CALVERT CLIFFS NUCLEAR POWER PLANT

RAN: 96-024FLOOD
REV: 1

RELIABILITY ENGINEERING
REU QUALITY RECORD

ATTACHMENT FLOOD
FLOOD RULE DEVELOPMENT

ORIGINATOR: Robert Cavedo — 8/8/2002 DATE

The origination of this document was limited to conforming it with the plant model rules and to the documentation of available key inputs and assumptions. This deviation is documented in the PRA Configuration Management Database as CRMP Issue 93.

REVIEWER: Jeff Stone — 8/26/2002 DATE

The review of this document was limited to verifying conformance with the plant model rules and to the applicability of the identified key inputs and assumptions. This deviation is documented in the PRA Configuration Management Database as CRMP Issue 93.

APPROVAL: — 8/26/2002 DATE

This revision documents the current status of this analysis and is considered adequate to support risk-informed PRA applications.

LIST OF EFFECTIVE PAGES

Pages	Revision
Cover	1
i	1
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Attachment A	1
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Attachment C	0
Attachment D	0

LIST OF EFFECTIVE SOFTWARE FILES

Reliability Software Number: 289

Directory: REV: 1

File Name	Software	Description
96-024Flood-Rev1.doc	WORD 97	Main Report (i.e. RAN)
GT-TO-Flood-RULE-Deltas.xls	Excel	GT-to-Flood Rule Changes

Directory: REV: 0

File Name	Software	Description
96-024Flood-Rev0.doc	WORD 97	Attachment C and D Info Only
Fld Impact Matrix.xls	Excel 97	Impact Matrix Sheets 1 to 5
Fld Impact-HA.XLS	Excel 97	Flood impacts on H/As

REVISION HISTORY

Revision	Description
0	Initial issue.
1	Flood is revised to incorporate the Revision 1 version of the GT model. This is accomplished by using the Revision 0 versions of Attachment C and D. All new top events that appear in the Revision 1 version of the GT rules that do not appear in Attachments C and D are conservatively assigned an impact from the Revision 0 impact matrixes. These CRMPs are closed by this RAN: 248, 263, 299, 307, 312, 313, 316, 324, 339, 353.

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ATTACHMENTS

1.0 PURPOSE

This analysis documents the changes to the CCPRA Rev 0 General Transient Rules (SUPPORT1, SUPPORT2, GT1, GT2, and LT) which are used to transform the General Transient Rules into the FLOOD Rules (FLDSUP1, FLDSUP2, FLDFL1, FLDFL2, and FLDLT) **[Attachment A]**.

The changes to the General Transient Rules are primarily based on the Flood vs. Top Event Impact matrix (Attachment C). Flood impacts on Human Actions are evaluated and shown in Attachment D.

2.0 DEVELOPMENT

In general, much of the FLOOD rules are similar or identical to the general transient rules. For this reason, this document addresses only the differences between the FLOOD rules and the general transient rules. These differences are addressed in three primary areas:

2.1 Initiating Event Related Changes

General Transient Specific Initiating Event impacts are removed from the GT Rules to create the FLOOD Rules. Since, these modifications are fairly obvious, the specific changes made are not discussed in detail for each specific rule change. Instead, for each top event or group of top events, it is noted that GT Initiating Events are removed. Section 2.1 contains a specific example for illustration purposes.

RAN 98-062, Internal Flood Initiating Event Frequencies, documents the development of the Calvert Cliffs flood frequencies. Where floods have similar impacts, they are combined into a single initiator whose frequency is the sum of the component floods. This development is shown in the impact matrix worksheets in Attachment C.

2.2 Human Action Related Changes

Because of their ability to incapacitate or hinder plant operators, it is assumed that certain floods increase certain CCPRA human action failure probabilities. Human Actions are documented in RAN 96-026. In the CCPRA Flood analysis, Human Actions are considered to either be failed completely by a flood or unaffected.

Many Human actions are performed in the Control Room. Since the CR is unaffected by CCPRA modeled floods, a modeled human action must (significantly) take place outside of the Control Room to be affected by the flood. A review of current human actions reveals only 44 such human actions. Most of these human actions are eliminated from further consideration as the floods:

i.) take place in an area unaffected by a flood (e.g. Tank Farm),

ii.) the human action impact is bounded by equipment failures associated with the flood (e.g. an action to provide SW makeup to the SWR header using pump drain connections becomes irrelevant when the flood has failed the SRW pumps),

iii.) flood height in the room is inconsequential to the action that must be taken (e.g. remotely operating the ADV pull chains when there is only a few inches of water around), or

iv.) the HA applies only to events not considered in the flood model (e.g. fire scenarios).

The impacts on the remaining Human actions are determined by comparing the flood propagation paths and flood heights to the locations required to be accessible for the applicable human actions.

Additionally, many of the actions take place in areas that could be affected by the MFW flood, Q224AM. This flood lasts only 8.5 minutes, but because it is a high-energy event, we assume the affected area will hinder human actions for one hour. After one hour, operators will be able to re-enter the area and take their actions.

The Attachment D spreadsheet documents the review conclusions. The impacts on the spread sheet are used to code the flood model rules, failing Top Events where appropriate. This is discussed in Section 3.0 where the specific Top Event is discussed.

2.3 Flood Macros

Special flood Macros are developed for Top Events impacted by one or more floods. The flood macros are used to specify groups of floods that impact a particular top event in the same way. Flood macros have 6 characters. For example, TTFLDN.

(1) The first two characters identify the top Event the macro applies to (for example, Top Event TT).

(2) The second three characters are always "FLD" which identify the macro as a Flood macro.

(3) The last character indicates the specific impact that the group of floods has on the associated top event. The last character is further explained below.

N – Used to identify Flood initiating events that have <u>no</u> impact on the top event. That is, when the macro is true, the particular flood initiating events specified by the macro does not impact the associated top event.

F – Used to identify Flood Initiating Events that <u>fail</u> the associated Top Event. That is, when the macro is true, the flood initiating events specified by the macro fails the associated top event.

1, 2, 3, etc – Used to identify flood initiating events that degrade but do not fail the associated top event. When the macro is true, the flood initiating events specified by the macro degrade the associated top event. The specific degradation is documented Attachment C, page C-4 through 7. Numerals 1, 2, and 3 differentiate between various degradations.

The flood-no-impact macros, those ending in N, are placed with SFs for any Top Event that is impacted by a flood. The flood-no-impact macro constraint permits the SF to be questioned only for floods that do not impact the Top Event. SFs w/o a flood macro will be questioned by all the flood initiating events.

2.4 Flood Split Fractions

Flood split fractions are developed for Top Events that are degraded by one or more floods. Flood split fractions have the first two characters of the Top Event and the last character of 'Z'. The impact of the split fraction is documented in the associated split fraction basis sheet.

2.5 Removal of General Transient Specific Initiators

If a general transient initiator such as LOOP1 would cause a specific macro to fail such as Macro NOLOOP, then this initiator is deleted from the macro.

Ex:

Before
NOLOOP:=(-(INIT=LOOP1+INIT=LOOP2+.INIT=LOOP4+INIT=LOOP11+INIT=LOOP24))

After
NOLOOP:=(-(INIT=LOOP2+.INIT=LOOP4+INIT=LOOP11+INIT=LOOP24))

Since this initiating event can not occur, it is removed from the macro (or split fraction rule as the case may be). If this occurs to the point where the macro can never be true or is always true, then the macro is deleted with all related split fractions/macros adjusted accordingly. This is true for the NOLOOP macro. As none of the initiators contained in the NOLOOP Macro can occur in the FLOOD Module, the Macro NOLOOP is always true. This means that the OP split fractions are changed as well.

Ex:

Before
NOLOOP:=(-(INIT=LOOP1+INIT=LOOP2+.INIT=LOOP4+INIT=LOOP11+INIT=LOOP24))

OP1 NOLOOP
OPF 1

After (NOLOOP deleted)

OP1 1

These types of changes account for the bulk of the rule changes, but are obvious in implementation so that each specific change is not noted in great detail in the change section.

3.0 Top Event Related Rule Changes

The changes noted below are broken out by Module and are in Rule Order. The reader should have the GT Module Rules side-by-side with the FLOOD Module Rules. Each of the changes below is written to explain the differences between the two sets of Rules. It is further assumed that the reader is familiar with the GT Rules write-up. Without familiarity of the GT Rules, understanding the basis for each change would be difficult to impossible.

Changes Required to Convert SUPPORT1 to FLDSUP1

1. General Transient (GT) Initiating Event (IE) related macros NOLOOP, M1INIT, M2INIT are deleted.

2. Top event IG, Operator Prevents a Plant Trip on a Loss of 120 VAC Panels 1Y01 or 1Y02, is deleted. There are no floods expected to cause a loss of these busses.

3. OP1 is always selected because there are no floods that are expected to cause a loss of offsite power.

4. GT IE related split fractions are removed from 13 kV Top Event Y1 leaving only split fraction Y11. Flood split fraction Y1Z is based on Y1.

5. GT IE related split fractions are removed from 13 kV Top Event Y2 leaving only split fractions Y21 and Y27.

6. Macro Y1FLDN ensures that a flood does not occur in 317. This room is the only credible impact on electrical top events Y1, Y2, QC, and QD. The other U-4000 transformer impacts listed in Attachment C fail loads on the 4kV buses that are supported by the U-4000 transformers (e.g. Condensate Pumps). With two levels of breaker protection available, it is reasonable to screen these loads. The case where 125 VDC breaker control power is not available is consider under Top Events Y3 and Y4. When Macro Y1FLDN is failed, the breakers on 4 kV Bus 11 are failed. This means the Unit 1 U-4000 transformers must be shed. This fails QC and QD and requires the 13kV Unit 1 U-4000 feeder breakers to open (i.e. a breaker challenge on 13kV Buses 11 & 21).

7. GT IE related split fractions are removed from 13 kV/4 kV Transformer Top Events QC, QD, QE, and QF

8. GT IE related split fractions are removed from 125 VDC Short Term Top Events DA, DB, DC, and DD.

9. Macro N120IE was removed since it is always true in FLOOD

10. GT IE related split fractions are removed from 120 VAC Short Term Top Events E1, E2, E3, and E4.

11. The NOTRIP macro is removed. This macro requires that the initiating event be either the loss of a 120 VAC bus (-N120IE) or the loss of a 125VDC Bus 12 or 22 (INIT=LODCOT). Since these initiating events never occur in the FLOOD model, Macro NOTRIP is never true. Any guaranteed success split fractions that are only successful when Macro NOTRIP is true are removed from the rules in all of the top events subsequently questioned.

12. BHEAZZ (Top Events H5 and H6) is assumed to use the EOP-8 factor during a FLOOD. As a result, split fraction H51 is deleted.

13. GT IE related split fractions are removed from the EDG related Top Events GE, GF, GG, GH, and GJ (i.e. INIT=LOOP1, LOOP2, LOOP11).

14. The human action to align 0C EDG to support vital auxiliary operation is, BHEC4A, is applicable as interviewed for the Flood module. Therefore, the only impact to Top Events GS, GK, and GL is the deletion of the internal events split fractions.

15. The 0C DG human actions, BHEC3A and BHEC3B, are applicable as interviewed for use in the Flood Module. Therefore, GO are used as is.

16. GT IE related split fractions are removed from the Unit 1 SR 4 kV related Top Events AA and AB (i.e. INIT=LOAC, LOAC4, IESF). For the 4kV Top Events AA and AB the flood split fraction boundary conditions must include the associated 125VDC Bus. This provides control power for opening the breaker when a load faults due to a flood. Therefore, the flood split fractions (AAZ, ABY, and ABZ) are based on the 4kV split fractions whose boundary conditions require 125VDC control power and either the associated 4kV transformer or EDG. Split fractions AA1 and AA2 have these boundary conditions. The higher value split fraction, AA2, is for the base value for flood split fraction AAZ. Top Event AB is modeled in similar fashion as modeled for Top Event AA. The exception is when a flood challenges both 4 kV Bus 11 and 14. In this case, breaker common cause failure could result in the failure of both 4kV Bus 11 and 14 (Split Fraction ABZ).

17. BHEHSA (Top Event H3) is assumed not affected by FLOOD.

18. BHEHZ1 is used in Split fraction HZ5 (45 minutes to perform) is failed by flood Q224AM. However, HZ5 is removed because it requires GT-related IEs. BHERC1 (used in Top Event HZ) is unaffected by Flood Q224AM because this floods impact is assumed to last less than 1 hour. BHERC1 has a nine hour time window.

19. GT related macros, M1INIT and M2INIT, are removed from SWGR Ventilation related Top Events HS and HZ as these macros are impossible in the FLOOD module. The SWGR initiating event LOSGV is removed as well.

20. GT IE related impacts are removed from the Unit 1 NSR 4 kV related Top Event AE (i.e. INIT=LOAC, IESF). For the 4kV Top Events AE and AF the flood split fraction boundary conditions must include the associated 125VDC Bus. This provides control power for opening the breaker when a load faults due to a flood. The flood impacts dominate the base 4kV split fraction values. Flood split fractions (AEZ, AFZ) are based on the 4kV split fractions with 125VDC available and all of the previous breakers required to open on a flood (i.e. Top Events AA and AB) opened. If the other 4kV breakers failed to open on a flood, then it is possible that these breakers will also fail to open on a flood.

21. Macro N480IE was removed since it is always true in FLOOD.

22. To ease the development of the 480VAC conditional split fractions, Macros are created which track the status of the Unit 1 and Unit 2 480 VAC Buses. Macro N480U1 means No 480 VAC Buses Fail on Unit 1 (i.e. 4 buses successful or not questioned). Macro O480U1 means one bus fails (i.e. 3

successful or not questioned). Macro T480U1 means two buses failed (i.e. 2 successful or not questioned). Similar macros are developed for the Unit 2 buses (e.g. N480U2 and O480U2).

23. GT IE related split fractions are removed from the Unit 1 SR 480 VAC Bus related Top Events N1, N2, N3, and N4 (i.e. INIT=LB11A, LB11B, LB14A, LB14B). The associated split fractions which are no longer needed following the removal of the GT Initiating Events are deleted. The 480VAC top events have additional split fractions that represent that likelihood that the 480VAC breakers do not open during a flood. As with the 4kV breaker challenge split fractions, the likelihood of diverse bus failure due to a common cause breaker failure is considered. The split fraction are assigned best to worst. For Top Event N3, N4, N5, N6, N7, and N8, flood induced failures given 0, 1, or 2 of the previously questioned 480VAC buses are developed. For example, N8Z is used during a flood that affects Bus 24B (Top Event N8), and two of the previously questioned 480VAC Buses fail. N8Y is used when one previously questioned bus fails. N8X is used when zero of the previously questioned buses fail. For Top Event N1 as there are no previously questioned 480 VAC buses split fraction N1Z has a similar value to split fraction N8X.

24. For the 4kV Top Events AD and AC the flood split fraction boundary conditions must include the associated 125VDC Bus. This provides control power for opening the breaker when a load faults due to a flood. Therefore, the flood split fractions are based on the 4kV split fractions whose boundary conditions require 125VDC control power and either the associated 4kV transformer or EDG. The flood split fractions are conditional on 4kV Bus Top Events AA, AB, AE, and AF. If the breakers associated with these buses failed to open during a flood, then it is possible that the breakers in 4kV Bus 21 and 24 will fail to open due to the same cause. ADX and ACX are used when none of the previously questioned 4kV buses failed due to flood. ADY and ACY are used when one of the previously questioned 4kV buses fail due to flood.

25. In general, Top Events N5, N6, N7, and N8 are treated in the same way as N4, as explained above. Due to the large number of possible cases, all combinations of one and two failures are not credited. This is conservative, but not overly conservative. Floods N226AM do not cause any Unit 2 480VAC Bus challenges. This differs from the Flood Impact Matrix (CRMP 519).

26. Certain floods significantly degrade the 480 VAC MCC Top Events M1, M2, M3, M7, and M8. All of the split fractions that appear in the GT rules appear in the flood rules. Each of the GT split fractions can only be used when the associated no flood macro is true. For example, Split Fraction M31 can only be used when Flood Macro M3FLDN true. The additional flood split fractions question the success of the reactor MCCs given flood induced load faults. As with the 4kV and 480VAC buses, there is a possible common cause failure given a flood affects multiple busses. Due to the low significance of MCCs 106T (M7) and 116T (M8) conservatively only a single flood split fraction is developed for each top event. These split fractions require all of the previously questioned MCCs to be successful or not questioned.

27. GT IE related impacts are removed from the Unit 1 SR 480 VAC MCC related Top Events M1 and M2 (i.e. INIT=LB104R, LB114R).

28. BHEHH2 (Split Fraction H42) is interviewed for LOOP initiating events. Therefore, this split fraction is removed. Macro EOP02S is also removed since this macro is never true in the FLOOD Module. BHEHH1 can be used globally as long as EOP-8 is not in use. (RAN 96-024H4).

29. BHEHH3 (Start standby CR/CSR Chillwater Pump within 1 hour of in-service Pump failure) is contained within Top Event CI's single split fraction, CI1. This split fraction can be used as is (i.e. no change) (RAN96-024CI).

Changes Required to Convert SUPPORT2 to FLDSUP2

1. GT IE related impacts are removed from Macros NRRSSP, NCISSP, NMSVSP, BUS11V, BUS14V, and NOSSSA (e.g. INIT=IESF, INIT=LOAC, INIT=LODC21 etc).

2. GT IE related impacts are removed from Long Term 125 VDC Macros XALT, XBLT, XCLT, XDLT, PWR1D1, PWR1D2, PWR2D1, and PWR2D2 (i.e. INITs LB11A, LB11B, LB14A, LB14B, LOAC, LOAC4).

3. The NOTRIP macro is removed. Guaranteed-success split fractions with NOTRIP as the only constraint are removed.

4. GT IE related impacts are removed from the Back-up Bus Macro XWMCCL and Back-up Bus Top Events XW and H9, (i.e. INIT=LOAC, LB14A, LB104R, LOAC4, LB11B, LB114R). Based on this, split fractions XW3 and H92 can be deleted. BHEE11 (within Top Event XW) will not be impacted by floods (See Attachment D).

5. GT IE related impacts are removed from Top Event OG. This results in split fractions OG2 and OG3 becoming identical. Therefore, OG3 is eliminated.

6. GT IE related impacts are removed from Top Event OH.

7. Human actions associated with a recovering from a spurious UV actuation (Top Event QQ) is not impacted by floods as these actions are performed from the Control Room or Cable Spreading Room. (See Attachment D).

8. GT related IEs are removed from the NRCOOL and NRSUPP macros.

9. When macro NRFLD1 is true, the Unit 1 Air Compressors are failed because Unit 1 SRW is failed or there is flooding on the Unit 1 12 ft TB affecting the Unit 1 Air Compressors. This leaves only the Unit 2 Plant Air compressor to support Unit 1 Air (unless Unit 2 air compressors are also failed as is the case when macro NSFLD1 is true). In the rules, Unit 1 Air is failed by making the NRCOOL macro require that NRFLD1 be not true.

10. When Macro NSFLD1 is true, the Unit 2 Air Compressors are not available for Unit 1 or 2 because Unit 2 SRW is failed. In the rules, the Unit 2 Air Compressors are failed by making Macro NSCOOL require that NSFLD1 be not true. Top Event NS will not be failed as long as the Unit 1 Air Compressors are not failed. They can supply Unit 2 as long as they are not also failed.

11. Macro SCFLDN must be true for Top Event SC (Salt Water Common Discharge Header) to be successful. When Top Event SC fails Top Event S1 (Salt Water Header 11) and S2 (Salt Water Header 12) are failed.

12. GT IE related impacts are removed from Salt Water Top Events SC, S1, and S2 (i.e. INITs LOSW, LOSW11, LOSW12). Top Event SC is reduced to Split Fractions SC1 and SCF.

13. Although two flood scenarios prevent operations from mechanically aligning SW Pump 13 to a different SW header, no special impact is required. The operator action to mechanically re-align SW post trip is not credited in the current model.

14. If Macro DMFLDN fails (i.e. demineralized water pumps are lost to due to a flooded), Top Event DM fails.

15. GT IE related impacts are removed from SRW Head Tank Top Events VH and VI (i.e. INITs LOSW11, LOSW12).

16. GT IE related impacts are removed from Fire Protection Top Event PG (i.e. INITs LOSRW, LO1SRW, LOCCW). If Macro PGFLDN fails (i.e. motor driven fire pump is lost due to a flood), the motor driven pump split fraction in Top Event PG is failed.

17. Split Fractions CA1, CB1, MF1, and MG1 are deleted as Macro EOP02S is never true in the FLOOD module. This leaves only the EOP-08 split fraction for each associated Top Event.

18. When Macro RLFLDN fails, Macro SRWSUP is set to failure. Macro SRWSUP is a required support for Top Event RL. When Macro RLFLD1 is true, condensate is not available for makeup to the SRW System. This is coded by making Macro VCMAKU require that RLFLD1 be not true with the Top Event RL Rules.

19. GT IE related impacts are removed from SRW Header Top Events S3 and S4 (i.e. INITs LOSRW, LO1SRW).

18. GT IE related impacts are removed from Turbine Building SRW Header Top Events TA and TB (i.e. INITs LOSRW, LO1SRW).

19. When Macro RMFLDN fails, Top Event RM fails. Top Event RM supports both Top Event GW and Top Event GZ. As all the floods under consideration (**Attachment C**) fail both GW and GZ, using a single macro to fail both top events is appropriate.

20. When macro IHFLDN is true, IH is not impacted. Otherwise, Top Event IH is failed.

21. When macro I1FLDN is true, I1 is not impacted. Otherwise, Top Event I1 is failed.

22. When macro I2FLDN is true, I2 is not impacted. Otherwise, Top Event I2 is failed.

23. GT IE related impacts (i.e. INIT=LOCCW) are removed from Top Event CD.

24. GT IE related impacts are removed from CCW Top Events K5 and KS.

25. When Macro K5FLDN is true, Top Event K5 is not impacted. Otherwise, it is failed. When Macro K5FLD1 is true, condensate is not available as a source of makeup to Component Cooling water.. This is coded by making Macro VCMAKU require that K5FLD1 be not true with the Top Event K5 Rules.

26. When Macro KZFLDN is true, Top Event KZ is not impacted, otherwise, KZ is failed. This is coded by requiring Macro KZSUPP to require KZFLDN to be true.

Changes Required to Convert GT1 to FLDGT1

1. GT related Initiating Events are removed from Macros SHSD and SSPH.

2. Macro NOTRIP is removed. Guaranteed success split fractions that only contain Macro NOTRIP are removed.

3. Split Fraction RSL is removed since there are no LOOP or loss of Red or Black Bus initiating events in FLOOD.

4. Split fractions TX1, TX2, TX5 and TX6 are removed because they require GT-related initiating events LOCV or LODC11, which do not occur in FLOOD. GT-related IE LODC11 is removed from split fractions TX3 and TX4.

5. The GT IE related Initiating Events are removed from split fraction TT1.

6. The code fragment (-(INIT=LOFW+LOCV)) is removed from split fractions MC1, MC5, MC2 and MC3 since these Initiating Events do not occur in FLOOD and this code fragment is always true. Split fractions MCA, MCD, MCB and MCC are based on the previous four except that the IE is LOCV or LOFW. These split fractions are removed because they are not needed. LOCV (top event VC) or LOFW (top event MN) do not occur as Initiating Events in FLOOD. Loss of condenser vacuum and loss of feedwater do occur as a result of some floods but when they do, their impact on condensate is bounded by other things and therefore do not need to be explicitly modeled in top event MC. For example, since the Condensate pumps are at a lower elevation than the Feed Pumps, MC is assumed to be lost before MN during Turbine Building Floods. Other flood scenarios that affect MN and MC are floods that fail Salt Water or Service Water. Loss of Service Water or Salt Water fails MN, MC and VC. Also, for simplicity in the FLOOD module, VC is assumed failed when the Main Condensate Pumps have failed. (Note 5 in impact matrix spreadsheet)

7. When macro MCFLDN is true, the flood IE does not affect top event MC. Otherwise MC is failed. This is accomplished by requiring that MCFLDN be true to satisfy macro MCSUPP.

8. When macro VCFLDN is true, the flood IE does not affect top event VC. Otherwise VC is failed. This is accomplished by requiring that VCFLDN be true to satisfy macro VCSUPP.

9. GT-related IE code fragment is removed from VCSUPP.

10. GT-related LOIA code fragment is removed from the BV and DW split fractions since Loss of Instrument Air as an IE does not occur in FLOOD.

11. Top Event BS is failed by flood F315AM. This is coded into macro BSSUPP.

12. Code fragment {KX=S*(INIT=IESF)*KS=S} is removed from Split Fraction SPS because IE IESF does not occur in FLOOD. Code fragment (-(INIT=L500B)) is removed from Split Fraction SP1.

13. Code fragment (INIT=L500B) is removed from Split Fraction SL1. Split fractions SL3 and SL5 are deleted as Initiating Events LOCCW and LOSCCW do not occur in FLOOD.

14. GT-related Initiating Events LB104R and LB114R are removed from Top Event MX. This results in deletion of split fraction MX2 because it becomes identical to MX1. Split Faction MX4 is deleted because it becomes identical to MX3.

15. Macros LMCCIE and PVONE are deleted as the MCC IEs are not applicable in the Flood Module.

16. As Macros LMCCIE and PVONE are deleted, the PV and PH Split Fractions related to these Macro are deleted.

17. GT related IE code fragments are removed from split fraction PSS.

18. The NOLOOP macro and GT-related IE impacts are removed from the RQCOND macro.

19. Split fraction MPS is removed since its requires a GT-related IE that quickly fails MFW.

20. Code fragment (-(INIT=LOIA)) is removed from MP split fractions since this IE does not occur in FLOOD. Although Instrument Air is lost due to certain Floods, it is not an immediate Loss. Additionally, for Turbine Building Floods, the Feed pumps will likely be lost before the air compressors because the Condensate Pumps are at a lower elevation and will fail Feed, essentially ensuring that Feed has ramped back, making MP successful

21. Code fragment (-(INIT=LOFW+INIT=EMFW)) is removed from macro MNSUPP since these Initiating events do not occur in FLOOD.

22. Code fragment (-(INIT=PLFW)) is removed from MN split fractions where it appears because it is always true in FLOOD. Split fractions MN5, MNB, MN6, MNC, MN7, and MND are removed because they require a partial Loss of Feedwater IE which does not occur in FLOOD.

Changes Required to Convert GT2 to FLDGT2

1. Macro NOTRIP is removed. Guaranteed success split fractions that only contain Macro NOTRIP are removed.

2. Several floods degrade Top Event FT (MFW isolates on SGIS) by causing the normally open S/G isolation MOVs to fail as-is. Therefore, FT success relies on the MFW pumps tripping. This is modeled by forcing the model to use split fraction FT4 or subsequent split fractions for floods affecting FT. This is accomplished by requiring all split fraction before FT4 require success of Macro FTFLD1. There are no floods that fail FT.

3. There are several floods that fail Top Event MS (Main Steam Isolation Valves close on SGIS). This is modeled by requiring that the MSFLDN macro be true for all MS split fractions except MSF.

4. Human actions associated with a recovering from a spurious AFAS Block (Top Events Q1 and QZ) are not impacted by floods as these actions are performed from the Control Room or Cable Spreading Room. (See Attachment D). Split Fraction QZ1 (BHEQZ1) is deleted from a GT IE perspective.

5. Top Event FO (Operator aligns SWACs to Unit 2 AFW control valves), is used to support Top Event F9 (AFW PP 23 supplies flow to U-1) by shutting the U-2 AFW Block Valves. The Unit 2 AFW Air Top Event FO can only be questioned when Macro FOFLDN is true.

6. Top Event FH (Operator starts AFW Pump 13, local or remote) failed by flood Q224AM because this flood would prevent an operator from entering the Switchgear Rooms for up to one hour. This is modeled by making Macro FHSUPP not true when the IE is flood Q224AM. Also, we conservatively assume FH is degraded by all other floods. As Macro FWLOSS is removed, the base non-EOP8 split fraction (FH1) is also removed. This ensures that this human action is used under the EOP-08 condition for all flood scenarios. Code fragment (-N120IE) is removed from FH3 since this is never true in flood.

7. Top Event F7 (AFW Pump 13 provides flow to Unit 1) is failed by certain floods. Top Event F7 is failed by coding F7SUPP to require F7FLDN be true.

8. Certain floods will indirectly fail Top Event FF (Operator starts AFW Pump room Emergency Cooling Fans) by failing support system failures. No special coding is required for this aspect. The human action portion of Top Event FF is assumed unaffected. Therefore, Top Event FF requires no special coding for FLOOD.

9. Top Event FC (AFW Pump-Room Cooling Operates) is degraded by floods in macro FCFLD1. When FCFLD1 fails, the flood fails both the emergency ventilation fans and the NSR cooler in the AFW Pump Room. The NSR cooler HS is located in adjacent Room 225 at a height of 4 feet above the floor. A flood that fills Room 225 fails both the emergency fans and the NSR cooler. This leaves only the AFW pump room doors as an option (split fraction FCH). This is coded by requiring macro FCFLD1 be true for all split fractions except FCH.
   Flood Q224AM is a high-energy line break affecting the Turbine Building. However, this human action (BHEFC8) has 12 hours and the impact from Flood Q224AM is assumed to last only 1 hour (See Attachment D). Therefore, FC is not impacted by Flood Q224AM.
   Floods ST12AM, IT12AM and XT27AM fail the NSR AFW Pump Room Cooler. This cooling option is available in split fractions FC1, FC3, FC4, and FC7. Macro FCFLD2 is coded into these split fractions to prevent their use when the Flood is ST12AM, IT12AM or XT27AM.

There are other floods that impact FC by failing support systems such as Salt Water or Service Water. These impacts are handled by the rules and require no special coding in FC.

10. Top Event OA models the human action to start and align the stand-by Turbine Driven AFW pump (Top Event TG). Top Event OB models the human action to start and align the Unit 2 AFW motor-driven pump to support Unit 1 operation (Top Event F9). Operations has 60 minutes following a trip with a normal SG water level and 45 minutes following a low water level trip. Top Events OA and OB use macro NWLTRP (normal water level trip) to track this status. In the FLOOD model, macro NWLTRP is set to false for simplicity (by using the impossible constraint that a Top Event be both successful and failed (E1=S * E1=F). Top Events OA and OB are otherwise unaffected.

11. Top Event TF (Normally aligned AFW Pump provides flow) is failed by various floods. Floods where the source is the Unit 1 header from the CST, (e.g. N318AM), fail all three Unit 1 AFW pumps because isolating this flood requires isolating the header at the valve stand in the Tank Farm. Floods that flood the Unit 1 AFW Pump Room itself also fail TF as well as TG. This is coded in the TF split fractions.

12. Top Event TG (Standby AFW Pump provides flow) is impacted similar to TF. Floods that flood the AFW Pump Room fail TG as well as TF. These are coded into Macro TGFLDN. This macro must be successful to credit the stand-by AFW pump (Top Event TG). This is accomplished by either requiring Macro TGFLDN directly in the TG Split Fractions or in Macro TGSUPP. Macro TGFLDN is similar to TFGLFN. The only difference is Flood Q224AM. This fails Top Event TG as a MFW line break in the vicinity of the AFW pump room is assumed to fail operator action in the area for up to one hour. This would prevent the operator from aligning the standby pump. However, the on-line AFW Pump, TF, is not directly affected. For completeness, several new TG Split Fractions are added given Macro TFFLDN fails (i.e. TF is not questioned), but Macro TGFLDN is successful. Currently, this is not possible, but the coding remains for the future.

13. Top Event F9 is failed when Macro F9FLDN is not true. This is coded by adding Macro F9FLDN to Macro F9SUPG. Floods that fail the turbine driven pumps, should not be considered for common cause or common mode failure with regard to AFW PP 23 (Top Event F9). Top Event FC also fails both turbine driven AFW PPs. All F9 Split Fractions that track whether the turbine driven AFW pumps are questioned (i.e. Top Event FC appears), now contain the Flood Impact Macros associated with Top Events TF and TG. Flood F605AM fails both the Unit 2 turbine driven AFW Pumps (CRMP 316). If Unit 2 MFW is not available, then operations will not be able to use the AFW Motor Driven Pump 23 for Unit 1. This is coded in Macro F9FLDN.

14. Top Event MH (Operator recovers a failed AFW pump steam admission line) is failed when macro MHFLDF is true. MH is degraded when macro MHFLD1 is true. Floods identified in macro MHFLD1 degrade MH by requiring the operators to manually bleed air off the AFW Turbine steam admission valves (Impact MH-1).

15. Top Event CV (CVCS borates for ATWC or OTCC) is failed by floods except when macro CVFLDN is true.

16. Top Event RT (RWT is available) is failed when the flood source is the Refueling Water Tank. This is coded in the RT split fraction.

17. Top Event RH (Operator Manually Starts Safety Injection Equipment after SIAS Failure) is failed except when macro RHFLDN is true. This is coded into the RHSUPP macro. Macro LMCCIE is removed from the RH split fractions because this macro is never true in FLOOD.

18. Top Event HA (HPSI Aux Hdr operates) and Top Event HW (HPSI Pump 12) are failed by flood C118XR. This is coded in HASUPP and HWSUPP, respectively.

19. Event HB (HPSI Main Header Operates) is failed by flood F317AM. This is coded into HBSUPP.

20. Top Event DL (Safety Injection Flow Paths are available) is failed when either Macro DLFLD1 or DLFLD2 fails. Top Event DL is failed in the rules for floods that fail all safety injection. Floods F221AM, C221AM, W221AM, D221AM, F227AM, C227AM, W227AM, D227AM, M419AM, W419AM, F428AM, and W428AM do NOT fail Top Event DL or any of the HPSI Top Events. This differs from the flood matrix. These floods in the worst case only spray the SI LOOP MOVs. Due to the EQ rating of the SI LOOP MOVs, these valves are not considered to fail (**CRMP 520**).

Changes Required to Convert LT to FLDLT

1. Top Events CS (Containment Spray Header 11 Operates) and CT (Containment Spray Header 12 Operates) are failed except when macro CSFLDN and CTFLDN are true, respectively.

2. Top Event SR (Containment Normal Sump drain line isolates on a LOCA) is degraded whenever the containment recirc pipe tunnel ('Room' 122) is flooded. This occurs because 1MOV5462 and 1MOV5463 will fail as-is and if these normally closed valves happen to be open, post-RAS recirculation flow will be diverted. Split Fraction SRA represents the case where no support is available to the MOVs. The flood impact is coded adding macro SRFLDN to all SR split fractions except SRA. Floods F225AM and N225AM although indicated as degrading Top Event SR will only spray these valves (worst case). Due to the EQ rating of these valves, this fail impacts are removed (**CRMPs 520 and 543**).

3. Top Events K3 (CC Heat Exchanger 11 Cools CCW) and K4 (Component Cooling Heat Exchanger 12 Cools CCW) have code fragment (-INIT=CCHX11) removed since this code fragment is always true in FLOOD.

4. Top Events TE (East Containment Sump Header Operates) and TW (West Containment Sump Header Operates) are failed by floods except when TEFLDN and TWFLDN are true. Since the same set of floods affects both TE and TW, the floods are identified in TEFLDN and TWFLDN is set equal to TEFLDN for brevity.

4.0 Key Inputs and Assumptions

Key Input 1354	Flooding in the MSIV Room is Limited to 3 feet of Water
Assumption 510	A CST-line-break flood on one Unit does not fail the opposite Unit CST AFW supply.
Assumption 513	Flood Impacts on Top Event SG are screened out.
Assumption 516	Flood impacts due to spray are screened for certain Safety Related Components.

5.0 References

RAN 98-062, Internal Flood Initiating Event Frequencies

RAN 98-065, Flood Evaluations (Flood Queries)

RAN 96-024H4, Operator manually starts Standby HVAC Train

RAN 96-024CI, Operator Starts Standby Control Room Chilled Water Pump

Attachment A
Changes to the
GT Rules to Create the
Flood Rules

List of Effective Pages

Page	Revision
A-i	1
A-1 to A-80	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1	FLDSUP1	Macro	n/a	None	BUS14A	AB=S*(QD=S+GG=S*M1=S)
2	FLDSUP1	Macro	n/a	None	NEOP8S	DA=S*DB=S*DC=S*DD=S*(E1=S*E4=S+E2 =S*E3=S)
3	FLDSUP1	Macro	n/a	None	ADLTA	AD=S*(QF=S+GF=S*M3=S)
4	FLDSUP1	Macro	n/a	None	ACLTA	AC=S*(QE=S+GH=S*N6=S)
5	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	NOLOOP	(-(INIT=LOOP01+INIT=LOOP02+INIT=LOOP 04+INIT=LOOP08+ INIT=LOOP11+INIT=LOOP18+INIT=LOOP2 4))
6	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	M1INIT	INIT=LB14A+INIT=LB104R
7	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	M2INIT	INIT=LB11B+INIT=LB114R
8	FLDSUP1	Macro	n/a	None	N120U1	(E1=S+DA=F)*(E2=S+DC=F)*(E3=S+DB=F) *(E4=S+DD=F)
9	FLDSUP1	Macro	n/a	None	O120U1	(E1=S+DA=F)*(E2=S+DC=F)*(E3=S+DB=F +E4=S+DD=F) +(E1=S+DA=F+E2=S+DC=F)*(E3=S+DB=F) *(E4=S+DD=F)
10	FLDSUP1	Macro	n/a	None	T120U1	(E1=S+DA=F)*(E2=S+DC=F+E3=S+DB=F+ E4=S+DD=F) +(E2=S+DC=F)*(E3=S+DB=F+E4=S+DD=F) +(E3=S+DB=F) *(E4=S+DD=F)
10.1	FLDSUP1	Macro	New Macro: Supports 480VAC Bus SF Development	((N1=S*(N2=S+ HS=F)+ -N12SUP)* (N3=S*N4=S+ -N34SUP))	**N480U1**	n/a
10.2	FLDSUP1	Macro	New Macro: Supports 480VAC Bus SF Development	(N1=S*(N2=S+HS=F)+ -N12SUP)* (N3=S+N4=S+ -N34SUP) + (N3=S*N4=S+ -N34SUP)* (N1=S+N2=S+HS=F + -N12SUP)	**O480U1**	n/a
10.3	FLDSUP1	Macro	New Macro: Supports 480VAC Bus SF Development	N1=S*(N2=S+HS=F+N3=S+N4=S)+ (N2=S+HS=F)*(N3=S+N4=S)+ N3=S*N4=S+ -N12SUP+ -N34SUP	**T480U1**	n/a
10.5	FLDSUP1	Macro	New Macro: Supports 480VAC Bus SF Development	(N5=S*N6=S+AC=F)* (N7=S*N8=S+AD=F)	**N480U2**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
10.6	FLDSUP1	Macro	New Macro: Supports 480VAC Bus SF Development	(N5=S*N6=S+AC=F)* (N7=S+N8=S+AD=F) + (N5=S+N6=S+AC=F)* (N7=S*N8=S+AD=F)	**O480U2**	n/a
11	FLDSUP1	Macros	n/a	None	NU2SPS	EF=S*EG=S*(EH=S+EI=S)+EH=S*EI=S
11.1	FLDSUP1	Macro	New Macro: Flood Matrix Impact	(-(INIT=F317AM))	**Y1FLDN**	n/a
12	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	N125IE	(-(INIT=LODC11+INIT=LODC21+INIT=LODCOT))
13	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	QD=S	M1SUPP	QD=S*(-(INIT=LOAC4+M1INIT))
14	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	N120IE	(-(INIT=L120V1+INIT=L120V2+INIT=L120V3))
15	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	NOTRIP	(-N120IE)*(E4=S*(E1=S*E2=S+E1=S*E3=S+E2=S* E3=S))*IG=S+((INIT=LODCOT)*DA=S*DC=S*DD=S* E1=S*E2=S*E4=S)
16	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	SHLOOP	(INIT=LOOP01+INIT=LOOP02+INIT=LOOP04)*DA=S*DC=S
17	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	UA=S*GC=S*G1=S	GESUPP	UA=S*(-(INIT=LOAC))*GC=S*G1=S
18	FLDSUP1	Macro	n/a	None	GFSUP1	EG=S*DC=S*W4=S*GC=S*G4=S
19	FLDSUP1	Macro	n/a	None	GFSUP2	GFSUP1*FP=S
20	FLDSUP1	Macro	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	DB=S*UB=S*DC=S*R4=S*GC=S* G2=S* **(-(INIT=M421AM))**	GGSUP1	DB=S*UB=S*DC=S*(-(INIT=LOAC4+INIT=L500R+INIT=L13KV2))*R4=S*GC=S*G2=S
21	FLDSUP1	Macro	n/a	None	GGSUP2	GGSUP1*FP=S
22	FLDSUP1	Macro	Flood Matrix Impact	EF=S*DA=S*W3=S*GC=S*G3=S* **(-(INIT=M422AM))**	GHSUP1	EF=S*DA=S*W3=S*GC=S*G3=S
23	FLDSUP1	Macro	n/a	None	GHSUP2	GHSUP1*FQ=S
23.1	FLDSUP1	Macro	n/a	None	GJSUPP	GC=S*G5=S*GL=S*GO=S
24	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	GJ=S* DA=S*UA=S* (GE=F*(GG=F+GF=S+GH=S)*(-EDGOOS) + G1=F)* **Y1FLDN**	GJTO11	GJ=S*(-(INIT=LOAC))* DA=S*UA=S* (GE=F*(GG=F+GF=S+GH=S)*(-EDGOOS) + G1=F)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
25	FLDSUP1	Macro	n/a	None	GJTO24	GJ=S*EG=S*DC=S*(-GJTO11)* (GF=F*(GE=S+GG=S)*(-EDGOOS) + G4=F)
26	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	GJ=S*DC=S*UB=S*(-GJTO11)*(-GJTO24)* (GG=F*(-EDGOOS) + G2=F)	GJTO14	GJ=S*DC=S*UB=S*(-GJTO11)*(-GJTO24)*(-(INIT=LOAC4))* (GG=F*(-EDGOOS) + G2=F)
27	FLDSUP1	Macro	n/a	None	GJTO21	GJ=S*GH=F*EF=S*DA=S*(-GJTO11)*(-GJTO24)*(-GJTO14)
28	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	N480IE	(-(INIT=LB11A+INIT=LB11B+INIT=LB14A+INIT=LB14B))
29	FLDSUP1	Macro	n/a	None	N12SUP	AA=S*HF=S
30	FLDSUP1	Macro	n/a	None	N34SUP	AB=S*HG=S
30.01	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=N205LN+ INIT=N224AM+ INIT=N225AM+ INIT=F225AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=R224AM+ INIT=X226AM+ INIT=N226AM+ INIT=N603AM+ INIT=F205AN+ INIT=R221AM+ INIT=R228AM+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=S228AN))	**AAFLDN**	n/a
30.02	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F317AM))	**AAFLD1**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
30.03	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=N224AM+ INIT=N225AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=X226AM+ INIT=N226AM+ INIT=N603AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=R224AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=F205AN+ INIT=R221AM+ INIT=R228AM+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=S228AN))	**ABFLDN**	n/a
30.05	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=X524AM+ INIT=W524AM))	**HSFLDN**	n/a
30.06	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=W315AM+ INIT=F429AM+ INIT=F315AM+ INIT=Q224AM+ INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM))	**AEFLDN**	n/a
30.07	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F317AM))	**AEFLD1**	n/a
30.08	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=W315AM+ INIT=F429AM+ INIT=F315AM+ INIT=Q224AM+ INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM))	**AFFLDN**	n/a
30.1	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=W315AM+ INIT=F315AM+ INIT=Q224AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM	**N1FLDN**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
30.11	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=M421AM+ INIT=M422AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=FISPAM+ INIT=IISPAM	N2FLDN	n/a
30.12	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=F429AM+ INIT=R221AM+ INIT=R228AM+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=S228AN+ INIT=X228AM+ INIT=X524AM+ INIT=W524AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM))	N3FLDN	n/a
30.13	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=SISPAN+ INIT=SISPAR+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM	N4FLDN	n/a
30.14	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=N226AM+ INIT=F605AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=N205LN+ INIT=N605AM+ INIT=R224AM+ INIT=R221AM+ INIT=R228AM+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=S228AN+ INIT=F205AN))	ADFLDN	n/a
30.15	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=SISPAN+ INIT=SISPAR+ INIT=N205LN+ INIT=N605AM+ INIT=R221AM+ INIT=R228AM+ INIT=F205AN+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=S228AN))	ACFLDN	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
30.16	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=R221AM+ INIT=S118XR+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S226AN+ INIT=S228AN+ INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM))	N5FLDN	n/a
30.17	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=SISPAN+ INIT=SISPAR+ INIT=D603AM+ INIT=W315AM+ INIT=F315AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=Q224AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM+ INIT=N226AM	N6FLDN	n/a
30.18	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=W315AM+ INIT=F315AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=Q224AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM+ INIT=N226AM	N7FLDN	n/a
30.19	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=F603AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=W315AM+ INIT=F315AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=Q224AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM+ INIT=N226AM	N8FLDN	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
30.2	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=W315AM+ INIT=F315AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=Q224AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM	**M3FLDN**	n/a
30.21	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=X228AM+ INIT=F224AM+ INIT=C224AM+ INIT=W224AM+ INIT=W320AM+ INIT=C324AM+ INIT=W525AM+ INIT=C537XM+ INIT=X537AM+ INIT=F605AM+ INIT=X319AM+ INIT=N605AM+ INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM	**M1FLDN**	n/a
30.22	FLDSUP1	Macros	New Macro: Flood Matrix Impact	INIT=M421AM+ INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=SISPAN+ INIT=SISPAR+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM	**M2FLDN**	n/a
30.23	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=F429AM+ INIT=W315AM+ INIT=F315AM+ INIT=Q224AM+ INIT=N318AM+ INIT=D318AM))	**M7FLDN**	n/a
30.24	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM))	**M7FLD1**	n/a
30.25	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=F429AM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=W315AM+ INIT=F315AM+ INIT=Q224AM))	**M8FLDN**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
30.26	FLDSUP1	Macros	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+INIT=XT27AM+INIT=IT12AM))	**M8FLD1**	n/a
31	FLDSUP1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	EOP02S	NEOP8S*(-NOLOOP+INIT=L500B+INIT=L500R)
31.1	FLDSUP1	Macro	n/a	None	ERYSBO	(GE=F*QC=F*GG=F*QD=F+GF=F*QF=F*GH=F*QE=F)
31.2	FLDSUP1	Macro	n/a	None	EDGOOS	G1=F+G2=F+G3=F+G4=F
32	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	IGS	'-(INIT=L120V1+INIT=L120V2)
33	FLDSUP1	SF	Top Event is not used unless 120 VAC IE	Deleted	IG1	1
34	FLDSUP1	SF	As no LOOP IEs, OP is always questioned.	1	OP1	NOLOOP
35	FLDSUP1	SF	As no LOOP IEs, OP is always questioned.	Deleted	OPF	1
36	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	OP=S***Y1FLDN**	Y11	OP=S*(-(INIT=L500B+INIT=L13KV1+INIT=LODC11))
36.1	FLDSUP1	SF	New Flood Split Fraction	OP=S	**Y1Z**	n/a
37	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	Y12	OP=S*(-(INIT=L500B+INIT=L13KV1))
38	FLDSUP1	SF	n/a	None	Y1F	1
39	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	OP=S*Y1=S***Y1FLDN**	Y21	OP=S*(-(INIT=L500R+INIT=L13KV2+INIT=LODC21))*Y1=S
40	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	Y23	OP=S*(-(INIT=L500R+INIT=L13KV2))*Y1=S
41	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	Y29	OP=S*INIT=L13KV1
42	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	Y26	OP=S*INIT=LODC11
43	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	OP=S***Y1FLDN**	Y27	OP=S*(-(INIT=L500R+INIT=L13KV2))*(INIT=L500B+Y1=F)
43.1	FLDSUP1	SF	New Flood Split Fraction	OP=S*Y1=S	**Y2Y**	n/a
43.2	FLDSUP1	SF	New Flood SF, Common cause breaker failure could lead to the failure of Bus 11 and 21	OP=S	**Y2Z**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
44	FLDSUP1	SF	n/a	None	Y2F	1
45	FLDSUP1	SF	Flood Matrix Impact	Y1=S***Y1FLDN**	QC1	Y1=S
46	FLDSUP1	SF	n/a	None	QCF	1
47	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Y2=S*(QC=S+ Y1=F)*Y1FLDN	QD3	Y2=S*(QC=S+Y1=F*(-(INIT=L13KV1)))
48	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QD4	Y2=S*INIT=L13KV1
49	FLDSUP1	SF	Flood Matrix Impact	Y2=S*Y1=S*QC=F***Y1FLDN**	QD2	Y2=S*Y1=S*QC=F
50	FLDSUP1	SF	n/a	None	QDF	1
51	FLDSUP1	SF	Flood Matrix Impact and Removed Unnecessary Initiating Event Impacts	Y2=S*((QC=S+ Y1=F)*QD=S+ - Y1FLDN)	QF5	Y2=S*(QC=S+Y1=F*(-(INIT=L13KV1)))*QD=S
52	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QF7	Y2=S*(INIT=L13KV1)*QD=S
53	FLDSUP1	SF	n/a	None	QF2	Y2=S*(QC=S*QD=F+QD=S*Y1=S*QC=F)
54	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Y2=S*Y1=F*QD=F	QF6	Y2=S*Y1=F*(-(INIT=L13KV1))*QD=F
55	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QF8	Y2=S*(INIT=L13KV1)*QD=F
56	FLDSUP1	SF	n/a	None	QF4	Y2=S*Y1=S*QC=F*QD=F
57	FLDSUP1	SF	n/a	None	QFF	1
58	FLDSUP1	SF	Flood Matrix Impact and Removed Unnecessary Initiating Event Impacts	Y1=S*(QC=S*(QD=S*QF=S+ Y2=F)+ -Y1FLDN*(QF=S+ Y2=F))	QE1	Y1=S*QC=S*(QD=S*QF=S+Y2=F*(-(INIT=L13KV2)))
59	FLDSUP1	SF	n/a	None	QE2	Y1=S*(QC=S*(QD=S+QF=S)+QD=S*QF=S)
60	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Y1=S*Y2=F	QE3	Y1=S*Y2=F*(-(INIT=L13KV2))
61	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QE6	Y1=S*QC=S*INIT=L13KV2
62	FLDSUP1	SF	n/a	None	QE4	Y1=S*(QC=S+QD=S+QF=S)
63	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QE7	Y1=S*INIT=L13KV2
64	FLDSUP1	SF	n/a	None	QE5	Y1=S
65	FLDSUP1	SF	n/a	None	QEF	1
66	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QC=S+ QE=S)	DA2	N125IE*(QC=S+QE=S)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
67	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	1	DA1	N125IE
68	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	DA3	(-(INIT=LODC11))
69	FLDSUP1	SF	Replaced by SF DA1	Deleted	DAF	1
70	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QD=S+ QF=S)*DA=S	DB2	N125IE*(QD=S+QF=S)*DA=S
71	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	DA=S	DB1	N125IE*DA=S
72	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QD=S+ QF=S)	DB6	N125IE*(QD=S+QF=S)
73	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Replaced by DB1	Deleted	DB3	(-(INIT=LODCOT))*(DA=S+INIT=LODC11)
74	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	1	DB5	N125IE
75	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Replaced by DB5	Deleted	DB8	(-(INIT=LODCOT))
76	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Replaced by DB5	Deleted	DBF	1
77	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QD=S+ QF=S)*DA=S*DB=S	DC2	N125IE*(QD=S+QF=S)*DA=S*DB=S
78	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	DA=S*DB=S	DC1	N125IE*DA=S*DB=S
79	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QD=S+ QF=S)*(DA=S+ DB=S)	DC6	N125IE*(QD=S+QF=S)*(DA=S+DB=S)
80	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	DC3	(-(INIT=LODC21))*(DA=S+DB=S)*(INIT=LODC11+ INIT=LODCOT)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
81	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(DA=S+ DB=S)	DC5	N125IE*(DA=S+DB=S)
82	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	DC8	(-(INIT=LODC21))*(INIT=LODC11+INIT=LODCOT)
83	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	1	DCA	(-(INIT=LODC21))
84	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Replaced by DCA	Deleted	DCF	1
85	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QC=S+ QE=S)*DA=S*DB=S*DC=S	DD2	N125IE*(QC=S+QE=S)*DA=S*DB=S*DC=S
86	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	DA=S*DB=S*DC=S	DD1	N125IE*DA=S*DB=S*DC=S
87	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(QC=S+ QE=S)*(DA=S*DB=S+ DA=S*DC=S+ DB=S*DC=S)	DD6	N125IE*(QC=S+QE=S)*(DA=S*DB=S+DA=S*DC=S+DB=S*DC=S)
88	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Replaced by DD1	Deleted	DD3	(DA=S+INIT=LODC11)*(DB=S+INIT=LODCOT)*(DC=S+ INIT=LODC21)
89	FLDSUP1	SF	No 125VDC IE appear in the Flood modules, Macro N125IE is deleted.	(DA=S*DB=S+ DA=S*DC=S+ DB=S*DC=S)	DD5	N125IE*(DA=S*DB=S+DA=S*DC=S+DB=S*DC=S)
90	FLDSUP1	SF	n/a	none	DDA	DA=S+DB=S+DC=S
91	FLDSUP1	SF	n/a	none	DDE	1
92	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DA=S*M1SUPP	E11	DA=S*N120IE*M1SUPP
93	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DA=S	E12	DA=S*N120IE
94	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by E12.	Deleted	E13	DA=S*(-(INIT=L120V1))
95	FLDSUP1	SF	n/a	none	E1F	1
96	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DC=S*M1SUPP*(E1=S+ DA=F)	E21	DC=S*N120IE*M1SUPP*(E1=S+DA=F)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
97	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DC=S*(E1=S+ DA=F)	E22	DC=S*N120IE*(E1=S+DA=F)
98	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by E22.	Deleted	E23	DC=S*(-(INIT=L120V2))*(E1=S+DA=F+INIT=L120V1)
99	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DC=S*(-M1SUPP)	E26	DC=S*N120IE*(-M1SUPP)
100	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DC=S	E25	DC=S*N120IE
101	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by E25.	Deleted	E28	DC=S*(-(INIT=L120V2))
102	FLDSUP1	SF	n/a	none	E2F	1
103	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DB=S*M1SUPP*(E1=S+ DA=F)*(E2=S+ DC=F)	E31	DB=S*N120IE*M1SUPP*(E1=S+DA=F)*(E2=S+DC=F)
104	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DB=S*(E1=S+ DA=F)*(E2=S+ DC=F)	E32	DB=S*N120IE*(E1=S+DA=F)*(E2=S+DC=F)
105	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by E32.	Deleted	E33	DB=S*(-(INIT=L120V3))*((INIT=L120V1)*(E2=S+ DC=F)+(INIT=L120V2)*(E1=S+DA=F))
106	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DB=S*(-M1SUPP)*(E1=S+ DA=F+ E2=S+ DC=F)	E36	DB=S*N120IE*(-M1SUPP)*(E1=S+DA=F+E2=S+DC=F)
107	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DB=S*(E1=S+ DA=F+ E2=S+ DC=F)	E35	DB=S*N120IE*(E1=S+DA=F+E2=S+DC=F)
108	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	E38	DB=S*(-(INIT=L120V3))*(INIT=L120V1+INIT=L120V2)
109	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	DB=S	E3A	DB=S*(-(INIT=L120V3))
110	FLDSUP1	SF	n/a	None	E3F	1
111	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DD=S*M1SUPP*(E1=S+ DA=F)*(E2=S+ DC=F) *(E3=S+ DB=F)	E41	DD=S*N120IE*M1SUPP*(E1=S+DA=F)*(E2=S+DC=F) *(E3=S+DB=F)
112	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DD=S*(E1=S+ DA=F)*(E2=S+ DC=F)*(E3=S+ DB=F)	E42	DD=S*N120IE*(E1=S+DA=F)*(E2=S+DC=F) *(E3=S+DB=F)
113	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by E42.	Deleted	E43	DD=S*(E1=S+DA=F+INIT=L120V1)*(E2=S+ DC=F+INIT=L120V2) *(E3=S+DB=F+INIT=L120V3)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
114	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DD=S*((E1=S+ DA=F)*(E2=S+ DC=F+ E3=S+ DB=F) + (E2=S+ DC=F)*(E3=S+ DB=F))*(-M1SUPP)	E46	DD=S*N120IE*((E1=S+DA=F)*(E2=S+DC=F +E3=S+DB=F) +(E2=S+DC=F)*(E3=S+DB=F))*(-M1SUPP)
115	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	DD=S*((E1=S+ DA=F)*(E2=S+ DC=F+ E3=S+ DB=F) + (E2=S+ DC=F)*(E3=S+ DB=F))	E45	DD=S*N120IE*((E1=S+DA=F)*(E2=S+DC=F +E3=S+DB=F) +(E2=S+DC=F)*(E3=S+DB=F))
116	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	E48	DD=S*(E1=S+DA=F+E2=S+DC=F)*(INIT=L 120V3)
117	FLDSUP1	SF	n/a	none	E4A	DD=S*(E1=S+DA=F+E2=S+DC=F+E3=S+D B=F)
118	FLDSUP1	SF	Macro N120IE is removed from the Flood module.	Deleted	E4C	DD=S*(-N120IE)
119	FLDSUP1	SF	n/a	None	E4E	DD=S
120	FLDSUP1	SF	n/a	None	E4F	1
121	FLDSUP1	SF	n/a	None	EF1	DA=S*N120U1
122	FLDSUP1	SF	n/a	None	EFG	DA=S*O120U1
123	FLDSUP1	SF	n/a	None	EFI	DA=S*T120U1
124	FLDSUP1	SF	n/a	None	EFN	DA=S
125	FLDSUP1	SF	n/a	None	EFF	1
126	FLDSUP1	SF	n/a	None	EG1	DC=S*N120U1*(EF=S+DA=F)
127	FLDSUP1	SF	n/a	None	EG2	DC=S*N120U1
128	FLDSUP1	SF	n/a	None	EGG	DC=S*O120U1*(EF=S+DA=F)
129	FLDSUP1	SF	n/a	None	EGH	DC=S*O120U1
130	FLDSUP1	SF	n/a	None	EGI	DC=S*T120U1*(EF=S+DA=F)
131	FLDSUP1	SF	n/a	None	EGO	DC=S*(EF=S+DA=F)
132	FLDSUP1	SF	n/a	None	EGF	1
133	FLDSUP1	SF	n/a	None	EH1	DB=S*N120U1*(EF=S+DA=F)*(EG=S+DC= F)
134	FLDSUP1	SF	n/a	None	EH2	DB=S*N120U1*(EF=S+DA=F+EG=S+DC=F)
135	FLDSUP1	SF	n/a	None	EH3	DB=S*N120U1
136	FLDSUP1	SF	n/a	None	EHG	DB=S*O120U1*(EF=S+DA=F)*(EG=S+DC= F)
137	FLDSUP1	SF	n/a	None	EHH	DB=S*O120U1*(EF=S+DA=F+EG=S+DC=F)
138	FLDSUP1	SF	n/a	None	EHI	DB=S*T120U1*(EF=S+DA=F)*(EG=S+DC= F)
139	FLDSUP1	SF	n/a	None	EHP	DB=S*(EF=S+DA=F)*(EG=S+DC=F)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
140	FLDSUP1	SF	n/a	None	EHF	1
141	FLDSUP1	SF	n/a	None	EI1	DD=S*N120U1*(EF=S+DA=F)*(EG=S+DC=F)*(EH=S+DB=F)
142	FLDSUP1	SF	n/a	None	EI2	DD=S*N120U1*((EF=S+DA=F)*(EG=S+DC=F+EH=S+DB=F) +(EG=S+DC=F)*(EH=S+DB=F))
143	FLDSUP1	SF	n/a	None	EI3	DD=S*N120U1*(EF=S+DA=F+EG=S+DC=F+EH=S+DB=F)
144	FLDSUP1	SF	n/a	None	EI4	DD=S*N120U1
145	FLDSUP1	SF	n/a	None	EIG	DD=S*O120U1*(EF=S+DA=F)*(EG=S+DC=F)*(EH=S+DB=F)
146	FLDSUP1	SF	n/a	None	EIH	DD=S*O120U1*((EF=S+DA=F)*(EG=S+DC=F+EH=S+DB=F) +(EG=S+DC=F)*(EH=S+DB=F))
147	FLDSUP1	SF	n/a	None	EII	DD=S*T120U1*(EF=S+DA=F)*(EG=S+DC=F)*(EH=S+DB=F)
148	FLDSUP1	SF	n/a	None	EIQ	DD=S*(EF=S+DA=F)*(EG=S+DC=F)*(EH=S+DB=F)
149	FLDSUP1	SF	n/a	None	EIF	1
150	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	CXS	NOTRIP
151	FLDSUP1	SF	n/a	None	CX1	E1=S
152	FLDSUP1	SF	n/a	None	CXF	1
153	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	CYS	NOTRIP
154	FLDSUP1	SF	n/a	None	CY1	E2=S*CX=S
155	FLDSUP1	SF	n/a	None	CY3	E2=S*E1=F
156	FLDSUP1	SF	n/a	None	CY2	E2=S*CX=F
157	FLDSUP1	SF	n/a	None	CYF	1
158	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	J1S	NOTRIP
159	FLDSUP1	SF	n/a	None	J11	E1=S*CX=S
160	FLDSUP1	SF	n/a	None	J12	E1=S
161	FLDSUP1	SF	n/a	None	J1F	1
162	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	J2S	NOTRIP
163	FLDSUP1	SF	n/a	None	J21	E2=S*(J1=S+E1=F)*CY=S
164	FLDSUP1	SF	n/a	None	J22	E2=S*(J1=S+E1=F)
165	FLDSUP1	SF	n/a	None	J23	E2=S*CX=F
166	FLDSUP1	SF	n/a	None	J24	E2=S
167	FLDSUP1	SF	n/a	None	J2F	1
168	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	UAS	NOTRIP
169	FLDSUP1	SF	n/a	None	UA1	E1=S*J1=S*CX=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
170	FLDSUP1	SF	n/a	None	UA3	E1=S*J1=S
171	FLDSUP1	SF	n/a	None	UAF	1
172	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	UBS	NOTRIP
173	FLDSUP1	SF	n/a	None	UBD	E2=S*J2=S*UA=S*CX=F*CY=S
174	FLDSUP1	SF	n/a	None	UB1	E2=S*J2=S*UA=S*CX=S*CY=S
175	FLDSUP1	SF	n/a	None	UB5	E2=S*J2=S*E1=F*CY=S
176	FLDSUP1	SF	n/a	None	UB3	E2=S*J2=S*UA=F*CX=S*CY=S
177	FLDSUP1	SF	n/a	None	UB7	E2=S*J2=S*UA=S*CY=F
178	FLDSUP1	SF	n/a	None	UBB	E2=S*J2=S*E1=F*CY=F
179	FLDSUP1	SF	n/a	None	UBG	E2=S*J2=S*UA=F*CX=F
180	FLDSUP1	SF	n/a	None	UB9	E2=S*J2=S*UA=F*CX=S*CY=F
181	FLDSUP1	SF	n/a	None	UBF	1
182	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	R3S	NOTRIP
183	FLDSUP1	SF	n/a	None	R31	1
185	FLDSUP1	SF	Macro NOTRIP is removed.	R3=F	R4S	R3=F+NOTRIP
186	FLDSUP1	SF	n/a	None	R41	1
188	FLDSUP1	SF	Macro NOTRIP is removed.	R4=F	W3S	R4=F+NOTRIP
189	FLDSUP1	SF	n/a	None	W31	1
190	FLDSUP1	SF	Macro NOTRIP is removed.	R4=F+W3=F	W4S	R4=F+W3=F+NOTRIP
191	FLDSUP1	SF	n/a	None	W41	1
192	FLDSUP1	SF	Macro SHLOOP is removed.	Deleted	H5S	SHLOOP
193	FLDSUP1	SF	These HA(s) are degraded in a Flood. The non-EOP8 factor split fraction is eliminated.	Deleted	H51	(QC=S+QD=S)*NEOP8S
194	FLDSUP1	SF	n/a	None	H52	QC=S+QD=S
195	FLDSUP1	SF	n/a	None	H5F	1
196	FLDSUP1	SF	Macro SHLOOP is removed.	H5=S*(QE=S+ QF=S)	H6S	SHLOOP+H5=S*(QE=S+QF=S)
197	FLDSUP1	SF	These HA(s) are degraded in a Flood. The non-EOP8 factor split fraction is eliminated.	Deleted	H61	(QE=S+QF=S)*(QC=F*QD=F)*NEOP8S
198	FLDSUP1	SF	n/a	None	H62	(QE=S+QF=S)*(QC=F*QD=F)
199	FLDSUP1	SF	n/a	None	H6F	1
200	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	FPS	INIT=LOOP01+INIT=LOOP02+NOTRIP
201	FLDSUP1	SF	n/a	None	FP3	DC=S*(R4=S+W4=S)
202	FLDSUP1	SF	n/a	None	FPF	1
203	FLDSUP1	SF	n/a	None	GC1	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
203.1	FLDSUP1	SF	Macro NOTRIP is removed.	R4=F+W3=F+W4=F	G1S	R4=F+W3=F+W4=F+NOTRIP
204	FLDSUP1	SF	n/a	None	G11	1
206	FLDSUP1	SF	Macro NOTRIP is removed.	G1=F+R3=F+W3=F+W4=F	G2S	G1=F+R3=F+W3=F+W4=F+NOTRIP
207	FLDSUP1	SF	n/a	None	G21	R4=S
207.1	FLDSUP1	SF	n/a	None	G2F	1
208.1	FLDSUP1	SF	Macro NOTRIP is removed.	G1=F+G2=F+W4=F	G3S	G1=F+G2=F+W4=F+NOTRIP
208.2	FLDSUP1	SF	n/a	None	G31	W3=S
208.21	FLDSUP1	SF	n/a	None	G3F	1
208.3	FLDSUP1	SF	Macro NOTRIP is removed.	G1=F+G2=F+G3=F	G4S	G1=F+G2=F+G3=F+NOTRIP
208.4	FLDSUP1	SF	n/a	None	G41	W4=S
208.41	FLDSUP1	SF	n/a	None	G4F	1
208.5	FLDSUP1	SF	n/a	None	G5S	G1=F+G2=F+G3=F+G4=F
208.6	FLDSUP1	SF	n/a	None	G51	1
209	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	GES	NOTRIP
210	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GE1	GESUPP*INIT=LOOP01
211	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GE2	GESUPP*INIT=LOOP02
212	FLDSUP1	SF	n/a	None	GE3	GESUPP*H5=S
213	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GE6	GESUPP*INIT=LOOP08
214	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GE4	GESUPP*INIT=LOOP11
215	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GE7	GESUPP*INIT=LOOP18
216	FLDSUP1	SF	n/a	None	GE5	GESUPP
217	FLDSUP1	SF	n/a	None	GEF	1
218	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	GFS	NOTRIP
219	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GF1	GFSUP1*INIT=LOOP01
220	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GF2	GFSUP1*INIT=LOOP02
221	FLDSUP1	SF	n/a	None	GF3	GFSUP2*H6=S
222	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GF6	GFSUP2*INIT=LOOP08
223	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GF4	GFSUP2*INIT=LOOP11
224	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GF7	GFSUP2*INIT=LOOP18

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
225	FLDSUP1	SF	n/a	None	GF5	GFSUP2
226	FLDSUP1	SF	n/a	None	GFF	1
227	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	FQS	INIT=LOOP01+INIT=LOOP02+NOTRIP
228	FLDSUP1	SF	n/a	None	FQ3	1
229	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	GGS	NOTRIP
230	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGB	GGSUP1*INIT=LOOP01*(GF=S+(-GFSUP1))
231	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GG6	GGSUP1*INIT=LOOP01
232	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGC	GGSUP1*INIT=LOOP02*(GF=S+(-GFSUP1))
233	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GG7	GGSUP1*INIT=LOOP02
234	FLDSUP1	SF	n/a	None	GGD	GGSUP2*H5=S*(GF=S+(-GFSUP2))
235	FLDSUP1	SF	n/a	None	GG8	GGSUP2*H5=S
236	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGH	GGSUP2*INIT=LOOP08*GF=S
237	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GG4	GGSUP2*INIT=LOOP11*GF=S
238	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGE	GGSUP2*(INIT=LOOP08+INIT=LOOP11)*(-GFSUP2)
239	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GG9	GGSUP2*(INIT=LOOP08+INIT=LOOP11)
240	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGI	GGSUP2*INIT=LOOP18*GF=S
241	FLDSUP1	SF	n/a	None	GG5	GGSUP2*GF=S
242	FLDSUP1	SF	n/a	None	GGG	GGSUP2*(-GFSUP2)
243	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GGK	GGSUP2*INIT=LOOP18
244	FLDSUP1	SF	n/a	None	GGA	GGSUP2
245	FLDSUP1	SF	n/a	None	GGF	1
246	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	GHS	NOTRIP
247	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH1	GHSUP1*INIT=LOOP01*(GF=S+(-GFSUP1))*(GG=S+ (-GGSUP1))
248	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH6	GHSUP1*INIT=LOOP01*((GF=S+(-GFSUP1))+(GG=S+ (-GGSUP1)))
249	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHB	GHSUP1*INIT=LOOP01

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
250	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH2	GHSUP1*INIT=LOOP02*(GF=S+(-GFSUP1))*(GG=S+ (-GGSUP1))
251	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH7	GHSUP1*INIT=LOOP02*((GF=S+(-GFSUP1))+(GG=S+ (-GGSUP1)))
252	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHC	GHSUP1*INIT=LOOP02
253	FLDSUP1	SF	n/a	None	GH3	GHSUP2*H6=S*(GF=S+(-GFSUP2))*(GG=S+(-GGSUP2))
254	FLDSUP1	SF	n/a	None	GH8	GHSUP2*H6=S*(GF=S+(-GFSUP2)+GG=S+(-GGSUP2))
255	FLDSUP1	SF	n/a	None	GHD	GHSUP2*H6=S
256	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHH	GHSUP2*INIT=LOOP08*(GF=S+(-GFSUP2))*(GG=S+ (-GGSUP2))
257	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH4	GHSUP2*INIT=LOOP11*(GF=S+(-GFSUP2))*(GG=S+ (-GGSUP2))
258	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GH9	GHSUP2*(INIT=LOOP11+INIT=LOOP08)*((GF=S+(-GFSUP2))+(GG=S+(-GGSUP2)))
259	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHE	GHSUP2*(INIT=LOOP11+INIT=LOOP08)
260	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHI	GHSUP2*(INIT=LOOP18)*(GF=S+(-GFSUP2))*(GG=S+ (-GGSUP2))
261	FLDSUP1	SF	n/a	None	GH5	GHSUP2*(GF=S+(-GFSUP2))*(GG=S+(-GGSUP2))
262	FLDSUP1	SF	n/a	None	GHA	GHSUP2*((GF=S+(-GFSUP2))+(GG=S+(-GGSUP2)))
263	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GHM	GHSUP2*(INIT=LOOP18)
264	FLDSUP1	SF	n/a	None	GHG	GHSUP2
265	FLDSUP1	SF	n/a	None	GHF	1
265.01	FLDSUP1	SF	n/a	None	GS1	EDGOOS
265.02	FLDSUP1	SF	n/a	None	GSF	1
265.03	FLDSUP1	SF	n/a	None	GKS	GS=S
265.04	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GK1	(-EDGOOS)*ERYSBO* INIT=LOOP01
265.05	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GK2	(-EDGOOS)*ERYSBO* INIT=LOOP02
265.06	FLDSUP1	SF	n/a	None	GK3	(-EDGOOS)*ERYSBO* H5=S*H6=S
265.07	FLDSUP1	SF	n/a	None	GK4	(-EDGOOS)*ERYSBO
265.08	FLDSUP1	SF	n/a	None	GK5	(-EDGOOS)*NEOP8S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
265.09	FLDSUP1	SF	n/a	None	GK6	(-EDGOOS)
265.1	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GKL	ERYSBO* INIT=LOOP01
265.11	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GKM	ERYSBO* INIT=LOOP02
265.12	FLDSUP1	SF	n/a	None	GKN	ERYSBO* H5=S*H6=S
265.13	FLDSUP1	SF	n/a	None	GKO	ERYSBO
265.14	FLDSUP1	SF	n/a	None	GKP	NEOP8S
265.15	FLDSUP1	SF	n/a	None	GKQ	1
265.16	FLDSUP1	SF	n/a	None	GLS	GK=S
265.17	FLDSUP1	SF	n/a	None	GL1	ERYSBO
265.18	FLDSUP1	SF	n/a	None	GL2	(-EDGOOS)
265.19	FLDSUP1	SF	n/a	None	GLF	1
265.2	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	H5=S*H6=S	GOS	H5=S*H6=S+INIT=LOOP08
265.21	FLDSUP1	SF	n/a	None	GO1	DC=S*FQ=S*GL=S
265.22	FLDSUP1	SF	n/a	None	GOF	1
266	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ1	GJSUPP*INIT=LOOP01*(GE=S+-GESUPP)
267	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ2	GJSUPP*INIT=LOOP01
268	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ3	GJSUPP*INIT=LOOP02*(GE=S+-GESUPP)
269	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ4	GJSUPP*INIT=LOOP02
270	FLDSUP1	SF	n/a	None	GJ5	GJSUPP*H5=S*H6=S*(GE=S+-GESUPP)
271	FLDSUP1	SF	n/a	None	GJ6	GJSUPP*H5=S*H6=S
272	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ7	GJSUPP*INIT=LOOP08*GE=S
273	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ8	GJSUPP*INIT=LOOP08*(-GESUPP)
274	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJ9	GJSUPP*INIT=LOOP08
275	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJA	GJSUPP*INIT=LOOP11*GE=S
276	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJB	GJSUPP*INIT=LOOP11*(-GESUPP)
277	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJC	GJSUPP*INIT=LOOP11

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278	FLDSUP1	SF	n/a	None	GJD	GJSUPP*GE=S
279	FLDSUP1	SF	n/a	None	GJE	GJSUPP*(-GESUPP)
280	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	GJG	GJSUPP*INIT=LOOP18
281	FLDSUP1	SF	n/a	None	GJH	GJSUPP
280	FLDSUP1	SF	n/a	None	GJF	1
286	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	AAS	NOTRIP
287	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	GE=S*DA=S***AAFLDN**	AA1	GE=S*DA=S*(-(INIT=LOAC))
288	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	QC=S*DA=S*AAFLDN	AA2	QC=S*DA=S*(-(INIT=LOAC+INIT=IESF))
289	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	QC=S*AAFLDN	AA3	QC=S*(-(INIT=LOAC+INIT=IESF))
289.1	FLDSUP1	SF	New Flood Split Fraction	(QC=S+ GE=S)*DA=S*AAFLD1	**AAZ**	n/a
290	FLDSUP1	SF	n/a	None	AAF	1
291	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	GG=S*DC=S*ABFLDN	AB1	GG=S*DC=S*(-(INIT=LOAC4))
292	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	QD=S*DC=S*ABFLDN	AB2	QD=S*DC=S*(-(INIT=LOAC4))
293	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	QD=S*ABFLDN	AB3	QD=S*(-(INIT=LOAC4))
293.1	FLDSUP1	SF	New Flood Split Fraction	(QD=S+ GG=S)*DC=S* (AA=S+ AAFLDN+ DA=F+ QC=F*GE=F)	**ABY**	n/a
293.1	FLDSUP1	SF	New Flood Split Fraction	(QD=S+ GG=S)*DC=S	**ABZ**	n/a
294	FLDSUP1	SF	n/a	None	ABF	1
295	FLDSUP1	SF	Macro NOTRIP is removed.	QC=F*(QD=F+ H5=F)+ (AA=F*AB=F)	H3S	QC=F*(QD=F+H5=F)+(AA=F*AB=F)+NOTRIP
296	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	DC=S*NEOP8S	H31	DC=S*NEOP8S*(-(INIT=LOSGV))
297	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	DC=S	H33	DC=S*(-(INIT=LOSGV))
298	FLDSUP1	SF	n/a	None	H3F	1
299	FLDSUP1	SF	Macro NOTRIP is removed.	QC=F*(QD=F+ H5=F)	HSS	QC=F*(QD=F+H5=F)+NOTRIP
300	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*AB=S*QC=S*QD=S*H3=S ***HSFLDN**	HSA	AA=S*(-(INIT=LB11A))*AB=S*(-(M1INIT+M2INIT))*QC=S*QD=S*(-(INIT=LOSGV))*H3=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
301	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*AB=S*(DA=S+ QC=S)*(DC=S+ QD=S)*H3=S *HSFLDN	HSB	AA=S*(-(INIT=LB11A))*AB=S*(-(M1INIT+M2INIT))*(DA=S+QC=S)*(DC=S+QD=S)*(-(INIT=LOSGV))*H3=S
302	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*AB=S*QC=S*QD=S*H3=F ***HSFLDN**	HSP	AA=S*(-(INIT=LB11A))*AB=S*(-(M1INIT+M2INIT))*QC=S*QD=S*(-(INIT=LOSGV))*H3=F
303	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*AB=S*(DA=S+ QC=S)*(DC=S+ QD=S)*H3=F *HSFLDN	HSQ	AA=S*(-(INIT=LB11A))*AB=S*(-(M1INIT+M2INIT))*(DA=S+QC=S)*(DC=S+QD=S)*(-(INIT=LOSGV))*H3=F
304	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*QC=S*H3=S ***HSFLDN**	HSI	AA=S*(-(INIT=LB11A))*QC=S*(-(M2INIT+INIT=LOSGV))*H3=S
305	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AB=S*QD=S*H3=S ***HSFLDN**	HSN	AB=S*QD=S*(-(M1INIT+INIT=LOSGV))*H3=S
306	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*DA=S*H3=S ***HSFLDN**	HSJ	AA=S*(-(INIT=LB11A))*DA=S*(-(M2INIT+INIT=LOSGV))*H3=S
307	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AB=S*DC=S*H3=S ***HSFLDN**	HSO	AB=S*DC=S*(-(M1INIT+INIT=LOSGV))*H3=S
308	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*QC=S ***HSFLDN**	HSR	AA=S*(-(INIT=LB11A))*QC=S*(-(M2INIT+INIT=LOSGV))
309	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AB=S*QD=S ***HSFLDN**	HST	AB=S*QD=S*(-(M1INIT+INIT=LOSGV))
310	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AA=S*DA=S ***HSFLDN**	HSU	AA=S*(-(INIT=LB11A))*DA=S*(-(M2INIT+INIT=LOSGV))
311	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	AB=S*DC=S ***HSFLDN**	HSV	AB=S*DC=S*(-(M1INIT+INIT=LOSGV))
312	FLDSUP1	SF	n/a	None	HSF	1
313	FLDSUP1	SF	Macro NOTRIP is removed.	QC=F*(QD=F+ H5=F)	HZS	QC=F*(QD=F+H5=F)+NOTRIP
314	FLDSUP1	SF	Macro M1INIT has been removed	Deleted	HZ5	DC=S*M1INIT*H3=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
315	FLDSUP1	SF	Macro M1INIT has been removed	DC=S*AB=S*NEOP8S	HZ1	DC=S*AB=S*(-M1INIT)*NEOP8S
316	FLDSUP1	SF	Macro M1INIT has been removed	DC=S*AB=S	HZ2	DC=S*AB=S*(-M1INIT)
317	FLDSUP1	SF	n/a	None	HZ3	DC=S*NEOP8S
318	FLDSUP1	SF	n/a	None	HZ4	DC=S
319	FLDSUP1	SF	n/a	None	HZF	1
320	FLDSUP1	SF	Macro NOTRIP is removed.	HZ=S	HFS	HZ=S+NOTRIP
321	FLDSUP1	SF	n/a	None	HF1	HS=S
322	FLDSUP1	SF	n/a	None	HFF	1
323	FLDSUP1	SF	Macro NOTRIP is removed.	HZ=S	HGS	HZ=S+NOTRIP
324	FLDSUP1	SF	n/a	None	HG1	HS=S*HF=S
325	FLDSUP1	SF	n/a	None	HG2	HS=S
326	FLDSUP1	SF	n/a	None	HGF	1
327	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	AES	NOTRIP
328	FLDSUP1	SF	Flood Matrix Impact	QC=S*DA=S ***AEFLDN**	AE1	QC=S*DA=S
329	FLDSUP1	SF	Flood Matrix Impact	QC=S ***AEFLDN**	AE2	QC=S
329.1	FLDSUP1	SF	New Flood Split Fraction	QC=S*DA=S*AEFLD1*(AA=S+ AAFLDN)*(AB=S+ ABFLDN)	**AEZ**	n/a
330	FLDSUP1	SF	n/a	None	AEF	1
331	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	AFS	NOTRIP
332	FLDSUP1	SF	Flood Matrix Impact	QC=S*DC=S ***AFFLDN**	AF1	QC=S*DC=S
333	FLDSUP1	SF	Flood Matrix Impact	QC=S ***AFFLDN**	AF2	QC=S
333.1	FLDSUP1	SF	New Flood Split Fraction	QC=S*DC=S*(AA=S+ AAFLDN)*(AB=S+ ABFLDN)*(AE=S+ AEFLDN)	**AFZ**	n/a
334	FLDSUP1	SF	n/a	None	AFF	1
335	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N1S	NOTRIP
336	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N12SUP ***N1FLDN**	N11	N12SUP*N480IE
337	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Covered by N11	Deleted	N12	N12SUP*(-(INIT=LB11A))
337.1	FLDSUP1	SF	New Flood Split Fraction	N12SUP	**N1Z**	n/a
338	FLDSUP1	SF	n/a	None	N1F	1
339	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N2S	NOTRIP
340	FLDSUP1	SF	Flood Matrix Impact, Macro M1INIT has been removed	N12SUP*HS=S*N1=S***N2FLDN**	N21	N12SUP*(HS=S+HZ=S*M1INIT)*N480IE*N1 =S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
341	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, and Deleted as the same as N21	Deleted	N22	N12SUP*(HS=S+HZ=S*M1INIT)*(-(INIT=LB11B))* (N1=S+INIT=LB11A)
342	FLDSUP1	SF	Flood Matrix Impact, Macro M1INIT has been removed	N12SUP*HS=S***N2FLDN**	N23	N12SUP*(HS=S+HZ=S*M1INIT)*N480IE
343	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, Covered by N23	Deleted	N24	N12SUP*(HS=S+HZ=S*M1INIT)*(-(INIT=LB11B))
343.1	FLDSUP1	SF	New Flood Split Fraction	N12SUP*HS=S*N1=S	**N2Y**	n/a
343.2	FLDSUP1	SF	New Flood Split Fraction	N12SUP*HS=S	**N2Z**	n/a
344	FLDSUP1	SF	n/a	None	N2F	1
345	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N3S	NOTRIP
346	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N34SUP*(N1=S*(N2=S+ HS=F)+ (-N12SUP))***N3FLDN**	N31	N34SUP*N480IE*(N1=S*(N2=S+HS=F)+(-N12SUP))
347	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by N31	Deleted	N32	N34SUP*(-(INIT=LB14A))*((N1=S+INIT=LB11A)*((N2=S+HS=F)+INIT=LB11B)+-N12SUP)
348	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N34SUP*(N1=S+ (N2=S+ HS=F))***N3FLDN**	N33	N34SUP*N480IE*(N1=S+(N2=S+HS=F))
349	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	N34	N34SUP*(-(INIT=LB14A))*(INIT=LB11A+INIT=LB11B+(N1=S+(N2=S+HS=F))*(INIT=LB14B))
350	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N34SUP***N3FLDN**	N35	N34SUP*N480IE
351	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by N35	Deleted	N36	N34SUP*(-(INIT=LB14A))
351.1	FLDSUP1	SF	New Flood Split Fraction	N34SUP*(N1=S*(N2=S+ HS=F)+ (-N12SUP))	**N3X**	n/a
351.2	FLDSUP1	SF	New Flood Split Fraction	N34SUP*(N1=S+ (N2=S+ HS=F))	**N3Y**	n/a
351.3	FLDSUP1	SF	New Flood Split Fraction	N34SUP	**N3Z**	n/a
352	FLDSUP1	SF	n/a	None	N3F	1
353	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N4S	NOTRIP
354	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N34SUP*(N1=S*(N2=S+ HS=F)+ (-N12SUP))*N3=S***N4FLDN**	N41	N34SUP*N480IE*(N1=S*(N2=S+HS=F)+(-N12SUP))*N3=S
355	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts, covered by N41	Deleted	N42	N34SUP*(-(INIT=LB14B))*((N1=S+INIT=LB11A)*((N2=S+HS=F)+INIT=LB11B)+-N12SUP)*(N3=S+INIT=LB14A)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
356	FLDSUP1	SF	Flood Matrix Impact, Macro N480IE has been removed	N34SUP*(N1=S*(N2=S+ HS=F)+ -N12SUP+ N1=S* N3=S+ (N2=S+ HS=F)*N3=S)***N4FLDN**	N43	N34SUP*N480IE*(N1=S*(N2=S+HS=F)+-N12SUP+N1=S* N3=S+(N2=S+HS=F)*N3=S)
357	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	N44	N34SUP*(-(INIT=LB14B))*(INIT=LB11A+INIT=LB11B+ INIT=LB14A)*(N1=S+(N2=S+HS=F)+N3=S)
358	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	N34SUP*(N1=S+ (N2=S+ HS=F)+ (-N12SUP) + N3=S)***N4FLDN**	N45	N34SUP*(-(INIT=LB14B))*(N1=S+(N2=S+HS=F)+(-N12SUP) +N3=S)
359	FLDSUP1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	N46	N34SUP*(-(INIT=LB14B))*(INIT=LB11A+INIT=LB11B+ INIT=LB14A)
360	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	N34SUP***N4FLDN**	N47	N34SUP*(-(INIT=LB14B))
360.1	FLDSUP1	SF	New Flood Split Fraction	N34SUP*(N1=S*(N2=S+ HS=F)+ (-N12SUP))*N3=S	**N4X**	n/a
360.2	FLDSUP1	SF	New Flood Split Fraction	N34SUP*(N1=S*(N2=S+ HS=F)+ -N12SUP+ N1=S* N3=S+ (N2=S+ HS=F)*N3=S)	**N4Y**	n/a
360.3	FLDSUP1	SF	New Flood Split Fraction	N34SUP*(N1=S+ (N2=S+ HS=F)+ (-N12SUP) + N3=S)	**N4Z**	n/a
361	FLDSUP1	SF	n/a	None	N4F	1
362	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	ADS	NOTRIP
363	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*GF=S*DC=S***ADFLDN**	AD1	NU2SPS*GF=S*DC=S
364	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*QF=S*DC=S***ADFLDN**	AD2	NU2SPS*QF=S*DC=S
365	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*QF=S***ADFLDN**	AD3	NU2SPS*QF=S
365.1	FLDSUP1	SF	New Flood Split Fraction	NU2SPS*(QF=S+ GF=S)*DC=S* (AA=S+ AAFLDN)*(AB=S+ ABFLDN)* ((AE=S+ AEFLDN)*(AF=S+ AFFLDN)+ QC=F)	**ADX**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
365.2	FLDSUP1	SF	New Flood Split Fraction	NU2SPS*(QF=S+ GF=S)*DC=S*((AA=S+ AAFLDN)*(AB=S+ ABFLDN)* (AE=S+ AEFLDN+ AF=S+ AFFLDN+ QC=F)+ (AA=S+ AAFLDN+ AB=S+ ABFLDN)* ((AE=S+ AEFLDN)*(AF=S+ AFFLDN)+ QC=F))	**ADY**	n/a
366	FLDSUP1	SF	n/a	None	ADF	1
367	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	ACS	NOTRIP
368	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*GH=S*DA=S***ACFLDN**	AC1	NU2SPS*GH=S*DA=S
369	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*QE=S*DA=S***ACFLDN**	AC2	NU2SPS*QE=S*DA=S
370	FLDSUP1	SF	Flood Matrix Impact	NU2SPS*QE=S***ACFLDN**	AC3	NU2SPS*QE=S
370.1	FLDSUP1	SF	New Flood Split Fraction	NU2SPS*(QE=S+ GH=S)*DA=S* (AA=S+ AAFLDN)*(AB=S+ ABFLDN)* ((AE=S+ AEFLDN)*(AF=S+ AFFLDN)+ QC=F)* (AD=S+ ADFLDN)	**ACX**	n/a
370.2	FLDSUP1	SF	New Flood Split Fraction	NU2SPS*(QE=S+ GH=S)*DA=S*(((AA=S+ AAFLDN)*(AB=S+ ABFLDN)* (AE=S+ AEFLDN+ AF=S+ AFFLDN+ QC=F)+ (AA=S+ AAFLDN+ AB=S+ ABFLDN)* ((AE=S+ AEFLDN)*(AF=S+ AFFLDN)+ QC=F))* (AD=S+ ADFLDN)+ (AA=S+ AAFLDN)*(AB=S+ ABFLDN)* ((AE=S+ AEFLDN)*(AF=S+ AFFLDN)+ QC=F))	**ACY**	n/a
371	FLDSUP1	SF	n/a	None	ACF	1
372	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N5S	NOTRIP
373	FLDSUP1	SF	Flood Matrix Impact:	AC=S***N480U1 *N5FLDN**	N51	AC=S*((N1=S*(N2=S+HS=F)+- N12SUP)*(N3=S*N4=S+ -N34SUP))
374	FLDSUP1	SF	Flood Matrix Impact	AC=S***O480U1 *N5FLDN**	N52	AC=S*((N1=S*(N2=S+HS=F)+- N12SUP)*(N3=S+N4=S+ - N34SUP)+(N3=S*N4=S+- N34SUP)*(N1=S+(N2=S+HS=F) +- N12SUP))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
375	FLDSUP1	SF	Flood Matrix Impact	AC=S***T480U1 *N5FLDN**	N53	AC=S*(N1=S*((N2=S+HS=F)+N3=S+N4=S) +(N2=S+HS=F) *(N3=S+N4=S)+N3=S*N4=S+-N12SUP+-N34SUP)
376	FLDSUP1	SF	Flood Matrix Impact	AC=S*(N1=S+ (N2=S+ HS=F)+ N3=S+ N4=S) ***N5FLDN**	N54	AC=S*(N1=S+(N2=S+HS=F)+N3=S+N4=S)
377	FLDSUP1	SF	Flood Matrix Impact	AC=S ***N5FLDN**	N55	AC=S
377.1	FLDSUP1	SF	New Flood Split Fraction	AC=S*** N480U1**	**N5X**	n/a
377.2	FLDSUP1	SF	New Flood Split Fraction	AC=S***O480U1**	**N5Y**	n/a
377.3	FLDSUP1	SF	New Flood Split Fraction	AC=S***T480U1**	**N5Z**	n/a
378	FLDSUP1	SF	n/a	None	N5F	1
379	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N6S	NOTRIP
380	FLDSUP1	SF	Flood Matrix Impact	AC=S*N5=S***N480U1 *N6FLDN**	N61	AC=S*N5=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S* N4=S+-N34SUP))
381	FLDSUP1	SF	Flood Matrix Impact	AC=S*N5=S***O480U1 *N6FLDN**	N62	AC=S*N5=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S+ N4=S+-N34SUP)+(N3=S*N4=S+-N34SUP)*(N1=S+(N2=S+ HS=F)+-N12SUP))
382	FLDSUP1	SF	Flood Matrix Impact	AC=S*N5=S***T480U1 *N6FLDN**	N63	AC=S*N5=S*(N1=S*((N2=S+HS=F)+N3=S+N4=S)+-N12SUP+ (N2=S+HS=F)*(N3=S+N4=S)+N3=S*N4=S+-N34SUP)
383	FLDSUP1	SF	Flood Matrix Impact	AC=S*N5=S*(N1=S+ (N2=S+ HS=F)+ N3=S+ N4=S) ***N6FLDN**	N64	AC=S*N5=S*(N1=S+(N2=S+HS=F)+N3=S+N4=S)
384	FLDSUP1	SF	Flood Matrix Impact	AC=S*N5=S ***N6FLDN**	N65	AC=S*N5=S
385	FLDSUP1	SF	Flood Matrix Impact	AC=S***N480U1 *N6FLDN**	N66	AC=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S*N4=S+ -N34SUP))
386	FLDSUP1	SF	Flood Matrix Impact	AC=S***T480U1 *N6FLDN**	N67	AC=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S+N4=S+ -N34SUP)+(N3=S*N4=S+-N34SUP)*(N1=S+(N2=S+HS=F) +-N12SUP))
386.1	FLDSUP1	SF	New Flood Split Fraction	AC=S*N5=S***N480U1**	**N6X**	n/a
386.2	FLDSUP1	SF	New Flood Split Fraction	AC=S***(N5=S*O480U1 + N480U1)**	**N6Y**	n/a
386.3	FLDSUP1	SF	New Flood Split Fraction	AC=S***(N5=S*T480U1 + O480U1)**	**N6Z**	n/a
387	FLDSUP1	SF	n/a	None	N6F	1
388	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N7S	NOTRIP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
389	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)* **N480U1 *N7FLDN**	N71	AD=S*(N5=S*N6=S+AC=F)*((N1=S*(N2=S+ HS=F)+-N12SUP) *(N3=S*N4=S+-N34SUP))
390	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)* **O480U1 *N7FLDN**	N72	AD=S*(N5=S*N6=S+AC=F)*((N1=S*(N2=S+ HS=F)+-N12SUP) *(N3=S+N4=S+-N34SUP)+(N1=S+(N2=S+HS=F)+-N12SUP) *(N3=S*N4=S+-N34SUP))
391	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)* **T480U1 *N7FLDN**	N73	AD=S*(N5=S*N6=S+AC=F)*(N1=S*((N2=S+ HS=F)+N3=S+ N4=S)+-N12SUP+(N2=S+HS=F)*(N3=S+N4=S)+N3 =S* N4=S+-N34SUP)
392	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)* (N1=S+ (N2=S+ HS=F)+ N3=S+ N4=S) ***N7FLDN**	N74	AD=S*(N5=S*N6=S+AC=F)*(N1=S+(N2=S+ HS=F)+N3=S+N4=S)
393	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F) ***N7FLDN**	N75	AD=S*(N5=S*N6=S+AC=F)
394	FLDSUP1	SF	Flood Matrix Impact	AD=S***N480U1** *(N5=S+ N6=S) ***N7FLDN**	N76	AD=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S*N4=S+ -N34SUP))*(N5=S+N6=S)
395	FLDSUP1	SF	Flood Matrix Impact	AD=S***N480U1 *N7FLDN**	N77	AD=S*((N1=S*(N2=S+HS=F)+-N12SUP)*(N3=S*N4=S+ -N34SUP))
395.1	FLDSUP1	SF	New Flood Split Fraction	AD=S*(N5=S*N6=S+ AC=F) ***N480U1**	**N7X**	n/a
395.2	FLDSUP1	SF	New Flood Split Fraction	AD=S* ((N5=S*N6=S+ AC=F)***O480U1+ N480U1*(N5=S+N6=S)**)	**N7Y**	n/a
395.3	FLDSUP1	SF	New Flood Split Fraction	AD=S*((N5=S*N6=S+AC=F)***T480U1+ (N5=S+N6=S)*O480U1 + N480U1**)	**N7Z**	n/a
396	FLDSUP1	SF	n/a	None	N7F	1
397	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	N8S	NOTRIP
398	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)*N7=S***N480U1 *N8FLDN**	N81	AD=S*(N5=S*N6=S+AC=F)*N7=S*((N1=S*(N2=S+HS=F) +-N12SUP)*(N3=S*N4=S+-N34SUP))
399	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)*N7=S* **O480U1 *N8FLDN**	N82	AD=S*(N5=S*N6=S+AC=F)*N7=S*((N1=S*(N2=S+HS=F) +-N12SUP)*(N3=S+N4=S+-N34SUP)+(N1=S+(N2=S+ HS=F)+-N12SUP)*(N3=S*N4=S+-N34SUP))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
400	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)*N7=S* **T480U1 *N8FLDN**	N83	AD=S*(N5=S*N6=S+AC=F)*N7=S*(N1=S*((N2=S+HS=F) +N3=S+N4=S)+- N12SUP+(N2=S+HS=F)*(N3=S+N4=S) +N3=S*N4=S+-N34SUP)
401	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)*N7=S* (N1=S+N2=S+HS=F+N3=S+N4=S) ***N8FLDN**	N84	AD=S*(N5=S*N6=S+AC=F)*N7=S*(N1=S+(N2=S+HS=F) +N3=S+N4=S)
402	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S*N6=S+ AC=F)*N7=S ***N8FLDN**	N85	AD=S*(N5=S*N6=S+AC=F)*N7=S
403	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N7=S*(N5=S+ N6=S)+ N5=S*N6=S+ AC=F)***N480U1 *N8FLDN**	N86	AD=S*(N7=S*(N5=S+N6=S)+N5=S*N6=S+A C=F)*((N1=S* (N2=S+HS=F)+- N12SUP)*(N3=S*N4=S+-N34SUP))
404	FLDSUP1	SF	Flood Matrix Impact	AD=S*(N5=S+ N6=S+ N7=S)***N480U1 *N8FLDN**	N87	AD=S*(N5=S+N6=S+N7=S)*((N1=S*(N2=S+ HS=F)+-N12SUP) *(N3=S*N4=S+- N34SUP))
404.1	FLDSUP1	SF	New Flood Split Fraction	AD=S*(N5=S*N6=S+ AC=F)*N7=S ***N480U1**	**N8X**	n/a
404.2	FLDSUP1	SF	New Flood Split Fraction	AD=S*((N5=S*N6=S+AC=F)*N7=S***O480U1 + N480U1*((N5=S*N6=S+ AC=F)+N7=S*(N5=S+N6=S)))**	**N8Y**	n/a
404.3	FLDSUP1	SF	New Flood Split Fraction	AD=S*((N5=S*N6=S+AC=F)*N7=S***T480U1 + O480U1* ((N5=S*N6=S+ AC=F)+ N7=S*(N5=S+N6=S)) +**	**N8Z**	n/a
405	FLDSUP1	SF	n/a	None	N8F	1
406	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	M3S	NOTRIP
407	FLDSUP1	SF	Flood Matrix Impact	N7=S ***M3FLDN**	M31	N7=S
407.1	FLDSUP1	SF	New Flood Split Fraction	N7=S	**M3Z**	n/a
408	FLDSUP1	SF	n/a	None	M3F	1
409	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	M1S	NOTRIP
410	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	N3=S***M1FLDN**	M11	N3=S*(-(INIT=LB104R))
410.1	FLDSUP1	SF	New Flood Split Fraction	N3=S*(M3=S+ M3FLDN+ N7=F)	**M1Y**	n/a
410.2	FLDSUP1	SF	New Flood Split Fraction	N3=S	**M1Z**	n/a
411	FLDSUP1	SF	n/a	None	M1F	1
412	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	M2S	NOTRIP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
413	FLDSUP1	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	N2=S***M2FLDN**	M21	N2=S*(-(INIT=LB114R))
413.1	FLDSUP1	SF	New Flood Split Fraction	N2=S*(M3=S+ M3FLDN+ N7=F)* (M1=S+ M1FLDN+ N3=F)	**M2Y**	n/a
413.1	FLDSUP1	SF	New Flood Split Fraction	N2=S	**M2Z**	n/a
414	FLDSUP1	SF	n/a	None	M2F	1
415	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	M7S	NOTRIP
416	FLDSUP1	SF	Flood Matrix Impact	AE=S*HF=S*HS=S* **N480U1* N480U2 *M7FLDN**	M71	AE=S*HF=S*HS=S*((N1=S*N2=S+(-N12SUP))*(N3=S* N4=S+(-N34SUP))*(N5=S*N6=S+AC=F)*(N7=S*N8=S+AD=F))
417	FLDSUP1	SF	Flood Matrix Impact	AE=S*HF=S*HS=S* **(N480U1*O480U2+O480U1*N480U2) *M7FLDN**	M72	AE=S*HF=S*HS=S*((N1=S*N2=S+-N12SUP)*(N3=S* N4=S+-N34SUP)*((N5=S*N6=S+AC=F)*(N7=S+N8=S+ AD=F)+(N5=S+N6=S+AC=F)*(N7=S*N8=S+AD=F))+(N5=S* N6=S+AC=F)*(N7=S*N8=S+AD=F)*((N1=S* N2=S+-N12SUP) *(N3=S+N4=S+-N34SUP)+(N1=S+N2=S+-N12SUP)*(N3=S* N4=S+-N34SUP)))
417.1	FLDSUP1	SF	New Flood Split Fraction	AE=S*HF=S*HS=S* **N480U1*N480U2*** M7FLD1* (M1=S+ M1FLDN+ N3=F)* (M2=S+ M2FLDN+ N2=F)* (M3=S+ M3FLDN+ N7=F)	**M7Z**	n/a
418	FLDSUP1	SF	n/a	None	M7F	1
419	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	M8S	NOTRIP
420	FLDSUP1	SF	Flood Matrix Impact	AF=S*HG=S***N480U1*N480U2*** M7=S ***M8FLDN**	M81	AF=S*HG=S*((N1=S*(N2=S+HS=F)+(-N12SUP))*(N3=S* N4=S+(-N34SUP))*(N5=S*N6=S+AC=F)*(N7=S*N8=S+ AD=F))*M7=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
421	FLDSUP1	SF	Flood Matrix Impact	AF=S*HG=S*M7=S* **(N480U1*O480U2+O480U2*N480U1) *M8FLDN**	M82	AF=S*HG=S*M7=S*((N1=S*(N2=S+HS=F)+-N12SUP) *(N3=S*N4=S+-N34SUP)*((N5=S*N6=S+AC=F)*(N7=S+N8=S+AD=F)+(N5=S+N6=S+AC=F)*(N7=S*N8=S+AD=F))+(N5=S*N6=S+AC=F)*(N7=S*N8=S+AD=F) *((N1=S* (N2=S+HS=F)+-N12SUP)*(N3=S+N4=S+-N34SUP)+(N1=S+(N2=S+HS=F)+-N12SUP)*(N3=S*N4=S+-N34SUP)))
422	FLDSUP1	SF	Flood Matrix Impact	AF=S*HG=S***N480U1*N480U2 *M8FLDN**	M83	AF=S*HG=S*((N1=S*(N2=S+HS=F)+(-N12SUP))*(N3=S* N4=S+(-N34SUP))*(N5=S*N6=S+AC=F)*(N7=S*N8=S+AD=F))
422.1	FLDSUP1	SF	New Flood Split Fraction	AF=S*HG=S***N480U1*N480U2*** M8FLD1 * (M1=S+ M1FLDN+ N3=F)*(M2=S+ M2FLDN+ N2=F)*(M3=S+ M3FLDN+ N7=F)*(M7=S+ AE=F+ M7FLDN)	**M8Z**	n/a
423	FLDSUP1	SF	n/a	None	M8F	1
424	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	H4S	NOTRIP
425	FLDSUP1	SF	Macro EOP02S is deleted	Deleted	H42	EOP02S
426	FLDSUP1	SF	n/a	None	H41	NEOP8S
427	FLDSUP1	SF	n/a	None	H4F	1
428	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	CIS	NOTRIP
429	FLDSUP1	SF	n/a	None	CI1	AF=S*DC=S*M7=S*M8=S*H4=S*NEOP8S* DA=S
430	FLDSUP1	SF	n/a	None	CIF	1
431	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	HHS	NOTRIP
432	FLDSUP1	SF	n/a	None	HH1	H4=S*(AF=S*CI=S*DA=S*M7=S*M8=S)*(QC=S*N1=S* M2=S)*(QF=S*M3=S*N7=S)
433	FLDSUP1	SF	n/a	None	HH6	H4=S*((QC=S+DA=S)*N1=S*M2=S)*((QF=S+DC=S)* M3=S*N7=S)
434	FLDSUP1	SF	n/a	None	HHB	((QC=S+DA=S)*N1=S*M2=S)*((QF=S+DC=S)*M3=S*N7=S)
435	FLDSUP1	SF	n/a	None	HH3	H4=S*(AF=S*CI=S*DA=S*M7=S*M8=S)*((QC=S*N1=S* M2=S)+(QF=S*N7=S*M3=S))

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436	FLDSUP1	SF	n/a	None	HH4	H4=S*((QC=S*N1=S*M2=S)+(QF=S*N7=S*M3=S))
437	FLDSUP1	SF	n/a	None	HH7	H4=S*((DC=S*N7=S*M3=S)+(DA=S*N1=S*M2=S))
438	FLDSUP1	SF	n/a	None	HHH	((QC=S*N1=S*M2=S)+(QF=S*N7=S*M3=S))
439	FLDSUP1	SF	n/a	None	HH8	((DC=S*N7=S*M3=S)+(DA=S*N1=S*M2=S))
440	FLDSUP1	SF	n/a	None	HHF	1
441	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	HRS	NOTRIP
442	FLDSUP1	SF	n/a	None	HR1	HH=S
443	FLDSUP1	SF	n/a	None	HRF	1
444	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	HLS	NOTRIP
445	FLDSUP1	SF	n/a	None	HL3	HH=S*HR=S
446	FLDSUP1	SF	n/a	None	HL2	HH=S
447	FLDSUP1	SF	n/a	None	HLF	1
448	FLDSUP1	SF	Macro NOTRIP is removed.	Deleted	HCS	NOTRIP
449	FLDSUP1	SF	n/a	None	HC1	HH=S
450	FLDSUP1	SF	n/a	None	HCF	1
451	FLDSUP2	Macro	n/a	None	NOSPEA	OG=S+(E2=S*(E3=S+E4=S)+E3=S*E4=S)
452	FLDSUP2	Macro	n/a	None	NOSPEB	OH=S+(E1=S*(E3=S+E4=S)+E3=S*E4=S)
453	FLDSUP2	Macro	n/a	None	NOSPEC	OG=S
454	FLDSUP2	Macro	n/a	None	NOSPED	OH=S
455	FLDSUP2	Macro	n/a	None	NUVASP	NOSPEA
456	FLDSUP2	Macro	n/a	None	NUVBSP	NOSPEB
457	FLDSUP2	Macro	n/a	None	NUVCSP	NOSPEC
458	FLDSUP2	Macro	n/a	None	NUVDSP	NOSPED
459	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	PO=S+ (E1=S*(E2=S*(E3=S+ E4=S)+ E3=S*E4=S)+ E2=S* E3=S*E4=S)*(EX=S*EY=S*EZ=S+ EW=S*(EX=S*(EY=S+ EZ=S)+ EY=S*EZ=S)+ DC=F)	NRPSSP	PO=S+(E1=S*(E2=S*(E3=S+E4=S)+E3=S*E4=S)+E2=S* E3=S*E4=S)*(EX=S*EY=S*EZ=S+EW=S*(EX=S*(EY=S+ EZ=S)+EY=S*EZ=S)+DC=F)+INIT=LODC21
460	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	NOSPEC*NOSPED	NCISSP	NOSPEC*NOSPED*(-(INIT=IESF))
461	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	NOSPEC*NOSPED	NMSVSP	NOSPEC*NOSPED*(-(INIT=IESF))

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462	FLDSUP2	Macro	n/a	None	GJTO1A	GJTO11
463	FLDSUP2	Macro	n/a	None	GJTO2B	GJTO24+GJ=S*EG=S*DC=S*(GW=F+M3=F)*(BUS11+BUS14) *-(GJTO1A+GJTO14+GJTO21)
464	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	GJTO14+ GJ=S*(S4=F+ M1=F+ VI=F)*DC=S*UB=S*-(GJTO1A+ GJTO2B+ GJTO21)	GJTO1B	GJTO14+GJ=S*(S4=F+M1=F+VI=F)*DC=S*UB=S*-(GJTO1A+ GJTO2B+GJTO21+INIT=LOAC4)
465	FLDSUP2	Macro	n/a	None	GJTO2A	GJTO21+GJ=S*(GZ=F+N6=F)*EF=S*DA=S*-(GJTO1A+ GJTO1B+GJTO2B)
466	FLDSUP2	Macro	n/a	None	BUS11	NUVCSP*AA=S*(QC=S+GE=S)*Y3=S
467	FLDSUP2	Macro	n/a	None	BUS11U	AA=S*(NUVCSP*QC=S+GE=S)*Y3=S
468	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	BUS11+ NUVCSP*Y3=S*QC=F*GE=F*GK=S* GJTO11	BUS11L	BUS11+NUVCSP*Y3=S*(QC=F+INIT=IESF)*GE=F*GK=S* GJTO11
469	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(AA=S+ QC=F*GE=F)* Y3=S* ((DA=S*H5=S+ QC=S)*NUVCSP+ GE=S+ GJTO1A)	BUS11V	(AA=S+(QC=F+INIT=IESF)*GE=F*(-(INIT=LOAC)))*Y3=S*((DA=S*H5=S+QC=S)*NUVCSP+GE=S+GJTO1A)
470	FLDSUP2	Macro	n/a	None	BUS14	NUVDSP*AB=S*Y4=S*(QD=S+GG=S*S4=S*VI=S*M1=S)
471	FLDSUP2	Macro	n/a	None	BUS14L	BUS14+NUVDSP*Y4=S*QD=F*GG=F*GK=S*GJTO14
472	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(AB=S+ QD=F*GG=F)*Y4=S* ((DC=S*H5=S+ QD=S)*(QQ=S+ NUVDSP) + GG=S*S4=S*VI=S*M1=S*NUVDSP+ GJTO1B)	BUS14V	(AB=S+QD=F*GG=F*(-(INIT=LOAC4)))*Y4=S*((DC=S*H5=S+QD=S)*(QQ=S+NUVDSP)+GG=S*S4=S*VI=S*M1=S* NUVDSP+GJTO1B)
473	FLDSUP2	Macro	n/a	None	INSTAC	E5=S+E6=S*BUS14
474	FLDSUP2	Macro	n/a	None	NEOP8L	(XA=S*XB=S*XC=S*XD=S*(EW=S*EZ=S+EX=S*EY=S) *(E5=S+E6=S*BUS14))*NEOP8S
475	FLDSUP2	Macro	n/a	None	MCCONE	M1=S*BUS14+M2=S*BUS11U
476	FLDSUP2	Macro	n/a	None	MCCTWO	(M1=S*BUS14)*(M2=S*BUS11U)
477	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	NOSPEC*NOSPED	NOSSSA	NOSPEC*NOSPED*(-(INIT=IESF))
478	FLDSUP2	Macro	n/a	None	NU2SPE	NU2SPS*(EK=S*EL=S*(EM=S+EN=S)+EM=S*EN=S)
479	FLDSUP2	Macro	n/a	None	ACLT	NU2SPE*AC=S*Y3=S*(QE=S+GH=S*GZ=S*N6=S)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
480	FLDSUP2	Macro	n/a	None	BUS21L	ACLT+NU2SPE*Y3=S*QE=F*GH=F*GK=S* GJTO21
481	FLDSUP2	Macro	n/a	None	ACLTV	(AC=S+QE=F*GH=F)*Y3=S*((GH=S*GZ=S* N6=S+DA=S* H6=S+QE=S)*NU2SPE+GJTO2A)
482	FLDSUP2	Macro	n/a	None	ADLT	NU2SPE*AD=S*Y4=S*(QF=S+GF=S*GW=S *M3=S)
483	FLDSUP2	Macro	n/a	None	BUS24L	ADLT+NU2SPE*Y4=S*QF=F*GF=F*GK=S* GJTO24
484	FLDSUP2	Macro	n/a	None	ADLTV	(AD=S+QF=F*GF=F)*Y4=S*((GF=S*GW=S* M3=S+DC=S* H6=S+QF=S)*NU2SPE+GJTO2B)
485	FLDSUP2	Macro	n/a	None	NRAVAIL	NR=S*XALT*XCLT*((TA=S+SX=S)*(BUS11 +BUS14)+(GW=S*ADLT+ GZ=S*ACLT)*QF=S*BUS11*QC=S)
486	FLDSUP2	Macro	n/a	None	NSAVAIL	NS=S*XALT*XCLT*((GW=S*ADLT+GZ=S*A CLT)+BUS11* QC=S*QE=S*(TA=S+SX=S)*ACLT)
487	FLDSUP2	Macro	n/a	None	SGINDS	E1=S+E2=S+E3=S+E4=S
488	FLDSUP2	Macro	n/a	None	SGINDL	EW=S*XALT+EX=S*XCLT+EY=S*XBLT+EZ =S*XDLT
489	FLDSUP2	Macro	n/a	None	WSGINS	E3=S*E4=S
490	FLDSUP2	Macro	n/a	None	WSGINL	EY=S*XBLT*EZ=S*XDLT
491	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	XA=S*((N1=S+ QC=F*GE=F)*BUS11V+ (N5=S+ QE=F*GH=F)*ACLTV)	XALT	XA=S*((N1=S+QC=F*GE=F*(- (INIT=LB11A)))*BUS11V+ (N5=S+QE=F*GH=F)*ACLTV)
492	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	XB=S*((N4=S+ QD=F*GG=F)*BUS14V+ (N8=S+ QF=F*GF=F)*ADLTV)	XBLT	XB=S*((N4=S+QD=F*GG=F*(- (INIT=LB14B)))*BUS14V+ (N8=S+QF=F*GF=F)*ADLTV)
493	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	XC=S*((N3=S+ QD=F*GG=F)*BUS14V+ (N7=S+ QF=F*GF=F)*ADLTV)	XCLT	XC=S*((N3=S+QD=F*GG=F*(- (INIT=LB14A)))*BUS14V+ (N7=S+QF=F*GF=F)*ADLTV)
494	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	XD=S*((N2=S+ QC=F*GE=F)*BUS11V+ (N6=S+ QE=F*GH=F)*ACLTV)	XDLT	XD=S*((N2=S+QC=F*GE=F*(- (INIT=LB11B)))*BUS11V+ (N6=S+QE=F*GH=F)*ACLTV)
495	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(N1=S+ QC=F*GE=F* (H5=S+ GJTO11))+ (N5=S*ACLTA+ QE=F*GH=F*(H6=S+ GJTO21))	PWR1D1	(N1=S+QC=F*GE=F*(- (INIT=LB11A+INIT=LOAC))* (H5=S+GJTO11))+(N5=S*ACLTA+QE=F*G H=F*(H6=S+ GJTO21))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
496	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(N4=S*BUS14A+ QD=F*GG=F*(H5=S+ GJTO14))+ (N8=S*ADLTA+ QF=F*GF=F*(H6=S+ GJTO24))	PWR1D2	(N4=S*BUS14A+QD=F*GG=F*(-(INIT=LB14B+INIT=LOAC4))*(H5=S+GJTO14))+(N8=S*ADLTA+QF=F* GF=F*(H6=S+ GJTO24))
497	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(N3=S*BUS14A+ QD=F*GG=F*(H5=S+ GJTO14))+ (N7=S*ADLTA+ QF=F*GF=F*(H6=S+ GJTO24))	PWR2D1	(N3=S*BUS14A+QD=F*GG=F*(-(INIT=LB14A+INIT=LOAC4))*(H5=S+GJTO14))+(N7=S*ADLTA+QF=F* GF=F*(H6=S+ GJTO24))
498	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(N2=S+ QC=F*GE=F* (H5=S+ GJTO11))+ (N6=S*ACLTA+ QE=F*GH=F*(H6=S+ GJTO21))	PWR2D2	(N2=S+QC=F*GE=F*(-(INIT=LB11B+INIT=LOAC))* (H5=S+GJTO11))+(N6=S*ACLTA+QE=F*G H=F*(H6=S+ GJTO21))
499	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	M1=S+ QD=F*GG=F* (GJTO14+ H5=S*DC=S)+ M2=S+ QC=F*GE=F*(GJTO11+ H5=S*DA=S)	XWMCCL	M1=S+QD=F*GG=F*(GJTO14+H5=S*DC=S)*(-(INIT=LOAC4+ INIT=LB14A+INIT=LB104R))+M2=S+QC=F* GE=F*(GJTO11+ H5=S*DA=S)*(-(INIT=LOAC+INIT=LB11B+INIT=LB114R))
500	FLDSUP2	Macro	n/a	None	XW2MCL	M3=S+QF=F*GF=F*(GJTO24+H6=S*DC=S) +N6=S+QE=F* GH=F*(GJTO21+H6=S*DA=S)
501	FLDSUP2	Macro	n/a	None	EWSUPP	E1=S*(XA=S+XW=S)+DA=F*XW=S
502	FLDSUP2	Macro	n/a	None	EXSUPP	E2=S*(XC=S+XW=S*XA=S)+DC=F*XW=S* XA=S
503	FLDSUP2	Macro	n/a	None	EYSUPP	E3=S*(XB=S+XW=S*XA=S*XC=S)+DB=F*X W=S*XA=S*XC=S
504	FLDSUP2	Macro	n/a	None	EZSUPP	E4=S*(XD=S+XW=S*XA=S*XB=S*XC=S)+ DD=F*XW=S* XA=S*XB=S*XC=S
505	FLDSUP2	Macro	n/a	None	EKSUPP	EF=S*(XA=S+H9=S)+DA=F*H9=S
506	FLDSUP2	Macro	n/a	None	ELSUPP	EG=S*(XC=S+H9=S*XA=S)+DC=F*H9=S*X A=S
507	FLDSUP2	Macro	n/a	None	EMSUPP	EH=S*(XB=S+H9=S*XA=S*XC=S)+DB=F*H 9=S*XA=S*XC=S
508	FLDSUP2	Macro	n/a	None	ENSUPP	EI=S*(XD=S+H9=S*XA=S*XB=S*XC=S)+D D=F*H9=S* XA=S*XB=S*XC=S
509	FLDSUP2	Macro	n/a	None	E5SUPP	M2=S*BUS11U

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
509.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact	INIT=Q224AM+ INIT=S205AN+ INIT=S118XR+ INIT=X226AM+ INIT=N226AM+ INIT=S228AN+ INIT=S228AR+ INIT=F315AM+ INIT=W315AM+ INIT=XT27AM+ INIT=F317AM+ INIT=ST12AM+ INIT=IT12AM+ INIT=S118XN+ INIT=S226AN+ INIT=S226AR	NRFLD1	n/a
509.2	FLDSUP2	Macro	New Macro: Flood Matrix Impact	INIT=F205AN+ INIT=N205LN+ INIT=S205AN+ INIT=S205AR+ INIT=ST12AM+ INIT=IT12AM+ INIT=S228AN+ INIT=S118XN+ INIT=S226AN	NSFLD1	n/a
510	FLDSUP2	Macro	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts.	XA=S*XC=S*(BUS11*R3=S+ BUS14A*R4=S)*NMSVSP*(-(NRFLD1))	NRCOOL	(-(INIT=LOSW+INIT=LOSRW+INIT=LTBSRW+INIT=LTBSRA))*XA=S*XC=S*(BUS11*R3=S+BUS14A*R4=S)*NMSVSP
511	FLDSUP2	Macro	Flood Matrix Impact	XA=S*XC=S*NU2SPE*(ACLTA*W3=S+ ADLTA*W4=S)*(-(NSFLD1))	NSCOOL	XA=S*XC=S*NU2SPE*(ACLTA*W3=S+ADLTA*W4=S)
512	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	IP=S*IL=S*IN=S	NRSUPP	(-(INIT=LOIA))*IP=S*IL=S*IN=S
512.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S118XN))	IHFLDN	n/a
512.2	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S118XN+ INIT=S205AN+ INIT=S226AR+ INIT=S226AN+ INIT=X226AM+ INIT=N226AM))	I1FLDN	n/a
512.3	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S118XN+ INIT=S205AN+ INIT=S226AR+ INIT=S226AN+ INIT=X226AM+ INIT=N226AM))	I2FLDN	n/a
513	FLDSUP2	Macro	n/a	None	U2XCNT	N5=S*QE=S*NU2SPE
514	FLDSUP2	Macro	n/a	None	U1XCNT	N1=S*QC=S*NUVCSP
515	FLDSUP2	Macro	n/a	None	PA11CM	N2=S*QC=S*NRCOOL*NUVCSP
516	FLDSUP2	Macro	n/a	None	PA21CM	N8=S*QF=S*NSCOOL*NU2SPE
517	FLDSUP2	Macro	n/a	None	IA11CM	N2=S*(QC=S+DA=S)*M2=S*XA=S*NRCOOL
518	FLDSUP2	Macro	n/a	None	IA12CM	N4=S*(QD=S+DC=S)*M1=S*XC=S*NRCOOL
519	FLDSUP2	Macro	n/a	None	IA21CM	N6=S*XA=S*NSCOOL

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
520	FLDSUP2	Macro	n/a	None	IA22CM	N8=S*M3=S*XC=S*NSCOOL
521	FLDSUP2	Macro	n/a	None	S1SUPG	BUS11L*SC=S*(QC=S+DA=S)
521.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=S118XR+ INIT=S118XN+ INIT=S228AN+ INIT=S226AR+ INIT=S226AN+ INIT=S228AR+ INIT=SISPAN+ INIT=SISPAR))	**SCFLDN**	n/a
522	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	S1SUPG	S1SUPP	S1SUPG*(-(INIT=LOSW11))
523	FLDSUP2	Macro	n/a	None	S2SUPG	NUVDSP*Y4=S*(BUS14A+QD=F*GG=F*GK =S*GJTO14) *SC=S*(QD=S+DC=S)
524	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	S2SUPG	S2SUPP	S2SUPG*(-(INIT=LOSW12))
524.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=D318AM+ INIT=D221AM+ INIT=D227AM+ INIT=X319AM+ INIT=X228AM+ INIT=M419AM+ INIT=X524AM+ INIT=X537AM+ INIT=D603AM))	**DMFLDN**	n/a
524.2	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=S205AN+ INIT=X226AM+ INIT=W419AM+ INIT=M421AM+ INIT=M422AM+ INIT=N226AM+ INIT=W315AM+ INIT=W221AM+ INIT=W224AM+ INIT=W227AM+ INIT=W320AM+ INIT=W428AM+ INIT=W524AM+ INIT=W525AM))	**RLFLDN**	n/a
524.3	FLDSUP2	Macro	New Macro: Flood Matrix Impact	INIT=XT27AM+ INIT=IT12AM+ INIT=Q224AM	**RLFLD1**	n/a
525	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(BUS11*S1=S*R3=S*VH=S+ BUS14A* S2=S*R4=S*VI=S) *RLFLDN	SRWSUP	(-(INIT=LOSRW))*(BUS11*S1=S*R3=S*VH=S +BUS14A* S2=S*R4=S*VI=S*(-(INIT=LO1SRW)))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
525.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=X228AM+ INIT=F317AM+ INIT=M419AM+ INIT=X319AM+ INIT=X524AM+ INIT=X537AM+ INIT=XT27AM+ INIT=F205AN+ INIT=X226AM+ INIT=F315AM+ INIT=F119AM+ INIT=F221AM+ INIT=F224AM+ INIT=F225AM+ INIT=F227AM+ INIT=M421AM+ INIT=M422AM+ INIT=F428AM+ INIT=F429AM+ INIT=F603AM+ INIT=F605AM+ INIT=FISPAM))	PGFLDN	n/a
525.2	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S118XN+ INIT=S205AN+ INIT=S228AN+ INIT=S226AN+ INIT=S228AR+ INIT=C324AM+ INIT=X228AM+ INIT=M419AM+ INIT=C118XN+ INIT=C118XR+ INIT=R221AM+ INIT=C221AM+ INIT=C224AM+ INIT=C227AM+ INIT=R228AM+ INIT=C537XM))	K5FLDN	n/a
525.3	FLDSUP2	Macro	New Macro: Flood Matrix Impact	INIT=W315AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=Q224AM+ INIT=F315AM+ INIT=ST12AM	K5FLD1	n/a
526	FLDSUP2	Macro	n/a	None	SRWMUI	(E5=S+VH=F)*(E6=S+VI=F)*XC=S*ES=S
527	FLDSUP2	Macro	n/a	None	CCWMUI	E5=S*XC=S*ES=S
528	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	(AE=S*M7=S*XA=S*E5=S*NR=S*ES =S+ AF=S*M8=S*XC=S)*M7=S	VCMAKU	(-(INIT=LOCV))*(AE=S*M7=S*XA=S*E5=S*NR=S*ES=S+ AF=S*M8=S*XC=S)*M7=S
529	FLDSUP2	Macro	n/a	None	S3SUPG	BUS11*S1=S*R3=S*RL=S*(QC=S+DA=S)
530	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	S3SUPG	S3SUPP	S3SUPG*(-(INIT=LOSRW))
531	FLDSUP2	Macro	n/a	None	S4SUPG	BUS14A*S2=S*R4=S*RL=S*(QD=S+DC=S)
532	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	S4SUPG	S4SUPP	S4SUPG*(-(INIT=LOSRW+INIT=LO1SRW))
533	FLDSUP2	Macro	n/a	None	TASUPP	XA=S*XC=S*NMSVSP*NR=S*(S3=S*BUS11*VH=S+S4=S* BUS14*VI=S*(R3=F+VH=F))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
534	FLDSUP2	Macro	Removed Unnecessary Initiating Event Impacts	XA=S*XC=S*NMSVSP*NR=S*(S4=S*BUS14*VI=S+S3=S*BUS11*VH=S*(R4=F+VI=F))	TBSUPP	XA=S*XC=S*NMSVSP*NR=S*(S4=S*BUS14*VI=S+S3=S*BUS11*VH=S*(R4=F+VI=F))*(-(INIT=LTBSRW+INIT=LTBSRB))
534.1	FLDSUP2	Macro	New Macro: Flood Matrix Impact (Combined Impacts for GW and GZ)	(-(INIT=F205AN+ INIT=N205LN+ INIT=S205AN+ INIT=S205AR+ INIT=S118XN+ INIT=S228AN+ INIT=S226AN+ INIT=SISPAN))	**RMFLDN**	n/a
535	FLDSUP2	Macro	n/a	None	GWSUPP	W4=S*NU2SPE*Y4=S*(ADLTA+QF=F*GF=F*GK=S*GJTO24) *(QF=S+DC=S)*RM=S
536	FLDSUP2	Macro	n/a	None	GZSUPP	W3=S*NU2SPE*Y3=S*(ACLTA+QE=F*GH=F*GK=S*GJTO21) *(QE=S+DA=S)*RM=S
537	FLDSUP2	Macro	n/a	None	KXSUPP	KM=S*(N1=S+QC=F*GE=F)*BUS11L*(QC=S+DA=S)
538	FLDSUP2	Macro	n/a	None	KYSUPP	KM=S*(N3=S+QD=F*GG=F)*BUS14L*DC=S
539	FLDSUP2	Macro	n/a	None	CCWPP2	KM=S*KX=S*KY=S
539.1	FLDSUP2	Macro	New Macro: D627+D744	(-(INIT=F317AM))	**KHFLDN**	n/a
539.2	FLDSUP2	Macro	New Macro: Flood Matrix Impact	(-(INIT=F317AM))	**KZFLDN**	n/a
540	FLDSUP2	Macro	Flood Matrix Impact	K5=S*KZFLDN* KH=S*(KM=S+KN=S)*((N2=S+ QC=F*GE=F)*DA=S*BUS11L*(QC=S+ DA=S)+ (N4=S+QD=F*GG=F)*DC=S*BUS14L*(QD=S+ DC=S))	KZSUPP	K5=S*KH=S*(KM=S+KN=S)*((N2=S+QC=F*GE=F)*DA=S*BUS11L*(QC=S+DA=S)+(N4=S+QD=F*GG=F)*DC=S*BUS14L* (QD=S+DC=S))
541	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	XAS	NOTRIP
542	FLDSUP2	SF	n/a	None	XA1	DA=S*HR=S*HC=S*N1=S*N5=S*ACLTA
543	FLDSUP2	SF	n/a	None	XA2	DA=S*N1=S*N5=S*ACLTA
544	FLDSUP2	SF	n/a	None	XA3	DA=S*HR=S*HC=S*PWR1D1
545	FLDSUP2	SF	n/a	None	XAH	DA=S*PWR1D1
546	FLDSUP2	SF	n/a	None	XAF	1
547	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	XBS	NOTRIP
548	FLDSUP2	SF	n/a	None	XB1	DB=S*HR=S*HC=S*N4=S*BUS14A*N8=S*ADLTA
549	FLDSUP2	SF	n/a	None	XB2	DB=S*N4=S*BUS14A*N8=S*ADLTA
550	FLDSUP2	SF	n/a	None	XB3	DB=S*HR=S*HC=S*PWR1D2

Order	Module	Type	Basis for Change	Flood Module Change
551	FLDSUP2	SF	n/a	None
552	FLDSUP2	SF	n/a	None
553	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted
554	FLDSUP2	SF	n/a	None
555	FLDSUP2	SF	n/a	None
556	FLDSUP2	SF	n/a	None
557	FLDSUP2	SF	n/a	None
558	FLDSUP2	SF	n/a	None
559	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted
560	FLDSUP2	SF	n/a	None
561	FLDSUP2	SF	n/a	None
562	FLDSUP2	SF	n/a	None
563	FLDSUP2	SF	n/a	None
564	FLDSUP2	SF	n/a	None
565	FLDSUP2	SF	Macro NOTRIP is removed.	XA=S
566	FLDSUP2	SF	n/a	None
567	FLDSUP2	SF	n/a	None
568	FLDSUP2	SF	Macro NOTRIP is removed.	XC=S
569	FLDSUP2	SF	n/a	None
570	FLDSUP2	SF	n/a	None
571	FLDSUP2	SF	Macro NOTRIP is removed.	XA=S*XB=S*XC=S*XD=S
572	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	XWMCCL
573	FLDSUP2	SF	Covered by XW2.	Deleted
574	FLDSUP2	SF	n/a	None
575	FLDSUP2	SF	Macro NOTRIP is removed.	XW=S*XW2MCL+ XA=S*XB=S*XC=S+ XA=S*XB=S*XD=S+ XA=S*XC=S*XD=S+ XB=S*XC=S*XD=S
576	FLDSUP2	SF	n/a	None
577	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	Deleted
578	FLDSUP2	SF	n/a	None
579	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted
580	FLDSUP2	SF	n/a	None
581	FLDSUP2	SF	n/a	None
582	FLDSUP2	SF	n/a	None

Term	GT Rule
XBH	DB=S*PWR1D2
XBF	1
XCS	NOTRIP
XC1	DC=S*HL=S*HC=S*N3=S*BUS14A*N7=S*ADLTA
XC2	DC=S*N3=S*BUS14A*N7=S*ADLTA
XC3	DC=S*HL=S*HC=S*PWR2D1
XCH	DC=S*PWR2D1
XCF	1
XDS	NOTRIP
XD1	DD=S*HL=S*HC=S*N2=S*N6=S*ACLTA
XD2	DD=S*N2=S*N6=S*ACLTA
XD3	DD=S*HL=S*HC=S*PWR2D2
XDH	DD=S*PWR2D2
XDF	1
Y3S	XA=S+NOTRIP
Y31	XC=S
Y32	1
Y4S	XC=S+NOTRIP
Y41	XA=S
Y42	1
XWS	XA=S*XB=S*XC=S*XD=S+NOTRIP
XW2	XWMCCL*(-(INIT=LB104R))
XW3	XWMCCL
XWF	1
H9S	XW=S*XW2MCL+XA=S*XB=S*XC=S+XA=S*XB=S*XD=S+ XA=S*XC=S*XD=S+XB=S*XC=S*XD=S+NOTRIP
H91	XW2MCL*(-XWMCCL)
H92	XW2MCL*(INIT=LB104R)
H9F	1
EWS	NOTRIP
EW1	EWSUPP*HR=S
EW2	EWSUPP
EWF	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
583	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	EXS	NOTRIP
584	FLDSUP2	SF	n/a	None	EX1	EXSUPP*HR=S
585	FLDSUP2	SF	n/a	None	EX2	EXSUPP
586	FLDSUP2	SF	n/a	None	EXF	1
587	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	EYS	NOTRIP
588	FLDSUP2	SF	n/a	None	EY1	EYSUPP*HR=S
589	FLDSUP2	SF	n/a	None	EY2	EYSUPP
590	FLDSUP2	SF	n/a	None	EYF	1
591	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	EZS	NOTRIP
592	FLDSUP2	SF	n/a	None	EZ1	EZSUPP*HR=S
593	FLDSUP2	SF	n/a	None	EZ2	EZSUPP
594	FLDSUP2	SF	n/a	None	EZF	1
595	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	EKS	NOTRIP
596	FLDSUP2	SF	n/a	None	EK1	EKSUPP*HL=S
597	FLDSUP2	SF	n/a	None	EK2	EKSUPP
598	FLDSUP2	SF	n/a	None	EKF	1
599	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	ELS	NOTRIP
600	FLDSUP2	SF	n/a	None	EL1	ELSUPP*HL=S
601	FLDSUP2	SF	n/a	None	EL2	ELSUPP
602	FLDSUP2	SF	n/a	None	ELF	1
603	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	EMS	NOTRIP
604	FLDSUP2	SF	n/a	None	EM1	EMSUPP*HL=S
605	FLDSUP2	SF	n/a	None	EM2	EMSUPP
606	FLDSUP2	SF	n/a	None	EMF	1
607	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	ENS	NOTRIP
608	FLDSUP2	SF	n/a	None	EN1	ENSUPP*HL=S
609	FLDSUP2	SF	n/a	None	EN2	ENSUPP
610	FLDSUP2	SF	n/a	None	ENF	1
611	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	(E2=S*(E3=S+ E4=S)+ E3=S*E4=S)*(E1=F+ EX=S*(EY=S+ EZ=S)+ EY=S*EZ=S)	OGS	INIT=L120V1+INIT=LODC11+(E2=S*(E3=S +E4=S)+ E3=S*E4=S)*(N120IE*N125IE*E1=F+EX=S* (EY=S+ EZ=S)+EY=S*EZ=S)
612	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	E1=F*(E2=S+ E3=S+ E4=S)	OG1	N120IE*N125IE*E1=F*(E2=S+E3=S+E4=S)
613	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	E1=F	OG2	E1=F*(N120IE*N125IE+(E2=S+E3=S+E4=S))
614	FLDSUP2	SF	Covered by OG2.	Deleted	OG3	E1=F
615	FLDSUP2	SF	n/a	None	OGF	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
616	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	(E1=S*(E3=S+ E4=S)+ E3=S*E4=S)*(E2=F+ (EW=S*(EY=S+ EZ=S)+ EY=S*EZ=S))+ OG=F*E2=F*(E3=S+ E4=S)	OHS	INIT=L120V2+INIT=LODC21+(E1=S*(E3=S +E4=S)+ E3=S*E4=S)*(N120IE*N125IE*E2=F+(EW= S*(EY=S+ EZ=S)+EY=S*EZ=S))+OG=F*E2=F*(E3=S+ E4=S)
617	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	E2=F*(E1=S+ OG=F)	OH1	N120IE*N125IE*E2=F*(E1=S+OG=F)
618	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	E2=F*(E1=S)	OH2	E2=F*((INIT=L120V1+INIT=LODC11)*(E3=S +E4=S)+E1=S)
619	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	E2=F*OG=S	OH3	E2=F*((INIT=L120V1+INIT=LODC11)+OG= S*N120IE* N125IE)
620	FLDSUP2	SF	n/a	None	OHF	1
621	FLDSUP2	SF	Macro NOTRIP is removed.	NUVDSP	QQS	NUVDSP+NOTRIP
622	FLDSUP2	SF	n/a	None	QQM	DC=S*QD=S+DC=S*DA=S*QC=S
623	FLDSUP2	SF	n/a	None	QQF	1
624	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	E5S	NOTRIP
625	FLDSUP2	SF	n/a	None	E51	E5SUPP*HR=S
626	FLDSUP2	SF	n/a	None	E52	E5SUPP
627	FLDSUP2	SF	n/a	None	E5F	1
628	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	E6S	NOTRIP
629	FLDSUP2	SF	n/a	None	E63	M1=S*HR=S*(E5=S+-E5SUPP)
630	FLDSUP2	SF	n/a	None	E66	M1=S*(E5=S+-E5SUPP)
631	FLDSUP2	SF	n/a	None	E62	M1=S*HR=S
632	FLDSUP2	SF	n/a	None	E65	M1=S
633	FLDSUP2	SF	n/a	None	E6F	1
634	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	ESS	NOTRIP
635	FLDSUP2	SF	n/a	None	ES1	E5=S*E6=S
636	FLDSUP2	SF	n/a	None	ES2	E5=S+E6=S
637	FLDSUP2	SF	n/a	None	ESF	1
638	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	IPS	NOTRIP
639	FLDSUP2	SF	n/a	None	IP1	1
640	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	ILS	NOTRIP
641	FLDSUP2	SF	n/a	None	IL1	IP=S
642	FLDSUP2	SF	n/a	None	ILF	1
643	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	INS	NOTRIP
644	FLDSUP2	SF	n/a	None	IN1	IP=S
645	FLDSUP2	SF	n/a	None	INF	1
646	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	NRS	NOTRIP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
647	FLDSUP2	SF	n/a	None	NR1	NRSUPP*PA11CM*PA21CM*IA11CM*QC=S*IA12CM*QD=S* U1XCNT
648	FLDSUP2	SF	n/a	None	NRA	NRSUPP*PA11CM*PA21CM*IA11CM*IA12CM*U1XCNT
649	FLDSUP2	SF	n/a	None	NRB	NRSUPP*PA11CM*PA21CM*IA12CM*U1XCNT
650	FLDSUP2	SF	n/a	None	NRD	NRSUPP*PA11CM*PA21CM*IA11CM*U1XCNT
651	FLDSUP2	SF	n/a	None	NRE	NRSUPP*PA11CM*PA21CM*U1XCNT
652	FLDSUP2	SF	n/a	None	NRG	NRSUPP*PA21CM*IA11CM*IA12CM*U1XCNT
653	FLDSUP2	SF	n/a	None	NRH	NRSUPP*PA21CM*IA12CM*U1XCNT
654	FLDSUP2	SF	n/a	None	NRJ	NRSUPP*PA21CM*IA11CM*U1XCNT
655	FLDSUP2	SF	n/a	None	NRK	NRSUPP*PA21CM*U1XCNT
656	FLDSUP2	SF	n/a	None	NRL	NRSUPP*PA11CM*IA11CM*IA12CM*U1XCNT
657	FLDSUP2	SF	n/a	None	NRM	NRSUPP*PA11CM*IA12CM*U1XCNT
658	FLDSUP2	SF	n/a	None	NRN	NRSUPP*PA11CM*IA11CM*U1XCNT
659	FLDSUP2	SF	n/a	None	NRP	NRSUPP*PA11CM*U1XCNT
660	FLDSUP2	SF	n/a	None	NRQ	NRSUPP*IA11CM*IA12CM
661	FLDSUP2	SF	n/a	None	NRT	NRSUPP*IA11CM
662	FLDSUP2	SF	n/a	None	NRU	NRSUPP*IA12CM
663	FLDSUP2	SF	n/a	None	NRF	1
676	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	NSS	NOTRIP
677	FLDSUP2	SF	n/a	None	NS1	U2XCNT*PA11CM*PA21CM*IA21CM*QE=S*IA22CM*QF=S* (NR=S+-U1XCNT)
678	FLDSUP2	SF	n/a	None	NSA	U2XCNT*PA11CM*PA21CM*IA21CM*IA22CM*(NR=S+-U1XCNT)
679	FLDSUP2	SF	n/a	None	NSB	U2XCNT*PA11CM*PA21CM*IA21CM*IA22CM*(IA11CM+IA12CM)
680	FLDSUP2	SF	n/a	None	NSC	U2XCNT*PA11CM*PA21CM*IA21CM*(NR=S+-U1XCNT)
681	FLDSUP2	SF	n/a	None	NSD	U2XCNT*PA11CM*PA21CM*IA21CM*(IA11CM+IA12CM)
682	FLDSUP2	SF	n/a	None	NSE	U2XCNT*PA11CM*PA21CM*IA22CM*(NR=S+-U1XCNT)
683	FLDSUP2	SF	n/a	None	NSG	U2XCNT*PA11CM*PA21CM*IA22CM*(IA11CM+IA12CM)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
684	FLDSUP2	SF	n/a	None	NSH	U2XCNT*PA11CM*PA21CM*(NR=S+-U1XCNT)
685	FLDSUP2	SF	n/a	None	NSJ	U2XCNT*PA11CM*PA21CM*(IA11CM+IA12CM)
686	FLDSUP2	SF	n/a	None	NSK	U2XCNT*PA11CM*IA21CM*IA22CM*(NR=S+-U1XCNT)
687	FLDSUP2	SF	n/a	None	NSL	U2XCNT*PA11CM*IA21CM*IA22CM*(IA11CM+IA12CM)
688	FLDSUP2	SF	n/a	None	NSM	U2XCNT*PA11CM*IA21CM*(NR=S+-U1XCNT)
689	FLDSUP2	SF	n/a	None	NSN	U2XCNT*PA11CM*IA22CM*(NR=S+-U1XCNT)
690	FLDSUP2	SF	n/a	None	NSP	U2XCNT*PA11CM*(NR=S+-U1XCNT)
691	FLDSUP2	SF	n/a	None	NSQ	U2XCNT*PA21CM*IA21CM*IA22CM*(NR=S+-U1XCNT)
692	FLDSUP2	SF	n/a	None	NST	U2XCNT*PA21CM*IA21CM*IA22CM*(IA11CM+IA12CM)
693	FLDSUP2	SF	n/a	None	NSU	U2XCNT*PA21CM*IA21CM*(NR=S+-U1XCNT)
694	FLDSUP2	SF	n/a	None	NSV	U2XCNT*PA21CM*IA22CM*(NR=S+-U1XCNT)
695	FLDSUP2	SF	n/a	None	NSW	U2XCNT*PA21CM*(NR=S+-U1XCNT)
696	FLDSUP2	SF	n/a	None	NSX	IA21CM*IA22CM
697	FLDSUP2	SF	n/a	None	NSY	IA21CM
698	FLDSUP2	SF	n/a	None	NSZ	IA22CM
699	FLDSUP2	SF	n/a	None	NSF	1
700	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	SCS	NOTRIP
701	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	SCFLDN	SC1	'-(INIT=LOSW)
702	FLDSUP2	SF	n/a	None	SCF	1
703	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	S1S	NOTRIP
704	FLDSUP2	SF	n/a	None	S13	S1SUPP*QC=S
705	FLDSUP2	SF	n/a	None	S14	S1SUPP*DA=S
706	FLDSUP2	SF	n/a	None	S1F	1
707	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	S2S	NOTRIP
708	FLDSUP2	SF	n/a	None	S23	S2SUPP*QD=S*(S1=S+(-S1SUPG))
709	FLDSUP2	SF	n/a	None	S24	S2SUPP*DC=S*(S1=S+(-S1SUPG))
710	FLDSUP2	SF	n/a	None	S27	S2SUPP*QD=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
711	FLDSUP2	SF	n/a	None	S28	S2SUPP*DC=S
712	FLDSUP2	SF	n/a	None	S2F	1
713	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	DMS	NOTRIP
714	FLDSUP2	SF	Flood Matrix Impact	Y1=S*Y2=S ***DMFLDN**	DM1	Y1=S*Y2=S
715	FLDSUP2	SF	Flood Matrix Impact	Y1=S ***DMFLDN**	DM2	Y1=S
716	FLDSUP2	SF	Flood Matrix Impact	Y2=S ***DMFLDN**	DM3	Y2=S
717	FLDSUP2	SF	Flood Matrix Impact	None	DMF	1
718	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	VHS	NOTRIP
719	FLDSUP2	SF	n/a	None	VH1	R3=S
720	FLDSUP2	SF	n/a	None	VHF	1
721	FLDSUP2	SF	Macro NOTRIP is removed.	VH=F	VIS	VH=F+NOTRIP
722	FLDSUP2	SF	n/a	None	VI1	R4=S
723	FLDSUP2	SF	n/a	None	VIF	1
724	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	PGS	NOTRIP
725	FLDSUP2	SF	Flood Matrix Impact	AE=S ***PGFLDN**	PG1	AE=S
726	FLDSUP2	SF	n/a	None	PG4	1
727	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	CAS	NOTRIP
728	FLDSUP2	SF	Macro EOP02S is deleted	Deleted	CA1	(VCMAKU+PG=S)*(SRWMUI+CCWMUI)*EOP02S
729	FLDSUP2	SF	n/a	None	CA2	(VCMAKU+PG=S)*(SRWMUI+CCWMUI)
730	FLDSUP2	SF	n/a	None	CAF	1
731	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	CBS	NOTRIP
732	FLDSUP2	SF	Macro EOP02S is deleted	Deleted	CB1	CA=S*EOP02S
733	FLDSUP2	SF	n/a	None	CB2	CA=S
734	FLDSUP2	SF	n/a	None	CBF	1
735	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	MFS	NOTRIP
736	FLDSUP2	SF	Macro EOP02S is deleted	Deleted	MF1	(CA=S+(-VCMAKU)*PG=F)*SRWSUP*SRWMUI*EOP02S
737	FLDSUP2	SF	n/a	None	MF2	(CA=S+(-VCMAKU)*PG=F)*SRWSUP*SRWMUI
738	FLDSUP2	SF	n/a	None	MFF	1
739	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	MGS	NOTRIP
740	FLDSUP2	SF	Macro EOP02S is deleted	Deleted	MG1	MF=S*(CB=S+(-VCMAKU)*PG=F)*EOP02S
741	FLDSUP2	SF	n/a	None	MG2	MF=S*(CB=S+(-VCMAKU)*PG=F)
742	FLDSUP2	SF	n/a	None	MGF	1
743	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	RLS	NOTRIP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
744	FLDSUP2	SF	n/a	SRWSUP*DM=S* (PG=S+ VCMAKU*(-RLFLD1))* VH=S*VI=S*CA=S*SRWMUI	RL1	SRWSUP*DM=S*(PG=S+VCMAKU)*VH=S* VI=S*CA=S*SRWMUI
745	FLDSUP2	SF	n/a	None	RL2	SRWSUP*DM=S*(VH=S*VI=S+MG=S)
746	FLDSUP2	SF	n/a	SRWSUP*DM=S*CB=S*SRWMUI* (PG=S+ VCMAKU *(-RLFLD1))	RL3	SRWSUP*DM=S*CB=S*SRWMUI*(PG=S+V CMAKU)
747	FLDSUP2	SF	n/a	None	RL4	SRWSUP*DM=S
748	FLDSUP2	SF	n/a	SRWSUP* (PG=S+ VCMAKU *(-RLFLD1))* VH=S*VI=S*CB=S*SRWMUI	RL5	SRWSUP*(PG=S+VCMAKU)*VH=S*VI=S*C B=S*SRWMUI
749	FLDSUP2	SF	n/a	None	RL6	SRWSUP*VH=S*VI=S*MF=S
750	FLDSUP2	SF	n/a	None	RL7	SRWSUP*MG=S
751	FLDSUP2	SF	n/a	SRWSUP* (PG=S+ VCMAKU *(-RLFLD1))* (VH=S*VI=S*CA=S+ CB=S)* SRWMUI	RL8	SRWSUP*(PG=S+VCMAKU)*(VH=S*VI=S* CA=S+CB=S)*SRWMUI
752	FLDSUP2	SF	n/a	None	RL9	SRWSUP
753	FLDSUP2	SF	n/a	None	RLF	1
754	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	S3S	NOTRIP
755	FLDSUP2	SF	n/a	None	S37	S3SUPP*QC=S
756	FLDSUP2	SF	n/a	None	S39	S3SUPP*DA=S
757	FLDSUP2	SF	n/a	None	S3F	1
758	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	S4S	NOTRIP
759	FLDSUP2	SF	n/a	None	S4B	S4SUPP*QD=S*S3=S
760	FLDSUP2	SF	n/a	None	S4R	S4SUPP*QD=S*(-S3SUPG)
761	FLDSUP2	SF	n/a	None	S4C	S4SUPP*DC=S*S3=S
762	FLDSUP2	SF	n/a	None	S4U	S4SUPP*DC=S*(-S3SUPG)
763	FLDSUP2	SF	n/a	None	S4M	S4SUPP*DC=S*QD=F
764	FLDSUP2	SF	n/a	None	S4L	S4SUPP*QD=S
765	FLDSUP2	SF	n/a	None	S4F	1
766	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	TAS	NOTRIP
767	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	TASUPP*(QC=S+ QD=S)	TA1	TASUPP*(QC=S+QD=S)*(-(INIT=LTBSRW+INIT=LTBSRA))
768	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	TASUPP	TA2	TASUPP*(-(INIT=LTBSRW+INIT=LTBSRA))
769	FLDSUP2	SF	n/a	None	TAF	1
770	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	TBS	NOTRIP
771	FLDSUP2	SF	n/a	None	TB1	TBSUPP*TA=S*(QC=S+QD=S)
772	FLDSUP2	SF	n/a	None	TB5	TBSUPP*(-TASUPP)*(QC=S+QD=S)
773	FLDSUP2	SF	n/a	None	TB3	TBSUPP*(QC=S+QD=S)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
774	FLDSUP2	SF	n/a	None	TB2	TBSUPP*TA=S
775	FLDSUP2	SF	n/a	None	TB6	TBSUPP*(-TASUPP)
776	FLDSUP2	SF	n/a	None	TB4	TBSUPP
777	FLDSUP2	SF	n/a	None	TBF	1
777.1	FLDSUP2	SF	n/a	None	SXS	TA=S*TB=S
777.2	FLDSUP2	SF	n/a	None	SX1	TA=S+TB=S
777.3	FLDSUP2	SF	n/a	None	SXF	1
778	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	RMS	NOTRIP
779	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	DM=S*PG=S*MG=S*(N6=S+ M3=S)*DA=S *RMFLDN	RM1	DM=S*PG=S*MG=S*(N6=S+M3=S)*DA=S
780	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	DM=S *RMFLDN	RM2	DM=S
781	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	PG=S*(N6=S+ M3=S)*CB=S*DA=S *RMFLDN	RM3	PG=S*(N6=S+M3=S)*CB=S*DA=S
782	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	MG=S*(N6=S+ M3=S)*DA=S *RMFLDN	RM4	MG=S*(N6=S+M3=S)*DA=S
783	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	-(SRWSUP*SRWMUI)*(N6=S+ M3=S)*DA=S *RMFLDN	RM5	-(SRWSUP*SRWMUI)*(N6=S+M3=S)*DA=S
784	FLDSUP2	SF	Flood Matrix Impact (Combined Impacts for GW and GZ)	RMFLDN	RM6	1
784.1	FLDSUP2	SF	New Flood Split Fraction	1	RMF	n/a
785	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	GWS	NOTRIP
786	FLDSUP2	SF	n/a	None	GW1	GWSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)
787	FLDSUP2	SF	n/a	None	GW2	GWSUPP*((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)
788	FLDSUP2	SF	n/a	None	GW3	GWSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG))

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
789	FLDSUP2	SF	n/a	None	GW4	GWSUPP*(((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG)))
790	FLDSUP2	SF	n/a	None	GW5	GWSUPP
791	FLDSUP2	SF	n/a	None	GWF	1
792	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	GZS	NOTRIP
793	FLDSUP2	SF	n/a	None	GZ1	GZSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)*(GW=S+-GWSUPP)
794	FLDSUP2	SF	n/a	None	GZ2	GZSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG))*(GW=S+-GWSUPP)
795	FLDSUP2	SF	n/a	None	GZ3	GZSUPP*((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)*(GW=S+-GWSUPP)
796	FLDSUP2	SF	n/a	None	GZ4	GZSUPP*((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG))*(GW=S+-GWSUPP)
797	FLDSUP2	SF	n/a	None	GZ5	GZSUPP*(GW=S+-GWSUPP)
798	FLDSUP2	SF	n/a	None	GZ6	GZSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)
799	FLDSUP2	SF	n/a	None	GZ7	GZSUPP*(S1=S+-S1SUPG)*(S2=S+-S2SUPG)*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG))
800	FLDSUP2	SF	n/a	None	GZ8	GZSUPP*((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*(S3=S+ -S3SUPG)*(S4=S+-S4SUPG)
801	FLDSUP2	SF	n/a	None	GZ9	GZSUPP*((S1=S+-S1SUPG)+(S2=S+-S2SUPG))*((S3=S+ -S3SUPG)+(S4=S+-S4SUPG))
802	FLDSUP2	SF	n/a	None	GZA	GZSUPP
803	FLDSUP2	SF	n/a	None	GZF	1
803.01	FLDSUP2	SF	Macro NOTRIP is removed.	NRAVAIL	IHS	NRAVAIL+NOTRIP
803.02	FLDSUP2	SF	Flood Matrix Impact	IP=S*NEOP8S*ES=S*XC=S* **IHFLDN**	IH1	IP=S*NEOP8S*ES=S*XC=S
803.03	FLDSUP2	SF	Flood Matrix Impact	IP=S*ES=S*XC=S* **IHFLDN**	IH3	IP=S*ES=S*XC=S
803.04	FLDSUP2	SF	n/a	None	IHF	1
803.05	FLDSUP2	SF	Macro NOTRIP is removed.	NRAVAIL	I1S	NRAVAIL+NOTRIP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
803.06	FLDSUP2	SF	Flood Matrix Impact	IP=S*IL=S*M2=S*BUS11U*IH=S* **I1FLDN**	I12	IP=S*IL=S*M2=S*BUS11U*IH=S
803.07	FLDSUP2	SF	n/a	None	I1F	1
803.08	FLDSUP2	SF	Macro NOTRIP is removed.	NRAVAIL	I2S	NRAVAIL+NOTRIP
803.09	FLDSUP2	SF	Flood Matrix Impact	IP=S*IN=S*M1=S*IH=S*I1=S* **I2FLDN**	I25	IP=S*IN=S*M1=S*IH=S*I1=S
803.1	FLDSUP2	SF	Flood Matrix Impact	IP=S*IN=S*M1=S*IH=S*(IL=F+M2=F+(-BUS11U))* **I2FLDN**	I24	IP=S*IN=S*M1=S*IH=S*(IL=F+M2=F+(-BUS11U))
803.11	FLDSUP2	SF	Flood Matrix Impact	IP=S*IN=S*M1=S*IH=S* **I2FLDN**	I26	IP=S*IN=S*M1=S*IH=S
803.12	FLDSUP2	SF	n/a	None	I2F	1
804	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	CDS	NOTRIP
805	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	(PG=S+ VCMAKU+ DM=S)*CB=S*CCWMUI	CD1	(-(INIT=LOCCW))*(PG=S+VCMAKU+DM=S)* CB=S*CCWMUI
806	FLDSUP2	SF	n/a	None	CDF	1
807	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	K5S	NOTRIP
808	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	DM=S*(PG=S+ VCMAKU*(-K5FLD1))*CA=S*CD=S* CCWMUI *K5FLDN	K5C	(-(INIT=LOCCW))*DM=S*(PG=S+VCMAKU)* CA=S*CD=S* CCWMUI
809	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	DM=S*(PG=S+ VCMAKU*(-K5FLD1))*CA=S*CCWMUI *K5FLDN	K5E	(-(INIT=LOCCW))*DM=S*(PG=S+VCMAKU)* CA=S*CCWMUI
810	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	DM=S ***K5FLDN**	K55	(-(INIT=LOCCW))*DM=S
811	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	(PG=S+ VCMAKU*(-K5FLD1))*CA=S*CD=S*CCWMUI *K5FLDN	K5D	(-(INIT=LOCCW))*(PG=S+VCMAKU)*CA=S* CD=S*CCWMUI
812	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	(PG=S+ VCMAKU*(-K5FLD1))*CA=S*CCWMUI *K5FLDN	K5G	(-(INIT=LOCCW))*(PG=S+VCMAKU)*CA=S* CCWMUI
813	FLDSUP2	SF	Flood Matrix Impact, Removed Unnecessary Initiating Event Impacts	**K5FLDN**	K5J	(-(INIT=LOCCW))
814	FLDSUP2	SF	n/a	None	K5F	1
815	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KMS	NOTRIP
816	FLDSUP2	SF	n/a	None	KM1	K5=S*NRAVAIL
817	FLDSUP2	SF	n/a	None	KM2	K5=S
818	FLDSUP2	SF	n/a	None	KMF	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
819	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KXS	NOTRIP
820	FLDSUP2	SF	n/a	None	KX1	KXSUPP*QC=S
821	FLDSUP2	SF	n/a	None	KX2	KXSUPP*DA=S
822	FLDSUP2	SF	n/a	None	KXF	1
823	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KYS	NOTRIP
824	FLDSUP2	SF	n/a	None	KY5	KYSUPP*((-KXSUPP)+KX=S)
825	FLDSUP2	SF	n/a	None	KY2	KYSUPP*QD=S
826	FLDSUP2	SF	n/a	None	KY4	KYSUPP
827	FLDSUP2	SF	n/a	None	KYF	1
828	FLDSUP2	SF	Macro NOTRIP is removed.	KM=S	KJS	KM=S+NOTRIP
829	FLDSUP2	SF	n/a	None	KJ1	KM=F*XCLT*NEOP8L
830	FLDSUP2	SF	n/a	None	KJ2	KM=F*XCLT
831	FLDSUP2	SF	n/a	None	KJF	1
832	FLDSUP2	SF	Macro NOTRIP is removed.	(KM=F*KJ=S+R3=F)*K5=S	KIS	(KM=F*KJ=S+R3=F)*K5=S+NOTRIP
833	FLDSUP2	SF	n/a	None	KI1	K5=S*(E5=S+S1=F+R3=F)*(E6=S+S2=F+R4=F)*XCLT*NEOP8L*KM=S
834	FLDSUP2	SF	n/a	None	KI2	K5=S*(E5=S+S1=F+R3=F)*(E6=S+S2=F+R4=F)*XCLT*KM=S
835	FLDSUP2	SF	n/a	None	KIF	1
836	FLDSUP2	SF	Macro NOTRIP is removed.	K5=S*(CCWPP2+ KM=F*KJ=S)	KHS	K5=S*(CCWPP2+KM=F*KJ=S)+NOTRIP
837	FLDSUP2	SF	n/a	None	KH1	K5=S*KI=S*NEOP8L*XCLT
838	FLDSUP2	SF	n/a	None	KH2	K5=S*KI=S*XCLT
839	FLDSUP2	SF	n/a	None	KHF	1
840	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KNS	NOTRIP
841	FLDSUP2	SF	n/a	None	KN1	KI=S*NRAVAIL
842	FLDSUP2	SF	n/a	None	KN2	KI=S
843	FLDSUP2	SF	n/a	None	KNF	1
844	FLDSUP2	SF	Macro NOTRIP is removed.	KX=S*KY=S	KZS	KX=S*KY=S+NOTRIP
845	FLDSUP2	SF	n/a	None	KZ8	KZSUPP*(KX=S+(-KXSUPP))*(-KYSUPP)
846	FLDSUP2	SF	n/a	None	KZC	KZSUPP*(-KXSUPP)*KY=S
847	FLDSUP2	SF	n/a	None	KZ2	KZSUPP*KXSUPP*KX=F*KYSUPP*KY=F
848	FLDSUP2	SF	n/a	None	KZE	KZSUPP*KXSUPP*KX=F*(-KYSUPP)
849	FLDSUP2	SF	n/a	None	KZ6	KZSUPP*KXSUPP*KX=F*KY=S
850	FLDSUP2	SF	n/a	None	KZ1	KZSUPP*((-KXSUPP)+KX=S)*KYSUPP*KY=F
851	FLDSUP2	SF	n/a	None	KZF	1
852	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KLS	NOTRIP
853	FLDSUP2	SF	n/a	None	KL1	KM=S*KN=S*(KX=S+KY=S+KZ=S)
854	FLDSUP2	SF	n/a	None	KL2	KM=S*(KX=S+KY=S+KZ=S)+KN=S*KZ=S

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855	FLDSUP2	SF	n/a	None	KLF	1
856	FLDSUP2	SF	Macro NOTRIP is removed.	Deleted	KSS	NOTRIP
857	FLDSUP2	SF	Removed Unnecessary Initiating Event Impacts	KL=S*XALT*XCLT*NRAVAIL* NCISSP	KS1	KL=S*XALT*XCLT*NRAVAIL*(-(INIT=LOSCCW))*NCISSP
858	FLDSUP2	SF	n/a	None	KSF	1
859	FLDFL1	Macro	Removed Unnecessary Initiating Event Impacts	RS=S*TT=S*MP=S*MN=S*SL=S* RV=S*PV=S	SHSD	RS=S*TT=S*MP=S*MN=S*SL=S*RV=S*PV =S*(-(INIT=LOCV+ INIT=LOFW+INIT=EMFW))+NOTRIP
860	FLDFL1	Macro	n/a	None	SAFW	RS=S*PH=S*SL=S*RV=S*WR=S*F3=S*F1= S*PT=S
861	FLDFL1	Macro	n/a	None	SLPF	RS=S*PV=S*SL=S*RV=S*WR=S*PT=S*LF= S
862	FLDFL1	Macro	n/a	None	SATWS	(RQ=S+AV=S*AQ=S*CV=S)*PV=S*SL=S*R V=S*WR=S* F1=S*F3=S*PT=S
863	FLDFL1	Macro	n/a	None	SPLOCA	RS=S*RCSLK*(F1=S*F3=S+OT=S*SL=S)*D L=S*WR=S*PT=S
864	FLDFL1	Macro	n/a	None	OTCC	RS=S*OT=S*((HA=S+HB=S)*F1=S*AL=S+(HA=S*HB=S* CV=S))*DL=S*PT=S*WR=S
865	FLDFL1	Macro	n/a	None	SSGTR1	RS=S*F1=S*F3=S*DL=S*PT=S*WR=F*(WS =S+SQ=S)
866	FLDFL1	Macro	n/a	None	RCSLK	PH=F+SL=F+RV=F
867	FLDFL1	Macro	n/a	None	SSHR	F3=S*F1=S+SHSD+SLPF
868	FLDFL1	Macro	n/a	None	SSPH	(TBVCLD*TT=S*(-(INIT=LSLBD))+MS=S)*ADVCLD* SW=S*(-(INIT=LSLBU+INIT=SLBI))
869	FLDFL1	Macro	n/a	None	NEP8AS	NEOP8S*RV=S*PH=S
870	FLDFL1	Macro	n/a	None	NEP8AL	NEOP8L*(-RCSLK)
871	FLDFL1	Macro	n/a	None	NEOP8H	NEOP8L*F1=S*F3=S*(PH=F+RV=F+SW=S* DV=S)
872	FLDFL1	Macro	n/a	None	T1SUPP	E5=S*ES=S*M3=S*ADLT
872.1	FLDFL1	Macro	New Macro: Flood Matrix Impact	(-(INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=XT27AM+ INIT=Q224AM+ INIT=F315AM+ INIT=F429AM+INIT=IT12AM))	**MCFLDN**	n/a
873	FLDFL1	Macro	Flood Matrix Impact	(TB=S+SX=S)*XALT*XCLT*NRAVAIL ***MCFLDN**	MCSUPP	(TB=S+SX=S)*XALT*XCLT*NRAVAIL

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
873.1	FLDFL1	Macro	New Macro: Flood Matrix Impact	(-(INIT=FISPAM+ INIT=IISPAM+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=Q224AM+ INIT=F315AM+ INIT=F429AM))	VCFLDN	n/a
874	FLDFL1	Macro	Flood Matrix Impact	Y1=S*NRAVAIL*(TB=S+SX=S)* TT=S*NMSVSP* (T1=S+(-T1SUPP)*E5=S*ES=S)* XALT*XCLT *VCFLDN	VCSUPP	Y1=S*NRAVAIL*(TB=S+SX=S)*(-(INIT=LOCV+INIT=LTBSRW))*TT=S*NMSVSP*(T1=S+(-T1SUPP)*E5=S*ES=S)*XALT*XCLT
875	FLDFL1	Macro	n/a	None	DVSUPP	TX=S*RR=S*EW=S*EX=S*XALT*XCLT*E5 =S*BUS11*NRAVAIL
876	FLDFL1	Macro	Flood Matrix Impact	XALT*VC=S*MC=S*M7=S*E5=S*BU S11*ES=S*NRAVAIL*DV=S*(-**(INIT=F315AM))**	BSSUPP	XALT*VC=S*MC=S*M7=S*E5=S*BUS11*ES =S*NRAVAIL*DV=S
877	FLDFL1	Macro	Removed Unnecessary Initiating Event Impacts.	RS=S*NRPSSP*(BV=S+ AU=S)+ (E1=S*NOSPEA+ E2=S*NOSPEB)* (-NRPSSP)* (DC=F+ N2=F*N3=F*XALT*XBLT)	NOLIFT	RS=S*NRPSSP*((BV=S*(-(INIT=LOCV)))+(-NOLOOP+ INIT=L13KV1+INIT=L500B)+AU=S)+(E1=S* NOSPEA+ E2=S*NOSPEB)*(-NRPSSP)*(DC=F+N2=F*N3=F*XALT*XBLT)
878	FLDFL1	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	LMCCIE	INIT=LOAC+INIT=LOAC4+M1INIT+M2INIT+ INIT=L500R+ INIT=L13KV2
879	FLDFL1	Macro	n/a	None	MCC2SH	M1=S*((GG=S+OH=F*E2=F)*QD=S+NUVD SP*QD=S)*M2=S* ((GE=S+OG=F*E1=F*QC=S)+NUVCSP*QC =S)
880	FLDFL1	Macro	Macro PVONE is not used	Deleted	PVONE	LMCCIE*(NRPSSP+MX=F)+(E1=S*NOSPE A+E2=S*NOSPEB) *(-NRPSSP)*MX=F*(N2=F+N3=F)*(XALT+XBL T)
881	FLDFL1	Macro	Removed Unnecessary Initiating Event Impacts	(PS=S*RU=S+ BV=S*TT=S)*DA=S*DC=S	RQCOND	(PS=S*RU=S+BV=S*TT=S)*NOLOOP*(-(INIT=L13KV1+ INIT=L500B))*DA=S*DC=S
882	FLDFL1	Macro	Removed Unnecessary Initiating Event Impacts	Q5=S*MP=S*VC=S*MC=S*NRAVAIL *BS=S*ADVCLD*SW=S* (-RCSLK)*(TB=S+SX=S)*(SGINDL+ E5=S+ E6=S*BUS14)*(N1=S* BUS11+ N4=S*BUS14)*(E5=S+ E6=S*BUS14)	MNSUPP	Q5=S*MP=S*VC=S*MC=S*NRAVAIL*BS=S* ADVCLD*SW=S* (-RCSLK)*(TB=S+SX=S)*(SGINDL+E5=S+E6 =S*BUS14)*(N1=S* BUS11+N4=S*BUS14)*(E5=S+E6=S*BUS14)*(-(INIT=LOFW+ INIT=EMFW))
883	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	RSS	NOTRIP

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884	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	RSL	(-NOLOOP)+INIT=L13KV1+INIT=L500B
885	FLDFL1	SF	n/a	None	RS1	DA=S*DB=S*DC=S*DD=S*E1=S*J1=S*E2=S*J2=S
886	FLDFL1	SF	n/a	None	RS4	DA=S*DB=S*DC=S+DA=S*DB=S*DD=S+DA=S*DC=S*DD=S+ DB=S*DC=S*DD=S
887	FLDFL1	SF	n/a	None	RSA	1
888	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	TXS	NOTRIP
889	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	TX1	DA=S*E2=S*J2=S*E5=S*RS=S*INIT=LOCV
890	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	TX2	DA=S*E2=S*J2=S*RS=S*INIT=LOCV
891	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	TX5	DA=S*E5=S*INIT=LOCV
892	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	TX6	DA=S*(INIT=LOCV)
893	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	DA=F*(OG=S+ E2=F*E3=S*E4=S)*E5=S	TX3	(INIT=LODC11+DA=F*(OG=S+E2=F*E3=S*E4=S))*E5=S
894	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	DA=F*(OG=S+ E2=F*E3=S*E4=S)	TX4	(INIT=LODC11+DA=F*(OG=S+E2=F*E3=S*E4=S))
895	FLDFL1	SF	n/a	None	TX7	E2=S*J2=S*E5=S*RS=S
896	FLDFL1	SF	n/a	None	TX8	E2=S*J2=S*RS=S
897	FLDFL1	SF	n/a	None	TX9	E2=S*J2=S*E5=S*(DA=S*DB=S*DC=S*DD=S*E1=S*E2=S)
898	FLDFL1	SF	n/a	None	TXA	E2=S*J2=S*(DA=S*DB=S*DC=S*DD=S*E1=S*E2=S)
899	FLDFL1	SF	n/a	None	TXB	E2=S*J2=S
900	FLDFL1	SF	n/a	None	TXF	1
901	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	TTS	NOTRIP
902	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	TX=S	TT1	((-(INIT=LODC11+INIT=L13KV1+INIT=L500B))*NOLOOP+ DA=S)*TX=S
903	FLDFL1	SF	Covered by TT1.	Deleted	TT2	TX=S
904	FLDFL1	SF	n/a	None	TTF	1
905	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	T1S	NOTRIP
906	FLDFL1	SF	n/a	None	T11	T1SUPP
907	FLDFL1	SF	n/a	None	T1F	1
908	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	MCS	NOTRIP

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909	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MCSUPP*AE=S*M7=S*AF=S*M8=S*E5=S*ES=S	MC1	MCSUPP*AE=S*M7=S*AF=S*M8=S*E5=S*ES=S*(-(INIT=LOCV+ INIT=LOFW))
910	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MCSUPP*AE=S*AF=S*M8=S*(M7=S + E5=S*ES=S)	MC5	MCSUPP*AE=S*AF=S*M8=S*(M7=S+E5=S*ES=S)*(-(INIT=LOCV+ INIT=LOFW))
911	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MCSUPP*(AF=S*M8=S*(E5=S*ES=S + AE=S)+ AE=S*M7=S* E5=S*ES=S)	MC2	MCSUPP*(AF=S*M8=S*(E5=S*ES=S+AE=S)+AE=S*M7=S* E5=S*ES=S)*(-(INIT=LOCV+INIT=LOFW))
912	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MCSUPP*AF=S*M8=S	MC3	MCSUPP*AF=S*M8=S*(-(INIT=LOCV+INIT=LOFW))
913	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	MCK	MCSUPP*AE=S*M7=S*AF=S*M8=S*E5=S*ES=S*(INIT=LOCV)
914	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	MCA	MCSUPP*AE=S*M7=S*AF=S*M8=S*E5=S*ES=S*(INIT=LOFW)
915	FLDFL1	SF	Covered by MC5	Deleted	MCD	MCSUPP*AE=S*AF=S*M8=S*(M7=S+E5=S*ES=S)
916	FLDFL1	SF	Covered by MC2	Deleted	MCB	MCSUPP*(AF=S*M8=S*(E5=S*ES=S+AE=S)+AE=S*M7=S* E5=S*ES=S)
917	FLDFL1	SF	Covered by MC3	Deleted	MCC	MCSUPP*AF=S*M8=S
918	FLDFL1	SF	n/a	None	MCF	1
919	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	VCS	NOTRIP
920	FLDFL1	SF	n/a	None	VC1	VCSUPP*(AE=S*M7=S)*(AF=S*M8=S)
921	FLDFL1	SF	n/a	None	VC2	VCSUPP*(AF=S*M8=S)
922	FLDFL1	SF	n/a	None	VC3	VCSUPP*(AE=S*M7=S)
923	FLDFL1	SF	n/a	None	VCF	1
924	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	RRS	NOTRIP
925	FLDFL1	SF	n/a	None	RR1	E1=S*E2=S
926	FLDFL1	SF	n/a	None	RRF	1
927	FLDFL1	SF	Macro NOTRIP is removed.	RR=S*NRAVAIL	RIS	RR=S*NRAVAIL+NOTRIP
928	FLDFL1	SF	n/a	None	RI1	DA=S*SGINDS
929	FLDFL1	SF	n/a	None	RIF	1
930	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	BVS	NOTRIP
931	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	TX=S*RR=S*DA=S*VC=S	BV1	TX=S*RR=S*DA=S*VC=S*(-(INIT=LOIA))
932	FLDFL1	SF	n/a	None	BVF	1
933	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	DWS	NOTRIP
934	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	TX=S*RR=S*DA=S*BV=S	DW2	TX=S*RR=S*DA=S*(-(INIT=LOIA))*BV=S
935	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	TX=S*RR=S*DA=S*VC=F	DW1	TX=S*RR=S*DA=S*(-(INIT=LOIA))*VC=F

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
936	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	TX=S*RR=S*DA=S	DW3	TX=S*RR=S*DA=S*(-(INIT=LOIA))
937	FLDFL1	SF	n/a	None	DWF	1
938	FLDFL1	SF	Macro NOTRIP is removed.	BV=S+ DW=S	SVS	BV=S+DW=S+NOTRIP
939	FLDFL1	SF	n/a	None	SV1	1
940	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	DVS	NOTRIP
941	FLDFL1	SF	n/a	None	DV1	DVSUPP*DW=S
942	FLDFL1	SF	n/a	None	DV5	(RR=F+(-NRAVAIL))*RI=S
943	FLDFL1	SF	n/a	None	DV2	DVSUPP
944	FLDFL1	SF	n/a	None	DVF	1
945	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	BSS	NOTRIP
946	FLDFL1	SF	n/a	None	BS3	BSSUPP*(BV=S+TX=F+RR=F)
947	FLDFL1	SF	n/a	None	BS2	BSSUPP
948	FLDFL1	SF	n/a	None	BSF	1
949	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	QC=S*QD=S*N1=S*N3=S*N4=S*KX=S*KS=S	SPS	QC=S*QD=S*N1=S*N3=S*N4=S*KX=S*KS=S+KX=S*(INIT=IESF) *KS=S+NOTRIP
950	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	(KX=S+ KY=S+ KZ=S)*KS=S*NEOP8L*DC=S*OP=S	SP1	(KX=S+KY=S+KZ=S)*KS=S*NEOP8L*DC=S*(OP=S*(-(INIT=L500B)))
951	FLDFL1	SF	n/a	None	SPF	1
952	FLDFL1	SF	Macro NOTRIP is removed.	SP=S	SLS	SP=S+NOTRIP
953	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	OP=F	SL1	OP=F+INIT=L500B
954	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	SL3	INIT=LOCCW*DA=S*DC=S
955	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	SL5	INIT=LOSCCW*DA=S*DC=S*E5=S*E6=S*AF=S*HZ=S
956	FLDFL1	SF	n/a	None	SL2	XALT*XCLT*NEOP8L*INSTAC
957	FLDFL1	SF	n/a	None	SL7	XALT*XCLT*INSTAC
958	FLDFL1	SF	n/a	None	SL4	XCLT*INSTAC
959	FLDFL1	SF	n/a	None	SL9	INSTAC
960	FLDFL1	SF	n/a	None	SLL	XALT*XBLT*XCLT*XDLT*(EW=S*EZ=S+EX=S*EY=S)
961	FLDFL1	SF	n/a	None	SLM	1
962	FLDFL1	SF	Macro NOTRIP is removed.	MCCTWO	MXS	MCCTWO+NOTRIP
963	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MCCONE*NEOP8L*SL=S	MX1	MCCONE*(-(INIT=LB104R+INIT=LB114R))*NEOP8L*SL=S
964	FLDFL1	SF	Covered by MX1	Deleted	MX2	MCCONE*NEOP8L*SL=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
965	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	((M1=S+ QD=F*GG=F)*GJTO14+ (M2=S+ QC=F*GE=F)* GJTO11)*GK=S*NEOP8L*SL=S	MX3	((M1=S+QD=F*GG=F)*GJTO14+(M2=S+QC =F*GE=F)* GJTO11)*GK=S*NEOP8L*(-(INIT=LB104R+INIT=LB114R))*SL=S
966	FLDFL1	SF	Covered by MX3	Deleted	MX4	((M1=S+QD=F*GG=F)*GJTO14+(M2=S+QC =F*GE=F)* GJTO11)*GK=S*NEOP8L*SL=S
967	FLDFL1	SF	n/a	None	MX5	MCCONE
968	FLDFL1	SF	n/a	None	MX6	((M1=S+QD=F*GG=F)*GJTO14+(M2=S+QC =F*GE=F)* GJTO11)*GK=S
969	FLDFL1	SF	n/a	None	MXF	1
970	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	AUS	NOTRIP
971	FLDFL1	SF	n/a	None	AU1	1
972	FLDFL1	SF	n/a	None	POS	E1=S*E2=S*E3=S*E4=S*EW=S*EX=S*EY= S*EZ=S*XCLT
973	FLDFL1	SF	n/a	None	PO1	1
974	FLDFL1	SF	n/a	None	PP1	M1LT*M2LT
975	FLDFL1	SF	n/a	None	PPF	1
976	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	RS=S*(BV=S+ AU=S)	PSS	RS=S*(BV=S*(-(INIT=LOCV))+(-NOLOOP)+INIT=L13KV1+ INIT=L500B+AU=S)+NOTRIP
977	FLDFL1	SF	n/a	None	PS1	DC=S*PP=S*MCCTWO*(E1=S*E2=S*E3=S *E4=S+PO=F)
978	FLDFL1	SF	n/a	None	PS2	DC=S*PP=S*MCCTWO*((E1=S*E2=S*(E3= S+E4=S)+E3=S* E4=S*(E1=S+E2=S))+PO=F)
979	FLDFL1	SF	n/a	None	PS3	DC=S*PP=S*MCCTWO*((E1=S*E2=S+(E1= S+E2=S)*(E3=S+ E4=S)+E3=S*E4=S)+PO=F)
980	FLDFL1	SF	n/a	None	PSF	1
981	FLDFL1	SF	Macro NOTRIP is removed.	PS=S*RS=S	RUS	PS=S*RS=S+NOTRIP
982	FLDFL1	SF	n/a	None	RU1	RS=S
983	FLDFL1	SF	n/a	None	RU2	1
984	FLDFL1	SF	Macro NOTRIP is removed.	NOLIFT	PVS	NOLIFT+NOTRIP
985	FLDFL1	SF	Macro PVONE is removed. As this split fraction is not possible, the split fraction is deleted.	Deleted	PV8	PVONE*NRPSSP
986	FLDFL1	SF	n/a	None	PV7	NRPSSP
987	FLDFL1	SF	n/a	None	PVW	MCC2SH

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
988	FLDFL1	SF	Macro LMCCIE is removed in the Flood module	Deleted	PVX	LMCCIE
989	FLDFL1	SF	n/a	None	PVY	1
990	FLDFL1	SF	Macros PVONE and NOTRIP are removed. These macros are removed.	PV=S	PNS	PVONE+PV=S+NOTRIP
991	FLDFL1	SF	n/a	None	PN1	NRPSSP
992	FLDFL1	SF	n/a	None	PNF	1
993	FLDFL1	SF	Macro NOTRIP is removed.	PV=S	PHS	PV=S+NOTRIP
994	FLDFL1	SF	n/a	None	PH1	PN=S*(MCCTWO+MX=S)*NRPSSP*NEOP 8S
995	FLDFL1	SF	n/a	None	PH2	MCCTWO*NRPSSP*NEOP8S
996	FLDFL1	SF	n/a	None	PH3	PN=S*(MCCTWO+MX=S)*NRPSSP
997	FLDFL1	SF	n/a	None	PH4	MCCTWO*NRPSSP
998	FLDFL1	SF	n/a	None	PHW	(-NRPSSP)*MCC2SH
999	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	PHX	(-NRPSSP)*LMCCIE*PN=S
1000	FLDFL1	SF	n/a	None	PHU	(-NRPSSP)*PN=S
1001	FLDFL1	SF	n/a	None	PHY	(-NRPSSP)
1002	FLDFL1	SF	n/a	None	PHF	1
1003	FLDFL1	SF	Macro NOTRIP is removed.	PS=S*RS=S	RVS	PS=S*RS=S+NOTRIP
1004	FLDFL1	SF	n/a	None	RV1	RS=S
1005	FLDFL1	SF	n/a	None	RV2	1
1006	FLDFL1	SF	Macro NOTRIP is removed.	RS=S	RQS	RS=S+NOTRIP
1007	FLDFL1	SF	n/a	None	RQ1	RQCOND*E1=S*E2=S*DA=S*DB=S*DC=S* DD=S
1008	FLDFL1	SF	n/a	None	RQ4	RQCOND*(DA=S*DB=S*DC=S+DA=S*DC= S*DD=S)
1009	FLDFL1	SF	n/a	None	RQA	RQCOND
1010	FLDFL1	SF	n/a	None	RQF	1
1011	FLDFL1	SF	Macro NOTRIP is removed.	RQ=S	AVS	RQ=S+NOTRIP
1012	FLDFL1	SF	n/a	None	AV1	AU=S*PS=S*RU=S*TT=S*BV=S
1013	FLDFL1	SF	n/a	None	AV2	AU=S*PS=S*RU=S*TT=S
1014	FLDFL1	SF	n/a	None	AVF	1
1015	FLDFL1	SF	Macro NOTRIP is removed.	RQ=S	AQS	RQ=S+NOTRIP
1016	FLDFL1	SF	n/a	None	AQ1	(E1=S+E2=S+E3=S+E4=S+E5=S+E6=S)*(- RQCOND)
1017	FLDFL1	SF	n/a	None	AQA	(E1=S+E2=S+E3=S+E4=S+E5=S+E6=S)*E 1=S*E2=S* DA=S*DB=S*DC=S*DD=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1018	FLDFL1	SF	n/a	None	AQB	(E1=S+E2=S+E3=S+E4=S+E5=S+E6=S)*(DA=S*DB=S* DC=S+DA=S*DC=S*DD=S)
1019	FLDFL1	SF	n/a	None	AQC	(E1=S+E2=S+E3=S+E4=S+E5=S+E6=S)
1020	FLDFL1	SF	n/a	None	AQF	1
1021	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	Deleted	MPS	'- NOLOOP+INIT=L13KV1+INIT=L500B+INIT=LOCV+INIT=LOFW+ NOTRIP
1022	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	E5=S*E6=S*TX=S	MP1	E5=S*E6=S*TX=S*(-(INIT=LOIA))
1023	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	(E5=S+ E6=S)*TX=S	MP2	(E5=S+E6=S)*TX=S*(-(INIT=LOIA))
1024	FLDFL1	SF	n/a	None	MPF	1
1025	FLDFL1	SF	Macro NOTRIP is removed.	(BV=S*DW=S)*(BS=S+DV=S*E1=S*E2=S)*PS=S	SWS	BV=S*DW=S*(BS=S+DV=S*E1=S*E2=S)*PS=S+NOTRIP
1026	FLDFL1	SF	n/a	None	SW1	BV=S*(BS=S+DV=S*E1=S*E2=S)
1027	FLDFL1	SF	n/a	None	SW2	(BS=S+DV=S*E1=S*E2=S)
1028	FLDFL1	SF	n/a	None	SW3	1
1029	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	Q5S	NOTRIP
1030	FLDFL1	SF	n/a	None	Q51	NEP8AL
1031	FLDFL1	SF	n/a	None	Q53	1
1032	FLDFL1	SF	Macro NOTRIP is removed.	Deleted	MNS	NOTRIP
1033	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M7=S*M8=S*(N1=S*BUS11*N4=S*BUS14)*(E5=S* E6=S)*NEOP8L	MN1	MNSUPP*M7=S*M8=S*(N1=S*BUS11*N4=S*BUS14)*(E5=S* E6=S)*(-(INIT=PLFW))*NEOP8L
1034	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M7=S*M8=S*NEOP8L	MN2	MNSUPP*M7=S*M8=S*(-(INIT=PLFW))*NEOP8L
1035	FLDFL1	SF	Covered by MN2	Deleted	MN5	MNSUPP*M7=S*M8=S*NEOP8L
1036	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M7=S*M8=S	MN8	MNSUPP*M7=S*M8=S*(-(INIT=PLFW))
1037	FLDFL1	SF	Covered by MN8	Deleted	MNB	MNSUPP*M7=S*M8=S
1038	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M7=S*NEOP8L	MN3	MNSUPP*M7=S*(-(INIT=PLFW))*NEOP8L
1039	FLDFL1	SF	Covered by MN3	Deleted	MN6	MNSUPP*M7=S*NEOP8L
1040	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M7=S	MN9	MNSUPP*M7=S*(-(INIT=PLFW))
1041	FLDFL1	SF	Covered by MN9	Deleted	MNC	MNSUPP*M7=S
1042	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M8=S*NEOP8L	MN4	MNSUPP*M8=S*(-(INIT=PLFW))*NEOP8L

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1043	FLDFL1	SF	Covered by MN4	Deleted	MN7	MNSUPP*M8=S*NEOP8L
1044	FLDFL1	SF	Removed Unnecessary Initiating Event Impacts	MNSUPP*M8=S	MNA	MNSUPP*M8=S*(-(INIT=PLFW))
1045	FLDFL1	SF	Covered by MNA	Deleted	MND	MNSUPP*M8=S
1046	FLDFL1	SF	n/a	None	MNF	1
1047	FLDFL2	Macro	n/a	None	TBVCLD	(BS=S+-BSSUPP+MS=S)
1048	FLDFL2	Macro	n/a	None	ADVCLD	(DV=S+(-DVSUPP)*(RI=F+NRAVAIL*RR=S))
1048.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=W419AM+ INIT=W315AM+ INIT=W428AM+ INIT=M419AM+ INIT=F315AM+ INIT=F428AM+ INIT=F429AM))	**FTFLD1**	n/a
1048.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=W419AM+ INIT=W315AM+ INIT=W428AM+ INIT=M419AM+ INIT=F315AM+ INIT=F428AM+ INIT=F429AM+ INIT=Q224AM))	**MSFLDN**	n/a
1049	FLDFL2	Macro	Flood Matrix Impact	BUS11*Q5=S*(E1=F+ DA=F)* SGINDS *(-(INIT=Q224AM))	FHSUPP	BUS11*Q5=S*(E1=F+DA=F)*SGINDS
1050	FLDFL2	Macro	Removed Unnecessary Initiating Event Impacts	Deleted	FWLOSS	(INIT=LOFW+INIT=LOCV+INIT=EMFW+INIT=LTBSRW+ INIT=LOIA+INIT=L13KV1+INIT=L500B+INIT=LODC11+ INIT=LODC21+INIT=LOSRW+INIT=LOSW) +-NOLOOP
1050.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S205AN+ INIT=N224AM+ INIT=N225AM+INIT=X226AM+ INIT=N226AM+ INIT=N603AM+ INIT=S118XN+ INIT=S226AN+ INIT=S226AR+ INIT=S228AN+ INIT=R221AM+ INIT=R224AM+ INIT=N318AM))	**F7FLDN**	n/a
1051	FLDFL2	Macro	Flood Matrix Impact	(BUS11+ GK=S*BUS11V*NUVCSP)*(FH=S+ DA=S*E1=S) *F7FLDN	F7SUPP	(BUS11+GK=S*BUS11V*NUVCSP)*(FH=S+ DA=S*E1=S)
1051.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=R221AM+ INIT=N225AM+ INIT=S118XN+ INIT=S226AR+ INIT=S228AN+ INIT=F225AM+ INIT=D225AM+ INIT=D603AM+ INIT=S226AN+ INIT=S205AN))	**FCFLD1**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1051.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=ST12AM+ INIT=XT27AM+ INIT=IT12AM+ INIT=FT12AM+ INIT=FT27AM))	**FCFLD2**	n/a
1052	FLDFL2	Macro	Flood Matrix Impact	(ADLT+ GK=S*ADLTV*NU2SPE)*(XALT+ XCLT)*FO=S *F9FLDN	F9SUPG	(ADLT+GK=S*ADLTV*NU2SPE)*(XALT+XCLT)*FO=S
1053	FLDFL2	Macro	n/a	None	FLWCNS	EG=S*E2=S*(E1=S+F7=F*(-F9SUPG))
1054	FLDFL2	Macro	n/a	None	FLWCNL	NRAVAIL*EL=S*EX=S*XCLT*(EW=S*XALT+F7=F*(-F9SUPG))
1054.1	FLDFL2	Macro	n/a	None	FLWCNA	FN=S*EL=S*EX=S*XCLT*(EW=S*XALT+F7=F*(-F9SUPG))
1054.2	FLDFL2	Macro	n/a	None	U2FLCN	E1=S*EW=S*EF=S*EK=S*XALT
1054.3	FLDFL2	Macro	n/a	None	U2SGIN	(EF=S+EG=S+EH=S+EI=S)* (EK=S*XALT+EL=S*XCLT+EM=S*XBLT+EN=S*XDLT)
1055	FLDFL2	Macro	n/a	None	OAOBSP	Q5=S*(SGINDL+XCLT+HX=S)
1056	FLDFL2	Macro	Removed Unnecessary Initiating Event Impacts. Assume low water level trip.	**E1=S*E1=F**	NWLTRP	INIT=CCWHX+INIT=EMFW+INIT=L120V1+INIT=L120V2+ INIT=L120V3+INIT=L13KV1+INIT=L500B+INIT=LOCCW+ INIT=LOCV+INIT=LODC11+INIT=LODCOT+(-NOLOOP) +INIT=LOSCCW
1056.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=N224AM+ INIT=N225AM+ INIT=N226AM+ INIT=D603AM+ INIT=F603AM+ INIT=N318AM+ INIT=N603AM))	**TFFLDN**	n/a
1056.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=N224AM+ INIT=N225AM+ INIT=N226AM+ INIT=D603AM+ INIT=F603AM+ INIT=N318AM+ INIT=Q224AM+ INIT=N603AM))	**TGFLDN**	n/a
1057	FLDFL2	Macro	n/a	None	TGSUPP	FC=S*OA=S
1057.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=S205AN+ INIT=S205AR+ INIT=S226AN+ INIT=F205AN))	**FOFLDN**	n/a
1057.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=N205LN+ INIT=F205AN+ INIT=S118XN+ INIT=S205AN+ INIT=S205AR+ INIT=R221AM+ INIT=R224AM+ INIT=S226AN+ INIT=S228AN+ INIT=N605AM+ INIT=F605AM*(-U2MFWS)))	**F9FLDN**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1058	FLDFL2	Macro	n/a	None	U2MFWS	XALT*XCLT*(GW=S*ADLT+GZ=S*ACLT)*N U2SPE*Y2=S* QF=S*M3=S*ADLT*NSAVAIL*(N5=S*ACLT +N8=S)*(T1=S+ (-T1SUPP)*M3=S)
1059	FLDFL2	Macro	n/a	None	F9SUPP	F9SUPG*OB=S
1060	FLDFL2	Macro	n/a	None	STMAVL	TT=S+MS=S
1060.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	INIT=Q224AM+ INIT=F227AM+ INIT=C227AM+ INIT=W227AM+ INIT=D227AM+ INIT=F315AM+ INIT=W315AM+ INIT=M419AM+ INIT=W419AM+ INIT=F429AM	**MHFLD1**	n/a
1060.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	INIT=F428AM+ INIT=W428AM	**MHFLDF**	n/a
1061	FLDFL2	Macro	n/a	None	ETRCST	T1=S+(- T1SUPP)*(M3=S*ADLT+E5=S*ES=S)
1062	FLDFL2	Macro	n/a	None	NLFHAC	(FG=S*Q5=S*(HX=S+(- LFSUPP)*UQ=S))*(FJ=S+FC=F) *(FH=S+- FHSUPP)
1063	FLDFL2	Macro	n/a	None	LFSUPP	MC=S*XALT*XCLT*M1=S*M2=S*NRAVAIL* BUS11U*BUS14* E5=S*E6=S*EW=S*EX=S*ES=S*MP=S*Y1= S*NEP8AL* M7=S*(F3=S+F1=F+AL=F)
1064	FLDFL2	Macro	n/a	None	OVRFLL	(F7=S+TF=S+TG=S+F9=S)*HX=F*UQ=S
1064.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	INIT=C221AM+ INIT=W221AM+ INIT=W224AM+ INIT=N226AM+ INIT=X226AM+ INIT=C227AM+ INIT=W227AM+ INIT=N205LN+ INIT=F205AN+ INIT=F317AM+ INIT=N318AM+ INIT=D318AM+ INIT=W320AM+ INIT=Q224AM+ INIT=F315AM+ INIT=W315AM+ INIT=C324AM+ INIT=ST12AM+ INIT=C118XN+ INIT=C118XR+ INIT=F119AM+ INIT=M421AM+ INIT=M422AM+ INIT=FISPAM+ INIT=IISPAM+ INIT=XT27AM+ INIT=IT12AM+ INIT=SISPAN+ INIT=SISPAR	**CVFLDN**	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1065	FLDFL2	Macro	n/a	None	OTSUPP	(XCLT+PO=S)*PP=S*NLFHAC*(LF=S+-LFSUPP)*(OVRFLL+ F1=S+CV=S*(MCCTWO+GS=S*M1LT*M2LT))*(F3=S+TF=F*TG=F*(-(U2MFWS* F7=S*F9=S))+AL=F+F1=F)
1066	FLDFL2	Macro	n/a	None	OZSUPP	(XCLT+PO=S)*(M1LT+M2LT)*NLFHAC*(LF=S+-LFSUPP)
1066.1	FLDFL2	Macro	Removed Unnecessary Initiating Event Impacts.	N1=S*N2=S*M2=S*BUS11+GS=S*GE=F*QC=F*GJTO11	CVSUPA	N1=S*N2=S*M2=S*BUS11+ GS=S*GE=F*(QC=F+INIT=IESF)*GJTO11
1066.2	FLDFL2	Macro	n/a	None	CVSUPB	N4=S*M1=S*BUS14+GS=S*GG=F*QD=F*GJTO14
1067	FLDFL2	Macro	n/a	None	SASUPP	EW=S*J1=S*XALT
1068	FLDFL2	Macro	n/a	None	SBSUPP	EX=S*J2=S*XCLT
1069	FLDFL2	Macro	n/a	None	M1LT	M1=S*BUS14+MX=S+QD=F*GG=F*GK=S*GJTO14
1070	FLDFL2	Macro	n/a	None	M2LT	M2=S*BUS11U+MX=S+QC=F*GE=F*GK=S*GJTO11
1071	FLDFL2	Macro	n/a	None	V1SUPP	BUS11L*S1=S*R3=S*M2LT
1072	FLDFL2	Macro	n/a	None	V2SUPP	BUS14L*S2=S*R4=S*M1LT
1072.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	(-(INIT=F227AM+ INIT=C227AM+ INIT=W227AM+ INIT=D227AM+ INIT=M419AM+ INIT=W419AM+ INIT=Q224AM))	**RHFLDN**	n/a
1073	FLDFL2	Macro	Flood Matrix Impact	RV=S*(XALT*XCLT+ (E5=S+ E6=S*BUS14)*(EW=S*XALT+ EX=S*XCLT))*(PH=S+ -NRPSSP+ (-MCCTWO)*(PN=F+ MX=F)) *RHFLDN	RHSUPP	RV=S*(XALT*XCLT+(E5=S+E6=S*BUS14)*(EW=S*XALT+ EX=S*XCLT))*(PH=S+-NRPSSP+(-MCCTWO)*(PN=F+MX=F))
1074	FLDFL2	Macro	n/a	None	PHNQOS	PH=S+NRPSSP*(-MCCTWO)
1075	FLDFL2	Macro	n/a	None	DL1SUP	E5=S+ES=S+M1=F*M2=F*(M1LT+M2LT)*(XCLT*(EW=S* XALT+EX=S))
1076	FLDFL2	Macro	Flood Matrix Impact	BUS11L*(SA=S*XALT+ RH=S)* M2LT*MV=S*RE=S *-(INIT=C118XR)	HASUPP	BUS11L*(SA=S*XALT+RH=S)* M2LT*MV=S*RE=S
1077	FLDFL2	Macro	Flood Matrix Impact	BUS14L*(XCLT*SB=S+ RH=S)*M1LT*MV=S*RW=S *-(INIT=F317AM)	HBSUPP	BUS14L*(XCLT*SB=S+RH=S)* M1LT*MV=S*RW=S
1078	FLDFL2	Macro	n/a	RE=S*BUS14L*XCLT*HY=S * -**(INIT=C118XR)**	HWSUPP	RE=S*BUS14L*XCLT*HY=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1078.1	FLDFL2	Macro	New Macro: Flood Matrix Impact	INIT=S118XN+ INIT=S118XR+ INIT=S228AN	**DLFLD1**	n/a
1078.2	FLDFL2	Macro	New Macro: Flood Matrix Impact	INIT=S205AN+ INIT=S205AR+ INIT=S226AR+ INIT=S228AR+ INIT=S226AN+ INIT=C118XN+ INIT=F119AM	**DLFLD2**	n/a
1079	FLDFL2	Macro	n/a	None	DL2HDR	(HW=S*(HA=S+HB=S)+HA=S*HB=S)*(SA=S*SB=S+RH=S) *(M1LT*M2LT)
1080	FLDFL2	Macro	n/a	None	DL1HDR	HA=S*M2LT*(SA=S+RH=S)+HB=S*M1LT*(SB=S+RH=S) +HW=S*(M2LT+M1LT)
1081	FLDFL2	SF	Macro NOTRIP is removed.	MP=S*TT=S*(BS=S+ -BSSUPP)*ADVCLD*SW=S	IAS	MP=S*TT=S*(BS=S+-BSSUPP)*ADVCLD*SW=S+NOTRIP
1082	FLDFL2	SF	n/a	None	IA1	E1=S*J1=S*CX=S
1083	FLDFL2	SF	n/a	None	IA2	E1=S*J1=S
1084	FLDFL2	SF	n/a	None	IAF	1
1085	FLDFL2	SF	Macro NOTRIP is removed.	MP=S*TT=S*(BS=S+ -BSSUPP)*ADVCLD*SW=S	IBS	MP=S*TT=S*(BS=S+-BSSUPP)*ADVCLD*SW=S+NOTRIP
1086	FLDFL2	SF	n/a	None	IB3	E2=S*J2=S*CY=S*(IA=S+E1=F+J1=F)
1087	FLDFL2	SF	n/a	None	IB6	E2=S*J2=S*CY=F*(IA=S+E1=F+J1=F)
1088	FLDFL2	SF	n/a	None	IB2	E2=S*J2=S*IA=F*(CX=S*CY=S+CX=F)
1089	FLDFL2	SF	n/a	None	IB5	E2=S*J2=S*IA=F*CX=S
1090	FLDFL2	SF	n/a	None	IBF	1
1091	FLDFL2	SF	n/a	None	FTS	MP=S+SHSD
1092	FLDFL2	SF	Flood Matrix Impact	M1=S*M2=S*IA=S*IB=S ***FTFLD1**	FT1	M1=S*M2=S*IA=S*IB=S
1093	FLDFL2	SF	Flood Matrix Impact	M1=S*M2=S*DA=S*E2=S* (IA=S+IB=S) *FTFLD1	FT2	M1=S*M2=S*DA=S*E2=S*(IA=S+IB=S)
1094	FLDFL2	SF	Flood Matrix Impact	M1=S*M2=S *(IA=S+ IB=S) *FTFLD1	FT3	M1=S*M2=S*(IA=S+IB=S)
1095	FLDFL2	SF	n/a	None	FT4	IA=S*IB=S
1096	FLDFL2	SF	n/a	None	FT5	DA=S*DC=S*E2=S*(IA=S+IB=S)
1097	FLDFL2	SF	n/a	None	FTF	1
1098	FLDFL2	SF	Macro NOTRIP is removed.	MP=S*TT=S*(BS=S+ -BSSUPP)*ADVCLD*SW=S	MSS	MP=S*TT=S*(BS=S+-BSSUPP)*ADVCLD*SW=S+NOTRIP
1099	FLDFL2	SF	Flood Matrix Impact	IA=S*E1=S*DA=S*IB=S*E2=S*DC=S *(EW=S*EX=S*XALT* XCLT+ (-NRAVAIL)) *MSFLDN	MS1	IA=S*E1=S*DA=S*IB=S*E2=S*DC=S*(EW=S*EX=S*XALT* XCLT+(-NRAVAIL))
1100	FLDFL2	SF	Flood Matrix Impact	**(IB=S*E2=S*DC=S*(EX=S*XCLT+ (-NRAVAIL))+ (-NOSPEB) *(-NRAVAIL)) *MSFLDN**	MS2	IB=S*E2=S*DC=S*(EX=S*XCLT+(-NRAVAIL))+(-NOSPEB) *(-NRAVAIL)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1101	FLDFL2	SF	Flood Matrix Impact	**(IA=S*E1=S*DA=S*(EW=S*XALT+ (-NRAVAIL))+ (-NOSPEA)) *MSFLDN**	MS3	IA=S*E1=S*DA=S*(EW=S*XALT+(-NRAVAIL))+(-NOSPEA)
1102	FLDFL2	SF	n/a	None	MSF	1
1103	FLDFL2	SF	Macro NOTRIP is removed.	TT=S*TBVCLD*ADVCLD*SW=S*PV=S*SL=S*RV=S	PTS	TT=S*TBVCLD*ADVCLD*SW=S*PV=S*SL=S*RV=S+NOTRIP
1104	FLDFL2	SF	n/a	None	PT1	(MS=S*ADVCLD+TT=S)*TBVCLD*SW=S*PV=S*SL=S*RV=S
1105	FLDFL2	SF	n/a	None	PT2	TT=S*SW=S*PV=S*SL=S*RV=S
1106	FLDFL2	SF	n/a	None	PT3	MS=S*PV=S*SL=S*RV=S
1107	FLDFL2	SF	n/a	None	PT4	PV=S*SL=S*RV=S
1108	FLDFL2	SF	n/a	None	PT5	TT=S*TBVCLD*ADVCLD*SW=S*PV=S*RV=S
1109	FLDFL2	SF	n/a	None	PT6	TT=S*TBVCLD*ADVCLD*SW=S*PV=S
1110	FLDFL2	SF	n/a	None	PT7	TT=S*TBVCLD*ADVCLD*SW=S
1111	FLDFL2	SF	n/a	None	PT8	1
1112	FLDFL2	SF	n/a	None	WRS	SSPH*RQ=S+PT=F
1113	FLDFL2	SF	n/a	None	WR1	RQ=S*MS=S
1114	FLDFL2	SF	n/a	None	WR2	RQ=S
1115	FLDFL2	SF	n/a	None	WR3	SSPH
1116	FLDFL2	SF	n/a	None	WRF	1
1117	FLDFL2	SF	n/a	None	Q1S	EW=S*EX=S*EY=S*EZ=S*XA=S*XB=S*XC=S*XD=S+E1=F* E2=F*E3=S*E4=S*(DA=S*DC=S+EW=F*EX=F*EY=S*EZ=S) +SHSD
1118	FLDFL2	SF	n/a	None	Q11	1
1119	FLDFL2	SF	n/a	None	QZS	Q1=S
1120	FLDFL2	SF	n/a	None	QZM	NOSPEC*NOSPED
1121	FLDFL2	SF	Removed Unnecessary Initiating Event Impacts	Deleted	QZ1	(-N120IE)
1122	FLDFL2	SF	n/a	None	QZ2	NRPSSP
1123	FLDFL2	SF	n/a	None	QZ4	1
1124	FLDFL2	SF	n/a	None	FNS	NRAVAIL+SHSD
1125	FLDFL2	SF	n/a	None	FN2	I1=S+I2=S
1126	FLDFL2	SF	n/a	None	FN1	(-BUS11)*(-BUS14)*(ACLT+ADLT)*NEP8AS*SL=S*SGINDS
1127	FLDFL2	SF	n/a	None	FN4	(-BUS11)*(-BUS14)*SGINDS
1128	FLDFL2	SF	n/a	None	FNF	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1129	FLDFL2	SF	n/a	None	FOS	NSAVAIL+SHSD
1130	FLDFL2	SF	Flood Matrix Impact	(I1=S+ (-BUS11U+ M2=F))* (I2=S+ M1=F)* (M3=S*ADLT+ N6=S*ACLT)* DA=S* (IH=S+ ES=F+ XC=F) * U2FLCN*U2SGIN* **FOFLDN**	FO2	(I1=S+(-BUS11U+M2=F))*(I2=S+M1=F)*(M3=S*ADLT+ N6=S*ACLT)*DA=S*(IH=S+ES=F+XC=F)* U2FLCN*U2SGIN
1131	FLDFL2	SF	Flood Matrix Impact	(I1=S+ (-BUS11U+ M2=F))* (I2=S+ M1=F)* (M3=S*ADLT+ N6=S*ACLT)* (IH=S+ ES=F+ XC=F) * U2SGIN ***FOFLDN**	FO3	(I1=S+(-BUS11U+M2=F))*(I2=S+M1=F)*(M3=S*ADLT+ N6=S*ACLT)*(IH=S+ES=F+XC=F)* U2SGIN
1132	FLDFL2	SF	Flood Matrix Impact	(M3=S*ADLT+ N6=S*ACLT)* (IH=S+ ES=F+ XC=F)* DA=S* U2FLCN*U2SGIN ***FOFLDN**	FOB	(M3=S*ADLT+N6=S*ACLT)*(IH=S+ES=F+XC=F)*DA=S* U2FLCN*U2SGIN
1133	FLDFL2	SF	Flood Matrix Impact	(M3=S*ADLT+ N6=S*ACLT)* (IH=S+ ES=F+ XC=F)*U2FLCN ***FOFLDN**	FOC	(M3=S*ADLT+N6=S*ACLT)*(IH=S+ES=F+XC=F)* U2SGIN
1134	FLDFL2	SF	n/a	None	FOF	1
1135	FLDFL2	SF	n/a	None	FGS	SHSD
1136	FLDFL2	SF	n/a	None	FG1	Q5=S
1137	FLDFL2	SF	n/a	None	FGF	1
1138	FLDFL2	SF	n/a	None	FHS	SHSD
1139	FLDFL2	SF	Macro FWLOSS is removed.	Deleted	FH1	FHSUPP*DA=S*NEP8AS*FWLOSS
1140	FLDFL2	SF	Macro N120IE is removed from the Flood module.	FHSUPP*DA=S	FH3	(FHSUPP+BUS11*Q5=S*(-N120IE)*(-SGINDS))*DA=S
1141	FLDFL2	SF	n/a	None	FH2	FHSUPP
1142	FLDFL2	SF	n/a	None	FHF	1
1143	FLDFL2	SF	n/a	None	F7S	SHSD
1144	FLDFL2	SF	n/a	None	F71	F7SUPP*FG=S*FH=S
1145	FLDFL2	SF	n/a	None	F73	F7SUPP*FG=S*QC=S
1146	FLDFL2	SF	n/a	None	F72	F7SUPP*FG=S
1147	FLDFL2	SF	n/a	None	F74	F7SUPP*FH=S
1148	FLDFL2	SF	n/a	None	F78	F7SUPP*QC=S
1149	FLDFL2	SF	n/a	None	F75	F7SUPP
1150	FLDFL2	SF	n/a	None	F7F	1
1151	FLDFL2	SF	n/a	None	FFS	SHSD
1152	FLDFL2	SF	n/a	None	FF1	MCCONE*NEP8AL*NOSSSA
1153	FLDFL2	SF	n/a	None	FF2	MCCONE
1154	FLDFL2	SF	n/a	None	FFF	1
1155	FLDFL2	SF	n/a	None	FCS	SHSD

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1156	FLDFL2	SF	Flood Matrix Impact	FF=S*(TA=S+SX=S)*N4=S*QD=S*BUS14*(MCCTWO+ MX=S)*NEP8AL * **FCFLD1*FCFLD2**	FC1	FF=S*(TA=S+SX=S)*N4=S*QD=S*BUS14*(MCCTWO+MX=S)*NEP8AL
1157	FLDFL2	SF	Flood Matrix Impact	FF=S*(TA=S+SX=S)*N4=S*QD=S*BUS14*M2=S*BUS11U*NEP8AL * **FCFLD1*FCFLD2**	FC3	FF=S*(TA=S+SX=S)*N4=S*QD=S*BUS14*M2=S*BUS11U*NEP8AL
1158	FLDFL2	SF	Flood Matrix Impact	FF=S*(TA=S+SX=S)*N4=S*QD=S*M1=S*BUS14*NEP8AL * **FCFLD1*FCFLD2**	FC4	FF=S*(TA=S+SX=S)*N4=S*QD=S*M1=S*BUS14*NEP8AL
1159	FLDFL2	SF	Flood Matrix Impact	FF=S*(MCCTWO+ MX=S)*NEP8AL ***FCFLD1**	FC2	FF=S*(MCCTWO+MX=S)*NEP8AL
1160	FLDFL2	SF	Flood Matrix Impact	FF=S*M2=S*BUS11U*NEP8AL ***FCFLD1**	FC5	FF=S*M2=S*BUS11U*NEP8AL
1161	FLDFL2	SF	Flood Matrix Impact	FF=S*M1=S*BUS14*NEP8AL ***FCFLD1**	FC6	FF=S*M1=S*BUS14*NEP8AL
1162	FLDFL2	SF	Flood Matrix Impact	(TA=S+SX=S)*N4=S*QD=S*BUS14*NEP8AL ***FCFLD1*FCFLD2**	FC7	(TA=S+SX=S)*N4=S*QD=S*BUS14*NEP8AL
1163	FLDFL2	SF	Flood Matrix Impact	NEP8AL ***FCFLD1**	FC8	NEP8AL
1164	FLDFL2	SF	Flood Matrix Impact	FF=S*(MCCTWO+ MX=S) ***FCFLD1**	FCA	FF=S*(MCCTWO+MX=S)
1165	FLDFL2	SF	Flood Matrix Impact	FF=S*M1=S*BUS14 ***FCFLD1**	FCC	FF=S*M1=S*BUS14
1166	FLDFL2	SF	Flood Matrix Impact	FF=S*M2=S*BUS11U ***FCFLD1**	FCD	FF=S*M2=S*BUS11U
1167	FLDFL2	SF	Flood Matrix Impact	**FCFLD2**	FCH	1
1167.1	FLDFL2	SF	Flood Matrix Impact	**1**	**FCF**	n/a
1168	FLDFL2	SF	n/a	None	HXS	SHSD
1169	FLDFL2	SF	n/a	None	HX1	Q5=S*NEP8AL*FLWCNS*FLWCNL*WSGINS*WSGINL
1170	FLDFL2	SF	n/a	None	HX2	Q5=S*NEP8AL*FLWCNS*FLWCNL*(WSGINS*SGINDL+SGINDS* WSGINL)
1171	FLDFL2	SF	n/a	None	HX3	Q5=S*NEP8AL*FLWCNS*FLWCNL*SGINDS*SGINDL
1172	FLDFL2	SF	n/a	None	HX4	Q5=S*FLWCNS*FLWCNL*WSGINS*WSGINL
1173	FLDFL2	SF	n/a	None	HX5	Q5=S*FLWCNS*FLWCNL*WSGINS*SGINDL
1174	FLDFL2	SF	n/a	None	HX6	Q5=S*FLWCNS*FLWCNL*SGINDS*WSGINL
1175	FLDFL2	SF	n/a	None	HX7	Q5=S*FLWCNS*FLWCNL*SGINDS*SGINDL

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1175.1	FLDFL2	SF	n/a	None	HXQ	Q5=S*NEP8AL*FLWCNS*FLWCNA* WSGINS*WSGINL
1175.2	FLDFL2	SF	n/a	None	HXR	Q5=S*FLWCNS*FLWCNA* SGINDS*SGINDL
1176	FLDFL2	SF	n/a	None	HX8	Q5=S*NEP8AL*WSGINS*WSGINL
1177	FLDFL2	SF	n/a	None	HX9	Q5=S*NEP8AL*(- FLWCNS)*WSGINS*SGINDL
1178	FLDFL2	SF	n/a	None	HXA	Q5=S*FLWCNS*SGINDS*WSGINL
1179	FLDFL2	SF	n/a	None	HXB	Q5=S*WSGINS*WSGINL
1180	FLDFL2	SF	n/a	None	HXC	Q5=S*(-FLWCNS)*WSGINS*SGINDL
1181	FLDFL2	SF	n/a	None	HXD	Q5=S*NEP8AL*SGINDS*SGINDL
1182	FLDFL2	SF	n/a	None	HXE	Q5=S*SGINDS*WSGINL
1183	FLDFL2	SF	n/a	None	HXG	Q5=S*SGINDS*SGINDL
1184	FLDFL2	SF	n/a	None	HXH	Q5=S*SGINDL
1185	FLDFL2	SF	n/a	None	HXJ	Q5=S*NEP8AL*SGINDS
1186	FLDFL2	SF	n/a	None	HXL	Q5=S*NEP8AL
1187	FLDFL2	SF	n/a	None	HXM	Q5=S*SGINDS
1188	FLDFL2	SF	n/a	None	HXN	Q5=S
1189	FLDFL2	SF	n/a	None	HXF	1
1190	FLDFL2	SF	n/a	None	UQS	SHSD+HX=S
1191	FLDFL2	SF	n/a	None	UQ1	Q5=S*FLWCNS*FLWCNL*SGINDS*SGIND L
1191.1	FLDFL2	SF	n/a	None	UQ4	Q5=S*FLWCNS*FLWCNA*SGINDS*SGIND L
1192	FLDFL2	SF	n/a	None	UQ2	Q5=S*SGINDS*SGINDL
1193	FLDFL2	SF	n/a	None	UQ3	Q5=S
1194	FLDFL2	SF	n/a	None	UQF	1
1195	FLDFL2	SF	n/a	None	HUS	SHSD
1196	FLDFL2	SF	n/a	None	HU1	HX=S*NEP8AL*FLWCNS*FLWCNL*WSGIN S*WSGINL
1197	FLDFL2	SF	n/a	None	HU2	HX=S*SGINDS*SGINDL
1198	FLDFL2	SF	n/a	None	HUF	1
1199	FLDFL2	SF	n/a	None	FJS	SHSD
1200	FLDFL2	SF	n/a	None	FJ1	FC=S*Q5=S
1201	FLDFL2	SF	n/a	None	FJF	1
1202	FLDFL2	SF	n/a	None	OAS	SHSD
1203	FLDFL2	SF	n/a	None	OA1	OAOBSP*NWLTRP*NEP8AL
1204	FLDFL2	SF	n/a	None	OA2	OAOBSP*NWLTRP
1205	FLDFL2	SF	n/a	None	OA3	OAOBSP*NEP8AL

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1206	FLDFL2	SF	n/a	None	OA4	OAOBSP
1207	FLDFL2	SF	n/a	None	OAF	1
1208	FLDFL2	SF	n/a	None	OBS	SHSD+-F9SUPG
1209	FLDFL2	SF	n/a	None	OB1	HX=F*UQ=S*OAOBSP*NEP8AL*DC=S
1210	FLDFL2	SF	n/a	None	OB2	NWLTRP*NEP8AL*DC=S*OAOBSP*OA=S
1211	FLDFL2	SF	n/a	None	OB3	NWLTRP*DC=S*OAOBSP*OA=S
1212	FLDFL2	SF	n/a	None	OB4	NEP8AL*DC=S*OAOBSP*OA=S
1213	FLDFL2	SF	n/a	None	OB5	DC=S*OAOBSP*OA=S
1214	FLDFL2	SF	n/a	None	OB6	HX=F*UQ=S*OAOBSP
1215	FLDFL2	SF	n/a	None	OB7	NWLTRP*NEP8AL*DC=S*OAOBSP
1216	FLDFL2	SF	n/a	None	OB8	NWLTRP*DC=S*OAOBSP
1217	FLDFL2	SF	n/a	None	OB9	NEP8AL*DC=S*OAOBSP
1218	FLDFL2	SF	n/a	None	OBA	DC=S*OAOBSP
1219	FLDFL2	SF	n/a	None	OBF	1
1220	FLDFL2	SF	n/a	None	TFS	SHSD
1221	FLDFL2	SF	Flood Matrix Impact	FC=S*FJ=S*(FG=S*-F7SUPP+ F7=S) ***TFFLDN**	TF1	FC=S*FJ=S*(FG=S*-F7SUPP+F7=S)
1222	FLDFL2	SF	Flood Matrix Impact	FC=S*FJ=S*-F7SUPP ***TFFLDN**	TF3	FC=S*FJ=S*-F7SUPP
1223	FLDFL2	SF	Flood Matrix Impact	FC=S*FJ=F*(FG=S*-F7SUPP+ F7=S) ***TFFLDN**	TF2	FC=S*FJ=F*(FG=S*-F7SUPP+F7=S)
1224	FLDFL2	SF	Flood Matrix Impact	FC=S*-F7SUPP ***TFFLDN**	TF4	FC=S*-F7SUPP
1225	FLDFL2	SF	Flood Matrix Impact	FC=S*F7=F*FJ=S*FG=S ***TFFLDN**	TF9	FC=S*F7=F*FJ=S*FG=S
1226	FLDFL2	SF	Flood Matrix Impact	FC=S*F7=F*FJ=F*FG=S ***TFFLDN**	TFA	FC=S*F7=F*FJ=F*FG=S
1227	FLDFL2	SF	Flood Matrix Impact	FC=S*F7=F*FJ=S*FG=F ***TFFLDN**	TFB	FC=S*F7=F*FJ=S*FG=F
1228	FLDFL2	SF	Flood Matrix Impact	FC=S ***TFFLDN**	TFC	FC=S
1229	FLDFL2	SF	n/a	None	TFF	1
1230	FLDFL2	SF	n/a	None	TGS	SHSD
1231	FLDFL2	SF	Flood Matrix Impact	TF=S* FC=S*HX=F* UQ=S ***TGFLDN**	TGQ	TF=S*FC=S*HX=F*UQ=S
1231.1	FLDFL2	SF	New Flood Split Fraction	**(-TFFLDN)*** FC=S*HX=F* UQ=S *TGFLDN	**TGP**	n/a
1232	FLDFL2	SF	Flood Matrix Impact	FC=S*HX=F*UQ=S ***TGFLDN**	TGR	FC=S*HX=F*UQ=S
1233	FLDFL2	SF	Flood Matrix Impact	TGSUPP*TF=S* (-F7SUPP+F7=S) ***TGFLDN**	TG1	TGSUPP*(TF=S*(-F7SUPP+F7=S))
1233.1	FLDFL2	SF	New Flood Split Fraction	TGSUPP***(-TFFLDN)*** (-F7SUPP+F7=S) ***TGFLDN**	**TGA**	n/a
1234	FLDFL2	SF	Flood Matrix Impact	TGSUPP*TF=S ***TGFLDN**	TG2	TGSUPP*TF=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1234.1	FLDFL2	SF	New Flood Split Fraction	TGSUPP*(-TFFLDN) *TGFLDN * FG=S	TGB	n/a
1234.2	FLDFL2	SF	New Flood Split Fraction	TGSUPP*(-TFFLDN) *TGFLDN	TGC	n/a
1235	FLDFL2	SF	Flood Matrix Impact	TGSUPP*FJ=S* (F7=S+-F7SUPP*FG=S) *TGFLDN	TG3	TGSUPP*FJ=S*(F7=S+-F7SUPP*FG=S)
1236	FLDFL2	SF	Flood Matrix Impact	TGSUPP*-F7SUPP*FJ=S *TGFLDN	TG4	TGSUPP*-F7SUPP*FJ=S
1237	FLDFL2	SF	Flood Matrix Impact	TGSUPP*(F7=S+-F7SUPP*FG=S) *TGFLDN	TG5	TGSUPP*(F7=S+-F7SUPP*FG=S)
1238	FLDFL2	SF	Flood Matrix Impact	TGSUPP*FJ=S*FG=S*F7SUPP* F7=F *TGFLDN	TG6	TGSUPP*FJ=S*FG=S*F7SUPP*F7=F
1239	FLDFL2	SF	Flood Matrix Impact	TGSUPP*-F7SUPP *TGFLDN	TG7	TGSUPP*-F7SUPP
1240	FLDFL2	SF	Flood Matrix Impact	TGSUPP*FG=S *TGFLDN	TG8	TGSUPP*FG=S
1241	FLDFL2	SF	n/a	None	TGF	1
1242	FLDFL2	SF	n/a	None	F9S	SHSD
1243	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*FG=S*XALT*XCLT* U2MFWS*((-F7SUPP+F7=S) * (FC=F+TF=S*TG=S+(-TFFLDN)*(-TGFLDN)))	F91	F9SUPP*FG=S*XALT*XCLT*U2MFWS*((-F7SUPP+F7=S) *(FC=F+TF=S*TG=S))
1244	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*XALT*XCLT* U2MFWS*((-F7SUPP+F7=S)* (FC=F+ TF=S*TG=S+(-TFFLDN)*(-TGFLDN)))	F92	F9SUPP*XALT*XCLT*U2MFWS*((-F7SUPP+F7=S)*(FC=F+ TF=S*TG=S))
1245	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP* (FC=F+(-TFFLDN)*(-TGFLDN))* F7=S*FG=S*XALT*XCLT	F93	F9SUPP*FC=F*F7=S*FG=S*XALT*XCLT
1246	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP* FC=S*(TFFLDN)*(TGFLDN)*TF=F* TG=F*F7SUPP*F7=F* FG=F*XALT* XCLT*U2MFWS	F94	F9SUPP*FC=S*TF=F*TG=F*F7SUPP*F7=F *FG=F*XALT* XCLT*U2MFWS
1247	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*XALT*XCLT* ((FC=S*(TFFLDN)*(TGFLDN)* TF=F*TG=F*F7=F* F7SUPP* FG=F)+ ((FC=F+TF=S*TG=S+(-TFFLDN)*(-TGFLDN))*(-F7SUPP)*FG=S))	F95	F9SUPP*XALT*XCLT*((FC=S*TF=F*TG=F* F7=F*F7SUPP* FG=F)+((FC=F+TF=S*TG=S)*(-F7SUPP)*FG=S))
1248	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP* (FC=F+TF=S*TG=S+(-TFFLDN)*(-TGFLDN))* (F7=S+(-F7SUPP))*XALT*XCLT	F96	F9SUPP*(FC=F+TF=S*TG=S)*(F7=S+(-F7SUPP))*XALT*XCLT
1249	FLDFL2	SF	n/a	None	F97	F9SUPP*F7=S*XALT*XCLT*U2MFWS

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1250	FLDFL2	SF	n/a	None	F98	F9SUPP*(-F7SUPP)*FG=F*XALT*XCLT*U2MFWS
1251	FLDFL2	SF	n/a	None	F99	F9SUPP*(-F7SUPP)*FG=F*XALT*XCLT
1252	FLDFL2	SF	n/a	None	F9A	F9SUPP*FG=F*XALT*XCLT*U2MFWS
1253	FLDFL2	SF	n/a	None	F9B	F9SUPP*F7SUPP*F7=F*FG=F*XALT*XCLT
1254	FLDFL2	SF	n/a	None	F9C	F9SUPP*F7=S*FG=S*XALT*XCLT
1255	FLDFL2	SF	n/a	None	F9D	F9SUPP*(-F7SUPP)*FG=S*XALT*XCLT*U2MFWS
1256	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(FC=S*(TFFLDN)*(TGFLDN)*TF=F*TG=F*F7=S)*XALT*XCLT	F9E	F9SUPP*(FC=S*TF=F*TG=F*F7=S)*XALT*XCLT
1257	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(TF=S+TG=S+FC=F+(-TFFLDN)*(-TGFLDN))*XALT*XCLT*U2MFWS	F9G	F9SUPP*(TF=S+TG=S+FC=F)*XALT*XCLT*U2MFWS
1258	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(TF=S*TG=S+FC=F+(-TFFLDN)*(-TGFLDN))*XALT*XCLT	F9J	F9SUPP*(TF=S*TG=S+FC=F)*XALT*XCLT
1259	FLDFL2	SF	n/a	None	F9K	F9SUPP*(TF=S+TG=S)*F7SUPP*F7=F*XALT*XCLT
1260	FLDFL2	SF	n/a	None	F9L	F9SUPP*(-F7SUPP)*XALT*XCLT
1261	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(FC=F+TF=S*TG=S+(-TFFLDN)*(-TGFLDN))*(F7=S+(-F7SUPP))*FG=S	F9N	F9SUPP*(FC=F+TF=S*TG=S)*(F7=S+(-F7SUPP))*FG=S
1262	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*FC=S*(TFFLDN)*(TGFLDN)*TF=F*TG=F*F7SUPP*F7=F*FG=F	F9O	F9SUPP*FC=S*TF=F*TG=F*F7SUPP*F7=F*FG=F
1263	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(FC=F+TF=S*TG=S+(-TFFLDN)*(-TGFLDN))*(F7=S+(-F7SUPP))	F9P	F9SUPP*(FC=F+TF=S*TG=S)*(F7=S+(-F7SUPP))
1264	FLDFL2	SF	n/a	None	F9R	F9SUPP*(F7=S+(-F7SUPP))
1265	FLDFL2	SF	n/a	None	F9U	F9SUPP*FG=F
1266	FLDFL2	SF	Credit Not Question Cases for T.D. AFW Pump Flooding	F9SUPP*(FC=F+TF=S+TG=S+(-TFFLDN)*(-TGFLDN))	F9W	F9SUPP*(FC=F+TF=S+TG=S)
1267	FLDFL2	SF	n/a	None	F9X	F9SUPP*XALT*XCLT
1268	FLDFL2	SF	n/a	None	F9Y	F9SUPP
1269	FLDFL2	SF	n/a	None	F9F	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1270	FLDFL2	SF	Removed Unnecessary Initiating Event Impacts and Macro FWLOSS is removed.	(MP=S+ FT=S+ MS=S)	MTS	(-(INIT=EMFW))*(MP=S+FT=S+FWLOSS+MS=S)
1271	FLDFL2	SF	n/a	None	MT1	SGINDS*XALT*XCLT*(FT=S+IA=F*IB=F+E2=F)
1272	FLDFL2	SF	n/a	None	MT2	SGINDS*XALT*XCLT*M1=S*M2=S
1273	FLDFL2	SF	n/a	None	MTF	1
1274	FLDFL2	SF	n/a	None	MHS	SHSD+EW=S*XALT*EX=S*XCLT
1275	FLDFL2	SF	Flood Matrix Impact	QZ=S*Q5=S*(TF=S+TG=S)* STMAVL*(SGINDL+HX=S) *XALT* XCLT* NOSSSA ***-MHFLD1*-MHFLDF**	MH1	QZ=S*Q5=S*(TF=S+TG=S)*STMAVL*(SGINDL+HX=S) *XALT*XCLT*NOSSSA
1276	FLDFL2	SF	Flood Matrix Impact	QZ=S*Q5=S*(TF=S+TG=S)* STMAVL*(SGINDL+HX=S) ***-MHFLDF**	MH2	QZ=S*Q5=S*(TF=S+TG=S)*STMAVL*(SGINDL+HX=S)
1277	FLDFL2	SF	Flood Matrix Impact	QZ=S*Q5=S*(TF=S+TG=S)* STMAVL ***-MHFLDF**	MH5	QZ=S*Q5=S*(TF=S+TG=S)*STMAVL
1278	FLDFL2	SF	n/a	None	MHF	1
1279	FLDFL2	SF	n/a	None	F1S	SHSD
1280	FLDFL2	SF	n/a	None	F11	(F7=S+F9=S)*(TF=S+TG=S)*STMAVL*QZ=S*HX=S*HU=S* MT=S*(XALT*EW=S*XCLT*EX=S+MH=S*(XALT*EW=S+ XCLT*EX=S))
1281	FLDFL2	SF	n/a	None	F13	(F7=S+F9=S)*(TF=S+TG=S)*STMAVL*(EW=S*XALT+ EX=S*XCLT+MH=S)*QZ=S*HX=S*HU=S*MT=S
1282	FLDFL2	SF	n/a	None	F16	(F7=S+F9=S)*(TF=S+TG=S)*STMAVL*(EW=S*EX=S* XALT*XCLT+MH=S*(EW=S*XALT+EX=S*XCLT))*QZ=S* HX=S*MT=S
1283	FLDFL2	SF	n/a	None	F14	(F7=S+F9=S)*QZ=S*UQ=S*HU=S
1284	FLDFL2	SF	n/a	None	F18	(F7=S+F9=S)*(TF=S+TG=S)*STMAVL*(EW=S*XALT+ EX=S*XCLT+MH=S)*QZ=S*HX=S*MT=S
1285	FLDFL2	SF	n/a	None	F12	(TF=S+TG=S)*STMAVL*(EW=S*EX=S*XALT*XCLT+MH=S* (EW=S*XALT+EX=S*XCLT))*QZ=S*HX=S* HU=S*MT=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1286	FLDFL2	SF	n/a	None	F1E	(TF=S+TG=S)*STMAVL*(EW=S*XALT+EX=S*XCLT+MH=S) *QZ=S*HX=S*HU=S*MT=S
1287	FLDFL2	SF	n/a	None	F1X	(F7=S+F9=S)*QZ=S*UQ=S
1288	FLDFL2	SF	n/a	None	F17	(TF=S+TG=S)*STMAVL*(EW=S*EX=S*XALT*XCLT+MH=S* (EW=S*XALT+EX=S*XCLT))*QZ=S*HX=S*MT=S
1289	FLDFL2	SF	n/a	None	F1G	(TF=S+TG=S)*STMAVL*(EW=S*XALT+EX=S*XCLT+MH=S) *QZ=S*HX=S*MT=S
1290	FLDFL2	SF	n/a	None	F1R	(TF=S*TG=S)*STMAVL*QZ=S*UQ=S*MH=S*Q5=S*OB=S* (FH=S+-FHSUPP)
1291	FLDFL2	SF	n/a	None	F1F	1
1292	FLDFL2	SF	n/a	None	ALS	SHSD
1293	FLDFL2	SF	n/a	None	AL1	F1=S
1294	FLDFL2	SF	n/a	None	ALF	1
1295	FLDFL2	SF	n/a	None	F3S	SHSD
1296	FLDFL2	SF	n/a	None	F31	F1=S*AL=S*ETRCST*(EW=S*XALT+EL=S*XCLT)*TF=S* TG=S*HX=S*(-U2MFWS)
1297	FLDFL2	SF	n/a	None	F32	F1=S*AL=S*ETRCST*(EW=S*XALT+EL=S*XCLT)*(TF=S* TG=S*HX=S+F7=S*F9=S*U2MFWS)
1298	FLDFL2	SF	n/a	None	F33	F1=S*AL=S*ETRCST*(EW=S*XALT+EL=S*XCLT)*(TF=S+TG=S)
1299	FLDFL2	SF	n/a	None	F34	F1=S*AL=S*ETRCST*(TF=S*TG=S*HX=S+F7=S*F9=S*U2MFWS)
1300	FLDFL2	SF	n/a	None	F35	F1=S*AL=S*ETRCST*(TF=S+TG=S)
1301	FLDFL2	SF	n/a	None	F36	F1=S*AL=S*(EW=S*XALT+EL=S*XCLT)*(TF=S*TG=S* HX=S+F7=S*F9=S*U2MFWS)
1302	FLDFL2	SF	n/a	None	F37	F1=S*AL=S*(EW=S*XALT+EL=S*XCLT)*(TF=S+TG=S)
1303	FLDFL2	SF	n/a	None	F38	F1=S*AL=S*(TF=S*TG=S*HX=S+F7=S*F9=S*U2MFWS)
1304	FLDFL2	SF	n/a	None	F39	F1=S*AL=S*(TF=S+TG=S)
1305	FLDFL2	SF	n/a	None	F3A	F1=S*AL=S
1306	FLDFL2	SF	n/a	None	F3F	1
1307	FLDFL2	SF	n/a	None	LFS	SHSD+SAFW
1308	FLDFL2	SF	n/a	None	LF1	LFSUPP*DV=S*NLFHAC

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1309	FLDFL2	SF	n/a	None	LF2	LFSUPP*NLFHAC
1310	FLDFL2	SF	n/a	None	LFF	1
1311	FLDFL2	SF	n/a	None	CVS	RQ=S*(SAFW+SLPF)
1312	FLDFL2	SF	Flood Matrix Impact	(PH=S*SL=S*RV=S*PT=S*WR=S*(F3=S*F1=S+LF=S* PV=S))* XALT*XCLT*N1=S*N2=S*N4=S* BUS11*BUS14* M1=S*M2=S*E6=S*NRAVAIL ***CVFLDN**	CV1	(PH=S*SL=S*RV=S*PT=S*WR=S*(F3=S*F1=S+LF=S* PV=S))*XALT*XCLT*N1=S*N2=S*N4=S*BUS11*BUS14* M1=S*M2=S*E6=S*NRAVAIL
1313	FLDFL2	SF	Flood Matrix Impact	(PH=S*SL=S*RV=S*PT=S*WR=S*(F3=S*F1=S+LF=S* PV=S))* XALT*XCLT*BUS11*BUS14* (N1=S*N2=S+N1=S* N4=S+N2=S*N4=S)* M1=S*M2=S*E6=S*NRAVAIL ***CVFLDN**	CV2	(PH=S*SL=S*RV=S*PT=S*WR=S*(F3=S*F1=S+LF=S* PV=S))*XALT*XCLT*BUS11*BUS14*(N1=S*N2=S+N1=S* N4=S+N2=S*N4=S)*M1=S*M2=S*E6=S*NRAVAIL
1314	FLDFL2	SF	Flood Matrix Impact	RQ=S*XALT*XCLT*CVSUPA*CVSUPB*(EW=S+EX=S) ***CVFLDN**	CV3	RQ=S*XALT*XCLT* CVSUPA*CVSUPB* (EW=S+EX=S)
1315	FLDFL2	SF	Flood Matrix Impact	RQ=S*BUS11*BUS14* (XALT*EW=S*N1=S*N2=S+ XALT* XCLT*EW=S*EX=S* (N1=S*N4=S+N2=S*N4=S))* M1=S*M2=S ***CVFLDN**	CV4	RQ=S*BUS11*BUS14*(XALT*EW=S*N1=S*N2=S+XALT* XCLT*EW=S*EX=S*(N1=S*N4=S+N2=S*N4=S))*M1=S*M2=S
1315 1	FLDFL2	SF	Flood Matrix Impact	RQ=S*XALT*CVSUPA*EW=S ***CVFLDN**	CV5	RQ=S*XALT*EW=S*CVSUPA
1316	FLDFL2	SF	n/a	None	CVF	1
1317	FLDFL2	SF	n/a	None	OSS	WR=S
1318	FLDFL2	SF	n/a	None	OS1	CV=S*XALT*NRAVAIL*M1=S*XCLT
1319	FLDFL2	SF	n/a	None	OS2	CV=S*XALT*NRAVAIL*M1=S
1320	FLDFL2	SF	n/a	None	OS3	XCLT
1321	FLDFL2	SF	n/a	None	OSF	1
1322	FLDFL2	SF	n/a	None	LDS	WR=S
1323	FLDFL2	SF	n/a	None	LD1	(DV=S+-DVSUPP)*SGINDL*XALT*XCLT*E5=S*MCCTWO* NRAVAIL*(MS=S*FT=S+IA=F*IB=F)
1324	FLDFL2	SF	n/a	None	LDA	SGINDL*(XALT+XCLT)*MCCONE*((FT=S+M1=F+M2=F) *MS=S+IA=F*IB=F)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1325	FLDFL2	SF	n/a	None	LD2	(DV=S+-DVSUPP)*SGINDL*XALT*XCLT*E5=S*MCCTWO* NRAVAIL*MS=S*DA=S*DC=S
1326	FLDFL2	SF	n/a	None	LDB	SGINDL*(XALT+XCLT)*MCCONE*MS=S*DA=S*DC=S
1327	FLDFL2	SF	n/a	None	LDF	1
1328	FLDFL2	SF	n/a	None	RCS	WR=S
1329	FLDFL2	SF	n/a	None	RC1	N7=S*ADLT*XCLT*(E5=S*E6=S*BUS14*ES=S)
1330	FLDFL2	SF	n/a	None	RCF	1
1331	FLDFL2	SF	n/a	None	OTS	SAFW+SHSD+SLPF+SATWS
1332	FLDFL2	SF	n/a	None	OT1	OTSUPP*NEOP8L*(F1=S*AL=S+OVRFLL)
1333	FLDFL2	SF	n/a	None	OT2	OTSUPP*(F1=S*AL=S+OVRFLL)
1334	FLDFL2	SF	n/a	None	OT3	OTSUPP*NEOP8L*F1=S
1335	FLDFL2	SF	n/a	None	OT4	OTSUPP*F1=S
1336	FLDFL2	SF	n/a	None	OT5	OTSUPP
1337	FLDFL2	SF	n/a	None	OTF	1
1338	FLDFL2	SF	n/a	None	OZS	OT=S
1339	FLDFL2	SF	n/a	None	OZ1	OZSUPP*(-OTSUPP)*PP=S
1340	FLDFL2	SF	n/a	None	OZ2	OZSUPP*PP=F
1341	FLDFL2	SF	n/a	None	OZ3	OZSUPP*F1=F*-OVRFLL
1342	FLDFL2	SF	n/a	None	OZF	1
1343	FLDFL2	SF	n/a	None	RTS	SHSD+SAFW
1344	FLDFL2	SF	Flood Matrix Impact	(-(INIT=R221AM+INIT=R224AM+INIT=R228AM))	RT1	1
1344.1	FLDFL2	SF	New Flood Split Fraction	1	RTF	n/a
1345	FLDFL2	SF	n/a	None	RES	SHSD+SAFW
1346	FLDFL2	SF	n/a	None	RE1	RT=S
1347	FLDFL2	SF	n/a	None	REF	1
1348	FLDFL2	SF	n/a	None	RWS	SHSD+SAFW
1349	FLDFL2	SF	n/a	None	RW3	RT=S*RE=S
1350	FLDFL2	SF	n/a	None	RW5	RT=S
1351	FLDFL2	SF	n/a	None	RWF	1
1352	FLDFL2	SF	n/a	None	SAS	SAFW+SHSD+SLPF+SATWS
1353	FLDFL2	SF	n/a	None	SA1	SASUPP*CX=S*WR=S
1354	FLDFL2	SF	n/a	None	SA2	SASUPP*CX=S
1355	FLDFL2	SF	n/a	None	SA3	SASUPP*WR=S
1356	FLDFL2	SF	n/a	None	SA4	SASUPP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1357	FLDFL2	SF	n/a	None	SAF	1
1358	FLDFL2	SF	n/a	None	SBS	SAFW+SHSD+SLPF+SATWS
1359	FLDFL2	SF	n/a	None	SB5	SBSUPP*CY=S*(SA=S+-SASUPP)*WR=S
1360	FLDFL2	SF	n/a	None	SBB	SBSUPP*CY=F*(SA=S+-SASUPP)*WR=S
1361	FLDFL2	SF	n/a	None	SB3	SBSUPP*SASUPP*SA=F*(CX=S*CY=S+CX =F)*WR=S
1362	FLDFL2	SF	n/a	None	SB9	SBSUPP*CX=S*CY=F*SASUPP*SA=F*WR =S
1363	FLDFL2	SF	n/a	None	SB6	SBSUPP*CY=S*(SA=S+-SASUPP)
1364	FLDFL2	SF	n/a	None	SBC	SBSUPP*CY=F*(SA=S+-SASUPP)
1365	FLDFL2	SF	n/a	None	SB4	SBSUPP*SASUPP*SA=F*(CX=S*CY=S+CX =F)
1366	FLDFL2	SF	n/a	None	SBA	SBSUPP*CX=S*CY=F*SASUPP*SA=F
1367	FLDFL2	SF	n/a	None	SBF	1
1368	FLDFL2	SF	n/a	None	VMS	SHSD+SAFW
1369	FLDFL2	SF	n/a	None	VM1	NEOP8H*(V1SUPP+V2SUPP)
1370	FLDFL2	SF	n/a	None	VM2	(V1SUPP+V2SUPP)*(XCLT+-NEOP8H)
1371	FLDFL2	SF	n/a	None	VMF	1
1372	FLDFL2	SF	n/a	None	HVS	SHSD+SAFW
1373	FLDFL2	SF	n/a	None	HV1	VM=S*NEOP8H
1374	FLDFL2	SF	n/a	None	HV2	VM=S*(XCLT+-NEOP8H)
1375	FLDFL2	SF	n/a	None	HVF	1
1376	FLDFL2	SF	n/a	None	V1S	SHSD+SAFW
1377	FLDFL2	SF	n/a	None	V14	V1SUPP*HV=S*VM=S
1378	FLDFL2	SF	n/a	None	V13	V1SUPP*VM=S
1379	FLDFL2	SF	n/a	None	V11	V1SUPP
1380	FLDFL2	SF	n/a	None	V1F	1
1381	FLDFL2	SF	n/a	None	V2S	SHSD+SAFW
1382	FLDFL2	SF	n/a	None	V2A	V2SUPP*V1=S*HV=S*VM=S
1383	FLDFL2	SF	n/a	None	V24	V2SUPP*(-V1SUPP)*HV=S*VM=S
1384	FLDFL2	SF	n/a	None	V2E	V2SUPP*HV=S*VM=S
1385	FLDFL2	SF	n/a	None	V29	V2SUPP*V1=S*VM=S
1386	FLDFL2	SF	n/a	None	V23	V2SUPP*(-V1SUPP)*VM=S
1387	FLDFL2	SF	n/a	None	V27	V2SUPP*V1=S
1388	FLDFL2	SF	n/a	None	V21	V2SUPP*(-V1SUPP)
1389	FLDFL2	SF	n/a	None	V2D	V2SUPP*VM=S
1390	FLDFL2	SF	n/a	None	V2B	V2SUPP

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1391	FLDFL2	SF	n/a	None	V2F	1
1392	FLDFL2	SF	n/a	None	MVS	SHSD+SAFW
1393	FLDFL2	SF	n/a	None	MV1	1
1394	FLDFL2	SF	n/a	None	RHS	SAFW+SHSD+SLPF+SATWS+OT=S*PHNQOS+SA=S*SB=S
1395	FLDFL2	SF	n/a	None	RH1	RHSUPP*NEOP8H*XALT*XCLT*PHNQOS
1396	FLDFL2	SF	n/a	None	RH3	RHSUPP*XALT*XCLT*PHNQOS
1397	FLDFL2	SF	n/a	None	RH4	RHSUPP*PHNQOS
1398	FLDFL2	SF	Removed Unnecessary Initiating Event Impacts	RHSUPP*XALT*XCLT*(PN=F*(-MCC2SH))	RH5	RHSUPP*XALT*XCLT*(LMCCIE+PN=F*(-MCC2SH))
1399	FLDFL2	SF	Removed Unnecessary Initiating Event Impacts	RHSUPP*(PN=F*(-MCC2SH))	RH6	RHSUPP*(LMCCIE+PN=F*(-MCC2SH))
1400	FLDFL2	SF	n/a	None	RH7	RHSUPP*(-MCC2SH)
1401	FLDFL2	SF	n/a	None	RH8	RHSUPP
1402	FLDFL2	SF	n/a	None	RHF	1
1403	FLDFL2	SF	n/a	None	HAS	SHSD+SAFW
1404	FLDFL2	SF	n/a	None	HA1	HASUPP
1405	FLDFL2	SF	n/a	None	HAF	1
1406	FLDFL2	SF	n/a	None	HBS	SHSD+SAFW
1407	FLDFL2	SF	n/a	None	HB1	HBSUPP*HA=S
1408	FLDFL2	SF	n/a	None	HB2	HBSUPP*(-HASUPP)
1409	FLDFL2	SF	n/a	None	HB3	HBSUPP
1410	FLDFL2	SF	n/a	None	HBF	1
1411	FLDFL2	SF	n/a	None	HDS	SAFW+SHSD+SLPF+SATWS
1412	FLDFL2	SF	n/a	None	HD1	DL1SUP*NEOP8H
1413	FLDFL2	SF	n/a	None	HD2	DL1SUP
1414	FLDFL2	SF	n/a	None	HDF	1
1415	FLDFL2	SF	n/a	None	HJS	SAFW+SHSD+SLPF+SATWS+HD=S
1416	FLDFL2	SF	n/a	None	HJ1	DL1SUP*HA=S*HB=S
1417	FLDFL2	SF	n/a	None	HJF	1
1418	FLDFL2	SF	n/a	None	HES	SAFW+SHSD+SLPF+SATWS+HD=S
1419	FLDFL2	SF	n/a	None	HE1	DL1SUP*NEOP8H*(HA=S+HB=S)
1420	FLDFL2	SF	n/a	None	HE2	DL1SUP*(HA=S+HB=S)
1421	FLDFL2	SF	n/a	None	HEF	1
1422	FLDFL2	SF	n/a	None	HYS	HA=S*HB=S*HD=S
1423	FLDFL2	SF	n/a	None	HY1	RH=S*(DL1SUP+XALT*XCLT)*NEOP8H
1424	FLDFL2	SF	n/a	None	HY2	RH=S*(DL1SUP+XALT*XCLT)
1425	FLDFL2	SF	n/a	None	HYF	1
1426	FLDFL2	SF	n/a	None	HWS	HA=S*HB=S*HD=S

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1427	FLDFL2	SF	n/a	None	HW1	HWSUPP*HA=S*(-HBSUPP+HJ=F*HB=S)*M1LT
1428	FLDFL2	SF	n/a	None	HW2	HWSUPP*HB=S*(-HASUPP+HD=F*HA=S)*M2LT
1429	FLDFL2	SF	n/a	None	HW3	HWSUPP*(-HASUPP+HD=F*HA=S)*(-HBSUPP+HJ=F*HB=S) *(M1LT+M2LT)
1430	FLDFL2	SF	n/a	None	HW4	HWSUPP*HA=S*HB=F*M1LT
1431	FLDFL2	SF	n/a	None	HW5	HWSUPP*HB=S*HA=F*M2LT
1432	FLDFL2	SF	n/a	None	HW6	HWSUPP*HA=F*(-HBSUPP+HJ=F*HB=S)*M1LT
1433	FLDFL2	SF	n/a	None	HW7	HWSUPP*HA=F*(-HBSUPP+HJ=F*HB=S)*M2LT
1434	FLDFL2	SF	n/a	None	HW8	HWSUPP*HB=F*(-HASUPP+HD=F*HA=S)*M2LT
1435	FLDFL2	SF	n/a	None	HW9	HWSUPP*HB=F*(-HASUPP+HD=F*HA=S)*M1LT
1436	FLDFL2	SF	n/a	None	HWA	HWSUPP*HB=F*HA=F*(M1LT+M2LT)
1437	FLDFL2	SF	n/a	None	HWF	1
1438	FLDFL2	SF	n/a	None	DLS	SHSD+SAFW
1438.1	FLDFL2	SF	Flood Matrix Impact	DL2HDR *(-(DLFLD1+DLFLD2))	DL4	DL2HDR
1438.2	FLDFL2	SF	Flood Matrix Impact	DL1HDR *(-(DLFLD1+DLFLD2))	DL5	DL1HDR
1441	FLDFL2	SF	n/a	None	DLF	1
1442	FLDFL2	SF	n/a	None	TRS	(SSHR+OTCC)+PT=F
1443	FLDFL2	SF	n/a	None	TR1	WR=S*SSPH*RQ=S
1444	FLDFL2	SF	n/a	None	TR2	WR=S*MS=S*SL=S*RQ=S*OZ=S
1445	FLDFL2	SF	n/a	None	TR3	WR=S*SL=S*RQ=S*OZ=S
1446	FLDFL2	SF	n/a	None	TR4	WR=S*RQ=S*MS=S*OZ=S
1447	FLDFL2	SF	n/a	None	TR5	WR=S*RQ=S*OZ=S
1448	FLDFL2	SF	n/a	None	TR6	WR=S*MS=S*SL=S*RQ=S
1449	FLDFL2	SF	n/a	None	TR7	WR=S*SL=S*RQ=S
1450	FLDFL2	SF	n/a	None	TR8	WR=S*RQ=S*MS=S
1451	FLDFL2	SF	n/a	None	TR9	WR=S*RQ=S
1452	FLDFL2	SF	n/a	None	TRF	1
1453	FLDFL2	SF	n/a	None	WSS	WR=S
1454.1	FLDFL2	SF	n/a	none	WS1	1
1455	FLDLT	Macro	n/a	none	EASUPP	EW=S*J1=S*XALT
1456	FLDLT	Macro	n/a	none	EBSUPP	EX=S*J2=S*XCLT
1457	FLDLT	Macro	n/a	None	RASUPP	EW=S*J1=S*XALT
1458	FLDLT	Macro	n/a	None	RBSUPP	EX=S*J2=S*XCLT

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1459	FLDLT	Macro	n/a	None	HPSICL	(K3=S*R3=S+K4=S*R4=S)*(KX=S+KY=S+KZ=S)*KL=S+NOCCSL
1460	FLDLT	Macro	n/a	None	CS11CL	(K3=S*R3=S+CT=F*K4=S*R4=S)*(KX=S+KY=S+KZ=S)+NOCCSL
1461	FLDLT	Macro	n/a	None	CS12CL	(K4=S*R4=S+(CS=F+-CS11CL)*K3=S*R3=S)*((CS=F+ -CS11CL)*(KX=S+KY=S+KZ=S)+(KX=S*KY=S+KX=S* KZ=S+KY=S*KZ=S))+NOCCSL
1462	FLDLT	Macro	n/a	None	SLT	(((HA=S*HD=S+HW=S*HE=S)*TE=S)+(HB=S*HJ=S*TW=S))*HPSICL*((CS=S*TE=S*CS11CL)+(CT=S*TW=S*CS12CL) +WY=S)
1463	FLDLT	Macro	n/a	None	WY1112	(SA=S*RA=S+LR=S)*N1=S*N2=S*S3=S*VH=S*BUS11
1464	FLDLT	Macro	n/a	None	WY1314	(SB=S*RB=S+LR=S)*N3=S*N4=S*S4=S*VI=S*BUS14
1464.1	FLDLT	Macro	New Macro: Flood Matrix Impact	(-(INIT=S205AN+INIT=S205AR+INIT=C118XN+INIT=C118XR+INIT=F119AM))	CSFLDN	n/a
1465	FLDLT	Macro	Flood Matrix Impact	V1=S*RE=S*(SA=S*EA=S+LR=S)*BUS11L*XALT*MV=S ***CSFLDN**	CSSUPP	V1=S*RE=S*(SA=S*EA=S+LR=S)*BUS11L*XALT*MV=S
1465.1	FLDLT	Macro	New Macro: Flood Matrix Impact	(-(INIT=S205AN+INIT=S205AR+INIT=C118XN+INIT=F119AM))	CTFLDN	n/a
1466	FLDLT	Macro	Flood Matrix Impact	V2=S*RW=S*(SB=S*EB=S+LR=S)*BUS14L*XCLT*MV=S ***CTFLDN**	CTSUPP	V2=S*RW=S*(SB=S*EB=S+LR=S)*BUS14L*XCLT*MV=S
1466.1	FLDLT	Macro	New Macro: Flood Matrix Impact	(-(INIT=S228AN+INIT=S205AN+INIT=S205AR+INIT=S226AR+INIT=S228AR+INIT=S226AN+INIT=R221AM+INIT=R224AM+INIT=R228AM))	SRFLDN	n/a
1467	FLDLT	Macro	n/a	None	AASR1A	M2=S*BUS11U*(SA=S+RH=S)*(HA=S+HW=S)
1468	FLDLT	Macro	n/a	None	AASR1B	M1=S*BUS14*(SB=S+RH=S)*(HB=S+HW=S)
1469	FLDLT	Macro	n/a	None	NOCCSL	PH=S*RV=S*SL=F*WY=S*(CS=S+CT=S)
1469.1	FLDLT	Macro	New Macro: Flood Matrix Impact	(-(INIT=S205AN+INIT=S205AR+INIT=N225AM+INIT=N224AM))	TEFLDN	n/a

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1470	FLDLT	Macro	Flood Matrix Impact	SR=S*(RA=S+LR=S)*M2LT*WS=S *TEFLDN	TESUPP	SR=S*(RA=S+LR=S)*M2LT*WS=S
1470.1	FLDLT	Macro	New Macro: Flood Matrix Impact	TEFLDN	TWFLDN	n/a
1471	FLDLT	Macro	Flood Matrix Impact	SR=S*(RB=S+LR=S)*M1LT*WS=S *TWFLDN	TWSUPP	SR=S*(RB=S+LR=S)*M1LT*WS=S
1472	FLDLT	SF	n/a	None	EAS	SHSD+SAFW
1473	FLDLT	SF	n/a	None	EA1	EASUPP*CX=S
1474	FLDLT	SF	n/a	None	EA2	EASUPP
1475	FLDLT	SF	n/a	None	EAF	1
1476	FLDLT	SF	n/a	None	EBS	SHSD+SAFW
1477	FLDLT	SF	n/a	None	EB1	EBSUPP*CY=S*EA=S
1478	FLDLT	SF	n/a	None	EB3	EBSUPP*CY=S*(-EASUPP)
1479	FLDLT	SF	n/a	None	EB6	EBSUPP*(EA=S+-EASUPP)
1480	FLDLT	SF	n/a	None	EB8	EBSUPP*(CX=S*CY=S+CX=F)
1481	FLDLT	SF	n/a	None	EB5	EBSUPP*CX=S
1482	FLDLT	SF	n/a	None	EBF	1
1483	FLDLT	SF	n/a	None	RAS	SHSD+SAFW
1484	FLDLT	SF	n/a	None	RA1	RASUPP*CX=S
1485	FLDLT	SF	n/a	None	RA2	RASUPP
1486	FLDLT	SF	n/a	None	RAF	1
1487	FLDLT	SF	n/a	None	RBS	SHSD+SAFW
1488	FLDLT	SF	n/a	None	RB1	RBSUPP*RA=S*CY=S
1489	FLDLT	SF	n/a	None	RB3	RBSUPP*(-RASUPP)*CY=S
1490	FLDLT	SF	n/a	None	RB6	RBSUPP*(RA=S+-RASUPP)
1491	FLDLT	SF	n/a	None	RB8	RBSUPP*(CX=S*CY=S+CX=F)
1492	FLDLT	SF	n/a	None	RB5	RBSUPP*CX=S
1493	FLDLT	SF	n/a	None	RBF	1
1494	FLDLT	SF	n/a	None	LRS	SHSD+SAFW+SLPF+SATWS+SA=S*SB=S *EA=S*EB=S*RA=S*RB=S
1495	FLDLT	SF	n/a	None	LR1	RH=S*(EW=S*XALT+EX=S*XCLT+XCLT)*(E5=S+E6=S* BUS14)*ES=S
1496	FLDLT	SF	n/a	None	LRF	1
1497	FLDLT	SF	n/a	None	WYS	SHSD+SAFW+SLPF+SATWS
1498	FLDLT	SF	n/a	None	WY1	WY1112*QC=S*WY1314*QD=S
1499	FLDLT	SF	n/a	None	WY3	WY1112*QC=S+WY1314*QD=S
1500	FLDLT	SF	n/a	None	WY2	WY1112*WY1314
1501	FLDLT	SF	n/a	None	WY4	WY1112+WY1314
1502	FLDLT	SF	n/a	None	WYF	1

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1503	FLDLT	SF	n/a	None	CSS	SHSD+SAFW+SLPF+SATWS
1504	FLDLT	SF	n/a	None	CS1	CSSUPP
1505	FLDLT	SF	n/a	None	CSF	1
1506	FLDLT	SF	n/a	None	CTS	SHSD+SAFW+SLPF+SATWS
1507	FLDLT	SF	n/a	None	CT1	CTSUPP*(CS=S+-CSSUPP)
1508	FLDLT	SF	n/a	None	CT6	CTSUPP
1509	FLDLT	SF	n/a	None	CTF	1
1510	FLDLT	SF	n/a	None	SGS	SAFW+SHSD+SLPF+SATWS
1511	FLDLT	SF	n/a	None	SG1	SA=S*SB=S*MCCTWO
1512	FLDLT	SF	n/a	None	SG2	SA=S*M2=S*BUS11U
1513	FLDLT	SF	n/a	None	SG3	SB=S*M1=S*BUS14
1514	FLDLT	SF	n/a	None	SG4	1
1515	FLDLT	SF	n/a	None	WJS	SAFW+SHSD+SLPF+SATWS
1516	FLDLT	SF	n/a	None	WJ1	E5=S
1517	FLDLT	SF	n/a	None	WJF	1
1518	FLDLT	SF	n/a	None	SHS	SAFW+SHSD+SLPF+SATWS
1519	FLDLT	SF	n/a	None	SH5	SA=S*SB=S*WJ=S
1520	FLDLT	SF	n/a	None	SHA	(SA=S+SB=S)*WJ=S
1521	FLDLT	SF	n/a	None	SHD	(SA=S+SB=S)*WJ=F
1522	FLDLT	SF	n/a	None	SHG	WJ=S
1523	FLDLT	SF	n/a	None	SHH	1
1524	FLDLT	SF	n/a	None	MJS	SHSD+SAFW
1525	FLDLT	SF	n/a	None	MJF	1
1526	FLDLT	SF	n/a	None	SRS	SHSD+SAFW
1527	FLDLT	SF	Flood Matrix Impact	M1=S*BUS14*M2=S*BUS11U* SA=S*SB=S*MJ=S*AASR1A* AASR1B ***SRFLDN**	SR5	M1=S*BUS14*M2=S*BUS11U*SA=S*SB=S* MJ=S*AASR1A* AASR1B
1528	FLDLT	SF	Flood Matrix Impact	M1=S*BUS14*M2=S*BUS11U* SB=S*MJ=S*AASR1A*AASR1B ***SRFLDN**	SRM	M1=S*BUS14*M2=S*BUS11U*SB=S*MJ=S* AASR1A*AASR1B
1529	FLDLT	SF	Flood Matrix Impact	M1=S*BUS14*M2=S*BUS11U* SA=S*MJ=S*AASR1A*AASR1B ***SRFLDN**	SRN	M1=S*BUS14*M2=S*BUS11U*SA=S*MJ=S* AASR1A*AASR1B
1530	FLDLT	SF	Flood Matrix Impact	M1=S*BUS14*M2=S*BUS11U* SA=S*SB=S*MJ=S*(AASR1A+ AASR1B) ***SRFLDN**	SRO	M1=S*BUS14*M2=S*BUS11U*SA=S*SB=S* MJ=S*(AASR1A+ AASR1B)
1531	FLDLT	SF	Flood Matrix Impact	M1=S*BUS14*M2=S*BUS11U* (SA=S+SB=S)*MJ=S*(AASR1A+ AASR1B) ***SRFLDN**	SRR	M1=S*BUS14*M2=S*BUS11U*(SA=S+SB=S)*MJ=S*(AASR1A+ AASR1B)

Order	Module	Type	Basis for Change	Flood Module Change	Term	GT Rule
1532	FLDLT	SF	Flood Matrix Impact	(M1=S*BUS14*SB=S+M2=S*BUS11 U*SA=S) ***SRFLDN**	SRK	M1=S*BUS14*SB=S+M2=S*BUS11U*SA=S
1533	FLDLT	SF	n/a	None	SRA	1
1534	FLDLT	SF	n/a	None	SIS	1
1535	FLDLT	SF	n/a	None	K3S	SHSD+SAFW+NOCCSL
1536	FLDLT	SF	Removed Unnecessary Initiating Event Impacts	KL=S*KM=S*S1=S*BUS11L	K31	(-(INIT=CCWHX))*KL=S*KM=S*S1=S*BUS11L
1537	FLDLT	SF	n/a	None	K3F	1
1538	FLDLT	SF	n/a	None	K4S	SHSD+SAFW+NOCCSL
1539	FLDLT	SF	Removed Unnecessary Initiating Event Impacts	KL=S*KN=S*S2=S*BUS14L*K3=S	K41	KL=S*KN=S*S2=S*BUS14L*K3=S*(-(INIT=CCWHX))
1540	FLDLT	SF	Removed Unnecessary Initiating Event Impacts	KL=S*KN=S*S2=S*BUS14L*(KM=F+ S1=F+ -BUS11)	K43	KL=S*KN=S*S2=S*BUS14L*(KM=F+S1=F+-BUS11)*(-(INIT=CCWHX))
1541	FLDLT	SF	Removed Unnecessary Initiating Event Impacts	KL=S*KN=S*S2=S*BUS14L	K42	KL=S*KN=S*S2=S*BUS14L*(-(INIT=CCWHX))
1542	FLDLT	SF	n/a	None	K4F	1
1543	FLDLT	SF	n/a	None	TES	SHSD+SAFW+SLPF+SATWS
1544	FLDLT	SF	n/a	None	TEA	TESUPP
1545	FLDLT	SF	n/a	None	TEF	1
1546	FLDLT	SF	n/a	None	TWS	SHSD+SAFW+SLPF+SATWS
1547	FLDLT	SF	n/a	None	TWA	TWSUPP*TE=S
1548	FLDLT	SF	n/a	None	TWC	TWSUPP*(-TESUPP)
1549	FLDLT	SF	n/a	None	TWB	TWSUPP*TE=F
1550	FLDLT	SF	n/a	None	TWF	1
1551	FLDLT	SF	n/a	None	SQS	WR=S*TR=S+LD=S*SW=S*MS=S*(SSHR+OT=S*DL=S*SLT)
1552	FLDLT	SF	n/a	None	SQF	1

CALVERT CLIFFS NUCLEAR POWER PLANT, INC.

RAN: 98-065
REV: 0

RELIABILITY ENGINEERING
REU QUALITY RECORD

FLOOD EVALUATIONS

ORIGINATOR:	See Revision History	J.D. Koelbel 7/12/01 (SECT 5.4 ONLY)	07/12/2001 DATE
REVIEWER:	See Revision History	J.D. Koelbel 9/12/01	9/28/2001 DATE
APPROVAL:			9/28/2001 DATE

G:\NED\REL\FLOOD\R98-065.DOC

LIST OF EFFECTIVE PAGES

Pages	Revision
Cover	0
i	0
ii	0
iii	0
iv	0
1	0
2	0
3	0
4	0
5	0
6	0
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8	0
9	0
10	0
11	0
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13	0
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15	0
16	0
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19	0
21	0
22	0
23	0
24	0
Attachment 1	0
Attachment 2	0
Attachment 3	0
Attachment 4	0

LIST OF EFFECTIVE SOFTWARE FILES

Reliability Software Number: 249

Directory: A:\ REV: 0

File Name	Software	Description	Notes
DDMAPTB9.XLS	MS Excel 97	Data Designator Mapping Table	
PRADATA.ZIP	MS Access 97	PRA Component Database	1, 2
R98-065.DOC	MS Word 97	Main Report	
TOTRMCNT.XLS	MS Excel 97	Flood Height Table	

Note 1 - Since the PRA Component Database is extremely large, only pertinent tables, queries, and reports were copied to the RSN diskette(s).

Note 2 - When unzipping A:\pradata.zip, remember to give it a .mdb extension.

REVISION HISTORY

Revision	Description
0	Initial issue. Rev 0

Rev 0 includes an addition of notes to Section 5.4. This addition was made after the initial origination but before the approval signature. Therefore, the addition is still considered part of Rev 0. The initial origination of this RAN is based on Rev 0 of the RAN 94-001 Calculations. The notes document the 'deltas' to the flood queries that resulted when about half of the 32 RAN 94-001 Flood Calculations were revised. The following list shows the individuals that originated and reviewed different parts of this RAN. Note that although the front matter of RAN 94-001 is Rev 0, it contains 32 separate flood calculations, some of which are Rev 1 or Rev 2.

Part of RAN 98-065	Origination	Review
All except section 5.4 notes	P. A. Jameson	J. G. Koelbel
Section 5.4 Notes	J. G. Koelbel	B. B. Mrowca

TABLE OF CONTENTS

ATTACHMENTS

1.0 PURPOSE

This RAN documents the methods used for determining flood impacts on PRA components and systems. This RAN also contains the procedure used to evaluate top event component lists, explain construction of the flood database, and clarifies how tables and queries were used to obtain results.

Note – All flood queries were printed in 1998. This deficiency is capture under CRMP 262.

2.0 ACRONYMS

(AFW) - Auxiliary Feedwater

(CCNPPI) - Calvert Cliffs Nuclear Power Plant, Inc.

(CCPRA) - Calvert Cliffs PRA

(CCW) - Component Cooling Water

(ECCS) - Emergency Core Cooling System

(EDG) - Emergency Diesel Generator

(ESFAS) - Engineered Safety Features Actuation System

(HER) - Human Action Error Rates

(HPSI) - High Pressure Safety Injection

(HVAC) - Heating, Ventilation and Air Conditioning

(IPE) - Individual Plant Examination

(IPEEE) - Individual Plant Examination External Events

(PRA) - Probabilistic Risk Assessment

(RAN) - Reliability Analysis Number

(REU) - Reliability Engineering Unit

(RSN) - Reliability Software Number

3.0 DEFINITIONS (See Key Input 1049)

3.1 Basic Event

An event that contributes to a fault tree top event and requires no further development. Components may have more then one basic event assigned. For example: A pump, which is required to start and then run, would have at least two basic events assigned. One basic event will be for the pump to fail to start and the second would be the pump fail to run.

3.2 Cafta Code

A three-character code embedded into a basic event that describes the component type and undesired failure mode (See Basic Event). The Cafta code is the combination of the first two characters and the last character of the basic event. An example would be C5ABAO, where C5O would be the Cafta code. C5 is the code given for Turbine Bypass Valves and O equals valve fails to open on demand. See Attachment 4 for a complete list of Cafta codes.

3.3 Common Cause Group

A group of components identified as having a significant group likelihood of experiencing a common cause event.

3.4 Data Designator

A data designator is a letter set designator for the probability of component failure given certain demands.

3.5 "Dummy" Top Events

Top events, which model redundant trains of equipment (such as Turbine Driven AFW Pumps, EDGs, or HPSI Pumps), are questioned for dependent failures between trains. The failure rate of the second (and third and fourth) train questioned is dependent upon whether the previously questioned train was questioned, succeeded, or failed. To determine the dependent failure rate, the top events are combined in "Dummy Top Events". These are simply the fault trees for the redundant trains combined via an "AND" gate. This determines the probability of both trains failing.

3.6 Fault Tree

A graphical representation of the various parallel and sequential combinations of faults that lead to the occurrence of the top event. (See definition for Top Event).

3.7 Functional Block

Functional Blocks are components/failure modes logically in series. A component/failure mode is considered in series when all components/failure modes within a functional block have an equivalent impact on a system or systems. Although implied from the definition "equivalent impact on a system or systems", components involved in a common cause group and components that are a common mode failure are not considered in functional blocks. The purpose of placing basic events into functional blocks is to reduce the complexity of the fault tree and thus curtailing time. The placing of a basic event into a functional block must not impact the logic of the fault tree.

3.8 Human Action

An operator action which must be performed in order to succeed in the fault tree. An example would be, BHEK12, "Operators start standby CCW Pump within 30 minutes following failure of CCW Pump 11".

3.9 Plant Model

The set of logical rules and data used to quantify the core damage frequency and containment release likelihood. The current version of the Plant Model is called the CCPRA. The December 1993 version is called the IPE. The August 1997 version for external events (i.e. fires, high winds, earthquakes, etc...) is called the IPEEE.

3.10 Split Fraction

Split Fractions are conditional failure probabilities for top events. The conditional failure probabilities are quantified using a fault tree given a certain set of boundary conditions. Each split fraction for a top event will have a unique set of boundary conditions, which will define the use of the split fraction in the plant model. The boundary conditions for a split fraction almost always include the status of other top events. Some top events are conditional on other top events due to a common cause dependency. If a common cause group links two top events, the status of the previously questioned top event will have an impact of the failure rate of the top event being questioned.

3.11 Top Event

A top event is the upper most event in a fault tree with all other fault tree events and fault tree gates below. Within the plant model, top event is a specific function of interest performed by a system, sub-system, or component. A fault tree contains faults that lead to failure of the top event.

4.0 OVERVIEW

When Generic Letter 88-20 was issued, nuclear power plants were asked to review the IPE for internally initiated events only. In June 1991, CCNPPI was asked to assess external events (IPEEE). The general purpose for the IPEEE was to develop an appreciation for severe accidents, understand what severe accident sequences could occur, qualitatively understand overall likelihood for core damage, and if necessary, determine what could be done to facilitate positive changes.

Flood is one of several internal events that CCNPPI assessed. External events include fire, high winds, and earthquakes. System analyses were performed for all major systems that could affect the likelihood of a severe accident at CCNPPI. See Section 5.1 for a complete list of system analyses. Each system is segmented into smaller portions called top events, functional blocks, and basic events (See Section 3.0).

After all system analyses fault trees were analyzed, a PRA Component Database could be refined to capture all system analysis component information. Various tables were developed to capture this information. See Section 5.2 for the scheme used for building the flood database.

Once this replication process was accomplished, all possible pipe-break scenarios could be evaluated to determine flood water impact on the Plant. For each scenario, queries

were fabricated to evaluate top events, basic events, and functional blocks affected by flood (See Section 5.3). A summary of the effects was then reported and converted into the plant model (See Section 5.4).

Section 6.0 delineates the User's Guide needed to effectively transfer the system fault-tree excel spreadsheets into the flood database. Final results can then be developed and incorporated into the plant model.

5.0 METHODOLOGY FOR ANALYSIS

5.1 - BASIS FOR SCOPE OF COMPONENTS CONSIDERED

REU developed system analysis fault trees for all risk-significant systems. The list below is the complete set of system fault-tree notebooks used to date. (See Key Input 1065).

RAN Number	Title
RAN 95-048	Auxiliary Feedwater Fault Trees - Update 2
RAN 95-049	Condensate Fault Trees - Update 2
RAN 95-050	Reactor Coolant Fault Trees - Update 2
RAN 95-051	Switchgear Room HVAC Fault Trees - Update 2
RAN 95-052	Reactor Protection Fault Trees - Update 2
RAN 95-053	Demineralized Water Fault Trees - Update 2
RAN 95-054	Reactor Regulating Fault Trees - Update 2
RAN 95-055	ECCS Pump Room Cooler Fault Trees - Update 2
RAN 95-056	Containment Air Cooler Fault Trees - Update 2
RAN 95-057	Main Turbine Fault Trees - Update 2
RAN 95-058	Service Water Fault Trees - Update 2
RAN 95-059	ESFAS Fault Trees - Update 2
RAN 95-060	Containment Spray Fault Trees - Update 2
RAN 95-061	Salt Water Fault Trees - Update 2
RAN 95-062	Safety Injection Fault Trees - Update 2
RAN 95-063	Component Cooling Water Fault Trees - Update 2
RAN 95-064	Compressed Air Fault Trees - Update 2
RAN 95-065	Emergency Diesel Generators Fault Trees - Update 2
RAN 95-066	Main Steam Fault Trees - Update 2
RAN 95-067	Updated 480VAC Fault Trees - Update 2
RAN 95-068	48VDC Fault Trees - Update 2
RAN 95-069	Control Room and CSR HVAC Fault Trees - Update 2
RAN 95-070	4KV Buses Fault Trees - Update 2
RAN 95-071	120V Vital AC Fault Trees - Update 2
RAN 95-072	125VDC Fault Trees - Update 2
RAN 95-073	13KV Fault Trees - Update 2
RAN 95-075	Containment Isolation Fault Trees - Update 2
RAN 95-076	Fire Protection Fault Trees - Update 2

RAN 95-077 Main Feedwater Fault Trees - Update 2

Each system notebook developed Top Events and Split Fractions to be used in the CCPRA. All system fault tree notebooks are broken into several sections. Each notebook contains Definitions of Split Fractions used, a Top Event fault tree, a calculation of Functional Block Failure Probabilities (breakdown of components and their associated basic event, functional block, and failure probability), equivalent functional blocks, and system notebook reports.

The section we're most concerned with for flood is the calculation of Functional Block Failure Probabilities. Each calculation contains a list of components, their respective basic-event failure code, and functional-block failure code.

Each component was assigned a Cafta code (See Attachment 4). The Cafta code list represents all possible component failures and their associated data designator.

5.2 - DEVELOPMENT OF FLOOD DATABASE

This is actually the called the PRA Component Database. There are many tables in this database. Only certain tables are of importance for flood. New tables and queries were developed to capture flood impacts. The three main tables are *Top Events*, *Total2-Flood*, and *PRA_Comp Table*.

5.2.1 TOP EVENTS Table

A review of the Master Frequency File (See RAN 96-038 Rev. 0), was examined to determine which top events were to be included in the Unit 1 CCPRA. The columns of importance in the top-events table are Top and Model. Top events are designated by a two-letter set. Each top event represents a function in the plant model. The model column is used to determine if a top event is used in the Unit 1 General Transient Model (See Key Input 708 and Assumption 391). Many top events were initially screened if they were not in the Unit 1 General Transient Model. This will be discussed in more detail when describing "Building Queries using Flood Calculations".

5.2.2 TOTAL2-FLOOD Table

The Total2-Flood table consists of twelve columns. Key columns are NUC_ID (Nucleis Component ID), INCLUDED COMP (Associated components not listed in fault trees), TOP (Top Event), FB (Functional Block) and BEVENT (Basic Event). This information was transposed from the system fault-tree notebooks mentioned in Section 5.1.

Note - Additional top events were also developed to capture key functions that were not included in the system fault-tree notebooks. These include human actions and dummy top events. See CRMP 262.

5.2.3 PRA_COMP TABLE

The PRA Component Table is simply a list of unique components (and information about the component) used in the PRA. There are thirteen columns in this table. The important columns for flood evaluations are UNIQUE (PRA Component ID), ROOM# (Calvert Cliffs Room Number), and " ABOVE FLOOD (components height above floor).

5.2.3.1 UNIQUE Column

This column consists of all unique component ID's. If the Calvert Cliffs component tracking system database (Nucleis), had an Equipment ID for the component, then this Equipment ID was used. But not in all cases did Nucleis have an ID for the component, therefore, one had to be developed in order to capture appropriate component failures.

5.2.3.2 ROOM# Column

The information in this column was taken from several places. If Nucleis listed a room location, then this was used. If not, various CCNPPI drawings and/or walkdowns were used. Not all components have room information identified. Certain components, i.e. HV's and CKV's, were not heavily researched because flood has no impact on their operability.

5.2.3.3 " ABOVE FLOOR

All component levels were initially set to zero inches above the floor in this column. If needed, CCNPPI pedestal drawings and walkdowns were used to determine the critical height at which the component will fail. For most cases, zero inches were conservatively used.

5.2.3.4 Flood Susceptible

This column was used to identify screened components that were not susceptible to flood. An example would be a Hand Valve. Since HV's are not susceptible to flood, they were identified as screened using this column.

5.3 - BUILDING QUERIES USING FLOOD CALCULATIONS

The tables mentioned in section 5.2 were used to develop each flood-scenario query. The IPE Internal Flooding Analysis (RAN 94-001) document all possible flood scenarios. RAN 94-001 includes 32 calculations representing 110 flow-path possibilities. The initial flood queries are based on Rev 0 of these 32 calculations. It should be noted that these calculations only represent floods that could possibly effect Unit 1 PRA components. Therefore, many flood scenarios were screened due to non-impact on Unit 1. Since this

is a building block process, assumptions and screening criteria of the IPE Internal Flooding Calculations were not scrutinized.

A table was developed to aid in building the flood scenario queries (See Attachment 2).

This spreadsheet list all possible flood scenarios mentioned above. Each has a number indicator representing the interpreted flood heights per room for that particular scenario. An "F" was used in rooms considered failed. All rooms were considered failed if the flood originated in the room or could possibly have spray affects due to pipe ruptures. Spray effects were considered due to the open grating throughout the plant.

All flood queries are located under the query section of the PRA Component Database. The queries are easily identified as "Flood Query". An explanation of the nomenclature is as follows: "Flood Query: CF-02A-S118AR". Where CF equals Calculation Flood, 02A equals calculation flood number 02A and S118AR equals the flood designator (S = Salt water flood, 118 = Room 118 and AR = recoverable flood). See RAN:94-001, section 6.1.3 for a complete description of flood identifiers.

Each query identifies all included components (lower than flood height) in the affected rooms where model equals "1" Or "1/2" and Flood Susceptible equals "YES". Therefore, if a component is located above the flood height listed in the room, it will be appropriately screened. See Attachment 1 for a printout of all components that could possibly fail (worse case scenario).

5.4 - REPORT FINDINGS

The results of each flood scenario query were printed and analyzed to determine what affect equipment failure had on the Unit 1 plant model. The *FLOOD EVALUATION* table was built to facilitate these failure results. Reference Attachment 3 for the complete set of query printouts and evaluations. Each scenario identifies top-event impacts as related to component failure. Assistance may be given to account for special plant impacts.

The queries as printed are based on Rev 0 of each of the 32 Ran 94-001 flood calculations. About half of the RAN 94-001 flood calculations were revised after the queries were run. See Section 3.0, Flood Calculation Index in RAN 94-001 to see which flood calculations were revised. The floods were revised because, for example, all Salt-Water floods originating in the Auxiliary Building (e.g. S118AR) are recovered sooner than initially evaluated. These floods are recovered at the point where the Auxiliary Building basement is flooded up to the 5 ft El. and the Service Water Pump Rooms are not flooded. This can change equipment impacts when rooms that were initially flooded are no longer flooded or are flooded to a lower level. In some queries, equipment heights are conservatively listed as 0 inches (floor level) in the absence of database or walk-down information. If this conservatism turned out to be unacceptable, equipment heights were obtained from walk-downs and the impacts adjusted appropriately. These exceptions are noted in the Attachment 3 Flood Evaluation Results and refer to the notes below. Additional discussion of particular floods appears after the notes.

Flood Evaluation Notes

1. Many floods were re-evaluated in order to add realism. The most significant changes are described below.

A) Detailed head loss calculations resulted in significantly reduced CST flood rates. Flood propagation and impacts were re-evaluated for CST floods in the SRW Pump Rooms: N205LN (CF-30), N226AM (CF-07), the AFW Pump Rooms: N603AM (CF-28) and N605AM (CF-29) and also for CST floods in the U-1 Purge Air Fan Room: N318AM (CF-13). Calculations are contained in or referenced in the CST Flood Calculations, e.g., CF-30.

B) CST floods now fail only the affected Units CST header vice both Units CST header (**Assumption 510**). This allows using the unaffected Units AFW supply through the AFW cross-connect. This applies to all CST floods.

C) Saltwater floods in the Auxiliary Building are recovered at El. 5ft instead of El. 13 ft. This saves Rooms on the 5-foot level and above except for the source room; equipment in the source room is considered failed. This also saves both Service Water Pump Rooms unless the flood source is located in one of the Service Water Pump Rooms. In that case, it saves the opposite Unit's Service Water Pump Room. An Auxiliary Building SW flood reaches the 5 ft. El in 1.5 hours (CF-1 Attachment A). This dictates an operator response time of 1.5 hours. Human Action BHF118 is used and is applicable to floods S118AR, S119AR, S226AR, S205AR, S228AR. (**Assumptions 11 and 512**)

D) The SRW Pump Room floor drains are now credited with draining limited amounts of water into the Turbine Building Condenser Pit (**Assumption 23**). This saves the SRW Pump Rooms for floods that originate outside the Service Water Pump Rooms and result in relatively small flood height against the SRW Pump Room.

E) Saltwater floods in the Auxiliary Building are recovered at the 5-foot level as explained above. For the non-recovered cases, instead of assuming that the flood runs for 12 hours, we assume guaranteed recovery at 2.6 hours. This corresponds to a flood height of 8 feet above the 5-foot level (Assumption 6.13, CF-1 section 6.0). This assumption saves the AFW Pump Rooms. These floods result in significant flow into the SRW Pump Room and the drains are not credited with draining the larger flow rates associated with these floods. This results in flooding the SRW Pump Rooms so both motor-driven AFW Pumps and both Units Service water pumps are considered failed. This is applicable to floods S118AN, S119AN, S226AN, S205AN, S228AN.

F. Floods that originate on the 5 ft level of the Auxiliary Building are assumed to drain to and fill up the lower levels prior to gaining any appreciable height on the 5-ft. level. In the previous evaluation, we assume that the flood fills up the 5-ft level before any significant water leaks to the basement. However, it is more realistic that the water will make its way under doors, down stairwells, elevator shaft, equipment access openings, into the recirc. tunnel and ECCS Pump Rooms and any other opening between the two

elevations before we get an appreciable build up on the 5 ft level.

The table below summarizes the changes.

Flood	Calculation	Comments
S118AR	CF-02	Note 1C. SRW PP Rooms & 5 ft level no longer flooded.
S118AN	CF-02	Note 1E. Guaranteed stopped at 2.6 hours.
S119AR	CF-03,	Note 1C. Reduced recovery time to 1.5 hours.
S119AN	CF-03	Note 1E. Guaranteed stopped at 2.6 hours.
N224AM	CF-05	Notes 1B & 1D. Model credits SRW Pump Room drains
F225AM, 298)	CF-06	Note 1D. Model credit SRW Pump Room drains (CRMP
N225AM (CRMP 298)	CF-06	Notes 1B & 1D. Credit reduced flood rate and drains
N226AM (226) still failed	CF-07	Notes 1A, AB, 1D. Reduced flood rate. Source room but Rooms on 5-ft level not affected. Drains reduce flow to Aux. Bldg.
R228AM on the 5-ft	CF-10	Note 1F. Source Room (228) failed but the other Rooms level and the SRW Pump Rooms are unaffected. This flood does not accumulate significantly more than six inches on the 5-ft. level.
S228AR	CF-10	Notes 1C & 1F. Reduced recovery time to 1.5 hours
N603AN PP Room	CF-28	Notes 1A, 1B, 1D. Reduced Flood Rate and credit SRW drains. Covered under N603AM.
N603AR	CF-28	Covered under N603AM.
F603AM 298)	CF-28	Note 1D. We credit the SRW Pump Room drains. (CRMP
D603AM	CF-28	Note 1D. We credit the SRW Pump Room Drains.
N605AM unaffected.	CF-29	Notes 1A & 1B. Credit drains. SRW Pump rooms
F605AM	CF-29	Note 1D. Credit drains. SRW Pump rooms unaffected.

2. Although some floods impact AFW, no impact is assigned to F1 (AFW flow paths). Flood impacts on F1 were eliminated in most cases, as explained below.

   AFW flow path components (F1) for Steam-Driven Pumps are unaffected for all floods. The AFW Steam Admission CV's and SV's, and the AFW steam-driven-train flow control valves and block valves are all located in either Room 316 or 315. The AFW Components in these Rooms are Safety Related and receive only spray affects. They are assumed unaffected (**Assumption 516**).

AFW flow path components (F1) for the motor-driven pumps may be impacted for some floods. The motor-driven flow-path block valves are located in the Service Water Pump Room lower level. However, the motor-driven pump is also located in the SRW Pump Room lower level. Therefore, the flood impact on the pump (F7) bounds the flow path (F1) impact. Therefore, explicit F1 impact is not needed. More details are provided below and in Note 3.

S118AR, S119AR, S228AR, R221AM– These floods no longer impact the SRW Pump Rooms (226 & 205). See Note 1C above. This eliminates the impacts to AFW Flow Control Valves (F1) and the motor driven AFW Pumps (F7 and F9) located in the SRW Pump Rooms.

S205AR – This flood originates in and fails equipment in the U-2 SRW Pump Room but the U-1 SRW Pump Room is unaffected (See Note 1C above). This eliminates impacts to AFW flow control valves, U-1 SRW pumps and motor-driven AFW Pump.

S226AR – This flood fails the Motor-driven AFW Pump (F7). See also Note 3.

N603AR & N603AN & F603AM & D603AM– These floods no longer fail the U-1 SRW Pump Room (226). This is due to crediting the SRW PP RM drains (Note 1A) and for the CST floods, a reduced flood rate (Note 1D).

3. AFW Steam Admission Control Valve solenoid valves 1SV4070/4070A/4071/4071A (Top Event F1) are located in Room A316 vice A227 (the flood/fire database has been changed to reflect this but the queries have not been re-run). Room A316, on the 27 ft level, is not affected by floods S118AR, S118AN (RAN 94-001 CF-02 Rev 1), R221AM (RAN 94-001, CF-04 Rev 1), S226AR, S226AN (CF-07 Rev 1), S228AR, S228AN (CF-10 Rev 1), S205AN (CF-30 Rev 1).

   Although no floods originate in Room 316 it may receive spray from some floods. It may be sprayed through the deck grating when the Room directly below (227) contains the flood source (F227AM, C227AM, W227AM, D227AM (CF-08). It may also receive spray when the flood originates at a higher level, such as flood M419AM – 45 ft truck bay. Room 316 contains the AFW Steam Admission Control Solenoid Valves 1SV4070/4070A/4071/4071A and the steam-driven AFW flow control valves (1CV4511/12) and block valves (1CV4521/21/30/31). These Safety Related valves are designed to operate in both LOCA and HELB environments and may be assumed to operate under spray affects (**Assumption 516**).

   The AFW Steam Admission CV's, 1CV4070/4070A/4071/4071A, (also Top Event F1) are located in the MSIV Room (A315) on the 27 ft level. This room has watertight doors so it is unaffected by floods except those originating inside the room (F315AM, W315AM (CF-11)) or on the next level up (45 ft level5). The AFW Steam Admission CV's are safety-related valves are designed to operate in LOCA and MSLB environments and may be assumed to operate under conditions where floods affect the MSIV Room (**Assumption 516**). The MSIV Room is not expected to accumulate more than 3 feet of

water because the Main Steam Piping Penetration fire wall connecting the MSIV Room to the Turbine Building is designed to collapse under pressure (**Key Input 1354**). See also note 16 below.

4. The U-1 air compressors are failed due to a lack of SRW cooling or flooding affecting Unit 1 TB 12-ft level. SRW cooling is failed when the Unit 1 SRW Pumps are flooded (Rm. 226 lower level) or Salt-Water cooling is lost because Salt water is the flood source. The Unit-2 P/A compressor may be available to Unit 1 Air System. If so, Top Event NR is degraded but not failed.
5. Flood impacts on Top Event SG, Hydrogen Purge Line Operates, are considered negligible. See **Assumption 513**.
6. Saltwater-related top events such as Top Event TH (Operator recovers unavailable SW HDR within 12 Hours), become immaterial in Saltwater Floods because a Salt Water pipe break is assumed to totally fail both SW headers. Top Event TH and all SW-related Top Events are failed within the Flood Rules for all Salt Water Floods by failing Top Event SC (Common SW header Discharge Operates as Required).
7. All non-recovered Salt-Water floods in the Auxiliary Building were re-evaluated. For these floods, instead of letting the flood run for 12 hours, we consider the flood guaranteed terminated before it reaches 8 ft above the 5 ft level (El. 13 ft). This saves the TD AFW PP Rooms and all rooms on the 27-ft elevation and above. The SRW PP Room lower levels are failed and unless the flood actually originated in a particular SRW PP Room, the SRW PP Room upper levels are unaffected. Therefore the SWAC's, located on the upper level, are not directly affected by these floods except those originating in the room. See applicable flood calculation in RAN 94-001 for flood height details. However, Top Event FO is used to shut U2 AFW Block valves so PP 23 can be used to support U-1. When the U-2 SRW PP Room lower level (and PP 23) is flooded, top Event FO becomes immaterial.
8. Both NR and NS are failed for floods that impact Both Units SRW Pump Room lower levels. This fails the cooling for both units air compressors.
9. Flood impacts on Top Event RH (Operator manually starts SI equipment following a SIAS failure) are bound by equipment impacts for floods that fail the ECCS Pump Rooms or have the RWT as the flood source (designator begins with R).
10. The potential for the normal containment sump bypass exists if normally shut MOVs 5462 and 5463 happen to be open when their location (cntmt. Recirc. Pipe tunnel – Rm. 122) is flooded. The MOVs would not shut on demand. Therefore, Top Event SR is degraded when Room 122 is flooded.
11. In flood R221AM (RAN 94-001 CF-04 Rev 1) and R224AM (RAN 94-001 CF-05 Rev 2) the flood height in the SRW Pump Rooms does not exceed 6 in. Since all equipment in this Room is greater than 6 inches, this room should be considered unaffected. The motor-driven AFW pump impacts (F7 and F9) should be removed from these floods (CRMP 290).
12. Non-recovered floods (designators ending in 'N') that were run beyond the 12- hour mission time in the flood calculations are not listed. Floods were removed when the

flood has a corresponding 12 hour version (designator ends in 'M'), and no recovered version (designator ends in 'R'). These floods are not credible based on the assumption of a 12 hour mission time stated in RAN 94-001, CF-1. The following floods were deleted. F119AN, F221AN, F224AN, F225AN, F226AN, F227AN, F228AN, F315AN, F317AN, F319AN, M419AN, W419AN, M421AN, M422AN, M428AN (F/W428AN), F429AN, M520AN (C/D520AN), M524AN (F/W/D524AN), M525AN (F/W/C/D525AN), M530AN (F/D/C530AN), M536AN (C/D536AN), M537AN (F/C/D537AN), F603AN, F605AN, FT12AN, FISPAN, FT27AN.

13. Top Event CV (CVCS provides sufficient boration for ATWSS or Once-through core cooling) was initially failed in most floods because it was deemed unimportant. However, Top Event CV is not affected by floods that do not flood the charging pumps (elevation 30 inches above the (-) 10 ft. level). See RAN 94-001 CF-1, Rev 2 Section 8.3.1. The failed impact initially assigned to this top event is removed from selected floods where appropriate. This includes floods C221AM (RAN 94-001 CF-04), C224AM and W224AM (RAN 94-001 CF-05 Rev 1), F226AM and N226AM (RAN 94-001 CF-07 Rev 1), C227AM and W227AM (RAN 94-001 CF-08), F317AM (CF-12), N318AM (CF-13 Rev 1), W320, (SRW flood rate is limited to Demin make-up rate), and N205LN (CF-30).

14. CST Floods (designator begins with 'N') are conservatively assumed to be a break in the supply of the unit affected (i.e. Unit 1 CST header for the Unit 1 Flood model). For a CST break in the U-1 AFW PP Room, in the Unit 1 model, Top Events F7, TF, and TG are failed assuming no water is available. However, the opposite Units motor-driven AFW pump (F9 in this case) is available (**Assumption 510**), if the Unit 2 SRW Pump Room is not flooded above 15 inches. For the U-1 model, a CST break in the U-2 AFW PP Room will fail the 23 AFW PP (F9). Also, Top Event FC (AFW TD Pump Room (603) Cooling operates) is irrelevant since the TD AFW Pumps are considered failed.

15. Flood Q224AM is a MFW line break in the Auxiliary Building. This line is encapsulated such that feedwater will be released in the MSIV Room (A315). Calculation CF-1 section 7.9 (RAN 94-001) stipulates an 8.5 minute duration for this flood. The normally-shut safety-related AFW steam admission valves 1CV4070/4070A and 1CV4071/4071A are assumed to open. Their solenoid valves are located in the next room (A316) which is unaffected by this flood. High room pressure (UFSAR sect. 10A.4.1.20) and level (App. H) in the MSIV room will fail the 10CFR50 Appendix R wall at the pipe tunnel/turbine building interface, propagating the flood directly into the Turbine Building (**Key Input 1354**). Components in adjacent areas are assumed to fail due to steam effects, including those above the TB 27' level on the 45'.

16. Flood Q224AM is assumed to result in a loss of feed water and condenser vacuum SGIS. This impact is modeled in the rules by failing MC (Main Condensate) and VC (Condenser Vacuum is available). Failing MC automatically fails dependent Top Events BS, MN, LF, MP, and TB. Failing VC automatically fails dependent Top Events BV, BS, MN, and TB. Therefore, these dependent top events do not require individual impacts in the rules.

17. When all three U-1 Air Compressors are failed, Top Event NR is degraded but not failed because the Unit 2 Plant Air Compressor can supply the Unit 1 Air loads.

18. When the Unit 1 Air Compressors are failed and the Unit 2 Air Compressors are available, Top Event NS is degraded but requires no special impact. NS is dependent on NR and the impact is accounted for in the rules.

19. Recovered SW Floods and non-Saltwater Floods that originate in a SRW PP Room are recovered or run out of inventory so that the flood height does not exceed the 5-ft. Elevation level. The Source Room is failed but the opposite Units SRW PP Room is unaffected and most rooms on the 5-ft level are also unaffected. For example, a recovered SW flood in the U-1 SRW PP Room (S226AR) does not impact the unit 2 SRW PP Rm. (A205). This is also true for all non-Saltwater floods. For example, flood F205AN does not impact the Unit 1 SRW Pump Room (226) or rooms on the 5-ft elevation.

20. The ECCS Pump Rooms and Recirc tunnels are not affected by floods N226AM (See CF-07) or F205AN (CF-30). See also Note 21 below.

21. The ECCS Pump Rooms (118, 119, 101, and 102) are located in the Aux. Bldg. Basement at the (-)15 ft. El. They have watertight doors that protect against most floods. However, these rooms can be flooded in the following ways:
    a. The flood originates in the room
    b. The flood enters the ECCS Pump rooms from the passageway through fire dampers at El. 1' 5". These 12" x 24" rectangular fire dampers located in cutouts in the concrete wall separating the ECCS PP Rooms from the passageway. Each ECCS Pump Room has one fire damper. The bottom elevation of the dampers is located between Elevations 1' 5" and 1'7" (16' 5" to 16' 7" above ECCS Pump Rm. floor level). Floods that have sufficient inventory to fill the Aux. Bldg. basement to this level will then start to flood the ECCS PP Rooms through the ventilation dampers. This includes floods that originate in an adjacent ECCS pump room, fill it to the point of spilling out the fire dampers into the hallway, filling the basement, and then entering the fire dampers of the adjacent ECCS Pump Rooms.
    c. The flood originates on 5ft El. or above and has sufficient flow rate to accumulate a greater than a 6" flood height on the 5 ft level. The Recirc tunnels are open at the floor of the 5-ft level piping area but with a 6' curb around. Floods that overcome this 6-in. curb will start to flood the ECCS PP Rooms.

    Floods that do not meet these criteria do not flood the ECCS Pump Rooms.

22. The flood height in Room 225 does not exceed the critical height of 4 ft for floods N226AM (See CF-07) and S228AR (CF-10). Therefore, equipment in this room is unaffected by these floods.

23. Flood S228MR is no longer used. This flood is the medium and small SW breaks in the U-1 CC PP Room. This flood is bounded by flood S228AR that was the large SW break size. The frequency contribution from the Med. and Small break sizes were added to the frequency of the large break flood in S228AR. See frequency development in RAN 98-062.

24. Top Event MC failure guarantees failure of Top Event MN in the rules. In these cases, impacts to MN become immaterial.

25. No impact is required for Top Event M2 when Top Event N2 fails. In the rules, N2 failure fails M2 and cross connecting is not credited.
26. Top Event PG (Fire protection provides adequate pressure) is not directly affected by floods except when the Fire protection system is the flood source. In this case, Top Event PG is failed.
27. Human actions associated with a Spurious AFAS Block (Top Events Q1, QZ, and QQ) are not impacted by floods as these actions are performed from the Control Room or Cable Spreading Room.
28. Flood impacts on Top Event RS (reactor trips on demand) from the Rx Coolant temp transmitters being in 1 of 3 are considered negligible.
29. The large, medium and small break CST Floods N318LM, N318MM and N318SM were combined to form one flood designated N318AM. The small and medium break frequencies were conservatively added to the large break size. The impacts for N318LM are used for all three break sizes. This does not cause excessive conservatism because in the re-evaluated flood the impacts are greatly reduced. See also note 30 below.
30. Floods N318LM (also N318AM) and D318AM were re-evaluated. They do not cause the level in the U-1 27-ft Switchgear Room (317) to exceed 6 inches. Therefore, the busses and breakers in the U-1 27-ft Switchgear Room are not directly failed by these floods. See RAN 94-001 CF-13 Rev 1. Component failures listed in the flood queries for these floods as a direct result of the bus failures are no longer valid. The number of breaker challenges to 4kV Buss 11 is bounded by any of the Saltwater floods in the Auxiliary Bldg. The number of breaker challenges to 4kV Bus 12 (AE) is bounded by flood ST12AM. See also note 31 below.
31. The flood queries list a specific number of breaker challenges to each affected bus for each flood. In order to minimize the number of flood split fractions required for each bus affected, the same number of breaker challenges for a particular bus is used for all floods that challenge that bus. The highest number of breaker challenges to a bus from any flood is used for the flood split fraction in order to bound the impact. This allows using a single flood split fraction for all floods that challenge a particular bus. This approach is not expected to cause excessive conservatism. This also means that when a flood is re-evaluated tracking the change in the number of breaker challenges for a particular flood is not important as long as the flood has reduced propagation or as long as there are other floods with a more severe impact to a particular bus.
32. Top Event MH should be degraded vice failed in Flood M428AM.
33. Top Events PA and PB (CIS Channel A and CIS Channel B Actuate) do not appear in the General Transient Model, only the LOCA Model. Therefore, these Top Events do not appear in the Flood Model.
34. Top Event FC (AFW Pump Room Cooling Operates) is irrelevant for floods that fail the TD AFW pumps.

35. In the U-1 Flood model, floods that fail the U-2 SRW Pump Room will fail the U-2 Instrument Air and Plant Air Compressors due to lack of SRW cooling. Impacts to NR and NS are handled in the rules for NR and NS.
36. In the U-1 Flood model, a CST break in the U-2 SRW PP Room (N205LN) will fail U-2 SRW pumps and 23 AFW pump but this flood will not impact the U-1 SRW PP Room (226) or U-1 AFW Pumps. Also, this flood does not impact the ECCS PP Rooms, or the Recirc tunnels (RAN 94-001 CF 30 Rev 1)
37. Flood SISPAR is recovered prior to the level reaching the Salt Water Pumps. The break is assumed to occur on the Unit being evaluated. Therefore, in the U-1 Flood model, the U-1 SW Pumps are failed but the Unit-2 SW pumps are not failed. See RAN 94-001 CF-33 Rev 1.
38. Flood C118AM and C119AM were broken down into recovered and non-recovered versions to reduce the impact on CDF. C118AN has the same impacts as C118AM. The recovered flood is isolated before it reaches the second ECCS Pump Room. Therefore, only one ECCS Pump Room is affected. Since one flood is used to represent both ECCS PP Rooms, the room with two HPSI pumps is used to conservatively model the impact of a flood in either Room 118 or 119. When only one ECCS PP Room is flooded, the other train remains available. The recovered version is the same as the non-recovered version except that impacts for the second ECCS trains are removed: top events CT and HB. Impacts from Top Events TE and TW were also removed. Top Event TE is not required for the flooded room and Top Event TW is not impacted for the unaffected room. Impacts on V1 and V2 were also removed for the recovered flood. ECCS cooling is not relevant to the failed room. ECCS is not affected for the unaffected room.
39. Floods that initiate in the TB 12-foot (ST12AR, FT12AM, IT12AM)or 27 foot level (FT27AM) do not place demands on Top Events QC and QF as indicated by the Flood Queries. There is no direct impact because the component load breakers (at the 480V or 4KV level) will open on fault as the loads are flooded, as long as 125VDC control power is available. Since there are no floods that fail 125VDC power, challenges to the transformers are not expected as a direct result of the flood.
40. The non-recovered Auxiliary Building Salt Water floods (S205AN, S119XN, S226AN, S228AN) are assumed to reach a maximum height of 8ft above the 5 ft El. (Elevation 13 ft)(See applicable Flood Calculation in RAN 94-001. This height is based on avoiding flood propagation to the AFW Pump Rooms through the emergency ventilation duct.) Therefore, the AFW Pump Rooms and Auxiliary Building equipment located above the 13-ft. level is unaffected except for equipment located in the flood-source Room. The SWACs are located in the upper level of the SRW Pump Rooms. The upper levels of the SRW Pump Rooms are at Elevation 14 ft. Therefore, the Salt Water Air Compressors (SWACs) are unaffected for these floods except when the flood originates in one of the SRW Pumps Rooms (226 or 205). In this case, the SWACs in that particular Room are assumed failed due to spray effects.
41. Modeling Unit-1 Salt Water flood impacts on Top Event RL (Service Water maintains adequate inventory) are not required. Unit-1 Salt Water floods fail both service water

headers (Top Events S3, S4, TA, & TB). This is accounted for in the rules by failing Top Event SC.

42. Flood impacts on Top Event KH (Op starts the stand-by CCW pump (assumed to be CCW PP 13) may be disregarded when Top Event KZ (CCW Pump 13 operates (assumed to be a stand-by pump)) is failed. This is so because Top Event KH supports Top Event KZ.

43. Top Event FO represents the action to shut U2 AFW Block valves so AFW PP 23 can be used to support U-1. When the U-2 SRW PP Room lower level (and AFW PP 23) is flooded (F9 is failed), top Event FO becomes immaterial.

44. The Fire Protection Flood in the 45-ft East Electrical Penetration Room (F429AM) does affect any PRA components in that room. The Containment Pressure Transmitters are located above the flood level. They may be subjected to spray but would not be affected by it (confirmed by System Engineer and System Manager). Therefore, spurious actuation of neither SIAS (SA&SB) nor CSAS (EA&EB) nor CIS (PA&PB) would result from spray on these transmitters.

45. The Turbine Building Fire Protection Floods on the 12 ft and 27 ft elevations (FT12AM & FT27AM combined to equivalent flood XT27AM) are assumed to fill the condenser pit but do not affect the other Unit (Ref RAN 94-001 CF-31 and CF32). From a Unit 1 perspective, a Fire Protection Flood on Unit 2 would not be expected to cause a Unit one trip, and so the fire protection piping break is assumed to occur on the Unit 1 side. From the Unit one model perspective, since the flood does not propagate to the Unit two side, Top Event NS (U-2 Compressed Air) is unaffected. However, the Unit 1 Air Compressors and the Unit 1 Instrument Air to Plant Air cross-connect valve (1CV2061) are assumed failed due to spray affects. Therefore, Top Event NR is assumed failed by this flood.

46. Some floods that were combined because of similar impacts in the Flood Evaluations (RAN 98-065) were re-separated in the Flood Rule Development (RAN 96-024FLD). For example, the Component Cooling flood (C520AM) and Demineralized Water flood (D520AM) in Room 520 were combined to form multiple flood M520AM. These floods have similar flood rates and propagation and therefore, mostly similar impacts. However, it was later realized that these two floods have different plant impacts because the flood source is different. The Component Cooling (CC) flood fails the Component Cooling system due to loss of inventory. The Demineralized Water Flood fails the Demineralized Water System but not the CC system. Therefore, flood M520AM was separated back into C520AM and D520AM in RAN 96-024FLD. Other multiple floods had all or some of their component floods broken out because of source considerations. This is true for floods M428AM, M524AM, and M525AM.

47. Top Events Y1 (13kV Bus 11 remains energized) and Y2 (13kV Bus 21 remains energized) were added to flood F317AM. These top events were not initially considered impacted because the affected Room (27 ft Switchgear Room –317) contains no PRA components directly associated with Y1 or Y2. Since the association does not exist in the database, the flood query did not show an impact. However, when room 317 is flooded above 6 inches, supply breakers to the 4kV busses 11 and 12 are shorted. These busses are both fed from U-4000-11, through 1BKR252-1102 which must open

on demand to protect 13kV Bus 11. 4kV Busses 11 and 12 also have feeds from U-4000-21 through breaker 2BKR152-2102, which must open to protect 13 kV Bus 21 (Top Event Y2).

Additional Discussion of re-evaluated floods

S118XN S118AN and S119AN were combined to form S118XN. It is re-evaluated similar to S228AN described below. The impacts were modified accordingly.

S118XR S118AR and S119AR were combined to form S118XR. It is re-evaluated similar to S228AR described below. The impacts were modified accordingly.

C118XR This flood is C118AR and C119AR combined. C118AM and C119AM were re-evaluated and a recovery has been added. C118XM frequency is multiplied by recovery BHF121 to create recovered flood C118XR. This is a CCW break in either the 11 or 12 ECCS PP Room. This results in several alarms in the control Room. A low CC head-tank level alarm will result in the operators securing the running CC pump. This stops the leak. In addition, letdown will isolate on a loss of cooling to the non-regenerative heat exchanger. Also, there will be RCP temp alarms. The flood will be quickly isolated and be confined to the affected ECCS Pump Room. Although the flood could occur in either Room, we conservatively assume that it occurs in No. 11 ECCS PP Room (East) because that room has two HPSI PPS vice 1. HPSI Pumps 11(HA) and 12 (HW) are located in ECCS PP Room 11 (Room 119). Recovering this flood reduces the impact because only one ECCS PP Room is flooded vice both. This results in affecting only one HPSI hdr (Aux Hdr, HA), one CS hdr (CS) vice both. So for the recovered flood, rather than failing DL, we fail HA and HW. The primary core damage sequence for the non-recovered flood is loss of CC induced RCP seal LOCA with no injection is available. (Note – since this change, we discovered that the ECCS Pump Rooms are not connected at the re-circ tunnel as previously thought (CRMP 308). Therefore, even without recovery, this flood would probably not propagate to the other ECCS Pump Room because of the limited inventory).

S205AR This flood is re-evaluated. We recover this flood within about 1.5 hours because this flood is detected quickly (causes immediate plant trip) and is easy to isolate (stop SW Pump). This means that the U-1 SRW PP Room and AFW Pump Rooms are unaffected if it stopped within about 2.5 hours. Unit 1 Salt water is unaffected. Unit 2 SW and SRW are failed. AFW PP 23 is failed. The Flood propagates to the Aux Bldg but does not fail the U-1 AFW Pump Rooms or the Unit 1 SRW PP Room.

S205AN This flood is re-evaluated. This flood is guaranteed recovered by the time the Aux Bldg flood height reaches 8 ft above the 5-ft level. This saves the AFW Pump Rooms. However, both SRW pump rooms would be failed. Additional impacts for this flood beyond the ones for the recovered flood are F7, RL, I1, I2, K5, and NR.

N205LN This flood is re-evaluated using dynamic modeling using a lower flood rate and crediting the SRW Pump Room floor drains. Most of the water will drain to U2 TB Cond pit and some goes under door to RM 204 (5 ft fan room) and under double door to Aux Bldg general area. This will make its way to -15 ft level. However, the water-tight doors on the ECCS Pump Rooms will keep the water out of the ECCS Pump Rooms. This flood causes loss of supply to U-2 AFW PPs, because that is the flood source. If recovered, U-2 AFW pump supply is isolated at the valve stand in Tank Farm. In either case, Unit 1 AFW is unaffected. Even with no recovery is assumed, the volume of water in CST 12 is not enough to significantly impact the AUX Bldg.

F205AN This flood is re-evaluated using a dynamic model. This flood is a fire main break in the U-2 SRW PP Room that terminates at the 12 hour mission time limit. This Flood fairly quickly causes a Unit 2 plant trip due to failing U-2 SRW. 23 AFW PP is also lost quickly. The impact on Unit 1 is essentially the same as the CST Flood in RM 205 (N205LN), except that the charging pumps are lost. For Unit 2, the impact is less severe because Unit 2 AFW water source is not lost. The flow rate is less, 600 GPM vice about 900 GPM. This flood has a potentially greater flood source, however, this is mitigated by the significantly lower flood rate, giving more time for discovery and isolation. Isolation of this flood is assumed guaranteed at the 12 hr. mission time, resulting in failure of charging pumps on the -10' EL.

N224AM This flood (AFW Feed line break in 5 ft piping area) is re-evaluated. Assuming (worst case) that the break is on Unit-1 AFW feed, the Unit 2 AFW supply will be unaffected. Therefore, instead of failing all AFW (F1), we fail only unit 1 AFW (TF, TG, & F7).

N225AM This flood is re-evaluated similar to N224AM above.

N226AM This flood is re-evaluated. This is the CST break in the U-1 SRW PP RM. The non-recovered version (N226LN) and the recovered version (N226AR) are eliminated and only N226AM is used. N226AM includes the contributions from small, medium and large break sizes. In N226AM we do not credit quick recovery because the flood will terminate itself when CST 12 empties. By crediting the floor drains and the reduced flood rate, this flood has reduced impact. The SRW pumps and AFW PP 13 are flooded. The plant will trip on loss of SRW cooling. An operator will be dispatched to investigate the loss of SRW cooling. Upon opening the door from the 12-ft TB, he will see the Room flooding. Water may be exiting out under the door to adjacent RM 225 (5 ft fan room), if it has reached elevation 5.5, or about 2.5 ft above the floor (elev. 3 ft). Water will also be quickly draining to the TB cond. pit through the floor drains. The level in the SRW PP Room will never reach 8 ft on the door to Room 225 (11 ft above floor) so the door will not fail. Determining the source of the flood will be aided by the CST 12 low level alarm in the CR. Isolation is fairly simple, shut U-1 CST header isolation valve at valve stand in Tank Farm. This isolates water to all three U-1 AFW Pumps. The U-1 SRW system and 13 AFW pump are lost early. This causes a trip on loss of condenser vacuum and feed water so water draining to the condenser pit adds no additional consequence. The next significant loss does not occur until Aux. BLDG fills to the point of failing the Charging Pumps. However, there is insufficient water to do this. No separate recovered and non-recovered

version is necessary unless we desire to further reduce contribution of this flood. A quick recovery might prevent loss of SRW cooling and possibly the AFW pump, depending on the location of the break with respect to the pumps. Spray is a concern. Also we may be able to eliminate the small and medium size pipe contribution to N226AM because this is mainly recirc pipe which goes into the top of the CST, preventing the CST from draining through this path into the SRW Pump Room.

X226AM This flood is comprised of F226AM and W226AM. X226AM has a reduced impact. This flood does not fail the Unit 2 SRW PP Room. This saves F9, GW, GZ, and NS.

S226AR This flood has been re-evaluated. This flood is recovered prior to filling the Aux. Bldg. basement significantly above the 5 ft level. This saves the Unit 2 SRW Pump Room and AFW PP 23. Also, the impact is changed so it no longer fails CCW completely (K5). Instead, since this flood fails SW, the rules will fail the CC heat exchangers.

S226AN This flood is assumed guaranteed stopped by the time the level in the Aux. Bldg. reaches 8 ft above the 5 ft level. This saves the AFW Pump Rooms.

N227AM This flood is re-evaluated and screened. See **Assumption 30.**

R228AM This flood is re-evaluated. This is an RWT line break in the U-1 CC PP Room. This flood is no longer expected to fail either SRW pump Room. The water will drain to the lower levels in the Aux. Bldg. before it floods the SRW Pump Rooms. To get to either SRW PP RM, it has go under at least two doors on the 5-ft level. The water has a large area to spread out with multiple paths leading down to the lower levels. In addition, we now credit the SRW PP Room drains which drain to the Turbine Building condenser pit.

S228AN This flood is re-evaluated. For this non-recovered flood, instead of letting the flood run for 12 hours, we assume the flood is guaranteed stopped before it reaches 8 ft above the 5 ft level (2.6 hour point). This saves the TD AFW PP Rooms. However, the SRW PP Rooms are still failed. Guaranteed recovery at 2.6 hours vice 12 hours is more realistic given that a SW break will have temperature affects on both SRW and CCW which will immediately alert the operators to a problem with the system. A turbine trip will shortly result. There will be multiple alarms including misc waste recvr tank in Aux Bldg, sump alarms in SRW Pump rooms and sump alarms room TB Cond pit. The only possible water source capable of putting that much water in the Aux BLDG is the Salt water System.

S228AR This flood is re-evaluated. This flood is the recovered Salt Water break in the Component Cooling PP Room. This flood no longer fails the SRW PP Rooms. Since the entrance to the CC Pump Room has no door, this flood can spread out over the very large area of the 5 ft level. One difference in the evaluation is that we now assume that the water will fill up the basement of the Aux Bldg (15 and -10 ft levels) prior to gaining an appreciable level on the 5 ft level. In the previous evaluation, we

assume that the flood fills up the 5-ft level before any significant water leaks to the basement. However, it is more realistic that the water will make its way under doors, down stairwells, elevator shaft, equipment access openings, into the recirc. tunnel and ECCS Pump Rooms and any other opening between the two elevations before we get an appreciable build up on the 5 ft level. Therefore, the flood recovery level is considered to occur by the time the Aux. Bldg. is filled to the 5-ft level. Previously, recovery was at 4 ft of water on the 5-ft. level. This recovery height was based on preventing the failure of the AFW PP Room emergency ventilation controls located 4 feet above the floor in the 5-ft fan room. Also, previously, since SRW PP Rm. drains were not credited, the SRW PP Room was considered failed shortly after the level got above the 5-ft level. There is a 6-in. curb at the door to the SRW PP Room. Therefore, the level must get up to the 5.5 ft. elev. in order for any water to start going into that room. Any water that might go over the curb will be easily handled by the SRW Pump Room drains. Therefore, this flood is no longer considered to fail the SRW PP Rooms.

F315AM The impacts were changed so they fail Unit-1 Air Compressors vice failing NR completely.

W315AM Same as F315AM above.

N318AM This flood is the combination of N318LM & N318MM. The rules were changed to fail TF, TG, & F7 vice F1. Recovery requires isolating the Unit-1 AFW supply hdr at the valve stand and this isolates water to all Unit-1 AFW pumps. Unit 2 AFW PP 23 (F7) is still available.

XT27AM This flood is re-evaluated. This flood is comprised of FT12AM and FT27AM. These two fire protection floods have their impact reduced so they do not fail Air on both units.

N603AM This flood was re-evaluated crediting a reduced CST flow rate and SRW Room Floor drains. The result is that the SRW PP Room does not fail nor is the water which drains into the TB enough to fail Condenser Vacuum. The only difference between the recovered version (N603AR) and the non-recovered version (N603AN) is that Top Event CV fails. This increase is not considered significant enough to warrant separate IE. The two floods were combined with no recovery credited and designated N603AM.

N605AM (CST flood in U-2 AFW PP Room) is recalculated and has a lower flow rate. This flood propagates out the U-2 AFW PP Room into the Radiation Exhaust Equip Room (204), but due to crediting the SRW PP Floor drains, does not fail the U-2 SRW PP Rm. Isolation requires securing water to all U2 AFW PPs. (Fail F9). The U-1 AFW is unaffected.

6.0 - USERS GUIDE

The information listed in this section will present in detail the steps needed to complete a flood evaluation. Although each step does not need to be accomplished in chronological order, they all must be accurately inputted to achieve proper results.

For each top event mentioned in section 5.1, get a copy of the Excel spreadsheet "Calculation of Functional Block Failure Probabilities". Verify that the top event is located in the TOP EVENT table. Assure columns *Model, Top, Equivalent Top, System, Description, Status, and Unit* are correctly filled out. Also, verify that all functional blocks are listed in the FUNCTIONAL BLOCK table. Insure information in columns Top, FB, and FB DESC is precise.

Confirm that all component ID's are located in the PRA_COMP TABLE table. Fill appropriated information into all columns (*UNIT, DEV, SERIAL, UNIQUE, SYS, DESCRIPTION, ROOM#, Nucleis ID, " ABOVE FLOOR, and Flood Susceptible*). Room # ID's can be found in the Nucleis (Form NEQF100, Page 2). If room information is blank, then verify using CCNPPI drawings and/or walkdowns. Hand valves and Check valves are not as important for flood. Therefore, the room ID does not need to be filled in at this time. A PRA room list can be found in the PRA ROOM LIST table. This is a complete list of all CCPRA rooms/areas currently being used in the plant model (see Key Input 1081).

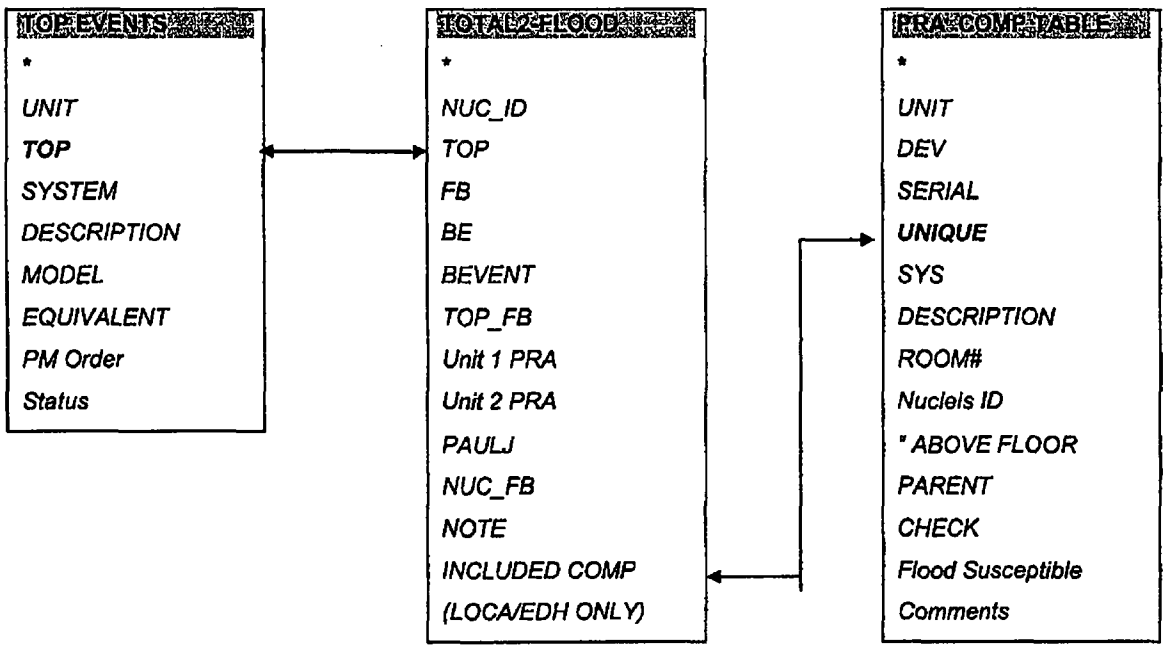
Next, input component information into TOTAL2-FLOOD table. See section 5.2.2 for table information. Input component ID into the *NUC_ID* column, the functional block data into the *FB* column, and the basic event into the *BEVENT* column. If a component has included components, i.e., I/P, HIC for control valves. Then the information must be duplicated for each included component.

Once component information is correctly loaded into the appropriate tables, queries can be developed to capture each flood scenario. See below for the steps needed to build a flood evaluation query:

- Go to the Query section
- Hit New
- Click on New Query
- Add tables TOP EVENTS, TOTAL2-FLOOD, and PRA_COMP TABLE
- Link *Top* in the TOP EVENTS table with *Top* in the TOTAL2-FLOOD table.
- Double click on the arrows once the link had been established.
- Insure that the number 1 button is highlighted.
- Click OK
- Link *Included Comp* in the TOTAL2-FLOOD table with *Unique* in the PRA_COMP TABLE table.
- Double click on the arrows once the link had been established.
- Insure that the number 1 button is highlighted.
- Drag down the columns listed below from their appropriate table:

Columns	Table	Show or Hide
Top	TOP EVENTS	Show
Room #	PRA_COMP TABLE	Show
Model	TOP EVENTS	Hide
FB	TOTAL2-FLOOD	Show
BEVENT	TOTAL2-FLOOD	Show
Include Comp	TOTAL2-FLOOD	Show
Description	PRA_COMP TABLE	Show
" ABOVE FLOOR	PRA_COMP TABLE	Show
Flood Susceptible	PRA_COMP TABLE	Hide
(LOCA/EDH Only)	TOTAL2-FLOOD	Hide

- Go to attachment 2 of this document. For each scenario, input flood heights into the appropriate columns. See example below (Flood Scenario CF-11A-F315AM):



Field:	TOP	ROOM #	MODEL	FB	BEVENT	INCLUDED COMP
Sort:	Ascending			Ascending	Ascending	Ascending
Show:						
Criteria:		"A315" Or "1TB12-1" Or "1TB12-4"	"1" Or "1/2"			
or:		"1TB12-2 (CP)" Or "1TB12-3 (CP)"	"1" Or "1/2"			

continued:

Field:	DESCRIPTION	ABOVE FLOOR	Flood Susceptible	(LOCA/EDH ONLY)
Sort:				
Show:				
Criteria:			"YES"	Not Like "*"
or:		<102	"YES"	Not Like "*"

- Execute query.
- Double click on each column to ensure you can see all information.
- Save layout and exit.

Analyze flood evaluation and enter results into the FLOOD EVALUATION table. Once completed, print out FLOOD EVALUATION REPORT in Report section of the database. Put final copy of flood evaluation query/results into flood evaluation books (Attachment 3).

7.0 References

RAN 94-001 Rev 0	Internal Flooding Analysis (Flooding Calculations)
RAN 96-038 Rev 0	Master Frequency File
CCPRA Assumption 11	Human Action to Isolate a SW Rupture in ECCS Pp Rm 118 Envelopes HA Failure Probabilities for Other Floods
CCPRA Assumption 23	SRW Pp Room Drainage
CCPRA Assumption 30	Flood N227AM is screened from the CCPRA Flood Model
CCPRA Assumption 391	Top Events screened from Flood Evaluations
CCPRA Assumption 512	Flood recovery action BHF118 is assumed applicable to a 1.5 hour response time
CCPRA Assumption 513	Flood Impacts on Top Event SG are screened out
CCPRA Key Input 684	Flood Evaluation References
CCPRA Key Input 708	Top Events Used n the U-1 GT Model
CCPRA Key Input 1049	PRA and System Analysis Definitions
CCPRA Key Input 1065	List of Current System Analysis Fault Tree RANs
CCPRA Key Input 1081	PRA Room List used for Fire/Flood Database
CCPRA Key Input 1354	Flooding in the MSIV Room is Limited to 3 Feet of Water

ROOM	CF-02A-S11 18AR	F-02B-S11 18AN	F-02E-C11 18AM	CF-03A-S11 19AR	F-03B-S11 19AN	F-03C-F11 19AM	CF-03D-F11 19AN	F-03E-C11 19AM	CF-04A-F12 1AM	F-04B-F22 1AN	CF-04C-R22 1AM	CF-04D-C22 1AM	CF-04E-W22 1AM	CF-04F-D22 1AM	CF-05A-F22 4AM	CF-05B-F22 4AN	CF-05C-R22 4AM	CF-05D-C22 4AM	CF-05E-W22 4AM	CF-05F-D22 4AM	CF-05G-N22 4AM	CF-05H-Q22 4AM	CF-06A-F22 5AM	CF-06B-F22 5AN	CF-06C-D22 5AM	CF-06D-N22 5AM	CF-07A-F22 6AM	CF-07B-F22 6AN	CF-07C-S22 6AR	CF-07D-S22 6AN	CF-07E-W22 6AM	CF-07F-N22 6AR	CF-07G-N22 6LN	CF-08A-F22 7AM	CF-08B-F22 7AN	CF-08C-C22 7AM	CF-08D-W22 7AM	CF-08E-D22 7AM	CF-09A-N22 7AM	CF-10A-F22 8AM	CF-10B-F22 8AN	CF-10C-C22 8AM
A100	105"	F		105"	F	57"	158"		204"	F	95"	131"	131"	131"	182"	F	111"	131"	131"	131"	103"		175"	F	130"	103"	175"	F	F	F	175"	86"	102"	204"	F	204"	204"	204"	130"	180"	F	180"
A101	F	F		F	F					48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A102	F	F		F	F					48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A103	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A104	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105A	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105B	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105C	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A106	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A107		F			F																								F	F												
A108	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A109		F			F																								F	F												
A110	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A111	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A112		F			F																								F	F												
A113	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A114		F			F																								F	F												
A115A	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A115B	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A115C	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A116	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A117	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A118	F	F	F	F	F	F	F	F		48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A119	F	F	F	F	F	F	F	F		48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A120	F	F		F	F					F	F					F	F				F			F		F		F	F	F			F		F						F	
A122	F	F	F	F	F	F	F	F		F	F					F	F				F			F		F		F	F	F			F		F						F	
A200	47"	F		47"	F						20"																		96"	F												
A201	47"	F		47"	F						20"																		96"	F												
A202	47"	F		47"	F						20"																		96"	F												
A203	47"	F		47"	F						20"																		96"	F												
A204	47"	F		47"	F						20"																		96"	F												
A205	71"	F		71"	F					30"	30"					30"	30"				30"			30"		30"		30"	156"	F			30"		30"						30"	
A206	47"	F		47"	F						20"																		96"	F												
A207	41"	F		41"	F						14"																		90"	F												
A208	47"	F		47"	F						20"																		96"	F												
A209	47"	F		47"	F						20"																		96"	F												
A210	47"	F		47"	F						20"																		96"	F												
A211	47"	F		47"	F						20"																		96"	F												
A212	47"	F		47"	F						20"																		96"	F												
A213	47"	F		47"	F						20"																		96"	F												
A214	47"	F		47"	F						20"																		96"	F												
A215	47"	F		47"	F						20"																		96"	F												
A216	47"	F		47"	F						20"																		96"	F												
A216A	47"	F		47"	F						20"																		96"	F												
A217	47"	F		47"	F						20"																		96"	F												
A218	47"	F		47"	F						20"																		96"	F												
A219	47"	F		47"	F						20"																		96"	F												
A220	47"	F		47"	F						20"																		96"	F												
A221	47"	F		47"	F				F	F	F	F	F	F															96"	F												

* These Floods were deleted. See note 12 in Sect. 5.4

ATTACHMENT 2 REV:0

ROOM	CF-02A-S11 18AR	CF-02B-S11 18AN	CF-02E-C11 18AM	CF-03A-S11 19AR	CF-03B-S11 19AN	CF-03C-F11 19AM	CF-03D-F11 19AN	CF-03E-C11 19AM	CF-04A-F22 1AM	CF-04B-F22 1AN	CF-04C-R22 1AM	CF-04D-C22 1AM	CF-04E-W22 1AM	CF-04F-D22 1AM	CF-05A-F22 4AM	CF-05B-F22 4AN	CF-05C-R22 4AM	CF-05D-C22 4AM	CF-05E-W22 4AM	CF-05F-D22 4AM	CF-05G-N22 4AM	CF-05H-Q22 4AM	CF-06A-F22 5AM	CF-06B-F22 5AN	CF-06C-D22 5AM	CF-06D-N22 5AM	CF-07A-F22 6AM	CF-07B-F22 6AN	CF-07C-S22 6AR	CF-07D-S22 6AN	CF-07E-W22 6AM	CF-07F-N22 6AR	CF-07G-N22 6LN	CF-08A-F22 7AM	CF-08B-F22 7AN	CF-08C-C22 7AM	CF-08D-W22 7AM	CF-08E-D22 7AM	CF-09A-N22 7AM	CF-10A-F22 8AM	CF-10B-F22 8AN	CF-10C-C22 8AM
A222	47"	F		47"	F						20"																		96"	F											
A223	47"	F		47"	F						20"																		96"	F											
A224	47"	F		47"	F						20"				F	F	F	F	F	F	F								96"	F											
A225	47"	F		47"	F						20"												F	F	F	F			F	F		47"	64"								
A226	71"	F		71"	F					30"	30"					30"	30"				30"		30"	30"		30"	F	F	F	F	F	F	F		30"						30"	
A227	47"	F		47"	F						20"																		96"	F				F	F	F	F	F	F			
A228	47"	F		47"	F						20"																		96"	F										F	F	F
A308																																									
A309																																									
A315																						F																			
A316																																	F	F	F	F	F	F			
A317																																									
A318																																									
A319																																									
A320																																									
A322																																									
A324																																									
A326									F	F	F	F	F	F																											
A406																																									
A419																																									
A421																																									
A422																																									
A428																																									
A429																																									
A431																																									
A520																																									
A524																																									
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A530																																									
A536																																									
A537																																									
1TB12-1																						F																			
1TB12-2																						F																			
1TB12-2 (CP)																						F																			
1TB12-3																																									
1TB12-3 (CP)																						F																			
1TB12-4																						F																			
1TB27-1																																									
1TB27-2																						F																			
1TB27-3																																									
1TB27-4																																									
1TB27-5E																																									
1TB27-5W																																									
1TB27-6																																									
1TB27-7																																									
1TB45-2																						F																			
1INTK-1																																									
1INTK-2																																									
1INTK-3																																									

ROOM	CF-02A-S11-18AR	CF-02B-S11-18AN	CF-02E-C11-18AM	CF-03A-S11-19AR	CF-03B-S11-19AN	CF-03C-F11-19AM	CF-03D-F11-19AN	CF-03E-C11-19AM	CF-04A-F22-1AM	CF-04B-F22-1AN	CF-04C-R22-1AM	CF-04D-C22-1AM	CF-04E-W22-1AM	CF-04F-D22-1AM	CF-05A-F22-4AM	CF-05B-F22-4AN	CF-05C-R22-4AM	CF-05D-C22-4AM	CF-05E-W22-4AM	CF-05F-D22-4AM	CF-05G-N22-4AM	CF-05H-Q22-4AM	CF-06A-F22-5AM	CF-06B-F22-5AN	CF-06C-D22-5AM	CF-06D-N22-5AM	CF-07A-F22-6AM	CF-07B-F22-6AN	CF-07C-S22-6AR	CF-07D-S22-6AN	CF-07E-W22-6AM	CF-07F-N22-6AR	CF-07G-N22-6LN	CF-08A-F22-7AM	CF-08B-F22-7AN	CF-08C-C22-7AM	CF-08D-W22-7AM	CF-08E-D22-7AM	CF-09A-N22-7AM	CF-10A-F22-8AM	CF-10B-F22-8AN	CF-10C-C22-8AM
1INTK-4																																										
2TB12-1																																										
2TB12-2																																										
2TB12-2 (CP)																																										
2TB12-3																																										
2TB12-3 (CP)																																										
2TB12-4																																										
2TB27-1																																										
2TB27-2E																																										
2TB27-2W																																										
2TB27-3																																										
2TB27-4																																										
2TB27-5																																										
2TB27-6																																										
2TB27-7																																										
2TB27-8																																										
2INTK-1																																										
2INTK-2																																										
2INTK-3																																										
2INTK-4																																										
T603		F			F																								F													
T605		F			F																								F													
CC1A																																										
CC1B																																										

ROOM	CF-10D-D228AM	CF-10E-R228AM	CF-10F-S228AR	CF-10G-S228AN	CF-10H-S228MR	CF-11A-F315AM	CF-11B-F315AN	CF-11C-W315AM	CF-12A-F317AM	CF-12B-F317AN	CF-13A-N318LM	CF-13B-N318MM	CF-13C-N318SM	CF-13D-D318AM	CF-14A-F319AM	CF-14B-F319AN	CF-14C-D313AM	CF-15A-W313AM	CF-15B-D323AN	CF-16A-C323AM	CF-17A-M341AM	CF-17B-M441AN	CF-18A-M442AM	CF-18B-M442AN	CF-19A-M442AM	CF-19B-M442AN	CF-20A-M442AM	CF-20B-M422AN	CF-21A-F442AM	CF-21B-F442AN	CF-22A-M522AM	CF-22B-M522AN	CF-23A-M522AM	CF-23B-M522AN	CF-24A-M522AM	CF-24B-M522AN	CF-25A-M530AM	CF-25B-M530AN	CF-26A-M533AM	CF-26B-M533AN	CF-27A-M533AM	CF-27B-M533AN	CF-28A-N603AR
A100	180"	76"	F	F	F										183"	F	183"	131"	131"	131"	140"	F					140"	F	140"	140"	95"	95"	94"	147"	103"	147"	138"	147"	100"	100"	100"	100"	83"
A101		58"	F	F	F											25"						25"						25"															
A102		63"	F	F	F											25"						25"						25"															
A103	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A104	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105A	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105B	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105C	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A106	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A107				F																																							
A108	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A109				F																																							
A110	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A111	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A112				F																																							
A113	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A114				F																																							
A115A	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A115B	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A115C	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A116	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A117	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A118		63"	F	F	F											25"						25"						25"															
A119		58"	F	F	F											25"						25"						25"															
A120		F	F	F	F											F						F						F															
A122		F	F	F	F											F						F						F															
A200			47"	F																																							
A201			47"	F																																							
A202			47"	F																																							
A203			47"	F																																							
A204			47"	F																																							
A205		30"	71"	F	30"											30"						30"						30"															
A206			47"	F																																							
A207			41"	F																																							
A208			47"	F																																							
A209			47"	F																																							
A210			47"	F																																							
A211			47"	F																		F						F	F	F													
A212			47"	F																																							
A213			47"	F																																							
A214			47"	F																																							
A215			47"	F																																							
A216			47"	F																																							
A216A			47"	F																																							
A217			47"	F																																							
A218			47"	F																																							
A219			47"	F																																							
A220			47"	F																																							
A221			47"	F																		F						F	F	F													

ROOM	CF-10D-DD28AM	CF-10E-RD28AM	CF-10F-SD28AR	CF-10G-SD28AN	CF-10H-SD28MR	CF-11A-FD15AM	CF-11B-FD15AN	CF-11C-WD15AM	CF-12A-FD17AM	CF-12B-FD17AN	CF-13A-ND18LM	CF-13B-ND18MM	CF-13C-ND18SM	CF-13D-DD18AM	CF-14A-FD19AM	CF-14B-FD19AN	CF-14C-DD19AM	CF-15A-WD20AM	CF-15B-DD20AM	CF-16A-CD24AM	CF-17A-MD42AM	CF-17B-MD42AN	CF-18A-MD41AM	CF-18B-MD41AN	CF-19A-MD22AM	CF-19B-MD22AN	CF-20A-MD28AM	CF-20B-MD28AN	CF-21A-FD29AM	CF-21B-FD29AN	CF-22A-MD50AM	CF-22B-MD50AN	CF-23A-MD52AM	CF-23B-MD52AN	CF-24A-MD52AM	CF-24B-MD52AN	CF-25A-MD53AM	CF-25B-MD53AN	CF-26A-MD53AM	CF-26B-MD53AN	CF-27A-MD53AM	CF-27B-MD53AN	CF-28A-ND603AR
A222			47"	F																																							
A223			47"	F																																							
A224			47"	F																																							
A225			47"	F																																							31"
A226		30"	71"	F	30"											30"						30"						30"															66"
A227			47"	F																		F						F															
A228	F	F	F	F	F																																						
A308																															32"	32"	F	F	F	F	F	F	F	F	F	F	
A309																					F	F					F	F	54"	54"													
A315						F	F	F		F											F	F					F	F	84"	84"													
A316																																											
A317									F	F	65"	4"		4"																													
A318											F	F	F	F																													
A319															F	F	F																										
A320																		F	F																								
A322																					F	F					F	F	F	F													
A324																				F																							
A326																																											
A406																													F	F			F	F	F	F	F	F	F	F	F	F	
A419																					F	F																					
A421																							F	F																			
A422																									F	F																	
A428																											F	F															
A429																													F	F													
A431																													F	F			F	F	F	F	F	F	F	F	F	F	
A520																															F	F											
A524																																	F	F									
A525																																			F	F							
A530																																					F	F					
A536																																							F	F	F	F	
A537																																							F	F	F	F	
1TB12-1						F	F	F																																			
1TB12-2																																											
1TB12-2 (CP)						102"	174"	63"	102"	174"	63"	63"	32"	63"															50"	89"													
1TB12-3																																											
1TB12-3 (CP)						102"	174"	63"	102"	174"	63"	63"	32"	63"															50"	89"													
1TB12-4																																											
1TB27-1						F	F	F																																			
1TB27-2																																											
1TB27-3																																											
1TB27-4																																											
1TB27-5E																																											
1TB27-5W																																											
1TB27-6																																											
1TB27-7																																											
1TB45-2																																											
1INTK-1																																											
1INTK-2																																											
1INTK-3																																											

ROOM	CF-10D-D228AM	CF-10E-R228AM	CF-10F-S228AR	CF-10G-S228AN	CF-10H-S228MR	CF-11A-F315AM	CF-11B-F315AN	CF-11C-W315AM	CF-12A-F317AM	CF-12B-F317AN	CF-13A-N318LM	CF-13B-N318MM	CF-13C-N318SM	CF-13D-D318AM	CF-14A-F319AM	CF-14B-F319AN	CF-14C-D319AM	CF-15A-W320AM	CF-15B-D320AM	CF-16A-C324AM	CF-17A-M419AM	CF-17B-M419AN	CF-18A-M421AM	CF-18B-M421AN	CF-19A-M422AN	CF-19B-M422AM	CF-20A-M428AM	CF-20B-M428AN	CF-21A-F449AM	CF-21B-F429AN	CF-22A-M520AM	CF-22B-M520AN	CF-23A-M524AM	CF-23B-M524AN	CF-24A-M525AM	CF-24B-M525AN	CF-25A-M530AM	CF-25B-M530AN	CF-26A-M536AM	CF-26B-M536AN	CF-27A-M537AM	CF-27B-M537AN	CF-28A-N603AR
1INTK-4																																											
2TB12-1																																											
2TB12-2																																											
2TB12-2 (CP)																																											
2TB12-3																																											
2TB12-3 (CP)																																											
2TB12-4																																											
2TB27-1																																											
2TB27-2E																																											
2TB27-2W																																											
2TB27-3																																											
2TB27-4																																											
2TB27-5																																											
2TB27-6																																											
2TB27-7																																											
2TB27-8																																											
2INTK-1																																											
2INTK-2																																											
2INTK-3																																											
2INTK-4																																											
T603				F																																							F
T605				F																																							
CC1A																													F	F			F	F	F	F	F	F	F	F	F	F	
CC1B																													F	F			F	F	F	F	F	F	F	F	F	F	

ROOM	CF-28B-N603AN	CF-28C-FM603AM	CF-28D*-FN603AN	CF-28E-DM603AM	CF-29A-NR605AR	CF-29B-FN605AN	CF-29C-FM605AM	CF-29D*-FN605AN	CF-30A-FN205AN	CF-30B-SR205AR	CF-30C-SN205AN	CF-30D-NL205LN	CF-31A-STR12AR	CF-31B-STN12AN	CF-31C-FTM12AM	CF-31D*-FTN12AN	CF-31E-ITM12AM	CF-32A-FTM27AM	CF-32B*-FTN27AN	CF-33A-SISPAN	CF-33B-SISPAR	CF-33C-FISPAM	CF-33D*-FISPAN	CF-33E-IISPAM
A100	112"	175"	F	175"	83"	112"	175"	F	F	F	F	102"		F										
A101			25"					25"	25"	F	F	7"		F										
A102			25"					25"	25"	F	F	7"		F										
A103	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A104	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105A	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105B	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105C	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A106	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A107										F	F			F										
A108	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A109										F	F			F										
A110	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A111	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A112										F	F			F										
A113	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A114										F	F			F										
A115A	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A115B	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A115C	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A116	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A117	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A118			25"					25"	25"	F	F	7"		F										
A119			25"					25"	25"	F	F	7"		F										
A120			F					F	F	F	F	F		F										
A122			F					F	F	F	F	F		F										
A200										96"	F			F										
A201										96"	F			F										
A202										96"	F			F										
A203										96"	F			F										
A204					31"	31"				F	F	64"		F										
A205			30"		66"	66"	30"	30"	F	F	F	F		F										
A206										96"	F			F										
A207										90"	F			F										
A208										96"	F			F										
A209										96"	F			F										
A210										96"	F			F										
A211										96"	F			F										
A212										96"	F			F										
A213										96"	F			F										
A214										96"	F			F										
A215										96"	F			F										
A216										96"	F			F										
A216A										96"	F			F										
A217										96"	F			F										
A218										96"	F			F										
A219										96"	F			F										
A220										96"	F			F										
A221										96"	F			F										

ROOM	CF-28B-N603AN	CF-28C-FM	CF-28D-FN	CF-28E-DM	CF-29A-NR	CF-29B-NN	CF-29C-FM	CF-29D-FN	CF-30A-FN	CF-30B-SR	CF-30C-SN	CF-30D-NN	CF-31A-STR	CF-31B-STAN	CF-31C-FTAM	CF-31D-FTAN	CF-31E-ITAM	CF-32A-FTAM	CF-32B-FTAN	CF-33A-SISPAN	CF-33B-SISPAR	CF-33C-FISPAM	CF-33D-FISPAN	CF-33E-IISPAM
A222										96"	F			F										
A223										96"	F			F										
A224										96"	F			F										
A225	31"									96"	F			F										
A226	66"	30"	30"	30"				30"	30"	156"	F	30"		F										
A227										96"	F			F										
A228										96"	F			F										
A308																								
A309																								
A315																								
A316																								
A317																								
A318																								
A319																								
A320																								
A322																								
A324																								
A326																								
A406																								
A419																								
A421																								
A422																								
A428																								
A429																								
A431																								
A520																								
A524																								
A525																								
A530																								
A536																								
A537																								
1TB12-1													F	F	F	F	F	F	F					
1TB12-2													F	F	F	F	F	F	F					
1TB12-2 (CP)													F	F	F	F	F	F	F					
1TB12-3													F	F	F	F	F	F	F					
1TB12-3 (CP)													F	F	F	F	F	F	F					
1TB12-4													F	F	F	F	F	F	F					
1TB27-1													F	F	F	F	F	F	F					
1TB27-2													F	F	F	F	F	F	F					
1TB27-3													F	F	F	F	F	F	F					
1TB27-4													F	F	F	F	F	F	F					
1TB27-5E													F	F	F	F	F	F	F					
1TB27-5W													F	F	F	F	F	F	F					
1TB27-6													F	F	F	F	F	F	F					
1TB27-7													F	F	F	F	F	F	F					
1TB45-2																								
1INTK-1																				F	200"	101"	174"	48"
1INTK-2																				F	200"	101"	174"	48"
1INTK-3																				F	200"	101"	174"	48"

ROOM	CF-28B-N603AN	CF-28C-FM603AM	CF-28D-FN603AM	CF-28E-DM603AM	CF-29A-FN605AR	CF-29B-FN605AN	CF-29C-FM605AM	CF-29D-FM605AN	CF-30A-FM205AN	CF-30B-SM205AR	CF-30C-SM205AN	CF-30D-NM205LN	CF-31A-ST112AR	CF-31B-ST112AN	CF-31C-FT12AM	CF-31D-FT12AN	CF-31E-IT12AM	CF-32A-FT27AM	CF-32B-FT27AN	CF-33A-SISPAN	CF-33B-SISPAR	CF-33C-FISPAM	CF-33D-FISPAN	CF-33E-IISPAM
1INTK-4																				F	200"	101"	174"	48"
2TB12-1													F	F	F	F	F	F	F					
2TB12-2													F	F	F	F	F	F	F					
2TB12-2 (CP)													F	F	F	F	F	F	F					
2TB12-3													F	F	F	F	F	F	F					
2TB12-3 (CP)													F	F	F	F	F	F	F					
2TB12-4													F	F	F	F	F	F	F					
2TB27-1													F	F	F	F	F	F	F					
2TB27-2E													F	F	F	F	F	F	F					
2TB27-2W													F	F	F	F	F	F	F					
2TB27-3													F	F	F	F	F	F	F					
2TB27-4													F	F	F	F	F	F	F					
2TB27-5													F	F	F	F	F	F	F					
2TB27-6													F	F	F	F	F	F	F					
2TB27-7													F	F	F	F	F	F	F					
2TB27-8													F	F	F	F	F	F	F					
2INTK-1																				F	200"	101"	174"	48"
2INTK-2																				F	200"	101"	174"	48"
2INTK-3																				F	200"	101"	174"	48"
2INTK-4																				F	200"	101"	174"	48"
T603	F	F	F	F							F			F										
T605					F	F	F	F			F			F										
CC1A																								
CC1B																								

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
A/C	AJQ	BTPMOQ	AJ	AIR CONDITIONING UNIT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
A/C	AJR	BPACUR	AJ	AIR CONDITIONING UNIT	R	FAILS DURING OPERATION	FO	12	
A/C	AJS	BTACUS	AJ	AIR CONDITIONING UNIT	S	FAILS TO START	FD	12	
A/C	AKB	ZTHXRB	AK	AIR COOLER - HX ONLY	B	MAJOR LEAKAGE DURING OPERATION	FO		
A/C	AKP	BTHEXP	AK	AIR COOLER - HX ONLY	P	PLUGS DURING OPERATION	FO		
ACC	ACB	BTACCB	AC	AIR RECEIVER	B	MAJOR LEAKAGE DURING OPERATION	FO		
AE	AER	BPEAER	AE	SMOKE DETECTOR	R	FAILURE DURING OPERATION	FO		
ALM	ALD	BTALMD	AL	ALARM	D	FAILS ON DEMAND	FD		
ALM	ALT	BTALMT	AL	ALARM	T	SPURIOUS OPERATION	FO		
AV	AVD	ZTSWPD	AV	AUTO VENT	D	FAILS TO OPERATE ON DEMAND	FD		
AV	AVR	ZTVR2T	AV	AUTO VENT	R	SPURIOUS OPERATION	FO		
AY	RYD	ZTRL1D	RY	ANALYZER CONVERTER (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
AY	RYE	BPRL1D	RY	ANALYZER CONVERTER (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		
AY	RYP	BPRL1R	RY	ANALYZER CONVERTER (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
AY	RYT	ZTRL1R	RY	ANALYZER CONVERTER (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
B/S	BID	ZTLC1D	BI	BISTABLE (TRIP LOGIC MODULE)	D	FAILS ON DEMAND	FD	11	
B/S	BII	ZTLC1R	BI	BISTABLE (TRIP LOGIC MODULE)	I	SPURIOUS OPERATION	FO	11	
B/S	BJD	ZTSWBD	BJ	BISTABLE (OP AMP)	D	FAILS ON DEMAND	FD	11	
B/S	BJI	ZTSWBI	BJ	BISTABLE (OP AMP)	I	SPURIOUS OPERATION	FO	11	
BATT	BAD	BPBATD	BA	125VDC BATTERY	D	FAILURE OF OUTPUT ON DEMAND	FD		
BATT	BAR	BPBATR	BA	125VDC BATTERY	R	FAILURE OF OUTPUT DURING OPERATION	FO		
BKR	BMC	BPCB3C	BM	480VAC MCC BREAKER	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	BMO	BPCB3O	BM	480VAC MCC BREAKER	O	FAILS TO OPEN ON DEMAND	FD		
BKR	BMP	ZTCB1T	BM	480VAC MCC BREAKER	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	BMT	BPCB3T	BM	480VAC MCC BREAKER	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	BNC	BPCB4C	BN	13 & 4KV CAPACITY BREAKER	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	BNO	BPCB4O	BN	13 & 4KV CAPACITY BREAKER	O	FAILS TO OPEN ON DEMAND	FD		
BKR	BNP	BPCB4P	BN	13 & 4KV CAPACITY BREAKER	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	BNT	BPCB4T	BN	13 & 4KV CAPACITY BREAKER	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	BXC	ZTCB1C	BX	500KV AIR BLAST CIRCUIT BKR	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	BXO	ZTCB1O	BX	500KV AIR BLAST CIRCUIT BKR	O	FAILS TO OPEN ON DEMAND	FD		
BKR	BXP	ZTCB1T	BX	500KV AIR BLAST CIRCUIT BKR	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	BXQ	BTECMQ	BX	500KV AIR BLAST CIRCUIT BKR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
BKR	BXT	ZTCB1T	BX	500KV AIR BLAST CIRCUIT BKR	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	BYC	ZTCB1C	BY	500KV M.O. DISCONNECT BKR	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	BYO	ZTCB1O	BY	500KV M.O. DISCONNECT BKR	O	FAILS TO OPEN ON DEMAND	FD		
BKR	BYP	ZTCB1T	BY	500KV M.O. DISCONNECT BKR	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	BYQ	BTECMQ	BY	500KV M.O. DISCONNECT BKR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
BKR	BYT	ZTCB1T	BY	500KV M.O. DISCONNECT BKR	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	CAC	ZTCB2C	CA	BELOW 480VAC & DC BREAKER	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	CAO	ZTCB2O	CA	BELOW 480VAC & DC BREAKER	O	FAILS TO OPEN ON DEMAND	FD		
BKR	CAP	ZTCB2T	CA	BELOW 480VAC & DC BREAKER	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	CAT	ZTCB2T	CA	BELOW 480VAC & DC BREAKER	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	CBC	BPCB3C	CB	480VAC BUS BREAKER	C	FAILS TO CLOSE ON DEMAND	FD		
BKR	CBO	BPCB3O	CB	480VAC BUS BREAKER	O	FAILS TO OPEN ON DEMAND	FD		
BKR	CBP	ZTCB1T	CB	480VAC BUS BREAKER	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	CBT	BPCB3T	CB	480VAC BUS BREAKER	T	TRANSFERS OPEN DURING OPERATION	FO		
BKR	TBD	BPCB5D	TB	REACTOR TRIP BREAKER	D	FAILS TO OPERATE ON DEMAND	FD		
BKR	TBP	BTCB1P	TB	REACTOR TRIP BREAKER	P	TRANSFERS CLOSED DURING OPERATION	FO		
BKR	TBT	ZTCB1T	TB	REACTOR TRIP BREAKER	T	TRANSFERS OPEN DURING OPERATION	FO	1	
BS	BSP	ZTSC1P	BS	SALT WATER STRAINER	P	PLUGS DURING OPERATION	FO		
BS	BTP	ZTSC1P	BT	NON-SALT WATER STRAINER	P	PLUGS DURING OPERATION	FO		

ATTACHMENT 4 REV. 0

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMMENTS	SUB-TYPE
BUS	BUQ	BPECMQ	BU	BUS	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
BUS	BUR	BPBS1R	BU	BUS	R	FAILS DURING OPERATION	FO		
CABLE	CSS	ZTCCOS	CS	CONTROL CABLE	S	OPEN OR SHORT DURING OPERATION	FO		
CABLE	CWS	BPCZ4S	CW	13 & 4KV POWER CABLES	S	OPEN OR SHORT DURING OPERATION	FO		
CABLE	CZS	BPCZ5S	CZ	480VAC OR LOWER POWER CABLES	S	OPEN OR SHORT DURING OPERATION	FO		
CHGR	CHQ	BPECMQ	CH	BATTERY CHARGER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
CHGR	CHR	BPBCHR	CH	BATTERY CHARGER	R	FAILS DURING OPERATION	FO		
CHL	CLQ	BTPMOQ	CL	CHILLER (A/C UNIT + WTR SYS)	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
CHL	CLR	ZTCHLR	CL	CHILLER (A/C UNIT + WTR SYS)	R	FAILS DURING OPERATION	FO	12	
CHL	CLS	BPCHLR	CL	CNTRL RM CHILLER (A/C +WTR SYS)	S	FAILS ON DEMAND	FD	12	
CHL	CLS	ZTCHLS	CL	CHILLER (A/C UNIT + WTR SYS)	S	FAILS ON DEMAND	FD	12	
CKV	CDL		CD	DSA NORMALLY CYCLED CHECK	L	EXTERNAL LEAKAGE	FO	9	
CKV	CDR	BPASCR	CD	DSA NORMALLY CYCLED CHECK	R	FAILS DURING OPERATION	FD	14	
CKV	CDX	ZTVMCX	CD	DSA NORMALLY CYCLED CHECK	X	DISC RUPTURE	FO		
CKV	CDZ	ZTVCOL	CD	DSA NORMALLY CYCLED CHECK	Z	GROSS INTERNAL LEAKAGE	FO		
CKV	CGC	BPFOCD	CG	DFO CHECK VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CKV	CGL		CG	DFO CHECK VALVE	L	EXTERNAL LEAKAGE	FO	9	
CKV	CGO	BPFOCD	CG	DFO CHECK VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CKV	CGP	ZTVCOP	CG	DFO CHECK VALVE	P	TRANSFERS CLOSED/PLUGS	FO		
CKV	CGX	ZTVMCX	CG	DFO CHECK VALVE	X	DISC RUPTURE	FO		
CKV	CGZ	ZTVCOL	CG	DFO CHECK VALVE	Z	GROSS INTERNAL LEAKAGE	FO		
CKV	CKC	BPVCOC	CK	CHECK (OTHER THAN STOP)	C	FAILS TO CLOSE ON DEMAND	FD		
CKV	CKL		CK	CHECK (OTHER THAN STOP)	L	EXTERNAL LEAKAGE	FO	9	
CKV	CKO	BPVCOO	CK	CHECK (OTHER THAN STOP)	O	FAILS TO OPEN ON DEMAND	FD		
CKV	CKP	BPVCOP	CK	CHECK (OTHER THAN STOP)	P	TRANSFERS CLOSED/PLUGS	FO		
CKV	CKX	BPVMCX	CK	CHECK (OTHER THAN STOP)	X	DISC RUPTURE	FO		
CKV	CKZ	BPVCOL	CK	CHECK (OTHER THAN STOP)	Z	GROSS INTERNAL LEAKAGE	FO		
CKV	CYL		CY	IA AIR DRYER 12 CHECK VALVE	L	EXTERNAL LEAKAGE	FO	9	
CKV	CYP	ZTVCOP	CY	IA AIR DRYER 12 CHECK VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CKV	CYR	BPVCAR	CY	IA AIR DRYER 12 CHECK VALVE	R	FAILS TO CYCLE DURING OPERATION	FO		
CKV	CYX	ZTVMCX	CY	IA AIR DRYER 12 CHECK VALVE	X	DISC RUPTURE	FO		
CKV	CYZ	ZTVCOL	CY	IA AIR DRYER 12 CHECK VALVE	Z	GROSS INTERNAL LEAKAGE	FO		
CKV	ECC	BTEFCD	EC	EXCESS FLOW CHECK VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CKV	ECL		EC	EXCESS FLOW CHECK VALVE	L	EXTERNAL LEAKAGE	FO	9	
CKV	ECO	BTEFCD	EC	EXCESS FLOW CHECK VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CKV	ECP	BPVCOP	EC	EXCESS FLOW CHECK VALVE	P	TRANSFERS CLOSED/PLUGS	FO		
CKV	ECX	BPVMCX	EC	EXCESS FLOW CHECK VALVE	X	DISC RUPTURE	FO		
CKV	ECZ	BPVCOL	EC	EXCESS FLOW CHECK VALVE	Z	GROSS INTERNAL LEAKAGE	FO		
CKV	SKC	ZTVCSD	SK	STOP CHECK	C	FAILS TO CLOSE ON DEMAND	FD		
CKV	SKL		SK	STOP CHECK	L	EXTERNAL LEAKAGE	FO	9	
CKV	SKO	ZTVCSD	SK	STOP CHECK	O	FAILS TO OPEN ON DEMAND	FD		
CKV	SKP	ZTVCSP	SK	STOP CHECK	P	TRANSFERS CLOSED/PLUGS	FO		
CKV	SKZ	ZTVCSL	SK	STOP CHECK	Z	GROSS INTERNAL LEAKAGE	FO		
CNTAM	CIR	BPIACR	CI	IA SYSTEM CONTAMINATION	R	IA CONTAMINATION DURING OPERATION	FO		
CNTCT	CXC		CX	CONTACT	C	FAILS TO CLOSE ON DEMAND	FD	9	
CNTCT	CXO		CX	CONTACT	O	FAILS TO OPEN ON DEMAND	FD	9	
CNTCT	CXP		CX	CONTACT	P	TRANSFERS CLOSED DURING OPERATION	FO	9	
CNTCT	CXT		CX	CONTACT	T	TRANSFERS OPEN DURING OPERATION	FO	9	
CNTCT	CXX		CX	CONTACT	X	FAULTS TO GROUND	FO	9	
COIL	SHD	ZTSTCD	SH	SHUNT TRIP COIL	D	FAILS ON DEMAND	FD		
COIL	SHT	ZTCB1T	SH	SHUNT TRIP COIL	T	PREMATURE ACTIVATION	FO	1	
COIL	UVD	ZTUVCD	UV	UV TRIP COIL	D	FAILS ON DEMAND	FD		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
COIL	UVT	ZTCB1T	UV	UV TRIP COIL	T	PREMATURE ACTIVATION	FO	1	
COMP	CML		CM	480V AIR COMPRESSOR	L	EXTERNAL LEAKAGE	FO	4, 9	
COMP	CMQ	BTPMOQ	CM	480V AIR COMPRESSOR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
COMP	CMR	ZTCMPR	CM	480V AIR COMPRESSOR	R	FAILS TO RUN DURING OPERATION	FO		
COMP	CMS	ZTCMPS	CM	480V AIR COMPRESSOR	S	FAILS TO START	FD		
COMP	CQL		CQ	COMPRESSOR FOR A/C OR CHL UNIT	L	EXTERNAL LEAKAGE	FO	4, 9	
COMP	CQQ	BTPMOQ	CQ	COMPRESSOR FOR A/C OR CHL UNIT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
COMP	CQR	BTCOMR	CQ	COMPRESSOR FOR A/C OR CHL UNIT	R	FAILS TO RUN DURING OPERATION	FO		
COMP	CQS	BTCOMS	CQ	COMPRESSOR FOR A/C OR CHL UNIT	S	FAILS TO START	FD		
COMP	KAL		KA	DSA SYS. NORMALLY CYCLED COMPR	L	EXTERNAL LEAKAGE	FO	4, 9	
COMP	KAQ	BTPMOQ	KA	DSA SYS. NORMALLY CYCLED COMPR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
COMP	KAR	BPDCMR	KA	DSA SYS. NORMALLY CYCLED COMPR	R	FAILS TO LOAD/UNLOAD DURING OPERATION	FO		
CONTR	COR	BTCTLR	CO	ELECTRONIC CONTROLLER	R	FAILS DURING OPERATION	FO		
CRD	CRD	BPCRAD	CR	CONTROL ELEMENT ASSEMBLIES	D	FOUR OR MORE CEAs FAIL TO INSERT ON DEMAND	FD		
CRN	CNQ	BTPMOQ	CN	GENERAL CRANE	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
CS	HSD	BPHDSD	HS	CONTROL SWITCH	D	FAILS ON DEMAND	FD		
CS	HST	BPHDST	HS	CONTROL SWITCH	T	FAILS DURING OPERATION	FO		
CV	ABC	BTABTD	AB	AIR VOLUME BOOSTER	C	FAILS TO CLOSE ON DEMAND	FD	20	
CV	ABF	BTABTD	AB	AIR VOLUME BOOSTER	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD	20	
CV	ABL		AB	AIR VOLUME BOOSTER	L	EXTERNAL LEAKAGE	FO	9, 20	
CV	ABM	BTVAOM	AB	AIR VOLUME BOOSTER	M	MINOR INTERNAL LEAKAGE	FO	20	
CV	ABO	BTABTD	AB	AIR VOLUME BOOSTER	O	FAILS TO OPEN ON DEMAND	FD	20	
CV	ABP	BTABTP	AB	AIR VOLUME BOOSTER	P	TRANSFERS CLOSED DURING OPERATION	FO	20	
CV	ABT	BTABTT	AB	AIR VOLUME BOOSTER	T	TRANSFERS OPEN DURING OPERATION	FO	20	
CV	C0L		C0	IA DRYER TOWER CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	C0M	BTVAOM	C0	IA DRYER TOWER CONTROL VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	C0P	ZTVAOT	C0	IA DRYER TOWER CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C0R	BPAC2R	C0	IA DRYER TOWER CONTROL VALVE	R	FAILS TO CYCLE DURING OPERATION	FO		
CV	C0T	ZTVAOT	C0	IA DRYER TOWER CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C1C	BPAOAD	C1	SW STD CV-FAILS OPEN ON LOS	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C1F	ZTVAOD	C1	SW STD CV-FAILS OPEN ON LOS	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
CV	C1L		C1	SW STD CV-FAILS OPEN ON LOS	L	EXTERNAL LEAKAGE	FO	9	
CV	C1M	BTVAOM	C1	SW STD CV-FAILS OPEN ON LOS	M	MINOR INTERNAL LEAKAGE	FO		
CV	C1O	BPVA1D	C1	SW STD CV-FAILS OPEN ON LOS	O	FAILS TO OPEN ON DEMAND	FD		
CV	C1P	BPAOCP	C1	SW STD CV-FAILS OPEN ON LOS	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C1T	BTAOCT	C1	SW STD CV-FAILS OPEN ON LOS	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C2C	BPAOAD	C2	SW THR CV-FAILS OPEN ON LOS	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C2F	ZTVAOD	C2	SW THR CV-FAILS OPEN ON LOS	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
CV	C2L		C2	SW THR CV-FAILS OPEN ON LOS	L	EXTERNAL LEAKAGE	FO	9	
CV	C2M	BTVAOM	C2	SW THR CV-FAILS OPEN ON LOS	M	MINOR INTERNAL LEAKAGE	FO		
CV	C2O	BPVA1D	C2	SW THR CV-FAILS OPEN ON LOS	O	FAILS TO OPEN ON DEMAND	FD		
CV	C2P	BPAOAP	C2	SW THR CV-FAILS OPEN ON LOS	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C2T	BPAOAT	C2	SW THR CV-FAILS OPEN ON LOS	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C3C	BPVA2C	C3	STD CV-FAILS CLOSED ON LOS	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C3F	ZTVAOD	C3	STD CV-FAILS CLOSED ON LOS	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		
CV	C3L		C3	STD CV-FAILS CLOSED ON LOS	L	EXTERNAL LEAKAGE	FO	9	
CV	C3M	BTVAOM	C3	STD CV-FAILS CLOSED ON LOS	M	MINOR INTERNAL LEAKAGE	FO		
CV	C3O	BPVA2O	C3	STD CV-FAILS CLOSED ON LOS	O	FAILS TO OPEN ON DEMAND	FD		
CV	C3P	BPC3PP	C3	STD CV-FAILS CLOSED ON LOS	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C3T	BTAOCP	C3	STD CV-FAILS CLOSED ON LOS	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C4C	BPVA1D	C4	SW STD CV-FAILS CLOSED ON LOS	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C4F	ZTVAOD	C4	SW STD CV-FAILS CLOSED ON LOS	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
CV	C4L		C4	SW STD CV-FAILS CLOSED ON LOS	L	EXTERNAL LEAKAGE	FO	9	
CV	C4M	BTVAOM	C4	SW STD CV-FAILS CLOSED ON LOS	M	MINOR INTERNAL LEAKAGE	FO		
CV	C4O	BPAOAD	C4	SW STD CV-FAILS CLOSED ON LOS	O	FAILS TO OPEN ON DEMAND	FD		
CV	C4P	BTAOCT	C4	SW STD CV-FAILS CLOSED ON LOS	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C4T	BPAOCP	C4	SW STD CV-FAILS CLOSED ON LOS	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C5C	BTAOBC	C5	TURBINE BYPASS VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C5F	BTAOBC	C5	TURBINE BYPASS VALVE	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		
CV	C5L		C5	TURBINE BYPASS VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	C5M	BTVAOM	C5	TURBINE BYPASS VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	C5O	BTAOBO	C5	TURBINE BYPASS VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	C5P	BTAOBP	C5	TURBINE BYPASS VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C5T	BTAOBT	C5	TURBINE BYPASS VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C6C	BPAOVC	C6	AFW THR CV (FAILS OPEN ON LOS)	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C6F	ZTVAOF	C6	AFW THR CV (FAILS OPEN ON LOS)	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
CV	C6L		C6	AFW THR CV (FAILS OPEN ON LOS)	L	EXTERNAL LEAKAGE	FO	9	
CV	C6M	BTVAOM	C6	AFW THR CV (FAILS OPEN ON LOS)	M	MINOR INTERNAL LEAKAGE	FO		
CV	C6O	BPAOVO	C6	AFW THR CV (FAILS OPEN ON LOS)	O	FAILS TO OPEN ON DEMAND	FD		
CV	C6P	BPAOVP	C6	AFW THR CV (FAILS OPEN ON LOS)	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C6R	BPAOVR	C6	AFW THR CV (FAILS OPEN ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	FO		
CV	C6T	BPAOVT	C6	AFW THR CV (FAILS OPEN ON LOS)	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C8C	BPAOSC	C8	AFW TURB STM SUPPLY CV	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C8F	ZTVAOF	C8	AFW TURB STM SUPPLY CV	F	FAILS OPEN ON A LOSS OF SUPPORT SYSTEM	FD		
CV	C8L		C8	AFW TURB STM SUPPLY CV	L	EXTERNAL LEAKAGE	FO	9	
CV	C8M	BTVAOM	C8	AFW TURB STM SUPPLY CV	M	MINOR INTERNAL LEAKAGE	FO		
CV	C8O	BPAOSO	C8	AFW TURB STM SUPPLY CV	O	FAILS TO OPEN ON DEMAND	FD		
CV	C8P	BPAOSP	C8	AFW TURB STM SUPPLY CV	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C8T	BPAOST	C8	AFW TURB STM SUPPLY CV	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	C9C	BTAOBC	C9	COMPR TOTAL CLOSURE VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	C9L		C9	COMPR TOTAL CLOSURE VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	C9M	BTVAOM	C9	COMPR TOTAL CLOSURE VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	C9O	BTAOBO	C9	COMPR TOTAL CLOSURE VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	C9P	BTAOBP	C9	COMPR TOTAL CLOSURE VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	C9T	BTAOBT	C9	COMPR TOTAL CLOSURE VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	CCC	BTAOBC	CC	PILOT CONTROL VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	CCL		CC	PILOT CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	CCM	BTVAOM	CC	PILOT CONTROL VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	CCO	BTAOBO	CC	PILOT CONTROL VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	CCP	BTAOBP	CC	PILOT CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	CCT	BTAOBT	CC	PILOT CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	CFC	BTFRVC	CF	MFW REGULATING VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	CFL		CF	MFW REGULATING VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	CFM	BTVAOM	CF	MFW REGULATING VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	CFO	BTFRVO	CF	MFW REGULATING VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	CFP	BTFRVP	CF	MFW REGULATING VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	CFT	BTFRVT	CF	MFW REGULATING VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	CJL		CJ	UNIT 2 FW MINI FLOW CV	L	EXTERNAL LEAKAGE	FO	9	
CV	CJM	BTVAOM	CJ	UNIT 2 FW MINI FLOW CV	M	MINOR INTERNAL LEAKAGE	FO		
CV	CJP	BPMFVP	CJ	UNIT 2 FW MINI FLOW CV	P	PLUGS DURING OPERATION	FO		
CV	CJR	BPMFVM	CJ	UNIT 2 FW MINI FLOW CV	R	FAILS TO MODULATE FLOW DURING OPERATION	FO		
CV	CJT	BPMFVT	CJ	UNIT 2 FW MINI FLOW CV	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	CVC	BPVA3D	CV	STD CV-FAILS OPEN ON LOS	C	FAILS TO CLOSE ON DEMAND	FD		
CV	CVF	ZTVAOD	CV	STD CV-FAILS OPEN ON LOS	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
CV	CVL		CV	STD CV-FAILS OPEN ON LOS	L	EXTERNAL LEAKAGE	FO	9	
CV	CVM	BTVAOM	CV	STD CV-FAILS OPEN ON LOS	M	MINOR INTERNAL LEAKAGE	FO		
CV	CVO	BPVA3D	CV	STD CV-FAILS OPEN ON LOS	O	FAILS TO OPEN ON DEMAND	FD		
CV	CVP	BTAOCP	CV	STD CV-FAILS OPEN ON LOS	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	CVT	BTAOCT	CV	STD CV-FAILS OPEN ON LOS	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	FFC	BPFFVC	FF	FLEX FLOW VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	FFL		FF	FLEX FLOW VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	FFM	BTVAOM	FF	FLEX FLOW VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	FFO	BPFFVO	FF	FLEX FLOW VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	FFP	BPFFVP	FF	FLEX FLOW VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	FFT	BPFFVT	FF	FLEX FLOW VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	GVC	BPGVFC	GV	EDG SRW CONTROL VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	GVL		GV	EDG SRW CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	GVM	BTVAOM	GV	EDG SRW CONTROL VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	GVO	BPGVFO	GV	EDG SRW CONTROL VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	GVP	BPGVFP	GV	EDG SRW CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	GVT	BPGVFT	GV	EDG SRW CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	ICC	BPCCVC	IC	CNTMT ISOLATION CV-FAIL CLOSED	C	FAILS TO CLOSE ON DEMAND	FD		
CV	ICF	ZTVAOF	IC	CNTMT ISOLATION CV-FAIL CLOSED	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		
CV	ICL		IC	CNTMT ISOLATION CV-FAIL CLOSED	L	EXTERNAL LEAKAGE	FO	9	
CV	ICM	BTVAOM	IC	CNTMT ISOLATION CV-FAIL CLOSED	M	MINOR INTERNAL LEAKAGE	FO		
CV	ICO	BPCCVO	IC	CNTMT ISOLATION CV-FAIL CLOSED	O	FAILS TO OPEN ON DEMAND	FD		
CV	ICP	BTCCVP	IC	CNTMT ISOLATION CV-FAIL CLOSED	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	ICT	BTCCVT	IC	CNTMT ISOLATION CV-FAIL CLOSED	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	MTC	BPMSVC	MT	MAIN STEAM ISOLATION VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	MTL		MT	MAIN STEAM ISOLATION VALVE (MSIV)	L	EXTERNAL LEAKAGE	FO	9	
CV	MTO	BPMSVO	MT	MAIN STEAM ISOLATION VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	MTP	BTMSVP	MT	MAIN STEAM ISOLATION VALVE (MSIV)	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	MTT	BTMSVT	MT	MAIN STEAM ISOLATION VALVE (MSIV)	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	V1C	BPTV1C	V1	UNIT 1 MAIN TURBINE VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	V1L		V1	UNIT 1 MAIN TURBINE VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	V1M	BTVAOM	V1	UNIT 1 MAIN TURBINE VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	V1O	ZTVE2D	V1	UNIT 1 MAIN TURBINE VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	V1P	ZTVE21	V1	UNIT 1 MAIN TURBINE VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	V1T	ZTVE22	V1	UNIT 1 MAIN TURBINE VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	V2C	BPTV2C	V2	UNIT 2 MAIN TURBINE VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
CV	V2L		V2	UNIT 2 MAIN TURBINE VALVE	L	EXTERNAL LEAKAGE	FO	9	
CV	V2M	BTVAOM	V2	UNIT 2 MAIN TURBINE VALVE	M	MINOR INTERNAL LEAKAGE	FO		
CV	V2O	ZTVE2D	V2	UNIT 2 MAIN TURBINE VALVE	O	FAILS TO OPEN ON DEMAND	FD		
CV	V2P	ZTVE21	V2	UNIT 2 MAIN TURBINE VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	V2T	ZTVE22	V2	UNIT 2 MAIN TURBINE VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	VTM	BTVAOM	VT	TURBINE STOP CON.VLV.	M	MINOR INTERNAL LEAKAGE	FO		
CV	VTO	ZTVE2D	VT	TURBINE STOP CON.VLV.	O	FAILURE TO OPERATE ON DEMAND	FD		
CV	VTP	ZTVE21	VT	TURBINE STOP CON.VLV.	P	TRANSFERS CLOSED DURING OPERATION	FO		
CV	VTT	ZTVE22	VT	TURBINE STOP CON.VLV.	T	TRANSFERS OPEN DURING OPERATION	FO		
CV	WCC	BPAOAD	WC	SW ECCS PP RM CLR CV (FO)	C	FAILS TO CLOSE ON 1ST DEMAND	FD		
CV	WCD	BPWCCD	WC	SW ECCS PP RM CLR CV (FO)	D	FAILS TO OPEN/CLOSE ON FURTHER DEMANDS	FD		
CV	WCF	ZTVAOD	WC	SW ECCS PP RM CLR CV (FO)	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
CV	WCL		WC	SW ECCS PP RM CLR CV (FO)	L	EXTERNAL LEAKAGE	FO	9	
CV	WCM	BTVAOM	WC	SW ECCS PP RM CLR CV (FO)	M	MINOR INTERNAL LEAKAGE	FO		
CV	WCO	BPVA1D	WC	SW ECCS PP RM CLR CV (FO)	O	FAILS TO OPEN ON 1ST DEMAND	FD		
CV	WCP	BPAOCP	WC	SW ECCS PP RM CLR CV (FO)	P	TRANSFERS CLOSED DURING OPERATION	FO		

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CV	WCT	BTAOCT	WC	SW ECCS PP RM CLR CV (FO)	T	TRANSFERS OPEN DURING OPERATION	FO		
DAMPR	BDD	ZTVCOD	BD	BACK DRAFT DAMPER	D	FAILS TO OPERATE ON DEMAND	FD		
DAMPR	BDT	ZTVCOP	BD	BACK DRAFT DAMPER	T	TRANSFERS CLOSED DURING OPERATION	FO		
DAMPR	DAT	ZTDHOT	DA	MANUAL DAMPER	T	TRANSFERS OPEN/CLOSED DURING OPERATION	FO		
DAMPR	FDI	ZTDHOT	FD	FIRE DAMPER	I	PREMATURE ACTIVATION	FO		
DAMPR	FQD	ZTVCOD	FQ	FUSIBLE LINK DAMPER	D	FAILS TO OPERATE ON DEMAND	FD		
DAMPR	FQT	ZTVCOP	FQ	FUSIBLE LINK DAMPER	T	FAILS DURING OPERATION	FO		
DAMPR	MDC	ZTDMOD	MD	MOTOR OPERATED DAMPER	C	FAILS TO CLOSE ON DEMAND	FD		
DAMPR	MDO	ZTDMOD	MD	MOTOR OPERATED DAMPER	O	FAILS TO OPEN ON DEMAND	FD		
DAMPR	MDP	ZTDMOT	MD	MOTOR OPERATED DAMPER	P	TRANSFERS CLOSED DURING OPERATION	FO		
DAMPR	MDQ	BTPMOQ	MD	MOTOR OPERATED DAMPER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
DAMPR	MDT	ZTDMOT	MD	MOTOR OPERATED DAMPER	T	TRANSFERS OPEN DURING OPERATION	FO		
DAMPR	POC	ZTDAOD	PO	PNEUM DAMPER (FAIL OPEN TYPE)	C	FAILS TO CLOSE ON DEMAND	FD		
DAMPR	POF	ZTVAOF	PO	PNEUM DAMPER (FAIL OPEN TYPE)	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
DAMPR	POL		PO	PNEUM DAMPER (FAIL OPEN TYPE)	L	EXTERNAL LEAKAGE	FO	9	
DAMPR	POO	ZTDAOD	PO	PNEUM DAMPER (FAIL OPEN TYPE)	O	FAILS TO OPEN ON DEMAND	FD		
DAMPR	POP	BPPO1P	PO	PNEUM DAMPER (FAIL OPEN TYPE)	P	TRANSFERS CLOSED DURING OPERATION	FO		
DAMPR	POT	ZTDAOT	PO	PNEUM DAMPER (FAIL OPEN TYPE)	T	TRANSFERS OPEN DURING OPERATION	FO		
DAMPR	PPC	ZTDAOD	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	C	FAILS TO CLOSE ON DEMAND	FD		
DAMPR	PPF	ZTVAOF	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		
DAMPR	PPL		PP	PNEUM DAMPER (FAIL CLOSE TYPE)	L	EXTERNAL LEAKAGE	FO	9	
DAMPR	PPO	ZTDAOD	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	O	FAILS TO OPEN ON DEMAND	FD		
DAMPR	PPP	ZTDAOT	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	P	TRANSFERS CLOSED DURING OPERATION	FO		
DAMPR	PPT	ZTDAOT	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	T	TRANSFERS OPEN DURING OPERATION	FO		
DISC	LKP	BTMBKR	LK	DISCONNECT SWITCH / LINK	P	TRANSFERS CLOSED DURING OPERATION	FO		
DISC	LKT	BPMBKR	LK	DISCONNECT SWITCH / LINK	T	TRANSFERS OPEN DURING OPERATION	FO		
DRY	ADB	ZTHXRB	AD	AIR DRYER (COMPRESSOR)	B	RUPTURES DURING OPERATION	FO		
DRY	ADP	ZTFA3P	AD	AIR DRYER (COMPRESSOR)	P	FAILS DURING OPERATION	FO		
DRY	ADQ	BTPMOQ	AD	AIR DRYER (COMPRESSOR)	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
DT	DTD	ZTSWPD	DT	DRAIN TRAP	D	FAILS TO OPERATE ON DEMAND	FD		
DT	DTL		DT	DRAIN TRAP	L	EXTERNAL LEAKAGE	FO	9	
DT	DTR	ZTVR2T	DT	DRAIN TRAP	R	SPURIOUS OPERATION	FO		
E/E	IIR	BTECMR	II	VOLTAGE/VOLTAGE ISOLATOR	R	FAILS DURING OPERATION	FO		
E/I	EIR	BTECMR	EI	VOLTAGE/CURRENT ISOLATOR	R	FAILS DURING OPERATION	FO		
EDG	DGD	BPDGSS	DG	EMERGENCY DIESEL GENERATOR	D	FAILS TO START	FD		
EDG	DGR	ZTDGS2	DG	EMERGENCY DIESEL GENERATOR	R	FAILS AFTER FIRST HOUR OF OPERATION	FO		
EDG	DGW	BPDGS1	DG	EMERGENCY DIESEL GENERATOR	W	FAILS TO RUN DURING FIRST HOUR OF OPERATION	FO		
EDG	EDD	BTDGNS	ED	SACM EMERG DIESEL GENERATOR	D	FAILS TO START	FD		
EDG	EDR	BTDGN2	ED	SACM EMERG DIESEL GENERATOR	R	FAILS TO RUN > 1 HOUR	FO		
EDG	EDW	BTDGN1	ED	SACM EMERG DIESEL GENERATOR	W	FAILS TO RUN < 1 HOUR	FO		
EHCV	CED	ZTVE1D	CE	EHC VALVE (EXCEPT TSV & TCV)	D	FAILURE TO OPERATE ON DEMAND	FD		
EHCV	CET	ZTVE1T	CE	EHC VALVE (EXCEPT TSV & TCV)	T	TRANSFERS OPEN/CLOSED DURING OPERATION	FO		
ELEV	EVQ	BTPMOQ	EV	ELEVATOR MOTOR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
EPP	EPL		EP	ENGINE DRIVEN PUMP	L	EXTERNAL LEAKAGE	FO	9	
EPP	EPR	BTEDPR	EP	ENGINE DRIVEN PUMP	R	FAILS TO RUN DURING OPERATION	FO		
EPP	EPS	BTEDPS	EP	ENGINE DRIVEN PUMP	S	FAILS TO START	FD		
ERV	IVD	BTSVID	IV	HALON ELECTROMAGNETIC REL VLV	D	FAILS TO OPERATE ON DEMAND	FD		
ERV	IVL		IV	HALON ELECTROMAGNETIC REL VLV	L	EXTERNAL LEAKAGE	FO	9	
ERV	IVT	BTSVIT	IV	HALON ELECTROMAGNETIC REL VLV	T	TRANSFERS OPEN/CLOSED DURING OPERATION	FO		
ERV	RPC	BPVR3C	RP	PORV	C	FAILS TO RESEAT ON DEMAND	FD		
ERV	RPL		RP	PORV	L	EXTERNAL LEAKAGE	FO	9	
ERV	RPO	BPVR3O	RP	PORV	O	FAILS TO OPEN ON DEMAND	FD		

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ERV	RPP	ZTVSOT	RP	PORV	P	TRANSFERS CLOSED DURING OPERATION	FO		
ERV	RPQ	BTPMOQ	RP	PORV	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
ERV	RPT	BPVR3T	RP	PORV	T	TRANSFERS OPEN DURING OPERATION	FO		
FAN	FHQ	BPPMOQ	FH	CHICKEN HOUSE TYPE FAN	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	FHR	BTCHFR	FH	CHICKEN HOUSE TYPE FAN	R	FAILS TO RUN DURING OPERATION	FO		
FAN	FHS	BTCHFS	FH	CHICKEN HOUSE TYPE FAN	S	FAILS TO START	FD		
FAN	VAQ	BTPMOQ	VA	FAN, NSR, NOT CNTMT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	VAR	BTVN9R	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	FO		
FAN	VAS	BTVN9S	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	FD		
FAN	VBQ	BTPMOQ	VB	FAN, NSR, CNTMT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	VBR	BTVN9R	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	FO		
FAN	VBS	BTVN9S	VB	FAN, NSR, CNTMT	S	FAILS TO START	FD		
FAN	VDQ	BPPMOQ	VD	FAN, SR, NOT CNTMT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	VDR	BPVN5R	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	FO		
FAN	VDS	BPVN5S	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	FD		
FAN	VGQ	BPPMOQ	VG	FAN, SR, CNTMT	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	VGR	BPVN8R	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	FO		
FAN	VGS	BPVN8S	VG	FAN, SR, CNTMT	S	FAILS TO START	FD		
FAN	VNQ	BTPMOQ	VN	ESFAS CABINET COOLING	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
FAN	VNR	BTVN9R	VN	ESFAS CABINET COOLING	R	FAILS TO RUN DURING OPERATION	FO		
FAN	VNS	BTVN9S	VN	ESFAS CABINET COOLING	S	FAILS TO START	FD		
FC	FCR	BPCONR	FC	FLOW CONTROLLER	R	FAILS DURING OPERATION	FO		
FCV	CVC	BPVA3D	CV	FLOW CONTROL VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
FCV	CVF	ZTVAOD	CV	FLOW CONTROL VALVE	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
FCV	CVL		CV	FLOW CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
FCV	CVM	BTVAOM	CV	FLOW CONTROL VALVE	M	MINOR INTERNAL LEAKAGE	FO		
FCV	CVO	BPVA3D	CV	FLOW CONTROL VALVE	O	FAILS TO OPEN ON DEMAND	FD		
FCV	CVP	BTAOCP	CV	FLOW CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
FCV	CVT	BTAOCT	CV	FLOW CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
FD	FDI	ZTDHOT	FD	FIRE DAMPER	I	PREMATURE ACTIVATION	FO		
FE	FBL		FB	FLOW ELEMENT (> 3 INCHES)	L	EXTERNAL LEAKAGE	FO	9	
FE	FBR	ZTPP1B	FB	FLOW ELEMENT (> 3 INCHES)	R	PLUGS DURING OPERATION	FO		
FE	FEL		FE	FLOW ELEMENT (< 3 INCHES)	L	EXTERNAL LEAKAGE	FO	9	
FE	FER	ZTPP2B	FE	FLOW ELEMENT (< 3 INCHES)	R	PLUGS DURING OPERATION	FO		
FI	GER	BTINDR	GE	FLOW INDICA. ELECTRICAL	R	FAILS DURING OPERATION	FO		
FI	GMR	BTINDR	GM	FLOW INDICA. MECHANICAL	R	FAILS DURING OPERATION	FO		
FIC	FCR	BPCONR	FC	FLOW INDICATOR CONTROLLER	R	FAILS DURING OPERATION	FO		
FL	FIB	BTACCB	FI	IA PREFILTER OR AFTERFILTER	B	RUPTURES DURING OPERATION	FO		
FL	FIP	ZTFL1P	FI	IA PREFILTER OR AFTERFILTER	P	PLUGS DURING OPERATION	FO		
FL	FLL		FL	AIR FILTER	L	EXTERNAL LEAKAGE	FO	9	
FL	FLP	ZTFA1P	FL	AIR FILTER	P	PLUGS DURING OPERATION	FO		
FL	FOL		FO	FUEL OIL FILTER	L	EXTERNAL LEAKAGE	FO	9	
FL	FOP	ZTFA2P	FO	FUEL OIL FILTER	P	PLUGS DURING OPERATION	FO		
FL	FVL		FV	VENTILATION FILTER	L	EXTERNAL LEAKAGE	FO	9	
FL	FVP	ZTFL1P	FV	VENTILATION FILTER	P	PLUGS DURING OPERATION	FO		
FLMAR	FMR	ZTPP2B	FM	FLAME ARRESTOR	R	PLUGS DURING OPERATION	FO		
FO	FBL		FB	FLOW ORIFICE (> 3 INCHES)	L	EXTERNAL LEAKAGE	FO	9	
FO	FBR	ZTPP1B	FB	FLOW ORIFICE (> 3 INCHES)	R	PLUGS DURING OPERATION	FO		
FO	FEL		FE	FLOW ORIFICE (< 3 INCHES)	L	EXTERNAL LEAKAGE	FO	9	
FO	FER	ZTPP2B	FE	FLOW ORIFICE (< 3 INCHES)	R	PLUGS DURING OPERATION	FO		
FS	PSD	ZTSWPD	PS	FLOW SWITCH	D	FAILS TO OPERATE ON DEMAND	FD		
FS	PSR	ZTCB1T	PS	FLOW SWITCH	R	FAILS DURING OPERATION	FO	3	

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
FT	FTL		FT	FLOW TRANSMITTER	L	EXTERNAL LEAKAGE	FO	9	
FT	FTR	ZTTRFR	FT	FLOW TRANSMITTER	R	FAILS DURING OPERATION	FO		
FUSE	FUR	ZTFU1R	FU	FUSE	R	FAILS DURING OPERATION	FO		
FY	FAR	BTCONR	FA	FLOW RELAY	R	FAILS DURING OPERATION	FO		
FY	FYR	BTECMR	FY	SQUARE ROOT CONVERTER	R	FAILS DURING OPERATION	FO		
FY	RYD	ZTRL1D	RY	FLOW DEVICE (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
FY	RYE	BPRL1D	RY	FLOW DEVICE (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		
FY	RYP	BPRL1R	RY	FLOW DEVICE (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
FY	RYT	ZTRL1R	RY	FLOW DEVICE (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
GEN	HGD	BTHGND	HG	PORTABLE GENERATOR (<10KW)	D	FAILS TO START	FD		
GEN	HGR	BTHGNR	HG	PORTABLE GENERATOR (<10KW)	R	FAILS TO RUN DURING OPERATION	FO		
H2R	HRQ	BPHTRQ	HR	HYDROGEN RECOMBINER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
H2R	HRR	BPH2RR	HR	HYDROGEN RECOMBINER	R	FAILS DURING OPERATION	FO		
HC	HSD	BPHDSD	HS	HAND CONTROLLER	D	FAILS ON DEMAND	FD		
HC	HST	BPHDST	HS	HAND CONTROLLER	T	FAILS DURING OPERATION	FO		
HIC	HSD	BPHDSD	HS	HAND INDIC. CONTRLER	D	FAILS ON DEMAND	FD		
HIC	HST	BPHDST	HS	HAND INDIC. CONTRLER	T	FAILS DURING OPERATION	FO		
HS	HSD	BPHDSD	HS	HAND SWITCH	D	FAILS ON DEMAND	FD		
HS	HST	BPHDST	HS	HAND SWITCH	T	FAILS DURING OPERATION	FO		
HTR	HTQ	BTHTRQ	HT	GENERAL HEATER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
HTR	HTR	BTHTRR	HT	GENERAL HEATER	R	FAILS DURING OPERATION	FO		
HV	HVC	BPVHOC	HV	HAND VALVE	C	CATASTROPHIC FAILURE	FO		
HV	HVL		HV	HAND VALVE	L	EXTERNAL LEAKAGE	FO	9	
HV	HVP	BPVHOT	HV	HAND VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
HV	HVT	BPVHOT	HV	HAND VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
HV	HWC	BPVHOC	HW	SRW OR CCW HAND VALVE	C	CATASTROPHIC FAILURE	FO		
HV	HWL		HW	SRW OR CCW HAND VALVE	L	EXTERNAL LEAKAGE	FO	9	
HV	HWP	BPVHOT	HW	SRW OR CCW HAND VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
HV	HWT	BPVHST	HW	SRW OR CCW HAND VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
HX	ATB	ZTHXRB	AT	COMPRESSED AIR COOLERS	B	MAJOR LEAKAGE DURING OPERATION	FO		
HX	ATP	BTHEXP	AT	COMPRESSED AIR COOLERS	P	PLUGS DURING OPERATION	FO		
HX	ATR	BPIAFL	AT	COMPRESSED AIR COOLERS	R	CATASTROPHIC RUPTURE	FO		
HX	HXB	ZTHXRB	HX	HEAT EXCHANGER	B	MAJOR LEAKAGE DURING OPERATION	FO		
HX	HXP	BPHEXP	HX	HEAT EXCHANGER	P	PLUGS DURING OPERATION	FO		
I/E	IER	BTECMR	IE	CURRENT/VOLTAGE CONVERTER	R	FAILURE DURING OPERATION	FO		
I/I	IIR	BTECMR	II	ISOLATOR	R	FAILS DURING OPERATION	FO		
I/P	IPL		IP	CURRENT/PNEUMATIC	L	EXTERNAL LEAKAGE	FO	9	
I/P	IPR	BTCONR	IP	CURRENT/PNEUMATIC	R	FAILS DURING OPERATION	FO		
I/P	IZD	BTSVID	IZ	CONTROL VALVE I/P CONVERTER	D	FAILS TO OPERATE ON DEMAND	FD		
I/P	IZL		IZ	CONTROL VALVE I/P CONVERTER	L	EXTERNAL LEAKAGE	FO	9	
I/P	IZR	BTSVIT	IZ	CONTROL VALVE I/P CONVERTER	R	FAILS DURING OPERATION	FO		
INV	INR	BPINVR	IN	INVERTER	R	FAILS DURING OPERATION	FO		
LC	LCR	BTCONR	LC	LEVEL CONTROLLER	R	FAILS DURING OPERATION	FO		
LI	GER	BTINDR	GE	LEVEL INDICATOR (ELECTRICAL)	R	FAILS DURING OPERATION	FO		
LI	GMR	BTINDR	GM	LEVEL INDICATOR (MECHANICAL)	R	FAILS DURING OPERATION	FO		
LIC	LCR	BTCONR	LC	LEVEL INDICATOR CONTROLLER	R	FAILS DURING OPERATION	FO		
LK	LKP	BTMBKR	LK	DISCONNECT SWITCH / LINK	P	TRANSFERS CLOSED DURING OPERATION	FO		
LK	LKT	BPMBKR	LK	DISCONNECT SWITCH / LINK	T	TRANSFERS OPEN DURING OPERATION	FO		
LR	RCR	BTRECR	RC	LEVEL RECORDER	R	FAILS DURING OPERATION	FO		
LS	LSD	ZTSWPD	LS	LEVEL SWITCH	D	FAILS ON DEMAND	FD		
LS	LSR	BPLSRT	LS	LEVEL SWITCH	R	OPERATES SPURIOUSLY	FO	3	
LT	LTL		LT	LEVEL TRANSMITTER	L	EXTERNAL LEAKAGE	FO	9	

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LT	LTR	BPTRLR	LT	LEVEL TRANSMITTER	R	OPERATES SPURIOUSLY	FO		
LV	LVP	ZTFL1P	LV	VENTILATION LOUVER	P	PLUGS DURING OPERATION	FO		
LY	RYD	ZTRL1D	RY	LEVEL DEVICE (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
LY	RYE	BPRL1D	RY	LEVEL DEVICE (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		
LY	RYP	BPRL1R	RY	LEVEL DEVICE (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
LY	RYT	ZTRL1R	RY	LEVEL DEVICE (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
LY	SMR	ZTSMDR	SM	SIGNAL MODIFIER	R	FAILS DURING OPERATION	FO		
MCC	BUQ	BPECMQ	BU	MOTOR CONTROL CENTER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
MCC	BUR	BPBS1R	BU	MOTOR CONTROL CENTER	R	FAILS DURING OPERATION	FO		
MG	MGR	BPMGSR	MG	MOTOR GENERATOR	R	FAILS DURING OPERATION	FO		
MIXER	MXQ	BTPMOQ	MX	MIXER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
MOV	MVC	BPVMOD	MV	MOTOR OPERATED VLV.	C	FAILS TO CLOSE ON DEMAND	FD		
MOV	MVL		MV	MOTOR OPERATED VLV.	L	EXTERNAL LEAKAGE	FO	9	
MOV	MVO	BPVMOD	MV	MOTOR OPERATED VLV.	O	FAILS TO OPEN ON DEMAND	FD		
MOV	MVP	BPVMOT	MV	MOTOR OPERATED VLV.	P	TRANSFERS CLOSED DURING OPERATION	FO		
MOV	MVQ	BPPMOQ	MV	MOTOR OPERATED VLV.	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
MOV	MVT	BPVMOT	MV	MOTOR OPERATED VLV.	T	TRANSFERS OPEN DURING OPERATION	FO		
MOV	MVX	ZTVMOE	MV	MOTOR OPERATED VLV.	X	FAILS TO CLOSE/INDICATES CLOSED	FD		
MS	MSL		MS	MOISTURE SEPARATOR	L	EXTERNAL LEAKAGE	FO	9	
MS	MSP	BT0MSP	MS	MOISTURE SEPARATOR	P	PLUGS DURING OPERATION	FO		
MS	MSR	BT0MSR	MS	MOISTURE SEPARATOR	R	FAILS DURING OPERATION	FO		
NZL	NZP	ZTSPNP	NZ	CONTAINM. SPRAY NOZZLE	P	PLUGS DURING OPERATION	FO		
OPAMP	OAD	ZTSWBD	OA	OPERATIONAL AMPLIFIER	D	FAILS ON DEMAND	FD	11	
OPAMP	OAR	ZTSWBI	OA	OPERATIONAL AMPLIFIER	R	FAILS DURING OPERATION	FO	11	
PC	PCL		PC	PRESSURE CONTROLLER	L	EXTERNAL LEAKAGE	FO	9	
PC	PCR	BTCONR	PC	PRESSURE CONTROLLER	R	FAILS DURING OPERATION	FO		
PCV	CVC	BPVA3D	CV	PRESSURE CONTROL VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
PCV	CVF	ZTVAOD	CV	PRESSURE CONTROL VALVE	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
PCV	CVL		CV	PRESSURE CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
PCV	CVM	BTVAOM	CV	PRESSURE CONTROL VALVE	M	MINOR INTERNAL LEAKAGE	FO		
PCV	CVO	BPVA3D	CV	PRESSURE CONTROL VALVE	O	FAILS TO OPEN ON DEMAND	FD		
PCV	CVP	BTAOCP	CV	PRESSURE CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
PCV	CVT	BTAOCT	CV	PRESSURE CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
PCV	PCL		PC	PRESSURE CONTROLLER	L	EXTERNAL LEAKAGE	FO	9	
PCV	PCR	BTCONR	PC	PRESSURE CONTROLLER	R	FAILS DURING OPERATION	FO		
PDC	PCL		PC	DIFFERENTIAL PRESSURE CNTL	L	EXTERNAL LEAKAGE	FO	9	
PDC	PCR	BTCONR	PC	DIFFERENTIAL PRESSURE CNTL	R	FAILS DURING OPERATION	FO		
PDI	GER	BTINDR	GE	PRES.DIFF.INDIC.(ELEC)	R	FAILS DURING OPERATION	FO		
PDI	GMR	BTINDR	GM	PRES.DIFF.INDIC.(MECH)	R	FAILS DURING OPERATION	FO		
PDIC	PCL		PC	PRESSURE DIFF INDIC CONTROLLER	L	EXTERNAL LEAKAGE	FO	9	
PDIC	PCR	BTCONR	PC	PRESSURE DIFF INDIC CONTROLLER	R	FAILS DURING OPERATION	FO		
PI	GER	BTINDR	GE	PRESSURE INDIC. (ELEC)	R	FAILS DURING OPERATION	FO		
PI	GMR	BTINDR	GM	PRESSURE INDIC. (MECH)	R	FAILS DURING OPERATION	FO		
PIC	PCL		PC	PRESSURE INDICATING CONTROLLER	L	EXTERNAL LEAKAGE	FO	9	
PIC	PCR	BTCONR	PC	PRESSURE INDICATING CONTROLLER	R	FAILS DURING OPERATION	FO		
PIPE	P1B	ZTPP1B	P1	LARGE PIPE BREAK PER SECTION	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P2B	ZTPP2B	P2	SMALL PIPE BREAK PER SECTION	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P3B	BTSP1B	P3	SMALL PIPE BREAK PER PIPE TAP	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P4B	BTSP2B	P4	LARGE PIPE BREAK PER FT	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P5B	BTPIPE	P5	WTR SYS PIPE BREAK FREQUENCY	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P6B	BPIAPB	P6	IA SYS PIPE BREAK FREQUENCY	B	PIPE BREAK DURING OPERATION	FO		
PIPE	P7B	BPDSAP	P7	DSA SYS PIPE BREAK FREQUENCY	B	PIPE BREAK DURING OPERATION	FO		

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PIPE	PGB	BTCHDB	PG	SW COMM HDR PIPE RUPTURE / HR	B	PIPE BREAK DURING OPERATION	FO		
PNL	BUQ	BPECMQ	BU	ELECTRICAL PANEL	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PNL	BUR	BPBS1R	BU	ELECTRICAL PANEL	R	FAILS DURING OPERATION	FO		
PO	POC	ZTDAOD	PO	PNEUM DAMPER (FAIL OPEN TYPE)	C	FAILS TO CLOSE ON DEMAND	FD		
PO	POF	ZTVAOF	PO	PNEUM DAMPER (FAIL OPEN TYPE)	F	FAILS TO OPEN ON LOSS OF SUPPORT SYSTEM	FD		
PO	POL		PO	PNEUM DAMPER (FAIL OPEN TYPE)	L	EXTERNAL LEAKAGE	FO	9	
PO	POO	ZTDAOD	PO	PNEUM DAMPER (FAIL OPEN TYPE)	O	FAILS TO OPEN ON DEMAND	FD		
PO	POP	BPPO1P	PO	PNEUM DAMPER (FAIL OPEN TYPE)	P	TRANSFERS CLOSED DURING OPERATION	FO		
PO	POT	ZTDAOT	PO	PNEUM DAMPER (FAIL OPEN TYPE)	T	TRANSFERS OPEN DURING OPERATION	FO		
PO	PPC	ZTDAOD	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	C	FAILS TO CLOSE ON DEMAND	FD		
PO	PPF	ZTVAOF	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	F	FAILS TO CLOSE ON LOSS OF SUPPORT SYSTEM	FD		
PO	PPL		PP	PNEUM DAMPER (FAIL CLOSE TYPE)	L	EXTERNAL LEAKAGE	FO	9	
PO	PPO	ZTDAOD	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	O	FAILS TO OPEN ON DEMAND	FD		
PO	PPP	ZTDAOT	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	P	TRANSFERS CLOSED DURING OPERATION	FO		
PO	PPT	ZTDAOT	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	T	TRANSFERS OPEN DURING OPERATION	FO		
POS	PXI	BTPOSI	PX	POSITIONER	I	OPERATIONAL FAILURE DURING IDLE TIME	FI		
POS	PXL		PX	POSITIONER	L	EXTERNAL LEAKAGE	FO	9	
POS	PXR	BTPOSR	PX	POSITIONER	R	FAILS DURING OPERATION	FO		
PR	RCR	BTRECR	RC	PRESSURE RECORDER	R	FAILS DURING OPERATION	FO		
PS	KPR	BPPSDR	KP	DSA CYCLED PRESSURE SWITCH	R	FAILS DURING OPERATION	FO		
PS	PSD	ZTSWPD	PS	PRESSURE SWITCH	D	FAILS TO OPERATE ON DEMAND	FD		
PS	PSR	ZTCB1T	PS	PRESSURE SWITCH	R	FAILS DURING OPERATION	FO	3	
PT	PTL		PT	PRESSURE TRANS.	L	EXTERNAL LEAKAGE	FO	9	
PT	PTR	BPTRPR	PT	PRESSURE TRANS.	R	FAILS DURING OPERATION	FO		
PUMP	APL		AP	MSIV HYDRAULIC AIR PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	APR	BTAOPR	AP	MSIV HYDRAULIC AIR PUMP	R	FAILS DURING OPERATION	FO		
PUMP	ARL		AR	AFW PUMP-NOT INCLUDING DRIVER	L	EXTERNAL LEAKAGE	FO	9	
PUMP	ARR	BPAFRR	AR	AFW PUMP-NOT INCLUDING DRIVER	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	ARS	BPAFRS	AR	AFW PUMP-NOT INCLUDING DRIVER	S	FAILS TO START	FD		
PUMP	AWL		AW	AFW TURBINE DRIVEN PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	AWR	BPAFWR	AW	AFW TURBINE DRIVEN PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	AWS	BPAFWS	AW	AFW TURBINE DRIVEN PUMP	S	FAILS TO START	FD		
PUMP	DPL		DP	DEMINERALIZED WATER PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	DPQ	BPPMOQ	DP	DEMINERALIZED WATER PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	DPR	BPNDPR	DP	DEMINERALIZED WATER PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	DPS	BTNDPS	DP	DEMINERALIZED WATER PUMP	S	FAILS TO START	FD		
PUMP	MAL		MA	4KV STANDBY PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MAQ	BPPMOQ	MA	4KV STANDBY PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MAR	BPMSAR	MA	4KV STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MAS	BPMSAS	MA	4KV STANDBY PUMP	S	FAILS TO START	FD		
PUMP	MBL		MB	480VAC STANDBY PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MBQ	BPPMOQ	MB	480VAC STANDBY PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MBR	BPMSBR	MB	480VAC STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MBS	BPMSBS	MB	480VAC STANDBY PUMP	S	FAILS TO START	FD		
PUMP	MCL		MC	CHARGING PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MCQ	BPPMOQ	MC	CHARGING PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MCR	BPMOCR	MC	CHARGING PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MCS	BPMOCS	MC	CHARGING PUMP	S	FAILS TO START	FD		
PUMP	MFL		MF	FUEL OIL TRANSFER PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MFQ	BTPMOQ	MF	FUEL OIL TRANSFER PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MFR	ZTPMSR	MF	FUEL OIL TRANSFER PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MFS	BPFTPS	MF	FUEL OIL TRANSFER PUMP	S	FAILS TO START	FD		

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PUMP	MHL		MH	REACTOR COOLANT PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MHQ	BTPMOQ	MH	REACTOR COOLANT PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MHR	ZTPMOR	MH	REACTOR COOLANT PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MHS	ZTPMOS	MH	REACTOR COOLANT PUMP	S	FAILS TO START	FD		
PUMP	MML		MM	NORM OPERATING PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MMQ	BTPMOQ	MM	NORM OPERATING PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MMR	ZTPMOR	MM	NORM OPERATING PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MMS	ZTPMOS	MM	NORM OPERATING PUMP	S	FAILS TO START	FD		
PUMP	MNL		MN	STEAM GENERATOR FEED PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MNR	BPMFWR	MN	STEAM GENERATOR FEED PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MNS	BPMFWS	MN	STEAM GENERATOR FEED PUMP	S	FAILS TO START	FD		
PUMP	MPL		MP	STANDBY PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MPQ	BTPMOQ	MP	STANDBY PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MPR	ZTPMSR	MP	STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MPS	ZTPMSS	MP	STANDBY PUMP	S	FAILS TO START	FD		
PUMP	MWL		MW	4KV SR NORMALLY OPER PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MWQ	BPPMOQ	MW	4KV SR NORMALLY OPER PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MWR	BPMO4R	MW	4KV SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MWS	BPMO4S	MW	4KV SR NORMALLY OPER PUMP	S	FAILS TO START	FD		
PUMP	MYL		MY	4KV NSR NORMALLY OPER PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MYQ	BPPMOQ	MY	4KV NSR NORMALLY OPER PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MYR	BPMO5R	MY	4KV NSR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MYS	BPMO5S	MY	4KV NSR NORMALLY OPER PUMP	S	FAILS TO START	FD		
PUMP	MZL		MZ	480VAC SR NORMALLY OPER PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	MZQ	BPPMOQ	MZ	480VAC SR NORMALLY OPER PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	MZR	BPMO8R	MZ	480VAC SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	MZS	BPMO8S	MZ	480VAC SR NORMALLY OPER PUMP	S	FAILS TO START	FD		
PUMP	NDL		ND	COMPR OIL PUMP (NO ELEC DRIV)	L	EXTERNAL LEAKAGE	FO	9	
PUMP	NDR	BTPMPR	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS DURING OPERATION	FO		
PUMP	NDS	BTPMPS	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	FD		
PUMP	PFL		PF	MOTOR DRIVEN FIRE PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	PFQ	BPPMOQ	PF	MOTOR DRIVEN FIRE PUMP	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
PUMP	PFR	BPFPER	PF	MOTOR DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	PFS	BPFPES	PF	MOTOR DRIVEN FIRE PUMP	S	FAILS TO START	FD		
PUMP	PHL		PH	DIESEL DRIVEN FIRE PUMP	L	EXTERNAL LEAKAGE	FO	9	
PUMP	PHR	BPFPDR	PH	DIESEL DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	FO		
PUMP	PHS	BPFPDS	PH	DIESEL DRIVEN FIRE PUMP	S	FAILS TO START	FD		
PY	PCL		PC	PRESSURE-TO-PRESSURE RELAY	L	EXTERNAL LEAKAGE	FO	9	
PY	PCR	BTCONR	PC	PRESSURE-TO-PRESSURE RELAY	R	FAILS DURING OPERATION	FO		
PY	RYD	ZTRL1D	RY	PRESSURE CONVERTER (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
PY	RYE	BPRL1D	RY	PRESSURE CONVERTER (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		
PY	RYP	BPRL1R	RY	PRESSURE CONVERTER (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
PY	RYT	ZTRL1R	RY	PRESSURE CONVERTER (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
PY	SMR	ZTSMDR	SM	SIGNAL MODIFIER	R	FAILS DURING OPERATION	FO		
RV	RBC	BTAOBC	RB	COMPR RELIEF VALVE UNLOADER	C	FAILS TO CLOSE ON DEMAND	FD		
RV	RBL		RB	COMPR RELIEF VALVE UNLOADER	L	EXTERNAL LEAKAGE	FO	9	
RV	RBO	BTAOBO	RB	COMPR RELIEF VALVE UNLOADER	O	FAILS TO OPEN ON DEMAND	FD		
RV	RBP	BTAOBP	RB	COMPR RELIEF VALVE UNLOADER	P	TRANSFERS CLOSED DURING OPERATION	FO		
RV	RBT	BTAOBT	RB	COMPR RELIEF VALVE UNLOADER	T	TRANSFERS OPEN DURING OPERATION	FO		
RV	RRL		RR	SAFETY RELIEF VLV.	L	EXTERNAL LEAKAGE	FO	9	
RV	RRO	ZTVR1O	RR	SAFETY RELIEF VLV.	O	FAILS TO OPEN ON DEMAND	FD		
RV	RRS	ZTVR1S	RR	SAFETY RELIEF VLV.	S	FAILS TO RESEAT ON DEMAND	FD		

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RV	RRT	ZTVR2T	RR	SAFETY RELIEF VLV.	T	PREMATURE OPEN	FO		
RV	RRW	ZTVR1W	RR	SAFETY RELIEF VLV.	W	FAILS TO RESEAT AFTER WATER RELIEF	FD		
RV	RTC	BTAOBC	RT	MODULATING RELIEF VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
RV	RTL		RT	MODULATING RELIEF VALVE	L	EXTERNAL LEAKAGE	FO	9	
RV	RTO	BTAOBO	RT	MODULATING RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	FD		
RV	RTP	BTAOBP	RT	MODULATING RELIEF VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
RV	RTT	BTAOBT	RT	MODULATING RELIEF VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
RV	RVL		RV	RELIEF VALVE	L	EXTERNAL LEAKAGE	FO	9	
RV	RVO	ZTVR2O	RV	RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	FD		
RV	RVS	ZTVR1S	RV	RELIEF VALVE	S	FAILS TO RESEAT AFTER STEAM RELIEF	FD	5	
RV	RVT	ZTVR2T	RV	RELIEF VALVE	T	PREMATURE ACTIVATION	FO		
RV	RVW	ZTVR2O	RV	RELIEF VALVE	W	FAILS TO RESEAT AFTER WATER RELIEF	FD	10	
RV	RWL		RW	SRW/CC RELIEF VALVE	L	EXTERNAL LEAKAGE	FO	9	
RV	RWO	ZTVR2O	RW	SRW/CC RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	FD		
RV	RWT	BPVRWT	RW	SRW/CC RELIEF VALVE	T	PREMATURE ACTIVATION	FO		
RV	RWW	ZTVR2O	RW	SRW/CC RELIEF VALVE	W	FAILS TO RESEAT AFTER WATER RELIEF	FD	10	
RY	RYD	ZTRL1D	RY	RELAY	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
RY	RYE	BPRL1D	RY	RELAY	E	FAILS TO ENERGIZE ON DEMAND	FD		
RY	RYP	BPRL1R	RY	RELAY	P	DE-ENERGIZES WITHOUT DEMAND	FO		
RY	RYT	ZTRL1R	RY	RELAY	T	ENERGIZES WITHOUT DEMAND	FO		
SCN	SCP	ZTSC1P	SC	TRAVELING SCREENS	P	PLUGS DURING OPERATION	FO		
SENSR	SRS	BTSENR	SR	SENSOR	S	SPURIOUS OPERATION	FO		
SEQ	SQD	ZTSEQD	SQ	SEQUENCER	D	FAILS ON DEMAND	FD		
SEQ	SQT	ZTCB1T	SQ	SEQUENCER	T	PREMATURE ACTIVATION	FO	6	
SUMP	SXR	ZTRSCP	SX	CONTAINMENT SUMP	R	PLUGS DURING OPERATION	FO		
SV	FSC	BPFOSC	FS	DFO CYCLED SOLENOID VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
SV	FSL		FS	DFO CYCLED SOLENOID VALVE	L	EXTERNAL LEAKAGE	FO	9	
SV	FSO	BPFOSO	FS	DFO CYCLED SOLENOID VALVE	O	FAILS TO OPEN ON DEMAND	FD		
SV	FSP	ZTVSOT	FS	DFO CYCLED SOLENOID VALVE	P	DE-ENERGIZES WITHOUT DEMAND	FO		
SV	FST	ZTVSOT	FS	DFO CYCLED SOLENOID VALVE	T	ENERGIZES WITHOUT DEMAND	FO		
SV	IVD	BTSVID	IV	CONTROL VALVE SOLENOID	D	FAILS TO OPERATE ON DEMAND	FD		
SV	IVL		IV	CONTROL VALVE SOLENOID	L	EXTERNAL LEAKAGE	FO	9	
SV	IVT	BTSVIT	IV	CONTROL VALVE SOLENOID	T	TRANSFERS OPEN/CLOSED DURING OPERATION	FO		
SV	SVD	ZTVSOD	SV	SOLENOID VALVE	D	FAILS ON DEMAND	FD		
SV	SVL		SV	SOLENOID VALVE	L	EXTERNAL LEAKAGE	FO	9	
SV	SVP	ZTVSOT	SV	SOLENOID VALVE	P	DE-ENERGIZES WITHOUT DEMAND	FO		
SV	SVT	ZTVSOT	SV	SOLENOID VALVE	T	ENERGIZES WITHOUT DEMAND	FO		
TC	TCQ	BTECMQ	TC	TEMPERATURE CONTROLLER	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TC	TCR	BPCTCR	TC	TEMPERATURE CONTROLLER	R	FAILS DURING OPERATION	FO		
TCV	C7C	BTAOBC	C7	TCV (NOT BUTTERFLY & NO SUPP)	C	FAILS TO CLOSE ON DEMAND	FD		
TCV	C7L		C7	TCV (NOT BUTTERFLY & NO SUPP)	L	EXTERNAL LEAKAGE	FO	9	
TCV	C7O	BTAOBO	C7	TCV (NOT BUTTERFLY & NO SUPP)	O	FAILS TO OPEN ON DEMAND	FD		
TCV	C7P	BTAOBP	C7	TCV (NOT BUTTERFLY & NO SUPP)	P	TRANSFERS CLOSED DURING OPERATION	FO		
TCV	C7T	BTAOBT	C7	TCV (NOT BUTTERFLY & NO SUPP)	T	TRANSFERS OPEN DURING OPERATION	FO		
TCV	CPL		CP	TCV (FAILS OPEN ON LOS)	L	EXTERNAL LEAKAGE	FO	9	
TCV	CPP	BPVTCT	CP	TCV (FAILS OPEN ON LOS)	P	TRANSFERS CLOSED DURING OPERATION	FO		
TCV	CPR	BTCONR	CP	TCV (FAILS OPEN ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	FO		
TCV	CPT	BTVTCP	CP	TCV (FAILS OPEN ON LOS)	T	TRANSFERS OPEN DURING OPERATION	FO		
TCV	CTL		CT	TCV (FAILS CLOSED ON LOS)	L	EXTERNAL LEAKAGE	FO	9	
TCV	CTP	BTVTCP	CT	TCV (FAILS CLOSED ON LOS)	P	TRANSFERS CLOSED DURING OPERATION	FO		
TCV	CTR	BTCONR	CT	TCV (FAILS CLOSED ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	FO		
TCV	CTT	BPVTCT	CT	TCV (FAILS CLOSED ON LOS)	T	TRANSFERS OPEN DURING OPERATION	FO		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
TCV	CUC	ZTVTCD	CU	BUTTERFLY TEMP CONTROL VALVE	C	FAILS TO CLOSE ON DEMAND	FD		
TCV	CUF	ZTVTCF	CU	BUTTERFLY TEMP CONTROL VALVE	F	FAILS TO GO TO FAILED POSITION ON LOSS OF SUP	FD		
TCV	CUL		CU	BUTTERFLY TEMP CONTROL VALVE	L	EXTERNAL LEAKAGE	FO	9	
TCV	CUO	ZTVTCD	CU	BUTTERFLY TEMP CONTROL VALVE	O	FAILS TO OPEN ON DEMAND	FD		
TCV	CUP	ZTVTCT	CU	BUTTERFLY TEMP CONTROL VALVE	P	TRANSFERS CLOSED DURING OPERATION	FO		
TCV	CUT	ZTVTCT	CU	BUTTERFLY TEMP CONTROL VALVE	T	TRANSFERS OPEN DURING OPERATION	FO		
TCV	TVL		TV	A/C UNIT THERMAL EXPANSION VLV	L	EXTERNAL LEAKAGE	FO	9	
TCV	TVP	BTTXVP	TV	A/C UNIT THERMAL EXPANSION VLV	P	TRANSFERS CLOSED DURING OPERATION	FO		
TCV	TVR	BTTXVR	TV	A/C UNIT THERMAL EXPANSION VLV	R	FAILS DURING OPERATION	FO		
TCV	TVT	BTTXVT	TV	A/C UNIT THERMAL EXPANSION VLV	T	TRANSFERS OPEN DURING OPERATION	FO		
TE	TEL		TE	TEMPERATURE ELEMENT	L	EXTERNAL LEAKAGE	FO	9	
TE	TER	BTTMER	TE	TEMPERATURE ELEMENT	R	FAILS DURING OPERATION	FO		
TI	GER	BTINDR	GE	TEMPERATURE INDICATOR (ELECT)	R	FAILS DURING OPERATION	FO		
TI	GMR	BTINDR	GM	TEMPERATURE INDICATOR (MECH)	R	FAILS DURING OPERATION	FO		
TIC	TCQ	BTECMQ	TC	TEMPERATURE INDICATING CNTR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TIC	TCR	BPCTCR	TC	TEMPERATURE INDICATING CNTR	R	FAILS DURING OPERATION	FO		
TK	TKB	BPTK1B	TK	TANK	B	RUPTURES DURING OPERATION	FO		
TLM	TLD	ZTLC1D	TL	TRIP LOGIC MODULE	D	FAILURE TO TRIP ON DEMAND	FD		
TLM	TLR	ZTLC1R	TL	TRIP LOGIC MODULE	R	FAILS DURING OPERATION	FO		
TR	RCR	BTRECR	RC	TEMPERATURE RECORDER	R	FAILS DURING OPERATION	FO		
TS	TSD	ZTSWPD	TS	TEMPERATURE SWITCH	D	FAILS TO OPERATE ON DEMAND	FD	7	
TS	TSR	BPTSRR	TS	TEMPERATURE SWITCH	R	FAILS DURING OPERATION	FO	3	
TT	TTL		TT	TEMPERATURE TRANSMITTER	L	EXTERNAL LEAKAGE	FO	9	
TT	TTR	ZTTRLR	TT	TEMPERATURE TRANSMITTER	R	FAILS DURING OPERATION	FO	8	
TX	TMQ	BTECMQ	TM	TRANSFORMER/480V TO 120V	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TX	TMR	ZTXR3R	TM	TRANSFORMER/480V TO 120V	R	FAILS DURING OPERATION	FO		
TX	TNQ	BPECMQ	TN	TRANSFORMER/4.16KV TO 480V	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TX	TNR	BPXR2R	TN	TRANSFORMER/4.16KV TO 480V	R	FAILS DURING OPERATION	FO		
TX	TRR	ZTXR1R	TR	TRANSFORMER/GENERAL	R	FAILS DURING OPERATION	FO		
TX	TXQ	BPECMQ	TX	TRANSFORMER/13KV TO 4KV	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TX	TXR	BPXR3R	TX	TRANSFORMER/13KV TO 4KV	R	FAILS DURING OPERATION	FO		
TX	TYQ	BTECMQ	TY	TRANSFORMER/500KV TO 13KV	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
TX	TYR	BTXR5R	TY	TRANSFORMER/500KV TO 13KV	R	FAILS DURING OPERATION	FO		
TY	RYD	ZTRL1D	RY	TEMPERATURE DEVICE (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
TY	RYE	BPRL1D	RY	TEMPERATURE DEVICE (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		
TY	RYP	BPRL1R	RY	TEMPERATURE DEVICE (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
TY	RYT	ZTRL1R	RY	TEMPERATURE DEVICE (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
TY	SMR	ZTSMDR	SM	SIGNAL MODIFIER	R	FAILS DURING OPERATION	FO		
VIA	ALD	BTALMD	AL	VIBRATION INDI. ALARM	D	FAILS ON DEMAND	FD		
VIA	ALT	BTALMT	AL	VIBRATION INDI. ALARM	T	SPURIOUS OPERATION	FO		
X	SPR	BPPS1R	SP	POWER SUPPLY 5 OR 24 VDC (ESFAS)	R	FAILS DURING OPERATION	FO		
X	X1R	ZTPS1R	X1	POWER SUPPLY	R	FAILS DURING OPERATION	FO		
X	X2R	ZTPSHR	X2	POWER SUPPLY 120VDC (ESFAS)	R	FAILS DURING OPERATION	FO		
X	VRQ	BTECMQ	VR	13KV VOLTAGE REGULATOR	Q	ELECTRICAL FAULT DURING OPERATION	FO	27	
X	VRR	BPVLRR	VR	13KV VOLTAGE REGULATOR	R	FAILS DURING OPERATION	FO		
XJ	XJM	BPVLVB	XJ	EXPANSION JOINT	M	GROSS EXTERNAL LEAKAGE	FO	2	
YS	YSL		YS	Y-STRAINERS	L	EXTERNAL LEAKAGE	FO	9	
YS	YSP	ZTSC1P	YS	Y-STRAINERS	P	PLUGS DURING OPERATION	FO		
ZS	HSD	BPHDSD	HS	SWITCH GENERAL	D	FAILS ON DEMAND	FD		
ZS	HST	BPHDST	HS	SWITCH GENERAL	T	FAILS DURING OPERATION	FO		
ZY	RYD	ZTRL1D	RY	POSITION DEVICE (RELAY)	D	FAILS TO DE-ENERGIZE ON DEMAND	FD		
ZY	RYE	BPRL1D	RY	POSITION DEVICE (RELAY)	E	FAILS TO ENERGIZE ON DEMAND	FD		

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ZY	RYP	BPRL1R	RY	POSITION DEVICE (RELAY)	P	DE-ENERGIZES WITHOUT DEMAND	FO		
ZY	RYT	ZTRL1R	RY	POSITION DEVICE (RELAY)	T	ENERGIZES WITHOUT DEMAND	FO		
A/C	**	ZBPRIC	*	AIR CONDITIONING UNIT	*	N/A	CB		
A/C	**	ZDPRIB	*	AIR CONDITIONING UNIT	*	N/A	CD		
A/C	**	ZGPRIC	*	AIR CONDITIONING UNIT	*	N/A	CG		
ALM	ALD	ZBPRIC	AL	ALARM	D	FAILS ON DEMAND	CB		
ALM	ALD	ZDPRIB	AL	ALARM	D	FAILS ON DEMAND	CD		
ALM	ALD	ZGPRIC	AL	ALARM	D	FAILS ON DEMAND	CG		
AV	AVD	ZBPRIC	AV	AUTO VENT	D	FAILS TO OPERATE ON DEMAND	CB		
AV	AVD	ZDPRIB	AV	AUTO VENT	D	FAILS TO OPERATE ON DEMAND	CD		
AV	AVD	ZGPRIC	AV	AUTO VENT	D	FAILS TO OPERATE ON DEMAND	CG		
AY	RY*	ZBPRIC	RY	ANALYZER CONVERTER (RELAY)	*	N/A	CB		
AY	RY*	ZDPRIB	RY	ANALYZER CONVERTER (RELAY)	*	N/A	CD		
AY	RY*	ZGPRIC	RY	ANALYZER CONVERTER (RELAY)	*	N/A	CG		
B/S	*	ZBPRIC	*	BISTABLE	D	FAILS ON DEMAND	CB		
B/S	*	ZDPRIB	*	BISTABLE	D	FAILS ON DEMAND	CD		
B/S	*	ZGPRIA	*	BISTABLE	D	FAILS ON DEMAND	CG		
BATT	BAD	ZBPRIC	BA	125VDC BATTERY	D	FAILURE OF OUTPUT ON DEMAND	CB		
BATT	BAD	ZDPRIB	BA	125VDC BATTERY	D	FAILURE OF OUTPUT ON DEMAND	CD		
BATT	BAD	ZGPRIC	BA	125VDC BATTERY	D	FAILURE OF OUTPUT ON DEMAND	CG		
BKR	BMC	BBCB3D	BM	480VAC MCC BREAKER	C	FAILS TO CLOSE ON DEMAND	CB		
BKR	BMC	BCDB3D	BM	480VAC MCC BREAKER	C	FAILS TO CLOSE ON DEMAND	CD		
BKR	BMC	BCGB3D	BM	480VAC MCC BREAKER	C	FAILS TO CLOSE ON DEMAND	CG		
BKR	BMO	BBCB3D	BM	480VAC MCC BREAKER	O	FAILS TO OPEN ON DEMAND	CB		
BKR	BMO	BCDB3D	BM	480VAC MCC BREAKER	O	FAILS TO OPEN ON DEMAND	CD		
BKR	BMO	BCGB3D	BM	480VAC MCC BREAKER	O	FAILS TO OPEN ON DEMAND	CG		
BKR	BNC	BBCB3D	BN	13 & 4KV CAPACITY BREAKER	C	FAILS TO CLOSE ON DEMAND	CB		
BKR	BNC	BCDB3D	BN	13 & 4KV CAPACITY BREAKER	C	FAILS TO CLOSE ON DEMAND	CD		
BKR	BNC	BCGB3D	BN	13 & 4KV CAPACITY BREAKER	C	FAILS TO CLOSE ON DEMAND	CG		
BKR	BNO	BBCB3D	BN	13 & 4KV CAPACITY BREAKER	O	FAILS TO CLOSE ON DEMAND	CB		
BKR	BNO	BCDB3D	BN	13 & 4KV CAPACITY BREAKER	O	FAILS TO CLOSE ON DEMAND	CD		
BKR	BNO	BCGB3D	BN	13 & 4KV CAPACITY BREAKER	O	FAILS TO CLOSE ON DEMAND	CG		
BKR	BX*	ZBPRIC	BX	500KV AIR BLAST CIRCUIT BKR	*	N/A	CB		
BKR	BX*	ZDPRIA	BX	500KV AIR BLAST CIRCUIT BKR	*	N/A	CD		
BKR	BX*	ZGPRIB	BX	500KV AIR BLAST CIRCUIT BKR	*	N/A	CG		
BKR	BY*	ZBPRIC	BY	500KV M.O. DISCONNECT BKR	*	N/A	CB		
BKR	BY*	ZDPRIA	BY	500KV M.O. DISCONNECT BKR	*	N/A	CD		
BKR	BY*	ZGPRIB	BY	500KV M.O. DISCONNECT BKR	*	N/A	CG		
BKR	CA*	ZBPRIC	CA	BELOW 480VAC & DC BREAKER	*	N/A	CB		
BKR	CA*	ZDPRIA	CA	BELOW 480VAC & DC BREAKER	*	N/A	CD		
BKR	CA*	ZGPRIB	CA	BELOW 480VAC & DC BREAKER	*	N/A	CG		
BKR	CBC	BBCB3D	CB	480VAC BUS BREAKER	C	FAILS TO CLOSE ON DEMAND	CB		
BKR	CBC	BCDB3D	CB	480VAC BUS BREAKER	C	FAILS TO CLOSE ON DEMAND	CD		
BKR	CBC	BCGB3D	CB	480VAC BUS BREAKER	C	FAILS TO CLOSE ON DEMAND	CG		
BKR	CBO	BBCB3D	CB	480VAC BUS BREAKER	O	FAILS TO OPEN ON DEMAND	CB		
BKR	CBO	BCDB3D	CB	480VAC BUS BREAKER	O	FAILS TO OPEN ON DEMAND	CD		
BKR	CBO	BCGB3D	CB	480VAC BUS BREAKER	O	FAILS TO OPEN ON DEMAND	CG		
BKR	TBD	BCBTBD	TB	REACTOR TRIP BREAKER	D	FAILS TO OPERATE ON DEMAND	CB		
BKR	TBD	ZDPRIA	TB	REACTOR TRIP BREAKER	D	N/A	CD		
BKR	TBD	ZGPRIB	TB	REACTOR TRIP BREAKER	D	N/A	CG		
CHGR	CHR	ZBPRIC	CH	BATTERY CHARGER	R	FAILS DURING OPERATION	CB		
CHGR	CHR	ZDPRIB	CH	BATTERY CHARGER	R	FAILS DURING OPERATION	CD		

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CHGR	CHR	ZGPRIC	CH	BATTERY CHARGER	R	FAILS DURING OPERATION	CG		
CHL	CL*	ZBPRIC	CL	CHILLER (A/C UNIT + WTR SYS)	*	N/A	CB		
CHL	CL*	ZDPRIB	CL	CHILLER (A/C UNIT + WTR SYS)	*	N/A	CD		
CHL	CL*	ZGPRIC	CL	CHILLER (A/C UNIT + WTR SYS)	*	N/A	CG		
CKV	CD*	ZBPRIB	CD	DSA NORMALLY CYCLED CHECK	*	N/A	CB		
CKV	CD*	ZDPRIB	CD	DSA NORMALLY CYCLED CHECK	*	N/A	CD		
CKV	CD*	ZGPRIB	CD	DSA NORMALLY CYCLED CHECK	*	N/A	CG		
CKV	CG*	ZBPRIB	CG	DFO CHECK VALVE	*	N/A	CB		
CKV	CG*	ZDPRIB	CG	DFO CHECK VALVE	*	N/A	CD		
CKV	CG*	ZGPRIB	CG	DFO CHECK VALVE	*	N/A	CG		
CKV	CKC	BBCK3C	CK	CHECK (OTHER THAN STOP)	C	FAILS TO CLOSE ON DEMAND	CB	15	Group of 3 or more
CKV	CKC	BCBCKC	CK	CHECK (OTHER THAN STOP)	C	FAILS TO CLOSE ON DEMAND	CB	13	Group of 2
CKV	CKC	BCDK3C	CK	CHECK (OTHER THAN STOP)	C	FAILS TO CLOSE ON DEMAND	CD	15	Group of 3 or more
CKV	CKC	BCGK3C	CK	CHECK (OTHER THAN STOP)	C	FAILS TO CLOSE ON DEMAND	CG	15	Group of 3 or more
CKV	CKO	BB3CKO	CK	CHECK (OTHER THAN STOP)	O	FAILS TO OPEN ON DEMAND	CB	15	Group of 3 or more
CKV	CKO	BBCCKO	CK	CHECK (OTHER THAN STOP)	O	FAILS TO OPEN ON DEMAND	CB	13	Group of 2
CKV	CKO	BCDK3O	CK	CHECK (OTHER THAN STOP)	O	FAILS TO OPEN ON DEMAND	CD	15	Group of 3 or more
CKV	CKO	BCGK3O	CK	CHECK (OTHER THAN STOP)	O	FAILS TO OPEN ON DEMAND	CG	15	Group of 3 or more
CKV	EC*	ZBPRIB	EC	EXCESS FLOW CHECK VALVE	*	N/A	CB		
CKV	EC*	ZDPRIB	EC	EXCESS FLOW CHECK VALVE	*	N/A	CD		
CKV	EC*	ZGPRIB	EC	EXCESS FLOW CHECK VALVE	*	N/A	CG		
CKV	SKC	BBCK3C	SK	STOP CHECK	C	FAILS TO CLOSE ON DEMAND	CB	15	Group of 3 or more
CKV	SKC	BCBCKC	SK	STOP CHECK	C	FAILS TO CLOSE ON DEMAND	CB	13	Group of 2
CKV	SKC	BCDK3C	SK	STOP CHECK	C	FAILS TO CLOSE ON DEMAND	CD	15	Group of 3 or more
CKV	SKC	BCGK3C	SK	STOP CHECK	C	FAILS TO CLOSE ON DEMAND	CG	15	Group of 3 or more
CKV	SKO	BB3CKO	SK	STOP CHECK	O	FAILS TO OPEN ON DEMAND	CB	15	Group of 3 or more
CKV	SKO	BBCCKO	SK	STOP CHECK	O	FAILS TO OPEN ON DEMAND	CB	13	Group of 2
CKV	SKO	BCDK3O	SK	STOP CHECK	O	FAILS TO OPEN ON DEMAND	CD	15	Group of 3 or more
CKV	SKO	BCGK3O	SK	STOP CHECK	O	FAILS TO OPEN ON DEMAND	CG	15	Group of 3 or more
CNTCT	CX*	ZBPRIC	CX	CONTACT	*	N/A	CB		
CNTCT	CX*	ZDPRIB	CX	CONTACT	*	N/A	CD		
CNTCT	CX*	ZGPRIC	CX	CONTACT	*	N/A	CG		
COIL	SHD	ZBPRIC	SH	SHUNT TRIP COIL	D	FAILS ON DEMAND	CB		
COIL	SHD	ZDPRIB	SH	SHUNT TRIP COIL	D	FAILS ON DEMAND	CD		
COIL	SHD	ZGPRIC	SH	SHUNT TRIP COIL	D	FAILS ON DEMAND	CG		
COIL	UVD	BBCUVD	UV	UV TRIP COIL	D	FAILS ON DEMAND	CB		
COIL	UVD	BCGUVD	UV	UV TRIP COIL	D	FAILS ON DEMAND	CG		
COIL	UVD	ZDPRIB	UV	UV TRIP COIL	D	FAILS ON DEMAND	CD		
COMP	CM*	ZBPRIC	CM	480V AIR COMPRESSOR	*	N/A	CB		
COMP	CM*	ZDPRIB	CM	480V AIR COMPRESSOR	*	N/A	CD		
COMP	CM*	ZGPRIC	CM	480V AIR COMPRESSOR	*	N/A	CG		
COMP	CQ*	ZBPRIC	CQ	COMPRESSOR FOR A/C OR CHL UNIT	*	N/A	CB		
COMP	CQ*	ZDPRIB	CQ	COMPRESSOR FOR A/C OR CHL UNIT	*	N/A	CD		
COMP	CQ*	ZGPRIC	CQ	COMPRESSOR FOR A/C OR CHL UNIT	*	N/A	CG		
COMP	KA*	ZBPRIC	KA	DSA SYS. NORMALLY CYCLED COMPR	*	N/A	CB		
COMP	KA*	ZDPRIB	KA	DSA SYS. NORMALLY CYCLED COMPR	*	N/A	CD		
COMP	KA*	ZGPRIC	KA	DSA SYS. NORMALLY CYCLED COMPR	*	N/A	CG		
CS	HSD	ZBPRIC	HS	CONTROL SWITCH	D	FAILS ON DEMAND	CB		
CS	HSD	ZDPRIB	HS	CONTROL SWITCH	D	FAILS ON DEMAND	CD		
CS	HSD	ZGPRIC	HS	CONTROL SWITCH	D	FAILS ON DEMAND	CG		
CV	AB*	ZBPRIC	AB	AIR VOLUME BOOSTER	*	N/A	CB	20	
CV	AB*	ZDPRIA	AB	AIR VOLUME BOOSTER	*	N/A	CD	20	

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CV	AB*	ZGPRIB	AB	AIR VOLUME BOOSTER	*	N/A	CG	20	
CV	C0R	BBAC2R	C0	IA DRYER TOWER CONTROL VALVE	R	FAILS TO CYCLE DURING OPERATION	CB		
CV	C1*	ZBPRIC	C1	SW STD CV-FAILS OPEN ON LOS	*	N/A	CB		
CV	C1*	ZDPRIA	C1	SW STD CV-FAILS OPEN ON LOS	*	N/A	CD		
CV	C1*	ZGPRIB	C1	SW STD CV-FAILS OPEN ON LOS	*	N/A	CG		
CV	C2*	ZBPRIC	C2	SW THR CV-FAILS OPEN ON LOS	*	N/A	CB		
CV	C2*	ZDPRIA	C2	SW THR CV-FAILS OPEN ON LOS	*	N/A	CD		
CV	C2*	ZGPRIB	C2	SW THR CV-FAILS OPEN ON LOS	*	N/A	CG		
CV	C3*	ZBPRIC	C3	STD CV-FAILS CLOSED ON LOS	*	N/A	CB		
CV	C3*	ZDPRIA	C3	STD CV-FAILS CLOSED ON LOS	*	N/A	CD		
CV	C3*	ZGPRIB	C3	STD CV-FAILS CLOSED ON LOS	*	N/A	CG		
CV	C4*	ZBPRIC	C4	SW STD CV-FAILS CLOSED ON LOS	*	N/A	CB		
CV	C4*	ZDPRIA	C4	SW STD CV-FAILS CLOSED ON LOS	*	N/A	CD		
CV	C4*	ZGPRIB	C4	SW STD CV-FAILS CLOSED ON LOS	*	N/A	CG		
CV	C5*	ZBPRIC	C5	TURBINE BY-PASS VALVE	*	N/A	CB		
CV	C5*	ZDPRIA	C5	TURBINE BY-PASS VALVE	*	N/A	CD		
CV	C5*	ZGPRIB	C5	TURBINE BY-PASS VALVE	*	N/A	CG		
CV	C6*	ZBPRIC	C6	AFW THR CV (FAILS OPEN ON LOS)	*	N/A	CB		
CV	C6*	ZDPRIA	C6	AFW THR CV (FAILS OPEN ON LOS)	*	N/A	CD		
CV	C6*	ZGPRIB	C6	AFW THR CV (FAILS OPEN ON LOS)	*	N/A	CG		
CV	C8*	ZBPRIC	C8	AFW TURB STM SUPPLY CV	*	N/A	CB		
CV	C8*	ZDPRIA	C8	AFW TURB STM SUPPLY CV	*	N/A	CD		
CV	C8*	ZGPRIB	C8	AFW TURB STM SUPPLY CV	*	N/A	CG		
CV	C9*	ZBPRIC	C9	COMPR TOTAL CLOSURE VALVE	*	N/A	CB		
CV	C9*	ZDPRIA	C9	COMPR TOTAL CLOSURE VALVE	*	N/A	CD		
CV	C9*	ZGPRIB	C9	COMPR TOTAL CLOSURE VALVE	*	N/A	CG		
CV	CC*	ZBPRIC	CC	PILOT CONTROL VALVE	*	N/A	CB		
CV	CC*	ZDPRIA	CC	PILOT CONTROL VALVE	*	N/A	CD		
CV	CC*	ZGPRIB	CC	PILOT CONTROL VALVE	*	N/A	CG		
CV	CF*	ZBPRIC	CF	MFW REGULATING VALVE	*	N/A	CB		
CV	CF*	ZDPRIA	CF	MFW REGULATING VALVE	*	N/A	CD		
CV	CF*	ZGPRIB	CF	MFW REGULATING VALVE	*	N/A	CG		
CV	CJR	ZBPRIC	CJ	UNIT 2 FW MINI FLOW CV	R	N/A	CB		
CV	CJR	ZDPRIA	CJ	UNIT 2 FW MINI FLOW CV	R	N/A	CD		
CV	CJR	ZGPRIB	CJ	UNIT 2 FW MINI FLOW CV	R	N/A	CG		
CV	CV*	ZBPRIC	CV	STD CV-FAILS OPEN ON LOS	*	N/A	CB		
CV	CV*	ZDPRIA	CV	STD CV-FAILS OPEN ON LOS	*	N/A	CD		
CV	CV*	ZGPRIB	CV	STD CV-FAILS OPEN ON LOS	*	N/A	CG		
CV	FF*	ZBPRIC	FF	FLEX FLOW VALVE	*	N/A	CB		
CV	FF*	ZDPRIA	FF	FLEX FLOW VALVE	*	N/A	CD		
CV	FF*	ZGPRIB	FF	FLEX FLOW VALVE	*	N/A	CG		
CV	GV*	ZBPRIC	GV	EDG SRW CONTROL VALVE	*	N/A	CB		
CV	GV*	ZDPRIA	GV	EDG SRW CONTROL VALVE	*	N/A	CD		
CV	GV*	ZGPRIB	GV	EDG SRW CONTROL VALVE	*	N/A	CG		
CV	IC*	ZBPRIC	IC	CNTMT ISOLATION CV-FAIL CLOSED	*	N/A	CB		
CV	IC*	ZDPRIA	IC	CNTMT ISOLATION CV-FAIL CLOSED	*	N/A	CD		
CV	IC*	ZGPRIB	IC	CNTMT ISOLATION CV-FAIL CLOSED	*	N/A	CG		
CV	MT*	ZBPRIC	MT	MAIN STEAM ISOLATION VALVE (MSIV)	*	N/A	CB		
CV	MT*	ZDPRIA	MT	MAIN STEAM ISOLATION VALVE	*	N/A	CD		
CV	MT*	ZGPRIB	MT	MAIN STEAM ISOLATION VALVE	*	N/A	CG		
CV	V1*	ZBPRIC	V1	UNIT 1 MAIN TURBINE VALVE	*	N/A	CB		
CV	V1*	ZDPRIA	V1	UNIT 1 MAIN TURBINE VALVE	*	N/A	CD		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
CV	V1*	ZGPRIB	V1	UNIT 1 MAIN TURBINE VALVE	*	N/A	CG		
CV	V2*	ZBPRIC	V2	UNIT 2 MAIN TURBINE VALVE	*	N/A	CB		
CV	V2*	ZDPRIA	V2	UNIT 2 MAIN TURBINE VALVE	*	N/A	CD		
CV	V2*	ZGPRIB	V2	UNIT 2 MAIN TURBINE VALVE	*	N/A	CG		
CV	VT*	ZBPRIC	VT	TURBINE STOP CON.VLV.	*	N/A	CB		
CV	VT*	ZDPRIA	VT	TURBINE STOP CON.VLV.	*	N/A	CD		
CV	VT*	ZGPRIB	VT	TURBINE STOP CON.VLV.	*	N/A	CG		
CV	WC*	ZBPRIC	WC	SW ECCS PP RM CLR CV (FO)	*	N/A	CB		
CV	WC*	ZDPRIA	WC	SW ECCS PP RM CLR CV (FO)	*	N/A	CD		
CV	WC*	ZGPRIB	WC	SW ECCS PP RM CLR CV (FO)	*	N/A	CG		
DAMPR	BDD	ZBPRIC	BD	BACK DRAFT DAMPER	D	FAILS TO OPERATE ON DEMAND	CB		
DAMPR	BDD	ZDPRIB	BD	BACK DRAFT DAMPER	D	FAILS TO OPERATE ON DEMAND	CD		
DAMPR	BDD	ZGPRIC	BD	BACK DRAFT DAMPER	D	FAILS TO OPERATE ON DEMAND	CG		
DAMPR	FQD	ZBPRIC	FQ	FUSIBLE LINK DAMPER	D	FAILS TO OPERATE ON DEMAND	CB		
DAMPR	FQD	ZDPRIB	FQ	FUSIBLE LINK DAMPER	D	FAILS TO OPERATE ON DEMAND	CD		
DAMPR	FQD	ZGPRIC	FQ	FUSIBLE LINK DAMPER	D	FAILS TO OPERATE ON DEMAND	CG		
DAMPR	MD*	ZBPRIC	MD	MOTOR OPERATED DAMPER	*	N/A	CB		
DAMPR	MD*	ZDPRIA	MD	MOTOR OPERATED DAMPER	*	N/A	CD		
DAMPR	MD*	ZGPRIB	MD	MOTOR OPERATED DAMPER	*	N/A	CG		
DAMPR	PO*	ZBPRIC	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CB		
DAMPR	PO*	ZDPRIA	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CD		
DAMPR	PO*	ZGPRIB	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CG		
DAMPR	PP*	ZBPRIC	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CB		
DAMPR	PP*	ZDPRIA	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CD		
DAMPR	PP*	ZGPRIB	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CG		
DT	DTD	ZBPRIC	DT	DRAIN TRAP	D	FAILS TO OPERATE ON DEMAND	CB		
DT	DTD	ZDPRIB	DT	DRAIN TRAP	D	FAILS TO OPERATE ON DEMAND	CD		
DT	DTD	ZGPRIC	DT	DRAIN TRAP	D	FAILS TO OPERATE ON DEMAND	CG		
EDG	DGD	BBCDGD	DG	EMERGENCY DIESEL GENERATOR	D	FAILS TO START	CB		
EDG	DGD	BGCDGD	DG	EMERGENCY DIESEL GENERATOR	D	FAILS TO START	CG		
EDG	DGR	ZBPRIC	DG	EMERGENCY DIESEL GENERATOR	R	N/A	CB		
EDG	DGR	ZGPRIC	DG	EMERGENCY DIESEL GENERATOR	R	N/A	CG		
EDG	DGW	BBCDGW	DG	EMERGENCY DIESEL GENERATOR	W	FAILS TO RUN DURING FIRST HOUR OF OPERATION	CB		
EDG	DGW	BCGDGW	DG	EMERGENCY DIESEL GENERATOR	W	FAILS TO RUN DURING FIRST HOUR OF OPERATION	CG		
EDG	ED*	ZBPRIB	ED	SACM EMERG DIESEL GENERATOR	*	N/A	CB		
EHCV	CED	ZBPRIC	CE	EHC VALVE (EXCEPT TSV & TCV)	D	FAILURE TO OPERATE ON DEMAND	CB		
EHCV	CED	ZDPRIA	CE	EHC VALVE (EXCEPT TSV & TCV)	D	FAILURE TO OPERATE ON DEMAND	CD		
EHCV	CED	ZGPRIB	CE	EHC VALVE (EXCEPT TSV & TCV)	D	FAILURE TO OPERATE ON DEMAND	CG		
EPP	EPR	ZBPRIC	EP	ENGINE DRIVEN PUMP	R	FAILS TO RUN	CB		
EPP	EPR	ZDPRIB	EP	ENGINE DRIVEN PUMP	R	FAILS TO RUN	CD		
EPP	EPR	ZGPRIC	EP	ENGINE DRIVEN PUMP	R	FAILS TO RUN	CG		
EPP	EPS	ZBPRIC	EP	ENGINE DRIVEN PUMP	S	FAILS TO START	CB		
EPP	EPS	ZDPRIB	EP	ENGINE DRIVEN PUMP	S	FAILS TO START	CD		
EPP	EPS	ZGPRIC	EP	ENGINE DRIVEN PUMP	S	FAILS TO START	CG		
ERV	IVD	ZBPRIC	IV	HALON ELECTROMAGNETIC REL VLV	D	FAILS TO OPERATE ON DEMAND	CB		
ERV	IVD	ZDPRIA	IV	HALON ELECTROMAGNETIC REL VLV	D	FAILS TO OPERATE ON DEMAND	CD		
ERV	IVD	ZGPRIB	IV	HALON ELECTROMAGNETIC REL VLV	D	FAILS TO OPERATE ON DEMAND	CG		
ERV	RP*	ZBPRIC	RP	PORV	*	N/A	CB		
ERV	RP*	ZDPRIA	RP	PORV	*	N/A	CD		
ERV	RP*	ZGPRIB	RP	PORV	*	N/A	CG		
FAN	FHR	ZBPRIB	FH	CHICKEN HOUSE TYPE FAN	R	FAILS TO RUN DURING OPERATION	CB		
FAN	FHR	ZDPRIB	FH	CHICKEN HOUSE TYPE FAN	R	FAILS TO RUN DURING OPERATION	CD		

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FAN	FHR	ZGPRIB	FH	CHICKEN HOUSE TYPE FAN	R	FAILS TO RUN DURING OPERATION	CG		
FAN	FHS	ZBPRIC	FH	CHICKEN HOUSE TYPE FAN	S	FAILS TO START	CB		
FAN	FHS	ZDPRIB	FH	CHICKEN HOUSE TYPE FAN	S	FAILS TO START	CD		
FAN	FHS	ZGPRIB	FH	CHICKEN HOUSE TYPE FAN	S	FAILS TO START	CG		
FAN	VAR	ZBPRIB	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
FAN	VAR	ZBPRIB	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
FAN	VAR	ZDPRIA	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
FAN	VAR	ZDPRIB	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
FAN	VAR	ZGPRIA	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
FAN	VAR	ZGPRIB	VA	FAN, NSR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
FAN	VAS	ZBPRIB	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CB	18	Normally Operating
FAN	VAS	ZBPRIC	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CB	19	Stand-by
FAN	VAS	ZDPRIA	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CD	18	Normally Operating
FAN	VAS	ZDPRIB	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CD	19	Stand-by
FAN	VAS	ZGPRIB	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CG	18	Normally Operating
FAN	VAS	ZGPRIB	VA	FAN, NSR, NOT CNTMT	S	FAILS TO START	CG	19	Stand-by
FAN	VBR	ZBPRIB	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
FAN	VBR	ZBPRIB	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
FAN	VBR	ZDPRIA	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
FAN	VBR	ZDPRIB	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
FAN	VBR	ZGPRIA	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
FAN	VBR	ZGPRIB	VB	FAN, NSR, CNTMT	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
FAN	VBS	ZBPRIB	VB	FAN, NSR, CNTMT	S	FAILS TO START	CB	18	Normally Operating
FAN	VBS	ZBPRIC	VB	FAN, NSR, CNTMT	S	FAILS TO START	CB	19	Stand-by
FAN	VBS	ZDPRIA	VB	FAN, NSR, CNTMT	S	FAILS TO START	CD	18	Normally Operating
FAN	VBS	ZDPRIB	VB	FAN, NSR, CNTMT	S	FAILS TO START	CD	19	Stand-by
FAN	VBS	ZGPRIB	VB	FAN, NSR, CNTMT	S	FAILS TO START	CG	18	Normally Operating
FAN	VBS	ZGPRIB	VB	FAN, NSR, CNTMT	S	FAILS TO START	CG	19	Stand-by
FAN	VDR	ZBPRIB	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
FAN	VDR	ZBPRIB	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
FAN	VDR	ZDPRIA	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
FAN	VDR	ZDPRIB	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
FAN	VDR	ZGPRIA	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
FAN	VDR	ZGPRIB	VD	FAN, SR, NOT CNTMT	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
FAN	VDS	ZBPRIB	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CB	18	Normally Operating
FAN	VDS	ZBPRIC	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CB	19	Stand-by
FAN	VDS	ZDPRIA	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CD	18	Normally Operating
FAN	VDS	ZDPRIB	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CD	19	Stand-by
FAN	VDS	ZGPRIB	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CG	18	Normally Operating
FAN	VDS	ZGPRIB	VD	FAN, SR, NOT CNTMT	S	FAILS TO START	CG	19	Stand-by
FAN	VGR	ZBPRIB	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
FAN	VGR	ZBPRIB	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
FAN	VGR	ZDPRIA	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
FAN	VGR	ZDPRIB	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
FAN	VGR	ZGPRIA	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
FAN	VGR	ZGPRIB	VG	FAN, SR, CNTMT	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
FAN	VGS	ZBPRIB	VG	FAN, SR, CNTMT	S	FAILS TO START	CB	18	Normally Operating
FAN	VGS	ZBPRIC	VG	FAN, SR, CNTMT	S	FAILS TO START	CB	19	Stand-by
FAN	VGS	ZDPRIA	VG	FAN, SR, CNTMT	S	FAILS TO START	CD	18	Normally Operating
FAN	VGS	ZDPRIB	VG	FAN, SR, CNTMT	S	FAILS TO START	CD	19	Stand-by
FAN	VGS	ZGPRIB	VG	FAN, SR, CNTMT	S	FAILS TO START	CG	18	Normally Operating
FAN	VGS	ZGPRIB	VG	FAN, SR, CNTMT	S	FAILS TO START	CG	19	Stand-by

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FAN	VNR	ZBPRIB	VN	ESFAS CABINET COOLING	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
FAN	VNR	ZDPRIA	VN	ESFAS CABINET COOLING	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
FAN	VNR	ZGPRIA	VN	ESFAS CABINET COOLING	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
FAN	VNS	ZBPRIB	VN	ESFAS CABINET COOLING	S	FAILS TO START	CB	18	Normally Operating
FAN	VNS	ZDPRIA	VN	ESFAS CABINET COOLING	S	FAILS TO START	CD	18	Normally Operating
FAN	VNS	ZGPRIB	VN	ESFAS CABINET COOLING	S	FAILS TO START	CG	18	Normally Operating
FCV	CV*	ZBPRIC	CV	FLOW CONTROL VALVE	*	N/A	CB		
FCV	CV*	ZDPRIA	CV	FLOW CONTROL VALVE	*	N/A	CD		
FCV	CV*	ZGPRIB	CV	FLOW CONTROL VALVE	*	N/A	CG		
FIC	FCR	ZBPRIC	FC	FLOW CONTROLLER	R	FAILS DURING OPERATION	CB		
FIC	FCR	ZDPRIB	FC	FLOW CONTROLLER	R	FAILS DURING OPERATION	CD		
FIC	FCR	ZGPRIC	FC	FLOW CONTROLLER	R	FAILS DURING OPERATION	CG		
FP	FP*	ZBPRIC	FP	FLOW PROCESSOR	*	FAILS TO OPERATE ON DEMAND	CB		
FP	FP*	ZDPRIB	FP	FLOW PROCESSOR	*	FAILS TO OPERATE ON DEMAND	CD		
FP	FP*	ZGPRIC	FP	FLOW PROCESSOR	*	FAILS TO OPERATE ON DEMAND	CG		
FS	PSD	ZBPRIC	PS	FLOW SWITCH	D	FAILS TO OPERATE ON DEMAND	CB		
FS	PSD	ZDPRIB	PS	FLOW SWITCH	D	FAILS TO OPERATE ON DEMAND	CD		
FS	PSD	ZGPRIA	PS	FLOW SWITCH	D	FAILS TO OPERATE ON DEMAND	CG		
FY	RY*	ZBPRIC	RY	FLOW DEVICE (RELAY)	*	N/A	CB		
FY	RY*	ZDPRIB	RY	FLOW DEVICE (RELAY)	*	N/A	CD		
FY	RY*	ZGPRIC	RY	FLOW DEVICE (RELAY)	*	N/A	CG		
GEN	HGD	ZBPRIC	HG	PORTABLE GENERATOR (<10KW)	D	FAILS TO START	CB		
GEN	HGD	ZDPRIB	HG	PORTABLE GENERATOR (<10KW)	D	FAILS TO START	CD		
GEN	HGD	ZGPRIC	HG	PORTABLE GENERATOR (<10KW)	D	FAILS TO START	CG		
GEN	HGR	ZBPRIC	HG	PORTABLE GENERATOR (<10KW)	R	FAILS TO RUN	CB		
GEN	HGR	ZDPRIB	HG	PORTABLE GENERATOR (<10KW)	R	FAILS TO RUN	CD		
GEN	HGR	ZGPRIC	HG	PORTABLE GENERATOR (<10KW)	R	FAILS TO RUN	CG		
H2R	HRR	ZBPRIC	HR	HYDROGEN RECOMBINER	R	FAILS DURING OPERATION	CB		
H2R	HRR	ZDPRIB	HR	HYDROGEN RECOMBINER	R	FAILS DURING OPERATION	CD		
H2R	HRR	ZGPRIC	HR	HYDROGEN RECOMBINER	R	FAILS DURING OPERATION	CG		
HC	HSD	ZBPRIC	HS	HAND CONTROLLER	D	FAILS ON DEMAND	CB		
HC	HSD	ZDPRIB	HS	HAND CONTROLLER	D	FAILS ON DEMAND	CD		
HC	HSD	ZGPRIC	HS	HAND CONTROLLER	D	FAILS ON DEMAND	CG		
HIC	HSD	ZBPRIC	HS	HAND INDIC. CONTRLER	D	FAILS ON DEMAND	CB		
HIC	HSD	ZDPRIB	HS	HAND INDIC. CONTRLER	D	FAILS ON DEMAND	CD		
HIC	HSD	ZGPRIC	HS	HAND INDIC. CONTRLER	D	FAILS ON DEMAND	CG		
HS	HSD	ZBPRIC	HS	HAND SWITCH	D	FAILS ON DEMAND	CB		
HS	HSD	ZDPRIB	HS	HAND SWITCH	D	FAILS ON DEMAND	CD		
HS	HSD	ZGPRIC	HS	HAND SWITCH	D	FAILS ON DEMAND	CG		
HTR	HTR	ZBPRIC	HT	GENERAL HEATER	R	FAILS DURING OPERATION	CB		
HTR	HTR	ZDPRIB	HT	GENERAL HEATER	R	FAILS DURING OPERATION	CD		
HTR	HTR	ZGPRIC	HT	GENERAL HEATER	R	FAILS DURING OPERATION	CG		
I/P	IZD	ZBPRIC	IZ	CONTROL VALVE I/P CONVERTER	D	FAILS TO OPERATE ON DEMAND	CB		
I/P	IZD	ZDPRIB	IZ	CONTROL VALVE I/P CONVERTER	D	FAILS TO OPERATE ON DEMAND	CD		
I/P	IZD	ZGPRIC	IZ	CONTROL VALVE I/P CONVERTER	D	FAILS TO OPERATE ON DEMAND	CG		
INV	INR	ZBPRIC	IN	INVERTER	R	FAILS DURING OPERATION	CB		
INV	INR	ZDPRIB	IN	INVERTER	R	FAILS DURING OPERATION	CD		
INV	INR	ZGPRIC	IN	INVERTER	R	FAILS DURING OPERATION	CG		
LS	LSD	ZBPRIC	LS	LEVEL SWITCH	D	FAILS ON DEMAND	CB		
LS	LSD	ZDPRIB	LS	LEVEL SWITCH	D	FAILS ON DEMAND	CD		
LS	LSD	ZGPRIA	LS	LEVEL SWITCH	D	FAILS ON DEMAND	CG		
LY	RY*	ZBPRIC	RY	LEVEL DEVICE (RELAY)	*	N/A	CB		

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LY	RY*	ZDPRIB	RY	LEVEL DEVICE (RELAY)	*	N/A	CD		
LY	RY*	ZGPRIC	RY	LEVEL DEVICE (RELAY)	*	N/A	CG		
MOV	MVC	BBCMVD	MV	MOTOR OPERATED VLV.	C	FAILS TO CLOSE ON DEMAND	CB		
MOV	MVC	BDCMVD	MV	MOTOR OPERATED VLV.	C	FAILS TO CLOSE ON DEMAND	CD		
MOV	MVC	BGCMVD	MV	MOTOR OPERATED VLV.	C	FAILS TO CLOSE ON DEMAND	CG		
MOV	MVO	BBCMVD	MV	MOTOR OPERATED VLV.	O	FAILS TO OPEN ON DEMAND	CB		
MOV	MVO	BDCMVD	MV	MOTOR OPERATED VLV.	O	FAILS TO OPEN ON DEMAND	CD		
MOV	MVO	BGCMVD	MV	MOTOR OPERATED VLV.	O	FAILS TO OPEN ON DEMAND	CG		
MOV	MVX	BBCMVD	MV	MOTOR OPERATED VLV.	X	FAILS TO CLOSE/INDICATES CLOSED	CB		
MOV	MVX	BDCMVD	MV	MOTOR OPERATED VLV.	X	FAILS TO CLOSE/INDICATES CLOSED	CD		
MOV	MVX	BGCMVD	MV	MOTOR OPERATED VLV.	X	FAILS TO CLOSE/INDICATES CLOSED	CG		
OPAMP	OAD	ZBPRIC	OA	OPERATIONAL AMPLIFIER	D	FAILS ON DEMAND	CB		
OPAMP	OAD	ZDPRIB	OA	OPERATIONAL AMPLIFIER	D	FAILS ON DEMAND	CD		
OPAMP	OAD	ZGPRIC	OA	OPERATIONAL AMPLIFIER	D	FAILS ON DEMAND	CG		
PCV	CV*	ZBPRIC	CV	PRESSURE CONTROL VALVE	*	N/A	CB		
PCV	CV*	ZDPRIA	CV	PRESSURE CONTROL VALVE	*	N/A	CD		
PCV	CV*	ZGPRIB	CV	PRESSURE CONTROL VALVE	*	N/A	CG		
PO	PO*	ZBPRIC	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CB		
PO	PO*	ZDPRIA	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CD		
PO	PO*	ZGPRIB	PO	PNEUM DAMPER (FAIL OPEN TYPE)	*	N/A	CG		
PO	PP*	ZBPRIC	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CB		
PO	PP*	ZDPRIA	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CD		
PO	PP*	ZGPRIB	PP	PNEUM DAMPER (FAIL CLOSE TYPE)	*	N/A	CG		
PS	KPR	BBPSDR	KP	DSA CYCLED PRESSURE SWITCH	R	FAILS DURING OPERATION	CB		
PS	PSD	ZBPRIC	PS	PRESSURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CB		
PS	PSD	ZDPRIB	PS	PRESSURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CD		
PS	PSD	ZGPRIA	PS	PRESSURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CG		
PT	PTR	BBTRNR	PT	PRESSURE TRANS.	R	FAILS DURING OPERATION	CB		
PUMP	APR	ZBPRIB	AP	MSIV HYDRAULIC AIR PUMP	R	FAILS DURING OPERATION	CB		STAND-BY
PUMP	APR	ZDPRIB	AP	MSIV HYDRAULIC AIR PUMP	R	FAILS DURING OPERATION	CD		STAND-BY
PUMP	APR	ZGPRIB	AP	MSIV HYDRAULIC AIR PUMP	R	FAILS DURING OPERATION	CG		STAND-BY
PUMP	APS	ZBPRIC	AP	MSIV HYDRAULIC AIR PUMP	S	FAILS DURING OPERATION	CB		STAND-BY
PUMP	APS	ZDPRIB	AP	MSIV HYDRAULIC AIR PUMP	S	FAILS DURING OPERATION	CD		STAND-BY
PUMP	APS	ZGPRIB	AP	MSIV HYDRAULIC AIR PUMP	S	FAILS DURING OPERATION	CG		STAND-BY
PUMP	ARR	ZBPRIB	AR	AFW PUMP-NOT INCLUDING DRIVER	R	FAILS TO RUN DURING OPERATION	CB		
PUMP	ARR	ZDPRIB	AR	AFW PUMP-NOT INCLUDING DRIVER	R	FAILS TO RUN DURING OPERATION	CD		
PUMP	ARR	ZGPRIB	AR	AFW PUMP-NOT INCLUDING DRIVER	R	FAILS TO RUN DURING OPERATION	CG		
PUMP	ARS	BBPAFS	AR	AFW PUMP-NOT INCLUDING DRIVER	S	FAILS TO START	CB		
PUMP	ARS	ZDPRIB	AR	AFW PUMP-NOT INCLUDING DRIVER	S	FAILS TO START	CD		
PUMP	ARS	ZGPRIB	AR	AFW PUMP-NOT INCLUDING DRIVER	S	FAILS TO START	CG		
PUMP	AWR	ZBPRIB	AW	AFW TURBINE DRIVEN PUMP	R	FAILS TO RUN DURING OPERATION	CB		
PUMP	AWR	ZDPRIB	AW	AFW TURBINE DRIVEN PUMP	R	FAILS TO RUN DURING OPERATION	CD		
PUMP	AWR	ZGPRIC	AW	AFW TURBINE DRIVEN PUMP	R	FAILS TO RUN DURING OPERATION	CG		
PUMP	AWS	BBCAFS	AW	AFW TURBINE DRIVEN PUMP	S	FAILS TO START	CB		
PUMP	AWS	ZDPRIB	AW	AFW TURBINE DRIVEN PUMP	S	FAILS TO START	CD		
PUMP	AWS	ZGPRIC	AW	AFW TURBINE DRIVEN PUMP	S	FAILS TO START	CG		
PUMP	DPR	BCBM2R	DP	DEMINERALIZED WATER PUMP	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
PUMP	DPS	BCBM2S	DP	DEMINERALIZED WATER PUMP	S	FAILS TO START	CB	18	Normally Operating
PUMP	MAR	BBCS2R	MA	4KV STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MAR	ZBPRIB	MA	4KV STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MAR	ZDPRIB	MA	4KV STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CD	15	Group of 3 or more
PUMP	MAR	ZGPRIB	MA	4KV STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
PUMP	MAS	BBCS2S	MA	4KV STANDBY PUMP	S	FAILS TO START	CB	13, 17	Group of 2 (not AFW)
PUMP	MAS	BCBAMS	MA	4KV STANDBY PUMP	S	FAILS TO START	CB	16	AFW PP
PUMP	MAS	ZBPRIC	MA	4KV STANDBY PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MAS	ZDPRIB	MA	4KV STANDBY PUMP	S	FAILS TO START	CD	15	Group of 3 or more
PUMP	MAS	ZGPRIB	MA	4KV STANDBY PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	MBR	BBCS2R	MB	480VAC STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MBR	ZBPRIB	MB	480VAC STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MBR	ZDPRIB	MB	480VAC STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CD	15	Group of 3 or more
PUMP	MBR	ZGPRIB	MB	480VAC STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more
PUMP	MBS	BBCS2S	MB	480VAC STANDBY PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MBS	ZBPRIC	MB	480VAC STANDBY PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MBS	ZDPRIB	MB	480VAC STANDBY PUMP	S	FAILS TO START	CD	15	Group of 3 or more
PUMP	MBS	ZGPRIB	MB	480VAC STANDBY PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	MCR	ZBPRIB	MC	CHARGING PUMP	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
PUMP	MCR	ZDPRIA	MC	CHARGING PUMP	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
PUMP	MCR	ZGPRIA	MC	CHARGING PUMP	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
PUMP	MCS	ZBPRIB	MC	CHARGING PUMP	S	FAILS TO START	CB	18	Normally Operating
PUMP	MCS	ZDPRIA	MC	CHARGING PUMP	S	FAILS TO START	CD	18	Normally Operating
PUMP	MCS	ZGPRIB	MC	CHARGING PUMP	S	FAILS TO START	CG	18	Normally Operating
PUMP	MFR	ZBPRIB	MF	FUEL OIL TRANSFER PUMP	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
PUMP	MFR	ZDPRIB	MF	FUEL OIL TRANSFER PUMP	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
PUMP	MFR	ZGPRIB	MF	FUEL OIL TRANSFER PUMP	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
PUMP	MFS	ZBPRIC	MF	FUEL OIL TRANSFER PUMP	S	FAILS TO START	CB	19	Stand-by
PUMP	MFS	ZDPRIB	MF	FUEL OIL TRANSFER PUMP	S	FAILS TO START	CD	19	Stand-by
PUMP	MFS	ZGPRIB	MF	FUEL OIL TRANSFER PUMP	S	FAILS TO START	CG	19	Stand-by
PUMP	MHR	ZBPRIB	MH	REACTOR COOLANT PUMP	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
PUMP	MHR	ZDPRIA	MH	REACTOR COOLANT PUMP	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
PUMP	MHR	ZGPRIA	MH	REACTOR COOLANT PUMP	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
PUMP	MHS	ZBPRIB	MH	REACTOR COOLANT PUMP	S	FAILS TO START	CB	18	Normally Operating
PUMP	MHS	ZDPRIA	MH	REACTOR COOLANT PUMP	S	FAILS TO START	CD	18	Normally Operating
PUMP	MHS	ZGPRIB	MH	REACTOR COOLANT PUMP	S	FAILS TO START	CG	18	Normally Operating
PUMP	MMR	BBCM3R	MM	NORM OPERATING PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MMR	BCBM2R	MM	NORM OPERATING PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MMR	ZDPRIA	MM	NORM OPERATING PUMP	R	FAILS TO RUN DURING OPERATION	CD	15, 18	Normally Operating
PUMP	MMR	ZGPRIA	MM	NORM OPERATING PUMP	R	FAILS TO RUN DURING OPERATION	CG	15, 18	Normally Operating
PUMP	MMS	BBCM3S	MM	NORM OPERATING PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MMS	BCBM2S	MM	NORM OPERATING PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MMS	ZDPRIA	MM	NORM OPERATING PUMP	S	FAILS TO START	CD	15, 18	Normally Operating
PUMP	MMS	ZGPRIB	MM	NORM OPERATING PUMP	S	FAILS TO START	CG	15, 18	Normally Operating
PUMP	MNR	BBMFWR	MN	STEAM GENERATOR FEED PUMP	R	FAILS TO RUN DURING OPERATION	CB		
PUMP	MNS	ZBPRIB	MN	STEAM GENERATOR FEED PUMP	S	FAILS TO START	CB		
PUMP	MPR	BBCS2R	MP	STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MPR	ZBPRIB	MP	STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MPR	ZDPRIB	MP	STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CD	15	Group of 3 or more
PUMP	MPR	ZGPRIB	MP	STANDBY PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more
PUMP	MPS	BBCS2S	MP	STANDBY PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MPS	ZBPRIC	MP	STANDBY PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MPS	ZDPRIB	MP	STANDBY PUMP	S	FAILS TO START	CD	15	Group of 3 or more
PUMP	MPS	ZGPRIB	MP	STANDBY PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	MWR	BBCM3R	MW	4KV SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MWR	BCBM2R	MW	4KV SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MWR	ZGPRIA	MW	4KV SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
PUMP	MWS	BBCM3S	MW	4KV SR NORMALLY OPER PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MWS	BCBM2S	MW	4KV SR NORMALLY OPER PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MWS	ZGPRIB	MW	4KV SR NORMALLY OPER PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	MYR	BBCM3R	MY	4KV NSR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MYR	BCBM2R	MY	4KV NSR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MYR	ZGPRIA	MY	4KV NSR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more
PUMP	MYS	BBCM3S	MY	4KV NSR NORMALLY OPER PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MYS	BCBM2S	MY	4KV NSR NORMALLY OPER PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MYS	ZGPRIB	MY	4KV NSR NORMALLY OPER PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	MZR	BBCM3R	MZ	480VAC SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	15	Group of 3 or more
PUMP	MZR	BCBM2R	MZ	480VAC SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CB	13	Group of 2
PUMP	MZR	ZGPRIA	MZ	480VAC SR NORMALLY OPER PUMP	R	FAILS TO RUN DURING OPERATION	CG	15	Group of 3 or more
PUMP	MZS	BBCM3S	MZ	480VAC SR NORMALLY OPER PUMP	S	FAILS TO START	CB	15	Group of 3 or more
PUMP	MZS	BCBM2S	MZ	480VAC SR NORMALLY OPER PUMP	S	FAILS TO START	CB	13	Group of 2
PUMP	MZS	ZGPRIB	MZ	480VAC SR NORMALLY OPER PUMP	S	FAILS TO START	CG	15	Group of 3 or more
PUMP	NDR	ZBPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CB	18	Normally Operating
PUMP	NDR	ZBPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
PUMP	NDR	ZDPRIA	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CD	18	Normally Operating
PUMP	NDR	ZDPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
PUMP	NDR	ZGPRIA	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CG	18	Normally Operating
PUMP	NDR	ZGPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
PUMP	NDS	ZBPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CB	18	Normally Operating
PUMP	NDS	ZBPRIC	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CB	19	Stand-by
PUMP	NDS	ZDPRIA	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CD	18	Normally Operating
PUMP	NDS	ZDPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CD	19	Stand-by
PUMP	NDS	ZGPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CG	18	Normally Operating
PUMP	NDS	ZGPRIB	ND	COMPR OIL PUMP (NO ELEC DRIV)	S	FAILS TO START	CG	19	Stand-by
PUMP	PFR	ZBPRIB	PF	MOTOR DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
PUMP	PFR	ZDPRIB	PF	MOTOR DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
PUMP	PFR	ZGPRIB	PF	MOTOR DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
PUMP	PFS	ZBPRIC	PF	MOTOR DRIVEN FIRE PUMP	S	FAILS TO START	CB	19	Stand-by
PUMP	PFS	ZDPRIB	PF	MOTOR DRIVEN FIRE PUMP	S	FAILS TO START	CD	19	Stand-by
PUMP	PFS	ZGPRIB	PF	MOTOR DRIVEN FIRE PUMP	S	FAILS TO START	CG	19	Stand-by
PUMP	PHR	ZBPRIB	PH	DIESEL DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CB	19	Stand-by
PUMP	PHR	ZDPRIB	PH	DIESEL DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CD	19	Stand-by
PUMP	PHR	ZGPRIB	PH	DIESEL DRIVEN FIRE PUMP	R	FAILS TO RUN DURING OPERATION	CG	19	Stand-by
PUMP	PHS	ZBPRIC	PH	DIESEL DRIVEN FIRE PUMP	S	FAILS TO START	CB	19	Stand-by
PUMP	PHS	ZDPRIB	PH	DIESEL DRIVEN FIRE PUMP	S	FAILS TO START	CD	19	Stand-by
PUMP	PHS	ZGPRIB	PH	DIESEL DRIVEN FIRE PUMP	S	FAILS TO START	CG	19	Stand-by
PY	RY*	ZBPRIC	RY	PRESSURE CONVERTER (RELAY)	*	N/A	CB		
PY	RY*	ZDPRIB	RY	PRESSURE CONVERTER (RELAY)	*	N/A	CD		
PY	RY*	ZGPRIC	RY	PRESSURE CONVERTER (RELAY)	*	N/A	CG		
RV	RB*	ZBPRIC	RB	COMPR RELIEF VALVE UNLOADER	*	N/A	CB		
RV	RB*	ZDPRIB	RB	COMPR RELIEF VALVE UNLOADER	*	N/A	CD		
RV	RB*	ZGPRIC	RB	COMPR RELIEF VALVE UNLOADER	*	N/A	CG		
RV	RR*	ZBPRIC	RR	SAFETY RELIEF VLV.	*	N/A	CB		
RV	RR*	ZDPRIB	RR	SAFETY RELIEF VLV.	*	N/A	CD		
RV	RR*	ZGPRIC	RR	SAFETY RELIEF VLV.	*	N/A	CG		
RV	RT*	ZBPRIC	RT	MODULATING RELIEF VALVE	*	N/A	CB		
RV	RT*	ZDPRIB	RT	MODULATING RELIEF VALVE	*	N/A	CD		
RV	RT*	ZGPRIC	RT	MODULATING RELIEF VALVE	*	N/A	CG		
RV	RV*	ZBPRIB	RV	RELIEF VALVE	*	N/A	CB		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
RV	RV*	ZDPRIB	RV	RELIEF VALVE	*	N/A	CD		
RV	RV*	ZGPRIC	RV	RELIEF VALVE	*	N/A	CG		
RV	RVO	ZBPRIB	RV	RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CB		
RV	RVO	ZDPRIA	RV	RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CD		
RV	RVO	ZGPRIA	RV	RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CG		
RV	RWO	ZBPRIB	RW	SRW/CC RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CB		
RV	RWO	ZDPRIA	RW	SRW/CC RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CD		
RV	RWO	ZGPRIA	RW	SRW/CC RELIEF VALVE	O	FAILS TO OPEN ON DEMAND	CG		
RV	RWW	ZBPRIB	RW	SRW/CC RELIEF VALVE	W	FAILS TO RESEAT AFTER WATER RELIEF	CB		
RV	RWW	ZDPRIB	RW	SRW/CC RELIEF VALVE	W	FAILS TO RESEAT AFTER WATER RELIEF	CD		
RV	RWW	ZGPRIC	RW	SRW/CC RELIEF VALVE	W	FAILS TO RESEAT AFTER WATER RELIEF	CG		
RY	RY*	ZBPRIC	RY	RELAY	*	N/A	CB		
RY	RY*	ZDPRIB	RY	RELAY	*	N/A	CD		
RY	RY*	ZGPRIC	RY	RELAY	*	N/A	CG		
SEQ	SQD	ZBPRIB	SQ	SEQUENCER	D	FAILS ON DEMAND	CB	26	
SEQ	SQD	ZDPRIB	SQ	SEQUENCER	D	FAILS ON DEMAND	CD	26	
SEQ	SQD	ZGPRIA	SQ	SEQUENCER	D	FAILS ON DEMAND	CG	26	
SV	FS*	ZBPRIC	FS	DFO CYCLED SOLENOID VALVE	*	N/A	CB		
SV	FS*	ZDPRIB	FS	DFO CYCLED SOLENOID VALVE	*	N/A	CD		
SV	FS*	ZGPRIA	FS	DFO CYCLED SOLENOID VALVE	*	N/A	CG		
SV	IV*	ZBPRIC	IV	CONTROL VALVE SOLENOID	*	N/A	CB		
SV	IV*	ZDPRIB	IV	CONTROL VALVE SOLENOID	*	N/A	CD		
SV	IV*	ZGPRIA	IV	CONTROL VALVE SOLENOID	*	N/A	CG		
SV	SV*	ZBPRIC	SV	SOLENOID VALVE	*	N/A	CB		
SV	SV*	ZDPRIB	SV	SOLENOID VALVE	*	N/A	CD		
SV	SV*	ZGPRIA	SV	SOLENOID VALVE	*	N/A	CG		
TCV	C7*	ZBPRIC	C7	TCV (NOT BUTTERFLY & NO SUPP)	*	N/A	CB		
TCV	C7*	ZDPRIA	C7	TCV (NOT BUTTERFLY & NO SUPP)	*	N/A	CD		
TCV	C7*	ZGPRIB	C7	TCV (NOT BUTTERFLY & NO SUPP)	*	N/A	CG		
TCV	CPR	ZBPRIC	CP	TCV (FAILS OPEN ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CB		
TCV	CPR	ZDPRIA	CP	TCV (FAILS OPEN ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CD		
TCV	CPR	ZGPRIB	CP	TCV (FAILS OPEN ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CG		
TCV	CTR	ZBPRIC	CT	TCV (FAILS CLOSED ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CB		
TCV	CTR	ZDPRIA	CT	TCV (FAILS CLOSED ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CD		
TCV	CTR	ZGPRIB	CT	TCV (FAILS CLOSED ON LOS)	R	FAILS TO MODULATE FLOW DURING OPERATION	CG		
TCV	CU*	ZBPRIC	CU	BUTTERFLY TEMP CONTROL VALVE	*	N/A	CB		
TCV	CU*	ZDPRIA	CU	BUTTERFLY TEMP CONTROL VALVE	*	N/A	CD		
TCV	CU*	ZGPRIB	CU	BUTTERFLY TEMP CONTROL VALVE	*	N/A	CG		
TLM	TLD	ZBPRIB	TL	TRIP LOGIC MODULE	D	FAILURE TO TRIP ON DEMAND	CB		
TS	TSD	ZBPRIC	TS	TEMPERATURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CB		
TS	TSD	ZDPRIB	TS	TEMPERATURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CD		
TS	TSD	ZGPRIC	TS	TEMPERATURE SWITCH	D	FAILS TO OPERATE ON DEMAND	CG		
TX	TMR	ZBPRIC	TM	TRANSFORMER/480V TO 120V	R	FAILS DURING OPERATION	CB		
TX	TMR	ZDPRIB	TM	TRANSFORMER/480V TO 120V	R	FAILS DURING OPERATION	CD		
TX	TMR	ZGPRIC	TM	TRANSFORMER/480V TO 120V	R	FAILS DURING OPERATION	CG		
TX	TNR	ZBPRIC	TN	TRANSFORMER/4.16KV TO 480V	R	FAILS DURING OPERATION	CB		
TX	TNR	ZDPRIB	TN	TRANSFORMER/4.16KV TO 480V	R	FAILS DURING OPERATION	CD		
TX	TNR	ZGPRIC	TN	TRANSFORMER/4.16KV TO 480V	R	FAILS DURING OPERATION	CG		
TX	TRR	ZBPRIC	TR	TRANSFORMER/GENERAL	R	FAILS DURING OPERATION	CB		
TX	TRR	ZDPRIB	TR	TRANSFORMER/GENERAL	R	FAILS DURING OPERATION	CD		
TX	TRR	ZGPRIC	TR	TRANSFORMER/GENERAL	R	FAILS DURING OPERATION	CG		
TX	TXR	ZBPRIC	TX	TRANSFORMER/13KV TO 4KV	R	FAILS DURING OPERATION	CB		

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
TX	TXR	ZDPRIB	TX	TRANSFORMER/13KV TO 4KV	R	FAILS DURING OPERATION	CD		
TX	TXR	ZGPRIC	TX	TRANSFORMER/13KV TO 4KV	R	FAILS DURING OPERATION	CG		
TX	TYR	ZBPRIC	TY	TRANSFORMER/500KV TO 13KV	R	FAILS DURING OPERATION	CB		
TX	TYR	ZDPRIB	TY	TRANSFORMER/500KV TO 13KV	R	FAILS DURING OPERATION	CD		
TX	TYR	ZGPRIC	TY	TRANSFORMER/500KV TO 13KV	R	FAILS DURING OPERATION	CG		
TY	RY*	ZBPRIC	RY	TEMPERATURE DEVICE (RELAY)	*	N/A	CB		
TY	RY*	ZDPRIB	RY	TEMPERATURE DEVICE (RELAY)	*	N/A	CD		
TY	RY*	ZGPRIC	RY	TEMPERATURE DEVICE (RELAY)	*	N/A	CG		
VIA	ALD	ZBPRIC	AL	VIBRATION INDI. ALARM	D	FAILS ON DEMAND	CB		
VIA	ALD	ZDPRIB	AL	VIBRATION INDI. ALARM	D	FAILS ON DEMAND	CD		
VIA	ALD	ZGPRIC	AL	VIBRATION INDI. ALARM	D	FAILS ON DEMAND	CG		
X	SPR	ZBPRIC	SP	POWER SUPPLY	R	FAILS DURING OPERATION	CB		
X	SPR	ZDPRIB	SP	POWER SUPPLY	R	FAILS DURING OPERATION	CD		
X	SPR	ZGPRIC	SP	POWER SUPPLY	R	FAILS DURING OPERATION	CG		
X	VRR	ZBPRIC	VR	13KV VOLTAGE REGULATOR	R	FAILS DURING OPERATION	CB		
X	VRR	ZDPRIB	VR	13KV VOLTAGE REGULATOR	R	FAILS DURING OPERATION	CD		
X	VRR	ZGPRIC	VR	13KV VOLTAGE REGULATOR	R	FAILS DURING OPERATION	CG		
ZS	HSD	ZBPRIC	HS	SWITCH GENERAL	D	FAILS ON DEMAND	CB		
ZS	HSD	ZDPRIB	HS	SWITCH GENERAL	D	FAILS ON DEMAND	CD		
ZS	HSD	ZGPRIC	HS	SWITCH GENERAL	D	FAILS ON DEMAND	CG		
ZY	RY*	ZBPRIC	RY	POSITION DEVICE (RELAY)	*	N/A	CB		
ZY	RY*	ZDPRIB	RY	POSITION DEVICE (RELAY)	*	N/A	CD		
ZY	RY*	ZGPRIC	RY	POSITION DEVICE (RELAY)	*	N/A	CG		
*	**	BMCCHD	*	CC HDR	*	(MAINTENANCE DURATION)	MD		
*	**	BMCCHF	*	CC HDR	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMCRBD	*	BOTH CRHVACs	*	(MAINTENANCE DURATION)	MD		
*	**	BMCRBF	*	BOTH CRHVACs	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMCRRD	*	CRHVAC (RECVR)	*	(MAINTENANCE DURATION)	MD		
*	**	BMCRRF	*	CRHVAC (RECVR)	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMCRUD	*	CRHVAC (UNRECVR)	*	(MAINTENANCE DURATION)	MD		
*	**	BMCRUF	*	CRHVAC (UNRECVR)	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMDSHD	*	DSA HEADER	*	(MAINTENANCE DURATION)	MD		
*	**	BMDSHF	*	DSA HEADER	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMH2PD	*	H2 PURGE LINE	*	(MAINTENANCE DURATION)	MD		
*	**	BMH2PF	*	H2 PURGE LINE	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMSRHD	*	SRW HDR OR XCONN	*	(MAINTENANCE DURATION)	MD		
*	**	BMSRHF	*	SRW HDR OR XCONN	*	(MAINTENANCE FREQUENCY)	MF		
*	**	BMSWHD	*	SW HDR (COMBINED)	*	(MAINTENANCE DURATION)	MD		
*	**	BMSWHF	*	SW HDR (COMBINED)	*	(MAINTENANCE FREQUENCY)	MF		
*	**	ZMOLSD	*	OTHER EQUIPMENT	*	(MAINTENANCE DURATION)	MD	22	LONG TECH SPEC
*	**	ZMOMSD	*	OTHER EQUIPMENT	*	(MAINTENANCE DURATION)	MD	22	48 & 72 HOUR TECH SP
*	**	ZMONSD	*	OTHER EQUIPMENT	*	(MAINTENANCE DURATION)	MD	22	NO TECH SPEC
*	**	ZMOSSD	*	OTHER EQUIPMENT	*	(MAINTENANCE DURATION)	MD	22	SHORT TECH SPEC
A/C	**	BMSHFD	*	SWGR HVAC TRAIN OOS (REC)	*	(MAINTENANCE DURATION)	MD	24	
A/C	**	BMSHFF	*	SWGR HVAC TRAIN OOS (REC)	*	(MAINTENANCE FREQUENCY)	MF	24	
A/C	AJ*	BMSHAD	AJ	SWGR HVAC A/C UNIT ONLY	*	(MAINTENANCE DURATION)	MD		
A/C	AJ*	BMSHAF	AJ	SWGR HVAC A/C UNIT ONLY	*	(MAINTENANCE FREQUENCY)	MF		
BATT	BA*	ZMELEF	BA	125VDC BATTERY	*	(MAINTENANCE FREQUENCY)	MF	21	
BS	BS*	ZMSC1F	BS	SALT WATER STRAINER	*	(MAINTENANCE FREQUENCY)	MF	21	
BS	BT*	ZMSC1F	BT	NON-SALT WATER STRAINER	*	(MAINTENANCE FREQUENCY)	MF	21	
BUS	BU*	BM13BD	BU	BUS	*	(MAINTENANCE DURATION)	MD		13 KV BUS
BUS	BU*	BM13BF	BU	BUS	*	(MAINTENANCE FREQUENCY)	MF		13 KV BUS

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
BUS	BU*	ZMBUSF	BU	BUS	*	(MAINTENANCE FREQUENCY)	MF	21	
CHGR	CH*	ZMELEF	CH	BATTERY CHARGER	*	(MAINTENANCE FREQUENCY)	MF	21	
CHL	CL*	ZMCHLF	CL	CHILLER (A/C UNIT + WTR SYS)	*	(MAINTENANCE FREQUENCY)	MF	21	
CHL	CL*	ZMCHND	CL	CHILLER (A/C UNIT + WTR SYS)	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
CKV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
CKV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
CKV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
CKV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
COMP	CM*	BMSACD	CM	SWAC	*	(MAINTENANCE DURATION)	MD		SWAC
COMP	CM*	BMSACF	CM	SWAC	*	(MAINTENANCE FREQUENCY)	MF		SWAC
COMP	CM*	ZMCMPF	CM	480V AIR COMPRESSOR	*	(MAINTENANCE FREQUENCY)	MF	21	
COMP	CQ*	ZMCMPF	CQ	COMPRESSOR FOR A/C OR CHL UNIT	*	(MAINTENANCE FREQUENCY)	MF	21	
COMP	KA*	ZMCMPF	KA	DSA SYS. NORMALLY CYCLED COMPR	*	(MAINTENANCE FREQUENCY)	MF	21	
CV	**	BMAFDD	*	AFW FD TRAIN - NOTR	*	(MAINTENANCE DURATION)	MD		AFW
CV	**	BMAFDF	*	AFW FD TRAIN - NOTR	*	(MAINTENANCE FREQUENCY)	MF		AFW
CV	**	BMASHD	*	AFW STEAM ADMISSION LINES	*	(MAINTENANCE DURATION)	MD		AFW
CV	**	BMASHF	*	AFW STEAM ADMISSION LINES	*	(MAINTENANCE FREQUENCY)	MF		AFW
CV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
CV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
CV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
CV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
CV	MT*	BMMSID	MT	MAIN STEAM ISOLATION VALVE (MSIV)	*	(MAINTENANCE DURATION)	MD		
CV	MT*	BMMSIF	MT	MAIN STEAM ISOLATION VALVE (MSIV)	*	(MAINTENANCE FREQUENCY)	MF		
CV	MT*	BMMSJD	MT	MSIV HYDRAULIC FLIUD DUMP PATH	*	(MAINTENANCE DURATION)	MD		
CV	MT*	BMMSJF	MT	MSIV HYDRAULIC FLIUD DUMP PATH	*	(MAINTENANCE FREQUENCY)	MF		
EDG	DG*	BMDG1D	DG	DEDICATED F&M DIESEL	*	(MAINTENANCE DURATION)	MD		EDGs 11 or 21
EDG	DG*	BMDG1F	DG	DEDICATED F&M DIESEL	*	(MAINTENANCE FREQUENCY)	MF		EDGs 11 or 21
EDG	DG*	BMDG2D	DG	SWING F&M DIESEL	*	(MAINTENANCE DURATION)	MD		EDG 12
EDG	DG*	BMDG2F	DG	SWING F&M DIESEL	*	(MAINTENANCE FREQUENCY)	MF		EDG 12
EDG	DG*	BMDGOD	DG	DEDICATED F&M DIESEL	*	(MAINTENANCE DURATION)	MD		(OTHER U MODE <2)
EDG	DG*	BMDGOF	DG	DEDICATED F&M DIESEL	*	(MAINTENANCE FREQUENCY)	MF		(OTHER U MODE <2)
EHCV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
EHCV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
EHCV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
EHCV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
ERV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
ERV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
ERV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
ERV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
ERV	RP*	BMPORD	RP	PORV	*	(MAINTENANCE DURATION)	MD		
ERV	RP*	BMPORF	RP	PORV	*	(MAINTENANCE FREQUENCY)	MF		
FAN	**	BMECLD	*	ECCS AIR COOLER	*	(MAINTENANCE DURATION)	MD	23	ECCS PP RM CLR
FAN	**	BMECLF	*	ECCS AIR COOLER	*	(MAINTENANCE FREQUENCY)	MF	23	ECCS PP RM CLR
FAN	FH*	ZMFN2F	FH	CHICKEN HOUSE FAN	*	(MAINTENANCE FREQUENCY)	MF	21	<50,000CFM
FAN	VA*	ZMFN1F	VA	FAN, NSR, NOT CNTMT	*	(MAINTENANCE FREQUENCY)	MF	21	>50,000CFM
FAN	VA*	ZMFN2F	VA	FAN, NSR, NOT CNTMT	*	(MAINTENANCE FREQUENCY)	MF	21	<50,000CFM
FAN	VB*	ZMFN2F	VB	FAN, NSR, CNTMT	*	(MAINTENANCE FREQUENCY)	MF	21	
FAN	VD*	ZMFN2F	VD	FAN, SR, NOT CNTMT	*	(MAINTENANCE FREQUENCY)	MF	21	
FAN	VG*	BMCA1D	VG	1 CONT AIR COOLER	*	(MAINTENANCE DURATION)	MD		CAC
FAN	VG*	BMCA1F	VG	1 CONT AIR COOLER	*	(MAINTENANCE FREQUENCY)	MF		CAC
FAN	VG*	BMCA2D	VG	2 CONT AIR COOLER	*	(MAINTENANCE DURATION)	MD		CAC
FAN	VG*	BMCA2F	VG	2 CONT AIR COOLER	*	(MAINTENANCE FREQUENCY)	MF		CAC

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FAN	VG*	ZMFN1F	VG	FAN, SR, CNTMT	*	(MAINTENANCE FREQUENCY)	MF	21	
FAN	VN*	ZMFN2F	VN	ESFAS CABINET COOLING	*	(MAINTENANCE FREQUENCY)	MF	21	
FCV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
FCV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
FCV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
FCV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
HV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		LONG TECH SPEC
HV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
HV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
HV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPEC
HX	**	BMHXND	*	SDC HX	*	(MAINTENANCE DURATION)	MD		
HX	**	BMHXNF	*	SDC HX	*	(MAINTENANCE FREQUENCY)	MF		
HX	HX*	ZMHXND	HX	HEAT EXCHANGER	*	(MAINTENANCE DURATION)	MD		NO TECH SPEC
HX	HX*	ZMHXRF	HX	HEAT EXCHANGER	*	(MAINTENANCE FREQUENCY)	MF	21	
INV	IN*	ZMELEF	IN	INVERTER	*	(MAINTENANCE FREQUENCY)	MF	21	
MOV	**	BMNSPD	*	NORMAL CNTMT SUMP OPEN	*	(MAINTENANCE DURATION)	MD		
MOV	**	BMNSPF	*	NORMAL CNTMT SUMP OPEN	*	(MAINTENANCE FREQUENCY)	MF		
MOV	MV*	BMPRBD	MV	PORV BLOCK MOVs	*	(MAINTENANCE DURATION)	MD		
MOV	MV*	BMPRBF	MV	PORV BLOCK MOVs	*	(MAINTENANCE FREQUENCY)	MF		
MOV	MV*	BMSIRD	MV	CS/SI PUMPS RECIRC LINE	*	(MAINTENANCE DURATION)	MD		
MOV	MV*	BMSIRF	MV	CS/SI PUMPS RECIRC LINE	*	(MAINTENANCE FREQUENCY)	MF		
MOV	MV*	BMVS4D	MV	CNTMT SUMP PUMP & RWT MOVs	*	(MAINTENANCE DURATION)	MD		RWT MOVs
MOV	MV*	BMVS4F	MV	CNTMT SUMP PUMP & RWT MOVs	*	(MAINTENANCE FREQUENCY)	MF		RWT MOVs
MOV	MV*	BMVS8D	MV	MOV	*	(MAINTENANCE DURATION)	MD		HPSI/LPSI LOOP MOVs
MOV	MV*	BMVS8F	MV	MOV	*	(MAINTENANCE FREQUENCY)	MF		HPSI/LPSI LOOP MOVs
MOV	MV*	ZMVLSD	MV	VALVES	*	(MAINTENANCE DURATION)	MD	25	LONG TECH SPEC
MOV	MV*	ZMVLVF	MV	VALVES	*	(MAINTENANCE FREQUENCY)	MF	21	OTHER MOV'S
MOV	MV*	ZMVNSD	MV	VALVES	*	(MAINTENANCE DURATION)	MD	25	NO TECH SPEC
MOV	MV*	ZMVSSD	MV	VALVES	*	(MAINTENANCE DURATION)	MD	25	SHORT TECH SPEC
PCV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	LONG TECH SPEC
PCV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
PCV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	NO TECH SPEC
PCV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	SHORT TECH SPEC
PNL	BU*	BM1YBD	BU	ELECTRICAL PANEL	*	(MAINTENANCE DURATION)	MD		ALIGNED TO BACK-UP
PNL	BU*	BM1YBF	BU	ELECTRICAL PANEL	*	(MAINTENANCE FREQUENCY)	MF		ALIGNED TO BACK-UP
PNL	BU*	BM1YOD	BU	120VAC VITALPNL OOS (1/MTTR)	*	(MAINTENANCE DURATION)	MD		
PNL	BU*	BM1YOF	BU	120VAC VITALPNL OOS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	**	BMA3RD	*	ALL AFW PUMPS - REC	*	(MAINTENANCE DURATION)	MD		AFW
PUMP	**	BMA3RF	*	ALL AFW PUMPS - REC	*	(MAINTENANCE FREQUENCY)	MF		AFW
PUMP	**	BMAMPD	*	MOTOR DRIVEN AFW PUMPS- (NOTR)	*	(MAINTENANCE DURATION)	MD		AFW MOTOR DRIVEN
PUMP	**	BMAMPF	*	MOTOR DRIVEN AFW PUMPS- (NOTR)	*	(MAINTENANCE FREQUENCY)	MF		AFW MOTOR DRIVEN
PUMP	**	BMBA1D	*	BORIC ACID PUMPS	*	(MAINTENANCE DURATION)	MD		
PUMP	**	BMBA1F	*	BORIC ACID PUMPS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	**	BMCH2D	*	2 CHG PUMPS OR 2 FLOW PATHS	*	(MAINTENANCE DURATION)	MD		
PUMP	**	BMCH2F	*	2 CHG PUMPS OR 2 FLOW PATHS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	**	BMCSPD	*	CS PUMPS	*	(MAINTENANCE DURATION)	MD		
PUMP	**	BMCSPF	*	CS PUMPS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	**	ZMPLSD	*	PUMPS	*	(MAINTENANCE DURATION)	MD		LONG TECH SPECs
PUMP	**	ZMPMSD	*	PUMPS	*	(MAINTENANCE DURATION)	MD		72 HOUR TECH SPECs
PUMP	**	ZMPNSD	*	PUMPS	*	(MAINTENANCE DURATION)	MD		NO TECH SPECs
PUMP	**	ZMPSSD	*	PUMPS	*	(MAINTENANCE DURATION)	MD		SHORT TECH SPECs(24
PUMP	*	ZMPSWF	*	PUMPs	*	(MAINTENANCE FREQUENCY)	MF	21	SRW/SW/CCW PPs

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
PUMP	*	ZMPTSF	*	PUMPs	*	(MAINTENANCE FREQUENCY)	MF	21	STAND-BY TURB DVN
PUMP	AP*	ZMPOPF	AP	MSIV HYDRAULIC AIR PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	AW*	BMA1TD	AW	ONE TURB AFW PUMP (NOTR)	*	(MAINTENANCE DURATION)	MD		
PUMP	AW*	BMA1TF	AW	ONE TURB AFW PUMP (NOTR)	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	AW*	BMA2ND	AW	BOTH TURB AFW PUMPS	*	(MAINTENANCE DURATION)	MD		
PUMP	AW*	BMA2NF	AW	BOTH TURB AFW PUMPS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	AW*	BMA2RD	AW	BOTH TURB AFW -(REC)	*	(MAINTENANCE DURATION)	MD		
PUMP	AW*	BMA2RF	AW	BOTH TURB AFW -(REC)	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	DP*	ZMPOPF	DP	DEMINERALIZED WATER PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MA*	BMSIPD	MA	SI PUMPS (LPSI/HPSI)	*	(MAINTENANCE DURATION)	MD		
PUMP	MA*	BMSIPF	MA	SI PUMPS (LPSI/HPSI)	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	MA*	ZMPMSF	MA	4KV STANDBY PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MB*	ZMPMSF	MB	480VAC STANDBY PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MC*	ZMPPDF	MC	CHARGING PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MF*	ZMPPDF	MF	FUEL OIL TRANSFER PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MH*	ZMPOPF	MH	REACTOR COOLANT PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MM*	ZMPOPF	MM	NORM OPERATING PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MN*	BMSGPD	MN	STEAM GENERATOR FEED PUMP OOS	*	(MAINTENANCE DURATION)	MD		
PUMP	MN*	BMSGPF	MN	STEAM GENERATOR FEED PUMP OOS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	MP*	ZMPMSF	MP	STANDBY PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	MTR & DIESEL DRIVEN
PUMP	MW*	BMSWPD	MW	SW PUMP OOS	*	(MAINTENANCE DURATION)	MD		
PUMP	MW*	BMSWPF	MW	SW PUMP OOS	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	MW*	ZMPOPF	MW	4KV SR NORMALLY OPER PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MY*	ZMPOPF	MY	4KV NSR NORMALLY OPER PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	MY*	ZMPOPF	MY	4KV NSR NORMALLY OPER PUMP	*	(MAINTENANCE FREQUENCY)	MF	21	
PUMP	PF*	BMMFPD	PF	MOTOR DRIVEN FIRE PUMP	*	(MAINTENANCE DURATION)	MD		
PUMP	PF*	BMMFPF	PF	MOTOR DRIVEN FIRE PUMP	*	(MAINTENANCE FREQUENCY)	MF		
PUMP	PH*	BMDFPD	PH	DIESEL DRIVEN FIRE PUMP	*	(MAINTENANCE DURATION)	MD		
PUMP	PH*	BMDFPF	PH	DIESEL DRIVEN FIRE PUMP	*	(MAINTENANCE FREQUENCY)	MF		
RV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	LONG TECH SPEC
RV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
RV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	NO TECH SPEC
RV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	SHORT TECH SPEC
SV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	LONG TECH SPEC
SV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
SV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	NO TECH SPEC
SV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	SHORT TECH SPEC
TCV	**	ZMVLSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	LONG TECH SPEC
TCV	*	ZMVLVF	*	VALVES	*	(MAINTENANCE FREQUENCY)	MF	25	
TCV	**	ZMVNSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	NO TECH SPEC
TCV	**	ZMVSSD	*	VALVES	*	(MAINTENANCE DURATION)	MD	25	SHORT TECH SPEC
TK	TK*	BMBATD	TK	BORATED H20 STORAGE	*	(MAINTENANCE DURATION)	MD		
TK	TK*	BMBATF	TK	BORATED H20 STORAGE	*	(MAINTENANCE FREQUENCY)	MF		
TK	TK*	BMCD1D	TK	COND STORAGE TANK	*	(MAINTENANCE DURATION)	MD		
TK	TK*	BMCD1F	TK	COND STORAGE TANK	*	(MAINTENANCE FREQUENCY)	MF		
TK	TK*	BMSITD	TK	SIT	*	(MAINTENANCE DURATION)	MD		SIT
TK	TK*	BMSITF	TK	SIT	*	(MAINTENANCE FREQUENCY)	MF		SIT
TX	TM*	ZMXFRF	TM	TRANSFORMER/480V TO 120V	*	(MAINTENANCE FREQUENCY)	MF	21	
TX	TN*	ZMXFRF	TN	TRANSFORMER/4.16KV TO 480V	*	(MAINTENANCE FREQUENCY)	MF	21	
TX	TR*	ZMXFRF	TR	TRANSFORMER/GENERAL	*	(MAINTENANCE FREQUENCY)	MF	21	
TX	TX*	BM13TD	TX	TRANSFORMER/13KV TO 4KV	*	(MAINTENANCE DURATION)	MD		13KV TRANSFORMER
TX	TX*	BM13TF	TX	TRANSFORMER/13KV TO 4KV	*	(MAINTENANCE FREQUENCY)	MF		13KV TRANSFORMER

DEVICE CODE	CAFTA CODE	DATA DESIGNATOR	BE COMP	DEVICE DESCRIPTION	FAIL CODE	FAILURE CODE DESCRIPTION	FAIL TYPE	COMM-ENTS	SUB-TYPE
TX	TY*	ZMXFRF	TY	TRANSFORMER/500KV TO 13KV	*	(MAINTENANCE FREQUENCY)	MF	21	
YS	YS*	ZMSC1F	YS	Y-STRAINERS	*	(MAINTENANCE FREQUENCY)	MF	21	

Flood Query: All Components used --Complete failure 12/15/98

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1BKR152-1115	U-4000-11 SERVICE TRANSF	AA	AA1X05	BNA1ET	0
A306	1RYAR-XK81	UV SUB CH A1-2	AA	AA1X05	RYA81T	0
A317	1BKR152-1102	U-440-11B SERVICE TRANSF	AA	AABKRA	BNA12O	0
A317	1BKR152-1102	U-440-11B SERVICE TRANSF	AA	AABKRA	BNA12P	0
A317	1BKR152-1104	NO. 11 LOW PRESS SAFETY INJ PUMP	AA	AABKRB	BNA14O	0
A317	1BKR152-1104	NO. 11 LOW PRESS SAFETY INJ PUMP	AA	AABKRB	BNA14P	0
A317	1BKR152-1107	NO. 11 CONTAINMENT SPRAY PUMP	AA	AABKRC	BNA17O	0
A317	1BKR152-1107	NO. 11 CONTAINMENT SPRAY PUMP	AA	AABKRC	BNA17P	0
A317	1BKR152-1105	NO. 11 SALT WATER PUMP	AA	AABKRD	BNA15O	0
A317	1BKR152-1105	NO. 11 SALT WATER PUMP	AA	AABKRD	BNA15P	0
A317	1BKR152-1108	NO. 11 HIGH PRESS SAFETY INJ PUMP	AA	AABKRE	BNA18O	0
A317	1BKR152-1108	NO. 11 HIGH PRESS SAFETY INJ PUMP	AA	AABKRE	BNA18P	0
A317	1BKR152-1116	AFW PP #13	AA	AABKRF	BNA1FO	0
A317	1BKR152-1116	AFW PP #13	AA	AABKRF	BNA1FP	0
A317	1BKR152-1109	NO. 11 SERVICE WATER PUMP	AA	AABKRG	BNA19O	0
A317	1BKR152-1109	NO. 11 SERVICE WATER PUMP	AA	AABKRG	BNA19P	0
A317	1BKR152-1110	NO. 13 HIGH PRESS SAFETY INJ PUMP	AA	AABKRH	BNA10O	0
A317	1BKR152-1110	NO. 13 HIGH PRESS SAFETY INJ PUMP	AA	AABKRH	BNA10P	0
A317	1BKR152-1111	NO. 13 SERVICE WATER PUMP	AA	AABKRI	BNA1AO	0
A317	1BKR152-1111	NO. 13 SERVICE WATER PUMP	AA	AABKRI	BNA1AP	0
A317	1BKR152-1112	NO. 13 SALT WATER PUMP	AA	AABKRJ	BNA1BO	0
A317	1BKR152-1112	NO. 13 SALT WATER PUMP	AA	AABKRJ	BNA1BP	0
A317	1BKR152-1113	SWITCHYARD FEEDER TRANS SX10	AA	AABKRK	BNA1CO	0
A317	1BKR152-1113	SWITCHYARD FEEDER TRANS SX10	AA	AABKRK	BNA1CP	0
A317	1BKR152-1114	U-440-11A SERVICE TRANSF	AA	AABKRL	BNA1DO	0
A317	1BKR152-1114	U-440-11A SERVICE TRANSF	AA	AABKRL	BNA1DP	0
A317	1BUS1A01	4KV BUS 11	AA	BUA01R	BUA01R	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A317	1NA110	13 SI HI PRESS PP DISC	AA	MAHP3Q	MAHP3Q	0
A430	1NA410	13 SI HPSI PP 13 DISC	AA	MAHP3Q	MAHP3Q	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	AA	MWSR1Q	MWSR1Q	32
A317	1NA111	SERV WTR PP 13 DISC	AA	MWSR3Q	MWSR3Q	0
A430	1NA411	SERV WTR PP 13 DISC	AA	MWSR3Q	MWSR3Q	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AA	MWSR3Q	MWSR3Q	32
1INTK-1	1PUMPSW11	11 SALT WATER PUMP (1MA105)	AA	MWSW1Q	MWSW1Q	168
A317	1NA112	SALT WTR PP 13 DISC	AA	MWSW3Q	MWSW3Q	0
A430	1NA412	SALT WTR PP 13 DISC	AA	MWSW3Q	MWSW3Q	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	AA	MWSW3Q	MWSW3Q	168
A317	1XU-440-11A	480V XFMR U-440-11A	AA	TN11AQ	TN11AQ	0
A317	1XU-440-11B	480V XFMR U-440-11B	AA	TN11BQ	TN11BQ	0
SWTCHYRD	1XSX10	BUS 11 STATION SERVICE TRANSFORMER	AA	TNSX1Q	TNSX1Q	0
A430	1BKR152-1414	SERVICE TRANSF U-4000-21	AB	AB2X05	BNA4DT	0
A306	1RYBR-XK67	UV SUB CH B1-2	AB	AB2X05	RYB67T	0
A430	1BKR152-1402	U-440-14A SERVICE TRANSF	AB	ABBKRB	BNA42O	0
A430	1BKR152-1402	U-440-14A SERVICE TRANSF	AB	ABBKRB	BNA42P	0
A430	1BKR152-1404	NO. 12 LOW PRESS SAFETY INJ PUMP	AB	ABBKRC	BNA44O	0
A430	1BKR152-1404	NO. 12 LOW PRESS SAFETY INJ PUMP	AB	ABBKRC	BNA44P	0
A430	1BKR152-1405	NO. 12 SALT WATER PUMP	AB	ABBKRD	BNA45O	0
A430	1BKR152-1405	NO. 12 SALT WATER PUMP	AB	ABBKRD	BNA45P	0
A430	1BKR152-1407	NO. 12 CONTAINMENT SPRAY PUMP	AB	ABBKRE	BNA47O	0
A430	1BKR152-1407	NO. 12 CONTAINMENT SPRAY PUMP	AB	ABBKRE	BNA47P	0
A430	1BKR152-1408	NO. 12 HIGH PRESS SAFETY INJ PUMP	AB	ABBKRF	BNA48O	0
A430	1BKR152-1408	NO. 12 HIGH PRESS SAFETY INJ PUMP	AB	ABBKRF	BNA48P	0
A430	1BKR152-1409	NO. 12 SERVER WATER PUMP	AB	ABBKRG	BNA49O	0
A430	1BKR152-1409	NO. 12 SERVER WATER PUMP	AB	ABBKRG	BNA49P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A430	1BKR152-1410	NO. 13 HIGH PRESS SAFETY INJ PUMP	AB	ABBKRH	BNA40O	0
A430	1BKR152-1410	NO. 13 HIGH PRESS SAFETY INJ PUMP	AB	ABBKRH	BNA40P	0
A430	1BKR152-1411	NO. 13 SERVICE WATER PUMP	AB	ABBKRI	BNA4AO	0
A430	1BKR152-1411	NO. 13 SERVICE WATER PUMP	AB	ABBKRI	BNA4AP	0
A430	1BKR152-1412	NO. 13 SALT WATER PUMP	AB	ABBKRJ	BNA4BO	0
A430	1BKR152-1412	NO. 13 SALT WATER PUMP	AB	ABBKRJ	BNA4BP	0
A430	1BKR152-1413	U-440-14B SERVICE TRANSF	AB	ABBKRK	BNA4CO	0
A430	1BKR152-1413	U-440-14B SERVICE TRANSF	AB	ABBKRK	BNA4CP	0
A430	1BUS1A04	4KV BUS 14	AB	BUA04R	BUA04R	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A317	1NA110	13 SI HI PRESS PP DISC	AB	MAHP4Q	MAHP4Q	0
A430	1NA410	13 SI HPSI PP 13 DISC	AB	MAHP4Q	MAHP4Q	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	AB	MWSR2Q	MWSR2Q	32
A317	1NA111	SERV WTR PP 13 DISC	AB	MWSR4Q	MWSR4Q	0
A430	1NA411	SERV WTR PP 13 DISC	AB	MWSR4Q	MWSR4Q	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AB	MWSR4Q	MWSR4Q	32
1INTK-2	1PUMPSW12	12 SALT WATER PUMP (1MA405)	AB	MWSW2Q	MWSW2Q	168
A317	1NA112	SALT WTR PP 13 DISC	AB	MWSW4Q	MWSW4Q	0
A430	1NA412	SALT WTR PP 13 DISC	AB	MWSW4Q	MWSW4Q	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	AB	MWSW4Q	MWSW4Q	168
A430	1XU-440-14A	480V XFMR U-440-14A	AB	TN14AQ	TN14AQ	0
A430	1XU-440-14B	480V XFMR U-440-14B	AB	TN14BQ	TN14BQ	0
A311	2BKR152-2101	SERVICE TRANSF U-4000-12	AC	AC1X06	BNAA1T	0
A302	2RYAR-XK82	UV SUB CH A1-3	AC	AC1X06	RYAA2T	0
A311	2BKR152-2102	SERVICE TRANSF U-440-21B	AC	ACBKRA	BNAA2O	0
A311	2BKR152-2102	SERVICE TRANSF U-440-21B	AC	ACBKRA	BNAA2P	0
A311	2BKR152-2104	LOW PRESS SAFETY INJ PUMP 21	AC	ACBKRB	BNAA4O	0
A311	2BKR152-2104	LOW PRESS SAFETY INJ PUMP 21	AC	ACBKRB	BNAA4P	0
A311	2BKR152-2107	CONTAIN SPRAY PUMP 21	AC	ACBKRC	BNAA7O	0
A311	2BKR152-2107	CONTAIN SPRAY PUMP 21	AC	ACBKRC	BNAA7P	0
A311	2BKR152-2105	SALT WATER PUMP 21	AC	ACBKRD	BNAA5O	0
A311	2BKR152-2105	SALT WATER PUMP 21	AC	ACBKRD	BNAA5P	0
A311	2BKR152-2108	HIGH PRESS SAFETY INJ PUMP 21	AC	ACBKRE	BNAA8O	0
A311	2BKR152-2108	HIGH PRESS SAFETY INJ PUMP 21	AC	ACBKRE	BNAA8P	0
A311	2BKR152-2109	SERVICE WATER PUMP 21	AC	ACBKRG	BNAA9O	0
A311	2BKR152-2109	SERVICE WATER PUMP 21	AC	ACBKRG	BNAA9P	0
A311	2BKR152-2110	HIGH PRESS SAFETY INJ PUMP 23	AC	ACBKRH	BNAA0O	0
A311	2BKR152-2110	HIGH PRESS SAFETY INJ PUMP 23	AC	ACBKRH	BNAA0P	0
A311	2BKR152-2111	SERVICE WATER WATER PP 23	AC	ACBKRI	BNAAAO	0
A311	2BKR152-2111	SERVICE WATER WATER PP 23	AC	ACBKRI	BNAAAP	0
A311	2BKR152-2112	SALT WATER PUMP 23	AC	ACBKRJ	BNAABO	0
A311	2BKR152-2112	SALT WATER PUMP 23	AC	ACBKRJ	BNAABP	0
A311	2BKR152-2113	SWITCHYARD FEEDER (500KVA)	AC	ACBKRK	BNAACO	0
A311	2BKR152-2113	SWITCHYARD FEEDER (500KVA)	AC	ACBKRK	BNAACP	0
A311	2BKR152-2114	SERVICE TRANSF U-440-21A	AC	ACBKRL	BNAADO	0
A311	2BKR152-2114	SERVICE TRANSF U-440-21A	AC	ACBKRL	BNAADP	0
A311	2BUS2A01	4KV BUS 21	AC	BU2A1R	BU2A1R	0
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A311	2NA110	SI 23 HPSI PP 23 DISC	AC	MAHP7Q	MAHP7Q	0
A407	2NA410	23 SI HPSI PP 23 DISC	AC	MAHP7Q	MAHP7Q	0
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	AC	MWSR5Q	MWSR5Q	32
A311	2NA111	SERV WTR PP 23 DISC	AC	MWSR7Q	MWSR7Q	0
A407	2NA411	SERV WTR PP 23 DISC	AC	MWSR7Q	MWSR7Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AC	MWSR7Q	MWSR7Q	32
2INTK-1	2PUMPSW21	21 SALT WATER PUMP (2MA105)	AC	MWSW5Q	MWSW5Q	168
A311	2NA112	SALT WTR PP 23 DISC	AC	MWSW7Q	MWSW7Q	0
A407	2NA412	SALT WTR PP 23 DISC	AC	MWSW7Q	MWSW7Q	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	AC	MWSW7Q	MWSW7Q	168
A311	2XU-440-21A	480V XFMR U-440-21A	AC	TN21AQ	TN21AQ	0
A311	2XU-440-21B	480V XFMR U-440-21B	AC	TN21BQ	TN21BQ	0
SWTCHYRD	2XSX20	BUS 21 STATION SERVICE TRANSFORMER	AC	TNX20Q	TNX20Q	0
A407	2BKR152-2401	SUPP BKR FROM U-4000-22	AD	AD2X06	BNAD1T	0
A302	2RYBR-XK66	UV SUB CH B1-1	AD	AD2X06	RYBD6T	0
A407	2BKR152-2402	SERVICE TRANSF (U-440-24A)	AD	ADBKRA	BNAD2O	0
A407	2BKR152-2402	SERVICE TRANSF (U-440-24A)	AD	ADBKRA	BNAD2P	0
A407	2BKR152-2404	LOW PRESS SAFETY INJ PUMP 22	AD	ADBKRB	BNAD4O	0
A407	2BKR152-2404	LOW PRESS SAFETY INJ PUMP 22	AD	ADBKRB	BNAD4P	0
A407	2BKR152-2405	SALT WATER PUMP 22	AD	ADBKRC	BNAD5O	0
A407	2BKR152-2405	SALT WATER PUMP 22	AD	ADBKRC	BNAD5P	0
A407	2BKR152-2407	CONTMT SPR PP 22	AD	ADBKRD	BNAD7O	0
A407	2BKR152-2407	CONTMT SPR PP 22	AD	ADBKRD	BNAD7P	0
A407	2BKR152-2408	HI PRESS SFTY INJ PP 22	AD	ADBKRE	BNAD8O	0
A407	2BKR152-2408	HI PRESS SFTY INJ PP 22	AD	ADBKRE	BNAD8P	0
A407	2BKR152-2409	SERVICE WATER PUMP 22	AD	ADBKRF	BNAD9O	0
A407	2BKR152-2409	SERVICE WATER PUMP 22	AD	ADBKRF	BNAD9P	0
A407	2BKR152-2410	HIGH PRESS SAFETY INJ PUMP 23	AD	ADBKRG	BNAD0O	0
A407	2BKR152-2410	HIGH PRESS SAFETY INJ PUMP 23	AD	ADBKRG	BNAD0P	0
A407	2BKR152-2411	SERVICE WATER PUMP 23	AD	ADBKRH	BNADAO	0
A407	2BKR152-2411	SERVICE WATER PUMP 23	AD	ADBKRH	BNADAP	0
A407	2BKR152-2412	SALT WATER PP 23	AD	ADBKRI	BNADBO	0
A407	2BKR152-2412	SALT WATER PP 23	AD	ADBKRI	BNADBP	0
A407	2BKR152-2413	SERVICE TRANSF U-440-24B	AD	ADBKRJ	BNADCO	0
A407	2BKR152-2413	SERVICE TRANSF U-440-24B	AD	ADBKRJ	BNADCP	0
A407	2BKR152-2415	AFW PUMP NO. 23	AD	ADBKRK	BNADEO	0
A407	2BKR152-2415	AFW PUMP NO. 23	AD	ADBKRK	BNADEP	0
A407	2BUS2A04	4KV BUS 24	AD	BU2A4R	BU2A4R	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A311	2NA110	SI 23 HPSI PP 23 DISC	AD	MAHP8Q	MAHP8Q	0
A407	2NA410	23 SI HPSI PP 23 DISC	AD	MAHP8Q	MAHP8Q	0
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	AD	MWSR6Q	MWSR6Q	32
A311	2NA111	SERV WTR PP 23 DISC	AD	MWSR8Q	MWSR8Q	0
A407	2NA411	SERV WTR PP 23 DISC	AD	MWSR8Q	MWSR8Q	0
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AD	MWSR8Q	MWSR8Q	32
2INTK-2	2PUMPSW22	22 SALT WATER PUMP (2MA405)	AD	MWSW6Q	MWSW6Q	168
A311	2NA112	SALT WTR PP 23 DISC	AD	MWSW8Q	MWSW8Q	0
A407	2NA412	SALT WTR PP 23 DISC	AD	MWSW8Q	MWSW8Q	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	AD	MWSW8Q	MWSW8Q	168
A407	2XU-440-24A	480V XFMR U-440-24A	AD	TN24AQ	TN24AQ	0
A407	2XU-440-24B	480V XFMR U-440-24B	AD	TN24BQ	TN24BQ	0
A317	1BKR152-1201	U-4000-11 SERVICE TRANSF	AE	AE1X05	BNA21T	0
A317	1BUS1A02	4KV BUS 12	AE	AE1X05	BUA02R	0
A317	1BKR152-1202	U-440-12B SERVICE TRANSF	AE	AEBKRA	BNA22O	0
A317	1BKR152-1202	U-440-12B SERVICE TRANSF	AE	AEBKRA	BNA22P	0
A317	1BKR152-1204	NO. 11 CONDENSATE BOOSTER PUMP	AE	AEBKRB	BNA24O	0
A317	1BKR152-1204	NO. 11 CONDENSATE BOOSTER PUMP	AE	AEBKRB	BNA24P	0
A317	1BKR152-1205	NO. 12 CONDENSATE BOOSTER PUMP	AE	AEBKRC	BNA25O	0
A317	1BKR152-1205	NO. 12 CONDENSATE BOOSTER PUMP	AE	AEBKRC	BNA25P	0
A317	1BKR152-1206	NO. 11 HEATER DRAIN PUMP	AE	AEBKRD	BNA26O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1BKR152-1206	NO. 11 HEATER DRAIN PUMP	AE	AEBKRD	BNA26P	0
A317	1BKR152-1207	NO. 11 CONDENSATE PUMP	AE	AEBKRE	BNA27O	0
A317	1BKR152-1207	NO. 11 CONDENSATE PUMP	AE	AEBKRE	BNA27P	0
A317	1BKR152-1208	U-440-12A SERVICE TRANSF	AE	AEBKRF	BNA28O	0
A317	1BKR152-1208	U-440-12A SERVICE TRANSF	AE	AEBKRF	BNA28P	0
1TB27-7	1PUMPCBP11	CD CBP 11 (1MA204)	AE	MYCB1Q	MYCB1Q	0
1TB27-7	1PUMPCBP12	CD CBP 12 (1MA205)	AE	MYCB2Q	MYCB2Q	0
1TB12-3 (CP)	1PUMPCD11	11 CONDENSATE PUMP (1MA207)	AE	MYCP1Q	MYCP1Q	0
1TB12-2	1PUMPHDV11	11 FW HEATER DRAIN PUMP (1MA206)	AE	MYHD1Q	MYHD1Q	0
A317	1XU-440-12A	480V XFMR U-440-12A	AE	TN12AQ	TN12AQ	0
A317	1XU-440-12B	480V XFMR U-440-12B	AE	TN12BQ	TN12BQ	0
A430	1BKR152-1311	SUPP BKR FROM U-4000-11	AF	AF1X05	BNA3AT	0
A430	1BUS1A03	4KV BUS 13	AF	AF1X05	BUA03R	0
A430	1BKR152-1302	U-440-13B SERVICE TRANSF	AF	AFBKRA	BNA32O	0
A430	1BKR152-1302	U-440-13B SERVICE TRANSF	AF	AFBKRA	BNA32P	0
A430	1BKR152-1306	NO. 12 HEATER DRAIN PUMP	AF	AFBKRB	BNA36O	0
A430	1BKR152-1306	NO. 12 HEATER DRAIN PUMP	AF	AFBKRB	BNA36P	0
A430	1BKR152-1307	NO. 12 CONDENSATE PUMP	AF	AFBKRC	BNA37O	0
A430	1BKR152-1307	NO. 12 CONDENSATE PUMP	AF	AFBKRC	BNA37P	0
A430	1BKR152-1308	NO. 13 CONDENSATE PUMP	AF	AFBKRD	BNA38O	0
A430	1BKR152-1308	NO. 13 CONDENSATE PUMP	AF	AFBKRD	BNA38P	0
A430	1BKR152-1309	TRANSFORMER 1X54 ACCESS CONTROL AREA CHILLE	AF	AFBKRE	BNA39O	0
A430	1BKR152-1309	TRANSFORMER 1X54 ACCESS CONTROL AREA CHILLE	AF	AFBKRE	BNA39P	0
A430	1BKR152-1310	U-440-13A SERVICE TRANSF	AF	AFBKRF	BNA30O	0
A430	1BKR152-1310	U-440-13A SERVICE TRANSF	AF	AFBKRF	BNA30P	0
A430	1BKR152-1304	NO. 13 CONDENSATE BOOSTER PUMP	AF	AFBKRG	BNA34O	0
A430	1BKR152-1304	NO. 13 CONDENSATE BOOSTER PUMP	AF	AFBKRG	BNA34P	0
1X54	1X54	1PNL1P74 SUPPLY TRANSFORMER	AF	AFBR9L	TNX54Q	0
1TB12-2	1PUMPCBP13	CD CBP 13 (1MA304)	AF	MYCB3Q	MYCB3Q	0
1TB12-3 (CP)	1PUMPCD12	12 CONDENSATE PUMP (1MA307)	AF	MYCP2Q	MYCP2Q	0
1TB12-3 (CP)	1PUMPCD13	13 CONDENSATE PUMP (1MA308)	AF	MYCP3Q	MYCP3Q	0
1TB12-2	1PUMPHDV12	12 FW HEATER DRAIN PUMP (1MA306)	AF	MYHD2Q	MYHD2Q	0
A430	1XU-440-13A	480V XFMR U-440-13A	AF	TN13AQ	TN13AQ	0
A430	1XU-440-13B	480V XFMR U-440-13B	AF	TN13BQ	TN13BQ	0
1TB27-3	1CV3940REGB	AIR VOL BST FOR 1VV3940	BS	BS3940	AB40OO	0
1TB27-3	1CV3940REGB	AIR VOL BST FOR 1VV3940	BS	BS3940	AB40OP	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BS	BS3940	C5940P	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BS	BS3940	C5940P	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BS	BS3940	C5940P	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BS	BS3940	C5940T	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BS	BS3940	C5940T	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BS	BS3940	C5940T	0
1TB27-3	1SV3940	TBV 3940 LO COND VAC I/L SV	BS	BS3940	IV940T	0
1TB27-3	1I/P3940	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BS	BS3940	IZ940R	0
1TB27-3	1CV3940OP	MS TURB BYP CV OPERATOR	BS	BS3940	PX940I	0
1TB27-3	1CV3940OP	MS TURB BYP CV OPERATOR	BS	BS3940	PX940R	0
1TB27-3	1CV3942REGB	AIR VOL BST FOR 1CV3942	BS	BS3942	AB42OO	0
1TB27-3	1CV3942REGB	AIR VOL BST FOR 1CV3942	BS	BS3942	AB42OP	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BS	BS3942	C5942P	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BS	BS3942	C5942P	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BS	BS3942	C5942P	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BS	BS3942	C5942T	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BS	BS3942	C5942T	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BS	BS3942	C5942T	0
1TB27-3	1SV3942	TBV 3942 LO COND VAC I/L SV	BS	BS3942	IV942T	0
1TB27-3	1I/P3942	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BS	BS3942	IZ942R	0
1TB27-3	1CV3942OP	MS TURB BYP VLV OPERATOR	BS	BS3942	PX942I	0
1TB27-3	1CV3942OP	MS TURB BYP VLV OPERATOR	BS	BS3942	PX942R	0
1TB27-3	1CV3944REGB	AIR VOL BST FOR 1CV3944	BS	BS3944	AB44OO	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-3	1CV3944REGB	AIR VOL BST FOR 1CV3944	BS	BS3944	AB44OP	0
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BS	BS3944	C5944P	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BS	BS3944	C5944P	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BS	BS3944	C5944P	0
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BS	BS3944	C5944T	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BS	BS3944	C5944T	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BS	BS3944	C5944T	0
1TB27-3	1SV3944	TBV 3944 LO COND VAC I/L SV	BS	BS3944	IV944T	0
1TB27-3	1I/P3944	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BS	BS3944	IZ944R	0
1TB27-3	1CV3944OP	MS TURB BYP VLV OPERATOR	BS	BS3944	PX944I	0
1TB27-3	1CV3944OP	MS TURB BYP VLV OPERATOR	BS	BS3944	PX944R	0
1TB27-3	1CV3946REGB	AIR VOL BST FOR 1CV3946	BS	BS3946	AB46OO	0
1TB27-3	1CV3946REGB	AIR VOL BST FOR 1CV3946	BS	BS3946	AB46OP	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BS	BS3946	C5946P	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BS	BS3946	C5946P	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BS	BS3946	C5946P	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BS	BS3946	C5946T	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BS	BS3946	C5946T	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BS	BS3946	C5946T	0
1TB27-3	1SV3946	TBV 3946 LO COND VAC I/L SV	BS	BS3946	IV946T	0
1TB27-3	1I/P3946	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BS	BS3946	IZ946R	0
1TB27-3	1CV3946OP	MS TURB BYP VLV OPERATOR	BS	BS3946	PX946I	0
1TB27-3	1CV3946OP	MS TURB BYP VLV OPERATOR	BS	BS3946	PX960R	0
A306	1I/I4056	TURBINE BY-PASS VALVE CONTROL	BS	BS4056	II056R	0
A405	1PIC4056	MS TURB BYPASS AUTO/MAN VLV PIC	BS	BS4056	PC056R	0
1TB12-4	1PT4056	MS TURB BYPASS VLV CONTROL PT	BS	BS4056	PT056R	0
1TB27-3	1CV3940REGB	AIR VOL BST FOR 1VV3940	BS	BS940C	AB40BC	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BS	BS940C	C5940C	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BS	BS940C	C5940C	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BS	BS940C	C5940C	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BS	BS940C	IV40AD	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BS	BS940C	IV40BD	0
1TB27-3	1CV3942REGB	AIR VOL BST FOR 1CV3942	BS	BS942C	AB42BC	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BS	BS942C	C5942C	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BS	BS942C	C5942C	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BS	BS942C	C5942C	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BS	BS942C	IV42AD	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BS	BS942C	IV42BD	0
1TB27-3	1CV3944REGB	AIR VOL BST FOR 1CV3944	BS	BS944C	AB44BC	0
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BS	BS944C	C5944C	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BS	BS944C	C5944C	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BS	BS944C	C5944C	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BS	BS944C	IV44AD	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BS	BS944C	IV44BD	0
1TB27-3	1CV3946REGB	AIR VOL BST FOR 1CV3946	BS	BS946C	AB46BC	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BS	BS946C	C5946C	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BS	BS946C	C5946C	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BS	BS946C	C5946C	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BS	BS946C	IV46AD	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BS	BS946C	IV46BD	0
A306	1RYT01/XKT/1032-1	VACUUM TRIP & RESET SYSTEM	BS	BSLVSV	RY321P	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	BS	BSRRSR	RYK71D	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	BS	BSRRSR	RYK71T	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BS	C5940O	C5940O	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BS	C5940O	C5940O	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BS	C5940O	C5940O	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BS	C5942O	C5942O	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BS	C5942O	C5942O	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BS	C5942O	C5942O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BS	C5944O	C5944O	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BS	C5944O	C5944O	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BS	C5944O	C5944O	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BS	C5946O	C5946O	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BS	C5946O	C5946O	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BS	C5946O	C5946O	0
1TB27-3	1CV3940REGB	AIR VOL BST FOR 1VV3940	BV	BV3940	AB40BO	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BV	BV3940	C5940P	0
1TB27-3	1I/P3940	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	BV3940	C5940P	0
1TB27-3	1SV3940	TBV 3940 LO COND VAC I/L SV	BV	BV3940	C5940P	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BV	BV3940	IV41AD	0
1TB27-3	1SV3941A	TURBINE BY-PASS QUICK OPENING	BV	BV3940	IV41AT	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BV	BV3940	IV41BD	0
1TB27-3	1SV3941B	TURBINE BY-PASS QUICK OPENING	BV	BV3940	IV41BT	0
1TB27-3	1CV3942REGB	AIR VOL BST FOR 1CV3942	BV	BV3942	AB42BO	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BV	BV3942	C5942P	0
1TB27-3	1I/P3942	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	BV3942	C5942P	0
1TB27-3	1SV3942	TBV 3942 LO COND VAC I/L SV	BV	BV3942	C5942P	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BV	BV3942	IV43AD	0
1TB27-3	1SV3943A	TURB BYPASS QUICK OPENING	BV	BV3942	IV43AT	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BV	BV3942	IV43BD	0
1TB27-3	1SV3943B	TURB BYPASS QUICK OPENING	BV	BV3942	IV43BT	0
1TB27-3	1CV3944REGB	AIR VOL BST FOR 1CV3944	BV	BV3944	AB44BO	0
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BV	BV3944	C5944P	0
1TB27-3	1I/P3944	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	BV3944	C5944P	0
1TB27-3	1SV3944	TBV 3944 LO COND VAC I/L SV	BV	BV3944	C5944P	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BV	BV3944	IV45AD	0
1TB27-3	1SV3945A	TURB BYPASS QUICK OPENING	BV	BV3944	IV45AT	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BV	BV3944	IV45BD	0
1TB27-3	1SV3945B	TURB BYPASS QUICK OPENING	BV	BV3944	IV45BT	0
1TB27-3	1CV3946REGB	AIR VOL BST FOR 1CV3946	BV	BV3946	AB46BO	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BV	BV3946	C5946P	0
1TB27-3	1I/P3946	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	BV3946	C5946P	0
1TB27-3	1SV3946	TBV 3946 LO COND VAC I/L SV	BV	BV3946	C5946P	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BV	BV3946	IV47AD	0
1TB27-3	1SV3947A	TURB BYPASS QUICK OPENING	BV	BV3946	IV47AT	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BV	BV3946	IV47BD	0
1TB27-3	1SV3947B	TURB BYPASS QUICK OPENING	BV	BV3946	IV47BT	0
1TB27-3	1SV3940	TBV 3940 LO COND VAC I/L SV	BV	BVCLVR	IV940T	0
1TB27-3	1SV3942	TBV 3942 LO COND VAC I/L SV	BV	BVCLVR	IV942T	0
1TB27-3	1SV3944	TBV 3944 LO COND VAC I/L SV	BV	BVCLVR	IV944T	0
1TB27-3	1SV3946	TBV 3946 LO COND VAC I/L SV	BV	BVCLVR	IV946T	0
A306	1RYT01/XKT/1032-1	VACUUM TRIP & RESET SYSTEM	BV	BVCLVR	RY321P	0
A306	1RY1D0124/1TVT/X1	TURB STEAM DUMP & BYPASS CONT	BV	BVCLVR	RYVT1P	0
A306	1RY1D0124/1TVT/X2	TURB STEAM DUMP & BYPASS CONT	BV	BVCLVR	RYVT2P	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	BV	BVMTTR	RY194E	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	BV	BVMTTR	RY194P	0
A405	1HS01/RRS	1 RR TAVG SIG SEL TO INDIC HS	BV	BVRRSX	HSRX1T	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	BV	BVRRSX	RYK71E	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	BV	BVRRSX	RYK71P	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	BV	BVSD1R	RYSD1E	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	BV	BVSD1R	RYSD1P	0
A306	1RY1D0124/1TSD/X2	TURB STEAM DUMP & BYPASS CONT	BV	BVSD2R	RYSD2E	0
A306	1RY1D0124/1TSD/X2	TURB STEAM DUMP & BYPASS CONT	BV	BVSD2R	RYSD2P	0
A306	1RY1D0124/1TT/X1	TURB STEAM DUMP & BYPASS CONT	BV	BVTT1R	RYTT1E	0
A306	1RY1D0124/1TT/X1	TURB STEAM DUMP & BYPASS CONT	BV	BVTT1R	RYTT1P	0
A306	1RY1D0124/1TT/X2	TURB STEAM DUMP & BYPASS CONT	BV	BVTT2R	RYTT2E	0
A306	1RY1D0124/1TT/X2	TURB STEAM DUMP & BYPASS CONT	BV	BVTT2R	RYTT2P	0
1TB27-3	1CV3940	TURB BYP VLV (TBV)	BV	C5940O	C5940O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-3	1I/P3940	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	C5940O	C5940O	0
1TB27-3	1SV3940	TBV 3940 LO COND VAC I/L SV	BV	C5940O	C5940O	0
1TB27-3	1CV3942	TURB BYP VLV (TBV)	BV	C5942O	C5942O	0
1TB27-3	1I/P3942	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	C5942O	C5942O	0
1TB27-3	1SV3942	TBV 3942 LO COND VAC I/L SV	BV	C5942O	C5942O	0
1TB27-3	1CV3944	TURB BYP VLV (TBV)	BV	C5944O	C5944O	0
1TB27-3	1I/P3944	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	C5944O	C5944O	0
1TB27-3	1SV3944	TBV 3944 LO COND VAC I/L SV	BV	C5944O	C5944O	0
1TB27-3	1CV3946	TURB BYP VLV (TBV)	BV	C5946O	C5946O	0
1TB27-3	1I/P3946	MS TURB BYPASS VLV CONTROL I/P SIG CONVERTER	BV	C5946O	C5946O	0
1TB27-3	1SV3946	TBV 3946 LO COND VAC I/L SV	BV	C5946O	C5946O	0
1TB45-1	0PUMPHVACWCW11	11 CHILLED WTR CR HVAC (1M0656)	CI	BHEHH3	Start	0
1TB45-1	0PUMPHVACWCW12	12 CHILLED WTR CR HVAC (1M1668)	CI	BHEHH3	Start	0
1CNT10-1	1CV4150	11 CS HDR ISOL CV	CS	CS0103	CV150P	0
A405	1HS4150	11 CS HDR ISOL VLV HS	CS	CS0103	CV150P	0
A306	1RYAR-XK116	CSAS SUB CH A2-2	CS	CS0103	CV150P	0
1CNT10-1	1SV4150	CNTMT SPRAY HDR 11 ISOL CONT	CS	CS0103	CV150P	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
1CNT69-3	1NZL11	CNTMT SPRAY HDR NZL 11	CS	CS0103	NZC11P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A405	1HS3828	11 CC S/D CLG HX OUT CV HS	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A306	1RYAR-XK28	SIAS SUB CH A7-5	CS	CSHX11	RYK28E	0
1CNT10-1	1CV4150	11 CS HDR ISOL CV	CS	CV150O	CV150O	0
A405	1HS4150	11 CS HDR ISOL VLV HS	CS	CV150O	CV150O	0
A306	1RYAR-XK116	CSAS SUB CH A2-2	CS	CV150O	CV150O	0
1CNT10-1	1SV4150	CNTMT SPRAY HDR 11 ISOL CONT	CS	CV150O	CV150O	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A405	1HS3828	11 CC S/D CLG HX OUT CV HS	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
1CNT10-2	1CV4151	12 CS HDR ISOL CV	CT	CT0103	CV151P	0
A405	1HS4151	12 CS HDR ISOL VLV HS	CT	CT0103	CV151P	0
A306	1RYBR-XK100	CSAS SUB CH B2-2	CT	CT0103	CV151P	0
1CNT10-2	1SV4151	CNTMT SPRAY HDR 12 ISOL CONT	CT	CT0103	CV151P	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
1CNT69-3	1NZL12	CNTMT SPRAY HDR NZL 12	CT	CT0103	NZC12P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A405	1HS3830	12 CC S/D CLG HX OUT CV HS	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A306	1RYAR-XK23	SIAS SUB CH A6-3	CT	CTXH12	RYK23E	0
1CNT10-2	1CV4151	12 CS HDR ISOL CV	CT	CV151O	CV151O	0
A405	1HS4151	12 CS HDR ISOL VLV HS	CT	CV151O	CV151O	0
A306	1RYBR-XK100	CSAS SUB CH B2-2	CT	CV151O	CV151O	0
1CNT10-2	1SV4151	CNTMT SPRAY HDR 12 ISOL CONT	CT	CV151O	CV151O	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A405	1HS3830	12 CC S/D CLG HX OUT CV HS	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A323	1CV520	PURIFI ION EXCHR INLT VLV	CV	CV520P	CV520P	0
A405	1HS2520	ION EXCHR BYP CV 520 HS	CV	CV520P	CV520P	0
A323	1SV520	PURIF ION EXCH BYPASS VLV CONT	CV	CV520P	CV520P	0
C230	1HXCVCU/DR11	11 CVC L/D REGEN HX	CV	CVCK01	HX011P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
1CNT45-2	1CV519	11A CHG LINE STOP	CV	CVCV01	CV519P	0
A405	1HS2519	11A CHG LN CNTRL VLV HS	CV	CVCV01	CV519P	0
1CNT45-2	1SV519	CHARGING LINE ISOL VLV 1CV519	CV	CVCV01	CV519P	0
1CNT45-2	1SV519A	CHARG LINE 2A CONT VLV SOLND	CV	CVCV01	CV519P	0
1CNT45-2	1CV518	12B CHG LINE STOP	CV	CVCV02	CV518P	0
A405	1HS2518	12A CHG LN CNTRL VLV HS	CV	CVCV02	CV518P	0
1CNT45-2	1SV518	CHARGING LINE ISOL VLV 1CV518	CV	CVCV02	CV518P	0
1CNT45-2	1SV518A	CHARGE LINE 2A CONT VLV SOLND	CV	CVCV02	CV518P	0
1CNT26-2	1CV515	REGEN HTEX 11 INLET VALVE	CV	CVHV03	C3515P	0
A405	1HS2515	LETDWN CNTMT ISOL CV 515 HS	CV	CVHV03	C3515P	0
A306	1RYAR-XK18	SIAS SUB CH A5-1	CV	CVHV03	C3515P	0
1CNT26-2	1SV515	RX AUX LETDOWN STOP VLV 1CV515	CV	CVHV03	C3515P	0
A405	1TIC221	REGEN HTEX OUTLT TEMP IND	CV	CVHV03	C3515P	0
1CNT26-2	1CV516	LETDOWN LINE CNTMT ISOL VLV	CV	CVHV03	C3516P	0
A405	1HS2516	LTDWN LIN CNTMT CV 516 HS	CV	CVHV03	C3516P	0
A306	1RYBR-XK112	CVCS CH B	CV	CVHV03	C3516P	0
1CNT26-2	1SV516	LETDOWN LINE CNTMT ISOL VLV	CV	CVHV03	C3516P	0
A405	1TIC221	REGEN HTEX OUTLT TEMP IND	CV	CVHV03	C3516P	0
A324	1CV110P	LETDOWN VALVE	CV	CVHV03	CV10PO	0
A405	1HS110-1	1 CVC L/D VLV CNTRL HS	CV	CVHV03	CV10PO	0
A324	1I/P110P	LETDOWN VALVE CONTROL	CV	CVHV03	CV10PO	0
A324	1CV110P	LETDOWN VALVE	CV	CVHV03	CV10PP	0
A405	1HS110-1	1 CVC L/D VLV CNTRL HS	CV	CVHV03	CV10PP	0
A324	1I/P110P	LETDOWN VALVE CONTROL	CV	CVHV03	CV10PP	0
A324	1CV201Q	LETDOWN BACK PRESSURE CONTROL	CV	CVHV03	CV201O	0
A405	1HS201	1 CVC L/D BACK PRESSURE VLV CNTRL HS	CV	CVHV03	CV201O	0
A324	1I/P201Q	LETDN HTEX BACK PRESS VLV CONT	CV	CVHV03	CV201O	0
A405	1PIC201	LETDOWN HTEX DISCH PRESS CONT	CV	CVHV03	CV201O	0
A324	1CV201Q	LETDOWN BACK PRESSURE CONTROL	CV	CVHV03	CV201P	0
A405	1HS201	1 CVC L/D BACK PRESSURE VLV CNTRL HS	CV	CVHV03	CV201P	0
A324	1I/P201Q	LETDN HTEX BACK PRESS VLV CONT	CV	CVHV03	CV201P	0
A405	1PIC201	LETDOWN HTEX DISCH PRESS CONT	CV	CVHV03	CV201P	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0
A405	1HS2500	VOL CONT TNK INLT VLV HS	CV	CVHV03	CV500O	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0
A405	1HS2500	VOL CONT TNK INLT VLV HS	CV	CVHV03	CV500P	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0
A405	1HIC110	11 RC PRZR HIC	CV	CVHV03	HS110T	0
A324	1HXCVCL/DNR11	LETDOWN HEAT EXCHANGER 11	CV	CVHV03	HX11LP	0
C230	1LT110X	COMPENSATED PZR LVL XMTR	CV	CVHV03	LT110R	0
A405	1PIC201	LETDOWN HTEX DISCH PRESS CONT	CV	CVHV03	PC201R	0
A319	1PT201	LETDOWN HTEX DISCH PRESS	CV	CVHV03	PT201R	0
A306	1RYAR-XK18	SIAS SUB CH A5-1	CV	CVHV03	RYA18T	0
A306	1RYBR-XK15	SIAS SUB CH B5-1	CV	CVHV03	RYB15T	0
A362	1IXPURIF11	11 CVC PURIF IX	CV	CVHV04	FOIX1P	0
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A405	1RYLC110/63X/CH12	CHARGING PUMP 12 CONTROL	CV	CVRY02	RY632T	0
A306	1RYBR-XK18	SIAS SUB CH B6-2	CV	CVRY03	RYB18E	0
A306	1RYBR-XK18	SIAS SUB CH B6-2	CV	CVRY03	RYB18P	0
A317	1RY89-1104X	CVC DISC 89-1104 CHG PP 13 AUX REL	CV	CVRY04	RY104T	0
A306	1RYAR-XK101	UV SUB CH A3-2	CV	CVRY04	RY10XP	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A405	1RYLC110/63XCH13A	CHARGING PUMP 13A CONTROL	CV	CVRY05	RY63CT	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A405	1RYLC110/63XCH13B	CHARGING PUMP 13B CONTROL	CV	CVRY06	RY63DT	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A317	1DISC89-1104	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A430	1DISC89-1404	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A317	1DISC89-1104	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A430	1DISC89-1404	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A306	1RYAR-XK111	SIAS SUB CH A6-4	CV	RY111E	RY111E	0
A306	1RYAR-XK111	SIAS SUB CH A6-4	CV	RY111P	RY111P	0
A306	1RYAR-XK23	SIAS SUB CH A6-3	CV	RY23XE	RY23XE	0
A306	1RYAR-XK23	SIAS SUB CH A6-3	CV	RY23XP	RY23XP	0
UNK	1RY89-1404X	CVC DISC 89-1404 CHG PP 13 AUX REL	CV	RY404T	RY404T	0
A405	1RYLC110/63X/CH11	CHARGING PUMP 11 CONTROL	CV	RY631T	RY631T	0
A306	1RYAR-XK85	UV SUB CH A2-2	CV	RY85XT	RY85XT	0
A306	1RYAR-XK13	SIAS SUB CH A4-2	CV	RYA13E	RYA13E	0
A306	1RYAR-XK13	SIAS SUB CH A4-2	CV	RYA13P	RYA13P	0
A306	1RYAR-XK21	SIAS SUB CH A6-1	CV	RYA21E	RYA21E	0
A306	1RYAR-XK21	SIAS SUB CH A6-1	CV	RYA21P	RYA21P	0
A306	1RYAR-XK22	SIAS SUB CH A6-2	CV	RYA22E	RYA22E	0
A306	1RYAR-XK22	SIAS SUB CH A6-2	CV	RYA22P	RYA22P	0
A306	1RYBR-XK17	SIAS SUB CH B6-1	CV	RYB17E	RYB17E	0
A306	1RYBR-XK17	SIAS SUB CH B6-1	CV	RYB17P	RYB17P	0
A306	1RYBR-XK18	SIAS SUB CH B6-2	CV	RYB18T	RYB18T	0
A306	1RYBR-XK19	SIAS SUB CH B6-3	CV	RYB19E	RYB19E	0
A306	1RYBR-XK19	SIAS SUB CH B6-3	CV	RYB19P	RYB19P	0
A306	1RYAR-XK87	UV SUB CH A2-4	CV	RYUVAT	RYUVAT	0
A306	1RYBR-XK85	UV SUB CH B3-2	CV	RYUVBE	RYUVBE	0
A306	1RYBR-XK85	UV SUB CH B3-2	CV	RYUVBP	RYUVBP	0
A306	1FUAL-F2	CH A FAN POWER FUSE F2	CX	CXFAN2	FUAF2R	0
A306	1HSAL-S2	CH A FAN POWER SWITCH S2	CX	CXFAN2	HSAS2T	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	CX	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	CX	EABKR1	CABALT	0
A306	1FANAL-ESFAS	AL LOGIC CABINET	CX	VNFNAR	VNFNAR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1FUBL-F2	CH B FAN POWER FUSE F2	CY	CYFAN2	FUBF2R	0
A306	1HSBL-S2	CH B FAN POWER SWITCH S2	CY	CYFAN2	HSBS2T	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	CY	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	CY	EBBKR1	CABBLT	0
A306	1FANBL-ESFAS	BL LOGIC CABINET	CY	VNFNBR	VNFNBR	0
A301	1BATT11	125D BATT 11	DA	BA011D	BA011D	0
A301	1BATT11	125D BATT 11	DA	BA011R	BA011R	0
A306	1BUS1D01	125D BUS 11	DA	BUV11R	BUV11R	0
A301	1DISC1D04L	11 125D BATT DISC	DA	DAB11C	LK11AT	0
A301	1DISC1D03L	11 125D BATT DISC	DA	DAB11C	LK11BT	0
A306	1DISC95-1103	11 BATT DISC SW	DA	DAB11C	LKA03T	0
A306	1PNL1D11	125D DISTR PNL 1D11	DA	DAP11A	BUP11R	0
A306	1FU95-1104/FU	MAIN DISCONNECT DC PNL 1D11	DA	DAP11A	FUA1PR	0
A306	1FU95-1104/FU	MAIN DISCONNECT DC PNL 1D11	DA	DAP11A	FUA1QR	0
A306	1DISC95-1104	MAIN DISCONNECT DC PNL 1D11	DA	DAP11A	LKA04T	0
A306	1PNL1D12	125D DISTR PNL 1D12	DA	DAP12A	BUP11R	0
A306	1FU95-1105/FU	MAIN DISCONNECT DC PNL 1D12	DA	DAP12A	FUA1PR	0
A306	1FU95-1105/FU	MAIN DISCONNECT DC PNL 1D12	DA	DAP12A	FUA1QR	0
A306	1DISC95-1105	MAIN DISCONNECT DC PNL 1D12	DA	DAP12A	LKA04T	0
A306	1PNL1D13	125D DISTR PNL 1D13	DA	DAP13A	BUP11R	0
A306	1FU95-1106/FU	MAIN DISCONNECT DC PNL 1D13	DA	DAP13A	FUA1PR	0
A306	1FU95-1106/FU	MAIN DISCONNECT DC PNL 1D13	DA	DAP13A	FUA1QR	0
A306	1DISC95-1106	MAIN DISCONNECT DC PNL 1D13	DA	DAP13A	LKA04T	0
A302	2PNL2D11	125D DISTR PNL 2D11	DA	DAP21A	BUP11R	0
A306	1FU95-1109/FU	MAIN DISCONNECT DC PNL 2D11	DA	DAP21A	FUA1PR	0
A306	1FU95-1109/FU	MAIN DISCONNECT DC PNL 2D11	DA	DAP21A	FUA1QR	0
A306	1DISC95-1109	MAIN DISCONNECT DC PNL 2D11	DA	DAP21A	LKA04T	0
A302	2PNL2D12	125D DISTR PNL 2D12	DA	DAP22A	BUP11R	0
A306	1FU95-1110/FU	MAIN DISCONNECT DC PNL 2D12	DA	DAP22A	FUA1PR	0
A306	1FU95-1110/FU	MAIN DISCONNECT DC PNL 2D12	DA	DAP22A	FUA1QR	0
A306	1DISC95-1110	MAIN DISCONNECT DC PNL 2D12	DA	DAP22A	LKA04T	0
A302	2PNL2D13	125D DISTR PNL 2D13	DA	DAP23A	BUP11R	0
A306	1FU95-1111/FU	MAIN DISCONNECT DC PNL 2D13	DA	DAP23A	FUA1PR	0
A306	1FU95-1111/FU	MAIN DISCONNECT DC PNL 2D13	DA	DAP23A	FUA1QR	0
A306	1DISC95-1111	MAIN DISCONNECT DC PNL 2D13	DA	DAP23A	LKA04T	0
A304	1BATT12	125D BATT 12	DB	BA012D	BA012D	0
A304	1BATT12	125D BATT 12	DB	BA012R	BA012R	0
A306	1BUS1D02	125D BUS 12	DB	BUV12R	BUV12R	0
A304	1DISC1D10L	125D BATT 12 DISC	DB	DBB12C	LK12AT	0
A304	1DISC1D09L	12 125D BATT DISC	DB	DBB12C	LK12BT	0
A306	1DISC95-1203	12 BATT DISC SW	DB	DBB12C	LKB03T	0
A306	1PNL1D14	125D DISTR PNL 1D14	DB	DBP14A	BUP14R	0
A306	1FU95-1204/FU	MAIN DISCONNECT OF DC PANEL 14	DB	DBP14A	FUB1NR	0
A306	1FU95-1204/FU	MAIN DISCONNECT OF DC PANEL 14	DB	DBP14A	FUB1PR	0
A306	1DISC95-1204	DC-14 FUSED DISC SW	DB	DBP14A	LKB04T	0
A305	2BATT21	125D BATT 21	DC	BA021D	BA021D	0
A305	2BATT21	125D BATT 21	DC	BA021R	BA021R	0
A302	2BUS2D01	125D BUS 21	DC	BUV21R	BUV21R	0
A305	2FU2D04F/1600A	125VDC BATTERY 21 1600A FUSE	DC	DCB21C	FUC21R	0
A305	2DISC2D04L	21 125D BATT DISC	DC	DCB21C	LK21AT	0
A305	2DISC2D03L	21 125D BATT DISC	DC	DCB21C	LK21BT	0
A302	2DISC95-2103	21 BATT DISC SW	DC	DCB21C	LKC03T	0
A306	1PNL1D15	125D DISTR PNL 1D15	DC	DCP15A	BUP25R	0
A302	2FU95-2109/FU	125D BKR FUSE BUS 21	DC	DCP15A	FUC1PR	0
A302	2FU95-2109/FU	125D BKR FUSE BUS 21	DC	DCP15A	FUC1QR	0
A302	2DISC95-2109	UNIT CONTROL PANEL DC 15	DC	DCP15A	LKC04T	0
A306	1PNL1D16	125D DISTR PNL 1D16	DC	DCP16A	BUP25R	0
A302	2FU95-2110/FU	125D BKR FUSE BUS 21	DC	DCP16A	FUC1PR	0
A302	2FU95-2110/FU	125D BKR FUSE BUS 21	DC	DCP16A	FUC1QR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A302	2DISC95-2110	UNIT CONTROL PANLE DC 16	DC	DCP16A	LKC04T	0
A306	1PNL1D17	125D DISTR PNL 1D17	DC	DCP17A	BUP25R	0
A302	2FU95-2111/FU	125D BKR FUSE BUS 21	DC	DCP17A	FUC1PR	0
A302	2FU95-2111/FU	125D BKR FUSE BUS 21	DC	DCP17A	FUC1QR	0
UNK	2DISC95-2111	UNIT CONTROL PANEL DC 17	DC	DCP17A	LKC04T	0
A302	2PNL2D15	125D DISTR PNL 2D15	DC	DCP25A	BUP25R	0
A302	2FU95-2104/FU	125D BKR FUSE BUS 21	DC	DCP25A	FUC1PR	0
A302	2FU95-2104/FU	125D BKR FUSE BUS 21	DC	DCP25A	FUC1QR	0
A302	2DISC95-2104	DC-25 FUSED DISC SW	DC	DCP25A	LKC04T	0
A302	2PNL2D16	125D DISTR PNL 2D16	DC	DCP26A	BUP25R	0
A302	2FU95-2105/FU	125D BKR FUSE BUS 21	DC	DCP26A	FUC1PR	0
A302	2FU95-2105/FU	125D BKR FUSE BUS 21	DC	DCP26A	FUC1QR	0
A302	2DISC95-2105	UNIT CONTROL PANEL DC 26	DC	DCP26A	LKC04T	0
A302	2PNL2D17	125D DISTR PNL 2D17	DC	DCP27A	BUP25R	0
A302	2FU95-2106/FU	125D BKR FUSE BUS 21	DC	DCP27A	FUC1PR	0
A302	2FU95-2106/FU	125D BKR FUSE BUS 21	DC	DCP27A	FUC1QR	0
A302	2DISC95-2106	UNIT CONTROL PANLE 27	DC	DCP27A	LKC04T	0
A307	2BATT22	125D BATT 22	DD	BA022D	BA022D	0
A307	2BATT22	125D BATT 22	DD	BA022R	BA022R	0
A302	2BUS2D02	125D BUS 22	DD	BUV22R	BUV22R	0
A307	2FU2D10F/1600A	125VDC BATTERY 22 1600A FUSE	DD	DDB22C	FUD22R	0
A307	2DISC2D10L	22 125D BATT DISC	DD	DDB22C	LK22AT	0
A307	2DISC2D09L	22 125D BATT DISC	DD	DDB22C	LK22BT	0
A302	2DISC95-2203	22 BATT DISC SW	DD	DDB22C	LKD03T	0
A302	2PNL2D14	125D DISTR PNL 2D14	DD	DDP24A	BUP24R	0
A302	2FU95-2204/FU	125D BKR FUSE BUS 22	DD	DDP24A	FUD1NR	0
A302	2FU95-2204/FU	125D BKR FUSE BUS 22	DD	DDP24A	FUD1PR	0
A302	2DISC95-2204	DC-24 FUSED DISC SW	DD	DDP24A	LKD04T	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	DL	DLA11A	MV617P	0
A306	1RYAR-XK3	SIAS SUB CH A2-3	DL	DLA11A	RYAK3E	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	DL	DLA11B	MV627P	0
A306	1RYAR-XK4	SIAS SUB CH A2-4	DL	DLA11B	RYAK4E	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0
A306	1RYAR-XK5	SIAS SUB CH A2-5	DL	DLA12A	RYAK5E	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0
A306	1RYAR-XK6	ESFAS SIAS CH A2-6 REL	DL	DLA12B	RYAK6E	0
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19
A306	1RYAR-XK7	SIAS SUB CH A1-7	DL	DLL11A	RYA07E	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0
A306	1RYAR-XK8	SIAS SUB CH A1-8	DL	DLL11B	RYA08E	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0
A306	1RYBR-XK2	SIAS SUB CH B1-2	DL	DLL12A	RYB02E	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0
A306	1RYBR-XK7	SIAS SUB CH B1-7	DL	DLL12B	RYB07E	0
A316	1MOV616	11A HPSI LOOP ISOL	DL	DLM11A	MV616P	0
A306	1RYBR-XK6	SIAS SUB CH B2-6	DL	DLM11A	RYBK6E	0
A316	1MOV626	11B HPSI LOOP ISOL	DL	DLM11B	MV626P	0
A306	1RYBR-XK3	SIAS SUB CH B2-3	DL	DLM11B	RYBK3E	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0
A306	1RYBR-XK4	SIAS SUB CH B2-4	DL	DLM12A	RYBK4E	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0
A306	1RYBR-XK5	SIAS SUB CH B2-5	DL	DLM12B	RYBK5E	0
A316	1MOV616	11A HPSI LOOP ISOL	DL	MV616O	MV616O	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	DL	MV617O	MV617O	0
A316	1MOV626	11B HPSI LOOP ISOL	DL	MV626O	MV626O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A316	1MOV627	11B AUX HPSI LOOP ISOL	DL	MV627O	MV627O	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0
1CNT69-1	1CV613	11A SIT VENT	DL	TKSIT1	C3613T	0
A405	1HS3613	11A SI TK VENT CV HS	DL	TKSIT1	C3613T	0
1CNT69-1	1SV613	SI TNK 11A VENT VLV CONT	DL	TKSIT1	C3613T	0
1CNT45-1	1MOV614	11A SIT OUT	DL	TKSIT1	MV614P	0
1CNT69-1	1CV623	11B SIT VENT CV	DL	TKSIT2	C3623T	0
A405	1HS3623	11B SI TK VENT CV HS	DL	TKSIT2	C3623T	0
1CNT69-1	1SV623	SI TNK 11B VENT VLV CONT	DL	TKSIT2	C3623T	0
1CNT45-1	1MOV624	11B SIT OUT	DL	TKSIT2	MV624P	0
1CNT69-2	1CV633	12A SIT VENT CV	DL	TKSIT3	C3633T	0
A405	1HS3633	12A SI TK VENT CV HS	DL	TKSIT3	C3633T	0
1CNT69-2	1SV633	SI TNK 12A VENT VLV CONT	DL	TKSIT3	C3633T	0
1CNT45-2	1MOV634	12A SIT OUT	DL	TKSIT3	MV634P	0
1CNT69-2	1CV643	12B SIT VENT CV	DL	TKSIT4	C3643T	0
A405	1HS3643	12B SI TK VENT CV HS	DL	TKSIT4	C3643T	0
1CNT69-2	1SV643	SI TNK 12B VENT VLV CONT	DL	TKSIT4	C3643T	0
1CNT45-2	1MOV644	12B SIT OUT	DL	TKSIT4	MV644P	0
0NSB27-1	1BKR152-1501	SUPP BKR FROM U-4000-13	DM	DM4K15	BN151T	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	DM	DM4K15	BN1H1T	0
0NSB27-1	1BUS1A05	4KV BUS 15	DM	DM4K15	BU1A5R	0
U4000-13	1XU-4000-13	13/4KV XFMR U-4000-13	DM	DM4K15	TX1X4R	0
0NSB27-1	2BKR152-2501	SERVICE TRANSF U-4000-23	DM	DM4K25	BN251T	0
13K21/22	2BKR252-2101	U-4000-23 FEEDER	DM	DM4K25	BN2H1T	0
0NSB27-1	2BUS2A05	13/4KV BUS 25	DM	DM4K25	BU2A5R	0
U4000-23	2XU-4000-23	13/4KV XFMR U-4000-23	DM	DM4K25	TX2X4R	0
1H2OT-1	1PNL1P08	LTG DISTR PNL 18	DM	DM5598	BUP18R	0
1H2OT-1	1BKR52-10825	MCC 108WT DISTR XFMR 18 BKR	DM	DM5598	CB825T	0
1H2OT-1	1XDT18	LTG DISTR XFMR 18	DM	DM5598	TMX30R	0
0NSB27-1	1BKR152-1505	SERV XFER (U-440-15)	DM	DMBS15	BN155T	0
0NSB27-1	1BUS1B05	480V BUS 15	DM	DMBS15	BU1B5R	0
0NSB27-1	1BKR52-1512	U-440-15 LOW SIDE BKR	DM	DMBS15	CB15BT	0
0NSB27-1	1XU-440-15	480V XFMR U-440-15	DM	DMBS15	TNB15R	0
0NSB27-1	2BKR152-2505	SERV XFER (U-440-25)	DM	DMBS25	BN255T	0
0NSB27-1	2BUS2B05	480V BUS 25	DM	DMBS25	BU2B5R	0
0NSB27-1	2BKR52-2512	TIE TO BUS 15	DM	DMBS25	CB25BT	0
0NSB27-1	2XU-440-25	480V XFMR U-440-25	DM	DMBS25	TNB25R	0
1H2OT-1	1MCC108WT	MCC 108WT	DM	DMM108	BU108R	0
0NSB27-1	1BKR52-1510	108 WT MCC	DM	DMM108	CB151T	0
1H2OT-1	1BKR52-10801	MCC 108WT MN FDR BKR	DM	DMM108	CB181T	0
2H2OT-1	2MCC208WT	MCC 208WT	DM	DMM208	BU208R	0
0NSB27-1	2BKR52-2510	208 WT MCC	DM	DMM208	CB251T	0
2H2OT-1	2BKR52-20801	MAIN FEEDER BREAKER	DM	DMM208	CB281T	0
WWPPHS	0PS5598	0 DW TRANSFER PUMPS PS	DM	DMPPPS	PS598D	0
WWPPHS	0LY5598	DW STAND-BY DEMIN PP START RY	DM	DMPPPS	RY598E	0
WWPPHS	0PUMPDWXFR11	11 DEMIN WTR XFR PUMP (1M0835)	DM	DMVAR1	DPD11S	0
WWPPHS	0PUMPDWXFR12	12 DEMIN WTR XFR PUMP (2M0835)	DM	DMVAR2	DPD12S	0
WWPPHS	0PUMPDWXFR11	11 DEMIN WTR XFR PUMP (1M0835)	DM	DPD11R	DPD11R	0
WWPPHS	0PUMPDWXFR12	12 DEMIN WTR XFR PUMP (2M0835)	DM	DPD12R	DPD12R	0
YARD	0LS5594	11 DW DEMIN WTR STOR TK LVL SWITCH	DM	LS594R	LS594R	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	DV	BSRRSR	RYK71D	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	DV	BSRRSR	RYK71T	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	DV	BSRRSR	RYSD1D	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	DV	BSRRSR	RYSD1T	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	DV	BVMTRR	RY194E	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	DV	BVMTRR	RY194P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RY1D0124/1TT/X2	TURB STEAM DUMP & BYPASS CONT	DV	BVTT2R	RYTT2E	0
A306	1RY1D0124/1TT/X2	TURB STEAM DUMP & BYPASS CONT	DV	BVTT2R	RYTT2P	0
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DV	C3938C	C3938C	60
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DV	C3938C	C3938C	0
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DV	C3939C	C3939C	60
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DV	C3939C	C3939C	0
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DV	DV3938	C3938P	60
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DV	DV3938	C3938P	0
A428	1I/P3938	11 MS S/G ADV CONTROL I/P SIG CONVERTER	DV	DV3938	IZ938R	0
A428	1I/P3938	11 MS S/G ADV CONTROL I/P SIG CONVERTER	DV	DV3938	PX938I	0
A428	1CV3938OP	11 MS S/G ADV OPERATOR	DV	DV3938	PX938R	60
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DV	DV3939	C3939P	60
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DV	DV3939	C3939P	0
A428	1I/P3939	12 MS S/G ADV CONTROL I/P SIG CONVERTER	DV	DV3939	IZ939R	0
A428	1I/P3939	12 MS S/G ADV CONTROL I/P SIG CONVERTER	DV	DV3939	PX939I	0
A428	1CV3939OP	12 MS S/G ADV OPERATOR	DV	DV3939	PX939R	60
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DV	DW3938	C338SP	60
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DV	DW3938	C338SP	0
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DV	DW3938	C3938O	60
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DV	DW3938	C3938O	0
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DV	DW3939	C339SP	60
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DV	DW3939	C339SP	0
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DV	DW3939	C3939O	60
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DV	DW3939	C3939O	0
A405	1HIC4056	12 MS S/G ADV AUTO/MANUAL HIC	DV	HS056T	HS056T	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	DW	BVMTRR	RY194E	0
A306	1RY1T01/XKT/1194	MASTER TRIP RELAY	DW	BVMTRR	RY194P	0
A405	1HS01/RRS	1 RR TAVG SIG SEL TO INDIC HS	DW	BVRRSX	HSRX1T	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	DW	BVRRSX	RYK71E	0
A405	1RY1C31/K7	RRS CH X CONTROL RELAY	DW	BVRRSX	RYK71P	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	DW	BVSD1R	RYSD1E	0
A306	1RY1D0124/1TSD/X1	TURB STM DUMP & BYP CONT	DW	BVSD1R	RYSD1P	0
A306	1RY1D0124/1TT/X1	TURB STEAM DUMP & BYPASS CONT	DW	BVTT1R	RYTT1E	0
A306	1RY1D0124/1TT/X1	TURB STEAM DUMP & BYPASS CONT	DW	BVTT1R	RYTT1P	0
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DW	DW3938	C338SP	60
A428	1CV3938OP	11 MS S/G ADV OPERATOR	DW	DW3938	C338SP	60
A405	1HIC4056	12 MS S/G ADV AUTO/MANUAL HIC	DW	DW3938	C338SP	0
A428	1I/P3938	11 MS S/G ADV CONTROL I/P SIG CONVERTER	DW	DW3938	C338SP	0
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DW	DW3938	C338SP	0
A428	1CV3938	STM GEN 11 ATMOS DUMP VLV	DW	DW3938	C3938O	60
A428	1CV3938OP	11 MS S/G ADV OPERATOR	DW	DW3938	C3938O	60
A405	1HIC4056	12 MS S/G ADV AUTO/MANUAL HIC	DW	DW3938	C3938O	0
A428	1I/P3938	11 MS S/G ADV CONTROL I/P SIG CONVERTER	DW	DW3938	C3938O	0
A428	1SV3938	STM GEN 11 ATMOS DUMP QUICK OPEN SV	DW	DW3938	C3938O	0
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DW	DW3939	C339SP	60
A428	1CV3939OP	12 MS S/G ADV OPERATOR	DW	DW3939	C339SP	60
A405	1HIC4056	12 MS S/G ADV AUTO/MANUAL HIC	DW	DW3939	C339SP	0
A428	1I/P3939	12 MS S/G ADV CONTROL I/P SIG CONVERTER	DW	DW3939	C339SP	0
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DW	DW3939	C339SP	0
A428	1CV3939	STM GEN 12 ATMOS DUMP VLV	DW	DW3939	C3939O	60
A428	1CV3939OP	12 MS S/G ADV OPERATOR	DW	DW3939	C3939O	60
A405	1HIC4056	12 MS S/G ADV AUTO/MANUAL HIC	DW	DW3939	C3939O	0
A428	1I/P3939	12 MS S/G ADV CONTROL I/P SIG CONVERTER	DW	DW3939	C3939O	0
A428	1SV3939	STM GEN 12 ATMOS DUMP QUICK OPEN SV	DW	DW3939	C3939O	0
A306	1BUS1Y11	120V INVTR B/U BUS 11	E1	E1B11B	BUB11R	0
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	E1	E1B11B	CBX07T	6
A306	1DISC1Y1101	SUPP TO INVERTER B/U BUS 11 (1X07)	E1	E1B11B	HSX07T	0
A306	1X1X07	120V REG X 11	E1	E1B11B	TMX07R	0
A306	1FU1Y1102/FU	120V INVTR B/U BUS 11 BKR FU	E1	E1B11F	FUB11R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1DISC1Y1102	SUPP TO 120 VAC VITAL BUS 11 (1Y01)	E1	E1B11F	HSB11T	0
A306	1DISC1Y01A/S2	11 INV MAN XFER SWITCH	E1	E1B11F	HSI11T	0
A306	1FU95-1107/FU	INVERTER 11 1Y01A	E1	E1I11E	FUD11R	0
A306	1DISC95-1107	INVERTER 11 1Y01A	E1	E1I11E	HSD11T	0
A306	1DISC1Y01A/S2	11 INV MAN XFER SWITCH	E1	E1I11E	HSI11T	0
A306	1PNL1Y01	120V DISTR PNL 11	E1	E1P11A	BUV11R	0
A306	1INV1Y01A	120V INVTR 11	E1	INT11R	INT11R	0
A306	1BUS1Y11	120V INVTR B/U BUS 11	E2	E1B11B	BUB11R	0
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	E2	E1B11B	CBX07T	6
A306	1DISC1Y1101	SUPP TO INVERTER B/U BUS 11 (1X07)	E2	E1B11B	HSX07T	0
A306	1X1X07	120V REG X 11	E2	E1B11B	TMX07R	0
A306	1FU1Y1103/FU	120V INVTR B/U BUS 11 BKR FU	E2	E2B12F	FUB12R	0
A306	1DISC1Y1103	SUPP TO 120 VAC VITAL BUS 12 (1Y02)	E2	E2B12F	HSB12T	0
A306	1DISC1Y02A/S2	12 INV MAN XFER SWITCH	E2	E2B12F	HSI12T	0
A302	2FU95-2108/FU	INVERTER 12 1Y02A	E2	E2I12E	FUD21R	0
A302	2DISC95-2108	INVERTER 12 1Y02A	E2	E2I12E	HSD21T	0
A306	1DISC1Y02A/S2	12 INV MAN XFER SWITCH	E2	E2I12E	HSI12T	0
A306	1PNL1Y02	120V DISTR PNL 12	E2	E2P12A	BUV12R	0
A306	1INV1Y02A	120V INVTR 12	E2	INT12R	INT12R	0
A306	1BUS1Y11	120V INVTR B/U BUS 11	E3	E1B11B	BUB11R	0
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	E3	E1B11B	CBX07T	6
A306	1DISC1Y1101	SUPP TO INVERTER B/U BUS 11 (1X07)	E3	E1B11B	HSX07T	0
A306	1X1X07	120V REG X 11	E3	E1B11B	TMX07R	0
A306	1FU1Y1104/FU	120V INVTR B/U BUS 11 BKR FU	E3	E3B13F	FUB13R	0
A306	1DISC1Y1104	SUPP TO 120 VAC VITAL BUS 13 (1Y03)	E3	E3B13F	HSB13T	0
A306	1DISC1Y03A/S2	13 INV MAN XFER SWITCH	E3	E3B13F	HSI13T	0
A306	1FU95-1205/FU	INVERTER 13 1Y03A	E3	E3I13E	FUD12R	0
A306	1DISC95-1205	INVERTER 13 1Y03A	E3	E3I13E	HSD12T	0
A306	1DISC1Y03A/S2	13 INV MAN XFER SWITCH	E3	E3I13E	HSI13T	0
A306	1PNL1Y03	120V DISTR PNL 13	E3	E3P13A	BUV13R	0
A306	1INV1Y03A	120V INVTR 13	E3	INT13R	INT13R	0
A306	1BUS1Y11	120V INVTR B/U BUS 11	E4	E1B11B	BUB11R	0
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	E4	E1B11B	CBX07T	6
A306	1DISC1Y1101	SUPP TO INVERTER B/U BUS 11 (1X07)	E4	E1B11B	HSX07T	0
A306	1X1X07	120V REG X 11	E4	E1B11B	TMX07R	0
A306	1FU1Y1105/FU	120V INVTR B/U BUS 11 BKR FU	E4	E4B14F	FUB14R	0
A306	1DISC1Y1105	SUPP TO 120 VAC VITAL BUS 14 (1Y04)	E4	E4B14F	HSB14T	0
A306	1DISC1Y04A/S2	14 INV MAN XFER SWITCH	E4	E4B14F	HSI14T	0
A302	2FU95-2205/FU	INVERTER 14 1Y04A	E4	E4I14E	FUD22R	0
A302	2DISC95-2205	INVERTER 14 1Y04A	E4	E4I14E	HSD22T	0
A306	1DISC1Y04A/S2	14 INV MAN XFER SWITCH	E4	E4I14E	HSI14T	0
A306	1PNL1Y04	120V DISTR PNL 14	E4	E4P14A	BUV14R	0
A306	1INV1Y04A	120V INVTR 14	E4	INT14R	INT14R	0
A306	1BUS1Y09	120I INSTR BUS 11	E5	E5B11E	BUI11R	0
A529	1BKR52-11429	MCC 114R INSTR AC XFMR 11 BKR	E5	E5B11E	CB114T	6
A306	1FU1Y0979/FU	120I DISTR PNL BKR 79 FU SET	E5	E5B11E	FUX08R	0
A306	1DISC1Y0979	120I INSTR XFMR 11 BKR	E5	E5B11E	HSX08T	0
A306	1X1X08	120I INSTR X 11	E5	TMX08R	TMX08R	0
A306	1BUS1Y10	120I INSTR BUS 12	E6	E6B12E	BUI12R	0
A423	1BKR52-10429	MCC 104R INSTR AC XFMR 12 BKR	E6	E6B12E	CB104T	6
A306	1FU1Y1001/FU	120I DISTR PNL BKR 01 FU SET	E6	E6B12E	FUX09R	0
A306	1DISC1Y1001	120I INSTR XFMR 12 BKR	E6	E6B12E	HSX09T	0
A306	1X1X09	120I INSTR X 12	E6	TMX09R	TMX09R	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	EA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	EA	EABKR1	CABALT	0
A306	1MODCSAS-A/CHD	CSAS-A MAINT BYP MODULE CH D	EA	EAMBID	HSM1DT	0
A306	1E/EZD-XA6-U7	CSAS ZD CH A ISOLATOR	EA	EAMBID	IID67R	0
A306	1MODCSAS-A/CHE	CSAS-A MAINT BYP MODULE CH E	EA	EAMBIE	HSM1ET	0
A306	1E/EZE-XA6-U7	CSAS ZE CH A ISOLATOR	EA	EAMBIE	IIE67R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1MODCSAS-A/CHF	CSAS-A MAINT BYP MODULE CH F	EA	EAMBIF	HSM1FT	0
A306	1E/EZF-XA6-U7	CSAS ZF CH A ISOLATOR	EA	EAMBIF	IIF67R	0
A306	1MODCSAS-A/CHG	CSAS-A MAINT BYP MODULE CH G	EA	EAMBIG	HSM1GT	0
A306	1E/EZG-XA6-U7	CSAS ZG CH A ISOLATOR	EA	EAMBIG	IIG67R	0
A306	1B/SZD-XA15	CSAS CNTMT PRESS ZD HIGH	EA	EASEND	BID15D	0
A429	1PT5314A	1 HVAC/P CNTMT PT TO CSAS	EA	EASEND	PTD4AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	EA	EASEND	SPD48R	0
A306	1B/SZE-XA15	CSAS CNTMT PRESS ZE HIGH	EA	EASENE	BIE15D	0
A429	1PT5314B	1 HVAC/P CNTMT PT TO CSAS	EA	EASENE	PTE4BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	EA	EASENE	SPE48R	0
A306	1B/SZF-XA15	CSAS CNTMT PRESS ZF HIGH	EA	EASENF	BIF15D	0
A423	1PT5314C	1 HVAC/P CNTMT PT TO CSAS	EA	EASENF	PTF4CR	40
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	EA	EASENF	SPF48R	0
A306	1B/SZG-XA15	CSAS CNTMT PRESS ZG HIGH	EA	EASENG	BIG15D	0
A423	1PT5314D	1 HVAC/P CNTMT PT TO CSAS	EA	EASENG	PTG4DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	EA	EASENG	SPG48R	0
A306	1YXAL-PS3/15	AL CABINET CSAS/SGIS/RAS/CRS 15V PWR SUPPLY	EA	SPA35R	SPA35R	0
A306	1YXAL-PS3/28	AL CABINET CSAS/SGIS/RAS/CRS 28V PWR SUPPLY	EA	SPA38R	SPA38R	0
A306	12/4AL-XA12	CSAS SUB CH A2	EA	TLA12D	TLA12D	0
A306	12/4AL-XA12	CSAS SUB CH A2	EA	TLA12R	TLA12R	0
A306	1B/SZD-XA15	CSAS CNTMT PRESS ZD HIGH	EB	EASEND	BID15D	0
A429	1PT5314A	1 HVAC/P CNTMT PT TO CSAS	EB	EASEND	PTD4AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	EB	EASEND	SPD48R	0
A306	1B/SZE-XA15	CSAS CNTMT PRESS ZE HIGH	EB	EASENE	BIE15D	0
A429	1PT5314B	1 HVAC/P CNTMT PT TO CSAS	EB	EASENE	PTE4BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	EB	EASENE	SPE48R	0
A306	1B/SZF-XA15	CSAS CNTMT PRESS ZF HIGH	EB	EASENF	BIF15D	0
A423	1PT5314C	1 HVAC/P CNTMT PT TO CSAS	EB	EASENF	PTF4CR	40
A306	1YXZF-PS1/48	ZF CABINET 48V PT5313C/14C/15C/16C POWER	EB	EASENF	SPF48R	0
A306	1B/SZG-XA15	CSAS CNTMT PRESS ZG HIGH	EB	EASENG	BIG15D	0
A423	1PT5314D	1 HVAC/P CNTMT PT TO CSAS	EB	EASENG	PTG4DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	EB	EASENG	SPG48R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	EB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	EB	EBBKR1	CABBLT	0
A306	1MODCSAS-B/CHD	CSAS-B MAINT BYP MODULE CH D	EB	EBMBID	HSM3DT	0
A306	1E/EZD-XA1-U7	CSAS ZD CH B ISOLATOR	EB	EBMBID	IID17R	0
A306	1MODCSAS-B/CHE	CSAS-B MAINT BYP MODULE CH E	EB	EBMBIE	HSM3ET	0
A306	1E/EZE-XA1-U7	CSAS ZE CH B ISOLATOR	EB	EBMBIE	IIE17R	0
A306	1MODCSAS-B/CHF	CSAS-B MIANT BYP MODULE CH F	EB	EBMBIF	HSM3FT	0
A306	1E/EZF-XA1-U7	CSAS ZF CH B ISOLATOR	EB	EBMBIF	IIF17R	0
A306	1MODCSAS-B/CHG	CSAS-B MAINT BYP MODULE CH G	EB	EBMBIG	HSM3GT	0
A306	1E/EZG-XA1-U7	CSAS ZG CH B ISOLATOR	EB	EBMBIG	IIG17R	0
A306	1YXBL-PS3/15	BL CABINET CSAS/SGIS/RAS/CRS 15V POWER SUPPLY	EB	SPB35R	SPB35R	0
A306	1YXBL-PS3/28	BL CABINET CSAS/SGIS/RAS/CRS/ 28V POWER SUPPLY	EB	SPB38R	SPB38R	0
A306	12/4BL-XA12	CSAS SUB CH B2	EB	TLB12D	TLB12D	0
A306	12/4BL-XA12	CSAS SUB CH B2	EB	TLB12R	TLB12R	0
A306	1DISC1Y0920	120I FISCHER & PORTER INST PWR SUPP CABINET 1R0	ES	ESOPS1	CA920T	0
A306	1FU1Y0920/FU	120I DISTR PNL BKR 20 FU	ES	ESOPS1	FU020R	0
A306	1FU1R01A/F102	INSTRUMENT PWR SUPPLY CABINET	ES	ESOPS1	FU102R	0
A306	1DISC1R01A/S1	1R01A 48VDC P/S#1 120V INPUT	ES	ESOPS1	HSAS1T	0
A306	1OPAMP1R01A/CR1	1R01A 48VDC P/S #1 AUCT DIODE	ES	ESOPS1	OACR1R	0
A306	1DISC1Y1020	120I FISCHER & PORTER INST PWR SUP CABINET 1R01	ES	ESOPS2	CA020T	0
A306	1FU1R01A/F101	INSTRUMENT PWR SUPPLY CABINET	ES	ESOPS2	FU101R	0
A306	1FU1Y0920/FU	120I DISTR PNL BKR 20 FU	ES	ESOPS2	FU920R	0
A306	1DISC1R01A/S2	1R01A 48VDC P/S#2 120V INPUT	ES	ESOPS2	HSAS2T	0
A306	1OPAMP1R01A/CR2	1R01A 48VDC P/S #2 AUCT DIODE	ES	ESOPS2	OACR2R	0
A306	1DISC1R01A/S3	120I DC PWR SUPPLY PNL 1R01A MANUAL SWITCH	ES	HSAS3T	HSAS3T	0
A306	1YX1X75A	120V INSTRUMENT PS FOR 1R01A	ES	SP75AR	SP75AR	0
A306	1YX1X75B	120V INSTRUMENT PS FOR 1R01A	ES	SP75BR	SP75BR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1FU95-1107/FU	INVERTER 11 1Y01A	EW	EWI11E	FUD11R	0
A306	1DISC95-1107	INVERTER 11 1Y01A	EW	EWI11E	HSD11T	0
A306	1DISC1Y01A/S2	11 INV MAN XFER SWITCH	EW	EWI11E	HSI11T	0
A306	1PNL1Y01	120V DISTR PNL 11	EW	EWP11A	BUV11R	0
A306	1INV1Y01A	120V INVTR 11	EW	INT11R	INT11R	0
A302	2FU95-2108/FU	INVERTER 12 1Y02A	EX	EXI12E	FUD21R	0
A302	2DISC95-2108	INVERTER 12 1Y02A	EX	EXI12E	HSD21T	0
A306	1DISC1Y02A/S2	12 INV MAN XFER SWITCH	EX	EXI12E	HSI12T	0
A306	1PNL1Y02	120V DISTR PNL 12	EX	EXP12A	BUV12R	0
A306	1INV1Y02A	120V INVTR 12	EX	INT12R	INT12R	0
A306	1FU95-1205/FU	INVERTER 13 1Y03A	EY	EYI13E	FUD12R	0
A306	1DISC95-1205	INVERTER 13 1Y03A	EY	EYI13E	HSD12T	0
A306	1DISC1Y03A/S2	13 INV MAN XFER SWITCH	EY	EYI13E	HSI13T	0
A306	1PNL1Y03	120V DISTR PNL 13	EY	EYP13A	BUV13R	0
A306	1INV1Y03A	120V INVTR 13	EY	INT13R	INT13R	0
A302	2FU95-2205/FU	INVERTER 14 1Y04A	EZ	EZI14E	FUD22R	0
A302	2DISC95-2205	INVERTER 14 1Y04A	EZ	EZI14E	HSD22T	0
A306	1DISC1Y04A/S2	14 INV MAN XFER SWITCH	EZ	EZI14E	HSI14T	0
A306	1PNL1Y04	120V DISTR PNL 14	EZ	EZP14A	BUV14R	0
A306	1INV1Y04A	120V INVTR 14	EZ	INT14R	INT14R	0
A316	1CV4520	11 S/G AFW BLOCK VLV	F1	CV4520	CV520P	0
A316	1SV4520	11 S/G AFW BLOCK SV	F1	CV4520	CV520P	0
A405	1HS4520	11 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	CV4520	HS520T	0
A316	1CV4521	11 S/G AFW BLOCK VLV	F1	CV4521	CV521P	0
A316	1SV4521	11 S/G AFW BLOCK SV	F1	CV4521	CV521P	0
A405	1HS4521	11 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	CV4521	HS521T	0
A226	1CV4522	11 S/G AFW BLOCK VLV	F1	CV4522	CV522P	40
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A405	1HS4522	11 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	CV4522	HS522T	0
A226	1CV4523	11 S/G AFW BLOCK VLV	F1	CV4523	CV523P	144
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A405	1HS4523	11 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	CV4523	HS523T	0
A316	1CV4530	12 S/G AFW BLOCK VLV	F1	CV4530	CV530P	0
A316	1SV4530	12 S/G AFW BLOCK SV	F1	CV4530	CV530P	0
A405	1HS4530	12 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	CV4530	HS530T	0
A316	1CV4531	12 S/G AFW BLOCK VLV	F1	CV4531	CV531P	0
A316	1SV4531	12 S/G AFW BLOCK SV	F1	CV4531	CV531P	0
A405	1HS4531	12 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	CV4531	HS531T	0
A226	1CV4532	12 S/G AFW BLOCK VLV	F1	CV4532	CV532P	40
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A405	1HS4532	12 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	CV4532	HS532T	0
A226	1CV4533	12 S/G AFW BLOCK VLV	F1	CV4533	CV533P	144
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A405	1HS4533	12 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	CV4533	HS533T	0
A405	1HS4520	11 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	F111SG	HS520T	0
A405	1HS4521	11 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	F111SG	HS521T	0
A405	1HS4522	11 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	F111SG	HS522T	0
A405	1HS4523	11 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	F111SG	HS523T	0
A405	1HS4530	12 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	F112SG	HS530T	0
A405	1HS4531	12 AFW TURB DRV PP TO S/G LN ISOL VLV HS	F1	F112SG	HS531T	0
A405	1HS4532	12 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	F112SG	HS532T	0
A405	1HS4533	12 AFW MTR DRV PP TO S/G LN ISOL VLV HS	F1	F112SG	HS533T	0
A315	1CV4070	11 S/G MS TO AFW PP TURB	F1	F1CV70	C8070O	12
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0
A315	1CV4070	11 S/G MS TO AFW PP TURB	F1	F1CV70	C8070P	12
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0
A315	1CV4070A	11 S/G AFW MAIN STM BYPASS VALVE	F1	F1CV70	C870AO	0
A316	1SV4070A	11 S/G AFW MAIN STM BYP VALVE	F1	F1CV70	C870AO	0
A405	1HS4070	11 MS S/G STM ISOL VLV HS	F1	F1CV70	HS070T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A315	1CV4071	12 S/G MS TO AFW PP TURB	F1	F1CV71	C8071O	12
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0
A315	1CV4071	12 S/G MS TO AFW PP TURB	F1	F1CV71	C8071P	12
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0
A315	1CV4071A	12 S/G AFW MAIN STM BYPASS VALVE	F1	F1CV71	C871AO	0
A316	1SV4071A	12 S/G AFW MAIN STM BYP VLV	F1	F1CV71	C871AO	0
A405	1HS4071	12 MS S/G STM ISOL VLV HS	F1	F1CV71	HS071T	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525P	144
A405	1FIC4525A	MOTOR DRIVEN AFW TO S/G 11	F1	F1MLV1	C6525P	0
A430	1HC4525B	MOTOR DR AFW STM GEN 11	F1	F1MLV1	C6525P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525R	144
A405	1FIC4525A	MOTOR DRIVEN AFW TO S/G 11	F1	F1MLV1	C6525R	0
A430	1HC4525B	MOTOR DR AFW STM GEN 11	F1	F1MLV1	C6525R	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535P	144
A405	1FIC4535A	MOTOR DRIVEN AFW TO S/G 12	F1	F1MLV2	C6535P	0
A430	1HC4535B	MOTOR DR AFW STM GEN 12	F1	F1MLV2	C6535P	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535R	144
A405	1FIC4535A	MOTOR DRIVEN AFW TO S/G 12	F1	F1MLV2	C6535R	0
A430	1HC4535B	MOTOR DR AFW STM GEN 12	F1	F1MLV2	C6535R	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A306	1RYZA-XK6	AFAS CH A ACT RY/TURB VLV	F1	F1SYTA	RYAK6E	0
A306	1RYZA-XK6	AFAS CH A ACT RY/TURB VLV	F1	F1SYTA	RYAK6P	0
A306	1RYZB-XK6	AFAS CH B ACT RY/TURB VLV	F1	F1SYTB	RYBK6E	0
A306	1RYZB-XK6	AFAS CH B ACT RY/TURB VLV	F1	F1SYTB	RYBK6P	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	F1	F1TLV1	C6511P	0
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	F1	F1TLV1	C6511P	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	F1	F1TLV1	C6511P	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	F1	F1TLV1	C6511P	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	F1	F1TLV1	C6511P	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	F1	F1TLV1	C6511R	0
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	F1	F1TLV1	C6511R	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	F1	F1TLV1	C6511R	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	F1	F1TLV1	C6511R	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	F1	F1TLV1	C6511R	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	F1	F1TLV2	C6512P	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	F1	F1TLV2	C6512P	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	F1	F1TLV2	C6512P	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	F1	F1TLV2	C6512P	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	F1	F1TLV2	C6512P	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	F1	F1TLV2	C6512R	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	F1	F1TLV2	C6512R	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	F1	F1TLV2	C6512R	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	F1	F1TLV2	C6512R	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	F1	F1TLV2	C6512R	0
A306	1DISC1Y0121	AFAS CHAN ZA 1C100A	F1	F1TMA1	CA121T	0
A306	1BKR1C100A/CB1	AFAS SYS A ACTUATION CAB	F1	F1TMA1	CAAALT	0
A306	1YXAL-PS1/12	CH A LOGIC CAB DC POWER SUPPLY	F1	F1TMA1	SPA12R	0
A306	1DISC1Y0221	1C100B AFAS ACT ZB	F1	F1TMB1	CA221T	0
A306	1BKR1C100B/CB1	AFAS SYS B ACTUATION CAB	F1	F1TMB1	CAABLT	0
A306	1YXBL-PS1/12	CH B LOGIC CAB DC POWER SUPPLY	F1	F1TMB1	SPB12R	0
A306	1B/SAFAS/ZD-XA5	BISTABLE AFAS CH ZD S/G 11	F1	F1ZD11	BIX5DD	0
A317	1I/I1114A1	1 AFW S/G 11 LVL TO AFAS I/I	F1	F1ZD11	II14AR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1CNT45-1	1LT1114A	11 FW S/G WR LVL XMTR	F1	F1ZD11	LT14AR	0
A317	1YX1114A	SG 11 WIDE RANGE CHL L-1114A	F1	F1ZD11	SP14AR	0
A306	1B/SAFAS/ZD-XA7	BISTABLE AFAS CH ZD S/G 12	F1	F1ZD12	BIX7DD	0
A317	1I/I1124A1	1 AFW S/G 12 LVL TO AFAS I/I	F1	F1ZD12	II24AR	0
1CNT45-2	1LT1124A	12 FW S/G WR LVL XMTR	F1	F1ZD12	LT24AR	0
A317	1YX1X1124A	SG 12 WIDE RANGE CHL L-1124A	F1	F1ZD12	SP24AR	0
A306	1B/SAFAS/ZE-XA5	BISTABLE AFAS CH ZE S/G 11	F1	F1ZE11	BIX5ED	0
A430	1I/I1114B1	1 AFW S/G 11 LVL TO AFAS I/I	F1	F1ZE11	II14BR	0
1CNT45-1	1LT1114B	11 FW S/G WR LVL XMTR	F1	F1ZE11	LT14BR	0
A430	1YX1X1114B1	SG 11 WIDE RANGE CHL L-1114B	F1	F1ZE11	SP14BR	0
A306	1B/SAFAS/ZE-XA7	BISTABLE AFAS CH ZE S/G 12	F1	F1ZE12	BIX7ED	0
A430	1I/I1124B1	STM GEN 12 WIDE RANGE LEVEL	F1	F1ZE12	II24BR	0
1CNT45-2	1LT1124B	12 FW S/G WR LVL XMTR	F1	F1ZE12	LT24BR	0
A430	1YX1X1124B1	SG 12 WIDE RANGE CHL L-1124B	F1	F1ZE12	SP24BR	0
A306	1B/SAFAS/ZF-XA5	BISTABLE AFAS CH ZF S/G 11	F1	F1ZF11	BIX5FD	0
A405	1LI1114C	11 FW S/G WR LVL INDIC	F1	F1ZF11	GE14CR	0
1CNT45-1	1LT1114C	11 FW S/G WR LVL XMTR	F1	F1ZF11	LT14CR	0
A405	1YX1X1114C	STM GEN 11 LEVEL CHL L-1114C	F1	F1ZF11	SP14CR	0
A306	1B/SAFAS/ZF-XA7	BISTABLE AFAS CH ZF S/G 12	F1	F1ZF12	BIX7FD	0
A405	1LI1124C	12 FW S/G WR LVL INDIC	F1	F1ZF12	GE24CR	0
1CNT45-2	1LT1124C	12 FW S/G WR LVL XMTR	F1	F1ZF12	LT24CR	0
A405	1YX1X1124C	STM GEN 12 LEVEL CHL L-1124C	F1	F1ZF12	SP24CR	0
A306	1B/SAFAS/ZG-XA5	BISTABLE AFAS CH ZG S/G 11	F1	F1ZG11	BIX5GD	0
1CNT45-1	1LT1114D	11 FW S/G WR LVL XMTR	F1	F1ZG11	LT14DR	0
A405	1LR1114D	11 FW S/G WR LR	F1	F1ZG11	RC14DR	0
A405	1YX1X1114D	STM GEN 11 LEVEL CHL L-1114D	F1	F1ZG11	SP14DR	0
A306	1B/SAFAS/ZG-XA7	BISTABLE AFAS CH ZG S/G 12	F1	F1ZG12	BIX7GD	0
1CNT45-2	1LT1124D	12 FW S/G WR LVL XMTR	F1	F1ZG12	LT24DR	0
A405	1LR1124D	12 FW S/G WR LR	F1	F1ZG12	RC24DR	0
A405	1YX1X1124D	STM GEN 12 LEVEL CHL L-1124D	F1	F1ZG12	SP24DR	0
A306	1I/IZD-XA1	ISO CH D (AFAS BLK CH A)	F1	IID11R	IID11R	0
A306	1I/IZD-XA1	ISO CH D (AFAS BLK CH A)	F1	IID12R	IID12R	0
A306	1I/IZD-XA3	ISO CH D (AFAS BLK CH B)	F1	IID31R	IID31R	0
A306	1I/IZD-XA3	ISO CH D (AFAS BLK CH B)	F1	IID32R	IID32R	0
A306	1I/IZE-XA1	ISO CH D (AFAS BLK CH A)	F1	IIE11R	IIE11R	0
A306	1I/IZE-XA1	ISO CH D (AFAS BLK CH A)	F1	IIE12R	IIE12R	0
A306	1I/IZE-XA3	ISO CH D (AFAS BLK CH B)	F1	IIE31R	IIE31R	0
A306	1I/IZE-XA3	ISO CH D (AFAS BLK CH B)	F1	IIE32R	IIE32R	0
A306	1I/IZF-XA1	ISO CH D (AFAS BLK CH A)	F1	IIF11R	IIF11R	0
A306	1I/IZF-XA1	ISO CH D (AFAS BLK CH A)	F1	IIF12R	IIF12R	0
A306	1I/IZF-XA3	ISO CH D (AFAS BLK CH B)	F1	IIF31R	IIF31R	0
A306	1I/IZF-XA3	ISO CH D (AFAS BLK CH B)	F1	IIF32R	IIF32R	0
A306	1I/IZG-XA1	ISO CH D (AFAS BLK CH A)	F1	IIG11R	IIG11R	0
A306	1I/IZG-XA1	ISO CH D (AFAS BLK CH A)	F1	IIG12R	IIG12R	0
A306	1I/IZG-XA3	ISO CH D (AFAS BLK CH B)	F1	IIG31R	IIG31R	0
A306	1I/IZG-XA3	ISO CH D (AFAS BLK CH B)	F1	IIG32R	IIG32R	0
A306	1RYZA-XK8	AFAS CH A ACT RY/MOTOR PUMP	F1	RYAK8E	RYAK8E	0
A306	1RYZA-XK8	AFAS CH A ACT RY/MOTOR PUMP	F1	RYAK8P	RYAK8P	0
A306	12/4ZA-XA4	CH ZA AFAS START	F1	TLA41D	TLA41D	0
A306	12/4ZA-XA4	CH ZA AFAS START	F1	TLA42D	TLA42D	0
A306	12/4ZB-XA4	CH ZB AFAS START	F1	TLB41D	TLB41D	0
A306	12/4ZB-XA4	CH ZB AFAS START	F1	TLB42D	TLB42D	0
A315	1CV4070	11 S/G MS TO AFW PP TURB	F3	BHEF31	Open	12
A315	1CV4070A	11 S/G AFW MAIN STM BYPASS VALVE	F3	BHEF31	Open	0
A315	1CV4071	12 S/G MS TO AFW PP TURB	F3	BHEF31	Open	12
A315	1CV4071A	12 S/G AFW MAIN STM BYPASS VALVE	F3	BHEF31	Open	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0
A316	1SV4070A	11 S/G AFW MAIN STM BYP VALVE	F3	BHEF31	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A316	1SV4071A	12 S/G AFW MAIN STM BYP VLV	F3	BHEF31	Open	0
A318	1LI5609	LVL INDICATING PRESS GAGE	F3	GM609R	GM609R	0
A405	2HS4540	23 AFW HS MTR DRV PP	F3	HS540D	HS540D	0
A405	2HS4550	MOTOR DR AFW XCONN VLV CONTROL	F3	HS550D	HS550D	0
A405	1HS3986	11 AFW TURB DRV PP TRIP HS	F3	HS986O	HS986O	0
A226	1CV4550	U-1 TO U-2 AFW X-CONN VLV	F7	F7MPVA	C3550T	144
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A405	1HS4540	13 AFW MTR DRV PP HS	F7	F7MPVA	HSA40T	0
A306	1RYAR-XK101	UV SUB CH A3-2	F7	F7MPVA	RYA01T	0
A306	1RYAR-XK85	UV SUB CH A2-2	F7	F7MPVA	RYA85T	0
A317	1RY1A116/2/SSA1	AFW MTR DRIVEN PP 13 TIME DELAY PICKUP REL	F7	F7RSA1	RYSA1E	0
A317	1RY1A116/2/SSA1	AFW MTR DRIVEN PP 13 TIME DELAY PICKUP REL	F7	F7RSA1	RYSA1P	0
A306	1RYAR-XK77	SDS SUB CH A3-1	F7	F7RY77	RYA77E	0
A306	1RYAR-XK77	SDS SUB CH A3-1	F7	F7RY77	RYA77P	0
A306	1RYZA-XK8	AFAS CH A ACT RY/MOTOR PUMP	F7	F7SYPA	RYAK8E	0
A306	1RYZA-XK8	AFAS CH A ACT RY/MOTOR PUMP	F7	F7SYPA	RYAK8P	0
A226	1PUMPAFWM013	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	CVB22C	CVB22C	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	CVB23C	CVB23C	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	CVB32C	CVB32C	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	CVB33C	CVB33C	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50O	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50P	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB22T	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB23T	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB32T	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB33T	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A405	2HS4540	23 AFW HS MTR DRV PP	F9	F9M2VA	HSB40T	0
A302	2RYBR-XK70	UV SUB CH B2-2	F9	F9M2VA	RYK70T	0
A302	2RYBR-XK85	UV SUB CH B3-2	F9	F9M2VA	RYK85T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
1TB12-1	1AFWDOORS	AFW DOUBLE DOORS	FC	Dummy	N/A	0
1TB27-1	1MCC101BT	MCC 101BT	FC	FC1MCC	BU1BTR	0
1TB27-1	1BKR52-10141	MCC 101BT MN FDR BKR	FC	FC1MCC	CB141T	0
A430	1BKR52-1419	101 BT TURB MCC	FC	FC1MCC	CB419T	0
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11R	0
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11S	0
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18
1TB12	1PCV1600	AUX FD PP RM CLR TEMP REG VLV	FC	FCSRWC	CV600P	0
T603	1FDAFWW1	AFW RM SUPPLY FROM RM 225 TO 1AFW FD	FC	FDAMPR	FD001I	0
1TB12-1	1FDTB12W1	AFW RM SUPPLY FROM AFW TO TB12 FD	FC	FDAMPR	FD002I	0
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11R	VDA11R	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11S	VDA11S	36

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12R	VDA12R	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12S	VDA12S	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FF	BHEFCB	Start	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FF	BHEFCB	Start	36
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
1TB12	1PCV4510	11A AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV510P	0
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
UNK	0SV6312	N2 ON/OFF SOLENOID VALVE	FN	FN0000	SV312P	0
A532	2BKR52-21401	MAIN FEEDER BREAKER	FO	UNIT 2	CBO01T	6
A311	2BKR52-2119	214R RX MCC	FO	UNIT 2	CBO19T	0
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21R	144
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21S	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22R	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22S	144
A405	2HS5204	21 IA SW AIR COMPR HS	FO	UNIT 2	HS204D	0
A405	2HS5205	22 IA SW AIR COMPR HS	FO	UNIT 2	HS205D	0
A205	2LS5200	21 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS200R	144
A205	2LS5201	22 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS201R	144
A302	2RYAR-XK1	SIAS SUB CH A1-1	FO	UNIT 2	RYA01E	0
A302	2RYAR-XK1	SIAS SUB CH A1-1	FO	UNIT 2	RYA01P	0
A302	2RYBR-XK1	SIAS SUB CH B1-1	FO	UNIT 2	RYB01E	0
A302	2RYBR-XK1	SIAS SUB CH B1-1	FO	UNIT 2	RYB01P	0
A205	2TS5200	21 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS200R	144
A205	2TS5201	22 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS201R	144
A529	1BKR52-11426	MCC 114R FW TO SG11 ISOL 1MOV4516 BKR	FT	FTFW10	CB114T	6
A405	1HS4516A	11 FW S/G ISOL VLV O/R HS	FT	FTFW10	HS16AT	0
A315	1MOV4516	11 SG FW ISOL	FT	FTFW10	MV516C	0
A315	1MOV4516	11 SG FW ISOL	FT	FTFW10	MV516T	0
A423	1BKR52-10426	MCC 104R FW TO S/G 12 ISOL 1MOV4517 BKR	FT	FTFW20	CB104T	6
A405	1HS4517A	12 FW S/G ISOL VLV O/R HS	FT	FTFW20	HS17AT	0
A315	1MOV4517	12 SG FW ISOL	FT	FTFW20	MV517C	0
A315	1MOV4517	12 SG FW ISOL	FT	FTFW20	MV517T	0
A405	1RY1CSSGC/X1	UNIT 1 CTMT OVERPRESSURE PROT	FT	FTFW30	RYX1CE	0
1TB12-2	1SV5010	SGFP 11 TURB TRIP & RESET	FT	FTFW30	SV010D	0
A405	1RY1CSSGC/X2	UNIT 1 CTMT OVERPRESSURE PROT	FT	FTFW40	RYX2CE	0
1TB12-2	1SV5059	SGFP 12 TURB TRIP & RESET	FT	FTFW40	SV059D	0
A405	1HS4000	1 ESFAS FW/COND SGIS/CSAS O/R	FT	HS000T	HS000T	0
A306	1RYAR-XK40	CSAS SUB CH A3-1	FT	RYA40E	RYA40E	0
A306	1RYAR-XK68	SGIS SUB CH A1	FT	RYA68E	RYA68E	0
A306	1RYBR-XK36	CSAS SUB CH B3-1	FT	RYB36E	RYB36E	0
A306	1RYBR-XK57	SGIS SUB CH B1	FT	RYB57E	RYB57E	0
A405	1RY1CSSGA/X1	UNIT 1 CTMT OVERPRESSURE PROT	FT	RYX1AE	RYX1AE	0
A405	1RY1CSSGB/X1	UNIT 1 CTMT OVERPRESSURE PROT	FT	RYX1BE	RYX1BE	0
A405	1RY1CSSGA/X2	UNIT 1 CTMT OVERPRESSURE PROT	FT	RYX2AE	RYX2AE	0
A405	1RY1CSSGB/X2	UNIT 1 CTMT OVERPRESSURE PROT	FT	RYX2BE	RYX2BE	0
1TB12-2	1CV3959B	11 FW SGFPT HP GOV VLV	FT	VT11HC	VT1HCO	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11HC	VT1HCO	0
1TB12-2	1CV3959B	11 FW SGFPT HP GOV VLV	FT	VT11HC	VT1HCT	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11HC	VT1HCT	0
1TB12-2	1CV3959A	11 FW SGFPT HP STOP VLV	FT	VT11HS	VT1HSO	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11HS	VT1HSO	0
1TB12-2	1CV3959A	11 FW SGFPT HP STOP VLV	FT	VT11HS	VT1HST	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11HS	VT1HST	0
1TB12-2	1CV3961B	11 FW SGFPT LP GOV VLV	FT	VT11LC	VT1LCO	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11LC	VT1LCO	0
1TB12-2	1CV3961B	11 FW SGFPT LP GOV VLV	FT	VT11LC	VT1LCT	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11LC	VT1LCT	0
1TB12-2	1CV3961A	11 FW SGFPT LP STIP VLV	FT	VT11LS	VT1LSO	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11LS	VT1LSO	0
1TB12-2	1CV3961A	11 FW SGFPT LP STIP VLV	FT	VT11LS	VT1LST	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	FT	VT11LS	VT1LST	0
1TB12-2	1CV3974B	12 FW SGFPT HP GOV VLV	FT	VT12HC	VT2HCO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12HC	VT2HCO	0
1TB12-2	1CV3974B	12 FW SGFPT HP GOV VLV	FT	VT12HC	VT2HCT	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12HC	VT2HCT	0
1TB12-2	1CV3974A	12 FW SGFPT HP STOP VLV	FT	VT12HS	VT2HSO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12HS	VT2HSO	0
1TB12-2	1CV3974A	12 FW SGFPT HP STOP VLV	FT	VT12HS	VT2HST	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12HS	VT2HST	0
1TB12-2	1CV3980B	12 FW SGFPT LP GOV VLV	FT	VT12LC	VT2LCO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12LC	VT2LCO	0
1TB12-2	1CV3980B	12 FW SGFPT LP GOV VLV	FT	VT12LC	VT2LCT	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12LC	VT2LCT	0
1TB12-2	1CV3980A	12 FW SGFPT LP STOP VLV	FT	VT12LS	VT2LSO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12LS	VT2LSO	0
1TB12-2	1CV3980A	12 FW SGFPT LP STOP VLV	FT	VT12LS	VT2LST	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	FT	VT12LS	VT2LST	0
DG1A (DB207)	1BATT14	125V DC BATTERY 14	GE	BA014D	BA014D	0
DG1A (DB104)	1BKR152-1703	OUTPUT BREAKER FROM DG1A	GE	BN703C	BN703C	0
DG1A (DB102)	1TCV10091	1A1 ENGINE HT COOLANT TEMPERATURE CONTROL V	GE	C7091O	C7091O	0
DG1A (DB102)	1TCV10111	1A2 ENGINE HT COOLANT TEMPATURE CONTROL VAL	GE	C7111O	C7111O	0
DG1A (DB102)	1TCV10132	1A1 ENGINE LT COOLANT TEMPATURE CONTROL VALV	GE	C7132O	C7132O	0
DG1A (DB102)	1TCV10152	1A2 ENGINE LT COOLANT TEMPATURE CONTROL VALV	GE	C7152O	C7152O	0
DG1A (DB104)	1CHGR16	125V DC BATT CHGR 16	GE	CH016R	CHD16R	0
DG1A (DB102)	1GENEDG1A	1A DIESEL GENERATOR	GE	ED01AD	ED01AD	0
DG1A (DB102)	1GENEDG1A	1A DIESEL GENERATOR	GE	ED01AR	ED01AR	0
DG1A (DB102)	1GENEDG1A	1A DIESEL GENERATOR	GE	ED01AW	ED01AW	0
DG1A (DB102)	1SV10241	1A1 AIR DISTRUBUTOR 11 INLET SOLENOID VALVE	GE	FF241O	FF241O	0
DG1A (DB102)	1SV10242	1A1 AIR DISTRIBUTOR 12 INLET SOLENOID VALVE	GE	FF242O	FF242O	0
DG1A (DB102)	1SV10271	1A2 AIR DISTRUBUTOR 11 INLET SOLENOID VALVE	GE	FF271O	FF271O	0
DG1A (DB102)	1SV10272	1A2 AIR DISTRIBUTOR 12 INLET SOLENOID VALVE	GE	FF272O	FF272O	0
DG1A (DB104)	1BKR152-1702	SUPPLY BREAKER TO U-440-17	GE	GE4KV1	BN702T	0
DG1A (DB104)	1BKR52-1701	TRANSF U-440-17 LV BKR	GE	GE4KV1	CB701T	0
DG1A (UNK)	1RY1ACRV1A	ENGINE 1A1 AIR START HDR 11 SC CONTROL RY	GE	GEAIR1	RYV1AD	0
DG1A (UNK)	1RY1ACRV1B	ENGINE 1A2 AIR START HDR 11 SC CONTROL RY	GE	GEAIR2	RYV1BD	0
DG1A (UNK)	1RY1ACRV2A	ENG 1A1 AIR START SOL CONTROL RY	GE	GEAIR3	RYV2AD	0
DG1A (UNK)	1RY1ACRV2B	ENGINE 1A2 AIR START HDR 12 SV SV CONTROL RY	GE	GEAIR4	RYV2BD	0
DG1A (DB104)	1BUS1D28	125V DC BUS 14	GE	GEBAT1	BUB07R	0
DG1A (DB104)	1DISC95-1405	DG CONTROL PNL 1C188	GE	GEBAT1	CAD05T	0
DG1A (DB104)	1FU95-1405/FU	125D DISC SW FUSE BUS 14	GE	GEBAT1	FUF95R	0
DG1A (DB207)	1BATT14	125V DC BATTERY 14	GE	GEBAT2	BA014R	0
DG1A (DB104)	1DISC72-1401	BATT 14 DISC SWITCH	GE	GEBAT2	CAD01T	0
DG1A (DB207)	1FU1D31F-600/FU	125V DC BATTERY 14 FUSE	GE	GEBAT2	FUB14R	0
DG1A (DB207)	1DISC1D31L	125V DC BATT 14 LINK	GE	GEBAT2	LKD31T	0
DG1A (DB102)	1TS10548	1A D/G ROOM TEMP	GE	GEDGT2	TS548R	0
DG1A (DB102)	1TS10549	1A D/G ROOM TEMP	GE	GEDGT2	TS549R	0
DG1A (DB102)	1TS10550	1A D/G ROOM TEMP	GE	GEDGT2	TS550R	0
DG1A (DB102)	1TS10551	1A D/G ROOM TEMP	GE	GEDGT2	TS551R	0
DG1A (DB102)	1TS10548	1A D/G ROOM TEMP	GE	GEDGTS	TS548D	0
DG1A (DB102)	1TS10549	1A D/G ROOM TEMP	GE	GEDGTS	TS549D	0
DG1A (DB102)	1TS10550	1A D/G ROOM TEMP	GE	GEDGTS	TS550D	0
DG1A (DB307)	1DAMPHVAC10556B	ELEC RM SUPP TORNADO DMPR TD-4	GE	GEDMP1	BD56BT	0
DG1A (DB104)	1DAMPHVAC10558A	1E SWGR RM SUPP DMPR (VD-10)	GE	GEDMP1	DAVD0T	0
DG1A (DB104)	1DAMPHVAC10558C	1E SWGR RM EXH DMPR (VD-11)	GE	GEDMP1	DAVD1T	0
DG1A (DB105)	1DAMPHVAC10557A	CR SUPPLY DMPR (VD-6)	GE	GEDMP1	DAVD6T	0
DG1A (DB104)	1DAMPHVAC10557B	CR EXH DMPR (VD-7)	GE	GEDMP1	DAVD7T	0
DG1A (DB206)	1DAMPHVAC10556A	NON 1-E PNL RM SUPP DMPR VD-8	GE	GEDMP1	DAVD8T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
DG1A (DB205)	1DAMPHVAC10556C	NON-1E PNL RM EXH DMPR (VD-9)	GE	GEDMP1	DAVD9T	0
DG1A (DB105)	1FDHVAC10503	CR EXH DMPR (FD-4)	GE	GEDMP1	FDFD4I	0
DG1A (DB105)	1FDHVAC10557A	CR SUPPLY DMPR (FD-8)	GE	GEDMP1	FDFD8I	0
DG1A (DB206)	1FDHVAC10558	1E SWGR RM SUPPLY DMPR (FD-9)	GE	GEDMP1	FDFD9I	0
DG1A (DB307)	1DAMPHVAC10562	BATT RM EXH TORNADO DMPR(TD-2)	GE	GEDMP3	BD562T	0
DG1A (DB206)	1DAMPHVAC10566	BATTERY RM EXH DMPR (VD-3)	GE	GEDMP3	DAVD3T	0
DG1A (DB206)	1DAMPHVAC10555	BATTERY RM SUPP DMPR (VD-5)	GE	GEDMP3	DAVD5T	0
DG1A (DB207)	1FDHVAC10562	BATTERY RM EXH DMPR (FD-3)	GE	GEDMP3	FDFD3I	0
DG1A (DB207)	1FDHVAC10555	BATTERY RM SUPPLY DMPR (FD-6)	GE	GEDMP3	FDFD6I	0
A317	1BKR152-1103	BKR 152-1103 11-17 4KV BUS TIE BKR	GE	GEELC1	BN103T	0
DG1A (DB104)	1BKR152-1701	TIE BREAKER TO BUS 11	GE	GEELC1	BN701T	0
DG1A (DB104)	1BKR152-1703	OUTPUT BREAKER FROM DG1A	GE	GEELC1	BN703T	0
DG1A (DB104)	1BUS1A07	4KV BUS 17	GE	GEELC1	BUA07R	0
DG1A (DB104)	1DISC189-1703	1A DG OUTPUT DISCONNECT	GE	GEELC1	LK703T	0
DG1A (UNK)	1RY1ACRA125	EDI 1A OUTPUT BKR HT HI TEMP RY	GE	GEELC1	RYA25T	0
DG1A (UNK)	1RY1ACRA31	EDG 1A OUTPUT BKT TRIP RY	GE	GEELC1	RYA31T	0
DG1A (UNK)	1RY1ACRA40	EDG 1A GOV FAIL OUT BKR TRIP RY	GE	GEELC1	RYA40T	0
DG1A (UNK)	1RY1ACRA63	EDG 1A GEN FAIL OUT BKR TRIP RY	GE	GEELC1	RYA63T	0
DG1A (UNK)	1RY1ACRA66	EDG 1A IMMEDIATE S/D TRIP RY	GE	GEELC1	RYA66T	0
DG1A (UNK)	1RY1ACRF7	EDG 1A EMERG S/D TRIP RY	GE	GEELC1	RYRF7T	0
DG1A (DB102)	1FDHVAC10546	FAN F-12 INLET DMPR (FD-10)	GE	GEEXDP	FDD101	0
DG1A (DB208)	1LS10022	1A FO DAY TANK LVL	GE	GEFO24	LS022R	0
DG1A (DB106)	1PUMPDFO10021	1A DFO TRANSFER PP 11	GE	GEFO24	MF021R	0
DG1A (DB208)	1LS10021	1A FO DAY TANK LVL	GE	GEFOB2	LS021D	0
DG1A (DB106)	1PUMPDFO10023	1A DFO TRANSFER PP 12	GE	GEFOB2	MF023S	0
DG1A (DB208)	1LS10021	1A FO DAY TANK LVL	GE	GEFOBU	LS021R	0
DG1A (DB106)	1PUMPDFO10023	1A DFO TRANSFER PP 12	GE	GEFOBU	MF023R	0
DG1A (DB208)	1HXDFO10024	FOST FLAME ARRESTOR	GE	GEFOEX	FMT1AR	0
DG1A (DB208)	1LS10022	1A FO DAY TANK LVL	GE	GEFON4	LS022D	0
DG1A (DB106)	1PUMPDFO10021	1A DFO TRANSFER PP 11	GE	GEFON4	MF021S	0
DG1A (DB307)	1DAMPHVAC10541	F-10 DISCH ISOL DMPR (D-5)	GE	GEHVC1	MD541P	0
DG1A (DB105)	1TIC10541	1A FAN F-10/F-12 TEMP CONTR	GE	GEHVC1	MD541P	0
DG1A (DB102)	1DAMPHVAC10548A	D/G RM OUT TORNADO DMPR (TD-8)	GE	GEHVDP	BD48AT	0
DG1A (DB303)	1DAMPHVAC10529	FAN RM INL TORNADO DMPR(TD-7)	GE	GEHVDP	BD529T	0
DG1A (DB303)	1DAMPHVAC10553	D/G RM O/A DMPR (D-13)	GE	GEHVDP	MD553P	0
DG1A (DB105)	1TIC10552	1A D/G FAN RM TEMP CONTR	GE	GEHVDP	MD553P	0
DG1A (DB104)	1DISC72-1402	16 BATTERY CHARGER 1D32	GE	GEMCC1	CAD02T	0
DG1A (DB104)	1BKR52-12328	BATT CHARGER FEED	GE	GEMCC1	CB328T	0
DG1A (DB104)	1BUS1B07	480V BUS 17	GE	GEMCC2	BU017R	0
DG1A (DB104)	1BUS1B023	MCC 123 BUS	GE	GEMCC2	BU023R	0
DG1A (DB104)	1BKR52-1703	MCC 1B023 BKR	GE	GEMCC2	CB703T	0
DG1A (UNK)	1RY1ACRB14	ENGINE 1 RADIATOR FAN CONTROL RELAY	GE	GERAD1	RYB14P	0
DG1A (DB308)	1FANDCW10081	1A1 RADIATOR FAN 13	GE	GERAD1	VD081R	0
DG1A (DB308)	1FANDCW10082	1A1 RADIATOR FAN 12	GE	GERAD1	VD082R	0
DG1A (DB308)	1FANDCW10083	1A1 RADIATOR FAN 11	GE	GERAD1	VD083R	0
DG1A (DB102)	1TCV10091	1A1 ENGINE HT COOLANT TEMPERATURE CONTROL V	GE	GERAD2	C7091P	0
DG1A (DB102)	1TCV10132	1A1 ENGINE LT COOLANT TEMPATURE CONTROL VALV	GE	GERAD2	C7132P	0
DG1A (DB308)	1HXDCW10082	1A1 RADIATOR (HT & LT)	GE	GERAD2	HX082B	0
DG1A (DB308)	1HXDCW10082	1A1 RADIATOR (HT & LT)	GE	GERAD3	HX082P	0
DG1A (UNK)	1RY1ACRB14	ENGINE 1 RADIATOR FAN CONTROL RELAY	GE	GERAD4	RYB14E	0
DG1A (DB308)	1FANDCW10081	1A1 RADIATOR FAN 13	GE	GERAD4	VD081S	0
DG1A (DB308)	1FANDCW10082	1A1 RADIATOR FAN 12	GE	GERAD4	VD082S	0
DG1A (DB308)	1FANDCW10083	1A1 RADIATOR FAN 11	GE	GERAD4	VD083S	0
DG1A (UNK)	1RY1ACRB15	1A2 HT/LT RAD FAN CONTROL RELAY	GE	GERAD5	RYB15P	0
DG1A (DB303)	1FANDCW10101	1A2 RADIATOR FAN 11	GE	GERAD5	VD101R	0
DG1A (DB303)	1FANDCW10102	1A2 RADIATOR FAN 12	GE	GERAD5	VD102R	0
DG1A (DB303)	1FANDCW10103	1A2 RADIATOR FAN 13	GE	GERAD5	VD103R	0
DG1A (DB102)	1TCV10111	1A2 ENGINE HT COOLANT TEMPATURE CONTROL VAL	GE	GERAD6	C7111P	0
DG1A (DB102)	1TCV10152	1A2 ENGINE LT COOLANT TEMPATURE CONTROL VALV	GE	GERAD6	C7152P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
DG1A (DB303)	1HXDCW10102	1A2 RADIATOR (HT & LT)	GE	GERAD6	HX102B	0
DG1A (DB303)	1HXDCW10102	1A2 RADIATOR (HT & LT)	GE	GERAD7	HX102P	0
DG1A (UNK)	1RY1ACRB15	1A2 HT/LT RAD FAN CONTROL RELAY	GE	GERAD8	RYB15E	0
DG1A (DB303)	1FANDCW10101	1A2 RADIATOR FAN 11	GE	GERAD8	VD101S	0
DG1A (DB303)	1FANDCW10102	1A2 RADIATOR FAN 12	GE	GERAD8	VD102S	0
DG1A (DB303)	1FANDCW10103	1A2 RADIATOR FAN 13	GE	GERAD8	VD103S	0
DG1A (DB105)	1RYD1A/159-1	DG1A CORRECT SET VOLT RLY	GE	GEREL1	RY591E	0
DG1A (DB105)	1RYD1A/181-1	DG1A CORRECT SET FREQ RLY	GE	GEREL1	RY811E	0
DG1A (UNK)	1RY1ACRB17	EDG 1A BKR VOLT REL AUTO CONTROL RY	GE	GEREL1	RYB17E	0
DG1A (UNK)	1RY1ACRB28	EDG 1A CORRECT FREQ CONTROL RY	GE	GEREL1	RYB28E	0
DG1A (UNK)	1RY1ACRC9	EDG 1A BKR VOLT/FREQ CONTROL RY	GE	GEREL1	RYRC9E	0
DG1A (DB203)	1FANHVAC10548	DIESEL RM SUPPLY FAN (F-1)	GE	GEVENR	VD548R	0
DG1A (DB203)	1FANHVAC10549	DIESEL RM SUPPLY FAN (F-2)	GE	GEVENR	VD549R	0
DG1A (DB203)	1FANHVAC10550	DIESEL RM SUPPLY FAN (F-3)	GE	GEVENR	VD550R	0
DG1A (DB203)	1FANHVAC10551	D/G RM SUPPLY FAN (F-4)	GE	GEVENR	VD551R	0
DG1A (DB203)	1FANHVAC10548	DIESEL RM SUPPLY FAN (F-1)	GE	GEVENS	VD548S	0
DG1A (DB203)	1FANHVAC10549	DIESEL RM SUPPLY FAN (F-2)	GE	GEVENS	VD549S	0
DG1A (DB203)	1FANHVAC10550	DIESEL RM SUPPLY FAN (F-3)	GE	GEVENS	VD550S	0
DG1A (DB307)	1DAMPHVAC10541	F-10 DISCH ISOL DMPR (D-5)	GE	MD541O	MD541O	0
DG1A (DB105)	1TIC10541	1A FAN F-10/F-12 TEMP CONTR	GE	MD541O	MD541O	0
A306	1RYAR-XK110	UV SUB CH A4-2	GE	RY110E	RY110E	0
A306	1RYAR-XK109	UV SUB CH A4-1	GE	RYA09E	RYA09E	0
A306	1RYAR-XK32	SIAS SUB CH A10-3	GE	RYA32E	RYA32E	0
DG1A (UNK)	1RY1ACRB21	EDG 1A AUTO START RELAY	GE	RYB21E	RYB21E	0
A306	1RYAR-XK32	SIAS SUB CH A10-3	GE	RYK32E	RYK32E	0
DG1A (UNK)	1RY1ACRC2	EDG 1A AUX START RELAY	GE	RYRC2E	RYRC2E	0
DG1A (UNK)	1RY1ACRC3	EDG 1A AUX START RELAY	GE	RYRC3E	RYRC3E	0
DG1A (UNK)	1RY1ACRC4	EDG 1A AUX START RELAY	GE	RYRC4E	RYRC4E	0
DG1A (DB104)	1XU-440-17	UNIT BUS 17 TRANSFORMER	GE	TN017R	TN017R	0
DG1A (DB102)	1TS10551	1A D/G ROOM TEMP	GE	TS551D	TS551D	0
DG1A (DB102)	1FANHVAC10546	ELEC ROOMS EXH FAN (F-12)	GE	VD546R	VD546R	0
DG1A (DB102)	1FANHVAC10546	ELEC ROOMS EXH FAN (F-12)	GE	VD546S	VD546S	0
DG1A (DB203)	1FANHVAC10551	D/G RM SUPPLY FAN (F-4)	GE	VD551S	VD551S	0
DG1A (DB307)	1FANHVAC10565	DG BLDG SR SYS SUPP FAN (F-10)	GE	VD565R	VD565R	0
DG1A (DB307)	1FANHVAC10565	DG BLDG SR SYS SUPP FAN (F-10)	GE	VD565S	VD565S	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	GE(UA)	EABKR1	CABALT	0
A306	1FUZD-F1	CH D CONTROL POWER FUSE	GE(UA)	RACPCD	FUDF1R	0
A306	1HSZD-S1	CH D CONTROL POWER SWITCH S1	GE(UA)	RACPCD	HSDS1T	0
A306	1YXZD-PS/40	CH D CAB 40VDC ISOL RELAY PWR	GE(UA)	RACPCD	SPD40R	0
A306	1FUZE-F1	CH E CONTROL POWER FUSE	GE(UA)	RACPCE	FUEF1R	0
A306	1HSZE-S1	CH E CONTROL POWER SWITCH S1	GE(UA)	RACPCE	HSES1T	0
A306	1YXZE-PS/40	CH E CAB 40VDC ISOL RELAY PWR	GE(UA)	RACPCE	SPE40R	0
A306	1FUZF-F1	CH F CONTROL POWER FUSE F1	GE(UA)	RACPCF	FUFF1R	0
A306	1HSZF-S1	CH F CONTROL POWER SWITCH S1	GE(UA)	RACPCF	HSFS1T	0
A306	1YXZF-PS/40	CH F CAB 40VDC ISOL RELAY PWR	GE(UA)	RACPCF	SPF40R	0
A306	1FUZG-F1	CH G CONTROL POWER FUSE F1	GE(UA)	RACPCG	FUGF1R	0
A306	1HSZG-S1	CH G CONTROL POWER SWITCH S1	GE(UA)	RACPCG	HSGS1T	0
A306	1YXZG-PS/40	CH G 40 VDC ISOL RELAY PWR SUP	GE(UA)	RACPCG	SPG40R	0
A306	1YXAL-PS5/15	AL CABINET U/V 15V POWER SUPPLY	GE(UA)	SPA55R	SPA55R	0
A306	1YXAL-PS5/28	AL CABINET U/V 28V POWER SUPPLY	GE(UA)	SPA58R	SPA58R	0
A306	12/4AL-XA17	UV SUB CH A1	GE(UA)	TLA17D	TLA17D	0
A306	12/4AL-XA17	UV SUB CH A1	GE(UA)	TLA17R	TLA17R	0
A306	1B/SZD-XA4	UV BUS 11 ZD DIGITAL	GE(UA)	UASEND	BID40D	0
A306	1MODRAS-A/CHD	RAS-A MAINT BYP MODULE CH D	GE(UA)	UASEND	HSMBDT	0
A306	1E/EZD-XA6-U4	UV BUS 11 ZD CH A ISOLATOR	GE(UA)	UASEND	IID64R	0
A317	1RY127/B11A	13/4KV BUS 11 U/V RY	GE(UA)	UASEND	RY11AD	0
A317	1RY127/B11A	13/4KV BUS 11 U/V RY	GE(UA)	UASEND	RY11AT	0
A317	1RY127/B11E	13/4KV BUS 11 U/V RY	GE(UA)	UASEND	RY11ED	0
A317	1RY127/B11E	13/4KV BUS 11 U/V RY	GE(UA)	UASEND	RY11ET	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYZD-XK5	UV11 ZD INPUT	GE(UA)	UASEND	RYD53E	0
A306	1RYZD-XK5	UV11 ZD INPUT	GE(UA)	UASEND	RYD53P	0
A306	1B/SZE-XA4	ESFAS U/V BUS 11 ZE DIGITAL B/S	GE(UA)	UASENE	BIE04D	0
A306	1MODRAS-A/CHE	RAS-A MAINT BYP MODULE CH E	GE(UA)	UASENE	HSMBET	0
A306	1E/EZE-XA6-U4	UV BUS 11 ZE CH A ISOLATOR	GE(UA)	UASENE	IIE64R	0
A317	1RY127/B11B	13/4KV BUS 11 U/V RY	GE(UA)	UASENE	RY11BD	0
A317	1RY127/B11B	13/4KV BUS 11 U/V RY	GE(UA)	UASENE	RY11BT	0
A317	1RY127/B11F	13/4KV BUS 11 U/V RY	GE(UA)	UASENE	RY11FD	0
A317	1RY127/B11F	13/4KV BUS 11 U/V RY	GE(UA)	UASENE	RY11FT	0
A306	1RYZE-XK5	UV11 ZE INPUT	GE(UA)	UASENE	RYE53E	0
A306	1RYZE-XK5	UV11 ZE INPUT	GE(UA)	UASENE	RYE53P	0
A306	1B/SZF-XA4	UV BUS 11 ZF DIGITAL	GE(UA)	UASENF	BIF04D	0
A306	1MODRAS-A/CHF	RAS-A MAINT BYP MODULE CH F	GE(UA)	UASENF	HSMBFT	0
A306	1E/EZF-XA6-U4	UV BUS 11 ZF CH A ISOLATOR	GE(UA)	UASENF	IIF64R	0
A317	1RY127/B11C	13/4KV BUS 11 U/V RY	GE(UA)	UASENF	RY11CD	0
A317	1RY127/B11C	13/4KV BUS 11 U/V RY	GE(UA)	UASENF	RY11CT	0
A317	1RY127/B11G	13/4KV BUS 11 U/V RY	GE(UA)	UASENF	RY11GD	0
A317	1RY127/B11G	13/4KV BUS 11 U/V RY	GE(UA)	UASENF	RY11GT	0
A306	1RYZF-XK5	UV11 ZF INPUT	GE(UA)	UASENF	RYF53E	0
A306	1RYZF-XK5	UV11 ZF INPUT	GE(UA)	UASENF	RYF53P	0
A306	1B/SZG-XA4	UV BUS 11 DIGITAL	GE(UA)	UASENG	BIG04D	0
A306	1MODRAS-A/CHG	RAS-A MAINT BYP MODULE CH G	GE(UA)	UASENG	HSMBGT	0
A306	1E/EZG-XA6-U4	UV BUS 11 ZG CH A ISOLATOR	GE(UA)	UASENG	IIG64R	0
A317	1RY127/B11D	13/4KV BUS 11 U/V RY	GE(UA)	UASENG	RY11DD	0
A317	1RY127/B11D	13/4KV BUS 11 U/V RY	GE(UA)	UASENG	RY11DT	0
A317	1RY127/B11H	13/4KV BUS 11 U/V RY	GE(UA)	UASENG	RY11HD	0
A317	1RY127/B11H	13/4KV BUS 11 U/V RY	GE(UA)	UASENG	RY11HT	0
A306	1RYZG-XK5	UV11 ZG INPUT	GE(UA)	UASENG	RYG53E	0
A306	1RYZG-XK5	UV11 ZG INPUT	GE(UA)	UASENG	RYG53P	0
A407	2BKR152-2403	DSL GEN #2B	GF	BND03C	BND03C	0
A416	2GENEDG2B	EDG 2B GENERATOR	GF	DGA21D	DGA21D	0
A416	2GENEDG2B	EDG 2B GENERATOR	GF	DGA21R	DGA21R	0
A416	2GENEDG2B	EDG 2B GENERATOR	GF	DGA21W	DGA21W	0
A416	2CV4838	2B DG STARTING AIR DIESEL AIR START CONTROL VAL	GF	FF838O	FF838O	0
A416	2SV4838	EDG 2B DG AIR START VALVE (AS1)	GF	FF838O	FF838O	0
A416	2CV4839	2B DG STARTING AIR DIESEL AIR START CONTROL VAL	GF	FF839O	FF839O	0
A416	2SV4839	EDG 2B AIR START VALVE (AS2)	GF	FF839O	FF839O	0
A416	2COMP4837	2B DG START AIR COMPR	GF	GFAIRE	MSC11P	0
A416	2ACC4839	2B DG AIR RECEIVER EAST HDR	GF	GFAIRE	MSC11R	0
A416	2YS4839	2B DG FO START AIR STRAIN	GF	GFAIRE	YS839P	0
A416	2ACC4838	2B DG AIR RECEIVER WEST HDR	GF	GFAIRW	MSC1WP	0
A416	2ACC4838	2B DG AIR RECEIVER WEST HDR	GF	GFAIRW	MSC1WR	0
A416	2YS4838	2B DG FO START AIR STRAIN	GF	GFAIRW	YS838P	0
A416	2MCC2BG	480V MCC 2BG	GF	GFC21G	BU21GR	6
A414	2BKR52-20411	MCC 204R DIESEL GEN MCC 2BG	GF	GFC21G	CB411T	6
A416	2HS4824	DIESEL 2B FO TRANSFER PMP CONT	GF	GFFOE2	HS824T	0
A416	2LS4824	2B DG FUEL OIL XFER PUMP STOP	GF	GFFOE2	LS824R	0
A416	2YS4824	2B DG FO TRANSFER STRAINER	GF	GFFOE2	YSC14P	0
A416	2PUMPDFOXFR2B	2B DG FO XFER PUMP (2M2BG02)	GF	GFFOE3	MFG21R	0
A416	2LS4826	2B DG FUEL OIL DAY TANK START	GF	GFFOE4	LS826D	0
A416	2PUMPDFOXFR2B	2B DG FO XFER PUMP (2M2BG02)	GF	GFFOE4	MFG21S	0
A416	2YS4828	2B DG FO STRAINER	GF	GFFOEX	YS828P	0
A407	2BKR152-2403	DSL GEN #2B	GF	GFOUTT	BND03T	0
A407	2DISC189-2403	DG 2B TO 4KV BIS 24 DISC SW	GF	GFOUTT	LK403T	0
A416	2RY2DG2BA/SDR	2B DG SHUTDOWN RELAY	GF	GFOUTT	RY2DRT	0
A416	2RY2DG2BA/SDRX	2B DG SHUTDOWN AUX RELAY	GF	GFOUTT	RY2DXT	0
A416	2RY2B/132	DG 2B REVERSE POWER RELAY	GF	GFOUTT	RY322T	0
A416	2RY2B/140	DG 2B LOSS OF FIELD RELAY	GF	GFOUTT	RY402T	0
A416	2RY2B/151G	DG 2B GROUND OVERCURRENT REL	GF	GFOUTT	RY512T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A416	2RY2B/181U/DB	DG 2B UNDER FREQUENCY RELAY	GF	GFOUTT	RY812T	0
A416	2RY2B/186	DG 2B GEN LOCKOUT RELAY	GF	GFOUTT	RY862T	0
A416	2RY2B/187	DG 2B DIFFERENTIAL RELAY	GF	GFOUTT	RY872T	0
A416	2RY2B/194	EDG 2B U/F & REVERSE PWR RELAY	GF	GFOUTT	RY942T	0
A416	2RY2DG2BA/ERA	2B DG ENGINE NORMAL SPEED RELAY	GF	GFRYLB	RY2ERE	0
A302	2RY2UFV2B/ERA/X	2B DG RATED SPD AUX RELAY X	GF	GFRYLB	RYEX1D	0
A302	2RY2DG2BA/127	2B DG ENGINE CNTRL RY -	GF	GFRYLB	RYX23E	0
A302	2RY2UFV2B/127/X	2B DG U/V AUX RELAY X	GF	GFRYLB	RYX24D	0
A416	2RY2DG2BA/4A	2B DG AIR START BLOCK RELAY	GF	GFRYST	RYC4AD	0
A416	2RY2DG2BA/4B	2B DG AIR START BLOCK RELAY	GF	GFRYST	RYC4BD	0
A416	2HX4794	2B DG LUBE OIL COOLER	GF	GFSRWE	HX021B	0
A416	2HX4794	2B DG LUBE OIL COOLER	GF	GFSRWE	HX021P	0
A416	2HX4777	2B DG AIR COOLER	GF	GFSRWE	HXC11B	0
A416	2HX4777	2B DG AIR COOLER	GF	GFSRWE	HXC11P	0
A416	2HX4810	2B DG JACKET WATER COOLER	GF	GFSRWE	HXW21P	0
A416	2HS5437	DIESEL RM 2B COOLING FAN CONT	GF	GFVEN2	PO437O	0
A416	2PO5437	2B DG ROOM VENTILATION EXHAUST DAMPER	GF	GFVEN2	PO437O	0
A416	2SV5437	2B DIESEL GENERATOR ROOM VENTILATION EXHAUST	GF	GFVEN2	PO437O	0
A416	2HS5438	DIESEL GEN RM 2B VENT FAN 2B	GF	GFVEN2	PO438O	0
A416	2PO5438	2B DG ROOM VENTILATION FAN RECIRC DAMPER	GF	GFVEN2	PO438O	0
A416	2SV5438	2B DIESEL GENERATOR ROOM VENT FAN SUPPLY/REC	GF	GFVEN2	PO438O	0
A416	2HS5438	DIESEL GEN RM 2B VENT FAN 2B	GF	GFVEN2	PP38AC	0
A416	2PO5438A	2B DG ROOM VENTILATION FAN SUPPLY DAMPER	GF	GFVEN2	PP38AC	0
A416	2SV5438	2B DIESEL GENERATOR ROOM VENT FAN SUPPLY/REC	GF	GFVEN2	PP38AC	0
A416	2RY42/2B1G01	CNTRLS 2B DG RM VENTILATION	GF	GFVEN2	RYC42E	0
A416	2FANHVACEDGS2B	DIESEL RM 2B SUPPLY FAN (2M2BG01)	GF	GFVEN2	VDV21S	0
A416	2HS5437	DIESEL RM 2B COOLING FAN CONT	GF	GFVENT	HS437T	0
A416	2PCV5438	IA SUPPLY TO 2B ROOM HVAC CONTROLS PRESSURE	GF	GFVENT	PC438R	0
A416	2HS5437	DIESEL RM 2B COOLING FAN CONT	GF	GFVENT	PO437P	0
A416	2PO5437	2B DG ROOM VENTILATION EXHAUST DAMPER	GF	GFVENT	PO437P	0
A416	2SV5437	2B DIESEL GENERATOR ROOM VENTILATION EXHAUST	GF	GFVENT	PO437P	0
A416	2HS5438	DIESEL GEN RM 2B VENT FAN 2B	GF	GFVENT	PO438P	0
A416	2PO5438	2B DG ROOM VENTILATION FAN RECIRC DAMPER	GF	GFVENT	PO438P	0
A416	2SV5438	2B DIESEL GENERATOR ROOM VENT FAN SUPPLY/REC	GF	GFVENT	PO438P	0
A416	2HS5438	DIESEL GEN RM 2B VENT FAN 2B	GF	GFVENT	PP38AT	0
A416	2PO5438A	2B DG ROOM VENTILATION FAN SUPPLY DAMPER	GF	GFVENT	PP38AT	0
A416	2SV5438	2B DIESEL GENERATOR ROOM VENT FAN SUPPLY/REC	GF	GFVENT	PP38AT	0
A416	2RY42/2B1G01	CNTRLS 2B DG RM VENTILATION	GF	GFVENT	RYC42P	0
A416	2TC5438	DG RM 2B FAN DAMPERS CONT	GF	GFVENT	TC438R	0
A416	2CV1587	DG CLR 2B SERV WTR INLET	GF	GV287P	GV287P	0
A416	2PDIC1587	SERV WTR TO DIESEL 21 FLW CONT	GF	GV287P	GV287P	0
A416	2SV1587	2B DG CLR SW IN CNTR VLV	GF	GV287P	GV287P	0
A416	2CV1587	DG CLR 2B SERV WTR INLET	GF	GVC87O	GVC87O	0
A416	2PDIC1587	SERV WTR TO DIESEL 21 FLW CONT	GF	GVC87O	GVC87O	0
A416	2SV1587	2B DG CLR SW IN CNTR VLV	GF	GVC87O	GVC87O	0
A302	2RYBR-XK109	STARTS DG 2B, 4KV, UV SIGNAL	GF	RYC09E	RYC09E	0
A416	2RY2DG2BA/5A	2B DG AUX STOP RELAY	GF	RYC5AT	RYC5AT	0
A302	2RY2DG2BA/LSAX	2B DG ENGINE LOW SPEED RELAY	GF	RYCAXE	RYCAXE	0
A416	2FANHVACEDGS2B	DIESEL RM 2B SUPPLY FAN (2M2BG01)	GF	VDV21R	VDV21R	0
A302	2B/SZD-XA3	UV BUS 24 ZD DIGITAL	GF(UD)	UNIT 2	BID03D	0
A302	2B/SZE-XA3	UV BUS 24 ZE DIGITAL	GF(UD)	UNIT 2	BIE03D	0
A302	2B/SZF-XA3	UV BUS 24 ZF DIGITAL	GF(UD)	UNIT 2	BIF03D	0
A302	2B/SZG-XA3	UV BUS 24 DIGITAL	GF(UD)	UNIT 2	BIG03D	0
A302	2DISC2Y0212	ESFAS CABINET 2C68-L (B LOGIC) POWER SUPPLY	GF(UD)	UNIT 2	CA212T	0
A302	2BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	GF(UD)	UNIT 2	CABBLT	0
A302	2FUZD-F1	CH D CONTROL POWER FUSE F1	GF(UD)	UNIT 2	FUDF1R	0
A302	2FUZE-F1	CH E CONTROL POWER FUSE F1	GF(UD)	UNIT 2	FUEF1R	0
A302	2FUZF-F1	CH F CONTROL POWER FUSE F1	GF(UD)	UNIT 2	FUFF1R	0
A302	2FUZG-F1	CH G CONTROL POWER FUSE F1	GF(UD)	UNIT 2	FUGF1R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A302	2HSZD-S1	CH D CONTROL POWER SWITCH S1	GF(UD)	UNIT 2	HSDS1T	0
A302	2HSZE-S1	CH E CONTROL POWER SWITCH S1	GF(UD)	UNIT 2	HSES1T	0
A302	2HSZF-S1	CH F CONTROL POWER SWITCH S1	GF(UD)	UNIT 2	HSFS1T	0
A302	2MODRAS-B/CHD	RAS-B MAINT BYP MODULE CH D	GF(UD)	UNIT 2	HSMCDT	0
A302	2MODRAS-B/CHE	RAS-B MAINT BYP MODULE CH E	GF(UD)	UNIT 2	HSMCET	0
A302	2MODRAS-B/CHF	RAS-B MAINT BYP MODULE CH F	GF(UD)	UNIT 2	HSMCFT	0
A302	2MODRAS-B/CHG	RAS-B MAINT BYP MODULE CH G	GF(UD)	UNIT 2	HSMCGT	0
A302	2E/EZD-XA1-U4	UV BUS 24 ZD CH B ISOLATOR	GF(UD)	UNIT 2	IID14R	0
A302	2E/EZE-XA1-U4	UV BUS 24 ZE CH B ISOLATOR	GF(UD)	UNIT 2	IIE14R	0
A302	2E/EZF-XA1-U4	UV BUS 24 ZF CH B ISOLATOR	GF(UD)	UNIT 2	IIF14R	0
A302	2E/EZG-XA1-U4	UV BUS 24 ZG CH B ISOLATOR	GF(UD)	UNIT 2	IIG14R	0
A407	2RY127/B24A	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24AD	0
A407	2RY127/B24A	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24AT	0
A407	2RY127/B24B	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24BD	0
A407	2RY127/B24B	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24BT	0
A407	2RY127/B24C	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24CD	0
A407	2RY127/B24C	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24CT	0
A407	2RY127/B24D	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24DD	0
A407	2RY127/B24D	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24DT	0
A407	2RY127/B24E	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24ED	0
A407	2RY127/B24E	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24ET	0
A407	2RY127/B24F	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24FD	0
A407	2RY127/B24F	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24FT	0
A407	2RY127/B24G	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24GD	0
A407	2RY127/B24G	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24GT	0
A407	2RY127/B24H	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24HD	0
A407	2RY127/B24H	13/4KV BUS 24 U/V RY	GF(UD)	UNIT 2	RY24HT	0
A302	2RYZD-XK6	UV24 ZD INPUT	GF(UD)	UNIT 2	RYD63E	0
A302	2RYZD-XK6	UV24 ZD INPUT	GF(UD)	UNIT 2	RYD63P	0
A302	2RYZE-XK6	UV24 ZE INPUT	GF(UD)	UNIT 2	RYE63E	0
A302	2RYZE-XK6	UV24 ZE INPUT	GF(UD)	UNIT 2	RYE63P	0
A302	2RYZF-XK6	UV24 ZF INPUT	GF(UD)	UNIT 2	RYF63E	0
A302	2RYZF-XK6	UV24 ZF INPUT	GF(UD)	UNIT 2	RYF63P	0
A302	2RYZG-XK6	UV24 ZG INPUT	GF(UD)	UNIT 2	RYG63E	0
A302	2RYZG-XK6	UV24 ZG INPUT	GF(UD)	UNIT 2	RYG63P	0
A302	2YXBL-PS5/15	BL CABINET U/V 15V POWER SUPPLY	GF(UD)	UNIT 2	SPB55R	0
A302	2YXBL-PS5/28	BL CABINET U/V 28V POWER SUPPLY	GF(UD)	UNIT 2	SPB58R	0
A302	2YXZD-PS/40	CH D CAB 40 VDC ISOL RELAY PWR	GF(UD)	UNIT 2	SPD40R	0
A302	2YXZE-PS/40	CH E CAB 40 VDC ISOL RELAY PWR	GF(UD)	UNIT 2	SPE40R	0
A302	2YXZF-PS/40	CH F CAB 40 VDC ISOL RELAY PWR	GF(UD)	UNIT 2	SPF40R	0
A302	2YXZG-PS/40	CH G CAB 40 VDC ISOL RELAY PWR	GF(UD)	UNIT 2	SPG40R	0
A302	22/4BL-XA17	UV SUB CH B1	GF(UD)	UNIT 2	TLB17D	0
A302	22/4BL-XA17	UV SUB CH B1	GF(UD)	UNIT 2	TLB17R	0
A430	1BKR152-1403	DG 1B TO 4KV BUS 14	GG	BN106C	BN106C	0
A421	1MCC1BG	1B EDG MCC 1BG	GG	BU12GR	BU12GR	7
A421	1EDG1BG	EDG 1B GENERATOR	GG	DGA12D	DGA12D	7
A421	1EDG1BG	EDG 1B GENERATOR	GG	DGA12R	DGA12R	7
A421	1EDG1BG	EDG 1B GENERATOR	GG	DGA12W	DGA12W	7
A421	1CV4834	1B DG STARTING AIR DIESEL AIR START CONTROL VAL	GG	FF834O	FF834O	7
A421	1SV4834	1B DG AIR START VALVE (AS1)	GG	FF834O	FF834O	0
A421	1CV4835	1B DG STARTING AIR DIESEL AIR START CONTROL VAL	GG	FF835O	FF835O	7
A421	1SV4835	1B DG AIR START VLV (AS2)	GG	FF835O	FF835O	0
A421	1COMP4833	1B EDG AIR COMPR	GG	GGAIRE	MSD2EP	7
A421	1ACC4835	1B DG AIR RECEIVER EAST HDR	GG	GGAIRE	MSD2ER	7
A421	1YS4835	1B DG FO START AIR STRAIN	GG	GGAIRE	YS835P	7
A421	1ACC4834	1B DG AIR RECEIVER WEST HDR	GG	GGAIRW	MSD2WP	7
A421	1ACC4834	1B DG AIR RECEIVER WEST HDR	GG	GGAIRW	MSD2WR	7
A421	1YS4834	1B DG FO START AIR STRAIN	GG	GGAIRW	YS834P	7
A423	1BKR52-10411	MCC 104R DIESEL GEN MCC 1BG	GG	GGB12G	CBB11T	6

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A421	1DISC83-10411	1B EDG INTERMEDIATE XFER DISC - MCC 104R	GG	GGB12G	RY411P	7
A421	1DISC83-1BG05	1B DG MCC 12G XFER DISC	GG	GGB12G	RYG05T	7
A421	1DISC83-1BG06	1B DG MCC 12G XFER DISC	GG	GGB12G	RYG06P	7
A421	1HS4819	DIESEL 1B FO TRANSFER PMP CONT	GG	GGFOE2	HS819T	7
A421	1YS4819	1B DG FO TRANSFER STRAINER	GG	GGFOE2	YS819P	7
A421	1LS4819	1B EDG FO DAY TK HI LS - XFER PP STOP	GG	GGFOE3	LS819R	7
A421	1PUMPDFOXFR1B	1B DG FO XFER PUMP (1M1BG02)	GG	GGFOE3	MFG12R	7
A421	1LS4819	1B EDG FO DAY TK HI LS - XFER PP STOP	GG	GGFOE4	LS819D	7
A421	1PUMPDFOXFR1B	1B DG FO XFER PUMP (1M1BG02)	GG	GGFOE4	MFG12S	7
A421	1YS4823	1B DG FO STRAINER	GG	GGFOEX	YS823P	7
A430	1BKR152-1403	DG 1B TO 4KV BUS 14	GG	GGOUTT	BN406T	0
A421	1DISC189-1403A	DG 1B TO DISC SW 1NA403	GG	GGOUTT	LK06AT	7
A430	1DISC189-1403	DG 1B TO 4KV BUS 14 DISC SW	GG	GGOUTT	LK406T	0
A421	1RY1B/151G	EDG 1B GROUND OVERCURRENT REL	GG	GGOUTT	RYC11T	7
A421	1RY1B/132	EDG 1B REVERSE POWER RELAY	GG	GGOUTT	RYC31T	7
A421	1RY1B/140	EDG 1B LOSS OF FIELD RELAY	GG	GGOUTT	RYC41T	7
A421	1RY1DG1BD/186A	1B DG GEN LOCKOUT AUX RELAY	GG	GGOUTT	RYC63T	7
A421	1RY1B/187	EDG 1B DIFFERENTIAL RELAY	GG	GGOUTT	RYC71T	7
A421	1RY1B/181U/DB	EDG 1B UNDER REQUENCY RELAY	GG	GGOUTT	RYC81T	7
A421	1RY1B/194	12 DG U/F & REVERSE PWR RELAY	GG	GGOUTT	RYC91T	7
A421	1RY1DG1BA/SDR	1B EDG ENGINE CNTRL RY - SHUTDOWN	GG	GGOUTT	RYCD1T	7
A421	1RY1DG1BA/SDRX3	EDG 1B SHUTDOWN AUX RELAY	GG	GGOUTT	RYCD3T	7
A306	1RY1DG1BA/127	1B EDG ENGINE CNTRL RY - UNDERVOLTAGE	GG	GGRLYB	RYC21E	0
A306	1RY1B/127/X3	EDG 1B U/V AUX RELAY X3	GG	GGRLYB	RYC22D	0
A306	1RY1B/ERA/X1	EDG 1B RATED SPD AUX RELAY X1	GG	GGRLYB	RYCE2D	0
A421	1RY1DG1BA/ERA	1B EDG ENGINE CNTRL RY - ENGINE NORMAL SPEED	GG	GGRLYB	RYCERE	7
A421	1RY1DG1BA/4A	1B DG AIR START BLOCK RELAY	GG	GGRYST	RYB4AD	7
A421	1RY1DG1BA/4B	1B DG AIR START BLOCK RELAY	GG	GGRYST	RYB4BD	7
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A405	1HS1645	12 SRW EDG CLR SUPP HS	GG	GGSRW1	HSA45T	0
A421	1HX4786	1B DG LUBE OIL COOLER	GG	GGSRWE	HX012B	7
A421	1HX4776	1B DG AIR COOLER	GG	GGSRWE	HXB12B	7
A421	1HX4776	1B DG AIR COOLER	GG	GGSRWE	HXB12P	7
A421	1HX4786	1B DG LUBE OIL COOLER	GG	GGSRWE	HXO12P	7
A421	1HX4806	1B DG JACKET WATER COOLER	GG	GGSRWE	HXW12P	7
A421	1HS5431	DIESEL RM 1B COOLING FAN CONT	GG	GGVEN2	PO433O	7
A421	1PO5431	DIESEL RM 1B EXHAUST DAMPER	GG	GGVEN2	PO433O	7
A421	1SV5431	DIESEL RM 1B EXHAUST DAMPER	GG	GGVEN2	PO433O	0
A421	1HS5432	DIESEL GEN RM 1B VENT FAN 1B	GG	GGVEN2	PO434O	0
A421	1PO5432	DIESEL RM 1B SUPPLY DAMPERS	GG	GGVEN2	PO434O	7
A421	1SV5432	DIESEL GEN RM 1B SUPPLY DMPRS	GG	GGVEN2	PO434O	0
A421	1HS5432	DIESEL GEN RM 1B VENT FAN 1B	GG	GGVEN2	PP34AC	0
A421	1PO5432A	DIESEL RM 1B SUPPLY DAMPER	GG	GGVEN2	PP34AC	7
A421	1SV5432	DIESEL GEN RM 1B SUPPLY DMPRS	GG	GGVEN2	PP34AC	0
A421	1RY42/1BBG01	CNTRLS 1B DG RM VENTILATION	GG	GGVEN2	RYB42E	7
A421	1FANHVACEDGS1B	1B DG RM SPLY FAN (1M1BG01)	GG	GGVEN2	VDV12S	7
A421	1HS5431	DIESEL RM 1B COOLING FAN CONT	GG	GGVENT	HS433T	7
A421	1PCV5432	AIR SUPPLY TO EDG 1B VENT DAMPER	GG	GGVENT	PC434R	7
A421	1HS5431	DIESEL RM 1B COOLING FAN CONT	GG	GGVENT	PO433P	7
A421	1PO5431	DIESEL RM 1B EXHAUST DAMPER	GG	GGVENT	PO433P	7
A421	1SV5431	DIESEL RM 1B EXHAUST DAMPER	GG	GGVENT	PO433P	0
A421	1HS5432	DIESEL GEN RM 1B VENT FAN 1B	GG	GGVENT	PO434P	0
A421	1PO5432	DIESEL RM 1B SUPPLY DAMPERS	GG	GGVENT	PO434P	7
A421	1SV5432	DIESEL GEN RM 1B SUPPLY DMPRS	GG	GGVENT	PO434P	0
A421	1HS5432	DIESEL GEN RM 1B VENT FAN 1B	GG	GGVENT	PP34AT	0
A421	1PO5432A	DIESEL RM 1B SUPPLY DAMPER	GG	GGVENT	PP34AT	7
A421	1SV5432	DIESEL GEN RM 1B SUPPLY DMPRS	GG	GGVENT	PP34AT	0
A421	1RY42/1BBG01	CNTRLS 1B DG RM VENTILATION	GG	GGVENT	RYB42P	7

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A421	1TC5432	1 HVAC/A DIESEL RM 1B FAN D TC	GG	GGVENT	TC434R	7
A421	1CV1588	1B DG SRW SUPPLY WATER SUPPLY CONTROL VALVE	GG	GV287P	GV287P	7
A421	1SV1588	1B DG CLR SW IN CNTR VLV SOL	GG	GV287P	GV287P	0
A421	1CV1588	1B DG SRW SUPPLY WATER SUPPLY CONTROL VALVE	GG	GVD12O	GVD12O	7
A421	1SV1588	1B DG CLR SW IN CNTR VLV SOL	GG	GVD12O	GVD12O	0
A306	1RYBR-XK113	UV SUB CH B4-3	GG	RYB13E	RYB13E	0
A421	1RY1DG1BA/5A	EDG 1B AUX STOP RELAY	GG	RYB5AT	RYB5AT	7
A421	1RY1DG1BA/LSAX	1B EDG ENGINE CNTRL RY - ENGINE LOW SPEED AUX	GG	RYBAXE	RYBAXE	7
A421	1FANHVACEDGS1B	1B DG RM SPLY FAN (1M1BG01)	GG	VDV12R	VDV12R	7
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	GG(UB)	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	GG(UB)	EBBKR1	CABBLT	0
A306	1FUZD-F1	CH D CONTROL POWER FUSE	GG(UB)	RACPCD	FUDF1R	0
A306	1HSZD-S1	CH D CONTROL POWER SWITCH S1	GG(UB)	RACPCD	HSDS1T	0
A306	1YXZD-PS/40	CH D CAB 40VDC ISOL RELAY PWR	GG(UB)	RACPCD	SPD40R	0
A306	1FUZE-F1	CH E CONTROL POWER FUSE	GG(UB)	RACPCE	FUEF1R	0
A306	1HSZE-S1	CH E CONTROL POWER SWITCH S1	GG(UB)	RACPCE	HSES1T	0
A306	1YXZE-PS/40	CH E CAB 40VDC ISOL RELAY PWR	GG(UB)	RACPCE	SPE40R	0
A306	1FUZF-F1	CH F CONTROL POWER FUSE F1	GG(UB)	RACPCF	FUFF1R	0
A306	1HSZF-S1	CH F CONTROL POWER SWITCH S1	GG(UB)	RACPCF	HSFS1T	0
A306	1YXZF-PS/40	CH F CAB 40VDC ISOL RELAY PWR	GG(UB)	RACPCF	SPF40R	0
A306	1FUZG-F1	CH G CONTROL POWER FUSE F1	GG(UB)	RACPCG	FUGF1R	0
A306	1HSZG-S1	CH G CONTROL POWER SWITCH S1	GG(UB)	RACPCG	HSGS1T	0
A306	1YXZG-PS/40	CH G 40 VDC ISOL RELAY PWR SUP	GG(UB)	RACPCG	SPG40R	0
A306	1YXBL-PS5/15	BL CABINET U/V 15V POWER SUPPLY	GG(UB)	SPB55R	SPB55R	0
A306	1YXBL-PS5/28	BL CABINET U/V 28V POWER SUPPLY	GG(UB)	SPB58R	SPB58R	0
A306	12/4BL-XA17	UV SUB CH B1	GG(UB)	TLB17D	TLB17D	0
A306	12/4BL-XA17	UV SUB CH B1	GG(UB)	TLB17R	TLB17R	0
A306	1B/SZD-XA3	UV BUS 14 ZD DIGITAL	GG(UB)	UBSEND	BID03D	0
A306	1MODRAS-B/CHD	RAS-B MAINT BYP MODULE CH D	GG(UB)	UBSEND	HSMCDT	0
A306	1E/EZD-XA1-U4	UV BUS 14 ZD CH B ISOLATOR	GG(UB)	UBSEND	IID14R	0
A430	1RY127/B14A	13/4KV BUS 14 U/V RY	GG(UB)	UBSEND	RY14AD	0
A430	1RY127/B14A	13/4KV BUS 14 U/V RY	GG(UB)	UBSEND	RY14AT	0
A430	1RY127/B14E	13/4KV BUS 14 U/V RY	GG(UB)	UBSEND	RY14ED	0
A430	1RY127/B14E	13/4KV BUS 14 U/V RY	GG(UB)	UBSEND	RY14ET	0
A306	1RYZD-XK6	UV14 ZD INPUT	GG(UB)	UBSEND	RYD63E	0
A306	1RYZD-XK6	UV14 ZD INPUT	GG(UB)	UBSEND	RYD63P	0
A306	1B/SZE-XA3	ESFAS U/V BUS 14 ZE DIGITAL B/S	GG(UB)	UBSENE	BIE03D	0
A306	1MODRAS-B/CHE	RAS-B MAINT BYP MODULE CH E	GG(UB)	UBSENE	HSMCET	0
A306	1E/EZE-XA1-U4	UV BUS 14 ZE CH B ISOLATOR	GG(UB)	UBSENE	IIE14R	0
A430	1RY127/B14B	13/4KV BUS 14 U/V RY	GG(UB)	UBSENE	RY14BD	0
A430	1RY127/B14B	13/4KV BUS 14 U/V RY	GG(UB)	UBSENE	RY14BT	0
A430	1RY127/B14F	13/4KV BUS 14 U/V RY	GG(UB)	UBSENE	RY14FD	0
A430	1RY127/B14F	13/4KV BUS 14 U/V RY	GG(UB)	UBSENE	RY14FT	0
A306	1RYZE-XK6	UV14 ZE INPUT	GG(UB)	UBSENE	RYE63E	0
A306	1RYZE-XK6	UV14 ZE INPUT	GG(UB)	UBSENE	RYE63P	0
A306	1B/SZF-XA3	UV BUS 14 ZF DIGITAL	GG(UB)	UBSENF	BIF03D	0
A306	1MODRAS-B/CHF	RAS-B MAINT BYP MODULE CH F	GG(UB)	UBSENF	HSMCFT	0
A306	1E/EZF-XA1-U4	UV BUS 14 ZF CH B ISOLATOR	GG(UB)	UBSENF	IIF14R	0
A430	1RY127/B14C	13/4KV BUS 14 U/V RY	GG(UB)	UBSENF	RY14CD	0
A430	1RY127/B14C	13/4KV BUS 14 U/V RY	GG(UB)	UBSENF	RY14CT	0
A430	1RY127/B14G	13/4KV BUS 14 U/V RY	GG(UB)	UBSENF	RY14GD	0
A430	1RY127/B14G	13/4KV BUS 14 U/V RY	GG(UB)	UBSENF	RY14GT	0
A306	1RYZF-XK6	UV14 ZF INPUT	GG(UB)	UBSENF	RYF63E	0
A306	1RYZF-XK6	UV14 ZF INPUT	GG(UB)	UBSENF	RYF63P	0
A306	1B/SZG-XA3	UV BUS 14 DIGITAL	GG(UB)	UBSENG	BIG03D	0
A306	1MODRAS-B/CHG	RAS-B MAINT BYP MODULE CH G	GG(UB)	UBSENG	HSMCGT	0
A306	1E/EZG-XA1-U4	UV BUS 14 ZG CH B ISOLATOR	GG(UB)	UBSENG	IIG14R	0
A430	1RY127/B14D	13/4KV BUS 14 U/V RY	GG(UB)	UBSENG	RY14DD	0
A430	1RY127/B14D	13/4KV BUS 14 U/V RY	GG(UB)	UBSENG	RY14DT	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A430	1RY127/B14H	13/4KV BUS 14 U/V RY	GG(UB)	UBSENG	RY14HD	0
A430	1RY127/B14H	13/4KV BUS 14 U/V RY	GG(UB)	UBSENG	RY14HT	0
A306	1RYZG-XK6	UV14 ZG INPUT	GG(UB)	UBSENG	RYG63E	0
A306	1RYZG-XK6	UV14 ZG INPUT	GG(UB)	UBSENG	RYG63P	0
A311	2BKR152-2103	2A DIESEL GENERATOR OUTPUT BREAKER	GH	BN103C	BN103C	0
A422	2GENEDG2A	EDG 2A GENERATOR	GH	DGA11D	DGA11D	7
A422	2GENEDG2A	EDG 2A GENERATOR	GH	DGA11R	DGA11R	7
A422	2GENEDG2A	EDG 2A GENERATOR	GH	DGA11W	DGA11W	7
A422	2CV4830	2A DG START AIR CONTROL VALVE	GH	FF830O	FF830O	7
A422	2SV4830	2A DG AIR START VALVE (AS1)	GH	FF830O	FF830O	0
A422	2CV4831	2A DG START AIR DIESEL AIR START CONTROL VALVE	GH	FF831O	FF831O	7
A422	2SV4831	2A DG AIR START VALVE (AS2)	GH	FF831O	FF831O	0
A422	2ACC4830	2A DG AIR RECEIVER EAST HDR	GH	GHAIRE	MSD11P	7
A422	2ACC4830	2A DG AIR RECEIVER EAST HDR	GH	GHAIRE	MSD11R	7
A422	2YS4831	2A DG START AIR STRAINER	GH	GHAIRE	YS831P	7
A422	2ACC4831	2A DG AIR RECEIVER WEST HDR	GH	GHAIRW	MSD1WP	7
A422	2ACC4831	2A DG AIR RECEIVER WEST HDR	GH	GHAIRW	MSD1WR	7
A422	2YS4830	2A DG W START AIR STRAINER	GH	GHAIRW	YS830P	7
A422	2MCC2AG	480V MCC 2AG	GH	GHC11G	BU11GR	6
A532	2BKR52-21411	DIESEL GENERATOR MCC 2AG FEEDER	GH	GHC11G	CB411T	6
A422	2HS4814	DIESEL 2A FO TRANSFER PUMP CONT	GH	GHFOE2	HS814T	7
A422	2LS4814	2A DG FO TRANSFER PMP STOP	GH	GHFOE2	LS814R	7
A422	2YS4814	2A DG FUEL OIL STRAINER	GH	GHFOE2	YS814P	7
A422	2PUMPDFOXFR2A	2A DG FO XFER PUMP (2M2AG02)	GH	GHFOE3	MFG11R	7
A422	2LS4816	2A DG FO DAY TANK START	GH	GHFOE4	LS816D	7
A422	2PUMPDFOXFR2A	2A DG FO XFER PUMP (2M2AG02)	GH	GHFOE4	MFG11S	7
A422	2YS4818	2A DG FUEL OIL STRAINER	GH	GHFOEX	YS818P	7
A311	2BKR152-2103	2A DIESEL GENERATOR OUTPUT BREAKER	GH	GHOUTT	BN103T	0
A422	2DISC189-2103A	2A DG TO DISC SW 2NA103	GH	GHOUTT	LK03AT	7
A311	2DISC189-2103	2A DG TO 4KV BUS 21 DISC SW	GH	GHOUTT	LK103T	0
A422	2RY2A/151G	DG 2A GROUND OVERCURRENT RELY	GH	GHOUTT	RYX11T	7
A422	2RY2A/132	DG 2A REVERSE POWER RELAY	GH	GHOUTT	RYX32T	7
A422	2RY2A/140	DG 2A LOSS OF FIELD RELAY	GH	GHOUTT	RYX41T	7
A422	2RY2A/186	DG 2A GEN LOCKOUT RELAY	GH	GHOUTT	RYX63T	7
A422	2RY2A/187	DG 2A DIFFERENTIAL RELAY	GH	GHOUTT	RYX71T	7
A422	2RY2A/181U/DB	DG 2A UNDER FREQUENCY RELAY	GH	GHOUTT	RYX81T	7
A422	2RY2A/194	DG 2A U/F & RESERVE PWR RELAY	GH	GHOUTT	RYX91T	7
A422	2RY2DG2AA/SDR	EDG 2A SHUTDOWN RELAY	GH	GHOUTT	RYXE2T	7
A422	2RY2DG2AA/SDRX	EDG 2A SHUTDOWN AUX RELAY	GH	GHOUTT	RYXSXT	7
A302	2RY2DG2AA/127	EDG 2A U/V AUX RELAY	GH	GHRYLB	RY21XE	0
A302	2RY2UFV2A/127/X	EDG 2A U/V AUX RELAY X	GH	GHRYLB	RY24XD	0
A422	2RY2DG2AA/ERA	EDG 2A ENG NORMAL SPEED RELAY	GH	GHRYLB	RYXE1E	7
A302	2RY2UFV2A/ERA/X	EDG 2A RATED SPD AUX RELAY X	GH	GHRYLB	RYXE2D	0
A422	2RY2DG2AA/4A	EDG 2A AIR START BLOCK RELAY	GH	GHRYST	RYA4AD	7
A422	2RY2DG2AA/4B	EDG 2A AIR START BLOCK RELAY	GH	GHRYST	RYA4BD	7
A422	2HX4775	2A DG AIR COOLER	GH	GHSRWE	HXA11B	7
A422	2HX4775	2A DG AIR COOLER	GH	GHSRWE	HXA11P	7
A422	2HX4778	2A DG LUBE OIL COOLER	GH	GHSRWE	HXO11B	7
A422	2HX4778	2A DG LUBE OIL COOLER	GH	GHSRWE	HXO11P	7
A422	2HX4802	2A DG JACKET WTR CLR	GH	GHSRWE	HXW11P	7
A422	2HS5429	DIESEL RM 2A COOLING FAN CONT	GH	GHVEN2	PO429O	7
A422	2PO5429	2A DG ROOM VENTILATION EXHAUST DAMPER	GH	GHVEN2	PO429O	7
A422	2SV5429	2 HVAC/A DIESEL GEN RM 2A EXH D SV	GH	GHVEN2	PO429O	7
A422	2HS5430	DIESEL GEN RM 2A VENT FAN 11	GH	GHVEN2	PO430O	0
A422	2PO5430	2A DG ROOM VENTILATION FAN RECIRC DAMPER	GH	GHVEN2	PO430O	7
A422	2SV5430	2 HVAC/A DIESEL GEN RM 2A SUPPLY D SV	GH	GHVEN2	PO430O	7
A422	2HS5430	DIESEL GEN RM 2A VENT FAN 11	GH	GHVEN2	PP30AC	0
A422	2PO5430A	2A DG ROOM VENTILATION FAN SUPPLY DAMPER	GH	GHVEN2	PP30AC	7
A422	2SV5430	2 HVAC/A DIESEL GEN RM 2A SUPPLY D SV	GH	GHVEN2	PP30AC	7

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A422	2RY42/2BAG01	CONTROLS DG 2A RM VENT	GH	GHVEN2	RYA42E	7
A422	2FANHVACEDGS2A	2A DG RM SPLY FAN (2M2AG01)	GH	GHVEN2	VDV11S	7
A422	2HS5429	DIESEL RM 2A COOLING FAN CONT	GH	GHVENT	HS429T	7
A422	2PCV5430	U-1 IA SUPPLY TO 2A DG ROOM HVAC CONTROLS PRE	GH	GHVENT	PC430R	7
A422	2HS5429	DIESEL RM 2A COOLING FAN CONT	GH	GHVENT	PO429P	7
A422	2PO5429	2A DG ROOM VENTILATION EXHAUST DAMPER	GH	GHVENT	PO429P	7
A422	2SV5429	2 HVAC/A DIESEL GEN RM 2A EXH D SV	GH	GHVENT	PO429P	7
A422	2HS5430	DIESEL GEN RM 2A VENT FAN 11	GH	GHVENT	PO430P	0
A422	2PO5430	2A DG ROOM VENTILATION FAN RECIRC DAMPER	GH	GHVENT	PO430P	7
A422	2SV5430	2 HVAC/A DIESEL GEN RM 2A SUPPLY D SV	GH	GHVENT	PO430P	7
A422	2HS5430	DIESEL GEN RM 2A VENT FAN 11	GH	GHVENT	PP30AT	0
A422	2PO5430A	2A DG ROOM VENTILATION FAN SUPPLY DAMPER	GH	GHVENT	PP30AT	7
A422	2SV5430	2 HVAC/A DIESEL GEN RM 2A SUPPLY D SV	GH	GHVENT	PP30AT	7
A422	2RY42/2BAG01	CONTROLS DG 2A RM VENT	GH	GHVENT	RYA42P	7
A422	2TC5430	DIESEL RM 2A FAN DAMPERS CONT	GH	GHVENT	TC430R	7
A422	2CV1588	DIESEL CLR 2A SERV WTR INLET	GH	GV588O	GV588O	7
A422	2SV1588	2A DG CLR SW IN CNTR VLV SOL	GH	GV588O	GV588O	0
A422	2CV1588	DIESEL CLR 2A SERV WTR INLET	GH	GV588P	GV588P	7
A422	2SV1588	2A DG CLR SW IN CNTR VLV SOL	GH	GV588P	GV588P	0
A302	2RYAR-XK109	UV SUB CH A4-1	GH	RY09AE	RY09AE	0
A422	2RY2DG2AA/5A	EDG 2A AUX STOP RELAY	GH	RYA5AT	RYA5AT	7
A302	2RY2DG2AA/LSAX	EDG 2A ENGINE LOW SPEED RELAY	GH	RYSAXE	RYSAXE	0
A422	2FANHVACEDGS2A	2A DG RM SPLY FAN (2M2AG01)	GH	VDV11R	VDV11R	7
A302	2B/SZD-XA4	UV BUS 21 ZD DIGITAL	GH(UC)	UNIT 2	BID40D	0
A302	2B/SZE-XA4	UV BUS 21 ZE DIGITAL	GH(UC)	UNIT 2	BIE04D	0
A302	2B/SZF-XA4	UV BUS 21 ZF DIGITAL	GH(UC)	UNIT 2	BIF04D	0
A302	2DISC2Y0112	ESFAS CABINET 2C67-L (A LOGIC) POWER SUPPLY)	GH(UC)	UNIT 2	CA112T	0
A302	2FUZD-F1	CH D CONTROL POWER FUSE F1	GH(UC)	UNIT 2	FUDF1R	0
A302	2FUZE-F1	CH E CONTROL POWER FUSE F1	GH(UC)	UNIT 2	FUEF1R	0
A302	2FUZF-F1	CH F CONTROL POWER FUSE F1	GH(UC)	UNIT 2	FUFF1R	0
A302	2FUZG-F1	CH G CONTROL POWER FUSE F1	GH(UC)	UNIT 2	FUGF1R	0
A302	2HSZD-S1	CH D CONTROL POWER SWITCH S1	GH(UC)	UNIT 2	HSDS1T	0
A302	2HSZE-S1	CH E CONTROL POWER SWITCH S1	GH(UC)	UNIT 2	HSES1T	0
A302	2HSZF-S1	CH F CONTROL POWER SWITCH S1	GH(UC)	UNIT 2	HSFS1T	0
A302	2HSZG-S1	CH G CONTROL POWER SWITCH S1	GH(UC)	UNIT 2	HSGS1T	0
A302	2MODRAS-A/CHD	RAS-A MAINT BYP MODULE CH D	GH(UC)	UNIT 2	HSMBDT	0
A302	2MODRAS-A/CHE	RAS-A MAINT BYP MODULE CH E	GH(UC)	UNIT 2	HSMBET	0
A302	2MODRAS-A/CHF	RAS-A MAINT BYP MODULE CH F	GH(UC)	UNIT 2	HSMBFT	0
A302	2MODRAS-A/CHG	RAS-A MAINT BYP MODULE CH G	GH(UC)	UNIT 2	HSMBGT	0
A302	2E/EZD-XA6-U4	UV BUS 21 ZD CH A ISOLATOR	GH(UC)	UNIT 2	IID64R	0
A302	2E/EZE-XA6-U4	UV BUS 21 ZE CH A ISOLATOR	GH(UC)	UNIT 2	IIE64R	0
A302	2E/EZF-XA6-U4	UV BUS 21 ZF CH A ISOLATOR	GH(UC)	UNIT 2	IIF64R	0
A302	2E/EZG-XA6-U4	UV BUS 21 ZG CH A ISOLATOR	GH(UC)	UNIT 2	IIG64R	0
A311	2RY127/B21A	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21AD	0
A311	2RY127/B21A	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21AT	0
A311	2RY127/B21B	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21BD	0
A311	2RY127/B21B	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21BT	0
A311	2RY127/B21C	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21CD	0
A311	2RY127/B21C	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21CT	0
A311	2RY127/B21D	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21DD	0
A311	2RY127/B21D	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21DT	0
A311	2RY127/B21E	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21ED	0
A311	2RY127/B21E	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21ET	0
A311	2RY127/B21F	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21FD	0
A311	2RY127/B21F	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21FT	0
A311	2RY127/B21G	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21GD	0
A311	2RY127/B21G	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21GT	0
A311	2RY127/B21H	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21HD	0
A311	2RY127/B21H	13/4KV BUS 21 U/V RY	GH(UC)	UNIT 2	RY21HT	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A302	2RYZD-XK5	UV21 ZD INPUT	GH(UC)	UNIT 2	RYD53E	0
A302	2RYZD-XK5	UV21 ZD INPUT	GH(UC)	UNIT 2	RYD53P	0
A302	2RYZE-XK5	UV21 ZE INPUT	GH(UC)	UNIT 2	RYE53E	0
A302	2RYZE-XK5	UV21 ZE INPUT	GH(UC)	UNIT 2	RYE53P	0
A302	2RYZF-XK5	UV21 ZF INPUT	GH(UC)	UNIT 2	RYF53E	0
A302	2RYZF-XK5	UV21 ZF INPUT	GH(UC)	UNIT 2	RYF53P	0
A302	2RYZG-XK5	UV21 ZG INPUT	GH(UC)	UNIT 2	RYG53E	0
A302	2RYZG-XK5	UV21 ZG INPUT	GH(UC)	UNIT 2	RYG53P	0
A302	2YXAL-PS5/15	AL CABINET U/V 15V POWER SUPPLY	GH(UC)	UNIT 2	SPA55R	0
A302	2YXAL-PS5/28	AL CABINET U/V 28V POWER SUPPLY	GH(UC)	UNIT 2	SPA58R	0
A302	2YXZD-PS/40	CH D CAB 40 VDC ISOL RELAY PWR	GH(UC)	UNIT 2	SPD40R	0
A302	2YXZE-PS/40	CH E CAB 40 VDC ISOL RELAY PWR	GH(UC)	UNIT 2	SPE40R	0
A302	2YXZF-PS/40	CH F CAB 40 VDC ISOL RELAY PWR	GH(UC)	UNIT 2	SPF40R	0
A302	2YXZG-PS/40	CH G CAB 40 VDC ISOL RELAY PWR	GH(UC)	UNIT 2	SPG40R	0
A302	22/4AL-XA17	UV SUB CH A1	GH(UC)	UNIT 2	TLA17D	0
A302	22/4AL-XA17	UV SUB CH A1	GH(UC)	UNIT 2	TLA17R	0
DG0C (SB003)	0BATT15	125V DC BATTERY 15	GJ	BA015D	BA015D	0
DG0C (SB103)	0BKR152-0703	OUTPUT BREAKER FROM DG0C	GJ	BN003C	BN003C	0
DG0C (SB102)	0TCV10111	0C2 LT COOLANT DRAIN/SAMPLE VALVE	GJ	C7011O	C7011O	0
DG0C (SB102)	0TCV10132	0C1 ENGINE LT COOLANT TEMPERATURE CONTROL V	GJ	C7032O	C7032O	0
DG0C (SB102)	0TCV10152	0C2 ENGINE LT COOLANT TEMPERATURE CONTROL VL	GJ	C7052O	C7052O	0
DG0C (SB102)	0TCV10091	0C1 ENGINE HT COOLANT TEMPERATURE CONTROL V	GJ	C7910O	C7910O	0
DG0C (SB103)	0CHGR17	125V DC BATT CHGR 17	GJ	CH017R	CH017R	0
DG0C (SB102)	0GENEDG0C	0C DIESEL GENERATOR	GJ	ED00CD	ED00CD	0
DG0C (SB102)	0GENEDG0C	0C DIESEL GENERATOR	GJ	ED00CR	ED00CR	0
DG0C (SB102)	0GENEDG0C	0C DIESEL GENERATOR	GJ	ED00CW	ED00CW	0
DG0C (SB102)	0SV10241	0C1 AIR DISTRIBUTOR 11 INLET SOLENOID VLV	GJ	FF041O	FF041O	0
DG0C (SB102)	0SV10242	0C1 AIR DISTRIBUTOR 12 INLET SOLENOID VALVE	GJ	FF042O	FF042O	0
DG0C (SB102)	0SV10271	0C2 AIR DISTRIBUTOR 11 INLET SOLENOID VALVE	GJ	FF071O	FF071O	0
DG0C (SB102)	0SV10272	0C2 AIR DISTRIBUTOR 12 INLET SOLENOID VALVE	GJ	FF072O	FF072O	0
DG0C (UNK)	0RY0CCRV1A	ENGINE 0C1 AIR START HDR 11 SV CONTROL RY	GJ	GJAIR1	RY0V1D	0
DG0C (UNK)	0RY0CCRV1B	ENGINE 0C1 AIR START HDR 12 SV CONTROL RY	GJ	GJAIR2	RYBV1D	0
DG0C (UNK)	0RY0CCRV2A	ENGINE 0C2 AIR START HDR 11 SV CONTROL RY	GJ	GJAIR3	RYAV1D	0
DG0C (UNK)	0RY0CCRV2B	ENGINE 0C2 AIR START HDR 12 SV CONTROL RY	GJ	GJAIR4	RYBV2D	0
DG0C (SB003)	0BATT15	125V DC BATTERY 15	GJ	GJBAT2	BA015R	0
DG0C (SB103)	0DISC72-1501	BATT 15 DISC SWITCH	GJ	GJBAT2	CA501T	0
DG0C (SB003)	0FU0D31F-600/FU	125V DC BATTERY 15 FUSE	GJ	GJBAT2	FU31FR	0
DG0C (SB003)	0DISC0D31L	125V DC BATT 15 LINK	GJ	GJBAT2	LKK31T	0
DG0C (SB103)	0BUS0D28	125V DC BUS 15	GJ	GJBUS1	BU07BR	0
DG0C (SB103)	0DISC95-1505	DG CONTROL PNL 0C188	GJ	GJBUS1	CA05DT	0
DG0C (SB103)	0FU95-1505/FU	125D DISC SW FUSE BUS 15	GJ	GJBUS1	FU95FR	0
DG0C (SB102)	0TS10597	0C DG ROOM TEMP	GJ	GJDGT2	TS597R	0
DG0C (SB102)	0TS10598	0C DG ROOM TEMP	GJ	GJDGT2	TS598R	0
DG0C (SB102)	0TS10599	0C DG ROOM TEMP	GJ	GJDGT2	TS599R	0
DG0C (SB102)	0TS10600	0C DG ROOM TEMP	GJ	GJDGT2	TS600R	0
DG0C (SB102)	0TS10597	0C DG ROOM TEMP	GJ	GJDGTS	TS597D	0
DG0C (SB102)	0TS10598	0C DG ROOM TEMP	GJ	GJDGTS	TS598D	0
DG0C (SB102)	0TS10599	0C DG ROOM TEMP	GJ	GJDGTS	TS599D	0
DG0C (SB003)	0DAMPHVAC10590	BATTERY RM SUPPLY DMPR (VD-12)	GJ	GJDMP3	DA12VT	0
DG0C (SB102)	0DAMPHVAC10589	BATTERY RM EXH DMPR (VD-13)	GJ	GJDMP3	DA13VT	0
DG0C (SB103)	0BKR152-0702	SUPPLY BREAKER TO U-440-07	GJ	GJELC1	BN002T	0
DG0C (SB103)	0BUS0B023	MCC 023 BUS	GJ	GJELC1	BU230R	0
DG0C (SB103)	0BUS0B07	480V BUS 07	GJ	GJELC1	BU407R	0
DG0C (SB103)	0BKR52-0701	TRANSF U-440-07 LV BKR	GJ	GJELC1	CB001T	0
DG0C (SB103)	0BKR52-0703	MCC 0B023 BKR	GJ	GJELC1	CB003T	0
DG0C (SB202)	0LS10021	0C FO DAY TANK LVL	GJ	GJFO24	LSF22R	0
DG0C (SB002)	0PUMPDFO10021	0C DFO TRANSFER PP	GJ	GJFO24	MFF21R	0
DG0C (SB202)	0LS10021	0C FO DAY TANK LVL	GJ	GJFON4	LSF22D	0
DG0C (SB002)	0PUMPDFO10021	0C DFO TRANSFER PP	GJ	GJFON4	MFF21S	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
DG0C (SB204)	0HXHVAC10583B	EVAP COIL(PART OF 0C AHU-1)	GJ	GJHV01	AJ83BS	0
DG0C (SB204)	0FANHVAC10583B	SUPPLY FAN(PART OF 0C AHU-1)	GJ	GJHV01	VD83BS	0
DG0C (SB204)	0HXHVAC10583B	EVAP COIL(PART OF 0C AHU-1)	GJ	GJHV02	AJ83BR	0
DG0C (SB104)	0DAMPHVAC10583A	CR A/C RETURN DMPR (VD-4)	GJ	GJHV02	DA0V4T	0
DG0C (SB104)	0DAMPHVAC10583B	CR A/C SUPPLY DMPR (VD-5)	GJ	GJHV02	DA0V5T	0
DG0C (SB204)	0FANHVAC10583B	SUPPLY FAN(PART OF 0C AHU-1)	GJ	GJHV02	VD83BR	0
DG0C (SB204)	0DAMPHVAC10587A	SWGR RM AHU-2 EXH DMPR (D-5)	GJ	GJHV03	MD87AO	0
DG0C (SB104)	0HS10587	0C-AHU-2 SWITCHGEAR RM	GJ	GJHV03	MD87AO	0
DG0C (SB204)	0DAMPHVAC10587C	SWGR RM AHU-2 DMPR OS AIR(D-7)	GJ	GJHV03	MD87CO	0
DG0C (SB104)	0HS10587	0C-AHU-2 SWITCHGEAR RM	GJ	GJHV03	MD87CO	0
DG0C (SB204)	0FANHVAC10587A	SUPPLY FAN(PART OF 0C AHU-2)	GJ	GJHV03	VD87AS	0
DG0C (SB204)	0FANHVAC10587B	RETURN FAN(PART OF 0C AHU-2)	GJ	GJHV03	VD87BS	0
DG0C (SB204)	0DAMPHVAC10587D	SWGR RM AHU RETURN DMPR (VD-6)	GJ	GJHV04	DA0V6T	0
DG0C (SB103)	0DAMPHVAC10588	SWGR RM SUPPLY DMPR (VD-9)	GJ	GJHV04	DA0V9T	0
DG0C (SB204)	0DAMPHVAC10587A	SWGR RM AHU-2 EXH DMPR (D-5)	GJ	GJHV04	MD87AP	0
DG0C (SB104)	0HS10587	0C-AHU-2 SWITCHGEAR RM	GJ	GJHV04	MD87AP	0
DG0C (SB204)	0DAMPHVAC10587B	SWGR RM AHU-2 BYPASS DMPR D-6	GJ	GJHV04	MD87BT	0
DG0C (SB104)	0HS10587	0C-AHU-2 SWITCHGEAR RM	GJ	GJHV04	MD87BT	0
DG0C (SB204)	0DAMPHVAC10587C	SWGR RM AHU-2 DMPR OS AIR(D-7)	GJ	GJHV04	MD87CP	0
DG0C (SB104)	0HS10587	0C-AHU-2 SWITCHGEAR RM	GJ	GJHV04	MD87CP	0
DG0C (SB204)	0FANHVAC10587A	SUPPLY FAN(PART OF 0C AHU-2)	GJ	GJHV04	VD87AR	0
DG0C (SB204)	0FANHVAC10587B	RETURN FAN(PART OF 0C AHU-2)	GJ	GJHV04	VD87BR	0
DG0C (SB102)	0DAMPHVAC10598	D/G RM VENT INT DMPR (D-2)	GJ	GJHVDP	MD598P	0
DG0C (SB104)	0HS10598	0C-F-2 DG RM EXH FAN	GJ	GJHVDP	MD598P	0
DG0C (SB102)	0DAMPHVAC10599	D/G RM VENT INT DMPR (D-3)	GJ	GJHVDP	MD599P	0
DG0C (SB104)	0HS10599	0C-F-3 DG RM EXH FAN	GJ	GJHVDP	MD599P	0
DG0C (SB102)	0DAMPHVAC10597B	D/G RM VENT INT DMPR (D-1)	GJ	GJHVDP	MD97BP	0
DG0C (SB104)	0HS10597	0C-F-1 DG RM EXH FAN	GJ	GJHVDP	MD97BP	0
DG0C (SB102)	0DAMPHVAC10598	D/G RM VENT INT DMPR (D-2)	GJ	GJHVMD	MD598O	0
DG0C (SB104)	0HS10598	0C-F-2 DG RM EXH FAN	GJ	GJHVMD	MD598O	0
DG0C (SB102)	0DAMPHVAC10599	D/G RM VENT INT DMPR (D-3)	GJ	GJHVMD	MD599O	0
DG0C (SB104)	0HS10599	0C-F-3 DG RM EXH FAN	GJ	GJHVMD	MD599O	0
DG0C (SB102)	0DAMPHVAC10597B	D/G RM VENT INT DMPR (D-1)	GJ	GJHVMD	MD97BO	0
DG0C (SB104)	0HS10597	0C-F-1 DG RM EXH FAN	GJ	GJHVMD	MD97BO	0
DG0C (SB103)	0DISC72-1502	17 BATTERY CHARGER 0D32	GJ	GJMCC1	CA02DT	0
DG0C (SB103)	0BKR52-02328	BATT CHARGER 0D32	GJ	GJMCC1	CB280T	0
DG0C (SB103)	0BKR152-0701	TIE BREAKER TO BUS 11	GJ	GJOUT1	BN001T	0
DG0C (SB103)	0BKR152-0703	OUTPUT BREAKER FROM DG0C	GJ	GJOUT1	BN003T	0
A317	0BKR152-1106	DSL GEN 0C TO 4KV BUS 11	GJ	GJOUT1	BN106T	0
A430	0BKR152-1406	DSL GEN 0C TO 4KV BUS 14	GJ	GJOUT1	BN106T	0
A311	0BKR152-2106	DSL GEN 0C TO 4KV BUS 21	GJ	GJOUT1	BN106T	0
A407	0BKR152-2406	DSL GEN 0C TO 4KV BUS 24	GJ	GJOUT1	BN106T	0
DG0C (SB103)	0BUS0A07	4KV UNIT BUS 07	GJ	GJOUT1	BU007R	0
DG0C (SB102)	0DISC189-0703	4KV BKR 152-0703 DISC SW	GJ	GJOUT1	LK003T	0
DG0C (UNK)	0RY0CCRA125	EDG 0C OUTPUT BKR HT HI TEMP RY	GJ	GJOUT1	RY025T	0
DG0C (UNK)	0RY0CCRA31	EDG 0C OUTPUT BKR TRIP RY	GJ	GJOUT1	RY031T	0
DG0C (UNK)	0RY0CCRA40	EDG 0C GOV FAIL OUT BKR TRIP RY	GJ	GJOUT1	RY040T	0
DG0C (UNK)	0RY0CCRA63	EDG 0C GEN FAIL OUT BKR TRIP RY	GJ	GJOUT1	RY063T	0
DG0C (UNK)	0RY0CCRA66	EDG 0C IMMEDIATE S/D TRIP RY	GJ	GJOUT1	RY066T	0
DG0C (UNK)	0RY0CCRF7	EDG 0C EMERG S/D TRIP RY	GJ	GJOUT1	RY0F7T	0
DG0C (UNK)	0RY0CCRB14	ENGINE 0C1 RAD FAN CONTROL RY	GJ	GJRAD1	RY014P	0
DG0C (SB204)	0FANDCW10081	0C1 RADIATOR FAN 13	GJ	GJRAD1	VD810R	0
DG0C (SB204)	0FANDCW10082	0C1 RADIATOR FAN 12	GJ	GJRAD1	VD820R	0
DG0C (SB204)	0FANDCW10083	0C1 RADIATOR FAN 11	GJ	GJRAD1	VD830R	0
DG0C (SB102)	0TCV10132	0C1 ENGINE LT COOLANT TEMPERATURE CONTROL V	GJ	GJRAD2	C7032P	0
DG0C (SB102)	0TCV10091	0C1 ENGINE HT COOLANT TEMPERATURE CONTROL V	GJ	GJRAD2	C7910P	0
DG0C (SB204)	0HXDCW10082	0C1 RADIATOR (HT & LT)	GJ	GJRAD2	HX820B	0
DG0C (SB204)	0HXDCW10082	0C1 RADIATOR (HT & LT)	GJ	GJRAD3	HX820P	0
DG0C (UNK)	0RY0CCRB14	ENGINE 0C1 RAD FAN CONTROL RY	GJ	GJRAD4	RY014E	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
DG0C (SB204)	0FANDCW10081	0C1 RADIATOR FAN 13	GJ	GJRAD4	VD810S	0
DG0C (SB204)	0FANDCW10082	0C1 RADIATOR FAN 12	GJ	GJRAD4	VD820S	0
DG0C (SB204)	0FANDCW10083	0C1 RADIATOR FAN 11	GJ	GJRAD4	VD830S	0
DG0C (UNK)	0RY0CCRB15	ENGINE 0C2 RAD FAN CONTROL RY	GJ	GJRAD5	RY015D	0
DG0C (SB203)	0FANDCW10101	0C2 RADIATOR FAN 11	GJ	GJRAD5	VD001R	0
DG0C (SB203)	0FANDCW10102	0C2 RADIATOR FAN 12	GJ	GJRAD5	VD002R	0
DG0C (SB203)	0FANDCW10103	0C2 RADIATOR FAN 13	GJ	GJRAD5	VD003R	0
DG0C (SB102)	0TCV10111	0C2 LT COOLANT DRAIN/SAMPLE VALVE	GJ	GJRAD6	C7011P	0
DG0C (SB102)	0TCV10152	0C2 ENGINE LT COOLANT TEMPERATURE CONTROL VL	GJ	GJRAD6	C7052P	0
DG0C (SB203)	0HXDCW10102	0C2 RADIATOR (HT & LT)	GJ	GJRAD6	HX002B	0
DG0C (SB203)	0HXDCW10102	0C2 RADIATOR (HT & LT)	GJ	GJRAD7	HX002P	0
DG0C (UNK)	0RY0CCRB15	ENGINE 0C2 RAD FAN CONTROL RY	GJ	GJRAD8	RY015E	0
DG0C (SB203)	0FANDCW10101	0C2 RADIATOR FAN 11	GJ	GJRAD8	VD001S	0
DG0C (SB203)	0FANDCW10102	0C2 RADIATOR FAN 12	GJ	GJRAD8	VD002S	0
DG0C (SB203)	0FANDCW10103	0C2 RADIATOR FAN 13	GJ	GJRAD8	VD003S	0
DG0C (SB104)	0RYD0C/181-1	DG0C CORRECT SET FREQ RLY	GJ	GJREL2	RY011E	0
DG0C (UNK)	0RY0CCRB17	EDG 0C BKR VOLT REG AUTO CONTROL RY	GJ	GJREL2	RY017E	0
DG0C (UNK)	0RY0CCRB28	EDG 0C CORRECT FREQ CONTROL RY	GJ	GJREL2	RY028E	0
DG0C (SB104)	0RYD0C/159-1	DG0C CORRECT SET VOLT RLY	GJ	GJREL2	RY091E	0
DG0C (UNK)	0RY0CCRC9	EDG 0C BKR VOLT/FREQ CONTROL RY	GJ	GJREL2	RY0C9E	0
DG0C (SB102)	0FANHVAC10597	D/G RM EXH FAN (F-1)	GJ	GJVENR	VD597R	0
DG0C (SB102)	0FANHVAC10598	D/G RM EXH FAN (F-2)	GJ	GJVENR	VD598R	0
DG0C (SB102)	0FANHVAC10599	D/G RM EXH FAN (F-3)	GJ	GJVENR	VD599R	0
DG0C (SB102)	0FANHVAC10600	D/G RM EXH FAN (F-4)	GJ	GJVENR	VD600R	0
DG0C (SB102)	0FANHVAC10597	D/G RM EXH FAN (F-1)	GJ	GJVENS	VD597S	0
DG0C (SB102)	0FANHVAC10598	D/G RM EXH FAN (F-2)	GJ	GJVENS	VD598S	0
DG0C (SB102)	0FANHVAC10599	D/G RM EXH FAN (F-3)	GJ	GJVENS	VD599S	0
A405	0HS0707	OC DG START PB	GJ	HS021D	HS021D	0
DG0C (UNK)	0RY0CCRC2	EDG 0C AUX START RY	GJ	RY0C2E	RY0C2E	0
DG0C (UNK)	0RY0CCRC3	EDG 0C AUX START RY	GJ	RY0C3E	RY0C3E	0
DG0C (UNK)	0RY0CCRC4	EDG 0C AUX START RY	GJ	RY0C4E	RY0C4E	0
A306	1RYBR-XK93	UV SUB CH B4-1	GJ	RYB93E	RYB93E	0
DG0C (SB103)	0XU-440-07	UNIT BUS 07 TRANSFORMER	GJ	TN007R	TN007R	0
DG0C (SB102)	0TS10600	0C DG ROOM TEMP	GJ	TS600D	TS600D	0
DG0C (SB102)	0FANHVAC10600	D/G RM EXH FAN (F-4)	GJ	VD600S	VD600S	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	C2S12O	C2S12O	48
A405	2HIC5212	SALT WTR OUT SERV WTR HTEX 22	GW	C2S12O	C2S12O	0
A405	2HS5154	HS FOR 2-SW-5153-CV AND 2-SW-5212-CV	GW	C2S12O	C2S12O	0
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
2INTK-2	2PUMPSW22	22 SALT WATER PUMP (2MA405)	GW	MWS22R	MWS22R	168
2INTK-2	2PUMPSW22	22 SALT WATER PUMP (2MA405)	GW	MWS22S	MWS22S	168
A311	2NA112	SALT WTR PP 23 DISC	GW	MWS23R	MWS23R	0
A407	2NA412	SALT WTR PP 23 DISC	GW	MWS23R	MWS23R	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	GW	MWS23R	MWS23R	168
A311	2NA112	SALT WTR PP 23 DISC	GW	MWS23S	MWS23S	0
A407	2NA412	SALT WTR PP 23 DISC	GW	MWS23S	MWS23S	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	GW	MWS23S	MWS23S	168
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22R	MWT22R	32
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22S	MWT22S	32
A311	2NA111	SERV WTR PP 23 DISC	GW	MWT23R	MWT23R	0
A407	2NA411	SERV WTR PP 23 DISC	GW	MWT23R	MWT23R	0
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23R	MWT23R	32
A311	2NA111	SERV WTR PP 23 DISC	GW	MWT23S	MWT23S	0
A407	2NA411	SERV WTR PP 23 DISC	GW	MWT23S	MWT23S	0
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23S	MWT23S	32
A302	2RYBR-XK24	SIAS SUB CH B7-5	GW	RYS24E	RYS24E	0
A302	2RYBR-XK25	SIAS SUB CH B7-6	GW	RYS25E	RYS25E	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A302	2RYBR-XK26	SIAS SUB CH B8-1	GW	RYS26E	RYS26E	0
A302	2RYBR-XK27	SIAS SUB CH B8-2	GW	RYS27E	RYS27E	0
A302	2RYBR-XK61	SDS SUB CH B1-1	GW	RYS61E	RYS61E	0
A302	2RYBR-XK62	SDS SUB CH B1-2	GW	RYS62E	RYS62E	0
A302	2RYBR-XK63	SDS SUB CH B2-1	GW	RYS63E	RYS63E	0
A302	2RYBR-XK64	SDS SUB CH B2-2	GW	RYS64E	RYS64E	0
A302	2RYBR-XK82	UV SUB CH B2-24	GW	S6PP22	RYS82T	0
A302	2RYBR-XK91	UV SUB CH B3-8	GW	S6PP23	RYS91T	0
2TB12-4	2HXIAA/CLR21	21 IA COMPR AFTER COOLER	GW	S7TBAL	ATI21R	0
2TB12-4	2HXIAA/CLR22	22 IA COMPR AFTER COOLER	GW	S7TBAL	ATI22R	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	GW	S7TBAL	ATP21R	0
A205	2CV5152	22 SRW HX SW INLET	GW	S8CV52	C1S52P	60
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A405	2HS5152	HS FOR 2-SW-5152-CV	GW	S8CV52	HSS52T	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A405	2HS5154	HS FOR 2-SW-5153-CV AND 2-SW-5212-CV	GW	S8H2CV	C1S53P	0
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	S8H2CV	C2S12P	48
A405	2HIC5212	SALT WTR OUT SERV WTR HTEX 22	GW	S8H2CV	C2S12P	0
A405	2HS5154	HS FOR 2-SW-5153-CV AND 2-SW-5212-CV	GW	S8H2CV	C2S12P	0
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22B	144
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22P	144
A302	2RYBR-XK83	UV SUB CH B2-15	GW	S8P2TR	RYS83T	0
A302	2RYBR-XK92	UV SUB CH B3-9	GW	S8P3TR	RYS92T	0
A405	2HS5151	21 SW SRW HX SW ISOL HS	GZ	HSS51T	HSS51T	0
2INTK-1	2PUMPSW21	21 SALT WATER PUMP (2MA105)	GZ	MWS21R	MWS21R	168
2INTK-1	2PUMPSW21	21 SALT WATER PUMP (2MA105)	GZ	MWS21S	MWS21S	168
A311	2NA112	SALT WTR PP 23 DISC	GZ	MWS23R	MWS23R	0
A407	2NA412	SALT WTR PP 23 DISC	GZ	MWS23R	MWS23R	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	GZ	MWS23R	MWS23R	168
A311	2NA112	SALT WTR PP 23 DISC	GZ	MWS23S	MWS23S	0
A407	2NA412	SALT WTR PP 23 DISC	GZ	MWS23S	MWS23S	0
2INTK-3	2PUMPSW23	23 SALT WATER PUMP (2MA412)	GZ	MWS23S	MWS23S	168
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21R	MWT21R	32
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21S	MWT21S	32
A311	2NA111	SERV WTR PP 23 DISC	GZ	MWT23R	MWT23R	0
A407	2NA411	SERV WTR PP 23 DISC	GZ	MWT23R	MWT23R	0
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23R	MWT23R	32
A311	2NA111	SERV WTR PP 23 DISC	GZ	MWT23S	MWT23S	0
A407	2NA411	SERV WTR PP 23 DISC	GZ	MWT23S	MWT23S	0
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23S	MWT23S	32
A302	2RYAR-XK26	SIAS SUB CH A7-3	GZ	RYS26E	RYS26E	0
A302	2RYAR-XK29	SIAS SUB CH A7-6	GZ	RYS29E	RYS29E	0
A302	2RYAR-XK30	SIAS SUB CH A8-1	GZ	RYS30E	RYS30E	0
A302	2RYAR-XK31	SIAS SUB CH A8-2	GZ	RYS31E	RYS31E	0
A302	2RYAR-XK73	SDS SUB CH A1-1	GZ	RYS73E	RYS73E	0
A302	2RYAR-XK74	SDS SUB CH A1-2	GZ	RYS74E	RYS74E	0
A302	2RYAR-XK75	SDS SUB CH A2-1	GZ	RYS75E	RYS75E	0
A302	2RYAR-XK76	SDS SUB CH A2-2	GZ	RYS76E	RYS76E	0
2INTK-4	2CV5149	EMERG SW DISCH TO BAY	GZ	S5149T	C4S49T	48
2INTK-4	2SV5149	SALT WTR EMERG OUT	GZ	S5149T	C4S49T	0
A405	2HS5157	22 SW SRW HX OUT HS	GZ	S5149T	HSS57T	0
A405	2HS5167	22 SW COMP CLG HX OUT HS	GZ	S5149T	HSS67T	0
A405	2HS5179	22 SW ECCS PP RM HX OUT HS	GZ	S5149T	HSS79T	0
A302	2RYAR-XK98	UV SUB CH A2-15	GZ	S5PP21	RYS98T	0
A302	2RYAR-XK107	UV SUB CH A3-8	GZ	S5PP23	RYS07T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A205	2CV5150	21 SRW HX SW INLET	GZ	S7H2CV	C1S50P	60
A405	2HS5151	21 SW SRW HX SW ISOL HS	GZ	S7H2CV	C1S50P	0
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2CV5210	21 SRW HX SW OUTLET CV	GZ	S7H2CV	C2S10P	60
A405	2HIC5210	SALT WTR OUT SERV WTR HTEX 21	GZ	S7H2CV	C2S10P	0
A405	2HS5151	21 SW SRW HX SW ISOL HS	GZ	S7H2CV	C2S10P	0
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21B	144
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21P	144
A302	2RYAR-XK99	UV SUB CH A2-16	GZ	S7P2TR	RYS99T	0
A302	2RYAR-XK108	UV SUB CH A3-9	GZ	S7P3TR	RYS08T	0
2TB12-4	2HXIAA/CLR21	21 IA COMPR AFTER COOLER	GZ	S7TBAL	ATI21R	0
2TB12-4	2HXIAA/CLR22	22 IA COMPR AFTER COOLER	GZ	S7TBAL	ATI22R	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	GZ	S7TBAL	ATP21R	0
A512	0COMPCRA/CCOMPR11	CONTROL RM A/C COMPRESSOR 11 (1MB108)	H4	BHEHH1	Start	0
A512	0COMPCRA/CCOMPR12	CONTROL RM A/C COMPRESSOR 12 (2MB408)	H4	BHEHH2	Start	0
A317	1BKR152-1101	SUPP BKR FROM U-4000-21	H5(U1)	BHEAZZ	Close	0
A317	1BKR152-1209	SUPP BKR FROM U-4000-21	H5(U1)	BHEAZZ	Close	0
A430	1BKR152-1301	SUPP BKR FROM U-4000-21	H5(U1)	BHEAZZ	Close	0
A430	1BKR152-1401	SERVICE TRANSF U-4000-11	H5(U1)	BHEAZZ	CLOSE	0
0NSB27-1	1BKR152-1604	SUPP BKR FROM U-4000-23	H5(U1)	BHEAZZ	Close	0
A317	1BKR152-1115	U-4000-11 SERVICE TRANSF	H5(U1)	BHEAZZ	Open	0
A317	1BKR152-1201	U-4000-11 SERVICE TRANSF	H5(U1)	BHEAZZ	Open	0
A430	1BKR152-1311	SUPP BKR FROM U-4000-11	H5(U1)	BHEAZZ	Open	0
A430	1BKR152-1414	SERVICE TRANSF U-4000-21	H5(U1)	BHEAZZ	OPEN	0
0NSB27-1	1BKR152-1501	SUPP BKR FROM U-4000-13	H5(U1)	BHEAZZ	Open	0
A311	2BKR152-2115	ALT SUPP BKR FROM U-4000-22	H5(U2)	BHEAZZ	Close	0
A311	2BKR152-2201	SUPP BKR FROM U-4000-22	H5(U2)	BHEAZZ	CLOSE	0
A311	2BKR152-2209	SERVICE TRANSF U-4000-12	H5(U2)	BHEAZZ	CLOSE	0
A407	2BKR152-2301	SERVICE TRANSF U-4000-12	H5(U2)	BHEAZZ	CLOSE	0
A407	2BKR152-2414	SERVICE TRANSF U-4000-12	H5(U2)	BHEAZZ	CLOSE	0
0NSB27-1	2BKR152-2604	SERVICE TRANSF U-4000-13	H5(U2)	BHEAZZ	CLOSE	0
A311	2BKR152-2101	SERVICE TRANSF U-4000-12	H5(U2)	BHEAZZ	Open	0
A407	2BKR152-2311	SUPP BKR FROM U-4000-22	H5(U2)	BHEAZZ	OPEN	0
A407	2BKR152-2401	SUPP BKR FROM U-4000-22	H5(U2)	BHEAZZ	OPEN	0
0NSB27-1	2BKR152-2501	SERVICE TRANSF U-4000-23	H5(U2)	BHEAZZ	OPEN	0
A423	1BKR52-10420	MCC 104R TIE BKR	H6	H6BKR1	CB042C	6
A529	1BKR52-11420	MCC 114R TIE BKR	H6	H6BKR1	CB142O	6
A423	1BKR52-10401	MCC 104R MN FDR BKR	H6	H6BKR1	CB401O	6
A302	2BUS2Y11	120VAC INVERTER BACKUP BUS 21	H9	U2-E1B11B	U2-BUB11	0
A414	2BKR52-20415	SUPP BRKR TO 120 VAC INVERTER B/U BUS 21	H9	U2-E1B11B	U2-CBX07	6
A302	2DISC2Y1101	SUPP TO INVERTER B/U BUS 21 (2X07)	H9	U2-E1B11B	U2-HSX07	0
A302	2X2X07	120V REG X 21	H9	U2-E1B11B	U2-TMX07	0
A302	2FU2Y1102/FU	120V INVTR B/U BUS 21 BKR FU	H9	U2-E1B11F	U2-FUB11	0
A302	2DISC2Y1102	SUPP TO 120 VAC VITAL BUS 21 (2Y01)	H9	U2-E1B11F	U2-HSB11	0
A302	2DISC2Y01A/S2	21 INVERTER MANUAL TRANSFER SWITCH	H9	U2-E1B11F	U2-HSI11T	0
A302	2FU2Y1103/FU	120V INVTR B/U BUS 21 BKR FU	H9	U2-E2B12F	U2-FUB12	0
A302	2DISC2Y1103	SUPP TO 120 VAC VITAL BUS 22 (2Y02)	H9	U2-E2B12F	U2-HSB12	0
A302	2DISC2Y02A/S2	22 INVERTER MANUAL TRANSFER SWITCH	H9	U2-E2B12F	U2-HSI12T	0
A302	2FU2Y1104/FU	120V INVTR B/U BUS 21 BKR FU	H9	U2-E3B13F	U2-FUB13	0
A302	2DISC2Y1104	SUPP TO 120 VAC VITAL BUS 23 (2Y03)	H9	U2-E3B13F	U2-HSB13	0
A302	2DISC2Y03A/S2	23 INVERTER MANUAL TRANSFER SWITCH	H9	U2-E3B13F	U2-HSI13T	0
A302	2FU2Y1105/FU	120V INVTR B/U BUS 21 BKR FU	H9	U2-E4B14F	U2-FUB14	0
A302	2DISC2Y1105	SUPP TO 120 VAC VITAL BUS 24 (2Y04)	H9	U2-E4B14F	U2-HSB14	0
A302	2DISC2Y04A/S2	24 INVERTER MANUAL TRANSFER SWITCH	H9	U2-E4B14F	U2-HSI14T	0
A302	2INV2Y01A	120V INVTR 21	H9	U2-INT11R	U2-INT11	0
A302	2INV2Y02A	120V INVTR 22	H9	U2-INT12R	U2-INT12	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A302	2INV2Y03A	120V INVTR 23	H9	U2-INT13R	U2-INT13	0
A302	2INV2Y04A	120V INVTR 24	H9	U2-INT14R	U2-INT14	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	HA	HATRTL	MV617C	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	HA	HATRTL	MV617T	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	HA	HATRTL	MV627C	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	HA	HATRTL	MV627T	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A306	1RYAR-XK93	UV SUB CH A2-10	HA	RYA93T	RYA93T	0
A306	1RYAR-XK9	SIAS SUB CH A2-1	HA	RYAK9E	RYAK9E	0
A316	1MOV616	11A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A316	1MOV626	11B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A316	1MOV616	11A HPSI LOOP ISOL	HB	HBTRTL	MV616C	0
A316	1MOV616	11A HPSI LOOP ISOL	HB	HBTRTL	MV616T	0
A316	1MOV626	11B HPSI LOOP ISOL	HB	HBTRTL	MV626C	0
A316	1MOV626	11B HPSI LOOP ISOL	HB	HBTRTL	MV626T	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0
A317	1NA110	13 SI HI PRESS PP DISC	HB	MA013R	MA013R	0
A430	1NA410	13 SI HPSI PP 13 DISC	HB	MA013R	MA013R	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A317	1NA110	13 SI HI PRESS PP DISC	HB	MA013S	MA013S	0
A430	1NA410	13 SI HPSI PP 13 DISC	HB	MA013S	MA013S	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A306	1RYBR-XK89	UV SUB CH B3-6	HB	RYB89T	RYB89T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYBR-XK9	SIAS SUB CH B2-2	HB	RYBK9E	RYBK9E	0
A512	0AE5347	0 HVAC/C CONTROL RM A/C SMOKE DETECTOR ANALY	HC	HCHVAC	AE347R	0
A512	0FD512F1	CONTROL RM/CSR SUPPLY FROM RM 405 TO 512 FD	HC	HCHVAC	FDCI1I	0
A512	0FD512F2	CONTROL RM/CSR EXHAUST FROM RM 405 TO 512 FD	HC	HCHVAC	FDCO1I	0
A405	0HS5347	CONT RM H&V EXH DMPR CONT	HC	HCHVAC	PO342P	0
A512	0PO5342	0 HVAC/C CR A/C SUPP DAMP PISTON OPER	HC	HCHVAC	PO342P	0
A512	0SV5342	CONTROL RM A/C SUPPLY DAMPER	HC	HCHVAC	PO342P	0
A405	0HS5347	CONT RM H&V EXH DMPR CONT	HC	HCHVAC	PO347P	0
A512	0PO5347	0 HVAC/C CR A/C RETURN AIR DAMP PISTON OPER	HC	HCHVAC	PO347P	0
A512	0SV5347	CONTROL RM A/C RETURN DAMPER	HC	HCHVAC	PO347P	0
A317	0AE317A	FSD ZONE 34 SMOKE DET	HF	HFDETA	AE17AR	0
A317	0AE317C	FSD ZONE 34 SMOKE DET	HF	HFDETA	AE17CR	0
A317	0AE317E	FSD ZONE 34 SMOKE DET	HF	HFDETA	AE17ER	0
A317	0AE317B	FSD ZONE 34 SMOKE DET	HF	HFDETB	AE17BR	0
A317	0AE317D	FSD ZONE 34 SMOKE DET	HF	HFDETB	AE17DR	0
A317	0AE317F	FSD ZONE 34 SMOKE DET	HF	HFDETB	AE17FR	0
A317	1FD317N1	SWGR RM SUPPLY FROM RM 317 TO 318 FD	HF	HFDMP7	FD17II	0
A430	1FD430F1	SWGR RM SUPPLY FROM RM 430 TO 318 FD	HF	HFDMP7	FD30II	0
A430	1FD430F2	SWGR RM EXHAUST FROM RM 430 TO 317 FD	HF	HFDMP7	FD30OI	0
A524	1FD524F6	SWGR RM SUPPLY FROM RM 524 TO 430 FD	HF	HFDMPC	FD24II	0
A524	1FD524F5	SWGR RM EXHAUST FROM RM 524 TO 430 FD	HF	HFDMPC	FD24OI	0
A317	1PO5442	EL 27 SUPP SWGR RM SUPP DMPR	HF	HFDMPR	PO442P	0
A318	1SV5442	SWTCGR RM EL 27 OUTLT DMPR SOL	HF	HFDMPR	PO442P	0
A317	1TS5443	1 FSD SWGR RM EL 27 OUTLET TS	HF	HFDMPR	PO442P	0
A317	1PO5443	1 HVAC/A SWGR RM EL 27 EXH D PO	HF	HFDMPR	PO443P	0
A318	1SV5442	SWTCGR RM EL 27 OUTLT DMPR SOL	HF	HFDMPR	PO443P	0
A317	1TS5443	1 FSD SWGR RM EL 27 OUTLET TS	HF	HFDMPR	PO443P	0
A311	1TY5443	SWGR RM EL 27 OUTLT TEMP	HF	HFTEMP	RY443P	0
A317	1TS5443	1 FSD SWGR RM EL 27 OUTLET TS	HF	HFTEMP	TS436R	0
UNK	1RY43X1	27' SWGR HALON ACTUATION RY	HF	RY4X1T	RY4X1T	0
UNK	1RYN-SR32	SWGR HALON CONTROL RY	HF	RYR32T	RYR32T	0
A524	1FD524F6	SWGR RM SUPPLY FROM RM 524 TO 430 FD	HG	HFDMPC	FD24II	0
A524	1FD524F5	SWGR RM EXHAUST FROM RM 524 TO 430 FD	HG	HFDMPC	FD24OI	0
A430	0AE430A	FSD ZONE 16 SMOKE DET	HG	HGDETA	AE30AR	0
A430	0AE430C	FSD ZONE 16 SMOKE DET	HG	HGDETA	AE30CR	0
A430	0AE430E	FSD ZONE 16 SMOKE DET	HG	HGDETA	AE30ER	0
A430	0AE430G	FSD ZONE 16 SMOKE DET	HG	HGDETA	AE30GR	0
A430	0AE430B	FSD ZONE 16 SMOKE DET	HG	HGDETB	AE30BR	0
A430	0AE430D	FSD ZONE 16 SMOKE DET	HG	HGDETB	AE30DR	0
A430	0AE430F	FSD ZONE 16 SMOKE DET	HG	HGDETB	AE30FR	0
A430	0AE430H	FSD ZONE 16 SMOKE DET	HG	HGDETB	AE30HR	0
A317	1TY5441	SWGR RM EL 45 OUTLT TEMP	HG	HGTEMP	RY441P	0
A430	1TS5441	1 FSD SWGR RM EL 45 OUTLET TS	HG	HGTEMP	TS441R	0
A430	1PO5439	1 HVAC/A SWGR RM EL 45' INLET DAMP PISTON OPER	HG	PO439P	PO439P	0
A430	1SV5440	SWTCGR RM EL 45 OUTLT DMPR SOL	HG	PO439P	PO439P	0
A430	1TS5441	1 FSD SWGR RM EL 45 OUTLET TS	HG	PO439P	PO439P	0
A430	1PO5440	1 HVAC/A SWGR RM EL 45' INLET DAMP PISTON OPER	HG	PO440P	PO440P	0
A430	1SV5440	SWTCGR RM EL 45 OUTLT DMPR SOL	HG	PO440P	PO440P	0
A430	1TS5441	1 FSD SWGR RM EL 45 OUTLET TS	HG	PO440P	PO440P	0
A430	1PO5441	1 HVAC/A SWGR RM EL 45 EXH D PO	HG	PO441P	PO441P	0
A430	1SV5440	SWTCGR RM EL 45 OUTLT DMPR SOL	HG	PO441P	PO441P	0
A430	1TS5441	1 FSD SWGR RM EL 45 OUTLET TS	HG	PO441P	PO441P	0
UNK	1RY43X	45' SWGR HALON ACTUATION RY	HG	RY43XT	RY43XT	0
UNK	1RYN-SR32	SWGR HALON CONTROL RY	HG	RYR32T	RYR32T	0
A512	0COMPCRA/CCOMPR11	CONTROL RM A/C COMPRESSOR 11 (1MB108)	HH	AJH11R	AJH11R	0
A512	0COMPCRA/CCOMPR11	CONTROL RM A/C COMPRESSOR 11 (1MB108)	HH	AJH11S	AJH11S	0
A512	0COMPCRA/CCOMPR12	CONTROL RM A/C COMPRESSOR 12 (2MB408)	HH	AJH12R	AJH12R	0
A512	0COMPCRA/CCOMPR12	CONTROL RM A/C COMPRESSOR 12 (2MB408)	HH	AJH12S	AJH12S	0
YARD	0HXCRCHILLER	11/12 EVAP CONTROL ROOM HVAC CHILLER	HH	CLHCWR	CLHCWR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
YARD	0HXCRCHILLER	11/12 EVAP CONTROL ROOM HVAC CHILLER	HH	CLHCWS	CLHCWS	0
1TB45-2	0CV5380A	11 HVAC CW SUPPLY SHUT OFF	HH	CV80AO	CV80AO	0
1TB45-1	0SV5380A	CHILLED WATER INLET LINE 11 SOL VLV	HH	CV80AO	CV80AO	0
1TB45-1	0SV5380B	CHILLED WTR SUPP SHUT OFF VLV SOL VLV	HH	CV80AO	CV80AO	0
1TB45-2	0CV5380B	12 HVAC CW SUPPLY SHUT OFF	HH	CV80BO	CV80BO	0
1TB45-1	0SV5380A	CHILLED WATER INLET LINE 11 SOL VLV	HH	CV80BO	CV80BO	0
1TB45-1	0SV5380B	CHILLED WTR SUPP SHUT OFF VLV SOL VLV	HH	CV80BO	CV80BO	0
A512	0CV5386B	11 TEMP MODULATING BYP CONTROL VLV	HH	HH1CSL	C386BT	0
1TB45-2	0I/P5386	0 HVAC/C CR HVAC UNITS 11 & 12 ISOL VLVS I/P	HH	HH1CSL	C386BT	0
A405	0TIC5385	0 HVAC/C CR TEMP INDIC CONTROLLER	HH	HH1CSL	C386BT	0
1TB45-2	0CV5380A	11 HVAC CW SUPPLY SHUT OFF	HH	HH1CSL	CV80AP	0
1TB45-1	0SV5380A	CHILLED WATER INLET LINE 11 SOL VLV	HH	HH1CSL	CV80AP	0
1TB45-1	0SV5380B	CHILLED WTR SUPP SHUT OFF VLV SOL VLV	HH	HH1CSL	CV80AP	0
A512	0CV5386A	11 TEMP MODULATING SUPP CONTROL VLV	HH	HH1CSL	CV86AT	0
1TB45-2	0I/P5386	0 HVAC/C CR HVAC UNITS 11 & 12 ISOL VLVS I/P	HH	HH1CSL	CV86AT	0
A405	0TIC5385	0 HVAC/C CR TEMP INDIC CONTROLLER	HH	HH1CSL	CV86AT	0
A512	0CV5387B	12 TEMP MODULATING BYP CV	HH	HH2CSL	C387BT	0
1TB45-2	0I/P5386	0 HVAC/C CR HVAC UNITS 11 & 12 ISOL VLVS I/P	HH	HH2CSL	C387BT	0
A405	0TIC5385	0 HVAC/C CR TEMP INDIC CONTROLLER	HH	HH2CSL	C387BT	0
1TB45-2	0CV5380B	12 HVAC CW SUPPLY SHUT OFF	HH	HH2CSL	CV80BP	0
1TB45-1	0SV5380A	CHILLED WATER INLET LINE 11 SOL VLV	HH	HH2CSL	CV80BP	0
1TB45-1	0SV5380B	CHILLED WTR SUPP SHUT OFF VLV SOL VLV	HH	HH2CSL	CV80BP	0
A512	0CV5387A	12 TEMP MODULATING SUPP CONTROL VLV	HH	HH2CSL	CV87AT	0
1TB45-2	0I/P5386	0 HVAC/C CR HVAC UNITS 11 & 12 ISOL VLVS I/P	HH	HH2CSL	CV87AT	0
A405	0TIC5385	0 HVAC/C CR TEMP INDIC CONTROLLER	HH	HH2CSL	CV87AT	0
A405	0HS5386	0 HVAC/C CONTROL RM CHILLED WATER PUMPS 11 & 1	HH	HHC1CL	HS386T	0
A405	0RY0TS380/Z	CONT&CABLE SPR CHILLED WTR SPY	HH	HHC1CL	RY380E	0
A405	0RY0TS380/Z	CONT&CABLE SPR CHILLED WTR SPY	HH	HHC1CL	RY380P	0
1TB45-1	0TS5380	0 HVAC/C OUTSIDE TEMP PUMP CONTROL SWITCH	HH	HHC1CL	TS380R	0
A430	1BKR152-1309	TRANSFORMER 1X54 ACCESS CONTROL AREA CHILLE	HH	HHCHLR	BNHCWT	0
1X54	1 TX 1X54 480VAC	ACCESS CONTROL AREA CHLD WTR UNIT	HH	HHCHLR	TNHCWR	0
1TB45-2	0YS5380A	11 HVAC CHLD WTR SUCT STRN	HH	HHCP1R	YS80AP	0
1TB45-1	0PUMPHVACWCW11	11 CHILLED WTR CR HVAC (1M0656)	HH	HHCP1S	MMCW1S	0
1TB45-2	0YS5380B	12 HVAC CHLD WTR SUCT STRN	HH	HHCP2R	YS80BP	0
1TB45-1	0PUMPHVACWCW12	12 CHILLED WTR CR HVAC (1M1668)	HH	HHCP2S	MMCW2S	0
1TB45-2	0I/P5386	0 HVAC/C CR HVAC UNITS 11 & 12 ISOL VLVS I/P	HH	HHCVIC	IZ386R	0
A405	0TIC5385	0 HVAC/C CR TEMP INDIC CONTROLLER	HH	HHCVIC	TC385R	0
A405	0TE5385	0 HVAC/C CR AMBIENT TEMP ELEMENT	HH	HHCVIC	TE385R	0
A405	0HS5341	0 HVAC/C CONTROL RM HVAC UNIT 12 FAN HAND SWIT	HH	HHDSF1	HS341T	0
A512	0HS5372	0 HVAC/C CR RETURN AIR FAN 12 HAND SWITCH	HH	HHDSF1	HS372T	0
A512	0PO5372	0 HVAC/C CR HVAC UNIT 12 RETURN AIR FAN SUCT DA	HH	HHDSF1	PO372P	0
A512	0SV5372	CONT RM RETURN FAN 12 DAMPER	HH	HHDSF1	PO372P	0
A512	0PO5363A	0 HVAC/C CONTROL RM HVAC UNIT 12 RECIRC DAMP P	HH	HHDSF1	PO63AP	0
A405	0HS5340	0 HVAC/C CONTROL ROOM HVAC UNIT 11 FAN HAND S	HH	HHDSF2	HS340T	0
A512	0HS5371	0 HVAC/C CR RETURN AIR FAN 12 HAND SWITCH	HH	HHDSF2	HS371T	0
A512	0PO5371	0 HVAC/C CR HVAC UNIT 11 RETURN AIR FAN SUCT DA	HH	HHDSF2	PO371P	0
A512	0SV5371	CONT RM RETURN FAN 11 DAMPER	HH	HHDSF2	PO371P	0
A512	0PO5360A	0 HVAC/C CONTROL RM HVAC UNIT 11 RECIRC DAMP P	HH	HHDSF2	PO60AP	0
A405	0HS5340	0 HVAC/C CONTROL ROOM HVAC UNIT 11 FAN HAND S	HH	HS340D	HS340D	0
A405	0HS5341	0 HVAC/C CONTROL RM HVAC UNIT 12 FAN HAND SWIT	HH	HS341D	HS341D	0
A512	0HS5371	0 HVAC/C CR RETURN AIR FAN 12 HAND SWITCH	HH	HS371D	HS371D	0
A512	0HS5372	0 HVAC/C CR RETURN AIR FAN 12 HAND SWITCH	HH	HS372D	HS372D	0
A405	0HS5380	0 HVAC/C CHILLED WATER INLET LINES 11 & 12 ISOL VL	HH	HS380T	HS380T	0
A405	0HS5386	0 HVAC/C CONTROL RM CHILLED WATER PUMPS 11 & 1	HH	HS386D	HS386D	0
1TB45-1	0PUMPHVACWCW11	11 CHILLED WTR CR HVAC (1M0656)	HH	MMCW1R	MMCW1R	0
1TB45-1	0PUMPHVACWCW12	12 CHILLED WTR CR HVAC (1M1668)	HH	MMCW2R	MMCW2R	0
A306	1RYAR-XK70	LOCI SUB CH A6-1	HH	RYA70E	RYA70E	0
A306	1RYAR-XK79	SDS SUB CH A3-3	HH	RYA79E	RYA79E	0
A306	1RYAR-XK90	UV SUB CH A2-7	HH	RYA90T	RYA90T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYBR-XK59	LOCI SUB CH B6-1	HH	RYB59E	RYB59E	0
A306	1RYBR-XK65	SDS SUB CH B3-1	HH	RYB65E	RYB65E	0
A306	1RYBR-XK69	UV SUB CH B2-1	HH	RYB69T	RYB69T	0
A512	0FANHVACCRS11	11 CONTROL RM SPLY FAN (1M1435)	HH	VDH11R	VDH11R	0
A512	0FANHVACCRS11	11 CONTROL RM SPLY FAN (1M1435)	HH	VDH11S	VDH11S	0
A512	0FANHVACCRS12	12 CONTROL RM SPLY FAN (2M0410)	HH	VDH12R	VDH12R	0
A512	0FANHVACCRS12	12 CONTROL RM SPLY FAN (2M0410)	HH	VDH12S	VDH12S	0
A512	0FANHVACCRC11	11 CONT RM RETURN FAN (1M1465)	HH	VDR11R	VDR11R	0
A512	0FANHVACCRC11	11 CONT RM RETURN FAN (1M1465)	HH	VDR11S	VDR11S	0
A512	0FANHVACCRC12	12 CONT RM RETURN FAN (2M0433)	HH	VDR12R	VDR12R	0
A512	0FANHVACCRC12	12 CONT RM RETURN FAN (2M0433)	HH	VDR12S	VDR12S	0
A300	1PNL1FP302A	CABLE SPREADING RM HALON SYSTM	HL	AAFP2A	AAFP2A	0
A512	0AE5349	0 HVAC/C CABLE SPREAD RM SMOKE DETECTOR ANAL	HL	AE349R	AE349R	0
A597	2FD597S1	CONTROL RM/CSR SUPPLY FORM RM 597 TO PWY FD	HL	FDRP1I	FDRP1I	0
A520	0FD520E1	CONTROL RM/CSR EXHAUST FROM RM 512 TO 520 FD	HL	HLEXFP	FDRP4I	0
A520	0FD520S2	CONTROL RM/CSR EXHAUST FROM RM 520 TO 521 FD	HL	HLEXFP	FDRP5I	0
A405	0HS5349	21 CABLE SPR RM EXH DMPR HS	HL	HLEXFP	PO349P	0
A512	0PO5349	0 HVAC/C CABLE SPREAD RM A/C RETURN DAMP PIST	HL	HLEXFP	PO349P	0
A512	0SV5349	0 HVAC/C CABLE SPREAD RM A/C RETURN DAMP SOL V	HL	HLEXFP	PO349P	0
A405	1RY1FP33A/SA-6X	U-2 CABLE SPR RM HALON SYS	HL	HLHLNF	RYA6XT	0
A302	0FD302S2	CONTROL RM/CSR SUPPLY FROM PWY-2 TO 306 FD	HL	HLINFP	FDRJ1I	0
A520	0FD520S1	CONTROL RM/CSR SUPPLY FROM RM 520 TO 521 FD	HL	HLINFP	FDRJ2I	0
A520	0FD520E4	CONTROL RM/CSR SUPPLY FROM RM 512 TO 520 FD	HL	HLINFP	FDRJ3I	0
A597	2FD597S1	CONTROL RM/CSR SUPPLY FORM RM 597 TO PWY FD	HL	HLINFP	FDRJ4I	0
A405	0HS5349	21 CABLE SPR RM EXH DMPR HS	HL	HLINFP	PO344P	0
A512	0PO5344	0 HVAC/C CABLE SPREAD RM A/C SUPP DAMP PISTON	HL	HLINFP	PO344P	0
A512	0SV5344	0 HVAC/C CABLE SPREAD RM A/C SUPP DAMP SOL VLV	HL	HLINFP	PO344P	0
A302	0FD302S1	CONTROL RM/CSR EXHAUST FROM RM 302 TO PWY-2 F	HL	HLODSA	FDRP2I	0
A597	2FD597S2	CONTROL RM/CSR EXHAUST FRO RM 597 TO PWY FD	HL	HLODSA	FDRP3I	0
A302	0AE302A	FSD ZONE 12 SMOKE DET	HL	HLZ1SD	AE02AR	0
A302	0AE302C	FSD ZONE 12 SMOKE DET	HL	HLZ1SD	AE02CR	0
A302	0AE302E	FSD ZONE 12 SMOKE DET	HL	HLZ1SD	AE02ER	0
A302	0AE302B	FSD ZONE 12 SMOKE DET	HL	HLZ2SD	AE02BR	0
A302	0AE302D	FSD ZONE 12 SMOKE DET	HL	HLZ2SD	AE02DR	0
A302	0AE302F	FSD ZONE 12 SMOKE DET	HL	HLZ2SD	AE02FR	0
A300	1PNL1FP302A	CABLE SPREADING RM HALON SYSTM	HR	AAFP2A	AAFP2A	0
A512	0AE5348	0 HVAC/C CABLE SPREAD RM SMOKE DETECTOR ANAL	HR	AE348R	AE348R	0
A520	0FD520N3	CNTRL RM/CSR EXH FROM RM	HR	FDRO1I	FDRO1I	0
A520	0FD520E7	CONTROL RM/CSR EXHAUST FROM RM 512 TO 520 FD	HR	HREXFP	FDRO4I	0
A405	0HS5348	11 CABLE SPR RM EXH DMPR HS	HR	HREXFP	PO348P	0
A512	0PO5348	0 HVAC/C CABLE SPREAD RM RETURN AIR DAMP PIST	HR	HREXFP	PO348P	0
A512	0SV5348	0 HVAC/C CABLE SPREAD RM A/C RETURN DAMP SOL V	HR	HREXFP	PO348P	0
A405	1RY1FP29A/SA-3X	U-1 CABLE SPR RM HALON SYS	HR	HRHLNF	RYA3XT	0
A306	0FD306N2	CONTROL RM/CSR SUPPLY FROM RM 306 TO PWY-1 FD	HR	HRINFP	FDRI1I	0
A520	0FD520N1	CONTROL RM/CSR SUPPLY FROM RM 520 TO PWY FD	HR	HRINFP	FDRI2I	0
A520	0FD520E3	CONTROL RM/CSR SUPPLY FROM RM 512 TO 520 FD	HR	HRINFP	FDRI3I	0
A405	0HS5348	11 CABLE SPR RM EXH DMPR HS	HR	HRINFP	PO343P	0
A512	0PO5343	0 HVAC/C CABLE SPREAD RM A/C SUPP DAMP PISTON	HR	HRINFP	PO343P	0
A512	0SV5343	0 HVAC/C CABLE SPREAD RM A/C SUPP DAMP SOL VLV	HR	HRINFP	PO343P	0
A306	0FD306N1	CONTROL RM/CSR EXHAUST FROM RM 306 TO PWY-1 F	HR	HRODSA	FDRO2I	0
A520	0FD520N2	CONTROL RM/CSR EXHAUST FROM RM 520 TO PWY FD	HR	HRODSA	FDRO3I	0
A306	0AE306A	FSD ZONE 10 SMOKE DET	HR	HRZ1SD	AE06AR	0
A306	0AE306C	FSD ZONE 10 SMOKE DET	HR	HRZ1SD	AE06CR	0
A306	0AE306E	FSD ZONE 10 SMOKE DET	HR	HRZ1SD	AE06ER	0
A306	0AE306B	FSD ZONE 10 SMOKE DET	HR	HRZ2SD	AE06BR	0
A306	0AE306D	FSD ZONE 10 SMOKE DET	HR	HRZ2SD	AE06DR	0
A306	0AE306F	FSD ZONE 10 SMOKE DET	HR	HRZ2SD	AE06FR	0
UNK	1HXHVACSWGR11	SWGR ROOM H&V UNIT HX 11	HS	AJU11R	AJU11R	0
UNK	1HXHVACSWGR11	SWGR ROOM H&V UNIT HX 11	HS	AJU11S	AJU11S	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
UNK	1HXHVACSWGR12	SWGR ROOM H&V UNIT HX 12	HS	AJU12R	AJU12R	0
UNK	1HXHVACSWGR12	SWGR ROOM H&V UNIT HX 12	HS	AJU12S	AJU12S	0
A524	1SV5426	1 HVAC/A SWGR RM HVAC UNIT 12 SUPP D SV	HS	HSOPR1	IV426T	0
A524	1PCV5426	AIR SUPPLY TO SWGR RM HVAC	HS	HSOPR1	PC426R	0
A524	1TC5426	1 HVAC/A SWGR RM RETURN AIR TC	HS	HSOPR1	TC426R	0
A524	1TT5426	1 HVAC/A SWGR RM TEMPERATURE INDICATOR TRAN	HS	HSOPR1	TT426R	0
A317	1SV5426A	1 HVAC/A SWGR RM HVAC UNIT 12 SUPP D SV	HS	HSOPR2	IV26AT	0
A524	1PCV5426A	AIR SUPPLY TO SWGR RM HVAC	HS	HSOPR2	PC26AR	0
A524	1TC5426A	1 HVAC/A SWGR RM RETURN AIR TC	HS	HSOPR2	TC26AR	0
A524	1TT5426A	1 HVAC/A SWGR RM TEMPERATURE INDICATOR TRAN	HS	HSOPR2	TT26AR	0
A423	1BKR1P0428	LTG SWGR RM A/C COMPR CONTR CKT 12 BKR	HS	HSP104	CA28AT	6
A423	1BKR52-10427	MCC 104R DISTR XFMR 14 BKR	HS	HSP104	CB104T	6
A423	1XDT14	LTG DISTR XFMR 14	HS	HSP104	TM104R	0
A529	1BKR1P1428	LTG SWGR RM A/C COMPR CONTR CKT 11 BKR	HS	HSP114	CA28XT	6
A529	1BKR52-11427	MCC 114R DISTR XFMR 114 BKR	HS	HSP114	CB114T	6
A529	1XDT114	LTG DISTR XFMR 114	HS	HSP114	TM114R	0
A524	1HS5426	1 HVAC/A SWGR RM HVAC UNIT 11 FAN HS	HS	HSU11D	HSU11D	0
A524	1HS5426	1 HVAC/A SWGR RM HVAC UNIT 11 FAN HS	HS	HSU11T	HSU11T	0
A524	1HS5426A	1 HVAC/A SWGR RM HVAC UNIT 12 FAN HS	HS	HSU12D	HSU12D	0
A524	1HS5426A	1 HVAC/A SWGR RM HVAC UNIT 12 FAN HS	HS	HSU12T	HSU12T	0
A524	1DAMP5426B	11 U RECIRC AIR DMPR	HS	PO11BP	PO11BP	0
A524	1DAMP5426D	12 U RECIRC AIR DMPR	HS	PO122P	PO122P	0
A524	1DAMP5426A	11 U OUTSIDE AIR DMPR	HS	PP011O	PP011O	0
A524	1DAMP5426A	11 U OUTSIDE AIR DMPR	HS	PP011P	PP011P	0
A524	1DAMP5426C	12 U OUTSIDE AIR DMPR	HS	PP121O	PP121O	0
A524	1DAMP5426C	12 U OUTSIDE AIR DMPR	HS	PP121P	PP121P	0
A306	1RYAR-XK70	LOCI SUB CH A6-1	HS	RYA70E	RYA70E	0
A306	1RYAR-XK78	SDS SUB CH A3-2	HS	RYA78E	RYA78E	0
A306	1RYAR-XK91	UV SUB CH A2-8	HS	RYA91T	RYA91T	0
A306	1RYBR-XK59	LOCI SUB CH B6-1	HS	RYB59E	RYB59E	0
A306	1RYBR-XK65	SDS SUB CH B3-1	HS	RYB65E	RYB65E	0
A306	1RYBR-XK76	UV SUB CH B2-8	HS	RYB76T	RYB76T	0
A524	1FANHVACSWGRS11	11 SWGR RM SPLY FAN (1M1436)	HS	VDU11R	VDU11R	0
A524	1FANHVACSWGRS11	11 SWGR RM SPLY FAN (1M1436)	HS	VDU11S	VDU11S	0
A524	1FANHVACSWGRS12	12 SWGR RM SPLY FAN (1M0436)	HS	VDU12R	VDU12R	0
A524	1FANHVACSWGRS12	12 SWGR RM SPLY FAN (1M0436)	HS	VDU12S	VDU12S	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	HU	BHEF1B	Throttle	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	HU	BHEF1B	Throttle	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	HU	BHEF1B	Throttle	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	HU	BHEF1B	Throttle	0
A405	1FIC4525A	MOTOR DRIVEN AFW TO S/G 11	HU	BHEF1B	Throttle	0
A405	1FIC4535A	MOTOR DRIVEN AFW TO S/G 12	HU	BHEF1B	Throttle	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	HU	BHEF1B	Throttle	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	HU	BHEF1B	Throttle	0
A430	1HC4525B	MOTOR DR AFW STM GEN 11	HU	BHEF1B	Throttle	0
A430	1HC4535B	MOTOR DR AFW STM GEN 12	HU	BHEF1B	Throttle	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	HW	HATRTL	MV617C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A316	1MOV617	11A AUX HPSI LOOP ISOL	HW	HATRTL	MV617T	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	HW	HATRTL	MV627C	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	HW	HATRTL	MV627T	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0
A316	1MOV616	11A HPSI LOOP ISOL	HW	HBTRTL	MV616C	0
A316	1MOV616	11A HPSI LOOP ISOL	HW	HBTRTL	MV616T	0
A316	1MOV626	11B HPSI LOOP ISOL	HW	HBTRTL	MV626C	0
A316	1MOV626	11B HPSI LOOP ISOL	HW	HBTRTL	MV626T	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A306	1RYBR-XK77	UV SUB CH B2-9	HW	RYB77T	RYB77T	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	HX	BHEF1A	Throttle	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	HX	BHEF1A	Throttle	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	HX	BHEF1A	Throttle	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	HX	BHEF1A	Throttle	0
A405	1FIC4525A	MOTOR DRIVEN AFW TO S/G 11	HX	BHEF1A	Throttle	0
A405	1FIC4535A	MOTOR DRIVEN AFW TO S/G 12	HX	BHEF1A	Throttle	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	HX	BHEF1A	Throttle	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	HX	BHEF1A	Throttle	0
A430	1HC4525B	MOTOR DR AFW STM GEN 11	HX	BHEF1A	Throttle	0
A430	1HC4535B	MOTOR DR AFW STM GEN 12	HX	BHEF1A	Throttle	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
N/A	1FANPRTB-27	PORTABLE SWGR VENT FAN	HZ	HZFANS	FH317R	0
N/A	1FANPRTB-27	PORTABLE SWGR VENT FAN	HZ	HZFANS	FH317S	0
N/A	1FANPRTB-45	PORTABLE SWGR VENT FAN	HZ	HZFANS	FH430R	0
N/A	1FANPRTB-45	PORTABLE SWGR VENT FAN	HZ	HZFANS	FH430S	0
N/A	1GENTRB-PORT	TURB BLDG PORTABLE GEN	HZ	HZPWRB	HGTGND	0
N/A	1GENTRB-PORT	TURB BLDG PORTABLE GEN	HZ	HZPWRB	HGTGNR	0
A423	1BKR52-10435	MCC 104R LTG XFMR (L-208-110) BKR	HZ	HZPWRP	CB435T	6

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
UNK	1X1X30	120/480VAC SWGR LGHT TRANSF	HZ	HZPWRP	TM130R	0
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11R	CMS11R	144
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11S	CMS11S	144
A226	1LS5200	11 IA SW AIR COMP LS	I1	I1CNTL	LS200R	144
A226	1TS5200	11 IA SW AIR COMP TS	I1	I1CNTL	TS200R	144
A306	1RYAR-XK1	SIAS SUB CH A1-1	I1	RYAXK1	RYA01E	0
A306	1RYAR-XK1	SIAS SUB CH A1-1	I1	RYAXK1	RYA01P	0
A306	1RYAR-XK1	SIAS SUB CH A1-1	I1	RYAXK1	RYAXK1	0
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12R	CMS12R	144
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12S	CMS12S	144
A226	1LS5201	12 IA SW AIR COMP LS	I2	I2CNTL	LS201R	144
A226	1TS5201	12 IA SW AIR COMP TS	I2	I2CNTL	TS201R	144
A306	1RYBR-XK1	SIAS SUB CH B1-1	I2	RYBXK1	RYB01E	0
A306	1RYBR-XK1	SIAS SUB CH B1-1	I2	RYBXK1	RYB01P	0
A306	1RYBR-XK1	SIAS SUB CH B1-1	I2	RYBXK1	RYBXK1	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	IA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	IA	EABKR1	CABALT	0
A306	12/4AL-XA18	ESFAS SGIS BLOCK CH A LOGIC MODULE	IA	IALOG1	TLA18R	0
A306	12/4AL-XA19	SGIS CH A	IA	IALOG1	TLA19R	0
A306	1B/SZD-XA12	SGIS SG 11 PRESS ZD LOW	IA	IASEND	BID12D	0
A306	1MODSGIS-A/CHD	SGIS-A MAINT BYP MODULE CH D	IA	IASEND	HSM2DT	0
A306	1E/E1013A	SGIS SG 11 ZD INPUT	IA	IASEND	II13AR	0
A317	1I/I1013A1	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASEND	II1A1R	0
A306	1E/EZD-XA6-U8	SGIS 11 ZD CH A ISOLATOR	IA	IASEND	IID68R	0
1CNT45-1	1PT1013A	11 FW PROT STM PT	IA	IASEND	PT13AR	0
A405	1PY1013A	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASEND	SM13AR	0
A306	1YXZD-PS1/5	ZD CABINET 5V SENSOR MODULE REFERENCE VOLTA	IA	IASEND	SPD05R	0
A306	1B/SZE-XA12	SGIS SG 11 PRESS ZE LOW	IA	IASENE	BIE12D	0
A306	1MODSGIS-A/CHE	SGIS-A MAINT BYP MODULE CH E	IA	IASENE	HSM2ET	0
A306	1E/E1013B	SGIS SG 11 ZE INPUT	IA	IASENE	II13BR	0
A430	1I/I1013B1	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASENE	II1B1R	0
A306	1E/EZE-XA6-U8	SGIS 11 ZE CH A ISOLATOR	IA	IASENE	IIE68R	0
1CNT45-1	1PT1013B	11 FW S/G PRESSURE PROTECTION PT	IA	IASENE	PT13BR	0
A405	1PY1013B	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASENE	SM13BR	0
A306	1YXZE-PS1/5	ZE CABINET 5V SENSOR MODULE REFERENCE VOLTA	IA	IASENE	SPE05R	0
A306	1B/SZF-XA12	SGIS SG 11 PRESS ZF LOW	IA	IASENF	BIF12D	0
A306	1MODSGIS-A/CHF	SGIS-A MAINT BYP MODULE CH F	IA	IASENF	HSM2FT	0
A306	1E/E1013C	SGIS SG 11 ZF INPUT	IA	IASENF	II13CR	0
A306	1E/EZF-XA6-U8	SGIS 11 ZF CH A ISOLATOR	IA	IASENF	IIF68R	0
1CNT45-1	1PT1013C	11 FW PROT STM PT	IA	IASENF	PT13CR	0
A405	1PY1013C	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASENF	SM13CR	0
A306	1YXZF-PS1/5	ZF CABINET 5V SENSOR MODULE REFERENCE VOLTA	IA	IASENF	SPF05R	0
A306	1B/SZG-XA12	SGIS SG 11 PRESS ZG LOW	IA	IASENG	BIG12D	0
A306	1MODSGIS-A/CHG	SGIS-A MAINT BYP MODULE CH G	IA	IASENG	HSM2GT	0
A306	1E/E1013D	SGIS SG 11 ZG INPUT	IA	IASENG	II13DR	0
A306	1E/EZG-XA6-U8	SGIS 11 ZG CH A ISOLATOR	IA	IASENG	IIG68R	0
1CNT45-1	1PT1013D	11 FW PROT STM PT	IA	IASENG	PT13DR	0
A405	1PY1013D	1 RPS S/G 11 PT TO RPS/ESFAS	IA	IASENG	SM13DR	0
A306	1YXZG-PS1/5	ZG CABINET 5V SENSOR MODULLE REFERENCE VOLT	IA	IASENG	SPG05R	0
A306	1YXAL-PS3/15	AL CABINET CSAS/SGIS/RAS/CRS 15V PWR SUPPLY	IA	SPA35R	SPA35R	0
A306	1YXAL-PS3/28	AL CABINET CSAS/SGIS/RAS/CRS 28V PWR SUPPLY	IA	SPA38R	SPA38R	0
A306	12/4AL-XA19	SGIS CH A	IA	TLA19D	TLA19D	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	IB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	IB	EBBKR1	CABBLT	0
A306	12/4BL-XA18	ESFAS SGIS BLOCK CH B LOGIC MODULE	IB	IBLOG1	TLB18R	0
A306	12/4BL-XA19	SGIS CH B	IB	IBLOG1	TLB19R	0
A306	1B/SZD-XA19	SGIS SG 12 PRESS ZD LOW	IB	IBSEND	BID19D	0
A306	1MODSGIS-B/CHD	SGIS-B MAINT BYP MODULE CH D	IB	IBSEND	HSM3DT	0
A306	1E/E1023A	SGIS SG 12 ZD INPUT	IB	IBSEND	II23AR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1I/I1023A1	1 RPS S/G 12 PT TO RPS/ESFAS	IB	IBSEND	II2A1R	0
A306	1E/EZD-XA1-U8	SGIS 12 ZD CH B ISOLATOR	IB	IBSEND	IID18R	0
1CNT45-2	1PT1023A	12 FW PROT STM PT	IB	IBSEND	PT23AR	0
A405	1PY1023A	1 RPS S//G 12 PT TO RPS/ESFAS	IB	IBSEND	SM23AR	0
A306	1YXZD-PS1/5	ZD CABINET 5V SENSOR MODULE REFERENCE VOLTA	IB	IBSEND	SPD05R	0
A306	1B/SZE-XA19	SGIS SG 12 PRESS ZE LOW	IB	IBSENE	BIE19D	0
A306	1MODSGIS-B/CHE	SGIS-B MAINT BYP MODULE CH E	IB	IBSENE	HSM3ET	0
A306	1E/E1023B	SGIS SG 12 ZE INPUT	IB	IBSENE	II23BR	0
A430	1I/I1023B1	1 RPS S/G 12 PT TO RPS/ESFAS	IB	IBSENE	II2BIR	0
A306	1E/EZE-XA1-U8	SGIS 12 ZE CH B ISOLATOR	IB	IBSENE	IIE18R	0
1CNT45-2	1PT1023B	12 FW S/G PROT PT	IB	IBSENE	PT23BR	0
A405	1PY1023B	1 RPS S/G 12 PT TO RPS/ESFAS	IB	IBSENE	SM23BR	0
A306	1YXZE-PS1/5	ZE CABINET 5V SENSOR MODULE REFERENCE VOLTA	IB	IBSENE	SPE05R	0
A306	1B/SZF-XA19	SGIS SG 12 PRESS ZF LOW	IB	IBSENF	BIF19D	0
A306	1MODSGIS-B/CHF	SGIS-B MAINT BYP MODULE CH F	IB	IBSENF	HSM3FT	0
A306	1E/E1023C	SGIS SG 12 ZF INPUT	IB	IBSENF	II23CR	0
A306	1E/EZF-XA1-U8	SGIS 12 ZF CH B ISOLATOR	IB	IBSENF	IIF18R	0
1CNT45-2	1PT1023C	12 FW PROT STM PT	IB	IBSENF	PT23CR	0
A405	1PY1023C	1 RPS S/G 12 PT TO RPS/ESFAS	IB	IBSENF	SM23CR	0
A306	1YXZF-PS1/5	ZF CABINET 5V SENSOR MODULE REFERENCE VOLTA	IB	IBSENF	SPF05R	0
A306	1B/SZG-XA19	SGIS SG 12 PRESS ZG LOW	IB	IBSENG	BIG19D	0
A306	1MODSGIS-B/CHG	SGIS-B MAINT BYP MODULE CH G	IB	IBSENG	HSM3GT	0
A306	1E/E1023D	SGIS SG 12 ZG INPUT	IB	IBSENG	II23DR	0
A306	1E/EZG-XA1-U8	SGIS 12 ZG CH B ISOLATOR	IB	IBSENG	IIG18R	0
1CNT45-2	1PT1023D	12 FW PROT STM PT	IB	IBSENG	PT23DR	0
A405	1PY1023D	1 RPS SG 12 PT TO RPS/ESFAS	IB	IBSENG	SM23DR	0
A306	1YXZG-PS1/5	ZG CABINET 5V SENSOR MODULLE REFERENCE VOLT	IB	IBSENG	SPG05R	0
A306	1YXBL-PS3/15	BL CABINET CSAS/SGIS/RAS/CRS 15V POWER SUPPLY	IB	SPB35R	SPB35R	0
A306	1YXBL-PS3/28	BL CABINET CSAS/SGIS/RAS/CRS/ 28V POWER SUPPLY	IB	SPB38R	SPB38R	0
A306	12/4BL-XA19	SGIS CH B	IB	TLB19D	TLB19D	0
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
1TB12-4	1ACCIA11	11 IA COMPR RCVR	IP	IPIA99	TK11B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A306	1FUAL-F1	CH A FAN POWER FUSE F1	JA	EA40V1	FUAF1R	0
A306	1HSAL-S1	CH A CONTROL POWER SWITCH S1	JA	EA40V1	HSAS1T	0
A306	1YXAL-PS/40	CH A 40VDC ISOL RELAY PWR SUP	JA	EA40V1	SPA40R	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	JA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	JA	EABKR1	CABALT	0
A405	1CS152-1106	OC DG BKR 152-1106 HS	JA	JA11IN	HSA13D	0
A405	1CS152-1106	OC DG BKR 152-1106 HS	JA	JA11IN	HSA13T	0
A306	1RYAL-XK19	AL BKR 152-1103 DG 11 SUPPLY TO BUS 11	JA	JA11IN	RYA19P	0
A405	1HS152-1101	13/4KV BUS 11 BKR 152-1101 SYN POT HS	JA	JAINPF	HSA11T	0
A405	1HS152-1115	13/4KV BUS 11 BKR 152-1115 SYN POT HS	JA	JAINPF	HSA15D	0
A306	1RYAL-XK17	AL BKR 152-1101 4KV BUS 11 FEEDER	JA	JAINPF	RYA17P	0
A306	12/4AL-XA16	SIAS SUB CH A9	JA	JAINPF	TLA16R	0
A306	1RYAL-XK18	AL BKR 152-1115 4KV BUS 11 FEEDER	JA	RYA18E	RYA18E	0
A306	1RYAL-XK19	AL BKR 152-1103 DG 11 SUPPLY TO BUS 11	JA	RYA19E	RYA19E	0
A306	1YXAL-PS1/15	AL CABINET LOC/SDS 15V POWER SUPPLY	JA	SPA15R	SPA15R	0
A306	1YXAL-PS1/28	AL CABINET LOCI/SDS 28V POWER SUPPLY	JA	SPA18R	SPA18R	0
A306	1SEQAL-XA34	CH A SEQUENCER MODULE	JA	SQA34D	SQA34D	0
A306	12/4AL-XA16	SIAS SUB CH A9	JA	TLA16D	TLA16D	0
A306	1FUBL-F1	CH B FAN POWER FUSE F1	JB	EB40V1	FUBF1R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1HSBL-S1	CH B CONTROL POWER SWITCH S1	JB	EB40V1	HSBS1T	0
A306	1YXBL-PS/40	CH B 40VDC ISOL RELAY PWR SUP	JB	EB40V1	SPB40R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	JB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	JB	EBBKR1	CABBLT	0
A405	1CS152-1403	1B DG BKR 152-1403 HS	JB	JB12IN	HSB46D	0
A405	1CS152-1403	1B DG BKR 152-1403 HS	JB	JB12IN	HSB46T	0
A306	1RYBL-XK20	BL BKR 152-1406 DG 22 SUPPLY TO BUS 14	JB	JB12IN	RYB20P	0
A405	1HS152-1401	13/4KV BUS 14 BKR 152-1401 SYN POT HS	JB	JBINPF	HSB41T	0
A405	1HS152-1414	13/4KV BUS 14 BKR 152-1414 SYN POT HS	JB	JBINPF	HSB44D	0
A306	1RYBL-XK17	BL BKR 152-1401 4KV BUS 14 FEEDER	JB	JBINPF	RYB17P	0
A306	12/4BL-XA16	SIAS SUB CH B9	JB	JBINPF	TLB16R	0
A306	1RYBL-XK18	BL BKR 152-1414 4KV BUS 14 FEEDER	JB	RYB18E	RYB18E	0
A306	1RYBL-XK20	BL BKR 152-1406 DG 22 SUPPLY TO BUS 14	JB	RYB20E	RYB20E	0
A306	1YXBL-PS1/15	BL CABINET LOCI/SHUT DOWN SEQUENCER 15V POWE	JB	SPB15R	SPB15R	0
A306	1YXBL-PS1/28	BL CABINET LOCI/SHUT DOWN SEQUENCER 28V POWE	JB	SPB18R	SPB18R	0
A306	1SEQBL-XA34	CH B SEQUENCER MODULE	JB	SQB34D	SQB34D	0
A306	12/4BL-XA16	SIAS SUB CH B9	JB	TLB16D	TLB16D	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A405	1HIC5206	SALT WTR OUT COMP CLG HTEX 11	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	C2210C	C2210C	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A405	1HS5210	11B SRW HX TO SALT WATER OUTLET HS	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A316	1CV3832	CONTMT SUPPLY CV	K3	C3832C	C3832C	0
A405	1HS3832	1 CC CNTMT INL CV HS	K3	C3832C	C3832C	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	K3	C3832C	C3832C	0
A316	1CV3832	CONTMT SUPPLY CV	K3	C3832T	C3832T	0
A405	1HS3832	1 CC CNTMT INL CV HS	K3	C3832T	C3832T	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	K3	C3832T	C3832T	0
A316	1CV3833	CONTMT RETN CV	K3	C3833C	C3833C	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	K3	C3833C	C3833C	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	K3	C3833C	C3833C	0
A316	1CV3833	CONTMT RETN CV	K3	C3833T	C3833T	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	K3	C3833T	C3833T	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	K3	C3833T	C3833T	0
A419	1CV3840	EVAP INLET CV	K3	C3840C	C3840C	228
A405	1HS3840	1 CC LIQ WST EVAP ISOL CV HS	K3	C3840C	C3840C	0
A419	1SV3840	LIQ WST EVAP COMP CLG ISOL VLV	K3	C3840C	C3840C	0
A419	1CV3840	EVAP INLET CV	K3	C3840T	C3840T	228
A405	1HS3840	1 CC LIQ WST EVAP ISOL CV HS	K3	C3840T	C3840T	0
A419	1SV3840	LIQ WST EVAP COMP CLG ISOL VLV	K3	C3840T	C3840T	0
A419	1CV3842	EVAPS INLET CV	K3	C3842C	C3842C	228
A405	1HS3842	1 CC LIQ WST EVAP ISOL CV HS	K3	C3842C	C3842C	0
A419	1SV3842	COMP CLG TO LIQ WSTE EVAP ISOL	K3	C3842C	C3842C	0
A419	1CV3842	EVAPS INLET CV	K3	C3842T	C3842T	228
A405	1HS3842	1 CC LIQ WST EVAP ISOL CV HS	K3	C3842T	C3842T	0
A419	1SV3842	COMP CLG TO LIQ WSTE EVAP ISOL	K3	C3842T	C3842T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	K3CLOS	C2210T	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1HS5210	11B SRW HX TO SALT WATER OUTLET HS	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A405	1RY1YRASA1	11 SW SRW HX OUT RECIRC ACT SIG AUX RY	K3	K3CLOS	RY0RAE	0
A405	1RY1YRASA1	11 SW SRW HX OUT RECIRC ACT SIG AUX RY	K3	K3CLOS	RY0RAP	0
A306	1RYAR-XK67	RAS SUB CH A4	K3	K3CLOS	RYA67E	0
A306	1RYAR-XK67	RAS SUB CH A4	K3	K3CLOS	RYA67P	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A405	1LY5206A	11 SW HX LVL RELAY	K3	K3OPEN	RY06AE	0
A405	1LY5206A	11 SW HX LVL RELAY	K3	K3OPEN	RY06AP	0
A306	1RYAR-XK66	RAS SUB CH A3	K3	K3OPEN	RYA66E	0
A306	1RYAR-XK66	RAS SUB CH A3	K3	K3OPEN	RYA66P	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A405	1HIC5206	SALT WTR OUT COMP CLG HTEX 11	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A405	1HS5161	HS FOR 1-SW-5160-CV & 1-SW-5206-CV	K3	K3OTLT	HS161T	0
A405	1LY5206	11 SW HX LVL RELAY	K3	K3RLY1	RY206T	0
A306	1RYAR-XK25	SIAS SUB CH A7-2	K3	K3RLY1	RYA25T	0
A306	1RYAR-XK41	CIS SUB CH A1-1	K3	RYA41E	RYA41E	0
A306	1RYAR-XK41	CIS SUB CH A1-1	K3	RYA41P	RYA41P	0
A306	1RYAR-XK59	CIS SUB CH A5-2	K3	RYA59E	RYA59E	0
A306	1RYAR-XK59	CIS SUB CH A5-2	K3	RYA59P	RYA59P	0
A306	1RYBR-XK37	CIS SUB CH B1-1	K3	RYB37E	RYB37E	0
A306	1RYBR-XK37	CIS SUB CH B1-1	K3	RYB37P	RYB37P	0
A306	1RYBR-XK49	CIS SUB CH B5-1	K3	RYB49E	RYB49E	0
A306	1RYBR-XK49	CIS SUB CH B5-1	K3	RYB49P	RYB49P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A405	1HIC5208	SALT WTR OUT COMP CLG HTEX 12	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	C2212C	C2212C	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A405	1HS5212	12B SRW HX TO SALT WATER OUTLET HS	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A316	1CV3832	CONTMT SUPPLY CV	K4	C3832C	C3832C	0
A405	1HS3832	1 CC CNTMT INL CV HS	K4	C3832C	C3832C	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	K4	C3832C	C3832C	0
A316	1CV3832	CONTMT SUPPLY CV	K4	C3832T	C3832T	0
A405	1HS3832	1 CC CNTMT INL CV HS	K4	C3832T	C3832T	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	K4	C3832T	C3832T	0
A316	1CV3833	CONTMT RETN CV	K4	C3833C	C3833C	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	K4	C3833C	C3833C	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	K4	C3833C	C3833C	0
A316	1CV3833	CONTMT RETN CV	K4	C3833T	C3833T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	K4	C3833T	C3833T	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	K4	C3833T	C3833T	0
A419	1CV3840	EVAP INLET CV	K4	C3840C	C3840C	228
A405	1HS3840	1 CC LIQ WST EVAP ISOL CV HS	K4	C3840C	C3840C	0
A419	1SV3840	LIQ WST EVAP COMP CLG ISOL VLV	K4	C3840C	C3840C	0
A419	1CV3840	EVAP INLET CV	K4	C3840T	C3840T	228
A405	1HS3840	1 CC LIQ WST EVAP ISOL CV HS	K4	C3840T	C3840T	0
A419	1SV3840	LIQ WST EVAP COMP CLG ISOL VLV	K4	C3840T	C3840T	0
A419	1CV3842	EVAPS INLET CV	K4	C3842C	C3842C	228
A405	1HS3842	1 CC LIQ WST EVAP ISOL CV HS	K4	C3842C	C3842C	0
A419	1SV3842	COMP CLG TO LIQ WSTE EVAP ISOL	K4	C3842C	C3842C	0
A419	1CV3842	EVAPS INLET CV	K4	C3842T	C3842T	228
A405	1HS3842	1 CC LIQ WST EVAP ISOL CV HS	K4	C3842T	C3842T	0
A419	1SV3842	COMP CLG TO LIQ WSTE EVAP ISOL	K4	C3842T	C3842T	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A405	1HS5162	HS FOR 1-SW-5162-CV	K4	K4INLT	HS162T	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	K4ISO1	C2212T	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A405	1HS5212	12B SRW HX TO SALT WATER OUTLET HS	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A405	1RY1YRASB1	12 SW SRW HX OUT RECIRC ACT SIG AUX RY	K4	K4ISO1	RY0RBE	0
A405	1RY1YRASB1	12 SW SRW HX OUT RECIRC ACT SIG AUX RY	K4	K4ISO1	RY0RBP	0
A306	1RYBR-XK56	RAS SUB CH B4	K4	K4ISO1	RYB56E	0
A306	1RYBR-XK56	RAS SUB CH B4	K4	K4ISO1	RYB56P	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A405	1HS5167	12 SW COMPR CLG HX OUT CV HS	K4	K4OPN2	HS167D	0
A405	1HS5167	12 SW COMPR CLG HX OUT CV HS	K4	K4OPN2	HS167T	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A405	1HIC5208	SALT WTR OUT COMP CLG HTEX 12	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A405	1HS5164	HS FOR 1-SW-5164-CV & 1-SW-5208-CV	K4	K4OTLT	HS164T	0
A405	1LY5208	12 SW COMP CLG HX OUT LVL RELAY	K4	K4RLY1	RY208T	0
A306	1RYBR-XK22	SIAS SUB CH B7-3	K4	K4RLY1	RYB22T	0
A405	1LY5208A	12 SW COMP CLG HX OUT LVL RELAY	K4	K4RLY2	RY08AE	0
A405	1LY5208A	12 SW COMP CLG HX OUT LVL RELAY	K4	K4RLY2	RY08AP	0
A306	1RYBR-XK55	RAS SUB CH B3	K4	K4RLY2	RYB55E	0
A306	1RYBR-XK55	RAS SUB CH B3	K4	K4RLY2	RYB55P	0
A306	1RYAR-XK41	CIS SUB CH A1-1	K4	RYA41E	RYA41E	0
A306	1RYAR-XK41	CIS SUB CH A1-1	K4	RYA41P	RYA41P	0
A306	1RYAR-XK59	CIS SUB CH A5-2	K4	RYA59E	RYA59E	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYAR-XK59	CIS SUB CH A5-2	K4	RYA59P	RYA59P	0
A306	1RYBR-XK20	SIAS SUB CH B7-1	K4	RYB20T	RYB20T	0
A306	1RYBR-XK37	CIS SUB CH B1-1	K4	RYB37E	RYB37E	0
A306	1RYBR-XK37	CIS SUB CH B1-1	K4	RYB37P	RYB37P	0
A306	1RYBR-XK49	CIS SUB CH B5-1	K4	RYB49E	RYB49E	0
A306	1RYBR-XK49	CIS SUB CH B5-1	K4	RYB49P	RYB49P	0
A525	1CV3820	M/U CV TO CC HD TK	K5	CV820O	CV820O	0
A525	1SV3820	COMP CLG HEAD TNK LVL CONTROL	K5	CV820O	CV820O	0
A525	1CV3820	M/U CV TO CC HD TK	K5	K5CY11	CV820P	0
A525	1SV3820	COMP CLG HEAD TNK LVL CONTROL	K5	K5CY11	CV820P	0
A525	1LS3820	11 CC HD TK LVL SW	K5	K5CY11	LS820R	0
1TB12-1	1HOSE12-16	1 FP TURB BLDG TYPE C HOSE STA	K5	K5FIRE	K5FHSF	0
A525	1LS3820	11 CC HD TK LVL SW	K5	LS820D	LS820D	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	KH(PP3)	BHEKC1	Start	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	KH(PP3)	BHEKC1	Start	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	KH(PP3)	BHEKZ1	Start	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	KH(PP3)	BHEKZ1	Start	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A405	1HIC5208	SALT WTR OUT COMP CLG HTEX 12	KI(HX1)	BHEK31	Close	0
A405	1HS5164	HS FOR 1-SW-5164-CV & 1-SW-5208-CV	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A405	1HIC5206	SALT WTR OUT COMP CLG HTEX 11	KI(HX1)	BHEK31	Throttle	0
A405	1HS5161	HS FOR 1-SW-5160-CV & 1-SW-5206-CV	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A405	1HIC5206	SALT WTR OUT COMP CLG HTEX 11	KI(HX2)	BHEK31	Close	0
A405	1HS5161	HS FOR 1-SW-5160-CV & 1-SW-5206-CV	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A405	1HIC5208	SALT WTR OUT COMP CLG HTEX 12	KI(HX2)	BHEK31	Throttle	0
A405	1HS5164	HS FOR 1-SW-5164-CV & 1-SW-5208-CV	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A405	1HS3824	11 CC HX OUT CV HS	KM	KMCV24	HS824T	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A405	1HS3826	12 CC HX CV HS	KN	KNCV26	HS826T	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A316	1CV3832	CONTMT SUPPLY CV	KS	KSCV32	C3832P	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	KS	KSCV32	C3832P	0
A405	1HS3832	1 CC CNTMT INL CV HS	KS	KSCV32	HS832T	0
A306	1RYAR-XK59	CIS SUB CH A5-2	KS	KSCV32	RYA59T	0
A316	1CV3833	CONTMT RETN CV	KS	KSCV33	C3833P	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	KS	KSCV33	C3833P	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	KS	KSCV33	HS833T	0
A306	1RYBR-XK49	CIS SUB CH B5-1	KS	KSCV33	RYB49T	0
A306	1RYAR-XK88	UV SUB CH A2-5	KX	KXPP11	RYA88T	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12
A306	1RYAR-XK24	SIAS SUB CH A7-1	KX	RYA24E	RYA24E	0
A306	1RYBR-XK72	UV SUB CH B2-4	KY	KYPP12	RYB72T	0
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12
A306	1RYBR-XK20	SIAS SUB CH B7-1	KY	RYB20E	RYB20E	0
A306	1RYBR-XK86	UV SUB CH B3-3	KZ	KZPP13	RYB86T	0
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	KZ	MZC13R	MZC13R	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	KZ	MZC13R	MZC13R	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	KZ	MZC13S	MZC13S	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	KZ	MZC13S	MZC13S	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12
A306	1RYBR-XK21	SIAS SUB CH B7-2	KZ	RYB21E	RYB21E	0
1TB27-2	1CV1105	11 SG FD REG VLV BYP	LF	C3105O	C3105O	0
A405	1FIC1105	11 SG FD WTR BYPASS VLV	LF	C3105O	C3105O	0
1TB27-2	1I/P1105	STM GEN 11 FDWTR BY-PASS VALVE	LF	C3105O	C3105O	0
1TB27-2	1CV1105	11 SG FD REG VLV BYP	LF	C3105P	C3105P	0
A405	1FIC1105	11 SG FD WTR BYPASS VLV	LF	C3105P	C3105P	0
1TB27-2	1I/P1105	STM GEN 11 FDWTR BY-PASS VALVE	LF	C3105P	C3105P	0
1TB27-2	1CV1106	12 SG FD REG VALVE BYPASS	LF	C3106O	C3106O	0
A405	1FIC1106	12 SG FD WTR BYPASS VLV	LF	C3106O	C3106O	0
1TB27-2	1I/P1106	STM GEN 12 FDWTR BY-PASS VALVE	LF	C3106O	C3106O	0
1TB27-2	1CV1106	12 SG FD REG VALVE BYPASS	LF	C3106P	C3106P	0
A405	1FIC1106	12 SG FD WTR BYPASS VLV	LF	C3106P	C3106P	0
1TB27-2	1I/P1106	STM GEN 12 FDWTR BY-PASS VALVE	LF	C3106P	C3106P	0
A405	1HS4516A	11 FW S/G ISOL VLV O/R HS	LF	HS516D	HS516D	0
A405	1HS4517A	12 FW S/G ISOL VLV O/R HS	LF	HS517D	HS517D	0
1H2OT-1	1MCC108WT	MCC 108WT	LF	LF108W	BUBSWR	0
0NSB27-1	1BKR52-1510	108 WT MCC	LF	LF108W	CB507T	0
1H2OT-1	1MOV4439	DEMIN BYP	LF	LFDBYP	CB439T	0
A405	1HS4439	DEMINERALIZER BY-PASS VLV HS	LF	LFDBYP	HS439D	0
1H2OT-1	1MOV4439	DEMIN BYP	LF	LFDBYP	MV439O	0
1H2OT-1	1MOV4439	DEMIN BYP	LF	LFDBYP	MV439P	0
1TB12-3 (CP)	1CV4406	CST TO HTWL M/U CV	LF	LFMUCV	C3406O	0
1TB12-3 (CP)	1I/P4406	COND STORAGE TO HOTWELL CONT	LF	LFMUCV	C3406O	0
1TB12-3 (CP)	1SV4406	CD STORAGE TO HOTWELL CONTROL SV	LF	LFMUCV	C3406O	0
1TB12-3 (CP)	1CV4406	CST TO HTWL M/U CV	LF	LFMUCV	C3406P	0
1TB12-3 (CP)	1I/P4406	COND STORAGE TO HOTWELL CONT	LF	LFMUCV	C3406P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-3 (CP)	1SV4406	CD STORAGE TO HOTWELL CONTROL SV	LF	LFMUCV	C3406P	0
1TB12-3 (CP)	1CV4405	HOTWELL TO COND STORAGE VLV	LF	LFMUCV	C3504T	0
1TB12-3 (CP)	1I/P4405	HOTWELL TO COND STORAGE CONT	LF	LFMUCV	C3504T	0
A405	1LIC4405	CD CONDENSER MAKE-UP AND DUMP CONTROL LIC	LF	LFMUCV	C3504T	0
A405	1LIC4405	CD CONDENSER MAKE-UP AND DUMP CONTROL LIC	LF	LFMUCV	LC405R	0
1TB12-3 (CP)	1LT4405	CD CONDENSER HOTWELL LT	LF	LFMUCV	LT405R	0
UNK	1CV5818	COND PRECOAT FILTER BYPASS	LF	LFPBYP	C3818O	0
1H2OT-1	1PDIC5818	CD FILT/DEMIN BYPASS VLV	LF	LFPBYP	C3818O	0
1H2OT-1	1SV5818	FILT/DEMINS BYPASS VALVE CONT	LF	LFPBYP	C3818O	0
1H2OT-1	1SV5818A	FILT/DEMINS BYPASS VALVE CONT	LF	LFPBYP	C3818O	0
UNK	1CV5818	COND PRECOAT FILTER BYPASS	LF	LFPBYP	C3818P	0
1H2OT-1	1PDIC5818	CD FILT/DEMIN BYPASS VLV	LF	LFPBYP	C3818P	0
1H2OT-1	1SV5818	FILT/DEMINS BYPASS VALVE CONT	LF	LFPBYP	C3818P	0
1H2OT-1	1SV5818A	FILT/DEMINS BYPASS VALVE CONT	LF	LFPBYP	C3818P	0
A405	1HS5818	CD FILT/DEMIN BYPASS VLV HS	LF	LFPBYP	HS818D	0
A405	1RY1CSSGA/X1	UNIT 1 CTMT OVERPRESSURE PROT	LF	MN0022	RYX1AT	0
A405	1RY1CSSGB/X1	UNIT 1 CTMT OVERPRESSURE PROT	LF	MN0022	RYX1BT	0
A405	1HS4516	11 FW TO S/G ISOL VLV HS	LF	MNBYP1	HS516T	0
A315	1MOV4516	11 SG FW ISOL	LF	MNBYP1	MV516P	0
A405	1HS4517	12 FW TO S/G ISOL VLV HS	LF	MNBYP2	HS517T	0
A315	1MOV4517	12 SG FW ISOL	LF	MNBYP2	MV417P	0
A306	1DISC1Y0939	120I S/G 11 FW REG SYS ALT SUPP 1C35	LF	MNFW11	CA939T	0
A306	1FU1Y0939/FU	120I DISTR PNL BKR 39 FU	LF	MNFW11	FU939R	0
A405	1RY1C35/N	SG 11 FW REGULATION	LF	MNFW11	RY35NP	0
A405	1RY1C35/CR	SG 11 FW REGULATION	LF	MNFW11	RY5CRP	0
A306	1DISC1Y1028	120I SPARE	LF	MNFW12	CA028T	0
A306	1FU1Y1028/FU	120I DISTR PNL BKR 28 FU	LF	MNFW12	FU028R	0
A405	1RY1C35/A	SG 11 FW REGULATION	LF	MNFW12	RY35AE	0
A405	1RY1C35/CR	SG 11 FW REGULATION	LF	MNFW12	RY5CRD	0
A306	1DISC1Y1018	120I S/G 12 FW REG SYS (ALT SUPP) 1C36	LF	MNFW13	CA018T	0
A306	1FU1Y1018/FU	120I DISTR PNL BKR 18 FU	LF	MNFW13	FU018R	0
A405	1RY1C36/N	SG 12 FW REGULATION	LF	MNFW13	RY36NP	0
A405	1RY1C36/CR	SG 12 FW REGULATION	LF	MNFW13	RY6CRP	0
A306	1DISC1Y0949	120I SPARE	LF	MNFW14	CA949T	0
A306	1FU1Y0949/FU	120I DISTR PNL BKR 49 FU	LF	MNFW14	FU949R	0
A405	1RY1C36/A	SG 12 FW REGULATION	LF	MNFW14	RY36AE	0
A405	1RY1C36/CR	SG 12 FW REGULATION	LF	MNFW14	RY6CRD	0
A405	1RY1C35/K3	FEEDWATER REGULATING UNIT 1A	LF	MNFW15	RY5K3E	0
A405	1RY1C35/K3	FEEDWATER REGULATING UNIT 1A	LF	MNFW15	RY5K3P	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	LF	MNFW15	RY71AE	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	LF	MNFW15	RY71AP	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	LF	MNFW16	RY196E	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	LF	MNFW16	RY196P	0
A405	1RY1C36/K3	FEEDWATER REGULATING UNIT 1B	LF	MNFW16	RY6K3E	0
A405	1RY1C36/K3	FEEDWATER REGULATING UNIT 1B	LF	MNFW16	RY6K3P	0
1TB27-2	1HXFWHPH16A	16A HP FEEDWATER HTR	LF	MNFW30	HX16AB	0
1TB27-2	1HXFWHPH16A	16A HP FEEDWATER HTR	LF	MNFW30	HX16AP	0
1TB27-2	1HXFWHPH16B	16B HP FEEDWATER HTR	LF	MNFW40	HX16BB	0
1TB27-2	1HXFWHPH16B	16B HP FEEDWATER HTR	LF	MNFW40	HX16BP	0
A315	1MOV4516	11 SG FW ISOL	LF	MV516O	MV516O	0
A315	1MOV4516	11 SG FW ISOL	LF	MV516P	MV516P	0
A315	1MOV4517	12 SG FW ISOL	LF	MV517O	MV517O	0
A315	1MOV4517	12 SG FW ISOL	LF	MV517P	MV517P	0
1TB12-2	1PY4483A	SGFP 12 LO SUCT PR TRIP	LF	RY83AT	RY83AT	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	LF	VC0015	BN101T	0
0NSB27-1	1BKR152-1501	SUPP BKR FROM U-4000-13	LF	VC0015	BN501T	0
0NSB27-1	1BUS1A05	4KV BUS 15	LF	VC0015	BU1A5R	0
U4000-13	1XU-4000-13	13/4KV XFMR U-4000-13	LF	VC0015	TX1X4R	0
0NSB27-1	1BKR152-1505	SERV XFER (U-440-15)	LF	VC015A	BN505T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
0NSB27-1	1BUS1B05	480V BUS 15	LF	VC015A	BU1B5R	0
0NSB27-1	1BKR52-1512	U-440-15 LOW SIDE BKR	LF	VC015A	CB512T	0
0NSB27-1	1XU-440-15	480V XFMR U-440-15	LF	VC015A	TN15AR	0
A423	1MCC104R	MCC 104R	M1	BU104R	BU104R	6
A421	1MCC1BG	1B EDG MCC 1BG	M1	BUM11Q	BUM11Q	7
UNK	1RECEPTMCC104	POWER RECEPT MCC104 (1W21, 1W23, 1W25, 1W28)	M1	BUM38Q	BUM38Q	0
A423	1BKR52-10402	MCC 104R PENET RM EXH FAN 12 BKR	M1	CBM02O	CBM02O	6
A423	1BKR52-10403	MCC 104R H2 PURGE REPLACEMENT AIR BLOWER BKR	M1	CBM03O	CBM03O	6
A423	1BKR52-10404	MCC 104R SW SYS AIR COMPR 12 BKR	M1	CBM04O	CBM04O	6
A423	1BKR52-10406	MCC 104R BORIC ACID PP 12 BKR	M1	CBM06O	CBM06O	6
A423	1BKR52-10407	MCC 104R LPSI FLOW CNTMT 1MOV635 BKR	M1	CBM07O	CBM07O	6
A423	1BKR52-10408	MCC 104R LPSI FLOW CNTMT 1MOV645 BKR	M1	CBM08O	CBM08O	6
A423	1BKR52-10409	MCC 104R BORIC ACID TK 11 HTR B BKR	M1	CBM09O	CBM09O	6
A423	1BKR52-10410	MCC 104R AUX BLDG ELAVATOR BKR	M1	CBM10O	CBM10O	6
A423	1BKR52-10411	MCC 104R DIESEL GEN MCC 1BG	M1	CBM11O	CBM11O	6
A423	1BKR52-10412	MCC 104R AUX FW PP RM VENT FAN 12 BKR	M1	CBM12O	CBM12O	6
A423	1BKR52-10413	MCC 104R ECCS PP RM EXH FAN 12 BKR	M1	CBM13O	CBM13O	6
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	M1	CBM15O	CBM15O	6
A423	1BKR52-10416	MCC 104R HPSI FLOW CNTMT 1MOV616 BKR	M1	CBM16O	CBM16O	6
A423	1BKR52-10417	MCC 104R HPSI FLOW CNTMT 1MOV626 BKR	M1	CBM17O	CBM17O	6
A423	1BKR52-10418	MCC 104R HPSI FLOW CNTMT 1MOV636 BKR	M1	CBM18O	CBM18O	6
A423	1BKR52-10419	MCC 104R HPSI FLOW CNTMT 1MOV646 BKR	M1	CBM19O	CBM19O	6
A423	1BKR52-10421	MCC 104R HPSI SYS ISOL 1MOV654 BKR	M1	CBM21O	CBM21O	6
A423	1BKR52-10422	MCC 104R HPSI SYS ISOL 1MOV653 BKR	M1	CBM22O	CBM22O	6
A423	1BKR52-10423	MCC 104R FIRE SYS CNTMT ISOL 1MOV6200 BKR	M1	CBM23O	CBM23O	6
A423	1BKR52-10424	MCC 104R S/D COOLING RTN HDR ISOL 1MOV652 BKR	M1	CBM24O	CBM24O	6
A423	1BKR52-10425	MCC 104R BORIC ACID FD PP 1MOV514 BKR	M1	CBM25O	CBM25O	6
A423	1BKR52-10426	MCC 104R FW TO S/G 12 ISOL 1MOV4517 BKR	M1	CBM26O	CBM26O	6
A423	1BKR52-10427	MCC 104R DISTR XFMR 14 BKR	M1	CBM27O	CBM27O	6
A423	1BKR52-10428	MCC 104R MS VALVE 12 BYPASS 1MOV4052 BKR	M1	CBM28O	CBM28O	6
A423	1BKR52-10429	MCC 104R INSTR AC XFMR 12 BKR	M1	CBM29O	CBM29O	6
A423	1BKR52-10430	MCC 104R CNTMT SUMP TO MWRT 1MOV5463 BKR	M1	CBM30O	CBM30O	6
A423	1BKR52-10432	MCC 104R SI RECIRC ISOL 1MOV660 BKR	M1	CBM32O	CBM32O	6
A423	1BKR52-10433	MCC 104R HEAT TRACING XFMR 12 1X12 BKR	M1	CBM33O	CBM33O	6
A423	1BKR52-10434	MCC 104R BORIC ACID TK 12 HTR B BKR	M1	CBM34O	CBM34O	6
A423	1BKR52-10435	MCC 104R LTG XFMR (L-208-110) BKR	M1	CBM35O	CBM35O	6
A423	1BKR52-10436	MCC 104R SWGR RM HVAC UNIT 12 FAN BKR	M1	CBM36O	CBM36O	6
A423	1BKR52-10437	MCC 104R EVAP OFF GAS SYS HTR BKR	M1	CBM37O	CBM37O	6
A423	1BKR52-10438	MCC 104R PWR RECEPTACLE BKR	M1	CBM38O	CBM38O	6
A423	1BKR52-10440	MCC 104R H2 PURGE SYS 1MOV6900 BKR	M1	CBM40O	CBM40O	6
A423	1BKR52-10444	MCC 104R CNTMT SUMP RECIRC 1MOV4145 BKR	M1	CBM44O	CBM44O	6
A423	1BKR52-10445	MCC 104R RWT DISCH 1MOV4143 BKR	M1	CBM45O	CBM45O	6
A423	1BKR52-10446	MCC 104R PRESS RELIEF ISOL 1MOV403 BKR	M1	CBM46O	CBM46O	6
A423	1BKR52-10448	MCC 104R ECCS PP RM 12 COOLER FANS BKR	M1	CBM48O	CBM48O	6
A423	1BKR52-10449	MCC 104R PZR RELIEF 1 ERV 404 BKR	M1	CBM49O	CBM49O	6
A423	1BKR52-10450	MCC 104R SWGR RM COND 12 FAN 11 & 12	M1	CBM50O	CBM50O	6
A423	1BKR52-10451	MCC 104R SPARE BKR	M1	CBM51O	CBM51O	6
A423	1BKR52-10452	MCC 104R H2 PURGE SYS 1MOV6903 BKR	M1	CBM52O	CBM52O	6
A423	1BKR52-10454	MCC 104R CAVITY COOL FAN 12 DMPR BKR	M1	CBM54O	CBM54O	6
A423	1BKR52-10455	MCC 104R MN EXH FAN 12 DMPR BKR	M1	CBM55O	CBM55O	6
A423	1BKR52-10456	MCC 104R H2 PURGE SYS 1MOV6902 BKR	M1	CBM56O	CBM56O	6
A423	1BKR52-10460	MCC 104R REACTOR STUD JIB CRANE 11 BKR	M1	CBM60O	CBM60O	6
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	M1	CMM04Q	CMM04Q	144
1CNT69-3	1CRNRVHDSTDJIB1TON	RX VESSEL HEAD STUD HANDLING JIB CRN 1 TON	M1	CNM60Q	CNM60Q	0
N/A	0ELEVAUXBLDG	AUXILIARY BUILDING ELEV	M1	EVM10Q	EVM10Q	0
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6
A420	1 HTR EVAP GAS	EVAP OFF GAS SYSTEM HEATER	M1	HTM37Q	HTM37Q	0
A430	1BKR52-1409	104R RX MCC	M1	M1BCBM	CB409T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A532	2BKR52-21446	PZR RELIEF ISOL 2MOV405	M4	CBN46O	CBN46O	6
A532	2BKR52-21448	ECCS PUMP RM 21 COOLER	M4	CBN48O	CBN48O	6
A532	2BKR52-21449	PZR RELIEF 2ERV402	M4	CBN49O	CBN49O	6
A532	2BKR52-21450	SWGR RM CONDR 21 FAN 21 & 22	M4	CBN50O	CBN50O	6
A532	2BKR52-21452	MCC 214R H2 PURGE SYS 2MOV6903 BKR	M4	CBN52O	CBN52O	6
A532	2BKR52-21453	INSTRUMENT AIR CNTMT ISOL 2MOV2080	M4	CBN53O	CBN53O	6
A532	2BKR52-21454	CAVITY COOLING FAN 21 DAMPER	M4	CBN54O	CBN54O	6
A532	2BKR52-21455	MAIN EXHAUST FAN 21 DAMPER	M4	CBN55O	CBN55O	6
A532	2BKR52-21456	H2 PURGE SYSTEM 2MOV6902	M4	CBN56O	CBN56O	6
A532	2BKR52-21457	CNTMT SUMP TO MISC WASTE REC TANK 2MOV5462	M4	CBN57O	CBN57O	6
A532	2BKR52-21459	CNTMT INTERIOR EQUIP HATCH HOIST 21	M4	CBN59O	CBN59O	6
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0
A319	2U1410	21 CVC BABT HTR	M4	HTN10Q	HTN10Q	0
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0
A311	2BKR52-2119	214R RX MCC	M4	M4BCBM	CB119T	0
A532	2BKR52-21401	MAIN FEEDER BREAKER	M4	M4BCBM	CBN01T	6
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	M4	M4FCRC	CM05AQ	144
A205	2COMPSWAC21B	21 SW AIR COMPRESSOR MOTOR B (2M1405B)	M4	M4FCRC	CM05BQ	144
A101	2FAN1448A	ECCS PP RM CLR 21 FAN A (2M1448A)	M4	M4FPPR	VD48AQ	72
A101	2FAN1448B	ECCS PP RM CLR 21 FAN B (2M1448B)	M4	M4FPPR	VD48BQ	72
A101	2FAN1448C	ECCS PP RM CLR 21 FAN C (2M1448C)	M4	M4FPPR	VD48CQ	72
A101	2FAN1448D	ECCS PP RM CLR 21 FAN D (2M1448D)	M4	M4FPPR	VD48DQ	72
ARF	2FAN1450A	SWGR RM CONDENSER 21 FAN 21 (2M1450A)	M4	M4FSWG	VD50AQ	0
ARF	2FAN1450B	SWGR RM CONDENSER 21 FAN 22 (2M1450B)	M4	M4FSWG	VD50BQ	0
A215	2PUMPCVC8A21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6
2CNT10-2	2DAMP5303	21 RCC FAN OUT DMPR (2MO5303)	M4	MDN54Q	MDN54Q	0
A526	2DAMP5412	MAIN EXH FAN 21 DISCH DAMPER (2MO5412)	M4	MDN55Q	MDN55Q	0
A206	2MOV615	21B LPSI OUTLET MOV	M4	MVN07Q	MVN07Q	24
A206	2MOV625	21A LPSI LOOP ISOL	M4	MVN08Q	MVN08Q	24
A310	2MOV617	21B AUX HPSI LOOP ISOL MOV	M4	MVN16Q	MVN16Q	28
A310	2MOV627	21A AUX HPSI LOOP ISOL	M4	MVN17Q	MVN17Q	0
A321	2MOV637	22B HPSI LOOP ISOL	M4	MVN18Q	MVN18Q	0
A321	2MOV647	22A HPSI LOOP ISOL	M4	MVN19Q	MVN19Q	0
A101	2MOV656	AUX HPSI HDR ISOL	M4	MVN21Q	MVN21Q	54
A101	2MOV655	HPSI HDR X-CONN	M4	MVN22Q	MVN22Q	48
A212	2MOV504	RWT TO CHG PP	M4	MVN23Q	MVN23Q	24
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0
A309	2MOV4516	21 SG FW ISOL	M4	MVN26Q	MVN26Q	0
A309	2MOV4045	21 MSIV BYP VLV	M4	MVN28Q	MVN28Q	0
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
2CNT45-1	2MOV6900	H2 PURGE CONTMT ISOL (CNTMT SIDE)	M4	MVN40Q	MVN40Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A440	2MOV4143	RWT OUTLET MOV	M4	MVN45Q	MVN45Q	0
2CNT26-1	2MOV405	2-RC-404-ERV ISOL	M4	MVN46Q	MVN46Q	0
A310	2MOV6903	H2 PURGE REPLACE AIR CONTMT ISOL VLV	M4	MVN52Q	MVN52Q	0
A310	2MOV2080	CNTMT IA ISOLATION MOV	M4	MVN53Q	MVN53Q	0
A310	2MOV6902	H2 PURGE FLOW CONTROL DAMPER	M4	MVN56Q	MVN56Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A319	2M1425	21 CVC BABT MIXER MOTOR	M4	MXN25Q	MXN25Q	0
2CNT26-1	2ERV402	PZR PWR OP RV	M4	RPN49Q	RPN49Q	0
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0
A532	2XDT214	LTG DISTR XFMR 214	M4	TMN27Q	TMN27Q	0
A302	2X2X08	120I INSTR X 21	M4	TMN29Q	TMN29Q	0
A310	2FANHP21	H2 PURGE REP BLOWER (2M1403)	M4	VAN03Q	VAN03Q	0
A204	2FANHVACPENETE21	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75
A204	2FANHVACAFWE21	21 AFW PUMP RM EXH (2M1412)	M4	VDN12Q	VDN12Q	36
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A526	2FANHVACSWGRS21	21 SWGR RM SPLY FAN (2M1436)	M4	VDN36Q	VDN36Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
1TB27-1	1MCC106T	MCC 106T	M7	BU213Q	BU213Q	0
1TB27-1	1MCC106T	MCC 106T	M7	BUM06R	BUM06R	0
1TB12-2 (CP)	1PNL1C51	11A AMERTAP CNTL PNL 1C51	M7	BUP23Q	BUP23Q	0
1TB12-2 (CP)	1PNL1C52	11B AMERTAP CNTL PNL 1C52	M7	BUP24Q	BUP24Q	0
1TB12-2 (CP)	1PNL1C53	12A AMERTAP CNTL PNL 1C53	M7	BUP25Q	BUP25Q	0
1TB27-1	1BKR52-10602	MCC 106T CIRC H2O PP DISCH 1MOV-5225 BKR	M7	CBP02O	CBP02O	0
1TB27-1	1BKR52-10603	MCC 106T CIRC H2O PP 12 DISCH 1MOV-5229 BKR	M7	CBP03O	CBP03O	0
1TB27-1	1BKR52-10604	MCC 106T CIRC H2O PP 13 DISCH 1MOV-5233 BKR	M7	CBP04O	CBP04O	0
1TB27-1	1BKR52-10605	MCC 106T WELDING RECEPTACLES 1W40-1W43	M7	CBP05O	CBP05O	0
1TB27-1	1BKR52-10606	MCC 106T WELDING RECEPTACLES 1W44-1W47	M7	CBP06O	CBP06O	0
1TB27-1	1BKR52-10607	MCC 106T COND PP 11 LUBE OIL PP BKR	M7	CBP07O	CBP07O	0
1TB27-1	1BKR52-10608	MCC 106T CIRC WTR PRIMING PP 11 BKR	M7	CBP08O	CBP08O	0
1TB27-1	1BKR52-10609	MCC 106T CIRC WTR PRIMING PP 12 BKR	M7	CBP09O	CBP09O	0
1TB27-1	1BKR52-10610	MCC 106T CIRC WTR PRIMING PP RECIRC SEAL PP 11	M7	CBP10O	CBP10O	0
1TB27-1	1BKR52-10611	MCC 106T CIRC WTR PRIMING PP RECIRC SEAL PP 12	M7	CBP11O	CBP11O	0
1TB27-1	1BKR52-10612	MCC 106T SGFP 11 LUBE OIL CONDITIONER BKR	M7	CBP12O	CBP12O	0
1TB27-1	1BKR52-10613	MCC 106T SGFP 11 MN OIL PP BKR	M7	CBP13O	CBP13O	0
1TB27-1	1BKR52-10614	MCC 106T SGFP 12 MN OIL PP BKR	M7	CBP14O	CBP14O	0
1TB27-1	1BKR52-10615	SGFP 11 OIL VAPOR EXTRACTOR	M7	CBP15O	CBP15O	0
1TB27-1	1BKR52-10616	MCC 106T BEARING OIL VAPOR EXTR 11 BKR	M7	CBP16O	CBP16O	0
1TB27-1	1BKR52-10617	MCC 106T STM LEAD DRN 1MOV-4652(CV2) BKR	M7	CBP17O	CBP17O	0
1TB27-1	1BKR52-10618	MCC 106T STM LEAD DRN 1MOV-4651(CV4) BKR	M7	CBP18O	CBP18O	0
1TB27-1	1BKR52-10619	MCC 106T HYDRAULIC FLUID FILT PP 11 BKR	M7	CBP19O	CBP19O	0
1TB27-1	1BKR52-10620	MCC 106T MN OIL SEAL PP 11 (MN GEN)	M7	CBP20O	CBP20O	0
1TB27-1	1BKR52-10621	MCC 106T SEAL OIL RECIRC PP 11 BKR	M7	CBP21O	CBP21O	0
1TB27-1	1BKR52-10622	MCC 106T SEAL VACUUM PP 11 BKR	M7	CBP22O	CBP22O	0
1TB27-1	1BKR52-10623	MCC 106T 11A AMERTAP CONTR PNL 1C51 BKR	M7	CBP23O	CBP23O	0
1TB27-1	1BKR52-10624	MCC 106T 11B AMERTAP CONTR PNL 1C52	M7	CBP24O	CBP24O	0
1TB27-1	1BKR52-10625	MCC 106T 12A AMERTAP CONTR PNL 1C53 BKR	M7	CBP25O	CBP25O	0
1TB27-1	1BKR52-10626	MCC 106T UNIT HTR 9 BKR	M7	CBP26O	CBP26O	0
1TB27-1	1BKR52-10627	MCC 106T UNIT HTR 10 BKR	M7	CBP27O	CBP27O	0
1TB27-1	1BKR52-10628	MCC 106T SGFP 11 LP STOP VLV DRN B 1MOV-5090 BK	M7	CBP28O	CBP28O	0
1TB27-1	1BKR52-10629	MCC 106T COMBINED CNTMT DRN 1MOV-4658(CV) BKR	M7	CBP29O	CBP29O	0
1TB27-1	1BKR52-10630	GLAND SEAL STEAM SUPPLY VALVE 1-MOV-4659	M7	CBP30O	CBP30O	0
1TB27-1	1BKR52-10631	MCC 106T STM SEAL BY-PASS 1MOV-4656(S2) BKR	M7	CBP31O	CBP31O	0
1TB27-1	1BKR52-10632	MCC 106T STM SEAL UNLOADING 1MOV-4657(B) BKR	M7	CBP32O	CBP32O	0
1TB27-1	1BKR52-10633	MCC 106T STM PACK EXH 11 BKR	M7	CBP33O	CBP33O	0
1TB27-1	1BKR52-10635	MCC 106T AUX BOILER FUEL PP 11 BKR	M7	CBP35O	CBP35O	0
1TB27-1	1BKR52-10636	MCC 106T COND VACUUM RECIRC SEAL PP 11 BKR	M7	CBP36O	CBP36O	0
1TB27-1	1BKR52-10637	MCC 106T COND VACUUM RECIRC SEAL PP 12 BKR	M7	CBP37O	CBP37O	0
1TB27-1	1BKR52-10638	SGFP 11 LP STOP VLV DRN 1-MOV-5089	M7	CBP38O	CBP38O	0
1TB27-1	1BKR52-10639	LIGHTING XFMR (1L11/1L17) L-208-218	M7	CBP39O	CBP39O	0
1TB27-1	1BKR52-10640	MCC 106T SGFP 11 EXH 1MOV-3964 BKR	M7	CBP40O	CBP40O	0
1TB27-1	1BKR52-10642	MCC 106T UNIT HTR 11 BKR	M7	CBP42O	CBP42O	0
1TB27-1	1BKR52-10643	MCC 106T UNIT HTR 12 BKR	M7	CBP43O	CBP43O	0
1TB27-1	1BKR52-10644	MCC 106T SGFP 11 HP STOP VLV DRN B 1MOV-5088 BK	M7	CBP44O	CBP44O	0
1TB27-1	1BKR52-10645	ROADWAY LIGHTING PANEL 1L54	M7	CBP45O	CBP45O	0
1TB27-1	1BKR52-10646	MCC 106T SGFP 11 HP STOP VLV DRN A 1MOV-5087 BK	M7	CBP46O	CBP46O	0
1TB27-1	1BKR52-10647	DISTRIBUTION XFMR 16 480-208/120V	M7	CBP47O	CBP47O	0
1TB27-1	1BKR52-10648	MCC 106T UNIT HTR 13 BKR	M7	CBP48O	CBP48O	0
1TB27-1	1BKR52-10649	MCC 106T SGFP 11 1ST STG DRN 1MOV-5091 BKR	M7	CBP49O	CBP49O	0
1TB27-1	1BKR52-10651	MCC 106T RHT STM SUPP 1MOV-4026 BKR	M7	CBP51O	CBP51O	0
1TB27-1	1BKR52-10652	MCC 106T MS TO MS RHTR 11 1MOV-4018 BKR	M7	CBP52O	CBP52O	0
1TB27-1	1BKR52-10653	MCC 106T EXTRACT STM TO MS RHTR 11 1MOV-4019 B	M7	CBP53O	CBP53O	0
1TB27-1	1BKR52-10654	SMOKE REMOVAL DAMPER 0M05390 {CLOSED	M7	CBP54O	CBP54O	0
1TB27-1	1BKR52-10656	CR & CBL SPREADING RM CHILL WTR SUPP PP 11	M7	CBP56O	CBP56O	0
1TB27-1	1BKR52-10657	MCC 106T TURB BLDG SUPP FAN 13 BKR	M7	CBP57O	CBP57O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-1	1BKR52-10658	MCC 106T TURB BLDG SUPP FAN 14 BKR	M7	CBP58O	CBP58O	0
1TB27-1	1BKR52-10659	MCC 106T COND PP 11 FAN BKR	M7	CBP59O	CBP59O	0
1TB27-1	1BKR52-10661	MCC 106T TURB BLDG HIGH BAY LTG BKR	M7	CBP61O	CBP61O	0
1TB27-1	1BKR52-10662	MCC 106T TURB BLDG HIGH BAY LTG BKR	M7	CBP62O	CBP62O	0
1TB27-1	1BKR52-10663	MCC 106T BOOSTER JOCKEY PP FIRE PROT SYS BKR	M7	CBP63O	CBP63O	0
1TB27-1	1BKR52-10667	MCC 106T TURB AREA OILY SUMP 11 PP 11 BKR	M7	CBP67O	CBP67O	0
1TB27-1	1BKR52-10668	MCC 106T TURB AREA OILY SUMP 11 PP 12 BKR	M7	CBP68O	CBP68O	0
1TB27-1	1BKR52-10669	MCC 106T SMOKE REMOVAL DMPR 0MO5391 BKR	M7	CBP69O	CBP69O	0
1TB27-1	1BKR52-10670	MCC 106T SMOKE REMOVAL DMPR 0MO5392 BKR	M7	CBP70O	CBP70O	0
1TB27-1	1BKR52-10671	MCC 106T AUX BD TK PP 11 BKR	M7	CBP71O	CBP71O	0
1TB27-1	1BKR52-10672	MCC 106T SPARE BKR	M7	CBP72O	CBP72O	0
1TB27-1	1BKR52-10673	SERV XFMR (P-13000-1) COOLING B (EMERGENCY)	M7	CBP73O	CBP73O	0
1TB27-1	1BKR52-10674	SERV XFMR (U-4000-11) COOLING A (NORMAL)	M7	CBP74O	CBP74O	0
1TB27-1	1BKR52-10675	SERV XFMR (U-4000-21) COOLING A (NORMAL)	M7	CBP75O	CBP75O	0
1TB27-1	1BKR52-10676	MCC 106T HTR DRN PP 11 LUBE OIL COOLER PP 11A BK	M7	CBP76O	CBP76O	0
1TB27-1	1BKR52-10677	MCC 106T HTR DRN PP 11 LUBE OIL COOLER PP 11B BK	M7	CBP77O	CBP77O	0
1TB27-1	1BKR52-10678	MCC 106T HTR DRN PP 11 LUBE OIL COOLER FAN BKR	M7	CBP78O	CBP78O	0
1TB45-3	1HXPHGUH9	9UH TURB BLDG WEST (1M0626)	M7	HTP26Q	HTP26Q	0
1TB45-3	1HXPHGUH10	10UH TURB BLDG U1 WEST (1M0627)	M7	HTP27Q	HTP27Q	0
1TB45-3	1HXPHGUH11	11UH TURB BLDG U1 WEST (1M0642)	M7	HTP42Q	HTP42Q	0
1TB45-3	1HXPHGUH12	12UH TURB BLDG U1 WEST (1M0643)	M7	HTP43Q	HTP43Q	0
1TB45-3	1HXPHGUH13	13UH TURB BLDG U1 EAST (1M0648)	M7	HTP48Q	HTP48Q	0
A317	1BKR52-1213	106T TURB MCC	M7	M71213	CB213O	0
A317	1BKR52-1213	106T TURB MCC	M7	M71213	CB213P	0
A317	1BKR152-1202	U-440-12B SERVICE TRANSF	M7	M7B12B	BN12BT	0
A317	1BUS1B02B	480V BUS 12B	M7	M7B12B	BU12BR	0
A317	1BKR52-1222	U-440-12B LOW SIDE BKR	M7	M7B12B	CB222T	0
A317	1BKR52-1213	106T TURB MCC	M7	M7BCBM	CB213T	0
1TB27-1	1BKR52-10601	MAIN FEEDER BREAKER	M7	M7BCBM	CBP01T	0
1TB12-3	1PUMPSTC11	11 MG STATOR WTR CLG PUMP (1MB216)	M7	MB215Q	MB215Q	0
1TB12-4	1PUMPEHC11	11 MT EHC HYD UNIT PUMP (1MB216)	M7	MB216Q	MB216Q	0
1TB12-2 (CP)	1PUMPCAR12	12 CAR VAC PP (1MB217)	M7	MB217Q	MB217Q	0
2TB27-8	0PUMPPHM11	11 MAIN HTG HWC PUMP (1MB225)	M7	MB225Q	MB225Q	0
1TB12-3	1PUMPWBP11	11 CW WTRBX PRMG PP (1M0608)	M7	MBP08Q	MBP08Q	0
1TB12-3	1PUMPWBP12	12 CW WTRBX PRMG PP (1M0609)	M7	MBP09Q	MBP09Q	0
1TB12-3	1PUMPWBPSWP11	11 CW WTRBX PRMG PP SEAL WTR PUMP (1M0610)	M7	MBP10Q	MBP10Q	0
1TB12-3	1PUMPWBPSWP12	12 CW WTRBX PRMG PP SEAL WTR PUMP (1M0611)	M7	MBP11Q	MBP11Q	0
1TB45-3	1PUMPEHCXFERFILT	MT EHC XFER & FILT PUMP (1M1T08)	M7	MBP19Q	MBP19Q	0
T602	0PUMPAHB-AUX11	11 AHB AUX BLR FUEL OIL PP (1M0635)	M7	MBP35Q	MBP35Q	0
1TB27-7	0PUMPBSTR9600	0 FP BSTR PUMP # 9600 (1M0663)	M7	MBP63Q	MBP63Q	0
1TB27-5W	1PUMPWOSMPTB11	TURB AREA OILY SUMP 11 PUMP 11 (1M0667)	M7	MBP67Q	MBP67Q	0
1TB27-5W	1PUMPWOSMPTB12	TURB AREA OILY SUMP 11 PUMP 12 (1M0668)	M7	MBP68Q	MBP68Q	0
1TB12-2 (CP)	1PUMPMSBD11	11 AUX BD TK PUMP (1M0671)	M7	MBP71Q	MBP71Q	0
A512	0DAMP5390	SMOKE REMOVAL EXH DMPR FROM CONTROL (0MO539	M7	MDP54Q	MDP54Q	0
A512	0DAMP5391	SMOKE REMOVAL EXH DMPR FROM U-1 A306 (0MO5391	M7	MDP69Q	MDP69Q	0
A512	0DAMP5392	SMOKE REMOVAL SUPP DMPR TO U-1 A306 (0MO5392)	M7	MDP70Q	MDP70Q	0
1TB12-3 (CP)	1PUMPCDMTRLO11	11 CD PP LO CLR PP (1M0607)	M7	MMP07Q	MMP07Q	0
1TB12-2	1PUMPFPTLOMOP11A	11A SGFP MAIN OIL PUMP (1M0613)	M7	MMP13Q	MMP13Q	0
1TB12-2	1PUMPFPTLOMOP12A	12A SGFP MAIN OIL PUMP (1M0614)	M7	MMP14Q	MMP14Q	0
1TB12-3	1PUMP2325	GEN H2 SEAL OIL SYS MAIN PUMP (1M0620)	M7	MMP20Q	MMP20Q	0
1TB12-3	1PUMP4624	GEN H2 SEAL OIL SYS RECIRC PUMP (1M0621)	M7	MMP21Q	MMP21Q	0
1TB12-3	1PUMP2316	MG H2 SEAL OIL VACUUM PUMP (1M0622)	M7	MMP22Q	MMP22Q	0
1TB12-2 (CP)	1PUMPCARSWP11	11 CAR SEAL WTR PUMP (1M0636)	M7	MMP36Q	MMP36Q	0
1TB12-2 (CP)	1PUMPCARSWP12	12 CAR SEAL WTR PUMP (1M0637)	M7	MMP37Q	MMP37Q	0
1TB45-1	0PUMPHVACWCW11	11 CHILLED WTR CR HVAC (1M0656)	M7	MMP56Q	MMP56Q	0
1NSB10-1	1PUMPMT4708	12 MT LUBE OIL CNDTR PUMP	M7	MMP72Q	MMP72Q	0
1TB12-2	1PUMPHDVLOP11A	11A HTR DRN PP LO CLR PP (1M0676)	M7	MMP76Q	MMP76Q	0
1TB12-2	1PUMPHDVLOP11B	11B HTR DRN PP LO CLR PP (1M0677)	M7	MMP77Q	MMP77Q	0
1TB12-3 (CP)	1MOV5225	11A COND'R INLET STRNR VLV	M7	MVP02Q	MVP02Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-3 (CP)	1MOV5229	11B COND'R INLET STRNR VLV	M7	MVP03Q	MVP03Q	0
1TB12-3 (CP)	1MOV5233	12A COND'R INLET STRNR VLV	M7	MVP04Q	MVP04Q	0
1TB12-2	1MOV4652	14 STEAM LEAD DR	M7	MVP17Q	MVP17Q	0
1TB12-2	1MOV4651	12 STEAM LEAD DR	M7	MVP18Q	MVP18Q	0
1TB12-2	1MOV5090	11 SGFP LP STOP BELOW SEAT & CV CHEST DRN	M7	MVP28Q	MVP28Q	0
1TB12-4	1MOV4658	MN CONT VLVS BEFORE SEAT DRN	M7	MVP29Q	MVP29Q	0
1TB12-4	1MOV4659	1 GS MS SEAL SUPPLY MOV	M7	MVP30Q	MVP30Q	0
1TB12-4	1MOV4656	1 GS MS SEAL REG BYP MOV	M7	MVP31Q	MVP31Q	0
1TB12-4	1MOV4657	1 GS SEAL DUMP BYP MOV	M7	MVP32Q	MVP32Q	0
1TB12-2	1MOV5089	11 SGFP LP STOP ABOVE SEAT DRN	M7	MVP38Q	MVP38Q	0
1TB27-3	1MOV3964	11 SGF PP TURB EXH	M7	MVP40Q	MVP40Q	0
1TB12-2	1MOV5088	11 SGFP HP STOP BELOW SEAT DRN	M7	MVP44Q	MVP44Q	0
1TB12-2	1MOV5087	11 SGFP HP STOP ABOVE SEAT DRN	M7	MVP46Q	MVP46Q	0
1TB12-2	1MOV5091	1FW SG FD PP 1ST STG EXH DRN	M7	MVP49Q	MVP49Q	0
1TB12-4	1MOV4026	MS TO 11 MSR 2ND STG	M7	MVP51Q	MVP51Q	0
1TB27-6	1MOV4018	MS TO 11 MSR 2ND STG CONT	M7	MVP52Q	MVP52Q	0
1TB27-6	1MOV4019	EXTRACTION STEAM TO MOISTURE SEPARATOR REHE	M7	MVP53Q	MVP53Q	0
1TB27-1	1XL-208-118	LTG XFMR L-208-118 TURB BLDG EL 27 FT	M7	TMP39Q	TMP39Q	0
FPPPHS	1PNL1L54	LTG PNL 1L54 ROADWAY EL GRADE LVL	M7	TMP45Q	TMP45Q	0
1TB27-1	1XDT16	LTG DISTR XFMR 16	M7	TMP47Q	TMP47Q	0
UNK	1LIGHT-TBHB1J176	TURB BLDG HIGH BAY LIGHTING - 1J176	M7	TMP61Q	TMP61Q	0
UNK	1LIGHT-TBHB1J178	TURB BLDG HIGH BAY LIGHTING - 1J178	M7	TMP62Q	TMP62Q	0
1CNT34-1	1FANHVACCEDMS11	11 CEDM COOLER FAN (1MB219)	M7	VA219Q	VA219Q	0
1TB12-2	1FANFPTLOCDTRE11	11 SGFP LO COND VAP EXT (1M0612)	M7	VAP12Q	VAP12Q	0
1TB12-2	1FANFPTLORESVE11	11 SGFP LO RESV VAPOR EXT (1M0615)	M7	VAP15Q	VAP15Q	0
1NSB10-1	1FANTLORESVE11	11 MT LO RESV VAPOR EXT (1M0616)	M7	VAP16Q	VAP16Q	0
1TB12-4	1FANGSPACK11	11 GLAND STEAM PACKING EXH (1M0633)	M7	VAP33Q	VAP33Q	0
1TB45-3	1FANHVACTBUHS13	13 TB EAST SIDE UNIT HTR (1M0657)	M7	VAP57Q	VAP57Q	0
1TB45-3	1FANHVACTBUHS14	14 TB WEST SIDE UNIT HTR (1M0658)	M7	VAP58Q	VAP58Q	0
1TB12-3 (CP)	1M0659	11 COND PP LUBE OIL COOLER FAN MTR (1M0659)	M7	VAP59Q	VAP59Q	0
P13000-1	1FANP-13000-1/CA	TRANSF (P-13000-1) COOLING A (EMERG)	M7	VAP73Q	VAP73Q	0
U4000-11	1FANU-4000-11/CA	TRANSF (U-4000-11) COOLING A	M7	VAP74Q	VAP74Q	0
U4000-21	2FANU-4000-21/CA	TRANSF (U-4000-21) COOLING A	M7	VAP75Q	VAP75Q	0
1TB12-2	1FANHVACHDPS11	11 HTR DRN PUMP AREA CLR (1M0678)	M7	VAP78Q	VAP78Q	0
1TB27-1	1MCC116T	MCC 116T	M8	BU313Q	BU313Q	0
A430	1MCC112PH	MCC 112PH	M8	BU318Q	BU318Q	0
A430	1MCC103WP	MCC 103WP	M8	BU321Q	BU321Q	0
1TB27-1	1MCC116T	MCC 116T	M8	BUM16R	BUM16R	0
1TB12-2 (CP)	1RECEPTMCC116A	POWER RECEPT MCC116 (1W48, 1W49, 1W50, 1W51)	M8	BUQ05Q	BUQ05Q	0
1TB12-2 (CP)	1PNL1C54	12B AMERTAP CNTL PNL 1C54	M8	BUQ23Q	BUQ23Q	0
1TB12-2 (CP)	1PNL1C55	13A AMERTAP CNTL PNL 1C55	M8	BUQ24Q	BUQ24Q	0
1TB12-2 (CP)	1PNL1C56	13B AMERTAP CNTL PNL 1C56	M8	BUQ25Q	BUQ25Q	0
UNK	1RECEPTMCC116B	POWER RECEPT MCC116 (1W60, 1W63)	M8	BUQ48Q	BUQ48Q	0
1TB27-1	1BKR52-11602	MCC 116T CIRC H2O PP 14 DISCH 1MOV-5237 BKR	M8	CBQ02O	CBQ02O	0
1TB27-1	1BKR52-11603	MCC 116T CIRC H2O PP 15 DISCH 1MOV-5241 BKR	M8	CBQ03O	CBQ03O	0
1TB27-1	1BKR52-11604	MCC 116T CIRC H2O PP 16 DISCH 1MOV-5245 BKR	M8	CBQ04O	CBQ04O	0
1TB27-1	1BKR52-11605	MCC 116T PWR RECEPTACLE BKR	M8	CBQ05O	CBQ05O	0
1TB27-1	1BKR52-11606	MCC 116T COND PP 12 LUBE OIL PP BKR	M8	CBQ06O	CBQ06O	0
1TB27-1	1BKR52-11607	MCC 116T COND PP 13 LUBE OIL PP BKR	M8	CBQ07O	CBQ07O	0
1TB27-1	1BKR52-11608	MCC 116T CIRC WTR PRIMING PP 13 BKR	M8	CBQ08O	CBQ08O	0
1TB27-1	1BKR52-11609	MCC 116T UNIT HTR 14 BKR	M8	CBQ09O	CBQ09O	0
1TB27-1	1BKR52-11610	MCC 116T CIRC WTR PRIMING PP RECIRC SEAL PP 13	M8	CBQ10O	CBQ10O	0
1TB27-1	1BKR52-11611	MCC 116T UNIT HTR 15 BKR	M8	CBQ11O	CBQ11O	0
1TB27-1	1BKR52-11612	MCC 116T SGFP 12 LUBE OIL CONDITIONER BKR	M8	CBQ12O	CBQ12O	0
1TB27-1	1BKR52-11613	MCC 116T SGFP 11 AUX OIL PP BKR	M8	CBQ13O	CBQ13O	0
1TB27-1	1BKR52-11614	MCC 116T SGFP 12 AUX OIL PP BKR	M8	CBQ14O	CBQ14O	0
1TB27-1	1BKR52-11615	MCC 116T SGFP 12 OIL VAPOR EXTR BKR	M8	CBQ15O	CBQ15O	0
1TB27-1	1BKR52-11616	MCC 116T 13 KV SERVICE BUSES 11 & 12 SERVICE XFM	M8	CBQ16O	CBQ16O	0
1TB27-1	1BKR52-11617	MCC 116T SPARE RCP MTR OIL LIFT PP BKR	M8	CBQ17O	CBQ17O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-1	1BKR52-11618	MCC 116T CNDSR VACUUM BKR 1MOV-6717 BKR	M8	CBQ18O	CBQ18O	0
1TB27-1	1BKR52-11620	MCC 116T CNDSR BULLETING PP 11 BKR	M8	CBQ20O	CBQ20O	0
1TB27-1	1BKR52-11621	MCC 116T TURB LUBE OIL CONDITIONER 11 BKR	M8	CBQ21O	CBQ21O	0
1TB27-1	1BKR52-11623	MCC 116T 12B AMERTAP CONTR PNL 1C54 BKR	M8	CBQ23O	CBQ23O	0
1TB27-1	1BKR52-11624	MCC 116T 13A AMERTAP CONTR PNL 1C55 BKR	M8	CBQ24O	CBQ24O	0
1TB27-1	1BKR52-11625	MCC 116T 13B AMERTAP CONTR PNL 1C56 BKR	M8	CBQ25O	CBQ25O	0
1TB27-1	1BKR52-11626	MCC 116T UNIT HTR 16 BKR	M8	CBQ26O	CBQ26O	0
1TB27-1	1BKR52-11627	MCC 116T UNIT HTR 17 BKR	M8	CBQ27O	CBQ27O	0
1TB27-1	1BKR52-11628	MCC 116T SGFP 12 HP STOP VLV DRN A 1MOV-5092 BK	M8	CBQ28O	CBQ28O	0
1TB27-1	1BKR52-11629	MCC 116T RHT STM DRN 1MOV-4022 BKR	M8	CBQ29O	CBQ29O	0
1TB27-1	1BKR52-11630	MCC 116T RHT STM DRN 1MOV-4023 BKR	M8	CBQ30O	CBQ30O	0
1TB27-1	1BKR52-11631	MCC 116T STM SEAL AUX SUPP 1MOV-4678(SG) BKR	M8	CBQ31O	CBQ31O	0
1TB27-1	1BKR52-11633	MCC 116T STM PACK EXH 12 BKR	M8	CBQ33O	CBQ33O	0
1TB27-1	1BKR52-11635	MCC 116T AUX BOILER FUEL PP 12 BKR	M8	CBQ35O	CBQ35O	0
1TB27-1	1BKR52-11636	MCC 116T COND VACUUM RECIRC SEAL PP 13 BKR	M8	CBQ36O	CBQ36O	0
1TB27-1	1BKR52-11637	MCC 116T COND VACUUM RECIRC SEAL PP 14 BKR	M8	CBQ37O	CBQ37O	0
1TB27-1	1BKR52-11638	MCC 116T SGFP 12 LP STOP VLV DRN A 1MOV-5094 BK	M8	CBQ38O	CBQ38O	0
1TB27-1	1BKR52-11639	MCC 116T LTG XFMR (L-208-112) BKR	M8	CBQ39O	CBQ39O	0
1TB27-1	1BKR52-11640	MCC 116T SGFP 12 EXH 1MOV-3981 BKR	M8	CBQ40O	CBQ40O	0
1TB27-1	1BKR52-11641	MCC 116T TURBINE LO XFMR PP 11 BKR	M8	CBQ41O	CBQ41O	0
1TB27-1	1BKR52-11642	MCC 116T TURB AREA SUMP 11 PP 11 BKR	M8	CBQ42O	CBQ42O	0
1TB27-1	1BKR52-11643	MCC 116T TURB AREA SUMP 11 PP 12 BKR	M8	CBQ43O	CBQ43O	0
1TB27-1	1BKR52-11644	MCC 116T SGFP 12 HP STOP VLV DRN 1MOV-5093 BKR	M8	CBQ44O	CBQ44O	0
1TB27-1	1BKR52-11645	MCC 116T LTG XFMR (L-208-119) BKR	M8	CBQ45O	CBQ45O	0
1TB27-1	1BKR52-11646	MCC 116T SGFP 12 LP STOP VLV DRN 1MOV-5095 BKR	M8	CBQ46O	CBQ46O	0
1TB27-1	1BKR52-11647	MCC 116T DISTR XFMR 116 BKR	M8	CBQ47O	CBQ47O	0
1TB27-1	1BKR52-11648	MCC 116T PWR RECEPTACLE BKR	M8	CBQ48O	CBQ48O	0
1TB27-1	1BKR52-11649	MCC 116T SGFP 12 FIRST STG DRN 1MOV-5096 BKR	M8	CBQ49O	CBQ49O	0
1TB27-1	1BKR52-11650	MCC 116T UNIT HTR 18 BKR	M8	CBQ50O	CBQ50O	0
1TB27-1	1BKR52-11651	MCC 116T RHT STM SUPP 1MOV-4025 BKR	M8	CBQ51O	CBQ51O	0
1TB27-1	1BKR52-11652	MCC 116T MS TO MS RHTR 12 1MOV-4017 BKR	M8	CBQ52O	CBQ52O	0
1TB27-1	1BKR52-11653	MCC 116T EXTR STM TO MS RHTR 12 1MOV-4020 BKR	M8	CBQ53O	CBQ53O	0
1TB27-1	1BKR52-11655	MCC 116T HYD PWR UNIT HTR 11 BKR	M8	CBQ55O	CBQ55O	0
1TB27-1	1BKR52-11656	MCC 116T AUX BD TK PP 12 BKR	M8	CBQ56O	CBQ56O	0
1TB27-1	1BKR52-11657	MCC 116T TURB BLDG SUPP FAN 15 BKR	M8	CBQ57O	CBQ57O	0
1TB27-1	1BKR52-11658	MCC 116T TURB BLDG SUPP FAN 16 BKR	M8	CBQ58O	CBQ58O	0
1TB27-1	1BKR52-11659	MCC 116T COND PP 12 FAN BKR	M8	CBQ59O	CBQ59O	0
1TB27-1	1BKR52-11660	MCC 116T COND PP 13 FAN BKR	M8	CBQ60O	CBQ60O	0
1TB27-1	1BKR52-11661	MCC 116T TURB BLDG HIGH BAY LTG BKR	M8	CBQ61O	CBQ61O	0
1TB27-1	1BKR52-11662	MCC 116T TURB BLDG LOW BAY LTG BKR	M8	CBQ62O	CBQ62O	0
1TB27-1	1BKR52-11663	MCC 116T TURB AREA SUMP 12 PP 11 BKR	M8	CBQ63O	CBQ63O	0
1TB27-1	1BKR52-11664	MCC 116T TURB AREA SUMP 12 PP 12 BKR	M8	CBQ64O	CBQ64O	0
1TB27-1	1BKR52-11665	MCC 116T LIGHTING TRANSFORMER 1L26 L-208-126	M8	CBQ65O	CBQ65O	0
1TB27-1	1BKR52-11667	MCC 116T TURBINE BLDG HTG CIRC PP 11 BKR	M8	CBQ67O	CBQ67O	0
1TB27-1	1BKR52-11668	MCC 116T CR & CSR CHILLED WTR SUPP PP #12 BKR	M8	CBQ68O	CBQ68O	0
1TB27-1	1BKR52-11669	MCC 116T XFMR 1X116 BKR	M8	CBQ69O	CBQ69O	0
1TB27-1	1BKR52-11670	MCC 116T MTR OPER DOOR 804 BKR	M8	CBQ70O	CBQ70O	0
1TB27-1	1BKR52-11671	MCC 116T COND COLLECTION TK 11 PP 11 BKR	M8	CBQ71O	CBQ71O	0
1TB27-1	1BKR52-11672	MCC 116T COND COLLECTION TK 11 PP 12 BKR	M8	CBQ72O	CBQ72O	0
1TB27-1	1BKR52-11673	MCC 116T SERVICE XFMR (P-13000-1) COOLING B BKR	M8	CBQ73O	CBQ73O	0
1TB27-1	1BKR52-11674	MCC 116T SERVICE XFMR (U-4000-11) COOLING B BKR	M8	CBQ74O	CBQ74O	0
1TB27-1	1BKR52-11675	MCC 116T SERVICE XFMR (U-4000-21) COOLING B BKR	M8	CBQ75O	CBQ75O	0
1TB27-1	1BKR52-11676	MCC 116T HTR DRN PP 12 LUBE OIL COOLER PP 12A BK	M8	CBQ76O	CBQ76O	0
1TB27-1	1BKR52-11677	MCC 116T HTR DRN PP 12 LUBE OIL COOLER PP 12B BK	M8	CBQ77O	CBQ77O	0
1TB27-1	1BKR52-11678	MCC 116T HTR DRN PP 12 LUBE OIL COOLER FAN BKR	M8	CBQ78O	CBQ78O	0
1TB45-3	0CRNTB200/25	TURB BLDG MAIN CRANE WHITING 200/25 TON	M8	CR320Q	CR320Q	0
UNK	0DOOR804	MOTOR OPER DOOR 804	M8	EVQ70Q	EVQ70Q	0
1TB45-3	1HXPHGUH14	14UH TURB BLDG U1 EAST (1M1609)	M8	HTQ09Q	HTQ09Q	0
1TB45-3	1HXPHGUH15	15UH TURB BLDG U1 EAST (1M1611)	M8	HTQ11Q	HTQ11Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB45-3	1HXPHGUH16	16UH TURB BLDG U1 EAST (1M1626)	M8	HTQ26Q	HTQ26Q	0
1TB45-3	1HXPHGUH17	17UH TURB BLDG U1 EAST (1M1627)	M8	HTQ27Q	HTQ27Q	0
1TB45-3	1HXPHGUH18	18UH TURB BLDG U1 EAST (1M1650)	M8	HTQ50Q	HTQ50Q	0
1TB45-3	1U1T08	MT HYD PWR U HTR BUNDLE	M8	HTQ55Q	HTQ55Q	0
A430	1BKR52-1313	116T TURB MCC	M8	M81313	CB313O	0
A430	1BKR52-1313	116T TURB MCC	M8	M81313	CB313P	0
A430	1BKR52-1315	NO. 12 STATOR LIQUID COOLING PR	M8	M81315	CB315O	0
A430	1BKR52-1315	NO. 12 STATOR LIQUID COOLING PR	M8	M81315	CB315P	0
A430	1BKR52-1316	NO. 12 HYDRAULIC FLUID PUMP	M8	M81316	CB316O	0
A430	1BKR52-1316	NO. 12 HYDRAULIC FLUID PUMP	M8	M81316	CB316P	0
A430	1BKR52-1317	NO. 14 CONDENSER VAC PUMP	M8	M81317	CB317O	0
A430	1BKR52-1317	NO. 14 CONDENSER VAC PUMP	M8	M81317	CB317P	0
A430	1BKR52-1318	112 PH PRESS HTR MCC	M8	M81318	CB318O	0
A430	1BKR52-1318	112 PH PRESS HTR MCC	M8	M81318	CB318P	0
A430	1BKR52-1319	NO. 12 CEDM COOLER	M8	M81319	CB319O	0
A430	1BKR52-1319	NO. 12 CEDM COOLER	M8	M81319	CB319P	0
A430	1BKR52-1320	TURBINE MAIN CRANE 125 HP	M8	M81320	CB320O	0
A430	1BKR52-1320	TURBINE MAIN CRANE 125 HP	M8	M81320	CB320P	0
A430	1BKR52-1321	103WP WASTE PROCESS MCC	M8	M81321	CB321O	0
A430	1BKR52-1321	103WP WASTE PROCESS MCC	M8	M81321	CB321P	0
A430	1BKR52-1325	HTR DRN PP CHILLER FAN NO. 11A	M8	M81325	CB325O	0
A430	1BKR52-1325	HTR DRN PP CHILLER FAN NO. 11A	M8	M81325	CB325P	0
A430	1BKR52-1326	HTR DRN PP CHILLER FAN NO. 11B	M8	M81326	CB326O	0
A430	1BKR52-1326	HTR DRN PP CHILLER FAN NO. 11B	M8	M81326	CB326P	0
A430	1BKR152-1302	U-440-13B SERVICE TRANSF	M8	M8B13B	BN13BT	0
A430	1BUS1B03B	480V BUS 13B	M8	M8B13B	BU13BR	0
A430	1BKR52-1322	U-440-13B LOW SIDE BKR	M8	M8B13B	CB322T	0
A430	1BKR52-1313	116T TURB MCC	M8	M8BCBM	CB313T	0
1TB27-1	1BKR52-11601	MCC 116T MN FDR BKR	M8	M8BCBM	CBQ01T	0
1TB12-3	1PUMPSTC12	12 MG STATOR WTR CLG PUMP (1MB316)	M8	MB315Q	MB315Q	0
1TB12-4	1PUMPEHC12	12 MT EHC HYD UNIT PUMP (1MB316)	M8	MB316Q	MB316Q	0
1TB12-2 (CP)	1PUMPCAR14	14 CAR VAC PP (1MB317)	M8	MB317Q	MB317Q	0
1TB12-3	1PUMPWBP13	13 CW WTRBX PRMG PP (1M1608)	M8	MBQ08Q	MBQ08Q	0
1TB12-3	1PUMPWBPSWP13	13 CW WTRBX PRMG PP SEAL WTR PUMP (1M1610)	M8	MBQ10Q	MBQ10Q	0
1TB12-2	1PUMPFPTLOMOP11B	11B SGFP AUX OIL PUMP (1M1613)	M8	MBQ13Q	MBQ13Q	0
1TB12-2	1PUMPFPTLOMOP12B	12B SGFP AUX OIL PUMP (1M1614)	M8	MBQ14Q	MBQ14Q	0
1TB27-7	0PUMPRCPSPARE	SPARE RCP MTR OIL LIFT PP MTR (0M1617)	M8	MBQ17Q	MBQ17Q	0
1TB27-5E	1PUMPSWBSTR11	11 SW BOOSTER PUMP (1M1620)	M8	MBQ20Q	MBQ20Q	0
T602	0PUMPAHBFO12	12 AHB AUX BLR FUEL OIL PP (1M1635)	M8	MBQ35Q	MBQ35Q	0
YARD	1PUMPTLOXFROIL11	11 TURB LUB OIL XFR PUMP (1M1641)	M8	MBQ41Q	MBQ41Q	0
1TB12-2 (CP)	1PUMPSMP11TB11	11 TURB BLDG SUMP 11 PP (1M1642)	M8	MBQ42Q	MBQ42Q	0
1TB12-2 (CP)	1PUMPSMP11TB12	11 TURB BLDG SUMP PP 12 (1M1643)	M8	MBQ43Q	MBQ43Q	0
1TB12-2 (CP)	1PUMPMSBD12	12 AUX BD TK PUMP (1M1656)	M8	MBQ56Q	MBQ56Q	0
1TB27-5E	1PUMPSMP12TB11	12 TURB BLDG SUMP PP 11 (1M1663)	M8	MBQ63Q	MBQ63Q	0
1TB27-5E	1PUMPSMP12TB12	12 TURB BLDG SUMP 12 PP (1M1664)	M8	MBQ64Q	MBQ64Q	0
UNK	1M1671	CONDENSATE COLL TANK 11 PP 12 (1M1671)	M8	MBQ71Q	MBQ71Q	0
UNK	1M1672	CONDENSATE COLL TANK 11 PP 11 (1M1672)	M8	MBQ72Q	MBQ72Q	0
1TB12-3 (CP)	1PUMPCDMTRLO12	12 CD PP LO CLR PP (1M1606)	M8	MMQ06Q	MMQ06Q	0
1TB12-3 (CP)	1PUMPCDMTRLO13	13 CD PP LO CLR PP (1M1607)	M8	MMQ07Q	MMQ07Q	0
1NSB10-1	1PUMPMT4268	MT LUBE OIL CNDTNR PP (1M1621)	M8	MMQ21Q	MMQ21Q	0
1TB12-2 (CP)	1PUMPCARSWP13	13 CAR SEAL WTR PUMP (1M1636)	M8	MMQ36Q	MMQ36Q	0
1TB12-2 (CP)	1PUMPCARSWP14	14 CAR SEAL WTR PUMP (1M1637)	M8	MMQ37Q	MMQ37Q	0
2TB27-8	0PUMPPHTB11	11 HTG TURB BLDG HWC PUMP (0M1667)	M8	MMQ67Q	MMQ67Q	0
1TB45-1	0PUMPHVACWCW12	12 CHILLED WTR CR HVAC (1M1668)	M8	MMQ68Q	MMQ68Q	0
1TB12-2	1PUMPHDVLOP12A	12A HTR DRN PP LO CLR PP (1M1676)	M8	MMQ76Q	MMQ76Q	0
1TB12-2	1PUMPHDVLOP12B	12B HTR DRN PP LO CLR PP (1M1677)	M8	MMQ77Q	MMQ77Q	0
1TB12-3 (CP)	1MOV5237	12B COND'R INLET STRNR VLV	M8	MVQ02Q	MVQ02Q	0
1TB12-3 (CP)	1MOV5241	13A COND'R STRNR INLET VLV	M8	MVQ03Q	MVQ03Q	0
1TB12-3 (CP)	1MOV5245	13B COND'R INLET STRNR VLV	M8	MVQ04Q	MVQ04Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-3	1MOV6717	COND VAC BKR	M8	MVQ18Q	MVQ18Q	0
1TB12-2	1MOV5092	12 SGFP HP STOP ABOVE SEAT DRN	M8	MVQ28Q	MVQ28Q	0
1TB12-4	1MOV4022	11 MSR 2ND STG RHT SUPP DRN	M8	MVQ29Q	MVQ29Q	0
1TB12-4	1MOV4023	12 MSR 2ND STAGE RHT SUPP DRN	M8	MVQ30Q	MVQ30Q	0
1TB12-4	1MOV4678	AUX STM SEAL SUPPLY VLV	M8	MVQ31Q	MVQ31Q	0
1TB12-2	1MOV5094	12 SGFP LP STOP ABOVE SEAT DRN	M8	MVQ38Q	MVQ38Q	0
1TB27-3	1MOV3981	12 SGF PP TURB EXH	M8	MVQ40Q	MVQ40Q	0
1TB12-2	1MOV5093	12 SGFP HP STOP BELOW SEAT DRN	M8	MVQ44Q	MVQ44Q	0
1TB12-2	1MOV5095	12 SGFP LP STOP BELOW SEAT & CV CHEST DRN	M8	MVQ46Q	MVQ46Q	0
1TB12-2	1MOV5096	12 SGFP 1ST STG EXH DRN	M8	MVQ49Q	MVQ49Q	0
1TB12-4	1MOV4025	MS TO 11 MSR 2ND STG	M8	MVQ51Q	MVQ51Q	0
1TB27-5W	1MOV4017	MS TO 12 MSR 2ND STG CONT	M8	MVQ52Q	MVQ52Q	0
1TB27-6	1MOV4020	EXTRACTION STEAM TO MOISTURE SEPARATOR REHE	M8	MVQ53Q	MVQ53Q	0
13K11/12	1X13KV/BUS11&12	480V POWER FOR 13KV BUS 11 & 12	M8	TMQ16Q	TMQ16Q	0
1TB27-1	1XL-208-112	LTG XFMR L-208-112 TURB BLDG EL 27 FT	M8	TMQ39Q	TMQ39Q	0
FPPPHS	1XL-208-119	LTG XFMR L-208-119 FIRE PP HOUSE EL GRADE LVL	M8	TMQ45Q	TMQ45Q	0
1TB27-1	1XDT116	LTG DISTR XFMR 116	M8	TMQ47Q	TMQ47Q	0
UNK	1LIGHT-TBHB116	TURB BLDG HIGH BAY LIGHTING - MCC116T	M8	TMQ61Q	TMQ61Q	0
UNK	1LIGHT-TBLB116	TURB BLDG LOW BAY LIGHTING - MCC116T	M8	TMQ62Q	TMQ62Q	0
UNK	1XL-208-126	LTG XFMR L-208-126 TURB BLDG LTG EL 69 FT	M8	TMQ65Q	TMQ65Q	0
YARD	1X1X116	480/120 VOLT DIST XFMR	M8	TMQ69Q	TMQ69Q	0
1CNT34-1	1FANHVACCEDMS12	12 CEDM COOLER FAN (1MB319)	M8	VA319Q	VA319Q	0
1X54	0FANHDPCW11A	HTR DRN PP CLR 11A FAN (1MB325)	M8	VA325Q	VA325Q	0
1X54	0FANHDPCW11B	HTR DRN PP CLR 11B FAN (1MB326)	M8	VA326Q	VA326Q	0
1TB12-2	1FANFPTLOCDTRE12	12 SGFP LO COND FAN (1M1612)	M8	VAQ12Q	VAQ12Q	0
1TB12-2	1FANFPTLORESVE12	12 SGFP LO RESV VAPOR EXT (1M1615)	M8	VAQ15Q	VAQ15Q	0
1TB12-4	1M1633	12 STM PACKING EXH MTR (1M1633)	M8	VAQ33Q	VAQ33Q	0
1TB45-3	1FANHVACTBUHS15	15 TB EAST SIDE UNIT HTR (1M1657)	M8	VAQ57Q	VAQ57Q	0
1TB45-3	1FANHVACTBS16	16 TB EAST SIDE VENT HTR (1M1658)	M8	VAQ58Q	VAQ58Q	0
1TB12-3 (CP)	1M1659	12 COND PP LUBE OIL COOLER FAN MTR (1M1659)	M8	VAQ59Q	VAQ59Q	0
1TB12-3 (CP)	1M1660	13 COND PP LUBE OIL COOLER FAN MTR (1M1660)	M8	VAQ60Q	VAQ60Q	0
P13000-1	1FANP-13000-1/CB	TRANSF (P-13000-1) COOLING B (NORM)	M8	VAQ73Q	VAQ73Q	0
U4000-11	1FANU-4000-11/CB	TRANSF (U-4000-11) COOLING B	M8	VAQ74Q	VAQ74Q	0
U4000-21	2FANU-4000-21/CB	TRANSF (U-4000-21) COOLING B	M8	VAQ75Q	VAQ75Q	0
1TB12-2	1M1678	12 HDV HTR DRN PP LUBE OIL CLR FAN 12 MTR (1M1678	M8	VAQ78Q	VAQ78Q	0
1TB27-7	1PS4453	11 CD BOOSTER PP SUCTION LOW PS	MC	MCBP10	PS453R	0
1TB27-7	1PS4513	COND BOOSTER PUMP 11 PS	MC	MCBP10	PS513R	0
A317	1RY1A204/2/4453	11 COND CBP BKR 152-1204 TIME DELAY DROP OUT RE	MC	MCBP10	RY242P	0
A317	1RY1A204/3	COND BOOSTER PUMP 11 AUX RELAY	MC	MCBP10	RY243T	0
A317	1PY4453	11 COND CBP PRESSURE CONVERTER REL	MC	MCBP10	RY453P	0
1TB27-7	1PS4460	12 CD BOOSTER PP SUCTION LOW PS	MC	MCBP20	PS460R	0
1TB27-7	1PS4514	COND BOOSTER PUMP 12 PS	MC	MCBP20	PS514R	0
A317	1RY1A205/2/4460	12 COND CBP BKR 152-1205 TIME DELAY DROP OUT RE	MC	MCBP20	RY252P	0
A317	1RY1A205/3	COND BOOSTER PUMP 12 AUX RELAY	MC	MCBP20	RY253T	0
A317	1PY4460	12 COND CBP PRESSURE CONVERTER REL	MC	MCBP20	RY460P	0
1TB12-2	1PS4467	13 CD BOOSTER PP SUCTION LOW PS	MC	MCBP30	PS467R	0
1TB12-2	1PS4468	13 CD BOOSTER PP DISCHARGE LOW PS	MC	MCBP30	PS468D	0
1TB12-2	1PS4515	COND BOOSTER PUMP 13 PS	MC	MCBP30	PS515R	0
A430	1RY1A304/2/4467	13 COND CBP BKR 152-1304 TIME DELAY DROP OUT RE	MC	MCBP30	RY342P	0
A430	1RY1A304/3	13 COND BOOSTER PUMP AUX RELAY	MC	MCBP30	RY343T	0
A430	1PY4467	13 COND CBP PRESSURE CONVERTER REL	MC	MCBP30	RY467P	0
A405	1RY1CSSGC/X2	UNIT 1 CTMT OVERPRESSURE PROT	MC	MCBP30	RYX2CT	0
A306	1RYAR-XK40	CSAS SUB CH A3-1	MC	MCCD99	RYA40T	0
A306	1RYAR-XK68	SGIS SUB CH A1	MC	MCCD99	RYA68T	0
A306	1RYBR-XK36	CSAS SUB CH B3-1	MC	MCCD99	RYB36T	0
A306	1RYBR-XK57	SGIS SUB CH B1	MC	MCCD99	RYB57T	0
A405	1RY1CSSGA/X2	UNIT 1 CTMT OVERPRESSURE PROT	MC	MCCD99	RYX2AT	0
A405	1RY1CSSGB/X2	UNIT 1 CTMT OVERPRESSURE PROT	MC	MCCD99	RYX2BT	0
1TB12-4	1HXSTMSEALEXH11	11 CD STM SEAL EXH CNDSR	MC	MCCOMM	HXSSEB	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-4	1HXSTMSEALEXH11	11 CD STM SEAL EXH CNDSR	MC	MCCOMM	HXSSEP	0
1TB12-3	1HXCDDC11A	11A COND/FW DRN CLR	MC	MCDC10	HXD1AB	0
1TB12-3	1HXCDDC11A	11A COND/FW DRN CLR	MC	MCDC10	HXD1AP	0
1TB12-3	1HXCDDC11B	11B COND/FW DRN CLR	MC	MCDC20	HXD1BB	0
1TB12-3	1HXCDDC11B	11B COND/FW DRN CLR	MC	MCDC20	HXD1BP	0
1TB12-3	1HXCDDC11C	11C COND/FW DRN CLR	MC	MCDC30	HXD1CB	0
1TB12-3	1HXCDDC11C	11C COND/FW DRN CLR	MC	MCDC30	HXD1CP	0
1TB27-4	1HXCDLPH11A	11A LP COND/FW HTR	MC	MCFH10	HX11AB	0
1TB27-4	1HXCDLPH11A	11A LP COND/FW HTR	MC	MCFH10	HX11AP	0
1TB27-4	1HXCDLPH12A	12A LP COND/FW HTR	MC	MCFH10	HX12AB	0
1TB27-4	1HXCDLPH12A	12A LP COND/FW HTR	MC	MCFH10	HX12AP	0
1TB27-4	1HXCDLPH11B	11B LP COND/FW HTR	MC	MCFH20	HX11BB	0
1TB27-4	1HXCDLPH11B	11B LP COND/FW HTR	MC	MCFH20	HX11BP	0
1TB27-4	1HXCDLPH12B	12B LP COND/FW HTR	MC	MCFH20	HX12BB	0
1TB27-4	1HXCDLPH12B	12B LP COND/FW HTR	MC	MCFH20	HX12BP	0
1TB27-4	1HXCDLPH11C	11C LP COND/FW HTR	MC	MCFH30	HX11CB	0
1TB27-4	1HXCDLPH11C	11C LP COND/FW HTR	MC	MCFH30	HX11CP	0
1TB27-4	1HXCDLPH12C	12C LP COND/FW HTR	MC	MCFH30	HX12CB	0
1TB27-4	1HXCDLPH12C	12C LP COND/FW HTR	MC	MCFH30	HX12CP	0
1TB12-1	1HXCDLPH13A	13A LP COND/FW HTR	MC	MCFH40	HX13AB	0
1TB12-1	1HXCDLPH13A	13A LP COND/FW HTR	MC	MCFH40	HX13AP	0
1TB27-2	1HXCDLPH14A	14A LP COND/FW HTR	MC	MCFH40	HX14AB	0
1TB27-2	1HXCDLPH14A	14A LP COND/FW HTR	MC	MCFH40	HX14AP	0
1TB45-2	1HXCDLPH15A	15A LP COND/FW HTR	MC	MCFH40	HX15AB	0
1TB45-2	1HXCDLPH15A	15A LP COND/FW HTR	MC	MCFH40	HX15AP	0
1TB12-1	1HXCDLPH13B	13B LP COND/FW HTR	MC	MCFH50	HX13BB	0
1TB12-1	1HXCDLPH13B	13B LP COND/FW HTR	MC	MCFH50	HX13BP	0
1TB27-2	1HXCDLPH14B	14B LP COND/FW HTR	MC	MCFH50	HX14BB	0
1TB27-2	1HXCDLPH14B	14B LP COND/FW HTR	MC	MCFH50	HX14BP	0
1TB45-2	1HXCDLPH15B	15B LP COND/FW HTR	MC	MCFH50	HX15BB	0
1TB45-2	1HXCDLPH15B	15B LP COND/FW HTR	MC	MCFH50	HX15BP	0
1TB27-7	1TCV1619	11 CBP LO CLR TCV	MC	MCLO15	C7619P	0
1TB27-7	1HXCDBSTRLO11	11 CD BSTR PUMP LUBE OIL COOLER	MC	MCLO15	HXM11B	0
1TB27-7	1HXCDBSTRLO11	11 CD BSTR PUMP LUBE OIL COOLER	MC	MCLO15	HXM11P	0
1TB27-7	1HXCBP-SW-11A	CBP-11 SEAL WATER COOLER 11A	MC	MCLO15	HXS1AB	0
1TB27-7	1HXCBP-SW-11A	CBP-11 SEAL WATER COOLER 11A	MC	MCLO15	HXS1AP	0
1TB27-7	1HXCBP-SW-11B	CBP-11 SEAL WATER COOLER 11B	MC	MCLO15	HXS1BB	0
1TB27-7	1HXCBP-SW-11B	CBP-11 SEAL WATER COOLER 11B	MC	MCLO15	HXS1BP	0
1TB27-7	1TCV1620	12 CBP LO CLR TEMP TCV	MC	MCLO25	C7620P	0
1TB27-7	1HXCDBSTRLO12	12 CD BSTR PUMP LO CLR	MC	MCLO25	HXM12B	0
1TB27-7	1HXCDBSTRLO12	12 CD BSTR PUMP LO CLR	MC	MCLO25	HXM12P	0
1TB27-7	1HXCBP-SW-12A	CBP-12 SEAL WATER COOLER 12A	MC	MCLO25	HXS2AB	0
1TB27-7	1HXCBP-SW-12A	CBP-12 SEAL WATER COOLER 12A	MC	MCLO25	HXS2AP	0
1TB27-7	1HXCBP-SW-12B	CBP-12 SEAL WATER COOLER 12B	MC	MCLO25	HXS2BB	0
1TB27-7	1HXCBP-SW-12B	CBP-12 SEAL WATER COOLER 12B	MC	MCLO25	HXS2BP	0
1TB12-2	1TCV1621	13 CBP LO CLR TCV	MC	MCLO35	C7621P	0
1TB12-2	1HXCDBSTRLO13	13 CD BSTR PUMP LO CLR	MC	MCLO35	HXM13B	0
1TB12-2	1HXCDBSTRLO13	13 CD BSTR PUMP LO CLR	MC	MCLO35	HXM13P	0
1TB12-2	1HXCBP-SW-13A	CBP-13 SEAL WATER COOLER 13A	MC	MCLO35	HXS3AB	0
1TB12-2	1HXCBP-SW-13A	CBP-13 SEAL WATER COOLER 13A	MC	MCLO35	HXS3AP	0
1TB12-2	1HXCBP-SW-13B	CBP-13 SEAL WATER COOLER 13B	MC	MCLO35	HXS3BB	0
1TB12-2	1HXCBP-SW-13B	CBP-13 SEAL WATER COOLER 13B	MC	MCLO35	HXS3BP	0
1TB27-4	1CV4438	COND PP'S MINI-FLOW CV	MC	MCMN10	CV438O	0
1TB27-4	1I/P4438	COND PMPS MINIMUM FLOW VLV CON	MC	MCMN10	CV438O	0
1TB27-4	1SV4438	COND PUMPS MIN FLOW VLV CONTRL	MC	MCMN10	CV438O	0
1TB27-4	1CV4438	COND PP'S MINI-FLOW CV	MC	MCMN10	CV438P	0
1TB27-4	1I/P4438	COND PMPS MINIMUM FLOW VLV CON	MC	MCMN10	CV438P	0
1TB27-4	1SV4438	COND PUMPS MIN FLOW VLV CONTRL	MC	MCMN10	CV438P	0
A405	1FIC4438	CD PP MINI FLOW CONTROL FIC	MC	MCMN10	FC438R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-5E	1FT4438A	CD GLAND STEAM CONDENSER MINI FLOW CONTROL	MC	MCMN10	FT38AR	0
A306	1FY4438A	CD GLAND STEAM CONDENSER MINI FLOW CONTROL	MC	MCMN10	FY38AR	0
A430	1FY4438B	CD GLAND STEAM CONDENSER MINI FLOW FY	MC	MCMN10	FY38BR	0
1TB27-3	1CV4486	CBP'S MINI FLOW CV	MC	MCMN40	CV486O	0
1TB27-3	1SV4486	COND BSTR PMPS MIN FLOW CONT	MC	MCMN40	CV486O	0
1TB27-3	1CV4486	CBP'S MINI FLOW CV	MC	MCMN40	CV486P	0
1TB27-3	1SV4486	COND BSTR PMPS MIN FLOW CONT	MC	MCMN40	CV486P	0
1TB12-3	1FIC4486	CD BOOSTER PP MINI FLOW CONTROL FIC	MC	MCMN40	FC486R	0
1TB12-1	1FY4486	CD BOOSTER PP MINI FLOW CONTROL FY	MC	MCMN40	FY486R	0
1TB12-1	1FT4484	11 SGFP SUCT FLO XMTR	MC	MCMN51	FT484R	0
1TB12-1	1FY4484	11 FW SGFP SUCT FLO DEVICE	MC	MCMN51	FY484R	0
1TB12-2	1FT4485	12 FW SGFP SUCT FLO XMTR	MC	MCMN52	FT485R	0
1TB12-1	1FY4485	11 & 12 COND BSTR PP MINI FLO DEVICE	MC	MCMN52	FY485R	0
1TB12-2	1HXCDPPLOCLR11	11 CD PP LO CLR	MC	MCPP10	HXL11B	0
1TB12-2	1HXCDPPLOCLR11	11 CD PP LO CLR	MC	MCPP10	HXL11P	0
1TB12-3 (CP)	1YS4414	COND PMP MOTOR 11 OIL STRAINER	MC	MCPP10	YS414P	0
1TB12-2	1HXCDPPLOCLR12	12 CD PP LO CLR	MC	MCPP20	HXL12B	0
1TB12-2	1HXCDPPLOCLR12	12 CD PP LO CLR	MC	MCPP20	HXL12P	0
1TB12-3 (CP)	1YS4421	COND PMP MOTOR 12 OIL STRAINER	MC	MCPP20	YS421P	0
1TB12-2	1HXCDPPLOCLR13	13 CD PP LO CLR	MC	MCPP30	HXL13B	0
1TB12-2	1HXCDPPLOCLR13	13 CD PP LO CLR	MC	MCPP30	HXL13P	0
1TB12-3 (CP)	1YS4428	COND PMP MOTOR 13 OIL STRAINER	MC	MCPP30	YS428P	0
1TB12-3 (CP)	1PUMPCDMTRLO11	11 CD PP LO CLR PP (1M0607)	MC	MML11R	MML11R	0
1TB12-3 (CP)	1PUMPCDMTRLO12	12 CD PP LO CLR PP (1M1606)	MC	MML12R	MML12R	0
1TB12-3 (CP)	1PUMPCDMTRLO13	13 CD PP LO CLR PP (1M1607)	MC	MML13R	MML13R	0
1TB27-7	1PUMPCBP11	CD CBP 11 (1MA204)	MC	MYB11R	MYB11R	0
1TB27-7	1PUMPCBP11	CD CBP 11 (1MA204)	MC	MYB11S	MYB11S	0
1TB27-7	1PUMPCBP12	CD CBP 12 (1MA205)	MC	MYB12R	MYB12R	0
1TB27-7	1PUMPCBP12	CD CBP 12 (1MA205)	MC	MYB12S	MYB12S	0
1TB12-2	1PUMPCBP13	CD CBP 13 (1MA304)	MC	MYB13R	MYB13R	0
1TB12-2	1PUMPCBP13	CD CBP 13 (1MA304)	MC	MYB13S	MYB13S	0
1TB12-3 (CP)	1PUMPCD11	11 CONDENSATE PUMP (1MA207)	MC	MYC11R	MYC11R	0
1TB12-3 (CP)	1PUMPCD12	12 CONDENSATE PUMP (1MA307)	MC	MYC12R	MYC12R	0
1TB12-3 (CP)	1PUMPCD13	13 CONDENSATE PUMP (1MA308)	MC	MYC13R	MYC13R	0
1TB12-3	1PUMPCBP-LO-11	CBP-11 LUBE OIL PUMP	MC	NDL11R	NDL11R	0
1TB12-3	1PUMPCBP-LO-12	CBP-12 LUBE OIL PUMP	MC	NDL12R	NDL12R	0
1TB12-3	1PUMPCBP-LO-13	CBP-13 LUBE OIL PUMP	MC	NDL13R	NDL13R	0
A315	1PCV4415	COND PP 11 SEAL WTR REG	MC	PC415R	PC415R	0
A315	1PCV4422	COND PP 12 SEAL WTR REG	MC	PC422R	PC422R	0
A315	1PCV4506	COND PP 13 SEAL WTR REG	MC	PC506R	PC506R	0
A405	1RY1CSSGC/X1	UNIT 1 CTMT OVERPRESSURE PROT	MC	RYX1CT	RYX1CT	0
1TB27-7	1TE1619	11 CD CBP LUBE OIL CLR TE	MC	TE619R	TE619R	0
1TB27-7	1TE1620	12 CD CBP LUBE OIL CLR OUT TE	MC	TE620R	TE620R	0
1TB12-2	1TE1621	13 CD CBP LUBE OIL CLR OUT TE	MC	TE621R	TE621R	0
1TB12-3 (CP)	1M0659	11 COND PP LUBE OIL COOLER FAN MTR (1M0659)	MC	VAL11R	VAL11R	0
1TB12-3 (CP)	1M1659	12 COND PP LUBE OIL COOLER FAN MTR (1M1659)	MC	VAL12R	VAL12R	0
1TB12-3 (CP)	1M1660	13 COND PP LUBE OIL COOLER FAN MTR (1M1660)	MC	VAL13R	VAL13R	0
A315	1CV4070	11 S/G MS TO AFW PP TURB	MH	BHEF1I	Open	12
A315	1CV4071	12 S/G MS TO AFW PP TURB	MH	BHEF1I	Open	12
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0
1TB27-2	1CV1105	11 SG FD REG VLV BYP	MN	C3105O	C3105O	0
A405	1FIC1105	11 SG FD WTR BYPASS VLV	MN	C3105O	C3105O	0
1TB27-2	1I/P1105	STM GEN 11 FDWTR BY-PASS VALVE	MN	C3105O	C3105O	0
1TB27-2	1CV1105	11 SG FD REG VLV BYP	MN	C3105P	C3105P	0
A405	1FIC1105	11 SG FD WTR BYPASS VLV	MN	C3105P	C3105P	0
1TB27-2	1I/P1105	STM GEN 11 FDWTR BY-PASS VALVE	MN	C3105P	C3105P	0
1TB27-2	1CV1106	12 SG FD REG VALVE BYPASS	MN	C3106O	C3106O	0
A405	1FIC1106	12 SG FD WTR BYPASS VLV	MN	C3106O	C3106O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-2	1I/P1106	STM GEN 12 FDWTR BY-PASS VALVE	MN	C3106O	C3106O	0
1TB27-2	1CV1106	12 SG FD REG VALVE BYPASS	MN	C3106P	C3106P	0
A405	1FIC1106	12 SG FD WTR BYPASS VLV	MN	C3106P	C3106P	0
1TB27-2	1I/P1106	STM GEN 12 FDWTR BY-PASS VALVE	MN	C3106P	C3106P	0
1TB27-1	1BKR52-10613	MCC 106T SGFP 11 MN OIL PP BKR	MN	CB013T	CB013T	0
1TB27-1	1BKR52-10614	MCC 106T SGFP 12 MN OIL PP BKR	MN	CB014T	CB014T	0
1TB27-1	1BKR52-11613	MCC 116T SGFP 11 AUX OIL PP BKR	MN	CB113T	CB113T	0
1TB27-1	1BKR52-11614	MCC 116T SGFP 12 AUX OIL PP BKR	MN	CB114T	CB114T	0
1TB12-2	1CV4484	11 SGFP MINI FLOW	MN	CV484O	CV484O	0
1TB12-2	1FY4484A	SGFP 11 MIN FLOW CONTROL	MN	CV484O	CV484O	0
1TB12-2	1FY4484B	SGFP 11 MIN FLOW CONTROL	MN	CV484O	CV484O	0
1TB12-2	1FY4484C	SG FEED PUMP 11 MIN FLOW CONTROL	MN	CV484O	CV484O	0
1TB12-2	1I/P4484	STEAM GENERATOR FEED PUMP 11 MINIFLOW	MN	CV484O	CV484O	0
1TB12-2	1PCV4484A	A/S 11 SGFP MINFLW CV POSIT	MN	CV484O	CV484O	0
1TB12-2	1PCV4484B	A/S 11 SGFP MINFLW CLOSE SV	MN	CV484O	CV484O	0
1TB12-2	1PCV4484C	A/S 11 SGFP MINFLW SNP RY	MN	CV484O	CV484O	0
1TB12-2	1PCV4484D	A/S 11 SGFP MINFLW CONT	MN	CV484O	CV484O	0
1TB12-2	1SV4484	SGFP 11 TURB TRIP & RESET	MN	CV484O	CV484O	0
1TB12-2	1CV4485	12 SGFP MINI FLOW	MN	CV485O	CV485O	0
1TB12-2	1FY4485A	SGFP 12 MIN FLOW CONTROL	MN	CV485O	CV485O	0
1TB12-2	1FY4485B	SGFP 12 MIN FLOW CONTROL	MN	CV485O	CV485O	0
1TB12-2	1FY4485C	SG FEED PUMP 12 MIN FLO CONTROL	MN	CV485O	CV485O	0
1TB12-2	1I/P4485	STEAM GENERATOR FEED PUMP 12 MINIFLOW	MN	CV485O	CV485O	0
1TB12-2	1PCV4485A	A/S 12 SGFP MINFLW CV POSIT	MN	CV485O	CV485O	0
1TB12-2	1PCV4485B	A/S 12 SGFP MINFLW CLOSE SV	MN	CV485O	CV485O	0
1TB12-2	1PCV4485C	A/S 12 SGFP MINFLW SNP RY	MN	CV485O	CV485O	0
1TB12-2	1PCV4485D	A/S 12 SGFP MINFLW CONT	MN	CV485O	CV485O	0
1TB12-2	1SV4485	SGFP 12 TURB TRIP & RESET	MN	CV485O	CV485O	0
1TB12-2	1PUMPFPTLOMOP11B	11B SGFP AUX OIL PUMP (1M1613)	MN	MB11BR	MB11BR	0
1TB12-2	1PUMPFPTLOMOP11B	11B SGFP AUX OIL PUMP (1M1613)	MN	MB11BS	MB11BS	0
1TB12-2	1PUMPFPTLOMOP12B	12B SGFP AUX OIL PUMP (1M1614)	MN	MB12BR	MB12BR	0
1TB12-2	1PUMPFPTLOMOP12B	12B SGFP AUX OIL PUMP (1M1614)	MN	MB12BS	MB12BS	0
1TB12-2	1PUMPFPTLOMOP11A	11A SGFP MAIN OIL PUMP (1M0613)	MN	MM11AR	MM11AR	0
1TB12-2	1PUMPFPTLOMOP12A	12A SGFP MAIN OIL PUMP (1M0614)	MN	MM12AR	MM12AR	0
1TB27-5E	1PUMPCDSGFPBSTR11	11 CD SGFP SEAL WTR BSTR PP (1M0112)	MN	MML11R	MML11R	0
1TB12-4	1PUMPCDSGFPBSTR12	12 CD SGFP SEAL WTR BSTR PP (1M0152)	MN	MML12R	MML12R	0
1TB12-4	1PUMPCDSGFPBSTR12	12 CD SGFP SEAL WTR BSTR PP (1M0152)	MN	MML12S	MML12S	0
A405	1RY1CSSGA/X1	UNIT 1 CTMT OVERPRESSURE PROT	MN	MN0022	RYX1AT	0
A405	1RY1CSSGB/X1	UNIT 1 CTMT OVERPRESSURE PROT	MN	MN0022	RYX1BT	0
1TB12-2	1PUMPFW11	11 STM GEN FEED PUMP (1M0121)	MN	MN011R	MN011R	0
1TB12-2	1PUMPFW12	12 STM GEN FEED PUMP (1M0161)	MN	MN012R	MN012R	0
A405	1HS4516	11 FW TO S/G ISOL VLV HS	MN	MNBYP1	HS516T	0
A315	1MOV4516	11 SG FW ISOL	MN	MNBYP1	MV516P	0
A405	1HS4517	12 FW TO S/G ISOL VLV HS	MN	MNBYP2	HS517T	0
A315	1MOV4517	12 SG FW ISOL	MN	MNBYP2	MV517P	0
1TB27-1	1MCC101AT	MCC 101AT	MN	MNF71B	BU01AR	0
1TB27-1	1BKR52-10101	MCC 101AT MAIN FDR BKR	MN	MNF71B	CB101T	0
A317	1BKR52-1109	101 AT TURB MCC	MN	MNF71B	CB109T	0
1TB27-1	1MCC101BT	MCC 101BT	MN	MNF72B	BU01BR	0
1TB27-1	1BKR52-10141	MCC 101BT MN FDR BKR	MN	MNF72B	CB141T	0
A430	1BKR52-1419	101 BT TURB MCC	MN	MNF72B	CB419T	0
A306	1DISC1Y0939	120I S/G 11 FW REG SYS ALT SUPP 1C35	MN	MNFW11	CA939T	0
A306	1FU1Y0939/FU	120I DISTR PNL BKR 39 FU	MN	MNFW11	FU939R	0
A405	1RY1C35/N	SG 11 FW REGULATION	MN	MNFW11	RY35NP	0
A405	1RY1C35/CR	SG 11 FW REGULATION	MN	MNFW11	RY5CRP	0
A306	1DISC1Y1028	120I SPARE	MN	MNFW12	CA028T	0
A306	1FU1Y1028/FU	120I DISTR PNL BKR 28 FU	MN	MNFW12	FU028R	0
A405	1RY1C35/A	SG 11 FW REGULATION	MN	MNFW12	RY35AE	0
A405	1RY1C35/CR	SG 11 FW REGULATION	MN	MNFW12	RY5CRD	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1DISC1Y1018	120I S/G 12 FW REG SYS (ALT SUPP) 1C36	MN	MNFW13	CA018T	0
A306	1FU1Y1018/FU	120I DISTR PNL BKR 18 FU	MN	MNFW13	FU018R	0
A405	1RY1C36/N	SG 12 FW REGULATION	MN	MNFW13	RY36NP	0
A405	1RY1C36/CR	SG 12 FW REGULATION	MN	MNFW13	RY6CRP	0
A306	1DISC1Y0949	120I SPARE	MN	MNFW14	CA949T	0
A306	1FU1Y0949/FU	120I DISTR PNL BKR 49 FU	MN	MNFW14	FU949R	0
A405	1RY1C36/A	SG 12 FW REGULATION	MN	MNFW14	RY36AE	0
A405	1RY1C36/CR	SG 12 FW REGULATION	MN	MNFW14	RY6CRD	0
A405	1RY1C35/K3	FEEDWATER REGULATING UNIT 1A	MN	MNFW15	RY5K3E	0
A405	1RY1C35/K3	FEEDWATER REGULATING UNIT 1A	MN	MNFW15	RY5K3P	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	MN	MNFW15	RY71AE	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	MN	MNFW15	RY71AP	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	MN	MNFW16	RY196E	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	MN	MNFW16	RY196P	0
A405	1RY1C36/K3	FEEDWATER REGULATING UNIT 1B	MN	MNFW16	RY6K3E	0
A405	1RY1C36/K3	FEEDWATER REGULATING UNIT 1B	MN	MNFW16	RY6K3P	0
1TB27-2	1HXFWHPH16A	16A HP FEEDWATER HTR	MN	MNFW30	HX16AB	0
1TB27-2	1HXFWHPH16A	16A HP FEEDWATER HTR	MN	MNFW30	HX16AP	0
1TB27-2	1HXFWHPH16B	16B HP FEEDWATER HTR	MN	MNFW40	HX16BB	0
1TB27-2	1HXFWHPH16B	16B HP FEEDWATER HTR	MN	MNFW40	HX16BP	0
1TB12-2	1CV3959B	11 FW SGFPT HP GOV VLV	MN	MNFW52	VT1HCP	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	MNFW52	VT1HCP	0
1TB12-2	1CV3959A	11 FW SGFPT HP STOP VLV	MN	MNFW52	VT1HSP	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	MNFW52	VT1HSP	0
1TB12-2	1CV3961B	11 FW SGFPT LP GOV VLV	MN	MNFW53	VT1LCP	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	MNFW53	VT1LCP	0
1TB12-2	1CV3961A	11 FW SGFPT LP STIP VLV	MN	MNFW53	VT1LSP	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	MNFW53	VT1LSP	0
A405	1HS5010	STM GEN FEED PMP TURB 11 TRIP	MN	MNFW54	HS010T	0
1TB12-2	1LS4705	11 GS GEN FEED PP TURBINE CASING HIGH LS	MN	MNFW54	LS705R	0
1TB27-3	1MOV3964	11 SGF PP TURB EXH	MN	MNFW54	MV964P	0
1TB12-2	1PS5002	BRG OIL HDR PS TO LOW PRESS TURB TRIPS	MN	MNFW54	PS002R	0
1TB12-2	1PS5025	11 FW SGFPT ACTIVE FRNT BTHR BRG PS	MN	MNFW54	PS025R	0
1TB12-2	1PS5027	11 FW SGFPT INACTIVE REAR THR BRG PS	MN	MNFW54	PS027R	0
1TB12-2	1SV5010	SGFP 11 TURB TRIP & RESET	MN	MNFW54	SV010T	0
1TB12-2	1CV4704	SGFP 11 PP SIDE SEAL BACK PRESS CV	MN	MNFW57	C7704P	0
1TB12-2	1CV4704	SGFP 11 PP SIDE SEAL BACK PRESS CV	MN	MNFW57	C7704T	0
1TB12-2	1CV4707	SGFP 11 TURB SIDE SEAL BACK PRESS CV	MN	MNFW57	C7707P	0
1TB12-2	1CV4707	SGFP 11 TURB SIDE SEAL BACK PRESS CV	MN	MNFW57	C7707T	0
1TB12-2	1CV4702	11 SGFP INJECT SEAL WTR CV	MN	MNFW57	CV702P	0
1TB12-2	1CV4705	11 SGFP INJECT SEAL WTR CV	MN	MNFW57	CV705P	0
1TB12-2	1PDC4702	11 CD SGFP INJECTION PDC	MN	MNFW57	PC702R	0
1TB12-2	1PC4704	11 FW SGFP INJECTION DISCHARGE PC	MN	MNFW57	PC704R	0
1TB12-2	1PDC4705	11 CD SGFP INJECTION PDC	MN	MNFW57	PC705R	0
1TB12-2	1PC4707	11 FW SGFP INJECTION DISCHARGE PC	MN	MNFW57	PC707R	0
1TB12-2	1CV4704OP	SGFP 11 PP SIDE SEAL BACK PRESS CV OPER	MN	MNFW57	PX704R	0
1TB12-2	1CV4707OP	SGFP 11 TURB SIDE SEAL BACK PRESS CV OPER	MN	MNFW57	PX707R	0
1TB12-2	1HXFPTLO-11	SGFP TURB LUBE OIL COOLER 11	MN	MNFW58	HX011B	0
1TB12-2	1HXFPTLO-11	SGFP TURB LUBE OIL COOLER 11	MN	MNFW58	HX011P	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
1TB12-2	1CV4484	11 SGFP MINI FLOW	MN	MNFW59	CV484P	0
1TB12-2	1FY4484A	SGFP 11 MIN FLOW CONTROL	MN	MNFW59	CV484P	0
1TB12-2	1FY4484B	SGFP 11 MIN FLOW CONTROL	MN	MNFW59	CV484P	0
1TB12-2	1FY4484C	SG FEED PUMP 11 MIN FLOW CONTROL	MN	MNFW59	CV484P	0
1TB12-2	1I/P4484	STEAM GENERATOR FEED PUMP 11 MINIFLOW	MN	MNFW59	CV484P	0
1TB12-2	1PCV4484A	A/S 11 SGFP MINFLW CV POSIT	MN	MNFW59	CV484P	0
1TB12-2	1PCV4484B	A/S 11 SGFP MINFLW CLOSE SV	MN	MNFW59	CV484P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-2	1PCV4484C	A/S 11 SGFP MINFLW SNP RY	MN	MNFW59	CV484P	0
1TB12-2	1PCV4484D	A/S 11 SGFP MINFLW CONT	MN	MNFW59	CV484P	0
1TB12-2	1SV4484	SGFP 11 TURB TRIP & RESET	MN	MNFW59	CV484P	0
A405	1FIC4484	11 FW SGFP MINI FLO INDIC CONTR	MN	MNFW59	FC484R	0
1TB12-1	1FT4484A	11 FW SGFP MINI FLO XMTR	MN	MNFW59	FT84AR	0
1TB12-2	1CV3974B	12 FW SGFPT HP GOV VLV	MN	MNFW62	VT2HCP	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	MNFW62	VT2HCP	0
1TB12-2	1CV3974A	12 FW SGFPT HP STOP VLV	MN	MNFW62	VT2HSP	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	MNFW62	VT2HSP	0
1TB12-2	1CV3980B	12 FW SGFPT LP GOV VLV	MN	MNFW63	VT2LCP	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	MNFW63	VT2LCP	0
1TB12-2	1CV3980A	12 FW SGFPT LP STOP VLV	MN	MNFW63	VT2LSP	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	MNFW63	VT2LSP	0
A405	1HS5057	STM GEN FEED PMP TURB 12 TRIP	MN	MNFW64	HS057T	0
1TB12-2	1LS4711	12 GS GEN FEED PP TURBINE CASING LS	MN	MNFW64	LS711R	0
1TB27-3	1MOV3981	12 SGF PP TURB EXH	MN	MNFW64	MV981P	0
1TB12-2	1PS5051	LOW BRG OIL PRESS TURB TRIP PS	MN	MNFW64	PS051R	0
1TB12-2	1PS5074	12 FW SGFPT ACTIVE FRNT THR BRG PS	MN	MNFW64	PS074R	0
1TB12-2	1PS5076	12 FW SGFPT INVACTIVE THR BRG PS	MN	MNFW64	PS076R	0
1TB12-2	1SV5059	SGFP 12 TURB TRIP & RESET	MN	MNFW64	SV059T	0
1TB12-2	1CV4710	12 SGFP SEAL DRN REG	MN	MNFW67	C7710P	0
1TB12-2	1CV4710	12 SGFP SEAL DRN REG	MN	MNFW67	C7710T	0
1TB12-2	1CV4713	12 SGFP SEAL DRN REG	MN	MNFW67	C7713P	0
1TB12-2	1CV4713	12 SGFP SEAL DRN REG	MN	MNFW67	C7713T	0
1TB12-2	1CV4708	12 SGFP INJECT SEAL WTR CV	MN	MNFW67	CV708P	0
1TB12-2	1CV4711	12 SGFP INJECT SEAL WTR CV	MN	MNFW67	CV711P	0
1TB12-2	1PDC4708	12 CD SGFP INJECTION PDC	MN	MNFW67	PC708R	0
1TB12-2	1PC4710	12 FW SEAL WTR DISCHARGE PC	MN	MNFW67	PC710R	0
1TB12-2	1PDC4711	12 CD SGFP INJECTION PDC	MN	MNFW67	PC711R	0
1TB12-2	1PC4713	12 FW SGFP SEAL WTR DISCHARGE PC	MN	MNFW67	PC713R	0
1TB12-2	1CV4710OP	12 SGFP SEAL DRN REG OPER	MN	MNFW67	PX710R	0
1TB12-2	1CV4713OP	12 SGFP SEAL DRN REG OPER	MN	MNFW67	PX713R	0
1TB12-2	1HXFPTLO-12	SGFP TURB LUBE OIL COOLER 12	MN	MNFW68	HX012B	0
1TB12-2	1HXFPTLO-12	SGFP TURB LUBE OIL COOLER 12	MN	MNFW68	HX012P	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
1TB12-2	1CV4485	12 SGFP MINI FLOW	MN	MNFW69	CV485P	0
1TB12-2	1FY4485A	SGFP 12 MIN FLOW CONTROL	MN	MNFW69	CV485P	0
1TB12-2	1FY4485B	SGFP 12 MIN FLOW CONTROL	MN	MNFW69	CV485P	0
1TB12-2	1FY4485C	SG FEED PUMP 12 MIN FLO CONTROL	MN	MNFW69	CV485P	0
1TB12-2	1I/P4485	STEAM GENERATOR FEED PUMP 12 MINIFLOW	MN	MNFW69	CV485P	0
1TB12-2	1PCV4485A	A/S 12 SGFP MINFLW CV POSIT	MN	MNFW69	CV485P	0
1TB12-2	1PCV4485B	A/S 12 SGFP MINFLW CLOSE SV	MN	MNFW69	CV485P	0
1TB12-2	1PCV4485C	A/S 12 SGFP MINFLW SNP RY	MN	MNFW69	CV485P	0
1TB12-2	1PCV4485D	A/S 12 SGFP MINFLW CONT	MN	MNFW69	CV485P	0
1TB12-2	1SV4485	SGFP 12 TURB TRIP & RESET	MN	MNFW69	CV485P	0
A405	1FIC4485	12 FW SGFP MINI FLO INDIC CONTR	MN	MNFW69	FC485R	0
1TB12-1	1FT4485A	12 FW SGFP MINI FLO XMTR	MN	MNFW69	FT85AR	0
A306	1RYAR-XK40	CSAS SUB CH A3-1	MN	MNFW99	RYA40T	0
A306	1RYAR-XK68	SGIS SUB CH A1	MN	MNFW99	RYA68T	0
A306	1RYBR-XK36	CSAS SUB CH B3-1	MN	MNFW99	RYB36T	0
A306	1RYBR-XK57	SGIS SUB CH B1	MN	MNFW99	RYB57T	0
1TB12-2	1CV1622	11 SGFP LUBE OIL TEMP CV	MN	MNSRW1	CT622P	0
1TB12-2	1TIC1622	LUBE OIL TEMPERATURE CONTROL	MN	MNSRW1	CT622P	0
1TB12-2	1CV1622	11 SGFP LUBE OIL TEMP CV	MN	MNSRW1	CT622R	0
1TB12-2	1TIC1622	LUBE OIL TEMPERATURE CONTROL	MN	MNSRW1	CT622R	0
1TB12-2	1CV1623	12 SGFP LUBE OIL TEMP CV	MN	MNSRW2	CT623P	0
1TB12-2	1TIC1623	LUBE OIL TEMPERATURE CONTROL	MN	MNSRW2	CT623P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-2	1CV1623	12 SGFP LUBE OIL TEMP CV	MN	MNSRW2	CT623R	0
1TB12-2	1TIC1623	LUBE OIL TEMPERATURE CONTROL	MN	MNSRW2	CT623R	0
1TB12-2	1PS5042A	12 FW SGFP AUX OIL PP PS	MN	PS42AD	PS42AD	0
1TB12-2	1PS4482	11 & 12 SGFP SUCT LO PS	MN	PS482R	PS482R	0
1TB12-2	1PS4483	11 & 12 SGFP SUCT LO PS	MN	PS483R	PS483R	0
1TB27-5E	1PS4486	CD SGFP SEAL WATER BOOSTER PPS SUCTION PS	MN	PS486R	PS486R	0
1TB12-4	1PS4487	CD SGFP SEAL WATER BOOSTER PPS DISCHARGE PS	MN	PS487D	PS487D	0
1TB12-2	1PS4490	11 FW SGFP DISCH PS	MN	PS490R	PS490R	0
1TB12-2	1PS4491	11 FW SGFP DISCH PS	MN	PS491R	PS491R	0
1TB12-2	1PS4495	12 FW SGFP DISCH PS	MN	PS495R	PS495R	0
1TB12-2	1PS4496	12 FW SGFP DISCH PS	MN	PS496R	PS496R	0
1TB12-2	1PS4992A	11 FW SGFP AUX OIL PUMP PS	MN	PS92AD	PS92AD	0
1TB12-2	1PY4482	SGFP 11 TURB TRIP & RESET	MN	RY482T	RY482T	0
1TB12-2	1PY4483	SGFP 11 TURB TRIP & RESET	MN	RY483T	RY483T	0
1TB12-2	1PY4482A	SGFP 12 LO SUCT PR ALARM	MN	RY82AT	RY82AT	0
1TB12-2	1PY4483A	SGFP 12 LO SUCT PR TRIP	MN	RY83AT	RY83AT	0
1TB12-2	1AY4483A	SGFP 12 LO SUCT PR TRIP	MN	RYA3AT	RYA3AT	0
1TB12-2	1AY4483	SGFP 11 TRIP & RESET	MN	RYA83T	RYA83T	0
A405	1RY1CSSGC/X1	UNIT 1 CTMT OVERPRESSURE PROT	MN	RYX1CT	RYX1CT	0
A405	1RY1CSSGA/X2	UNIT 1 CTMT OVERPRESSURE PROT	MN	RYX2AT	RYX2AT	0
A405	1RY1CSSGB/X2	UNIT 1 CTMT OVERPRESSURE PROT	MN	RYX2BT	RYX2BT	0
A405	1RY1CSSGC/X2	UNIT 1 CTMT OVERPRESSURE PROT	MN	RYX2CT	RYX2CT	0
1TB12-2	1CV3959B	11 FW SGFPT HP GOV VLV	MN	VT1HCO	VT1HCO	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	VT1HCO	VT1HCO	0
1TB12-2	1CV3961B	11 FW SGFPT LP GOV VLV	MN	VT1LCO	VT1LCO	0
A405	1HIC4516	11 SG FD PMP A TURB SPEED CONTR	MN	VT1LCO	VT1LCO	0
1TB12-2	1CV3974B	12 FW SGFPT HP GOV VLV	MN	VT2HCO	VT2HCO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	VT2HCO	VT2HCO	0
1TB12-2	1CV3980B	12 FW SGFPT LP GOV VLV	MN	VT2LCO	VT2LCO	0
A405	1HIC4517	12 SG FD PMP B TURB SPEED CONTR	MN	VT2LCO	VT2LCO	0
A306	1DISC1Y0939	120I S/G 11 FW REG SYS ALT SUPP 1C35	MP	MNFW11	CA939T	0
A306	1FU1Y0939/FU	120I DISTR PNL BKR 39 FU	MP	MNFW11	FU939R	0
A405	1RY1C35/N	SG 11 FW REGULATION	MP	MNFW11	RY35NP	0
A405	1RY1C35/CR	SG 11 FW REGULATION	MP	MNFW11	RY5CRP	0
A306	1DISC1Y1028	120I SPARE	MP	MNFW12	CA028T	0
A306	1FU1Y1028/FU	120I DISTR PNL BKR 28 FU	MP	MNFW12	FU028R	0
A405	1RY1C35/A	SG 11 FW REGULATION	MP	MNFW12	RY35AE	0
A405	1RY1C35/CR	SG 11 FW REGULATION	MP	MNFW12	RY5CRD	0
A306	1DISC1Y1018	120I S/G 12 FW REG SYS (ALT SUPP) 1C36	MP	MNFW13	CA018T	0
A306	1FU1Y1018/FU	120I DISTR PNL BKR 18 FU	MP	MNFW13	FU018R	0
A405	1RY1C36/N	SG 12 FW REGULATION	MP	MNFW13	RY36NP	0
A405	1RY1C36/CR	SG 12 FW REGULATION	MP	MNFW13	RY6CRP	0
A306	1DISC1Y0949	120I SPARE	MP	MNFW14	CA949T	0
A306	1FU1Y0949/FU	120I DISTR PNL BKR 49 FU	MP	MNFW14	FU949R	0
A405	1RY1C36/A	SG 12 FW REGULATION	MP	MNFW14	RY36AE	0
A405	1RY1C36/CR	SG 12 FW REGULATION	MP	MNFW14	RY6CRD	0
A405	1RY1C35/K2	FEEDWATER REGULATING UNIT 1A	MP	MP11AX	RY5K2E	0
A405	1RY1C35/K2	FEEDWATER REGULATING UNIT 1A	MP	MP11AX	RY5K2P	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	MP	MP11AX	RY71AE	0
A306	1RYXKT-1171A	CH A TURB TRIP LOL TO RPS	MP	MP11AX	RY71AP	0
1TB27-2	1CV1111	11 SG FD REG VLV	MP	MP11RV	CF111C	0
1TB27-2	1CV1111A	1CV1111 ACTUATOR CONTROL	MP	MP11RV	CF111C	0
1TB27-2	1CV1111B	1CV1111 ACTUATOR CONTROL	MP	MP11RV	CF111C	0
A405	1FIC1111	MN FEEDWTR VLV CONTROLLER	MP	MP11RV	CF111C	0
1TB27-2	1I/P1111	STM GEN 11 FDWTR CONTROL VALVE	MP	MP11RV	CF111C	0
1TB27-2	1SV1111	11 FRV AIR TO VALVE POSITIONER SV	MP	MP11RV	CF111C	0
1TB27-2	1CV1111	11 SG FD REG VLV	MP	MP11RV	CF111T	0
1TB27-2	1CV1111A	1CV1111 ACTUATOR CONTROL	MP	MP11RV	CF111T	0
1TB27-2	1CV1111B	1CV1111 ACTUATOR CONTROL	MP	MP11RV	CF111T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1FIC1111	MN FEEDWTR VLV CONTROLLER	MP	MP11RV	CF111T	0
1TB27-2	1I/P1111	STM GEN 11 FDWTR CONTROL VALVE	MP	MP11RV	CF111T	0
1TB27-2	1SV1111	11 FRV AIR TO VALVE POSITIONER SV	MP	MP11RV	CF111T	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	MP	MP12AX	RY196E	0
A306	1RYXKT-1196	CH B TURB TRIP LOL TO RPS	MP	MP12AX	RY196P	0
A405	1RY1C36/K2	FEEDWATER REGULATING UNIT 1B	MP	MP12AX	RY6K2E	0
A405	1RY1C36/K2	FEEDWATER REGULATING UNIT 1B	MP	MP12AX	RY6K2P	0
1TB27-2	1CV1121	12 SG FD REG VLV	MP	MP12RV	CF121C	0
1TB27-2	1CV1121A	1CV1121 ACTUATOR CONTROL	MP	MP12RV	CF121C	0
1TB27-2	1CV1121B	1CV1121 ACTUATOR CONTROL	MP	MP12RV	CF121C	0
A405	1FIC1121	MN FEEDWTR VLV CONTROLLER	MP	MP12RV	CF121C	0
1TB27-2	1I/P1111	STM GEN 11 FDWTR CONTROL VALVE	MP	MP12RV	CF121C	0
1TB27-2	1SV1121	12 FRV AIR TO VALVE POSITIONER SV	MP	MP12RV	CF121C	0
1TB27-2	1CV1121	12 SG FD REG VLV	MP	MP12RV	CF121T	0
1TB27-2	1CV1121A	1CV1121 ACTUATOR CONTROL	MP	MP12RV	CF121T	0
1TB27-2	1CV1121B	1CV1121 ACTUATOR CONTROL	MP	MP12RV	CF121T	0
A405	1FIC1121	MN FEEDWTR VLV CONTROLLER	MP	MP12RV	CF121T	0
1TB27-2	1I/P1111	STM GEN 11 FDWTR CONTROL VALVE	MP	MP12RV	CF121T	0
1TB27-2	1SV1121	12 FRV AIR TO VALVE POSITIONER SV	MP	MP12RV	CF121T	0
A306	1RYBR-XK103	TUV SUB CH B	MP	RY103E	RY103E	0
A306	1RYKT823	MT REACTOR TRIP BUS U/V OR SG HIGH LVL TRIP REL	MP	RY823E	RY823E	0
A306	1RYYKT/874	MT MASTER TRIP AND RESET SYS REL	MP	RY874E	RY874E	0
A306	1RYYKT/874	MT MASTER TRIP AND RESET SYS REL	MP	RY874P	RY874P	0
A306	1RYAR-XK40	CSAS SUB CH A3-1	MS	MSESFA	RYAX2P	0
A306	1RYAR-XK68	SGIS SUB CH A1	MS	MSESFA	RYK68P	0
A306	1RYBR-XK36	CSAS SUB CH B3-1	MS	MSESFB	RYBX2P	0
A306	1RYAR-XK57	CIS SUB CH A4-6/SIAS SUB CH 5-4	MS	MSESFB	RYK57P	0
A315	1CV4043	MSIV 11	MS	MT043C	MT043C	0
A405	1HS4043	11 MS ISOL VLV OPEN/CLOSE CONTROL HS	MS	MT043C	MT043C	0
A315	1CV4048	MSIV 12	MS	MT048C	MT048C	0
A405	1HS4048	12 MS ISOL VLV OPEN/CLOSE CONTROL HS	MS	MT048C	MT048C	0
A306	1RYAR-XK40	CSAS SUB CH A3-1	MS	RYAX2E	RYAX2E	0
A306	1RYBR-XK36	CSAS SUB CH B3-1	MS	RYBX2E	RYBX2E	0
A306	1RYAR-XK57	CIS SUB CH A4-6/SIAS SUB CH 5-4	MS	RYK57E	RYK57E	0
A306	1RYAR-XK68	SGIS SUB CH A1	MS	RYK68E	RYK68E	0
1TB12-2	1PUMPFW11	11 STM GEN FEED PUMP (1M0121)	MT	BHEMT1	Trips	0
1TB12-2	1PUMPFW12	12 STM GEN FEED PUMP (1M0161)	MT	BHEMT1	Trips	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A306	1RYAR-XK65	RAS SUB CH A2	MV	MV0A11	RYA65P	0
A306	1RYBR-XK54	RAS SUB CH B2	MV	MV0A11	RYB54P	0
1TB27-1	1MCC101AT	MCC 101AT	N1	BU109Q	BU109Q	0
1NSB31-1	1CHGR15	250D BATT CHGR 15	N1	CH107Q	CH107Q	0
A306	1CHGR11	125D BATT CHGR 11	N1	CH111Q	CH111Q	0
A512	0COMPCRA/CCOMPR11	CONTROL RM A/C COMPRESSOR 11 (1MB108)	N1	CQ108Q	CQ108Q	0
A524	1COMP5427	SWGR RM A/C COMPRESSOR 11 (1MB110)	N1	CQ110Q	CQ110Q	0
A317	1DISC89-1104	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A430	1DISC89-1404	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12
A317	1BKR52-1101	11 CAV CLG FAN	N1	N11101	CB101O	0
A317	1BKR52-1101	11 CAV CLG FAN	N1	N11101	CB101P	0
A317	1BKR52-1102	11 CONTMT AIR CLR	N1	N11102	CB102O	0
A317	1BKR52-1102	11 CONTMT AIR CLR	N1	N11102	CB102P	0
A317	1BKR52-1104	13 CHG PP	N1	N11104	CB104O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1BKR52-1104	13 CHG PP	N1	N11104	CB104P	0
A317	1BKR52-1105	11 CONTMT FILT UNIT	N1	N11105	CB105O	0
A317	1BKR52-1105	11 CONTMT FILT UNIT	N1	N11105	CB105P	0
A317	1BKR52-1106	11 COMP CLG PP	N1	N11106	CB106O	0
A317	1BKR52-1106	11 COMP CLG PP	N1	N11106	CB106P	0
A317	1BKR52-1107	15 BATT CHGR	N1	N11107	CB107O	0
A317	1BKR52-1107	15 BATT CHGR	N1	N11107	CB107P	0
A317	1BKR52-1108	11 CONT RM A/C COMPR	N1	N11108	CB108O	0
A317	1BKR52-1108	11 CONT RM A/C COMPR	N1	N11108	CB108P	0
A317	1BKR52-1109	101 AT TURB MCC	N1	N11109	CB109O	0
A317	1BKR52-1109	101 AT TURB MCC	N1	N11109	CB109P	0
A317	1BKR52-1110	11 SWGR RM A/C COMPR	N1	N11110	CB110O	0
A317	1BKR52-1110	11 SWGR RM A/C COMPR	N1	N11110	CB110P	0
A317	1BKR52-1111	11 BATT CHGR	N1	N11111	CB111O	0
A317	1BKR52-1111	11 BATT CHGR	N1	N11111	CB111P	0
A317	1BKR52-1130	11 PZR HTR PROP CONTR	N1	N11130	CB130O	0
A317	1BKR52-1130	11 PZR HTR PROP CONTR	N1	N11130	CB130P	0
A317	1BKR152-1114	U-440-11A SERVICE TRANSF	N1	N1B11A	BN11AT	0
A317	1BUS1B01A	480V BUS 11A	N1	N1B11A	BU11AR	0
A317	1BKR52-1112	U-440-11A LOW SIDE BKR	N1	N1B11A	CB112T	0
A317	1NB130	11A RC PZR HTR 11 PROP CONTR	N1	TC130Q	TC130Q	0
1CNT10-1	1FANHVACRXC11	11 RX CAVITY COOLING (1MB101)	N1	VB101Q	VB101Q	0
1CNT10-1	1FANHVACCTCLR11	CONTAINMENT COOLER 11 FAN (1MB102)	N1	VG102Q	VG102Q	0
1CNT69-1	1FANHVAC/PIR11	CONTAINMENT FILTER UNIT 11 (1MB105)	N1	VG105Q	VG105Q	0
A529	1MCC114R	MCC 114R	N2	BU119Q	BU119Q	6
A430	1MCC109PH	MCC 109PH	N2	BU127Q	BU127Q	0
A302	1CHGR14	125D BATT CHGR 14	N2	CH120Q	CH120Q	0
1TB12-4	1COMPIA11	11 IA COMPR (1MB118)	N2	CM118Q	CM118Q	0
1TB12-4	1COMPPA11	11 PA COMPR (1MB123)	N2	CM123Q	CM123Q	0
A423	1PNL1NB122	H2 RECOMBINER 11 POWER SUPPLY	N2	HR122Q	HR122Q	5
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	N2	MZ116Q	MZ116Q	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	N2	MZ116Q	MZ116Q	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12
A317	1BKR52-1114	12 CONTMT AIR CLR	N2	N21114	CB114O	0
A317	1BKR52-1114	12 CONTMT AIR CLR	N2	N21114	CB114P	0
A317	1BKR52-1115	11 CHG PP	N2	N21115	CB115O	0
A317	1BKR52-1115	11 CHG PP	N2	N21115	CB115P	0
A317	1BKR52-1116	13 COMP CLG PP	N2	N21116	CB116O	0
A317	1BKR52-1116	13 COMP CLG PP	N2	N21116	CB116P	0
A317	1BKR52-1117	11 MAIN PLT EXH FAN	N2	N21117	CB117O	0
A317	1BKR52-1117	11 MAIN PLT EXH FAN	N2	N21117	CB117P	0
A317	1BKR52-1118	11 INSTR AIR COMPR	N2	N21118	CB118O	0
A317	1BKR52-1118	11 INSTR AIR COMPR	N2	N21118	CB118P	0
A317	1BKR52-1119	114R RX MCC	N2	N21119	CB119O	0
A317	1BKR52-1119	114R RX MCC	N2	N21119	CB119P	0
A317	1BKR52-1120	14 BATT CHGR	N2	N21120	CB120O	0
A317	1BKR52-1120	14 BATT CHGR	N2	N21120	CB120P	0
A317	1BKR52-1121	13 CONTMT FILT UNIT	N2	N21121	CB121O	0
A317	1BKR52-1121	13 CONTMT FILT UNIT	N2	N21121	CB121P	0
A317	1BKR52-1122	H2 RECOMB PWR PNL 11	N2	N21122	CB122O	0
A317	1BKR52-1122	H2 RECOMB PWR PNL 11	N2	N21122	CB122P	0
A317	1BKR52-1123	PLANT AIR COMPRESSOR 11	N2	N21123	CB123O	0
A317	1BKR52-1123	PLANT AIR COMPRESSOR 11	N2	N21123	CB123P	0
A317	1BKR52-1127	109 PH PZR HTR MCC	N2	N21127	CB127O	0
A317	1BKR52-1127	109 PH PZR HTR MCC	N2	N21127	CB127P	0
A317	1BKR152-1102	U-440-11B SERVICE TRANSF	N2	N2B11B	BN11BT	0
A317	1BUS1B01B	480V BUS 11B	N2	N2B11B	BU11BR	0
A317	1BKR52-1113	U-440-11B LOW SIDE BKR	N2	N2B11B	CB113T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A524	1FANHVACABE11	11 AUX BLDG MAIN EXH (1MB117)	N2	VA117Q	VA117Q	0
1CNT10-2	1FANHVACCTCLR12	CONTAINMENT COOLER 12 FAN (1MB114)	N2	VG114Q	VG114Q	0
A317	1DISC89-1121	13 CONTMT FILT UNIT DISCS	N2	VG121Q	VG121Q	0
A430	1DISC89-1421	13 CONTMT FILT UNIT DISCS	N2	VG121Q	VG121Q	0
1CNT69-1	1FANHVAC/PIR13	CONTAINMENT FILTER UNIT 13 (1MB121)	N2	VG121Q	VG121Q	0
A423	1MCC104R	MCC 104R	N3	BU409Q	BU409Q	6
A302	1CHGR13	125D BATT CHGR 13	N3	CH407Q	CH407Q	0
A524	1COMP5431	SWGR RM A/C COMPRESSOR 12 (1MB410)	N3	CQ410Q	CQ410Q	0
A317	1DISC89-1104	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A430	1DISC89-1404	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12
A320	0PUMPSFP11	11 SFP CLG PP (1MB411)	N3	MZ411Q	MZ411Q	6
A430	1BKR52-1401	12 CAV CLG FAN	N3	N31401	CB401O	0
A430	1BKR52-1401	12 CAV CLG FAN	N3	N31401	CB401P	0
A430	1BKR52-1402	13 CONTMT AIR CLR	N3	N31402	CB402O	0
A430	1BKR52-1402	13 CONTMT AIR CLR	N3	N31402	CB402P	0
A430	1BKR52-1403	BKR 52-1403 OUTAGE POWER	N3	N31403	CB403O	0
A430	1BKR52-1403	BKR 52-1403 OUTAGE POWER	N3	N31403	CB403P	0
A430	1BKR52-1404	13 CHG PP	N3	N31404	CB404O	0
A430	1BKR52-1404	13 CHG PP	N3	N31404	CB404P	0
A430	1BKR52-1405	12 CONTMT FILT UNIT	N3	N31405	CB405O	0
A430	1BKR52-1405	12 CONTMT FILT UNIT	N3	N31405	CB405P	0
A430	1BKR52-1406	12 COMP CLG PP	N3	N31406	CB406O	0
A430	1BKR52-1406	12 COMP CLG PP	N3	N31406	CB406P	0
A430	1BKR52-1407	13 BATT CHGR	N3	N31407	CB407O	0
A430	1BKR52-1407	13 BATT CHGR	N3	N31407	CB407P	0
A430	1BKR52-1409	104R RX MCC	N3	N31409	CB409O	0
A430	1BKR52-1409	104R RX MCC	N3	N31409	CB409P	0
A430	1BKR52-1410	12 SWGR RM A/C COMPR	N3	N31410	CB410O	0
A430	1BKR52-1410	12 SWGR RM A/C COMPR	N3	N31410	CB410P	0
A430	1BKR52-1411	11 SFP CLG PP	N3	N31411	CB411O	0
A430	1BKR52-1411	11 SFP CLG PP	N3	N31411	CB411P	0
A430	1BKR52-1430	12 PZR HTR PROP CONTR	N3	N31430	CB430O	0
A430	1BKR52-1430	12 PZR HTR PROP CONTR	N3	N31430	CB430P	0
A430	1BKR152-1402	U-440-14A SERVICE TRANSF	N3	N3B14A	BN14AT	0
A430	1BUS1B04A	480V BUS 14A	N3	N3B14A	BU14AR	0
A430	1BKR52-1412	U-440-14A LOW SIDE BKR	N3	N3B14A	CB412T	0
A429	1NB430	14A RC PZR HTR 12 PROP CONTR	N3	TC430Q	TC430Q	0
1CNT10-1	1FANHVACRXC12	12 RX CAVITY COOLING (1MB401)	N3	VB401Q	VB401Q	0
1CNT45-1	1FANHVACCTCLR13	CONTAINMENT COOLER 13 FAN (1MB402)	N3	VG402Q	VG402Q	0
1CNT69-1	1FANHVAC/PIR12	CONTAINMENT FILTER UNIT 12 (1MB405)	N3	VG405Q	VG405Q	0
A559	1U011	HVAC/CR COMPUTER RM 11 ELECT HTR	N4	AJ425Q	AJ425Q	0
1TB27-1	1MCC101BT	MCC 101BT	N4	BU419Q	BU419Q	0
A430	1MCC111PH	MCC 111PH	N4	BU427Q	BU427Q	0
A306	1CHGR12	125D BATT CHGR 12	N4	CH420Q	CH420Q	0
1TB12-4	1COMPIA12	12 IA COMPR (1MB418)	N4	CM418Q	CM418Q	0
A429	1NB1NB422	H2 RECOMBINER 12 POWER SUPPLY	N4	HR422Q	HR422Q	7
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	N4	MZ416Q	MZ416Q	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	N4	MZ416Q	MZ416Q	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12
A430	1BKR52-1414	14 CONTMT AIR CLR	N4	N41414	CB414O	0
A430	1BKR52-1414	14 CONTMT AIR CLR	N4	N41414	CB414P	0
A430	1BKR52-1415	12 CHG PP	N4	N41415	CB415O	0
A430	1BKR52-1415	12 CHG PP	N4	N41415	CB415P	0
A430	1BKR52-1416	13 COMP CLG PP	N4	N41416	CB416O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A430	1BKR52-1416	13 COMP CLG PP	N4	N41416	CB416P	0
A430	1BKR52-1417	12 MAIN PLT EXH FAN	N4	N41417	CB417O	0
A430	1BKR52-1417	12 MAIN PLT EXH FAN	N4	N41417	CB417P	0
A430	1BKR52-1418	12 INSTR AIR COMPR	N4	N41418	CB418O	0
A430	1BKR52-1418	12 INSTR AIR COMPR	N4	N41418	CB418P	0
A430	1BKR52-1419	101 BT TURB MCC	N4	N41419	CB419O	0
A430	1BKR52-1419	101 BT TURB MCC	N4	N41419	CB419P	0
A430	1BKR52-1420	12 BATT CHGR	N4	N41420	CB420O	0
A430	1BKR52-1420	12 BATT CHGR	N4	N41420	CB420P	0
A430	1BKR52-1421	13 CONTMT FILT UNIT	N4	N41421	CB421O	0
A430	1BKR52-1421	13 CONTMT FILT UNIT	N4	N41421	CB421P	0
A430	1BKR52-1422	H2 RECOMB PWR PNL 12	N4	N41422	CB422O	0
A430	1BKR52-1422	H2 RECOMB PWR PNL 12	N4	N41422	CB422P	0
A430	1BKR52-1425	COMPUTER ROOM 11 HVAC	N4	N41425	CB425O	0
A430	1BKR52-1425	COMPUTER ROOM 11 HVAC	N4	N41425	CB425P	0
A430	1BKR52-1427	111 PH PZR HTR MCC	N4	N41427	CB427O	0
A430	1BKR52-1427	111 PH PZR HTR MCC	N4	N41427	CB427P	0
A430	1BKR152-1413	U-440-14B SERVICE TRANSF	N4	N4B14B	BN14BT	0
A430	1BUS1B04B	480V BUS 14B	N4	N4B14B	BU14BR	0
A430	1BKR52-1413	U-440-14B LOW SIDE BKR	N4	N4B14B	CB413T	0
A524	1FANHVACABE12	12 AUX BLDG MAIN EXH (1MB417)	N4	VA417Q	VA417Q	0
1CNT45-2	1FANHVACCTCLR14	CONTAINMENT COOLER 14 FAN (1MB414)	N4	VG414Q	VG414Q	0
A317	1DISC89-1121	13 CONTMT FILT UNIT DISCS	N4	VG421Q	VG421Q	0
A430	1DISC89-1421	13 CONTMT FILT UNIT DISCS	N4	VG421Q	VG421Q	0
1CNT69-1	1FANHVAC/PIR13	CONTAINMENT FILTER UNIT 13 (1MB121)	N4	VG421Q	VG421Q	0
2TB27-7	2MCC201AT	MCC 201AT	N5	BUT59Q	BUT59Q	0
1NSB31-1	2CHGR25	250D BATT CHGR 25	N5	CHT05Q	CHT05Q	0
A306	2CHGR23	125D BATT CHGR 23	N5	CHT11Q	CHT11Q	0
A526	2COMP5427	SWGR RM A/C COMPRESSOR 21 (2MB110)	N5	CQT10Q	CQT10Q	0
A311	2DISC89-2104	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A407	2DISC89-2404	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12
2NSB10-1	2PUMPTLOBOP21	21 MT BEARING OIL PP (2MB108)	N5	MZT08Q	MZT08Q	0
A311	2BKR52-2101	21 CAV CLG FAN	N5	N52101	CBT01O	0
A311	2BKR52-2101	21 CAV CLG FAN	N5	N52101	CBT01P	0
A311	2BKR52-2102	21 CONTMT AIR CLR	N5	N52102	CBT02O	0
A311	2BKR52-2102	21 CONTMT AIR CLR	N5	N52102	CBT02P	0
A311	2BKR52-2104	23 CHG PP	N5	N52104	CBT04O	0
A311	2BKR52-2104	23 CHG PP	N5	N52104	CBT04P	0
A311	2BKR52-2105	21 CONTMT FILTER UNIT	N5	N52105	CBT05O	0
A311	2BKR52-2105	21 CONTMT FILTER UNIT	N5	N52105	CBT05P	0
A311	2BKR52-2106	21 COMP CLG PP	N5	N52106	CBT06O	0
A311	2BKR52-2106	21 COMP CLG PP	N5	N52106	CBT06P	0
A311	2BKR52-2107	25 BATT CHGR	N5	N52107	CBT07O	0
A311	2BKR52-2107	25 BATT CHGR	N5	N52107	CBT07P	0
A311	2BKR52-2108	21 BRG OIL PP	N5	N52108	CBT08O	0
A311	2BKR52-2108	21 BRG OIL PP	N5	N52108	CBT08P	0
A311	2BKR52-2109	201 AT TURB MCC	N5	N52109	CBT09O	0
A311	2BKR52-2109	201 AT TURB MCC	N5	N52109	CBT09P	0
A311	2BKR52-2110	21 SWGR RM A/C COMPR	N5	N52110	CBT10O	0
A311	2BKR52-2110	21 SWGR RM A/C COMPR	N5	N52110	CBT10P	0
A311	2BKR52-2111	23 BATT CHGR 125 VDC	N5	N52111	CBT11O	0
A311	2BKR52-2111	23 BATT CHGR 125 VDC	N5	N52111	CBT11P	0
A311	2BKR52-2130	21 PZR HTR PROP CONTR	N5	N52130	CBT30O	0
A311	2BKR52-2130	21 PZR HTR PROP CONTR	N5	N52130	CBT30P	0
A311	2BKR152-2114	SERVICE TRANSF U-440-21A	N5	N5B21A	BN21AT	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A311	2BUS2B01A	480V BUS 21A	N5	N5B21A	BU21AR	0
A311	2BKR52-2112	U-440-21A LOW SIDE BKR	N5	N5B21A	CBT12T	0
A311	2NB130	21A RC PZR HTR 21 PROP CONTR	N5	TCT21Q	TCT21Q	0
2CNT10-1	2FANCCS21	21 CCS CAV CLG FAN BLOWER (2MB101)	N5	VBT21Q	VBT21Q	0
2CNT10-1	2FANHVACCTCLR21	CONTAINMENT COOLER 21 FAN (2MB102)	N5	VGT02Q	VGT02Q	0
2CNT69-1	2FANHVAC/PIR21	CONTAINMENT FILTER UNIT 21 (2MB105)	N5	VGT05Q	VGT05Q	0
A559	2U012	72' COMPUTER RM. HVAC UNIT 12	N6	AJT25Q	AJT25Q	0
A532	2MCC214R	MCC 214R	N6	BUT29Q	BUT29Q	6
A407	2MCC209PH	MCC 209PH	N6	BUT37Q	BUT37Q	0
A302	2CHGR22	125D BATT CHGR 22	N6	CHT20Q	CHT20Q	0
2TB12-4	2COMPIA21	21 IA COMPR (2MB118)	N6	CMT18Q	CMT18Q	0
A414	2PNL2NB122	H2 RECOMBINER 21 POWER SUPPLY	N6	HRT21Q	HRT21Q	0
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A311	2DISC89-2116	COMPONENT CLG PP 23 DISC SW	N6	MZT16Q	MZT16Q	0
A407	2DISC89-2416	COMPONENT CLG PP 23 DISC SW	N6	MZT16Q	MZT16Q	0
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12
A311	2BKR52-2114	22 CONTMT AIR CLR	N6	N62114	CBT14O	0
A311	2BKR52-2114	22 CONTMT AIR CLR	N6	N62114	CBT14P	0
A311	2BKR52-2115	21 CHG PP	N6	N62115	CBT15O	0
A311	2BKR52-2115	21 CHG PP	N6	N62115	CBT15P	0
A311	2BKR52-2116	23 COMP CLG PP	N6	N62116	CBT16O	0
A311	2BKR52-2116	23 COMP CLG PP	N6	N62116	CBT16P	0
A311	2BKR52-2117	21 MAIN PLT EXH FAN	N6	N62117	CBT17O	0
A311	2BKR52-2117	21 MAIN PLT EXH FAN	N6	N62117	CBT17P	0
A311	2BKR52-2118	21 INSTR AIR COMPR	N6	N62118	CBT18O	0
A311	2BKR52-2118	21 INSTR AIR COMPR	N6	N62118	CBT18P	0
A311	2BKR52-2119	214R RX MCC	N6	N62119	CBT19O	0
A311	2BKR52-2119	214R RX MCC	N6	N62119	CBT19P	0
A311	2BKR52-2120	22 BATT CHGR 125 VDC	N6	N62120	CBT20O	0
A311	2BKR52-2120	22 BATT CHGR 125 VDC	N6	N62120	CBT20P	0
A311	2BKR52-2121	23 CONTMT FILT UNIT	N6	N62121	CBT21O	0
A311	2BKR52-2121	23 CONTMT FILT UNIT	N6	N62121	CBT21P	0
A311	2BKR52-2122	H2 RECOMB PWR PNL 21	N6	N62122	CBT22O	0
A311	2BKR52-2122	H2 RECOMB PWR PNL 21	N6	N62122	CBT22P	0
A311	2BKR52-2125	72' COMPUTER RM HVAC #12	N6	N62125	CBT25O	0
A311	2BKR52-2125	72' COMPUTER RM HVAC #12	N6	N62125	CBT25P	0
A311	2BKR52-2127	209 PZR HTR MCC	N6	N62127	CBT27O	0
A311	2BKR52-2127	209 PZR HTR MCC	N6	N62127	CBT27P	0
A311	2BKR152-2102	SERVICE TRANSF U-440-21B	N6	N6B21B	BN21BT	0
A311	2BUS2B01B	480V BUS 21B	N6	N6B21B	BU21BR	0
A311	2BKR52-2113	U-440-21B LOW SIDE FEEDER	N6	N6B21B	CBT13T	0
A526	2FANHVACABE21	21 AUX BLDG MAIN EXH (2MB117)	N6	VAT17Q	VAT17Q	0
2CNT10-2	2FANHVACCTCLR22	CONTAINMENT COOLER 22 FAN (2MB114)	N6	VGT14Q	VGT14Q	0
A311	2DISC89-2121	CNTMT FILTER 23 DISC SW	N6	VGT21Q	VGT21Q	0
A407	2DISC89-2421	CNTMT FILTER 23 DISC SW	N6	VGT21Q	VGT21Q	0
2CNT69-2	2FANHVAC/PIR23	CONTAINMENT FILTER UNIT 23 (2MB121)	N6	VGT21Q	VGT21Q	0
A414	2MCC204R	MCC 204R	N7	BUT09Q	BUT09Q	6
A302	2CHGR21	125D BATT CHGR 21	N7	CHT01Q	CHT01Q	0
A512	0COMPCRA/COMPR12	0 HVAC/C CONTROL RM HVAC UNIT 12 A/C COMPRESS	N7	CMT08Q	CMT08Q	0
A311	2DISC89-2104	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A407	2DISC89-2404	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A320	0PUMPSFP12	12 SFP CLG PP (2MB411)	N7	MZT11Q	MZT11Q	6
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12
A407	2BKR52-2401	22 CAV CLG FAN	N7	N72401	CBT01O	0
A407	2BKR52-2401	22 CAV CLG FAN	N7	N72401	CBT01P	0
A407	2BKR52-2402	23 CONTMT AIR CLR	N7	N72402	CBT02O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A407	2BKR52-2402	23 CONTMT AIR CLR	N7	N72402	CBT02P	0
A407	2BKR52-2404	23 CHG PP	N7	N72404	CBT04O	0
A407	2BKR52-2404	23 CHG PP	N7	N72404	CBT04P	0
A407	2BKR52-2405	22 CONTMT FILT UNIT	N7	N72405	CBT05O	0
A407	2BKR52-2405	22 CONTMT FILT UNIT	N7	N72405	CBT05P	0
A407	2BKR52-2406	22 COMP CLG PP	N7	N72406	CBT06O	0
A407	2BKR52-2406	22 COMP CLG PP	N7	N72406	CBT06P	0
A407	2BKR52-2407	21 BATT CHGR	N7	N72407	CBT07O	0
A407	2BKR52-2407	21 BATT CHGR	N7	N72407	CBT07P	0
A407	2BKR52-2408	12 CONT RM A/C COMPR	N7	N72408	CBT08O	0
A407	2BKR52-2408	12 CONT RM A/C COMPR	N7	N72408	CBT08P	0
A407	2BKR52-2409	204R RX MCC	N7	N72409	CBT09O	0
A407	2BKR52-2409	204R RX MCC	N7	N72409	CBT09P	0
A407	2BKR52-2411	12 SFP CLG PP	N7	N72411	CBT11O	0
A407	2BKR52-2411	12 SFP CLG PP	N7	N72411	CBT11P	0
A407	2BKR52-2430	22 PZR HTR PROP CONTR	N7	N72430	CBT30O	0
A407	2BKR52-2430	22 PZR HTR PROP CONTR	N7	N72430	CBT30P	0
A407	2BKR152-2402	SERVICE TRANSF (U-440-24A)	N7	N7B24A	BN24AT	0
A407	2BUS2B04A	480V BUS 24A	N7	N7B24A	BU24AR	0
A407	2BKR52-2412	U-440-24A LOW SIDE BKR	N7	N7B24A	CBT12T	0
A409	2NB430	24A RC PZR HTR 22 PROP CONTR	N7	TCT30Q	TCT30Q	0
2CNT10-2	2FANCCS22	22 CCS CAV CLG FAN BLOWER (2MB401)	N7	VBT01Q	VBT01Q	0
2CNT69-1	2FANHVAC/PIR22	CONTAINMENT FILTER UNIT 22 (2MB405)	N7	VGT22Q	VGT22Q	0
2CNT45-1	2FANHVACCTCLR23	CONTAINMENT COOLER 23 FAN (2MB402)	N7	VGT23Q	VGT23Q	0
2TB27-7	2MCC201BT	MCC 201BT	N8	BUT19Q	BUT19Q	0
A407	2MCC211PH	MCC 211PH	N8	BUT27Q	BUT27Q	0
A306	2CHGR24	125D BATT CHGR 24	N8	CHT04Q	CHT04Q	0
2TB12-4	2COMPPA21	21 PA COMPR (2MB423)	N8	CMT21Q	CMT21Q	0
2TB12-4	2COMPIA22	22 IA COMPR (2MB418)	N8	CMT28Q	CMT28Q	0
A526	2COMP5431	SWGR RM A/C COMPRESSOR 22 (2MB424)	N8	CQT24Q	CQT24Q	0
A409	2PNL2NB422	H2 RECOMBINER 22 POWER SUPPLY	N8	HRT22Q	HRT22Q	7
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A311	2DISC89-2116	COMPONENT CLG PP 23 DISC SW	N8	MZT36Q	MZT36Q	0
A407	2DISC89-2416	COMPONENT CLG PP 23 DISC SW	N8	MZT36Q	MZT36Q	0
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12
A407	2BKR52-2414	24 CONTMT AIR CLR	N8	N82414	CBT14O	0
A407	2BKR52-2414	24 CONTMT AIR CLR	N8	N82414	CBT14P	0
A407	2BKR52-2415	22 CHG PP	N8	N82415	CBT15O	0
A407	2BKR52-2415	22 CHG PP	N8	N82415	CBT15P	0
A407	2BKR52-2416	23 COMP CLG PP	N8	N82416	CBT16O	0
A407	2BKR52-2416	23 COMP CLG PP	N8	N82416	CBT16P	0
A407	2BKR52-2417	22 MAIN PLT EXH FAN	N8	N82417	CBT17O	0
A407	2BKR52-2417	22 MAIN PLT EXH FAN	N8	N82417	CBT17P	0
A407	2BKR52-2418	22 INSTR AIR COMPR	N8	N82418	CBT18O	0
A407	2BKR52-2418	22 INSTR AIR COMPR	N8	N82418	CBT18P	0
A407	2BKR52-2419	201 BT TURB MCC	N8	N82419	CBT19O	0
A407	2BKR52-2419	201 BT TURB MCC	N8	N82419	CBT19P	0
A407	2BKR52-2420	24 BATT CHGR	N8	N82420	CBT20O	0
A407	2BKR52-2420	24 BATT CHGR	N8	N82420	CBT20P	0
A407	2BKR52-2421	23 CONTMT FILT UNIT	N8	N82421	CBT21O	0
A407	2BKR52-2421	23 CONTMT FILT UNIT	N8	N82421	CBT21P	0
A407	2BKR52-2422	H2 RECOMBINER PANLE 22	N8	N82422	CBT22O	0
A407	2BKR52-2422	H2 RECOMBINER PANLE 22	N8	N82422	CBT22P	0
A407	2BKR52-2423	21 PLT AIR COMPR	N8	N82423	CBT23O	0
A407	2BKR52-2423	21 PLT AIR COMPR	N8	N82423	CBT23P	0
A407	2BKR52-2424	22 SWGR RM A/C COMPR	N8	N82424	CBT24O	0
A407	2BKR52-2424	22 SWGR RM A/C COMPR	N8	N82424	CBT24P	0
A407	2BKR52-2427	211 PZR HTR MCC	N8	N82427	CBT27O	0
A407	2BKR52-2427	211 PZR HTR MCC	N8	N82427	CBT27P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A407	2BKR152-2413	SERVICE TRANSF U-440-24B	N8	N8B24B	BN24BT	0
A407	2BUS2B04B	480V BUS 24B	N8	N8B24B	BU24BR	0
A407	2BKR52-2413	U-440-24B LOW SIDE BKR	N8	N8B24B	CBT13T	0
A526	2FANHVACABE22	22 AUX BLDG MAIN EXH (2MB417)	N8	VAT27Q	VAT27Q	0
2CNT45-2	2FANHVACCTCLR24	CONTAINMENT COOLER 24 FAN (2MB414)	N8	VGT24Q	VGT24Q	0
A311	2DISC89-2121	CNTMT FILTER 23 DISC SW	N8	VGT31Q	VGT31Q	0
A407	2DISC89-2421	CNTMT FILTER 23 DISC SW	N8	VGT31Q	VGT31Q	0
2CNT69-2	2FANHVAC/PIR23	CONTAINMENT FILTER UNIT 23 (2MB121)	N8	VGT31Q	VGT31Q	0
2TB12-4	2TCV1636	PA COMP TCV	NR	C72S6O	C72S6O	0
1TB12-4	1TCV1634	12 I/A COMPR TEMP REG VLV	NR	C7S34O	C7S34O	0
1TB12-4	1COMPIA11	11 IA COMPR (1MB118)	NR	CM011R	CM011R	0
1TB12-4	1COMPIA11	11 IA COMPR (1MB118)	NR	CM011S	CM011S	0
1TB12-4	1COMPIA12	12 IA COMPR (1MB418)	NR	CM012R	CM012R	0
1TB12-4	1COMPIA12	12 IA COMPR (1MB418)	NR	CM012S	CM012S	0
1TB12-4	1COMPIA11	11 IA COMPR (1MB118)	NR	CMP11R	CMP11R	0
2TB12-4	2COMPPA21	21 PA COMPR (2MB423)	NR	CMP21R	CMP21R	0
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
1TB12-4	1ACCIA11	11 IA COMPR RCVR	NR	IPIA99	TKA11B	0
2TB12-4	2SV1635	PA COMP A/CLR SRW INLET	NR	IV2S5D	IV2S5D	0
2TB12-4	2SV1636	PA COMP SRW INLET	NR	IV2S6D	IV2S6D	0
1TB12-4	1SV1633	12 I/A COMPR A/CLR SRW INLET	NR	IVS33D	IVS33D	0
1TB12-4	1SV1634	12 I/A COMPR SRW INLET	NR	IVS34D	IVS34D	0
1TB27-1	1MCC101AT	MCC 101AT	NR	NR1P01	BU1ATR	0
1TB27-1	1PNL1P11	LTG DISTR PNL 111	NR	NR1P01	BUP11R	0
1TB27-1	1BKR52-10101	MCC 101AT MAIN FDR BKR	NR	NR1P01	CB101T	0
1TB27-1	1BKR52-10116	MCC 101AT DISTR XFMR 11 BKR	NR	NR1P01	CB116T	0
A317	1BKR52-1109	101 AT TURB MCC	NR	NR1P01	CB1B9T	0
1TB27-1	1XDT11	LTG DISTR XFMR 11	NR	NR1P01	TM1P1R	0
A423	1PNL1P04	LTG DISTR PNL 14	NR	NR1P04	BUP04R	6
A423	1BKR52-10427	MCC 104R DISTR XFMR 14 BKR	NR	NR1P04	CBB27T	6
A423	1XDT14	LTG DISTR XFMR 14	NR	NR1P04	TMX04R	0
A529	1PNL1P14	LTG DISTR PNL 114	NR	NR1P14	BUP14R	6
A529	1BKR52-11427	MCC 114R DISTR XFMR 114 BKR	NR	NR1P14	CBA27T	6
A529	1XDT114	LTG DISTR XFMR 114	NR	NR1P14	TMX14R	0
A414	2PNL2P04	LTG DISTR PNL 24	NR	NR2P04	BU2P4R	6
A414	2BKR52-20427	MCC 204R DISTR XFMR 24 BKR	NR	NR2P04	CB2B7T	6
A414	2XDT24	LTG DISTR XFMT 24	NR	NR2P04	TM2X4R	0
1TB12	1PCV1628	SRW TO I&P/A COMPR PCV	NR	NRC1SW	CV628P	0
1TB12-4	1TCV1630	11 I/A COMPR TEMP REG VLV	NR	NRIA11	C7630P	0
1TB12-4	1MUFFIAFILT11	11 IA COMPR FILTER SILENCER	NR	NRIA11	FL011P	0
1TB12-4	1HXIAA/CLR11	11 IA COMPR AFTER COOLER	NR	NRIA11	HXA11P	0
1TB12-4	1HXIAI/CLR11	11 IA COMPR INTER COOLER	NR	NRIA11	HXI11B	0
1TB12-4	1HXIAI/CLR11	11 IA COMPR INTER COOLER	NR	NRIA11	HXI11P	0
1TB12-4	1HXIAA/CLR11	11 IA COMPR AFTER COOLER	NR	NRIA11	HXIA1P	0
1TB12-4	1HXIAI/CLR12	12 IA COMPR INTER COOLER	NR	NRIA11	HXII1P	0
1TB12-4	1SV2062	COMPR LOAD SV	NR	NRIA11	IV062D	0
1TB12-4	1SV2062	COMPR LOAD SV	NR	NRIA11	IV062T	0
1TB12-4	1SV1629	11 I/A COMPR A/CLR SRW INLET	NR	NRIA11	IV629T	0
1TB12-4	1SV1630	11 I/A COMPR SRW INLET	NR	NRIA11	IV630T	0
1TB12-4	1PS2062	11 IA COMPR UNLOADER CONTR PS	NR	NRIA11	PS062R	0
1TB12-4	1PS2063	11 IA COMPR OIL PS LOW	NR	NRIA11	PS063R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1RY1B118/62	11 IA COMPR TIME DELAY PICKUP RY	NR	NRIA11	RY118E	0
A317	1RY1B118/62	11 IA COMPR TIME DELAY PICKUP RY	NR	NRIA11	RY118P	0
1TB12-4	1TE1630	11 SRW IA COMPR OUT TE	NR	NRIA11	TE630R	0
1TB12-4	1TS2063	11 IA COMPR A/CLR OUT TS HI	NR	NRIA11	TS063R	0
1TB12-4	1TS2082	11 IA COMPR I/CLR OUT TS	NR	NRIA11	TS082R	0
1TB12-4	1TCV1634	12 I/A COMPR TEMP REG VLV	NR	NRIA12	C7S34P	0
1TB12-4	1MUFFIAFILT12	12 IA COMPR FILTER SILENCER	NR	NRIA12	FLS12P	0
1TB12-4	1HXIAA/CLR12	12 IA COMPR AFTER COOLER	NR	NRIA12	HXAS2P	0
1TB12-4	1HXIAI/CLR12	12 IA COMPR INTER COOLER	NR	NRIA12	HXIS2B	0
1TB12-4	1HXIAI/CLR12	12 IA COMPR INTER COOLER	NR	NRIA12	HXIS2P	0
1TB12-4	1SV2064	12 IA COMPR LOADING SV	NR	NRIA12	IV064D	0
1TB12-4	1SV2064	12 IA COMPR LOADING SV	NR	NRIA12	IV064T	0
1TB12-4	1SV1633	12 I/A COMPR A/CLR SRW INLET	NR	NRIA12	IVS33T	0
1TB12-4	1SV1634	12 I/A COMPR SRW INLET	NR	NRIA12	IVS34T	0
1TB12-4	1PS2064	12 IA COMPR UNLOADER CONTR PS	NR	NRIA12	PS064R	0
1TB12-4	1PS2067	12 IA RCVR 11 TO COMPR 11 CONTR PS	NR	NRIA12	PS067R	0
1TB12-4	1PS2065	12 IA COMPR OIL PS LOW	NR	NRIA12	PSS65R	0
A430	1RY1B418/62	12 IA COMPR TIME DELAY PICKUP RY	NR	NRIA12	RY418E	0
A430	1RY1B418/62	12 IA COMPR TIME DELAY PICKUP RY	NR	NRIA12	RY418P	0
1TB12-4	1TE1634	12 SRW IA COMPR OUT TE	NR	NRIA12	TES34R	0
1TB12-4	1TS2065	12 IA COMPR A/CLR OUT TS HI	NR	NRIA12	TSS65R	0
1TB12-4	1TS2084	12 IA COMPR I/CLR OUT TS	NR	NRIA12	TSS84R	0
1TB12-4	1HXIAA/CLR11	11 IA COMPR AFTER COOLER	NR	NRIA99	HXA11B	0
1TB12-4	1HXIAA/CLR12	12 IA COMPR AFTER COOLER	NR	NRIA99	HXAS2B	0
UNK	1ACC10		NR	NRIA99	TK010B	0
1TB12-4	1ACCIA11	11 IA COMPR RCVR	NR	NRIA99	TK011B	0
1TB12-4	1ACCIA12	12 IA COMPR RCVR	NR	NRIA99	TK012B	0
UNK	1ACC17		NR	NRIA99	TK017B	0
A226	1ACC4070	11 S/G AFW STM VLV ACCUM	NR	NRIA99	TK070B	144
A226	1ACC4071	12 S/G STM VLV ACCUM	NR	NRIA99	TK071B	144
UNK	1ACC1262		NR	NRIA99	TK262B	0
UNK	1ACC1274		NR	NRIA99	TK274B	0
UNK	1ACC1280		NR	NRIA99	TK280B	0
1TB12-2	1DRYIA12	12 IA COMP AIR DRYER	NR	NRIAHD	AD12AP	0
1TB12-2	1DRYIA12	12 IA COMP AIR DRYER	NR	NRIAHD	AD12BP	0
1TB12-2	1CV2001	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001P	0
1TB12-2	1CV2001A	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001P	0
1TB12-2	1SV2001	INST AIR DRYER 12A TOWER INLET	NR	NRIAHD	C0001P	0
1TB12-2	1CV2001	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001R	0
1TB12-2	1CV2001A	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001R	0
1TB12-2	1SV2001	INST AIR DRYER 12A TOWER INLET	NR	NRIAHD	C0001R	0
1TB12-2	1CV2001	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001T	0
1TB12-2	1CV2001A	12 IA DRYER TOWER 12A INL CV	NR	NRIAHD	C0001T	0
1TB12-2	1SV2001	INST AIR DRYER 12A TOWER INLET	NR	NRIAHD	C0001T	0
1TB12-2	1CV2002	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002P	0
1TB12-2	1CV2002A	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002P	0
1TB12-2	1SV2002	INST AIR DRYER 12B TOWER INLET	NR	NRIAHD	C0002P	0
1TB12-2	1CV2002	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002R	0
1TB12-2	1CV2002A	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002R	0
1TB12-2	1SV2002	INST AIR DRYER 12B TOWER INLET	NR	NRIAHD	C0002R	0
1TB12-2	1CV2002	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002T	0
1TB12-2	1CV2002A	12 IA DRYER TOWER 12B INL CV	NR	NRIAHD	C0002T	0
1TB12-2	1SV2002	INST AIR DRYER 12B TOWER INLET	NR	NRIAHD	C0002T	0
1TB12-2	1CV2003	12 IA DRYER TOWER 12A PURGE CV	NR	NRIAHD	C0003R	0
1TB12-2	1CV2003A	12 IA DRYER TOWER 12A PURGE CV	NR	NRIAHD	C0003R	0
1TB12-2	1SV2003	INST AIR DRYER 12A TOWER PURGE	NR	NRIAHD	C0003R	0
1TB12-2	1CV2003	12 IA DRYER TOWER 12A PURGE CV	NR	NRIAHD	C0003T	0
1TB12-2	1CV2003A	12 IA DRYER TOWER 12A PURGE CV	NR	NRIAHD	C0003T	0
1TB12-2	1SV2003	INST AIR DRYER 12A TOWER PURGE	NR	NRIAHD	C0003T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-2	1CV2004	12 IA DRYER TOWER 12B PURGE CV	NR	NRIAHD	C0004R	0
1TB12-2	1CV2004A	12 IA DRYER TOWER 12B PURGE CV	NR	NRIAHD	C0004R	0
1TB12-2	1SV2004	INST AIR DRYER 12B TOWER PURGE	NR	NRIAHD	C0004R	0
1TB12-2	1CV2004	12 IA DRYER TOWER 12B PURGE CV	NR	NRIAHD	C0004T	0
1TB12-2	1CV2004A	12 IA DRYER TOWER 12B PURGE CV	NR	NRIAHD	C0004T	0
1TB12-2	1SV2004	INST AIR DRYER 12B TOWER PURGE	NR	NRIAHD	C0004T	0
1TB12-4	1NP1113B	IA DRYER 12 LOCAL CONTROL PNL	NR	NRIAHD	COD12R	0
1TB12-4	1FU1NP113B/FU3	12 IA DRYER CONTR CKT FU	NR	NRIAHD	FUC12R	0
1TB12-2	1HS2004	12 IA DRYER HS	NR	NRIAHD	HS004T	0
1TB12-4	1PCV2003	IA DRYER 12 PILOT REG PCV	NR	NRIAHD	PC003R	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NR	NRPA01	HXAP1B	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	NR	NRPA01	HXPA2B	0
1TB12-4	1ACCPA11	11 PA COMPR RCVR	NR	NRPA01	TKP11B	0
2TB12-4	2ACCPA21	21 PA COMPR RCVR	NR	NRPA01	TKP21B	0
1TB12-4	1TCV1636	11 P/A COMPR TEMP REG VLV	NR	NRPA11	C7636P	0
1TB12-4	1MUFFPAFILT11	11 PA COMPR FILTER SILENCER	NR	NRPA11	FLP11P	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NR	NRPA11	HXAP1P	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NR	NRPA11	HXPA1P	0
1TB12-4	1HXPAI/CLR11	11 PA COMPR INTER COOLER	NR	NRPA11	HXPI1B	0
1TB12-4	1HXPAI/CLR11	11 PA COMPR INTER COOLER	NR	NRPA11	HXPI1P	0
1TB12-4	1SV2054	11 PA COMPR LOADING SV	NR	NRPA11	IV154D	0
1TB12-4	1SV2054	11 PA COMPR LOADING SV	NR	NRPA11	IV154T	0
1TB12-4	1SV1635	11 P/A COMPR A/CLR SRW INLET	NR	NRPA11	IV635T	0
1TB12-4	1SV1636	11 P/A COMPR SRW INLET	NR	NRPA11	IV636T	0
1TB12-4	1PS2055	11 PA COMPR OIL PS LOW	NR	NRPA11	PS055R	0
1TB12-4	1PS2054	11 PA COMPR UNLOADER CONTR PS	NR	NRPA11	PS154R	0
UNK	1RY1B423/62	PA COMPR LOADER CONTROL RY	NR	NRPA11	RYB23E	0
UNK	1RY1B423/62	PA COMPR LOADER CONTROL RY	NR	NRPA11	RYB23P	0
1TB12-4	1TE1636	11 SRW PA COMPR OUT TE	NR	NRPA11	TE636R	0
1TB12-4	1TS2055	11 PA COMPR A/CLR OUT TS HI	NR	NRPA11	TS055R	0
1TB12-4	1TS2086	11 PA COMPR I/CLR OUT TS	NR	NRPA11	TS086R	0
2TB12-4	2TCV1636	PA COMP TCV	NR	NRPA21	C72S6P	0
2TB12-4	2COMPPA21	21 PA COMPR (2MB423)	NR	NRPA21	CMP21S	0
2TB12-4	2PCV1628	SRW TO IA & PA COMP PCV'S	NR	NRPA21	CV228P	0
2TB12-4	2MUFFPAFILT21	21 PA COMPR FILTER SILENCER	NR	NRPA21	FLS21P	0
2TB12-4	2HXPAI/CLR21	21 PA COMPR INTER COOLER	NR	NRPA21	HXIP2B	0
2TB12-4	2HXPAI/CLR21	21 PA COMPR INTER COOLER	NR	NRPA21	HXIP2P	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	NR	NRPA21	HXPA2P	0
2TB12-4	2SV2054	21 PA COMPR TOTAL CLOSURE SV	NR	NRPA21	IV054D	0
2TB12-4	2SV2054	21 PA COMPR TOTAL CLOSURE SV	NR	NRPA21	IV054T	0
2TB12-4	2SV1635	PA COMP A/CLR SRW INLET	NR	NRPA21	IV2S5T	0
2TB12-4	2SV1636	PA COMP SRW INLET	NR	NRPA21	IV2S6T	0
2TB12-4	2PS2054	21 PA COMPR UNLOADER CONTR PS	NR	NRPA21	PS054R	0
2TB27-8	2PS2056	21 PA RCVR COMPR CONTR PS	NR	NRPA21	PS056R	0
2TB12-4	2PS2055	21 PA COMPR OIL PS LOW	NR	NRPA21	PSS25R	0
2TB12-4	2TE1636	21 PX COMP CLR SRW TCV TE	NR	NRPA21	TE2S6R	0
2TB12-4	2TS2082	21 IA COMPR I/CLR OUT TS	NR	NRPA21	TSS22R	0
2TB12-4	2TS2055	21 PA COMPR A/CLR OUT TS HI	NR	NRPA21	TSS25R	0
1TB12-4	1CV2059	1 PA HDR ISOL CV	NR	NRPALP	C3059C	0
1TB12-4	1SV2059	PLNT AIR HEADER ISOL VLV CONT	NR	NRPALP	C3059C	0
1TB12-4	1CV2059	1 PA HDR ISOL CV	NR	NRPALP	C3059T	0
1TB12-4	1SV2059	PLNT AIR HEADER ISOL VLV CONT	NR	NRPALP	C3059T	0
2TB12-4	2CV2059	PA TO PA HEADER	NR	NRPALP	C3259C	0
2TB12-4	2SV2059	PA TO PA HEADER SV	NR	NRPALP	C3259C	0
2TB12-4	2CV2059	PA TO PA HEADER	NR	NRPALP	C3259T	0
2TB12-4	2SV2059	PA TO PA HEADER SV	NR	NRPALP	C3259T	0
1TB12-4	1PS2059	1 PA ISOL VLV CONTR PS	NR	NRPALP	PS059D	0
1TB12-4	1PS2059	1 PA ISOL VLV CONTR PS	NR	NRPALP	PS059R	0
2TB12-4	2PS2059	2 PA HDR ISOL SV PS	NR	NRPALP	PS259D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2TB12-4	2PS2059	2 PA HDR ISOL SV PS	NR	NRPALP	PS259R	0
1TB12-4	1CV2061	11 PA TO IA AUTO CROSSCONNECT CV	NR	NRPAXA	C3061O	0
1TB12-4	1SV2061	PLNT AIR TO INST AIR VLV CONT	NR	NRPAXA	C3061O	0
1TB12-4	1CV2061	11 PA TO IA AUTO CROSSCONNECT CV	NR	NRPAXA	C3061P	0
1TB12-4	1SV2061	PLNT AIR TO INST AIR VLV CONT	NR	NRPAXA	C3061P	0
1TB12-4	1PS2061	1 PA TO IA SV CONTR PS	NR	NRPAXA	PS061D	0
1TB12-4	1PS2061	1 PA TO IA SV CONTR PS	NR	NRPAXA	PS061R	0
2TB12-4	2PS2054	21 PA COMPR UNLOADER CONTR PS	NR	PS054D	PS054D	0
2TB27-8	2PS2056	21 PA RCVR COMPR CONTR PS	NR	PS056D	PS056D	0
1TB12-4	1PS2062	11 IA COMPR UNLOADER CONTR PS	NR	PS062D	PS062D	0
1TB12-4	1PS2064	12 IA COMPR UNLOADER CONTR PS	NR	PS064D	PS064D	0
1TB12-4	1PS2067	12 IA RCVR 11 TO COMPR 11 CONTR PS	NR	PS067D	PS067D	0
1TB12-4	1PS2054	11 PA COMPR UNLOADER CONTR PS	NR	PS154D	PS154D	0
A306	1RYBR-XK65	SDS SUB CH B3-1	NR	RYK65E	RYK65E	0
A306	1RYAR-XK79	SDS SUB CH A3-3	NR	RYK79E	RYK79E	0
A205	2CV1637	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A405	2HS1637	2 SRW 2-SV-1637 HS	NR(TC)	UNIT 2-TAFB01	HS637T	0
A405	2HS1639	2 SRW 2-SV-1639 HS	NR(TC)	UNIT 2-TAFB01	HS639T	0
A302	2RYAR-XK20	SIAS SUB CH A5-3	NR(TC)	UNIT 2-TAFB01	RYA20T	0
A302	2RYBR-XK16	SIAS SUB CH B5-2	NR(TC)	UNIT 2-TAFB01	RYB16T	0
A205	2CV1600	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A405	2HS1600	2 SRW 2-SV-1600 HS	NR(TC)	UNIT 2-TBFB01	HS600T	0
A405	2HS1638	2 SRW 2-SV-1638 HS	NR(TC)	UNIT 2-TBFB01	HS638T	0
A302	2RYAR-XK20	SIAS SUB CH A5-3	NR(TC)	UNIT 2-TBFB01	RYA20T	0
A302	2RYBR-XK15	SIAS SUB CH B5-1	NR(TC)	UNIT 2-TBFB01	RYB15T	0
2TB12-4	2TCV1636	PA COMP TCV	NS	C72S6O	C72S6O	0
2TB12-4	2TCV1634	22 IA COMP TCV	NS	C7634O	C7634O	0
2TB12-4	2COMPIA21	21 IA COMPR (2MB118)	NS	CM021R	CM021R	0
2TB12-4	2COMPIA21	21 IA COMPR (2MB118)	NS	CM021S	CM021S	0
2TB12-4	2COMPIA22	22 IA COMPR (2MB418)	NS	CM022R	CM022R	0
2TB12-4	2COMPIA22	22 IA COMPR (2MB418)	NS	CM022S	CM022S	0
1TB12-4	1COMPPA11	11 PA COMPR (1MB123)	NS	CMP11R	CMP11R	0
2TB12-4	2COMPPA21	21 PA COMPR (2MB423)	NS	CMP21R	CMP21R	0
UNK	2ACC196		NS	IMIA99	TK196B	0
UNK	2ACC1645	AIR ACCUMULATOR FOR 2CV1645	NS	IMIA99	TKS45B	0
UNK	2ACC1646	AIR ACCUMULATOR FOR 2CV1646	NS	IMIA99	TKS46B	0
UNK	2ACC196		NS	IQIA99	TK196B	0
UNK	2ACC5173	AIR ACCUMULATOR FOR 2CV5173	NS	ITIA99	TKS73B	0
2TB12-4	2SV1635	PA COMP A/CLR SRW INLET	NS	IV2S5D	IV2S5D	0
2TB12-4	2SV1636	PA COMP SRW INLET	NS	IV2S6D	IV2S6D	0
2TB12-4	2SV1633	22 IA COMP A/CLR SRW INLET	NS	IV633D	IV633D	0
2TB12-4	2SV1634	22 IA COMP SRW INLET	NS	IV634D	IV634D	0
1TB12-4	1SV2054	11 PA COMPR LOADING SV	NS	NRCMP1	IV154D	0
1TB12-4	1SV2054	11 PA COMPR LOADING SV	NS	NRCMP1	IV154T	0
1TB12-4	1PS2054	11 PA COMPR UNLOADER CONTR PS	NS	NRCMP1	PS154R	0
A430	1RY1B403/62	11 PA COMPR TIME DELAY PICKUP RY	NS	NRCMP1	RYB23E	0
A430	1RY1B403/62	11 PA COMPR TIME DELAY PICKUP RY	NS	NRCMP1	RYB23P	0
2TB12-4	2SV2054	21 PA COMPR TOTAL CLOSURE SV	NS	NRCMP2	IV054D	0
2TB12-4	2SV2054	21 PA COMPR TOTAL CLOSURE SV	NS	NRCMP2	IV054T	0
2TB12-4	2PS2054	21 PA COMPR UNLOADER CONTR PS	NS	NRCMP2	PS054R	0
A407	2RY2B423/62	21 PA COMPR TIME DELAY PICKUP RY	NS	NRCMP2	RY423E	0
A407	2RY2B423/62	21 PA COMPR TIME DELAY PICKUP RY	NS	NRCMP2	RY423P	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NS	NRDPP1	HXAP1P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-4	1HXPAI/CLR11	11 PA COMPR INTER COOLER	NS	NRDPP1	HXPI1B	0
2TB12-4	2HXPAI/CLR21	21 PA COMPR INTER COOLER	NS	NRDPP2	HXIP2B	0
1TB12-4	1MUFFPAFILT11	11 PA COMPR FILTER SILENCER	NS	NRHVP1	FLP11P	0
2TB12-4	2MUFFPAFILT21	21 PA COMPR FILTER SILENCER	NS	NRHVP2	FLS21P	0
1TB12-4	1PS2055	11 PA COMPR OIL PS LOW	NS	NRPSP1	PS055R	0
1TB12-4	1TS2055	11 PA COMPR A/CLR OUT TS HI	NS	NRPSP1	TS055R	0
1TB12-4	1TS2086	11 PA COMPR I/CLR OUT TS	NS	NRPSP1	TS086R	0
2TB12-4	2COMPPA21	21 PA COMPR (2MB423)	NS	NRPSP2	CMP21S	0
2TB27-8	2PS2056	21 PA RCVR COMPR CONTR PS	NS	NRPSP2	PS056R	0
2TB12-4	2PS2055	21 PA COMPR OIL PS LOW	NS	NRPSP2	PSS25R	0
2TB12-4	2TS2082	21 IA COMPR I/CLR OUT TS	NS	NRPSP2	TSS22R	0
2TB12-4	2TS2055	21 PA COMPR A/CLR OUT TS HI	NS	NRPSP2	TSS25R	0
1TB12-4	1TCV1636	11 P/A COMPR TEMP REG VLV	NS	NRSW13	C7636P	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NS	NRSW13	HXPA1P	0
1TB12-4	1HXPAI/CLR11	11 PA COMPR INTER COOLER	NS	NRSW13	HXPI1P	0
1TB12-4	1SV1635	11 P/A COMPR A/CLR SRW INLET	NS	NRSW13	IV635T	0
1TB12-4	1SV1636	11 P/A COMPR SRW INLET	NS	NRSW13	IV636T	0
1TB12-4	1TE1636	11 SRW PA COMPR OUT TE	NS	NRSW13	TE636R	0
2TB12-4	2TCV1636	PA COMP TCV	NS	NRSW21	C72S6P	0
2TB12-4	2PCV1628	SRW TO IA & PA COMP PCV'S	NS	NRSW21	CV228P	0
2TB12-4	2HXPAI/CLR21	21 PA COMPR INTER COOLER	NS	NRSW21	HXIP2P	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	NS	NRSW21	HXPA2P	0
2TB12-4	2SV1635	PA COMP A/CLR SRW INLET	NS	NRSW21	IV2S5T	0
2TB12-4	2SV1636	PA COMP SRW INLET	NS	NRSW21	IV2S6T	0
2TB12-4	2TE1636	21 PX COMP CLR SRW TCV TE	NS	NRSW21	TE2S6R	0
2TB27-7	2MCC201AT	MCC 201AT	NS	NS1P01	BU2ATR	0
2TB27-7	2PNL2P01	LTG DISTR PNL 21	NS	NS1P01	BUP21R	0
2TB27-7	2BKR52-20101	MCC 201AT MN FDR BKR	NS	NS1P01	CB201T	0
2TB27-7	2BKR52-20116	DISTRIBUTION XFMR 480-208 120V	NS	NS1P01	CB216T	0
A311	2BKR52-2109	201 AT TURB MCC	NS	NS1P01	CB2B9T	0
2TB27-7	2XDT21	LTG DISTR XFMR 21	NS	NS1P01	TM2P2R	0
A414	2PNL2P04	LTG DISTR PNL 24	NS	NS2P04	BU2P4R	6
A414	2BKR52-20427	MCC 204R DISTR XFMR 24 BKR	NS	NS2P04	CB2B7T	6
A414	2XDT24	LTG DISTR XFMT 24	NS	NS2P04	TM2X4R	0
A532	2PNL2P14	LTG DISTR PNL 214	NS	NS2P14	BU214R	6
A532	2BKR52-21427	DISTRIBUTION TRANSF 214 480-208/120V	NS	NS2P14	CB427T	6
A532	2XDT214	LTG DISTR XFMR 214	NS	NS2P14	TMT14R	0
2TB12-4	2PCV1628	SRW TO IA & PA COMP PCV'S	NS	NSC1SW	CVS28P	0
2TB12-4	2SV2062	21 IA COMPR CLOSURE SV	NS	NSCMI1	IV262D	0
2TB12-4	2SV2062	21 IA COMPR CLOSURE SV	NS	NSCMI1	IV262T	0
2TB12-4	2PS2062	21 IA COMPR UNLOADER CONTR PS	NS	NSCMI1	PSS62R	0
A311	2RY2B118/62	21A IA COMPR TIME DELAY PICKUP RY	NS	NSCMI1	RY2B1E	0
A311	2RY2B118/62	21A IA COMPR TIME DELAY PICKUP RY	NS	NSCMI1	RY2B1P	0
2TB12-4	2SV2064	22 IA COMPR CLOSURE SV	NS	NSCMI2	IV264D	0
2TB12-4	2SV2064	22 IA COMPR CLOSURE SV	NS	NSCMI2	IV264T	0
2TB12-4	2PS2064	22 IA COMPR UNLOADER CONTR PS	NS	NSCMI2	PSS64R	0
A407	2RY2B418/62	22 IA COMPR TIME DELAY PICKUP RELAY	NS	NSCMI2	RY2B4E	0
A407	2RY2B418/62	22 IA COMPR TIME DELAY PICKUP RELAY	NS	NSCMI2	RY2B4P	0
2TB12-4	2HXIAA/CLR22	22 IA COMPR AFTER COOLER	NS	NSDPI1	HXA21P	0
2TB12-4	2HXIAI/CLR21	21 IA COMPR INTER COOLER	NS	NSDPI1	HXI21B	0
2TB12-4	2HXIAI/CLR21	21 IA COMPR INTER COOLER	NS	NSDPI1	HXI21P	0
2TB12-4	2HXIAI/CLR22	22 IA COMPR INTER COOLER	NS	NSDPI2	HXI22B	0
2TB12-4	2MUFFIAFILT21	21 IA COMPR FILTER SILENCER	NS	NSHVI1	FL021P	0
2TB12-4	2MUFFIAFILT22	22 IA COMPR FILTER SILENCER	NS	NSHVI2	FLS22P	0
2TB12-4	2HXIAA/CLR21	21 IA COMPR AFTER COOLER	NS	NSIA99	HXA21B	0
2TB12-4	2HXIAA/CLR22	22 IA COMPR AFTER COOLER	NS	NSIA99	HXA22B	0
UNK	2ACC6301A		NS	NSIA99	TK01AB	0
UNK	2ACC6301B		NS	NSIA99	TK01BB	0
2TB12-4	2ACCIA21	21 IA COMPR RCVR	NS	NSIA99	TK021B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2TB27-8	2ACCIA22	22 IA COMPR RCVR	NS	NSIA99	TK022B	0
UNK	2ACC926		NS	NSIA99	TK926B	0
A205	2ACC4070	IA ACCUMULATOR	NS	NSIA99	TKS70B	144
A205	2ACC4071	IA ACCUMULATOR	NS	NSIA99	TKS71B	144
2TB27-8	2DRYIA22	22 IA DRYER	NS	NSIAHD	AD22AP	0
2TB27-8	2DRYIA22	22 IA DRYER	NS	NSIAHD	AD22BP	0
2TB27-8	2CV2001	22 IA DRYER TOWER 22A INL CV	NS	NSIAHD	C0201P	0
2TB27-8	2CV2001A	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201P	0
2TB27-8	2SV2001	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201P	0
2TB27-8	2CV2001	22 IA DRYER TOWER 22A INL CV	NS	NSIAHD	C0201R	0
2TB27-8	2CV2001A	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201R	0
2TB27-8	2SV2001	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201R	0
2TB27-8	2CV2001	22 IA DRYER TOWER 22A INL CV	NS	NSIAHD	C0201T	0
2TB27-8	2CV2001A	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201T	0
2TB27-8	2SV2001	INST AIR DRYER 22A TOWER INLET	NS	NSIAHD	C0201T	0
2TB27-8	2CV2002	22 IA DRYER TOWER 22B INL CV	NS	NSIAHD	C0202P	0
2TB27-8	2CV2002A	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202P	0
2TB27-8	2SV2002	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202P	0
2TB27-8	2CV2002	22 IA DRYER TOWER 22B INL CV	NS	NSIAHD	C0202R	0
2TB27-8	2CV2002A	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202R	0
2TB27-8	2SV2002	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202R	0
2TB27-8	2CV2002	22 IA DRYER TOWER 22B INL CV	NS	NSIAHD	C0202T	0
2TB27-8	2CV2002A	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202T	0
2TB27-8	2SV2002	INST AIR DRYER 22B TOWER INLET	NS	NSIAHD	C0202T	0
2TB27-8	2CV2003	22 IA DRYER TOWER 22A PURGE CV	NS	NSIAHD	C0203R	0
2TB27-8	2CV2003A	INST AIR DRYER 22A TOWER PURGE	NS	NSIAHD	C0203R	0
2TB27-8	2SV2003	INST AIR DRYER 22A TOWER PURGE	NS	NSIAHD	C0203R	0
2TB27-8	2CV2003	22 IA DRYER TOWER 22A PURGE CV	NS	NSIAHD	C0203T	0
2TB27-8	2CV2003A	INST AIR DRYER 22A TOWER PURGE	NS	NSIAHD	C0203T	0
2TB27-8	2SV2003	INST AIR DRYER 22A TOWER PURGE	NS	NSIAHD	C0203T	0
2TB27-8	2CV2004	22 IA DRYER TOWER 22B PURGE CV	NS	NSIAHD	C0204R	0
2TB27-8	2CV2004A	INST AIR DRYER 22B TOWER PURGE	NS	NSIAHD	C0204R	0
2TB27-8	2SV2004	INST AIR DRYER 22B TOWER PURGE	NS	NSIAHD	C0204R	0
2TB27-8	2CV2004	22 IA DRYER TOWER 22B PURGE CV	NS	NSIAHD	C0204T	0
2TB27-8	2CV2004A	INST AIR DRYER 22B TOWER PURGE	NS	NSIAHD	C0204T	0
2TB27-8	2SV2004	INST AIR DRYER 22B TOWER PURGE	NS	NSIAHD	C0204T	0
2TB27-8	2PNL2NP0103B	IA DRYER 22 CONTROLLER	NS	NSIAHD	COD22R	0
2TB27-8	2FU2NP0103B/FU3	22 IA DRYER CONTR CKT FU	NS	NSIAHD	FUC22R	0
2TB27-8	2HS2004	22 I/A DRYER H/S	NS	NSIAHD	HS204T	0
2TB27-8	2PCV2003	22 IA DRYER PILOT REG	NS	NSIAHD	PC203R	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	NS	NSPA01	HXAP1B	0
2TB12-4	2HXPAA/CLR21	21 PA COMPR AFTER COOLER	NS	NSPA01	HXPA2B	0
1TB12-4	1ACCPA11	11 PA COMPR RCVR	NS	NSPA01	TKP11B	0
2TB12-4	2ACCPA21	21 PA COMPR RCVR	NS	NSPA01	TKP21B	0
1TB12-4	1CV2059	1 PA HDR ISOL CV	NS	NSPALP	C3059C	0
1TB12-4	1SV2059	PLNT AIR HEADER ISOL VLV CONT	NS	NSPALP	C3059C	0
1TB12-4	1CV2059	1 PA HDR ISOL CV	NS	NSPALP	C3059T	0
1TB12-4	1SV2059	PLNT AIR HEADER ISOL VLV CONT	NS	NSPALP	C3059T	0
2TB12-4	2CV2059	PA TO PA HEADER	NS	NSPALP	C3259C	0
2TB12-4	2SV2059	PA TO PA HEADER SV	NS	NSPALP	C3259C	0
2TB12-4	2CV2059	PA TO PA HEADER	NS	NSPALP	C3259T	0
2TB12-4	2SV2059	PA TO PA HEADER SV	NS	NSPALP	C3259T	0
1TB12-4	1PS2059	1 PA ISOL VLV CONTR PS	NS	NSPALP	PS059D	0
1TB12-4	1PS2059	1 PA ISOL VLV CONTR PS	NS	NSPALP	PS059R	0
2TB12-4	2PS2059	2 PA HDR ISOL SV PS	NS	NSPALP	PS259D	0
2TB12-4	2PS2059	2 PA HDR ISOL SV PS	NS	NSPALP	PS259R	0
2TB12-4	2CV2061	PA TO IA XCONN CV	NS	NSPAXA	C3261O	0
2TB12-4	2SV2061	PLNT AIR TO INST AIR VLV CONT	NS	NSPAXA	C3261O	0
2TB12-4	2CV2061	PA TO IA XCONN CV	NS	NSPAXA	C3261P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2TB12-4	2SV2061	PLNT AIR TO INST AIR VLV CONT	NS	NSPAXA	C3261P	0
2TB12-4	2PS2061	2 PA TO IA CROSSCONNECT PS	NS	NSPAXA	PSS61D	0
2TB12-4	2PS2061	2 PA TO IA CROSSCONNECT PS	NS	NSPAXA	PSS61R	0
2TB12-4	2PS2063	21 IA COMPR OIL PS LOW	NS	NSPSI1	PSS63R	0
2TB12-4	2TS2063	21 IA COMPR A/CLR OUT TS	NS	NSPSI1	TS263R	0
2TB12-4	2TS2082	21 IA COMPR I/CLR OUT TS	NS	NSPSI1	TS282R	0
UNK	2PS2065	22 IA COMPR OIL PS LOW	NS	NSPSI2	PS065R	0
2TB27-8	2PS2067	22 IA RCVR TO COMPR 22 CONTR PS	NS	NSPSI2	PSS67R	0
2TB12-4	2TS2065	22 IA COMPR A/CLR OUT TS	NS	NSPSI2	TS065R	0
2TB12-4	2TS2084	22 IA COMPR I/CLR OUT TS	NS	NSPSI2	TS084R	0
A205	2CV1638	TB SRW HDR ISOL	NS	NSSRW	N/A	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
2TB12-4	2TCV1630	21 IA COMPR TCV	NS	NSSW11	C7S30P	0
2TB12-4	2HXIAA/CLR21	21 IA COMPR AFTER COOLER	NS	NSSW11	HXIA2P	0
2TB12-4	2HXIAI/CLR21	21 IA COMPR INTER COOLER	NS	NSSW11	HXII2P	0
2TB12-4	2SV1629	21 IA COMPR A/CLR SRW INLET	NS	NSSW11	IVS29T	0
2TB12-4	2SV1630	21 IA COMPR SRW INLET	NS	NSSW11	IVS30T	0
2TB12-4	2TE1630	21 IA COMP CLR SRW TCV TE	NS	NSSW11	TE163R	0
2TB12-4	2TCV1634	22 IA COMP TCV	NS	NSSW12	C7634P	0
2TB12-4	2HXIAA/CLR22	22 IA COMPR AFTER COOLER	NS	NSSW12	HXA22P	0
2TB12-4	2HXIAI/CLR22	22 IA COMPR INTER COOLER	NS	NSSW12	HXI22P	0
2TB12-4	2SV1633	22 IA COMP A/CLR SRW INLET	NS	NSSW12	IV633T	0
2TB12-4	2SV1634	22 IA COMP SRW INLET	NS	NSSW12	IV634T	0
2TB12-4	2TE1634	22 IA COMPR CLR SRW TCV TE	NS	NSSW12	TE634R	0
2TB12-4	2PS2054	21 PA COMPR UNLOADER CONTR PS	NS	PS054D	PS054D	0
2TB27-8	2PS2056	21 PA RCVR COMPR CONTR PS	NS	PS056D	PS056D	0
1TB12-4	1PS2054	11 PA COMPR UNLOADER CONTR PS	NS	PS154D	PS154D	0
2TB12-4	2PS2062	21 IA COMPR UNLOADER CONTR PS	NS	PSS62D	PSS62D	0
2TB12-4	2PS2064	22 IA COMPR UNLOADER CONTR PS	NS	PSS64D	PSS64D	0
2TB27-8	2PS2067	22 IA RCVR TO COMPR 22 CONTR PS	NS	PSS67D	PSS67D	0
A302	2RYBR-XK65	SDS SUB CH B3-1	NS	RY265E	RY265E	0
A302	2RYAR-XK79	SDS SUB CH A3-3	NS	RY279E	RY279E	0
A205	2CV1637	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A405	2HS1637	2 SRW 2-SV-1637 HS	NS	UNIT 2-TAFB01	HS637T	0
A405	2HS1639	2 SRW 2-SV-1639 HS	NS	UNIT 2-TAFB01	HS639T	0
A302	2RYAR-XK20	SIAS SUB CH A5-3	NS	UNIT 2-TAFB01	RYA20T	0
A302	2RYBR-XK16	SIAS SUB CH B5-2	NS	UNIT 2-TAFB01	RYB16T	0
A205	2CV1600	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A405	2HS1600	2 SRW 2-SV-1600 HS	NS	UNIT 2-TBFB01	HS600T	0
A405	2HS1638	2 SRW 2-SV-1638 HS	NS	UNIT 2-TBFB01	HS638T	0
A302	2RYAR-XK20	SIAS SUB CH A5-3	NS	UNIT 2-TBFB01	RYA20T	0
A302	2RYBR-XK15	SIAS SUB CH B5-1	NS	UNIT 2-TBFB01	RYB15T	0
SWTCHYRD	0DISC89-1L	5051 WAUGH CHAPEL LINE DISC	OP	OPF01L	BY01LT	0
A405	0CS589-1LA	500KV LINE 5051 DISC CS	OP	OPF01L	HS1LAT	0
A405	0CS589-1LB	500KV LINE 5051 DISC CS	OP	OPF01L	HS1LBT	0
SWTCHYRD	0BKR552-21	AIR BLAST CIRCUIT BREAKER	OP	OPF021	BX021T	0
SWTCHYRD	0DISC89-21A	5051 CKT BUS BRK BUS SIDE DISC	OP	OPF021	BY21AT	0
SWTCHYRD	0DISC89-21B	5051 CKT BUS BRK LINE SIDE DISC	OP	OPF021	BY21BT	0
A405	0CS552-21	500KV CKTBRK 552-21 CS	OP	OPF021	HS021T	0
A405	0CS25-21	5051 CKT BUS BKR SYNC POT	OP	OPF021	HS521T	0
SWTCHYRD	0BKR552-22	AIR BLAST CIRCUIT BREAKER	OP	OPF022	BX022T	0
SWTCHYRD	0DISC89-22A	11 GEN BUS BRK GEN SIDE DISC	OP	OPF022	BY22AT	0
SWTCHYRD	0DISC89-22B	11 GEN BUS BRK BUS SIDE DISC	OP	OPF022	BY22BT	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	0CS552-22	500KV CKTBRK 552-22 CS	OP	OPF022	HS022T	0
A405	0CS25-22	11 GEN BUS BKR 552-22 SYNC POT	OP	OPF022	HS522T	0
SWTCHYRD	0BKR552-23	AIR BLAST CIRCUIT BREAKER	OP	OPF023	BX023T	0
SWTCHYRD	0DISC89-23A	11 GEN TIE BRK LINE SIDE DISC	OP	OPF023	BY23AT	0
SWTCHYRD	0DISC89-23B	11 GEN TE BRK GE SIDE DISC	OP	OPF023	BY23BT	0
A405	0CS552-23	500KV CKTBRK 552-23 CS	OP	OPF023	HS023T	0
A405	0CS25-23	11 GEN TIE BKR 552-23 SYNC POT	OP	OPF023	HS523T	0
SWTCHYRD	0DISC89-2L	5072 CHALK POINT LINE DISC	OP	OPF02L	BY02LT	0
A405	0CS1007	500KV LINE 5072 DISC CS	OP	OPF02L	HS007T	0
A405	0CS1008	500KV LINE 5072 DISC CS	OP	OPF02L	HS008T	0
SWTCHYRD	0BKR552-41	AIR BLAST CIRCUIT BREAKER	OP	OPF041	BX041T	0
SWTCHYRD	0DISC89-41A	5072 RED BUS BUS SIDE DISC	OP	OPF041	BY41AT	0
SWTCHYRD	0DISC89-41B	5052 RED BUS LINE SIDE DISC	OP	OPF041	BY41BT	0
A405	0CS552-41	500KV CKTBRK 552-41 CS	OP	OPF041	HS041T	0
A405	0CS25-41	21 GEN BUS BKR 552-41 SYNC POT	OP	OPF041	HS541T	0
SWTCHYRD	0BKR552-43	AIR BLAST CIRCUIT BREAKER	OP	OPF043	BX043T	0
SWTCHYRD	0DISC89-43A	0 DISC 89-43A 500KV	OP	OPF043	BY43AT	0
SWTCHYRD	0DISC89-43B	0 DISC 89-43B 500KV	OP	OPF043	BY43BT	0
A405	0CS552-43	500KV CKTBRK 552-43 CS	OP	OPF043	HS043T	0
A405	0CS25-43	500KV SWYD BKR 552-43 SYNC POT	OP	OPF043	HS543T	0
SWTCHYRD	0BKR552-61	AIR BLAST CIRCUIT BREAKER	OP	OPF061	BX061T	0
SWTCHYRD	0DISC89-61A	21 GEN BUS BRK BUS SIDE DISC	OP	OPF061	BY61AT	0
SWTCHYRD	0DISC89-61B	21 GEN BUS BRK GEN SIDE DISC	OP	OPF061	BY61BT	0
A405	0CS552-61	500KV CKTBRK 552-61 CS	OP	OPF061	HS061T	0
A405	0CS25-61	21 GEN BUS BKR 552-61 SYN POT	OP	OPF061	HS561T	0
SWTCHYRD	0BKR552-62	AIR BLAST CIRCUIT BREAKER	OP	OPF062	BX062T	0
SWTCHYRD	0DISC89-62A	5072 CKT BUS BRK LINE SIDE DISC	OP	OPF062	BY62AT	0
SWTCHYRD	0DISC89-62B	5072 CKT BUS BRK BUS SIDE DISC	OP	OPF062	BY62BT	0
A405	0CS552-62	500KV CKTBRK 552-62 CS	OP	OPF062	HS062T	0
A405	0CS25-62	552-62 BKR 5072 CKT SYNC POT	OP	OPF062	HS562T	0
SWTCHYRD	0BKR552-63	AIR BLAST CIRCUIT BREAKER	OP	OPF063	BX063T	0
SWTCHYRD	0DISC89-63A	21 GEN TIE BRK GEN SIDE DISC	OP	OPF063	BY63AT	0
SWTCHYRD	0DISC89-63B	21 GEN TIE BRK LINE SIDE DISC	OP	OPF063	BY63BT	0
A405	0CS552-63	21 GEN TIE BKR 552-63 HS	OP	OPF063	HS063T	0
A405	0CS25-63	21 GEN BUS BKR 552-63 SYNC POT	OP	OPF063	HS563T	0
SWTCHYRD	1DISC589-11	U-1 HIS SIDE DISC/HI SIDE GND D	OP	OPF911	BY011T	0
SWTCHYRD	2DISC589-21	U-2 HI SIDE DISC/HI SIDE GND D	OP	OPF921	BY021T	0
YARD	0LINKBLACK	LINK BETWEEN P13000 & BLACK BUS	OP	OPFLK1	LKLU1T	0
YARD	0LINKRED	LINK BETWEEN P13000 & RED BUS	OP	OPFLK2	LKLU2T	0
1CNT26-1	1ERV402	PZR PWR OP RV	OT	BHEOT1	Open	0
1CNT26-1	1ERV404	PZR PWR OP RV	OT	BHEOT1	Open	0
A405	1RYAK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	OT	OTAWK1	RYA29T	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	OT	OTAWK1	RYAK1D	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	OT	OTAWK1	RYAK1T	0
A405	1RYBK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	OT	OTBWK1	RYB29T	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	OT	OTBWK1	RYBK1D	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	OT	OTBWK1	RYBK1T	0
A405	1RYCK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	OT	OTCWK1	RYC29T	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	OT	OTCWK1	RYCK1D	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	OT	OTCWK1	RYCK1T	0
A405	1RYDK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	OT	OTDWK1	RYD29T	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	OT	OTDWK1	RYDK1D	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	OT	OTDWK1	RYDK1T	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	OT	OTP402	HS402T	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	OT	OTP402	HS403T	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	OT	OTP402	MV403P	0
1CNT26-1	1ERV402	PZR PWR OP RV	OT	OTP402	RP402O	0
1CNT26-1	1ERV402	PZR PWR OP RV	OT	OTP402	RP402P	0
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	OT	OTP402	RY242E	6

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	OT	OTP402	RY242P	6
A405	1HS1404	11 RC PRZR RLF VLV HS	OT	OTP404	HS404T	0
A405	1HS1405	11 RC PRZR RLF VLV HS	OT	OTP404	HS405T	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	OT	OTP404	MV405P	0
1CNT26-1	1ERV404	PZR PWR OP RV	OT	OTP404	RP404O	0
1CNT26-1	1ERV404	PZR PWR OP RV	OT	OTP404	RP404P	0
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	OT	OTP404	RY442E	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	OT	OTP404	RY442P	6
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	OT	OTRPSE	RY102E	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	OT	OTRPSE	RY102P	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	PA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	PA	EABKR1	CABALT	0
A306	1MODCIS-A/CHD	CIS-A MAINT BYP MODULE CH D	PA	PAMBID	HSCMDT	0
A306	1E/EZD-XA6-U2	CIS ZD CH A ISOLATOR	PA	PAMBID	IID62R	0
A306	1MODCIS-A/CHE	CIS-A MAINT BYP MODULE CH E	PA	PAMBIE	HSCMET	0
A306	1E/EZE-XA6-U2	CIS ZE CH A ISOLATOR	PA	PAMBIE	IIE62R	0
A306	1MODCIS-A/CHF	CIS-A MAINT BYP MODULE CH F	PA	PAMBIF	HSCMFT	0
A306	1E/EZF-XA6-U2	CIS ZF CH A ISOLATOR	PA	PAMBIF	IIF62R	0
A306	1MODCIS-A/CHG	CIS-A MAINT BYP MODULE CH G	PA	PAMBIG	HSCMGT	0
A306	1E/EZG-XA6-U2	CIS ZG CH A ISOLATOR	PA	PAMBIG	IIG62R	0
A306	1B/SZD-XA14	CIS CNTMT PRESS ZD HIGH	PA	PASEND	BID14D	0
A429	1PT5315A	1 HVAC/P CNTMT PT TO CIS	PA	PASEND	PTD5AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	PA	PASEND	SPD48R	0
A306	1B/SZE-XA14	CIS CNTMT PRESS ZE HIGH	PA	PASENE	BIE14D	0
A429	1PT5315B	1 HVAC/P CNTMT PT TO CIS	PA	PASENE	PTE5BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	PA	PASENE	SPE48R	0
A306	1B/SZF-XA14	CIS CNTMT PRESS ZF HIGH	PA	PASENF	BIF14D	0
A423	1PT5315C	1 HVAC/P CNTMT PT TO CIS	PA	PASENF	PTF5CR	40
A306	1YXZF-PS1/48	ZF CABINET 48V PT5313C/14C/15C/16C POWER	PA	PASENF	SPF48R	0
A306	1B/SZG-XA14	CIS CNTMT PRESS 2G HIGH	PA	PASENG	BIG14D	0
A423	1PT5315D	1 HVAC/P CNTMT PT TO CIS	PA	PASENG	PTG5DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	PA	PASENG	SPG48R	0
A306	1YXAL-PS2/15	AL CABINET CIS 15V POWER SUPPLY	PA	SPA25R	SPA25R	0
A306	1YXAL-PS2/28	AL CABINET CIS 28V POWER SUPPLY	PA	SPA28R	SPA28R	0
A306	12/4AL-XA10	CIS SUB CH A1	PA	TLA10D	TLA10D	0
A306	12/4AL-XA10	CIS SUB CH A1	PA	TLA10R	TLA10R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	PB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	PB	EBBKR1	CABBLT	0
A306	1B/SZD-XA14	CIS CNTMT PRESS ZD HIGH	PB	PASEND	BID14D	0
A429	1PT5315A	1 HVAC/P CNTMT PT TO CIS	PB	PASEND	PTD5AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	PB	PASEND	SPD48R	0
A306	1B/SZE-XA14	CIS CNTMT PRESS ZE HIGH	PB	PASENE	BIE14D	0
A429	1PT5315B	1 HVAC/P CNTMT PT TO CIS	PB	PASENE	PTE5BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	PB	PASENE	SPE48R	0
A306	1B/SZF-XA14	CIS CNTMT PRESS ZF HIGH	PB	PASENF	BIF14D	0
A423	1PT5315C	1 HVAC/P CNTMT PT TO CIS	PB	PASENF	PTF5CR	40
A306	1YXZF-PS1/48	ZF CABINET 48V PT5313C/14C/15C/16C POWER	PB	PASENF	SPF48R	0
A306	1B/SZG-XA14	CIS CNTMT PRESS 2G HIGH	PB	PASENG	BIG14D	0
A423	1PT5315D	1 HVAC/P CNTMT PT TO CIS	PB	PASENG	PTG5DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	PB	PASENG	SPG48R	0
A306	1MODCIS-B/CHD	CIS-B MAINT BYP MODULE CH G	PB	PBMBID	HSM3DT	0
A306	1E/EZD-XA1-U2	CIS ZD CH B ISOLATOR	PB	PBMBID	IID12R	0
A306	1MODCIS-B/CHE	CIS-B MAINT BYP MODULE CH D	PB	PBMBIE	HSM3ET	0
A306	1E/EZE-XA1-U2	CIS ZE CH B ISOLATOR	PB	PBMBIE	IIE12R	0
A306	1MODCIS-B/CHF	CIS-B MAINT BYP MODULE CH E	PB	PBMBIF	HSM3FT	0
A306	1E/EZF-XA1-U2	CIS ZF CH B ISOLATOR	PB	PBMBIF	IIF12R	0
A306	1MODCIS-B/CHG	CIS-B MAINT BYP MODULE CH F	PB	PBMBIG	HSM3GT	0
A306	1E/EZG-XA1-U2	CIS ZG CH B ISOLATOR	PB	PBMBIG	IIG12R	0
A306	1YXBL-PS2/15	BL CABINET CIS 15V POWER SUPPLY	PB	SPB25R	SPB25R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1YXBL-PS2/28	BL CABINET CIS 28V POWER SUPPLY	PB	SPB28R	SPB28R	0
A306	12/4BL-XA10	CIS SUB CH B1	PB	TLB10D	TLB10D	0
A306	12/4BL-XA10	CIS SUB CH B1	PB	TLB10R	TLB10R	0
FPPPHS	0 BAT FP13A FP	DIESEL FP 12 BATT BANK A	PG	BAB11D	BAB11D	0
FPPPHS	0 BAT FP13A FP	DIESEL FP 12 BATT BANK A	PG	BAB11R	BAB11R	0
FPPPHS	0 BAT FP13B FP	DIESEL FP 12 BATT BANK B	PG	BAB12D	BAB12D	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD143O	MD143O	0
FPPPHS	0MO7143	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD143O	MD143O	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD143P	MD143P	0
FPPPHS	0MO7143	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD143P	MD143P	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD144O	MD144O	0
FPPPHS	0MO7144	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD144O	MD144O	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD144P	MD144P	0
FPPPHS	0MO7144	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD144P	MD144P	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD145O	MD145O	0
FPPPHS	0MO7145	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD145O	MD145O	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD145P	MD145P	0
FPPPHS	0MO7145	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD145P	MD145P	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD146O	MD146O	0
FPPPHS	0MO7146	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD146O	MD146O	0
FPPPHS	0HS7142	HVAC/S FIRE PUMP HOUSE VENT FAN VU-11 HS	PG	MD146P	MD146P	0
FPPPHS	0MO7146	HVAC/S FIRE PUMP HOUSE INL DAMP	PG	MD146P	MD146P	0
FPPPHS	0PUMPFP11	11 MTR DRIVEN FIRE PUMP (1MB208)	PG	PFP11R	PFP11R	0
FPPPHS	0PUMPFP12	12 DIESEL DRIVEN FIRE PP	PG	PFP12S	PFP12S	0
FPPPHS	0 BAT FP13B FP	DIESEL FP 12 BATT BANK B	PG	PGBA30	BAB12R	0
FPPPHS	0 RY R10/1C97 FP	FP 13 BATTERY ALTERNATOR RY	PG	PGBA30	RYR10E	0
A317	1BKR152-1208	U-440-12A SERVICE TRANSF	PG	PGBK06	BN208T	0
A317	1BUS1B02A	480V BUS 12A	PG	PGBK06	BU12AR	0
A317	1BKR52-1201	U-440-12A LOW SIDE BKR	PG	PGBK06	CB201T	0
A317	1BKR52-1208	FIRE PP FDR	PG	PGBK06	CB208T	0
A407	2BKR152-2310	SERV XFER (U-440-23A)	PG	PGBK08	BN310T	0
A407	2BUS2B03A	480V BUS 23A	PG	PGBK08	BU23AR	0
A407	2BKR52-2301	U-440-23A LOW SIDE BKR	PG	PGBK08	CB301T	0
A407	2BKR52-2308	ALTERNATE FIR PP FDR	PG	PGBK08	CB308T	0
13K21/22	2BKR252-2103	U-4000-22 FEEDER	PG	PGBK10	BN103T	0
A407	2BKR152-2311	SUPP BKR FROM U-4000-22	PG	PGBK10	BN311T	0
A407	2BUS2A03	13/4KV BUS 23	PG	PGBK10	BUA23R	0
U4000-22	2XU-4000-22	13/4KV XFMR U-4000-22	PG	PGBK10	TX2X6R	0
0NSB27-1	1BKR152-1505	SERV XFER (U-440-15)	PG	PGBU38	BN155T	0
0NSB27-1	1BUS1B05	480V BUS 15	PG	PGBU38	BU1B5R	0
0NSB27-1	1BKR52-1512	U-440-15 LOW SIDE BKR	PG	PGBU38	CB15BT	0
0NSB27-1	1XU-440-15	480V XFMR U-440-15	PG	PGBU38	TNB15R	0
0NSB27-1	1BKR152-1501	SUPP BKR FROM U-4000-13	PG	PGCA40	BN151T	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	PG	PGCA40	BN1H1T	0
0NSB27-1	1BUS1A05	4KV BUS 15	PG	PGCA40	BU1A5R	0
U4000-13	1XU-4000-13	13/4KV XFMR U-4000-13	PG	PGCA40	TX1X4R	0
FPPPHS	0PUMPFPSP12	12 FP ENGINE FUEL SUPPLY PUMP	PG	PGFU20	NDP12R	0
FPPPHS	0PUMPFPSP12	12 FP ENGINE FUEL SUPPLY PUMP	PG	PGFU20	NDP12S	0
FPPPHS	0IVFP12COOL1	DIESEL FP 12 COOLING WATER	PG	PGHX22	IVC01D	0
FPPPHS	0IVFP12COOL1	DIESEL FP 12 COOLING WATER	PG	PGHX22	IVC01T	0
1H2OT-1	1MCC108WT	MCC 108WT	PG	PGMC36	BU108R	0
0NSB27-1	1BKR52-1510	108 WT MCC	PG	PGMC36	CB151T	0
1H2OT-1	1BKR52-10801	MCC 108WT MN FDR BKR	PG	PGMC36	CB181T	0
1H2OT-1	1PNL1P08	LTG DISTR PNL 18	PG	PGPN34	BUP18R	0
1H2OT-1	1BKR52-10825	MCC 108WT DISTR XFMR 18 BKR	PG	PGPN34	CB825T	0
1H2OT-1	1XDT18	LTG DISTR XFMR 18	PG	PGPN34	TMX30R	0
FPPPHS	0PUMPFP13	13 PZR FIRE PUMP (1MB208A)	PG	PGPP02	MBP13R	0
FPPPHS	0PUMPFP13	13 PZR FIRE PUMP (1MB208A)	PG	PGPP02	MBP13S	0
FPPPHS	0PS6227	13 FP PP CONT PS	PG	PGPP02	PS227D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
FPPPHS	0PS6227	13 FP PP CONT PS	PG	PGPP02	PS227R	0
A317	1RY1B208/CR	MOTOR FIRE PUMP CR RELAY	PG	PGRY16	RYFCRE	0
A317	1RY1B208/CR	MOTOR FIRE PUMP CR RELAY	PG	PGRY16	RYFCRP	0
FPPPHS	0 RY R9/1C97 FP	FIRE PP 12 REMOTE START RELAY	PG	PGRY24	RYFR9D	0
UNK	0 RY PASR/1B208 FP	FIRE PP 11 LOSS OF POWER RELAY	PG	PGRY24	RYPASD	0
FPPPHS	0 RY R5/1C97 FP	FIRE PP 13 AUTO PILOT RY	PG	PGRY26	RYFR5E	0
FPPPHS	0 RY R5/1C97 FP	FIRE PP 13 AUTO PILOT RY	PG	PGRY26	RYFR5P	0
FPPPHS	0 RY R6/1C97 FP	FP 13 CONTROL LOCK-IN RY	PG	PGRY26	RYFR6E	0
FPPPHS	0 RY R6/1C97 FP	FP 13 CONTROL LOCK-IN RY	PG	PGRY26	RYFR6P	0
FPPPHS	0 RY R1/1C97 FP	FIRE PP 13 GOVERN CNTRL RY	PG	PGRY28	RYFR1E	0
FPPPHS	0 RY R1/1C97 FP	FIRE PP 13 GOVERN CNTRL RY	PG	PGRY28	RYFR1P	0
FPPPHS	0 RY R7/1C97 FP	FIRE PP 13 CRANK RELAY	PG	PGRY28	RYFR7E	0
FPPPHS	0 RY R7/1C97 FP	FIRE PP 13 CRANK RELAY	PG	PGRY28	RYFR7P	0
FPPPHS	0 RY R2/1C97 FP	FIRE PP 13 OVERCRANK RELAY	PG	PGRY32	RYFR2T	0
FPPPHS	0 RY R12/1C97 FP	FIRE PP 13 OVERSPEED SHUTDOWN RY	PG	PGRY32	RYR12T	0
FPPPHS	0 TS T1/1C97 FP	FP 13 CONTACT OF THERMO RY	PG	PGRY32	TSFT1R	0
UNK	0 RY 42/1B0854 FP	FP HOUSE FAN 42 CONTACTOR	PG	PGVE42	RY42AE	0
UNK	0 RY 42/1B0854 FP	FP HOUSE FAN 42 CONTACTOR	PG	PGVE42	RY42AP	0
FPPPHS	0TS7143	HVAC/S FIRE PUMP HOUSE TS	PG	PGVE42	TS143D	0
FPPPHS	0TS7143	HVAC/S FIRE PUMP HOUSE TS	PG	PGVE42	TS143R	0
FPPPHS	0PUMPFP12	12 DIESEL DRIVEN FIRE PP	PG	PHP12R	PHP12R	0
FPPPHS	0PUMPFP12	12 DIESEL DRIVEN FIRE PP	PG	PHP12S	PHP12S	0
FPPPHS	0PS6220	11 FP PP CONT PS	PG	PS220D	PS220D	0
FPPPHS	0PS6224	FIRE PROTECTION PUMP 12 START	PG	PS224D	PS224D	0
A317	1XU-440-12A	480V XFMR U-440-12A	PG	TN12AR	TN12AR	0
A407	2XU-440-23A	480V XFMR U-440-23A	PG	TN23AR	TN23AR	0
A405	1HS1406	11 RC MPT PROT HS	PN	HS406T	HS406T	0
A405	1HS1408	11 RC PRZR MPT HS	PN	HS408T	HS408T	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PN	PVAWK1	RYAK1E	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PN	PVAWK1	RYAK1P	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PN	PVBS6A	BITUAD	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PN	PVBS6A	BITUAI	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PN	PVBS6B	BITUBD	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PN	PVBS6B	BITUBI	0
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PN	PVBS6C	BITUCD	0
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PN	PVBS6C	BITUCI	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PN	PVBS6D	BITUDD	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PN	PVBS6D	BITUDI	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PN	PVBWK1	RYBK1E	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PN	PVBWK1	RYBK1P	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PN	PVCWK1	RYCK1E	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PN	PVCWK1	RYCK1P	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PN	PVDWK1	RYDK1E	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PN	PVDWK1	RYDK1P	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	PN	PVHS02	HS402D	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	PN	PVHS02	HS402T	0
A405	1HS1404	11 RC PRZR RLF VLV HS	PN	PVHS04	HS404D	0
A405	1HS1404	11 RC PRZR RLF VLV HS	PN	PVHS04	HS404T	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	PN	PVMV43	HS403D	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	PN	PVMV43	HS403T	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	PN	PVMV43	MV403C	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	PN	PVMV43	MV403T	0
A405	1HS1405	11 RC PRZR RLF VLV HS	PN	PVMV45	HS405D	0
A405	1HS1405	11 RC PRZR RLF VLV HS	PN	PVMV45	HS405T	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	PN	PVMV45	MV405C	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	PN	PVMV45	MV405T	0
1CNT45-1	1PT102A	11 RC PRZR PT	PN	PVPT2A	PT02AR	0
A405	1YX1X102A	FW 1PT102A LOOP PWR SUPP	PN	PVPT2A	SP02AR	0
1CNT45-1	1PT102B	11 RC PRZR PT	PN	PVPT2B	PT02BR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1YX1X102B	FW 1PT102B LOOP PWR SUPP	PN	PVPT2B	SP02BR	0
1CNT45-1	1PT102C	11 RC PRZR PT	PN	PVPT2C	PT02CR	0
A405	1YX1X102C	FW 1PT102C LOOP PWR SUPP	PN	PVPT2C	SP02CR	0
1CNT45-1	1PT102D	11 RC PRZR PT	PN	PVPT2D	PT02DR	0
A405	1YX1X102D	FW 1PT102D LOOP PWR SUPP	PN	PVPT2D	SP02DR	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PN	PVRPSE	RY102D	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PN	PVRPSE	RY102T	0
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PN	PVRY42	RY242D	6
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PN	PVRY42	RY242T	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PN	PVRY44	RY442D	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PN	PVRY44	RY442T	6
1CNT26-1	1ERV402	PZR PWR OP RV	PN	PVV402	RP402C	0
1CNT26-1	1ERV402	PZR PWR OP RV	PN	PVV402	RP402T	0
1CNT26-1	1ERV404	PZR PWR OP RV	PN	PVV404	RP404C	0
1CNT26-1	1ERV404	PZR PWR OP RV	PN	PVV404	RP404T	0
A405	1TY115	11B RC T-COLD REL	PN	RY115T	RY115T	0
A405	1TY125	12A RC T-COLD REL	PN	RY125T	RY125T	0
1CNT45-1	1PT102A	11 RC PRZR PT	PS	PS102A	PT02AR	0
A405	1YX1X102A	FW 1PT102A LOOP PWR SUPP	PS	PS102A	SP02AR	0
1CNT45-1	1PT102B	11 RC PRZR PT	PS	PS102B	PT02BR	0
A405	1YX1X102B	FW 1PT102B LOOP PWR SUPP	PS	PS102B	SP02BR	0
1CNT45-1	1PT102C	11 RC PRZR PT	PS	PS102C	PT02CR	0
A405	1YX1X102C	FW 1PT102C LOOP PWR SUPP	PS	PS102C	SP02CR	0
1CNT45-1	1PT102D	11 RC PRZR PT	PS	PS102D	PT02DR	0
A405	1YX1X102D	FW 1PT102D LOOP PWR SUPP	PS	PS102D	SP02DR	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	PS	PS402P	HS402T	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	PS	PS402P	HS403T	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	PS	PS402P	MV403P	0
1CNT26-1	1ERV402	PZR PWR OP RV	PS	PS402P	RP402P	0
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PS	PS402P	RY242E	6
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PS	PS402P	RY242P	6
A405	1HS1404	11 RC PRZR RLF VLV HS	PS	PS404P	HS404T	0
A405	1HS1405	11 RC PRZR RLF VLV HS	PS	PS404P	HS405T	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	PS	PS404P	MV405P	0
1CNT26-1	1ERV404	PZR PWR OP RV	PS	PS404P	RP404P	0
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PS	PS404P	RY442E	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PS	PS404P	RY442P	6
A405	1RYAK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	PS	PSCHAP	RYA29T	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PS	PSCHAP	RYAK1D	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PS	PSCHAP	RYAK1T	0
A405	1RYBK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	PS	PSCHBP	RYB29T	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PS	PSCHBP	RYBK1D	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PS	PSCHBP	RYBK1T	0
A405	1RYCK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	PS	PSCHCP	RYC29T	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PS	PSCHCP	RYCK1D	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PS	PSCHCP	RYCK1T	0
A405	1RYDK29-1	HI PRESS 2/4 LOGIC TEST CKT RY	PS	PSCHDP	RYD29T	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PS	PSCHDP	RYDK1D	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PS	PSCHDP	RYDK1T	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PS	PSRPSE	RY102E	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PS	PSRPSE	RY102P	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PS	PSU6AP	BITUAD	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PS	PSU6AP	BITUAI	0
A405	1RY6AK4	RPS HI PRESS TRIP UNIT 6A RY	PS	PSU6AP	RYAK4D	0
A405	1RY6AK4	RPS HI PRESS TRIP UNIT 6A RY	PS	PSU6AP	RYAK4T	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PS	PSU6BP	BITUBD	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PS	PSU6BP	BITUBI	0
A405	1RY6BK4	RPS HI PRESS TRIP UNIT 6B RY	PS	PSU6BP	RYBK4D	0
A405	1RY6BK4	RPS HI PRESS TRIP UNIT 6B RY	PS	PSU6BP	RYBK4T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PS	PSU6CP	BITUCD	0
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PS	PSU6CP	BITUCI	0
A405	1RY6CK4	RPS HI PRESS TRIP UNIT 6C RY	PS	PSU6CP	RYCK4D	0
A405	1RY6CK4	RPS HI PRESS TRIP UNIT 6C RY	PS	PSU6CP	RYCK4T	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PS	PSU6DP	BITUDD	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PS	PSU6DP	BITUDI	0
A405	1RY6DK4	RPS HI PRESS TRIP UNIT 6D RY	PS	PSU6DP	RYDK4D	0
A405	1RY6DK4	RPS HI PRESS TRIP UNIT 6D RY	PS	PSU6DP	RYDK4T	0
1CNT26-1	1ERV402	PZR PWR OP RV	PS	RP402O	RP402O	0
1CNT26-1	1ERV404	PZR PWR OP RV	PS	RP404O	RP404O	0
C230	1RXU1	UNIT 1 REACTOR VESSEL	PT	FUTURE	FUTURE	0
A405	1HS1406	11 RC MPT PROT HS	PV	HS406T	HS406T	0
A405	1HS1408	11 RC PRZR MPT HS	PV	HS408T	HS408T	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PV	PVAWK1	RYAK1E	0
A405	1RYAW10-K1	HI PRESS 2/4 LOGIC CH A RELAY	PV	PVAWK1	RYAK1P	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PV	PVBS6A	BITUAD	0
A405	1B/SATU6	RPS HI PRESS B/S TRIP UNIT A6	PV	PVBS6A	BITUAI	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PV	PVBS6B	BITUBD	0
A405	1B/SBTU6	RPS HI PRESS B/S TRIP UNIT B6	PV	PVBS6B	BITUBI	0
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PV	PVBS6C	BITUCD	0
A405	1B/SCTU6	RPS HI PRESS B/S TRIP UNIT C6	PV	PVBS6C	BITUCI	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PV	PVBS6D	BITUDD	0
A405	1B/SDTU6	RPS HI PRESS B/S TRIP UNIT D6	PV	PVBS6D	BITUDI	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PV	PVBWK1	RYBK1E	0
A405	1RYBW10-K1	HI PRESS 2/4 LOGIC CH B RELAY	PV	PVBWK1	RYBK1P	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PV	PVCWK1	RYCK1E	0
A405	1RYCW10-K1	HI PRESS 2/4 LOGIC CH C RELAY	PV	PVCWK1	RYCK1P	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PV	PVDWK1	RYDK1E	0
A405	1RYDW10-K1	HI PRESS 2/4 LOGIC CH D RELAY	PV	PVDWK1	RYDK1P	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	PV	PVHS02	HS402D	0
A405	1HS1402	11 RC PRZR RLF VLV CONTR HS	PV	PVHS02	HS402T	0
A405	1HS1404	11 RC PRZR RLF VLV HS	PV	PVHS04	HS404D	0
A405	1HS1404	11 RC PRZR RLF VLV HS	PV	PVHS04	HS404T	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	PV	PVMV43	HS403D	0
A405	1HS1403	11 RC PRZR RLF VLV CONTR HS	PV	PVMV43	HS403T	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	PV	PVMV43	MV403C	0
1CNT26-1	1MOV403	PWR OP RLF ISOL	PV	PVMV43	MV403T	0
A405	1HS1405	11 RC PRZR RLF VLV HS	PV	PVMV45	HS405D	0
A405	1HS1405	11 RC PRZR RLF VLV HS	PV	PVMV45	HS405T	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	PV	PVMV45	MV405C	0
1CNT26-1	1MOV405	PWR OP RLF ISOL	PV	PVMV45	MV405T	0
1CNT45-1	1PT102A	11 RC PRZR PT	PV	PVPT2A	PT02AR	0
A405	1YX1X102A	FW 1PT102A LOOP PWR SUPP	PV	PVPT2A	SP02AR	0
1CNT45-1	1PT102B	11 RC PRZR PT	PV	PVPT2B	PT02BR	0
A405	1YX1X102B	FW 1PT102B LOOP PWR SUPP	PV	PVPT2B	SP02BR	0
1CNT45-1	1PT102C	11 RC PRZR PT	PV	PVPT2C	PT02CR	0
A405	1YX1X102C	FW 1PT102C LOOP PWR SUPP	PV	PVPT2C	SP02CR	0
1CNT45-1	1PT102D	11 RC PRZR PT	PV	PVPT2D	PT02DR	0
A405	1YX1X102D	FW 1PT102D LOOP PWR SUPP	PV	PVPT2D	SP02DR	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PV	PVRPSE	RY102D	0
A405	1RY63X/P1102	11 RC HI PZR PRESS TRIP RLY	PV	PVRPSE	RY102T	0
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PV	PVRY42	RY242D	6
A529	1BKR1B1449/42	PRSR PRESS RELIEF VALVE	PV	PVRY42	RY242T	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PV	PVRY44	RY442D	6
A423	1BKR1B0449/42	PRSR PRESS RELIEF VALVE	PV	PVRY44	RY442T	6
1CNT26-1	1ERV402	PZR PWR OP RV	PV	PVV402	RP402C	0
1CNT26-1	1ERV402	PZR PWR OP RV	PV	PVV402	RP402T	0
1CNT26-1	1ERV404	PZR PWR OP RV	PV	PVV404	RP404C	0
1CNT26-1	1ERV404	PZR PWR OP RV	PV	PVV404	RP404T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1TY115	11B RC T-COLD REL	PV	RY115T	RY115T	0
A405	1TY125	12A RC T-COLD REL	PV	RY125T	RY125T	0
A317	1BUS1A01	4KV BUS 11	QC	BUA01R	BUA01R	0
A317	1BUS1A02	4KV BUS 12	QC	BUA02R	BUA02R	0
A430	1BUS1A03	4KV BUS 13	QC	BUA03R	BUA03R	0
A317	1BKR152-1115	U-4000-11 SERVICE TRANSF	QC	QCBUS1	BNA1EO	0
A317	1BKR152-1115	U-4000-11 SERVICE TRANSF	QC	QCBUS1	BNA1EP	0
A317	1BKR152-1201	U-4000-11 SERVICE TRANSF	QC	QCBUS2	BNA21O	0
A317	1BKR152-1201	U-4000-11 SERVICE TRANSF	QC	QCBUS2	BNA21P	0
A430	1BKR152-1311	SUPP BKR FROM U-4000-11	QC	QCBUS3	BNA3AO	0
A430	1BKR152-1311	SUPP BKR FROM U-4000-11	QC	QCBUS3	BNA3AP	0
A317	1BKR152-1115	U-4000-11 SERVICE TRANSF	QC	QCFLST	TXQC1Q	0
A317	1BKR152-1201	U-4000-11 SERVICE TRANSF	QC	QCFLST	TXQC2Q	0
A430	1BKR152-1311	SUPP BKR FROM U-4000-11	QC	QCFLST	TXQC3Q	0
A430	1BKR152-1401	SERVICE TRANSF U-4000-11	QC	QCFLST	TXQC4Q	0
13K11/12	1BKR252-1102	U-4000-11 FEEDER	QC	QCMISA	BN102T	0
1H1102	1DISC1H1102-2	13KV VOLT REG DISC SWITCH 2	QC	QCMISA	LK122T	0
1H1102	1DISC1H1102-3	13KV VOLT REG DISC SWITCH 3	QC	QCMISA	LK123T	0
1TB12-2	1PUMPCBP13	CD CBP 13 (1MA304)	QC	QCMISC	MYCB3Q	0
1TB12-3 (CP)	1PUMPCD12	12 CONDENSATE PUMP (1MA307)	QC	QCMISC	MYCP2Q	0
1TB12-3 (CP)	1PUMPCD13	13 CONDENSATE PUMP (1MA308)	QC	QCMISC	MYCP3Q	0
1TB12-2	1PUMPHDV12	12 FW HEATER DRAIN PUMP (1MA306)	QC	QCMISC	MYHD2Q	0
A430	1XU-440-13A	480V XFMR U-440-13A	QC	QCMISC	TN13AQ	0
A430	1XU-440-13B	480V XFMR U-440-13B	QC	QCMISC	TN13BQ	0
U4000-11	1XU-4000-11	13/4KV XFMR U-4000-11	QC	TX1X5R	TX1X5R	0
1H1102	1EI1H1102REG	13 KV VOLTAGE REGULATOR EI/II/JI	QC	VR102R	VR102R	0
A317	1BKR152-1101	SUPP BKR FROM U-4000-21	QD	QDFLST	TXQD1Q	0
A317	1BKR152-1209	SUPP BKR FROM U-4000-21	QD	QDFLST	TXQD2Q	0
A430	1BKR152-1301	SUPP BKR FROM U-4000-21	QD	QDFLST	TXQD3Q	0
A430	1BKR152-1414	SERVICE TRANSF U-4000-21	QD	QDFLST	TXQD4Q	0
13K21/22	2BKR252-2102	U-4000-21 FEEDER	QD	QDMISA	BN212T	0
2H2102	2DISC2H2102-2	13 KV VOLT REG DISC SWITCH 2	QD	QDMISA	LK222T	0
2H2102	2DISC2H2102-3	13 KV VOLT REG DISC SWITCH 3	QD	QDMISA	LK223T	0
U4000-21	2XU-4000-21	13/4KV XFMR U-4000-21	QD	TX2X5R	TX2X5R	0
2H2102	2EI2H2102REG	13 KV VOLTAGE REGULATOR EI/II/JI	QD	VR202R	VR202R	0
A311	2BKR152-2101	SERVICE TRANSF U-4000-12	QE	QDELST	TXQE1Q	0
A311	2BKR152-2209	SERVICE TRANSF U-4000-12	QE	QDELST	TXQE2Q	0
A407	2BKR152-2301	SERVICE TRANSF U-4000-12	QE	QDELST	TXQE3Q	0
A407	2BKR152-2414	SERVICE TRANSF U-4000-12	QE	QDELST	TXQE4Q	0
13K11/12	1BKR252-1103	U-4000-12 FEEDER	QE	QEMISA	BN103T	0
1H1103	1DISC1H1103-2	13 KV VOLT REG DISC SWITCH 2	QE	QEMISA	LK132T	0
1H1103	1DISC1H1103-3	13 KV VOLT REG DISC SWITCH 3	QE	QEMISA	LK133T	0
U4000-12	1XU-4000-12	13/4KV XFMR U-4000-12	QE	TX1X6R	TX1X6R	0
1H1103	1EI1H1103REG	13 KV VOLTAGE REGULATOR EI/II/JI	QE	VR103R	VR103R	0
A311	2BUS2A02	13/4KV BUS 22	QF	BU2A2R	BU2A2R	0
A407	2BUS2A03	13/4KV BUS 23	QF	BU2A3R	BU2A3R	0
A407	2BUS2A04	4KV BUS 24	QF	BU2A4R	BU2A4R	0
A311	2BKR152-2115	ALT SUPP BKR FROM U-4000-22	QF	QDFLST	TXQF1Q	0
A311	2BKR152-2201	SUPP BKR FROM U-4000-22	QF	QDFLST	TXQF2Q	0
A407	2BKR152-2311	SUPP BKR FROM U-4000-22	QF	QDFLST	TXQF3Q	0
A407	2BKR152-2401	SUPP BKR FROM U-4000-22	QF	QDFLST	TXQF4Q	0
A311	2BKR152-2201	SUPP BKR FROM U-4000-22	QF	QFBUS1	BNAD2O	0
A311	2BKR152-2201	SUPP BKR FROM U-4000-22	QF	QFBUS1	BNAD2P	0
A407	2BKR152-2311	SUPP BKR FROM U-4000-22	QF	QFBUS2	BNAD3O	0
A407	2BKR152-2311	SUPP BKR FROM U-4000-22	QF	QFBUS2	BNAD3P	0
A407	2BKR152-2401	SUPP BKR FROM U-4000-22	QF	QFBUS3	BNAD1O	0
A407	2BKR152-2401	SUPP BKR FROM U-4000-22	QF	QFBUS3	BNAD1P	0
13K21/22	2BKR252-2103	U-4000-22 FEEDER	QF	QFMISA	BN213T	0
2H2103	2DISC2H2103-2	13 KV VOLT REG DISC SWITCH 2	QF	QFMISA	LK232T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2H2103	2DISC2H2103-3	13 KV VOLT REG DISC SWITCH 3	QF	QFMISA	LK233T	0
2TB12-3	2PUMPCBP21	21 CD CBP (2MA204)	QF	QFMISC	MXCB1Q	0
2TB12-3	2PUMPCBP22	22 CD CBP (2MA205)	QF	QFMISC	MXCB2Q	0
2TB12-2 (CP)	2PUMPCD21	21 CONDENSATE PUMP (2MA207)	QF	QFMISC	MXCP1Q	0
2TB12-3	2PUMPHDV21	21 FW HEATER DRAIN PUMP (2MA206)	QF	QFMISC	MXHD1Q	0
A311	2XU-440-22A	480V XFMR U-440-22A	QF	QFMISC	TN22AQ	0
A311	2XU-440-22B	480V XFMR U-440-22B	QF	QFMISC	TN22BQ	0
U4000-22	2XU-4000-22	13/4KV XFMR U-4000-22	QF	TX2X6R	TX2X6R	0
2H2103	2EI2H2103REG	13 KV VOLTAGE REGULATOR EI/II/JI	QF	VR203R	VR203R	0
A430	1BKR152-1401	SERVICE TRANSF U-4000-11	QQ	BHEQQM	Close	0
A430	1BKR152-1414	SERVICE TRANSF U-4000-21	QQ	BHEQQM	Close	0
13K11/12	1BKR252-1102	U-4000-11 FEEDER	QQ	BHEQQM	Close	0
13K21/22	2BKR252-2102	U-4000-21 FEEDER	QQ	BHEQQM	Close	0
A430	1BKR152-1402	U-440-14A SERVICE TRANSF	QQ	BHEQQM	Open	0
A430	1BKR152-1413	U-440-14B SERVICE TRANSF	QQ	BHEQQM	Open	0
A430	1BKR152-1404	NO. 12 LOW PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1405	NO. 12 SALT WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1407	NO. 12 CONTAINMENT SPRAY PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1408	NO. 12 HIGH PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1409	NO. 12 SERVER WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1410	NO. 13 HIGH PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1411	NO. 13 SERVICE WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1412	NO. 13 SALT WATER PUMP	QQ	BHEQQM	PTL	0
A316	1CV4520	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A316	1CV4521	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4523	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A316	1CV4530	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A316	1CV4531	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4533	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A316	1SV4520	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4521	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4530	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4531	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A306	1RYZB-XK1	AFAS CH B BL RY/TURB 11 VLV	QZ	CV4520	RYBK1T	0
A306	1RYZA-XK1	AFAS CH A BL RY/TURB 11 VLV	QZ	CV4521	RYAK1T	0
A306	1RYZB-XK3	AFAS CH B BL RY/MTR PP/S/G 11	QZ	CV4522	RYBK3T	0
A306	1RYZA-XK3	AFAS CH A BL RY/MTR PP/S/G 11	QZ	CV4523	RYAK3T	0
A306	1RYZB-XK2	AFAS CH B BL RY/TURB 12 VLV	QZ	CV4530	RYBK2T	0
A306	1RYZA-XK2	AFAS CH A BL RY/TURB AS VLV	QZ	CV4531	RYAK2T	0
A306	1RYZB-XK5	AFAS CH B BL RY.MTR RR/S/G 12	QZ	CV4532	RYBK5T	0
A306	1RYZA-XK5	AFAS CH A RY/MTR PP/S/G 12	QZ	CV4533	RYAK5T	0
A306	1DISC1Y0401	AFAS 1C100G CHAN ZG	QZ	F11X22	CA041T	0
A306	1BKR1C100G/CB1	AFAS SYS G SENSOR CAB	QZ	F11X22	CA12GT	0
A306	1YXZG-PS1/12	CH G SENSR CAB DC POWER SUPPLY	QZ	F11X22	SPG12R	0
A306	1DISC1Y0122	AFAS CHAN ZD 1C100D	QZ	F11Y22	CA122T	0
A306	1BKR1C100D/CB1	AFAS SYS D SENSOR CAB	QZ	F11Y22	CA12DT	0
A306	1YXZD-PS1/12	CH D SENSR CAB DC POWER SUPPLY	QZ	F11Y22	SPD12R	0
A306	1BKR1C100E/CB1	AFAS SYS E SENSOR CAB	QZ	F12X22	CA12ET	0
A306	1DISC1Y0222	1C100E AFAS ACT ZE	QZ	F12X22	CA222T	0
A306	1YXZE-PS1/12	CH E SENSR CAB DC POWER SUPPLY	QZ	F12X22	SPE12R	0
A306	1DISC1Y0301	1C100F AFAS CHAN ZF	QZ	F12Y22	CA031T	0
A306	1BKR1C100F/CB1	AFAS SYS F SENSOR CAB	QZ	F12Y22	CA12FT	0
A306	1YXZF-PS1/12	CH F SENSR CAB DC POWER SUPPLY	QZ	F12Y22	SPF12R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2H2103	2DISC2H2103-3	13 KV VOLT REG DISC SWITCH 3	QF	QFMISA	LK233T	0
2TB12-3	2PUMPCBP21	21 CD CBP (2MA204)	QF	QFMISC	MXCB1Q	0
2TB12-3	2PUMPCBP22	22 CD CBP (2MA205)	QF	QFMISC	MXCB2Q	0
2TB12-2 (CP)	2PUMPCD21	21 CONDENSATE PUMP (2MA207)	QF	QFMISC	MXCP1Q	0
2TB12-3	2PUMPHDV21	21 FW HEATER DRAIN PUMP (2MA206)	QF	QFMISC	MXHD1Q	0
A311	2XU-440-22A	480V XFMR U-440-22A	QF	QFMISC	TN22AQ	0
A311	2XU-440-22B	480V XFMR U-440-22B	QF	QFMISC	TN22BQ	0
U4000-22	2XU-4000-22	13/4KV XFMR U-4000-22	QF	TX2X6R	TX2X6R	0
2H2103	2EI2H2103REG	13 KV VOLTAGE REGULATOR EI/II/JI	QF	VR203R	VR203R	0
A430	1BKR152-1401	SERVICE TRANSF U-4000-11	QQ	BHEQQM	Close	0
A430	1BKR152-1414	SERVICE TRANSF U-4000-21	QQ	BHEQQM	Close	0
13K11/12	1BKR252-1102	U-4000-11 FEEDER	QQ	BHEQQM	Close	0
13K21/22	2BKR252-2102	U-4000-21 FEEDER	QQ	BHEQQM	Close	0
A430	1BKR152-1402	U-440-14A SERVICE TRANSF	QQ	BHEQQM	Open	0
A430	1BKR152-1413	U-440-14B SERVICE TRANSF	QQ	BHEQQM	Open	0
A430	1BKR152-1404	NO. 12 LOW PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1405	NO. 12 SALT WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1407	NO. 12 CONTAINMENT SPRAY PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1408	NO. 12 HIGH PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1409	NO. 12 SERVER WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1410	NO. 13 HIGH PRESS SAFETY INJ PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1411	NO. 13 SERVICE WATER PUMP	QQ	BHEQQM	PTL	0
A430	1BKR152-1412	NO. 13 SALT WATER PUMP	QQ	BHEQQM	PTL	0
A316	1CV4520	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A316	1CV4521	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4523	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A316	1CV4530	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A316	1CV4531	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	0
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4533	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A316	1SV4520	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4521	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4530	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A316	1SV4531	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A306	1RYZB-XK1	AFAS CH B BL RY/TURB 11 VLV	QZ	CV4520	RYBK1T	0
A306	1RYZA-XK1	AFAS CH A BL RY/TURB 11 VLV	QZ	CV4521	RYAK1T	0
A306	1RYZB-XK3	AFAS CH B BL RY/MTR PP/S/G 11	QZ	CV4522	RYBK3T	0
A306	1RYZA-XK3	AFAS CH A BL RY/MTR PP/S/G 11	QZ	CV4523	RYAK3T	0
A306	1RYZB-XK2	AFAS CH B BL RY/TURB 12 VLV	QZ	CV4530	RYBK2T	0
A306	1RYZA-XK2	AFAS CH A BL RY/TURB AS VLV	QZ	CV4531	RYAK2T	0
A306	1RYZB-XK5	AFAS CH B BL RY.MTR RR/S/G 12	QZ	CV4532	RYBK5T	0
A306	1RYZA-XK5	AFAS CH A RY/MTR PP/S/G 12	QZ	CV4533	RYAK5T	0
A306	1DISC1Y0401	AFAS 1C100G CHAN ZG	QZ	F11X22	CA041T	0
A306	1BKR1C100G/CB1	AFAS SYS G SENSOR CAB	QZ	F11X22	CA12GT	0
A306	1YXZG-PS1/12	CH G SENSR CAB DC POWER SUPPLY	QZ	F11X22	SPG12R	0
A306	1DISC1Y0122	AFAS CHAN ZD 1C100D	QZ	F11Y22	CA122T	0
A306	1BKR1C100D/CB1	AFAS SYS D SENSOR CAB	QZ	F11Y22	CA12DT	0
A306	1YXZD-PS1/12	CH D SENSR CAB DC POWER SUPPLY	QZ	F11Y22	SPD12R	0
A306	1BKR1C100E/CB1	AFAS SYS E SENSOR CAB	QZ	F12X22	CA12ET	0
A306	1DISC1Y0222	1C100E AFAS ACT ZE	QZ	F12X22	CA222T	0
A306	1YXZE-PS1/12	CH E SENSR CAB DC POWER SUPPLY	QZ	F12X22	SPE12R	0
A306	1DISC1Y0301	1C100F AFAS CHAN ZF	QZ	F12Y22	CA031T	0
A306	1BKR1C100F/CB1	AFAS SYS F SENSOR CAB	QZ	F12Y22	CA12FT	0
A306	1YXZF-PS1/12	CH F SENSR CAB DC POWER SUPPLY	QZ	F12Y22	SPF12R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1B/SAFAS/ZD-XA9	AFAS SG 12 PRESS > SG 11	QZ	F1PT1A	BIX9DI	0
A317	1I/I1013A3	11 FW S/G PT TO INDIC I/I	QZ	F1PT1A	II10AR	0
A317	1I/I1013A2	11 AFW S/G PRESSURE PROTECTION I/I SIG CONVERT	QZ	F1PT1A	II13AR	0
A317	1I/I1013A1	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT1A	II1A1R	0
A317	1I/I1023A2	1 AFW SG 12 PT TO AFAS I/I	QZ	F1PT1A	II23AR	0
1CNT45-1	1PT1013A	11 FW PROT STM PT	QZ	F1PT1A	PT13AR	0
1CNT45-2	1PT1023A	12 FW PROT STM PT	QZ	F1PT1A	PT23AR	0
A317	1YX1X1013A1	FW 1PT1013A LOOP PWR SUPP	QZ	F1PT1A	SP13AR	0
A306	1B/SAFAS/ZE-XA9	AFAS SG 12 PRESS > SG 11	QZ	F1PT1B	BIX9EI	0
A430	1I/I1013B1	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT1B	II10BR	0
A430	1I/I1013B2	1 AFW SG 11 PT TO AFAS	QZ	F1PT1B	II13BR	0
A430	1I/I1023B2	1 AFW SG 12 PT TO AFAS I/I	QZ	F1PT1B	II23BR	0
1CNT45-1	1PT1013B	11 FW S/G PRESSURE PROTECTION PT	QZ	F1PT1B	PT13BR	0
1CNT45-2	1PT1023B	12 FW S/G PROT PT	QZ	F1PT1B	PT23BR	0
A430	1YX1X1013B1	1PT1013B LOOP PWR SUPP	QZ	F1PT1B	SP13BR	0
A306	1B/SAFAS/ZF-XA9	AFAS SG 12 PRESS > SG 11	QZ	F1PT1C	BIX9FI	0
A405	1E/I1013C1	1 AFW SG 11 PT TO AFAS	QZ	F1PT1C	EI13CR	0
A405	1E/I1023C1	1 AFW SG 12 PT TO AFAS	QZ	F1PT1C	EI23CR	0
1CNT45-1	1PT1013C	11 FW PROT STM PT	QZ	F1PT1C	PT13CR	0
1CNT45-2	1PT1023C	12 FW PROT STM PT	QZ	F1PT1C	PT23CR	0
A405	1PY1013C	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT1C	SM13CR	0
A405	1PY1023C	1 RPS S/G 12 PT TO RPS/ESFAS	QZ	F1PT1C	SM23CR	0
A405	1YX1X44	1PT1013C LOOP PWR SUPP	QZ	F1PT1C	SPX44R	0
A306	1B/SAFAS/ZG-XA9	AFAS SG 12 PRESS > SG 11	QZ	F1PT1D	BIX9GI	0
A405	1E/I1013D1	1 AFW SG 11 PT TO AFAS E/I	QZ	F1PT1D	EI13DR	0
A405	1E/I1023D1	1 AFW SG 12 PT TO AFAS E/I	QZ	F1PT1D	EI23DR	0
1CNT45-1	1PT1013D	11 FW PROT STM PT	QZ	F1PT1D	PT13DR	0
1CNT45-2	1PT1023D	12 FW PROT STM PT	QZ	F1PT1D	PT23DR	0
A405	1PY1013D	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT1D	SM13DR	0
A405	1PY1023D	1 RPS SG 12 PT TO RPS/ESFAS	QZ	F1PT1D	SM23DR	0
A405	1YX1X45	1PT1013D LOOP PWR SUPP	QZ	F1PT1D	SPX45R	0
A306	1B/SAFAS/ZD-XA10	AFAS SG 11 PRESS > SG 12	QZ	F1PT2A	BIX0DI	0
A317	1I/I1013A2	11 AFW S/G PRESSURE PROTECTION I/I SIG CONVERT	QZ	F1PT2A	II13AR	0
A317	1I/I1023A2	1 AFW SG 12 PT TO AFAS I/I	QZ	F1PT2A	II23AR	0
A317	1I/I1023A1	1 RPS S/G 12 PT TO RPS/ESFAS	QZ	F1PT2A	II3A1R	0
A317	1I/I1023A3	12 FW S/G PT TO INDIC I/I	QZ	F1PT2A	II3A3R	0
1CNT45-1	1PT1013A	11 FW PROT STM PT	QZ	F1PT2A	PT13AR	0
1CNT45-2	1PT1023A	12 FW PROT STM PT	QZ	F1PT2A	PT23AR	0
A317	1YX1X1023A1	1PT1023A LOOP PWR SUPP	QZ	F1PT2A	SP23AR	0
A306	1B/SAFAS/ZE-XA10	AFAS SG 11 PRESS > SG 12	QZ	F1PT2B	BIX0EI	0
A430	1I/I1013B2	1 AFW SG 11 PT TO AFAS	QZ	F1PT2B	II13BR	0
A430	1I/I1023B2	1 AFW SG 12 PT TO AFAS I/I	QZ	F1PT2B	II23BR	0
A430	1I/I1023B1	1 RPS S/G 12 PT TO RPS/ESFAS	QZ	F1PT2B	II3B1R	0
1CNT45-1	1PT1013B	11 FW S/G PRESSURE PROTECTION PT	QZ	F1PT2B	PT13BR	0
1CNT45-2	1PT1023B	12 FW S/G PROT PT	QZ	F1PT2B	PT23BR	0
A430	1YX1X1023B1	1PT1023B LOOP PWR SUPP	QZ	F1PT2B	SP23BR	0
A306	1B/SAFAS/ZF-XA10	AFAS SG 11 PRESS > SG 12	QZ	F1PT2C	BIX0FI	0
A405	1E/I1013C1	1 AFW SG 11 PT TO AFAS	QZ	F1PT2C	EI13CR	0
A405	1E/I1023C1	1 AFW SG 12 PT TO AFAS	QZ	F1PT2C	EI23CR	0
1CNT45-1	1PT1013C	11 FW PROT STM PT	QZ	F1PT2C	PT13CR	0
1CNT45-2	1PT1023C	12 FW PROT STM PT	QZ	F1PT2C	PT23CR	0
A405	1PY1013C	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT2C	SM13CR	0
A405	1PY1023C	1 RPS S/G 12 PT TO RPS/ESFAS	QZ	F1PT2C	SM23CR	0
A405	1YX1X48	1PT1023C LOOP PWR SUPP	QZ	F1PT2C	SPX48R	0
A306	1B/SAFAS/ZG-XA10	AFAS SG 11 PRESS > SG 12	QZ	F1PT2D	BIX0GI	0
A405	1E/I1013D1	1 AFW SG 11 PT TO AFAS E/I	QZ	F1PT2D	EI13DR	0
A405	1E/I1023D1	1 AFW SG 12 PT TO AFAS E/I	QZ	F1PT2D	EI23DR	0
1CNT45-1	1PT1013D	11 FW PROT STM PT	QZ	F1PT2D	PT13DR	0
1CNT45-2	1PT1023D	12 FW PROT STM PT	QZ	F1PT2D	PT23DR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1PY1013D	1 RPS S/G 11 PT TO RPS/ESFAS	QZ	F1PT2D	SM13DR	0
A405	1PY1023D	1 RPS SG 12 PT TO RPS/ESFAS	QZ	F1PT2D	SM23DR	0
A405	1YX1X49	1PT1023D LOOP PWR SUPP	QZ	F1PT2D	SPX49R	0
A306	1I/IZD-XA1	ISO CH D (AFAS BLK CH A)	QZ	IID13R	IID13R	0
A306	1I/IZD-XA1	ISO CH D (AFAS BLK CH A)	QZ	IID14R	IID14R	0
A306	1I/IZD-XA3	ISO CH D (AFAS BLK CH B)	QZ	IID33R	IID33R	0
A306	1I/IZD-XA3	ISO CH D (AFAS BLK CH B)	QZ	IID34R	IID34R	0
A306	1I/IZE-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIE13R	IIE13R	0
A306	1I/IZE-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIE14R	IIE14R	0
A306	1I/IZE-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIE33R	IIE33R	0
A306	1I/IZE-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIE34R	IIE34R	0
A306	1I/IZF-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIF13R	IIF13R	0
A306	1I/IZF-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIF14R	IIF14R	0
A306	1I/IZF-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIF33R	IIF33R	0
A306	1I/IZF-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIF34R	IIF34R	0
A306	1I/IZG-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIG13R	IIG13R	0
A306	1I/IZG-XA1	ISO CH D (AFAS BLK CH A)	QZ	IIG14R	IIG14R	0
A306	1I/IZG-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIG33R	IIG33R	0
A306	1I/IZG-XA3	ISO CH D (AFAS BLK CH B)	QZ	IIG34R	IIG34R	0
A306	12/4ZA-XA2	CH ZA SG11 AUX FD BLK & HI LVL	QZ	TLXA2R	TLXA2R	0
A306	12/4ZA-XA3	CH ZA SG12 AUX FD BLK & HI LVL	QZ	TLXA3R	TLXA3R	0
A306	12/4ZB-XA2	CH ZB SG11 AUX FD BLK & HI LVL	QZ	TLXB2R	TLXB2R	0
A306	12/4ZB-XA3	CH ZB SG12 AUX FD BLK & HI LVL	QZ	TLXB3R	TLXB3R	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	RA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	RA	EABKR1	CABALT	0
A306	1FUZD-F1	CH D CONTROL POWER FUSE	RA	RACPCD	FUDF1R	0
A306	1HSZD-S1	CH D CONTROL POWER SWITCH S1	RA	RACPCD	HSDS1T	0
A306	1YXZD-PS/40	CH D CAB 40VDC ISOL RELAY PWR	RA	RACPCD	SPD40R	0
A306	1FUZE-F1	CH E CONTROL POWER FUSE	RA	RACPCE	FUEF1R	0
A306	1HSZE-S1	CH E CONTROL POWER SWITCH S1	RA	RACPCE	HSES1T	0
A306	1YXZE-PS/40	CH E CAB 40VDC ISOL RELAY PWR	RA	RACPCE	SPE40R	0
A306	1FUZF-F1	CH F CONTROL POWER FUSE F1	RA	RACPCF	FUFF1R	0
A306	1HSZF-S1	CH F CONTROL POWER SWITCH S1	RA	RACPCF	HSFS1T	0
A306	1YXZF-PS/40	CH F CAB 40VDC ISOL RELAY PWR	RA	RACPCF	SPF40R	0
A306	1FUZG-F1	CH G CONTROL POWER FUSE F1	RA	RACPCG	FUGF1R	0
A306	1HSZG-S1	CH G CONTROL POWER SWITCH S1	RA	RACPCG	HSGS1T	0
A306	1YXZG-PS/40	CH G 40 VDC ISOL RELAY PWR SUP	RA	RACPCG	SPG40R	0
A306	1MODRAS-A/CHD	RAS-A MAINT BYP MODULE CH D	RA	RAMBID	HSM9DT	0
A306	1E/EZD-XA6-U3	RAS ZD CH A ISOLATOR	RA	RAMBID	IID63R	0
A306	1MODRAS-A/CHE	RAS-A MAINT BYP MODULE CH E	RA	RAMBIE	HSM9ET	0
A306	1E/EZE-XA6-U3	RAS ZE CH A ISOLATOR	RA	RAMBIE	IIE63R	0
A306	1MODRAS-A/CHF	RAS-A MAINT BYP MODULE CH F	RA	RAMBIF	HSM9FT	0
A306	1E/EZF-XA6-U3	RAS ZF CH A ISOLATOR	RA	RAMBIF	IIF63R	0
A306	1MODRAS-A/CHG	RAS-A MAINT BYP MODULE CH G	RA	RAMBIG	HSM9GT	0
A306	1E/EZG-XA6-U3	RAS ZG CH A ISOLATOR	RA	RAMBIG	IIG63R	0
A306	1B/SZD-XA5	RAS RWT LEVEL ZD DIGITAL	RA	RASEND	BID05D	0
A439	1LS4142A	11 SI RWT LO LS	RA	RASEND	LS41AD	0
A306	1RYZD-XK4	RAS ZD INPUT	RA	RASEND	RYD43E	0
A306	1RYZD-XK4	RAS ZD INPUT	RA	RASEND	RYD43P	0
A306	1B/SZE-XA5	RAS RWT LEVEL ZE DIGITAL	RA	RASENE	BIE05D	0
A439	1LS4142B	11 SI RWT LO LS	RA	RASENE	LS41BD	0
A306	1RYZE-XK4	RAS ZE INPUT	RA	RASENE	RYE43E	0
A306	1RYZE-XK4	RAS ZE INPUT	RA	RASENE	RYE43P	0
A306	1B/SZF-XA5	RAS RWT LEVEL ZF DIGITAL	RA	RASENF	BIF05D	0
A439	1LS4142C	11 SI RWT LO LS	RA	RASENF	LS41CD	0
A306	1RYZF-XK4	ZF RAS ZF INPUT	RA	RASENF	RYF43E	0
A306	1RYZF-XK4	ZF RAS ZF INPUT	RA	RASENF	RYF43P	0
A306	1B/SZG-XA5	RAS RWT LEVEL ZG DIGITAL	RA	RASENG	BIG05D	0
A439	1LS4142D	11 SI RWT LO LS	RA	RASENG	LS41DD	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYZG-XK4	RAS ZG INPUT	RA	RASENG	RYG43E	0
A306	1RYZG-XK4	RAS ZG INPUT	RA	RASENG	RYG43P	0
A306	1YXAL-PS3/15	AL CABINET CSAS/SGIS/RAS/CRS 15V PWR SUPPLY	RA	SPA35R	SPA35R	0
A306	1YXAL-PS3/28	AL CABINET CSAS/SGIS/RAS/CRS 28V PWR SUPPLY	RA	SPA38R	SPA38R	0
A306	12/4AL-XA20	RAS CH A	RA	TLA20D	TLA20D	0
A306	12/4AL-XA20	RAS CH A	RA	TLA20R	TLA20R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	RB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	RB	EBBKR1	CABBLT	0
A306	1FUZD-F1	CH D CONTROL POWER FUSE	RB	RACPCD	FUDF1R	0
A306	1HSZD-S1	CH D CONTROL POWER SWITCH S1	RB	RACPCD	HSDS1T	0
A306	1YXZD-PS/40	CH D CAB 40VDC ISOL RELAY PWR	RB	RACPCD	SPD40R	0
A306	1FUZE-F1	CH E CONTROL POWER FUSE	RB	RACPCE	FUEF1R	0
A306	1HSZE-S1	CH E CONTROL POWER SWITCH S1	RB	RACPCE	HSES1T	0
A306	1YXZE-PS/40	CH E CAB 40VDC ISOL RELAY PWR	RB	RACPCE	SPE40R	0
A306	1FUZF-F1	CH F CONTROL POWER FUSE F1	RB	RACPCF	FUFF1R	0
A306	1HSZF-S1	CH F CONTROL POWER SWITCH S1	RB	RACPCF	HSFS1T	0
A306	1YXZF-PS/40	CH F CAB 40VDC ISOL RELAY PWR	RB	RACPCF	SPF40R	0
A306	1FUZG-F1	CH G CONTROL POWER FUSE F1	RB	RACPCG	FUGF1R	0
A306	1HSZG-S1	CH G CONTROL POWER SWITCH S1	RB	RACPCG	HSGS1T	0
A306	1YXZG-PS/40	CH G 40 VDC ISOL RELAY PWR SUP	RB	RACPCG	SPG40R	0
A306	1B/SZD-XA5	RAS RWT LEVEL ZD DIGITAL	RB	RASEND	BID05D	0
A439	1LS4142A	11 SI RWT LO LS	RB	RASEND	LS41AD	0
A306	1RYZD-XK4	RAS ZD INPUT	RB	RASEND	RYD43E	0
A306	1RYZD-XK4	RAS ZD INPUT	RB	RASEND	RYD43P	0
A306	1B/SZE-XA5	RAS RWT LEVEL ZE DIGITAL	RB	RASENE	BIE05D	0
A439	1LS4142B	11 SI RWT LO LS	RB	RASENE	LS41BD	0
A306	1RYZE-XK4	RAS ZE INPUT	RB	RASENE	RYE43E	0
A306	1RYZE-XK4	RAS ZE INPUT	RB	RASENE	RYE43P	0
A306	1B/SZF-XA5	RAS RWT LEVEL ZF DIGITAL	RB	RASENF	BIF05D	0
A439	1LS4142C	11 SI RWT LO LS	RB	RASENF	LS41CD	0
A306	1RYZF-XK4	ZF RAS ZF INPUT	RB	RASENF	RYF43E	0
A306	1RYZF-XK4	ZF RAS ZF INPUT	RB	RASENF	RYF43P	0
A306	1B/SZG-XA5	RAS RWT LEVEL ZG DIGITAL	RB	RASENG	BIG05D	0
A439	1LS4142D	11 SI RWT LO LS	RB	RASENG	LS41DD	0
A306	1RYZG-XK4	RAS ZG INPUT	RB	RASENG	RYG43E	0
A306	1RYZG-XK4	RAS ZG INPUT	RB	RASENG	RYG43P	0
A306	1MODRAS-B/CHD	RAS-B MAINT BYP MODULE CH D	RB	RBMBID	HSMADT	0
A306	1E/EZD-XA1-U3	RAS ZD CH B ISOLATOR	RB	RBMBID	IID13R	0
A306	1MODRAS-B/CHE	RAS-B MAINT BYP MODULE CH E	RB	RBMBIE	HSMAET	0
A306	1E/EZE-XA1-U3	RAS ZE CH B ISOLATOR	RB	RBMBIE	IIE13R	0
A306	1MODRAS-B/CHF	RAS-B MAINT BYP MODULE CH F	RB	RBMBIF	HSMAFT	0
A306	1E/EZF-XA1-U3	RAS ZF CH B ISOLATOR	RB	RBMBIF	IIF13R	0
A306	1MODRAS-B/CHG	RAS-B MAINT BYP MODULE CH G	RB	RBMBIG	HSMAGT	0
A306	1E/EZG-XA1-U3	RAS ZG CH B ISOLATOR	RB	RBMBIG	IIG13R	0
A306	1YXBL-PS3/15	BL CABINET CSAS/SGIS/RAS/CRS 15V POWER SUPPLY	RB	SPB35R	SPB35R	0
A306	1YXBL-PS3/28	BL CABINET CSAS/SGIS/RAS/CRS/ 28V POWER SUPPLY	RB	SPB38R	SPB38R	0
A306	12/4BL-XA20	RAS CH B	RB	TLB20D	TLB20D	0
A306	12/4BL-XA20	RAS CH B	RB	TLB20R	TLB20R	0
A439	1MOV4142	RWT OUT	RE	RE0101	MV142P	0
A316	1MOV616	11A HPSI LOOP ISOL	RH	BHERH1	Open	0
A316	1MOV617	11A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0
A316	1MOV626	11B HPSI LOOP ISOL	RH	BHERH1	Open	0
A316	1MOV627	11B AUX HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A317	1NA110	13 SI HI PRESS PP DISC	RH	BHERH1	Start	0
A430	1NA410	13 SI HPSI PP 13 DISC	RH	BHERH1	Start	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A524	1CV1565	SRW HD TK 12 AUTO FILL	RL	CV565O	CV565O	0
A524	1SV1565	SERV WTR HEAD TNK 12 FILL VLV	RL	CV565O	CV565O	0
A524	1CV1579	SRW HD TK 11 AUTO FILL	RL	CV579O	CV579O	0
A524	1SV1579	SERV WTR HEAD TNK 11 FILL VLV	RL	CV579O	CV579O	0
A524	1LS1565	12 SRW HD TK LS	RL	LS565D	LS565D	0
A524	1LS1579	12 SRW HD TK LS	RL	LS579D	LS579D	0
1TB12-1	1HOSE12-16	1 FP TURB BLDG TYPE C HOSE STA	RL	RLFHSF	RLFHSF	0
A524	1CV1579	SRW HD TK 11 AUTO FILL	RL	RLHT1F	CV579P	0
A524	1SV1579	SERV WTR HEAD TNK 11 FILL VLV	RL	RLHT1F	CV579P	0
A524	1LS1579	12 SRW HD TK LS	RL	RLHT1F	LS579R	0
A524	1CV1565	SRW HD TK 12 AUTO FILL	RL	RLHT2F	CV565P	0
A524	1SV1565	SERV WTR HEAD TNK 12 FILL VLV	RL	RLHT2F	CV565P	0
A524	1LS1565	12 SRW HD TK LS	RL	RLHT2F	LS565R	0
A317	1BKR52-1201	U-440-12A LOW SIDE BKR	RQ	BHERS1	Open	0
A317	1BKR52-1212	480V BUS 12A & B TIE BREAKER	RQ	BHERS1	Open	0
A430	1BKR52-1301	1BUS1B03A	RQ	BHERS1	Open	0
A430	1BKR52-1312	480V BUS 13A & B TIE BREAKER	RQ	BHERS1	Open	0
A317	1BKR52-1201	U-440-12A LOW SIDE BKR	RQ	CB201O	CB201O	0
A430	1BKR52-1301	1BUS1B03A	RQ	CB301O	CB301O	0
UNK	1CRDCEA	FOUR MOST REACTIVE CEAS	RQ	CRCEAD	CRCEAD	0
A405	1HS111	SELECTS EITHER LOOPS 11A OR 11B TC INPUTS TO RR	RR(X)	HS111T	HS111T	0
A405	1HS121	SELECTS EITHER LOOPS 12A OR 12B TC INPUTS TO RR	RR(X)	HS121T	HS121T	0
A405	1HSS1X	CHANNEL X LOOP 11 TAVG SELECT	RR(X)	HSS1XT	HSS1XT	0
A405	1HSS2X	CHANNEL X LOOP 12 TAVG SELECT	RR(X)	HSS2XT	HSS2XT	0
A405	1HSS8X	CHANNEL X FUNCTION SELECTOR SW	RR(X)	HSS8XT	HSS8XT	0
A405	1I/IA1X	LOOP 11 HOT LEG TEMP TO RRS	RR(X)	IIA1XR	IIA1XR	0
A405	1I/IA2X	LOOP 12 HOT LEG TEMP TO RRS	RR(X)	IIA2XR	IIA2XR	0
A405	1I/IA4X	LOOP 11A COLD LEG TEMP TO RRS	RR(X)	IIA4XR	IIA4XR	0
A405	1I/IA5X	LOOP 12A COLD LEG TEMPERATURE	RR(X)	IIA5XR	IIA5XR	0
A306	1DISC1Y0101	REACTOR CLNT SYS CHANNELS TR-115, TIC-111Y, TIA-	RR(X)	RR11PS	CA101T	0
A405	1YX6	RR 1TT111Y/111X/115 LOOP PWR SUPP	RR(X)	RR11PS	SP1X6R	0
1CNT26-1	1TE111X	11 RC RXV T-HOT ELMNT	RR(X)	RR11TH	TE11XR	0
A405	1TT111X	11 RRS T-HOT XMTR	RR(X)	RR11TH	TT11XR	0
A306	1DISC1Y0201	REACTOR CLNT SYS CHANNELS TR-125, TIC-121Y, PW	RR(X)	RR12PS	CA201T	0
A405	1YX7	RR 1TT121Y/121X/125 LOOP PWR SUPP	RR(X)	RR12PS	SP1X7R	0
1CNT26-2	1TE121X	1 RC LOOP 12 T-HOT ELMNT	RR(X)	RR12TH	TE12XR	0
A405	1TT121X	12 RRS T-HOT XTMR	RR(X)	RR12TH	TT12XR	0
A306	1DISC1Y0114	REACTOR REGULATING SYS 11 (1C31)	RR(X)	RRPWRS	CA114T	0
A405	1BKR1C31/CB1	REACTOR REGULATING SYSTEM	RR(X)	RRPWRS	CAB1XT	0
A405	1DWRRCUC	11 RR RX CONTR UNIT CALC	RR(X)	RRPWRS	COCCXR	0
A405	1FUOL-1 CH X	CH X 120VAC (LINE) CALC INPUT	RR(X)	RRPWRS	FUF1XR	0
A405	1FUOL-2 CH X	CH X 120VAC (NEUTL) CALC INPUT	RR(X)	RRPWRS	FUF2XR	0
A405	1DWRRPUC	11 RR RX PROGRAM UNIT CALC	RR(X)	RRRPUC	COXPCR	0
A405	1RY1C31/K1	RRS CH X CONTROL RELAY	RR(X)	RRRPUC	RYK1XP	0
1CNT26-1	1TE111Y	1 RC 11A RCP OUT TEMP ELMNT	RR(X)	TE11YR	TE11YR	0
1CNT26-2	1TE121Y	1 RC RCP 12A OUT TEMP ELMNT	RR(X)	TE12YR	TE12YR	0
A405	1TT111Y	11 RRS T-COLD XMTR	RR(X)	TT11YR	TT11YR	0
A405	1TT121Y	12 RR LOOP COLD TEMP TO RRS XMTR	RR(X)	TT12YR	TT12YR	0
A405	1HS111	SELECTS EITHER LOOPS 11A OR 11B TC INPUTS TO RR	RR(Y)	HS111T	HS111T	0
A405	1HS121	SELECTS EITHER LOOPS 12A OR 12B TC INPUTS TO RR	RR(Y)	HS121T	HS121T	0
A405	1HSS1Y	CHANNEL Y LOOP 11 TAVG SELECT	RR(Y)	HSS1YT	HSS1YT	0
A405	1HSS2Y	CHANNEL Y LOOP 12 TAVG SELECT	RR(Y)	HSS2YT	HSS2YT	0
A405	1HSS8Y	CHANNEL Y FUNCTION SELECTOR SW	RR(Y)	HSS8YT	HSS8YT	0
A405	1I/IA1Y	LOOP 11 HOT LEG TEMP TO RRS	RR(Y)	IIA1YR	IIA1XR	0
A405	1I/IA2Y	LOOP 12 HOT LEG TEMP TO RRS	RR(Y)	IIA2YR	IIA2XR	0
A405	1I/IA4Y	LOOP 11 COLD LEG TEMP TO RRS	RR(Y)	IIA4YR	IIA4XR	0
A405	1I/IA5Y	LOOP 12 COLD LEG TEMP TO RRS	RR(Y)	IIA5YR	IIA5XR	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1DISC1Y0101	REACTOR CLNT SYS CHANNELS TR-115, TIC-111Y, TIA-	RR(Y)	RR11PS	CA101T	0
A405	1YX6	RR 1TT111Y/111X/115 LOOP PWR SUPP	RR(Y)	RR11PS	SP1X6R	0
1CNT26-1	1TE111Y	1 RC 11A RCP OUT TEMP ELMNT	RR(Y)	RR11TH	TE11YR	0
A405	1TT111Y	11 RRS T-COLD XMTR	RR(Y)	RR11TH	TT11YR	0
A306	1DISC1Y0201	REACTOR CLNT SYS CHANNELS TR-125, TIC-121Y, PW	RR(Y)	RR12PS	CA201T	0
A405	1YX7	RR 1TT121Y/121X/125 LOOP PWR SUPP	RR(Y)	RR12PS	SP1X7R	0
1CNT26-2	1TE121Y	1 RC RCP 12A OUT TEMP ELMNT	RR(Y)	RR12TH	TE12YR	0
A405	1TT121Y	12 RR LOOP COLD TEMP TO RRS XMTR	RR(Y)	RR12TH	TT12YR	0
A306	1DISC1Y0214	REACTOR REGULATING SYS 12 (1C32)	RR(Y)	RRPWRS	CA214T	0
A405	1BKR1C32/CB1	REACTOR REGULATING SYSTEM	RR(Y)	RRPWRS	CAB1XT	0
A405	1DWRRCUC	11 RR RX CONTR UNIT CALC	RR(Y)	RRPWRS	COCCXR	0
A405	1FUOL-1 CH Y	CH Y 120VAC (LINE) CALC INPUT	RR(Y)	RRPWRS	FUF1YR	0
A405	1FUOL-2 CH Y	CH Y 120VAC (NEUTL) CALC INPUT	RR(Y)	RRPWRS	FUF2YR	0
A405	1DWRRPUC	11 RR RX PROGRAM UNIT CALC	RR(Y)	RRRPUC	COXPCR	0
A405	1RY1C32/K1	RRS CH Y CONTROL RELAY	RR(Y)	RRRPUC	RYK1XP	0
1CNT26-1	1TE111X	11 RC RXV T-HOT ELMNT	RR(Y)	TE11XR	TE11XR	0
1CNT26-2	1TE121X	1 RC LOOP 12 T-HOT ELMNT	RR(Y)	TE12XR	TE12XR	0
A405	1TT111X	11 RRS T-HOT XMTR	RR(Y)	TT11XR	TT11XR	0
A405	1TT121X	12 RRS T-HOT XTMR	RR(Y)	TT12XR	TT12XR	0
A405	1B/SAW9-TU7	CH A TM/LP BISTABLE TRIP UNIT	RS	BIT7AD	BIT7AD	0
A405	1B/SBW9-TU7	CH B TM/LP BISTABLE TRIP UNIT	RS	BIT7BD	BIT7BD	0
A405	1B/SCW9-TU7	CH C TM/LP BISTABLE TRIP UNIT	RS	BIT7CD	BIT7CD	0
A405	1B/SDW9-TU7	CH D TM/LP BISTABLE TRIP UNIT	RS	BIT7DD	BIT7DD	0
A306	1DISC1D1120	REACT TRIP BKR PANEL 1Q01A	RS	CA120T	CA120T	0
A306	1DISC1D1405	REACT TRIP BKR PANEL 1Q01D	RS	CA145T	CA145T	0
A302	2DISC2D1405	RX TRIP BRKR PNL (1Q01E)	RS	CA245T	CA245T	0
A306	1DISC1D1520	REACT TRIP BKR PANEL 1Q01B	RS	CA520T	CA520T	0
UNK	1CRDCEA	FOUR MOST REACTIVE CEAS	RS	CRCEAD	CRCEAD	0
A405	1HS1Q01B	1 RPS MAN RX TRIP TCB 2/6 HS	RS	HSMT1D	HSMT1D	0
A405	1HS1Q01D	1 RPS MAN RX TRIP TCB 3/7 HS	RS	HSMT2D	HSMT2D	0
A405	1HS5835	1 RPS MAN RX TRIP TCB 1/5 HS	RS	HSMT3D	HSMT3D	0
A405	1HS5836	1 RPS MAN RX TRIP TCB 4/8 HS	RS	HSMT4D	HSMT4D	0
A306	1E/EZD-XA16	ZD CHANNEL B (LOWER) ISOLATOR	RS	IID16R	IID16R	0
A306	1E/EZD-XA23	ZD CHANNEL A (LOWER) ISOLATOR	RS	IID23R	IID23R	0
A306	1E/EZE-XA21	ZE CHANNEL B (LOWER) ISOLATOR	RS	IIE21R	IIE21R	0
A306	1E/EZE-XA26	ZE CHANNEL A (LOWER) ISOLATOR	RS	IIE26R	IIE26R	0
A306	1E/EZF-XA21	ZF CHANNEL B (LOWER) ISOLATOR	RS	IIF21R	IIF21R	0
A306	1E/EZF-XA26	ZF CHANNEL A (LOWER) ISOLATOR	RS	IIF26R	IIF26R	0
A306	1E/EZG-XA21	ZG CHANNEL B (LOWER) ISOL	RS	IIG21R	IIG21R	0
A306	1E/EZG-XA26	ZG CHANNEL A (LOWER) ISOL	RS	IIG26R	IIG26R	0
1CNT45-1	1PT102A	11 RC PRZR PT	RS	PT02AR	PT02AR	0
1CNT45-1	1PT102B	11 RC PRZR PT	RS	PT02BR	PT02BR	0
1CNT45-1	1PT102C	11 RC PRZR PT	RS	PT02CR	PT02CR	0
1CNT45-1	1PT102D	11 RC PRZR PT	RS	PT02DR	PT02DR	0
A306	1DISC1Y0126	LOCAL AUX PNL RCS RTD, 1C43E	RS	RSCHAT	CA126T	0
A405	1HSAW11-S1	CH A RPSCIP FUNCTION SEL SW	RS	RSCHAT	HSAS1T	0
A405	1RYAW10-K32	CH A THERMAL POWER BLOCK	RS	RSCHAT	RYAK2T	0
A317	1YX1X112HA	1 RPS 1TT112HA PWR SUPP	RS	RSCHAT	SP1HAR	0
A317	1YX1X122HA	11 RXV PWR SUP 122HA XFMR	RS	RSCHAT	SP2HAR	0
1CNT26-1	1TE112CA	11A RC RXV T-COLD ELMNT	RS	RSCHAT	TE1CAR	0
1CNT26-1	1TE112HA	11 RC RXV T-HOT ELMNT	RS	RSCHAT	TE1HAR	0
1CNT26-2	1TE122CA	12A RC T-COLD ELMNT	RS	RSCHAT	TE2CAR	0
1CNT26-2	1TE122HA	11 RC T-HOT ELMNT	RS	RSCHAT	TE2HAR	0
A317	1TT112CA	11A RPS T-COLD XMTR	RS	RSCHAT	TT1CAR	0
A317	1TT112HA	11 RPS T-HOT XMTR	RS	RSCHAT	TT1HAR	0
A317	1TT122CA	12A RPS T-COLD XMTR	RS	RSCHAT	TT2CAR	0
A317	1TT122HA	1 RPS 12 T-HOT TEMP XMTR	RS	RSCHAT	TT2HAR	0
A302	2DISC2Y0228	CHANNEL B WIDE RANGE AMP, OPTICAL ISOL & AUX S/	RS	RSCHBT	CA228T	0
A405	1HSBW11-S1	CH B RPSCIP FUNCTION SEL SW	RS	RSCHBT	HSBS1T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1RYBW10-K32	CH B THERMAL POWER BLOCK	RS	RSCHBT	RYBK2T	0
A317	1YX1X112HB	1 RPS 1TT112HB PWR SUPP	RS	RSCHBT	SP1HBR	0
A430	1YX1X122HB	1 RPS 1TT122HB PWR SUPP	RS	RSCHBT	SP2HBR	0
1CNT26-1	1TE112CB	11 RC RXV T-COLD ELMNT	RS	RSCHBT	TE1CBR	0
1CNT26-1	1TE112HB	11 RC RXV T-HOT ELMNT	RS	RSCHBT	TE1HBR	0
1CNT26-2	1TE122CB	12B RC T-COLD ELMNT	RS	RSCHBT	TE2CBR	0
1CNT26-2	1TE122HB	12 RC TEMP ELMNT	RS	RSCHBT	TE2HBR	0
A430	1TT112CB	11B RPS T-COLD XMTR	RS	RSCHBT	TT1CBR	0
A430	1TT112HB	11 RPS T-HOT XMTR	RS	RSCHBT	TT1HBR	0
A430	1TT122CB	12B RPS T-COLD XMTR	RS	RSCHBT	TT2CBR	0
A430	1TT122HB	12 RPS T-HOT XMTR	RS	RSCHBT	TT2HBR	0
A306	1DISC1Y0305	REACTOR CLNT SYS LOOP TEMP CH T-112C, T-122C, P	RS	RSCHCT	CA305T	0
A405	1HSCW11-S1	CH C RPSCIP FUNCTION SEL SW	RS	RSCHCT	HSCS1T	0
A405	1RYCW10-K32	CH C THERMAL POWER BLOCK	RS	RSCHCT	RYCK2T	0
A405	1YX1X56	1 RPS 1TT112HC PWR SUPP	RS	RSCHCT	SP1HCR	0
A405	1YX1X58	1 RPS 1TT122HC PWR SUPP	RS	RSCHCT	SP2HCR	0
1CNT26-1	1TE112CC	11A RC RXV T-COLD ELMNT	RS	RSCHCT	TE1CCR	0
1CNT26-1	1TE112HC	11 RC RXV T-HOT ELMNT	RS	RSCHCT	TE1HCR	0
1CNT26-2	1TE122CC	12A RC RXV T-COLD ELMNT	RS	RSCHCT	TE2CCR	0
1CNT26-2	1TE122HC	12B RC T-HOT ELMNT	RS	RSCHCT	TE2HCR	0
A405	1TT112CC	11A RPS T-COLD XMTR	RS	RSCHCT	TT1CCR	0
A405	1TT112HC	11 RPS T-HOT XMTR	RS	RSCHCT	TT1HCR	0
A405	1TT122CC	12A RPS T-COLD XTMR	RS	RSCHCT	TT2CCR	0
A405	1TT122HC	12 RPS T-HOT XMTR	RS	RSCHCT	TT2HCR	0
A306	1DISC1Y0405	REACTOR CLNT SYS LOOP TEMP CH T-112D, T-122D, P	RS	RSCHDT	CA405T	0
A405	1HSDW11-S1	CH D RPSCIP FUNCTION SEL SW	RS	RSCHDT	HSDS1T	0
A405	1RYDW10-K32	CH D THERMAL POWER BLOCK	RS	RSCHDT	RYDK2T	0
A405	1YX1X59	1 RPS 1TT112HD PWR SUPP	RS	RSCHDT	SP1HDR	0
A405	1YX1X61	1 RPS 1TT122HD PWR SUPP	RS	RSCHDT	SP2HDR	0
1CNT26-1	1TE112CD	11 RC RXV T-COLD ELMNT	RS	RSCHDT	TE1CDR	0
1CNT26-1	1TE112HD	11 RC RXV T-HOT ELMNT	RS	RSCHDT	TE1HDR	0
1CNT26-2	1TE122CD	12B RC T-COLD ELMNT	RS	RSCHDT	TE2CDR	0
1CNT26-2	1TE122HD	12A RC T-HOT ELMNT	RS	RSCHDT	TE2HDR	0
A405	1TT112CD	11A RPS T-COLD XMTR	RS	RSCHDT	TT1CDR	0
A405	1TT112HD	11 RPS T-HOT XMTR	RS	RSCHDT	TT1HDR	0
A405	1TT122CD	12B RPS T-COLD XMTR	RS	RSCHDT	TT2CDR	0
A405	1TT122HD	12 RPS T-HOT XMTR	RS	RSCHDT	TT2HDR	0
A306	1FUAL-F2	CH A FAN POWER FUSE F2	RS	RSLCCA	FUAF2R	0
A306	1HSAL-S2	CH A FAN POWER SWITCH S2	RS	RSLCCA	HSAS2T	0
A306	1FANAL-ESFAS	AL LOGIC CABINET	RS	RSLCCA	VNFNAR	0
A306	1FUBL-F2	CH B FAN POWER FUSE F2	RS	RSLCCB	FUBF2R	0
A306	1HSBL-S2	CH B FAN POWER SWITCH S2	RS	RSLCCB	HSBS2T	0
A306	1FANBL-ESFAS	BL LOGIC CABINET	RS	RSLCCB	VNFNBR	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	RS	RSLCXA	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	RS	RSLCXA	CABALT	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	RS	RSLCXB	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	RS	RSLCXB	CABBLT	0
A306	1YXAL-PS4/15	AL CABINET SIAS/CVCIS/DSS 15V POWER SUPPLY	RS	RSLMAF	SPA45R	0
A306	1YXAL-PS4/28	AL CABINET SIAS/CVCIS/DSS 28V POWER SUPPLY	RS	RSLMAF	SPA48R	0
A306	12/4AL-XA28	DSS PP CH A	RS	RSLMAF	TLA28D	0
A306	1YXBL-PS4/15	BL CABINET SIAS/CVCIS/DSS/ 15V POWER SUPPLY	RS	RSLMBF	SPB45R	0
A306	1YXBL-PS4/28	BL CABINET SIAS/CVCIS/DSS 28V POWER SUPPLY	RS	RSLMBF	SPB48R	0
A306	12/4BL-XA28	DSS PP CH B	RS	RSLMBF	TLB28D	0
A317	1HSMG11-5PB	CEDS MG 11 BYPASS IN	RS	RSMG11	HS15PT	0
A317	1CONT1Q206/3M	CEDM M/G/ SET 11 LOAD CONTACTOR	RS	RSMG11	RY13MD	0
A317	1CONT1Q206/3M	CEDM M/G/ SET 11 LOAD CONTACTOR	RS	RSMG11	RY13MT	0
A317	1CONT1Q206/4M	CEDM M/G SET 11 BYPASS CONTACTOR	RS	RSMG11	RY14MT	0
A306	1RYAR-XK119	DSS CH A1	RS	RSMG11	RYA19E	0
A317	1RYMX11	CEDS MG 11 LOAD CONTROL RELAY	RS	RSMG11	RYX11D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1RYMX11	CEDS MG 11 LOAD CONTROL RELAY	RS	RSMG11	RYX11T	0
A430	1HSMG12-5PB	CEDS MG 12 BYPASS IN	RS	RSMG12	HS25PT	0
A430	1CONT1Q306/3M	CEDM M/G SET 12 LOAD CONTACTOR	RS	RSMG12	RY23MD	0
A430	1CONT1Q306/3M	CEDM M/G SET 12 LOAD CONTACTOR	RS	RSMG12	RY23MT	0
A430	1CONT1Q306/4M	CEDM M/G SET 12 BYPASS CONTACTOR	RS	RSMG12	RY24MT	0
A306	1RYBR-XK120	DSS CH B2	RS	RSMG12	RYB20E	0
A430	1RYMX12	CEDS MG 12 LOAD CONTROL RELAY	RS	RSMG12	RYX12D	0
A430	1RYMX12	CEDS MG 12 LOAD CONTROL RELAY	RS	RSMG12	RYX12T	0
1CNT10-2	1NE005	CHANNEL A PWR RNG SFTY NE	RS	RSNIAF	AE005R	0
A405	1NI005	CHANNEL A PWR RNG SFTY NI	RS	RSNIAF	CO005R	0
A405	1FUAW3-F1	CH A LRNI 120VAC POWER FUSE	RS	RSNIAF	FUF1AR	0
A405	1FUAW3-F2	CH A LRNI 120VAC POWER FUSE	RS	RSNIAF	FUF2AR	0
A405	1BKRDWRAW3-S7	CH A LIN PWR LVL PS BKR	RS	RSNIAF	HSS7AT	0
A405	1YXDWRAW3-PS1	CH A LIN PWR LVL LVPS	RS	RSNIAF	SPX1AR	0
A405	1YXDWRAW3-PS2	CH A LIN PWR LVL LVPS	RS	RSNIAF	SPX2AR	0
1CNT10-1	1NE006	CHANNEL B PWR RNG SFTY NE	RS	RSNIBF	AE006R	0
A405	1NI006	CHANNEL B PWR RNG SFTY NI	RS	RSNIBF	CO006R	0
A405	1FUBW3-F1	CH B KRNI 120VAC POWER FUSE	RS	RSNIBF	FUF1BR	0
A405	1FUBW3-F2	CH B LRNI 120VAC POWER FUSE	RS	RSNIBF	FUF2BR	0
A405	1BKRDWRBW3-S7	CH B LIN PWR LVL PS BKR	RS	RSNIBF	HSS7BT	0
A405	1YXDWRBW3-PS1	CH B LIN PWR LVL LVPS	RS	RSNIBF	SPX1BR	0
A405	1YXDWRBW3-PS2	CH B LIN PWR LVL LVPS	RS	RSNIBF	SPX2BR	0
1CNT10-1	1NE007	CHANNEL C PWR RNG SFTY NE	RS	RSNICF	AE007R	0
A405	1NI007	CHANNEL C PWR RNG SFTY NI	RS	RSNICF	CO007R	0
A405	1FUCW3-F1	CH C LRNI 120VAC POWER FUSE	RS	RSNICF	FUF1CR	0
A405	1FUCW3-F2	CH C LRNI 120VAC POWER FUSE	RS	RSNICF	FUF2CR	0
A405	1BKRDWRCW3-S7	CH C LIN PWR LVL PS BKR	RS	RSNICF	HSS7CT	0
A405	1YXDWRCW3-PS1	CH C LIN PWR LVL LVPS	RS	RSNICF	SPX1CR	0
A405	1YXDWRCW3-PS2	CH C LIN PWR LVL LVPS	RS	RSNICF	SPX2CR	0
1CNT10-2	1NE008	CHANNEL D PWR RNG SFTY NE	RS	RSNIDF	AE008R	0
A405	1NI008	CHANNEL D PWR RNG SFTY NI	RS	RSNIDF	CO008R	0
A405	1FUDW3-F1	CH D LRNI 120VAC POWER FUSE	RS	RSNIDF	FUF1DR	0
A405	1FUDW3-F2	CH D KRNI 120VAC POWER FUSE	RS	RSNIDF	FUF2DR	0
A405	1BKRDWRDW3-S7	CH D LIN PWR LVL PS BKR	RS	RSNIDF	HSS7DT	0
A405	1YXDWRDW3-PS1	CH D LIN PWR LVL LVPS	RS	RSNIDF	SPX1DR	0
A405	1YXDWRDW3-PS2	CH D LIN PWR LVL LVPS	RS	RSNIDF	SPX2DR	0
A306	1B/SZD-XA28	DSS PP HIGH	RS	RSPBDF	BID28D	0
A306	1DISC1Y0102	PRESSURIZER PZR CHANNELS PY-102A & PWR SUPP X	RS	RSPBDF	CA102T	0
A306	1E/E102A	SIAS PP ZD INPUT	RS	RSPBDF	II02AR	0
A405	1YX1X102A	FW 1PT102A LOOP PWR SUPP	RS	RSPBDF	SP02AR	0
A306	1B/SZE-XA30	DSS PP HIGH	RS	RSPBEF	BIE30D	0
A306	1DISC1Y0202	PRESSURIZER PZR CHANNELS PY-102B & PWR SUPP X	RS	RSPBEF	CA202T	0
A306	1E/E102B	SIAS PP ZE INPUT	RS	RSPBEF	II02BR	0
A405	1YX1X102B	FW 1PT102B LOOP PWR SUPP	RS	RSPBEF	SP02BR	0
A306	1B/SZF-XA30	DSS PP HIGH	RS	RSPBFF	BIF30D	0
A306	1DISC1Y0302	CHANNEL C WIDE RANGE (UNIT 1) AMPLIFIER PWR SU	RS	RSPBFF	CA302T	0
A306	1E/E102C	SIAS PP ZF INPUT	RS	RSPBFF	II02CR	0
A405	1YX1X102C	FW 1PT102C LOOP PWR SUPP	RS	RSPBFF	SP02CR	0
A306	1B/SZG-XA30	DSS PP HIGH	RS	RSPBGF	BIG30D	0
A306	1DISC1Y0402	PRESSURIZER PZR CHANNEL PY-102D & PWR SUPP X-2	RS	RSPBGF	CA402T	0
A306	1E/E102D	SIAS PP ZG INPUT	RS	RSPBGF	II02DR	0
A405	1YX1X102D	FW 1PT102D LOOP PWR SUPP	RS	RSPBGF	SP02DR	0
A405	1CONTRAW12-CALC	CH A TM/LP CALCULATOR	RS	RSSPAF	COA2CR	0
A405	1CONTRAW15-CALC	CH A APD CALCULATOR	RS	RSSPAF	COA5CR	0
A405	1YXAW12-PS/10	CH A TM/LP 10VDC POWER SUPPLY	RS	RSSPAF	SPA20R	0
A405	1YXAW12-PS1	CH A TM/LP 18VDC POWER SUPPLY	RS	RSSPAF	SPA21R	0
A405	1YXAW12-PS2	CH A TM/LP 18VDC POWER SUPPLY	RS	RSSPAF	SPA22R	0
A405	1YXAW15-RS1	CH A APD 10VDC POWER SUPPLY	RS	RSSPAF	SPA51R	0
A405	1YXAW15-PS1	CH A APD 18VDC POWER SUPPLY	RS	RSSPAF	SPA58R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1CONTRBW12-CALC	CH B TM/LP CALCULATOR	RS	RSSPBF	COB2CR	0
A405	1CONTRBW15-CALC	CH B APD CALCULATOR	RS	RSSPBF	COB5CR	0
A405	1YXBW12-PS/10	CH B TM/LP 10VDC POWER SUPPLY	RS	RSSPBF	SPB20R	0
A405	1YXBW12-PS1	CH B TM/LP 18VDC POWER SUPPLY	RS	RSSPBF	SPB21R	0
A405	1YXBW12-PS2	CH B TM/LP 18VDC POWER SUPPLY	RS	RSSPBF	SPB22R	0
A405	1YXBW15-RS1	CH B APD 10VDC POWER SUPPLY	RS	RSSPBF	SPB51R	0
A405	1YXBW15-PS1	CH B APD 18VDC POWER SUPPLY	RS	RSSPBF	SPB58R	0
A405	1CONTRCW12-CALC	CH C TM/LP CALCULATOR	RS	RSSPCF	COC2CR	0
A405	1CONTRCW15-CALC	CH C APD CALCULATOR	RS	RSSPCF	COC5CR	0
A405	1YXCW12-PS/10	CH C TM/LP 10VDC POWER SUPPLY	RS	RSSPCF	SPC20R	0
A405	1YXCW12-PS1	CH C TM/LP 18VDC POWER SUPPLY	RS	RSSPCF	SPC21R	0
A405	1YXCW12-PS2	CH C TM/LP 18VDC POWER SUPPLY	RS	RSSPCF	SPC22R	0
A405	1YXCW15-RS1	CH C APD 10 VDC POWER SUPPLY	RS	RSSPCF	SPC51R	0
A405	1YXCW15-PS1	CH C SPD 18VDC POWER SUPPLY	RS	RSSPCF	SPC58R	0
A405	1CONTRDW12-CALC	CH D TM/LP CALCULATOR	RS	RSSPDF	COD2CR	0
A405	1CONTRDW15-CALC	CH D APD CALCULATOR	RS	RSSPDF	COD5CR	0
A405	1YXDW12-PS/10	CH D TM/LP 10VDC POWER SUPPLY	RS	RSSPDF	SPD20R	0
A405	1YXDW12-PS1	CH D TM/LP 18VDC POWER SUPPLY	RS	RSSPDF	SPD21R	0
A405	1YXDW12-PS2	CH D TM/LP 18VDC POWER SUPPLY	RS	RSSPDF	SPD22R	0
A405	1YXDW15-RS1	CH D APD 10VDC POWER SUPPLY	RS	RSSPDF	SPD51R	0
A405	1YXDW15-PS1	CH D APD 18VDC POWER SUPPLY	RS	RSSPDF	SPD58R	0
A405	1RYDWRAW7-AB1	AB MATRIX RELAY AB1	RS	RYAB1D	RYAB1D	0
A405	1RYDWRAW7-AB2	AB MATRIX RELAY AB2	RS	RYAB2D	RYAB2D	0
A405	1RYDWRAW7-AB3	AB MATRIX RELAY AB3	RS	RYAB3D	RYAB3D	0
A405	1RYDWRAW7-AB4	AB MATRIX RELAY AB4	RS	RYAB4D	RYAB4D	0
A405	1RYDWRCW6-AC1	AC MATRIX RELAY AC1	RS	RYAC1D	RYAC1D	0
A405	1RYDWRCW6-AC2	AC MATRIX RELAY AC2	RS	RYAC2D	RYAC2D	0
A405	1RYDWRCW6-AC3	AC MATRIX RELAY AC3	RS	RYAC3D	RYAC3D	0
A405	1RYDWRCW6-AC4	AC MATRIX RELAY AC4	RS	RYAC4D	RYAC4D	0
A405	1RYDWRDW6-AD1	AD MATRIX RELAY AD1	RS	RYAD1D	RYAD1D	0
A405	1RYDWRDW6-AD2	AD MATRIX RELAY AD2	RS	RYAD2D	RYAD2D	0
A405	1RYDWRDW6-AD3	AD MATRIX RELAY AD3	RS	RYAD3D	RYAD3D	0
A405	1RYDWRDW6-AD4	AD MATRIX RELAY AD4	RS	RYAD4D	RYAD4D	0
A405	1RYDWRBW6-BC1	BC MATRIX RELAY BC1	RS	RYBC1D	RYBC1D	0
A405	1RYDWRBW6-BC2	BC MATRIX RELAY BC2	RS	RYBC2D	RYBC2D	0
A405	1RYDWRBW6-BC3	BC MATRIX RELAY BC2	RS	RYBC3D	RYBC3D	0
A405	1RYDWRBW6-BC4	BC MATRIX RELAY BC4	RS	RYBC4D	RYBC4D	0
A405	1RYDWRBW7-BD1	BD MATRIX RELAY BD1	RS	RYBD1D	RYBD1D	0
A405	1RYDWRBW7-BD2	BD MATRIX RELAY BD2	RS	RYBD2D	RYBD2D	0
A405	1RYDWRBW7-BD3	BD MATRIX RELAY BD3	RS	RYBD3D	RYBD3D	0
A405	1RYDWRBW7-BD4	BD MATRIX RELAY BD4	RS	RYBD4D	RYBD4D	0
A405	1RYDWRCW7-CD1	CD MATRIX RELAY CD1	RS	RYCD1D	RYCD1D	0
A405	1RYDWRCW7-CD2	CD MATRIX RELAY CD2	RS	RYCD2D	RYCD2D	0
A405	1RYDWRCW7-CD3	CD MATRIX RELAY CD3	RS	RYCD3D	RYCD3D	0
A405	1RYDWRCW7-CD4	CD MATRIX RELAY CD 4	RS	RYCD4D	RYCD4D	0
A306	1COIL1Q01/TC-1	RX TRIP BKR 1 SHUNT TRIP COIL	RS	SHST1D	SHST1D	0
A306	1COIL1Q02/TC-2	RX TRIP BKR 2 SHUNT TRIP COIL	RS	SHST2D	SHST2D	0
A306	1COIL1Q03/TC-3	RX TRIP BKR 3 SHUNT TRIP COIL	RS	SHST3D	SHST3D	0
A306	1COIL1Q04/TC-4	RX TRIP BKR 4 SHUNT TRIP COIL	RS	SHST4D	SHST4D	0
A306	1COIL1Q01/TC-5	RX TRIP BKR 5 SHUNT TRIP COIL	RS	SHST5D	SHST5D	0
A306	1COIL1Q02/TC-6	RX TRIP BKR 6 SHUNT TRIP COIL	RS	SHST6D	SHST6D	0
A306	1COIL1Q03/TC-7	RX TRIP BKR 7 SHUNT TRIP COIL	RS	SHST7D	SHST7D	0
A306	1COIL1Q04/TC-8	RX TRIP BKR 8 SHUNT TRIP COIL	RS	SHST8D	SHST8D	0
A306	1BKR1Q01A/TCB-1	CEDM TRIP CIRCUIT BREAKER	RS	TBTB1D	TBTB1D	0
A306	1BKR1Q01B/TCB-2	CEDM TRIP CIRCUIT BREAKER	RS	TBTB2D	TBTB2D	0
A306	1BKR1Q01D/TCB-3	CEDM TRIP CIRCUIT BREAKER	RS	TBTB3D	TBTB3D	0
A306	1BKR1Q01E/TCB-4	CEDM TRIP CIRCUIT BREAKER	RS	TBTB4D	TBTB4D	0
A306	1BKR1Q01A/TCB-5	CEDM TRIP CIRCUIT BREAKER	RS	TBTB5D	TBTB5D	0
A306	1BKR1Q01B/TCB-6	CEDM TRIP CIRCUIT BREAKER	RS	TBTB6D	TBTB6D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1BKR1Q01D/TCB-7	CEDM TRIP CIRCUIT BREAKER	RS	TBTB7D	TBTB7D	0
A306	1BKR1Q01E/TCB-8	CEDM TRIP CIRCUIT BREAKER	RS	TBTB8D	TBTB8D	0
A306	1COIL1Q01/UVD-1	RX TRIP BKR 1 U/V TRIP COIL	RS	UVUV1D	UVUV1D	0
A306	1COIL1Q02/UVD-2	RX TRIP BKR 2 U/V TRIP COIL	RS	UVUV2D	UVUV2D	0
A306	1COIL1Q03/UVD-3	RX TRIP BKR 3 U/V TRIP COIL	RS	UVUV3D	UVUV3D	0
A306	1COIL1Q04/UVD-4	RX TRIP BKR 4 U/V TRIP COIL	RS	UVUV4D	UVUV4D	0
A306	1COIL1Q01/UVD-5	RX TRIP BKR 5 U/V TRIP COIL	RS	UVUV5D	UVUV5D	0
A306	1COIL1Q02/UVD-6	RX TRIP BKR 6 U/V TRIP COIL	RS	UVUV6D	UVUV6D	0
A306	1COIL1Q03/UVD-7	RX TRIP BKR 7 U/V TRIP COIL	RS	UVUV7D	UVUV7D	0
A306	1COIL1Q04/UVD-8	RX TRIP BKR 8 U/V TRIP COIL	RS	UVUV8D	UVUV8D	0
UNK	1HXSIRWT11	11 SI RWT HX	RT	RT0101	HXR11B	0
UNK	1HXSIRWT11	11 SI RWT HX	RT	RT0101	HXR11P	0
A439	1PUMPSIRWT11	11 REFUELING WATER PUMP (1M0515)	RT	RT0101	MZ515R	0
A439	1PUMPSIRWT11	11 REFUELING WATER PUMP (1M0515)	RT	RT0101	MZ515S	0
A439	1MOV4143	RWT OUT	RW	RW0101	MV143P	0
1INTK-1	1PUMPSW11	11 SALT WATER PUMP (1MA105)	S1	MWS11R	MWS11R	168
1INTK-1	1PUMPSW11	11 SALT WATER PUMP (1MA105)	S1	MWS11S	MWS11S	168
A317	1NA112	SALT WTR PP 13 DISC	S1	MWS13R	MWS13R	0
A430	1NA412	SALT WTR PP 13 DISC	S1	MWS13R	MWS13R	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	S1	MWS13R	MWS13R	168
A317	1NA112	SALT WTR PP 13 DISC	S1	MWS13S	MWS13S	0
A430	1NA412	SALT WTR PP 13 DISC	S1	MWS13S	MWS13S	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	S1	MWS13S	MWS13S	168
A306	1RYAR-XK30	SIAS SUB CH A8-1	S1	RYA30E	RYA30E	0
A306	1RYAR-XK31	SIAS SUB CH A8-2	S1	RYA31E	RYA31E	0
A306	1RYAR-XK75	SDS SUB CH A2-1	S1	RYA75E	RYA75E	0
A306	1RYAR-XK76	SDS SUB CH A2-2	S1	RYA76E	RYA76E	0
1INTK-4	1CV5149	EMERG SW DISCH TO BAY	S1	S1149T	C4149T	48
1INTK-4	1SV5149	SALT WTR EMERG OUT	S1	S1149T	C4149T	0
A405	1HS5157	12 SRW HX CV-5166 & CV-5155 HS	S1	S1149T	HS157T	0
A405	1HS5167	12 SW COMPR CLG HX OUT CV HS	S1	S1149T	HS167T	0
A405	1HS5179	12 SW ECCS PP RM HX OUT HS	S1	S1149T	HS179T	0
A306	1RYAR-XK98	UV SUB CH A2-15	S1	S1PP11	RYA98T	0
A306	1RYAR-XK107	UV SUB CH A3-8	S1	S1PP13	RYA07T	0
1INTK-2	1PUMPSW12	12 SALT WATER PUMP (1MA405)	S2	MWS12R	MWS12R	168
1INTK-2	1PUMPSW12	12 SALT WATER PUMP (1MA405)	S2	MWS12S	MWS12S	168
A317	1NA112	SALT WTR PP 13 DISC	S2	MWS13R	MWS13R	0
A430	1NA412	SALT WTR PP 13 DISC	S2	MWS13R	MWS13R	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	S2	MWS13R	MWS13R	168
A317	1NA112	SALT WTR PP 13 DISC	S2	MWS13S	MWS13S	0
A430	1NA412	SALT WTR PP 13 DISC	S2	MWS13S	MWS13S	0
1INTK-3	1PUMPSW13	13 SALT WATER PUMP (1MA412)	S2	MWS13S	MWS13S	168
A306	1RYBR-XK26	SIAS SUB CH B8-1	S2	RYB26E	RYB26E	0
A306	1RYBR-XK27	SIAS SUB CH B8-2	S2	RYB27E	RYB27E	0
A306	1RYBR-XK63	SDS SUB CH B2-1	S2	RYB63E	RYB63E	0
A306	1RYBR-XK64	SDS SUB CH B2-2	S2	RYB64E	RYB64E	0
A306	1RYBR-XK82	UV SUB CH B2-14	S2	S2PP12	RYB82T	0
A306	1RYBR-XK91	UV SUB CH B3-8	S2	S2PP13	RYB91T	0
A226	1CV5150	11 SRW HX SW INLET	S3	C1150P	C1150P	60
A405	1HS5150	11A/11B SRW HX SALT WATER INLET & BYPASS VLV HS	S3	C1150P	C1150P	0
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL.
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A405	1HS5151	11 SERV WTR HX SALT WTR ISO HS	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A405	1HS5151	11 SERV WTR HX SALT WTR ISO HS	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A405	1HS5151	11 SERV WTR HX SALT WTR ISO HS	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A405	1HS5151	11 SERV WTR HX SALT WTR ISO HS	S3	HS151T	HS151T	0
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11R	MWS11R	32
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11S	MWS11S	32
A317	1NA111	SERV WTR PP 13 DISC	S3	MWS13R	MWS13R	0
A430	1NA411	SERV WTR PP 13 DISC	S3	MWS13R	MWS13R	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13R	MWS13R	32
A317	1NA111	SERV WTR PP 13 DISC	S3	MWS13S	MWS13S	0
A430	1NA411	SERV WTR PP 13 DISC	S3	MWS13S	MWS13S	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13S	MWS13S	32
A306	1RYAR-XK26	SIAS SUB CH A7-3	S3	RYA26E	RYA26E	0
A306	1RYAR-XK29	SIAS SUB CH A7-6	S3	RYA29E	RYA29E	0
A306	1RYAR-XK73	SDS SUB CH A1-1	S3	RYA73E	RYA73E	0
A306	1RYAR-XK74	SDS SUB CH A1-2	S3	RYA74E	RYA74E	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A405	1HS5209	SRW HX 11A SALT WATER OUTLET VLV HS	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A405	1HS5151	11 SERV WTR HX SALT WTR ISO HS	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1CV5210	11 SRW HX SW OUTLET CV	S3	S3H1BV	C2210P	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A405	1HS5210	11B SRW HX TO SALT WATER OUTLET HS	S3	S3H1BV	C2210P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A306	1RYAR-XK99	UV SUB CH A2-16	S3	S3P1TR	RYA99T	0
A306	1RYAR-XK108	UV SUB CH A3-9	S3	S3P3TR	RYA08T	0
1TB12-4	1HXIAA/CLR11	11 IA COMPR AFTER COOLER	S3	S3TBAL	ATIA1R	0
1TB12-4	1HXIAA/CLR12	12 IA COMPR AFTER COOLER	S3	S3TBAL	ATIA2R	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	S3	S3TBAL	ATPA1R	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A405	1HS5153	12A/12B SRW HX SALT WATER OUTLET & BYPASS VLV	S4	C1153P	C1153P	0
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A405	1PIC5157	12A/12B SRW HX SW OUT PRESSURE INDICATING CON	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	C2212O	C2212O	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A405	1HS5212	12B SRW HX TO SALT WATER OUTLET HS	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12R	MWS12R	32
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12S	MWS12S	32
A317	1NA111	SERV WTR PP 13 DISC	S4	MWS13R	MWS13R	0
A430	1NA411	SERV WTR PP 13 DISC	S4	MWS13R	MWS13R	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13R	MWS13R	32

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A317	1NA111	SERV WTR PP 13 DISC	S4	MWS13S	MWS13S	0
A430	1NA411	SERV WTR PP 13 DISC	S4	MWS13S	MWS13S	0
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13S	MWS13S	32
A306	1RYBR-XK24	SIAS SUB CH B7-5	S4	RYB24E	RYB24E	0
A306	1RYBR-XK25	SIAS SUB CH B7-6	S4	RYB25E	RYB25E	0
A306	1RYBR-XK61	SDS SUB CH B1-1	S4	RYB61E	RYB61E	0
A306	1RYBR-XK62	SDS SUB CH B1-2	S4	RYB62E	RYB62E	0
1TB12-4	1HXIAA/CLR11	11 IA COMPR AFTER COOLER	S4	S3TBAL	ATIA1R	0
1TB12-4	1HXIAA/CLR12	12 IA COMPR AFTER COOLER	S4	S3TBAL	ATIA2R	0
1TB12-4	1HXPAA/CLR11	11 PA COMPR AFTER COOLER	S4	S3TBAL	ATPA1R	0
A226	1CV5152	12 SRW HX SW INLET	S4	S4CV52	C1152P	60
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A405	1HS5152	HS FOR 1-SW-5152	S4	S4CV52	HS152T	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A405	1HS5211	SRW HX 12A SALT WATER OUTLET VLV HS	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	S4H2BV	C2212P	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A405	1HS5212	12B SRW HX TO SALT WATER OUTLET HS	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A306	1RYBR-XK83	UV SUB CH B2-15	S4	S4P2TR	RYB83T	0
A306	1RYBR-XK92	UV SUB CH B3-9	S4	S4P3TR	RYB92T	0
A306	1DISC1Y0112	ESFAS CABINET 1C67-L (A LOGIC) POWER SUPPLY	SA	EABKR1	CA112T	0
A306	1BKRESFAS-AL	ESFAS CABINET AL POWER SUPPLY	SA	EABKR1	CABALT	0
A306	1MODCONTPRESS-A/C	SIAS-A CONT PRESS MAINT BYP MOD CH D	SA	SAMBID	HSM5DT	0
A306	1E/EZD-XA6-U1	SIAS CP ZD CH A ISOLATOR	SA	SAMBID	IID61R	0
A306	1MODCONTPRESS-A/C	SIAS-A CONT PRESS MAINT BYP MOD CH E	SA	SAMBIE	HSM5ET	0
A306	1E/EZE-XA6-U1	SIAS CP ZE CH A ISOLATOR	SA	SAMBIE	IIE61R	0
A306	1MODCONTPRESS-A/C	SIAS-A CONT PRESS MAINT BYP MOD CH F	SA	SAMBIF	HSM5FT	0
A306	1E/EZF-XA6-U1	SIAS CP ZF CH A ISOLATOR	SA	SAMBIF	IIF61R	0
A306	1MODCONTPRESS-A/C	SIAS-A CONT PRESS MAINT BYP MOD CH G	SA	SAMBIG	HSM5GT	0
A306	1E/EZG-XA6-U1	SIAS CP ZG CH A ISOLATOR	SA	SAMBIG	IIG61R	0
A306	1MODPZRPRESS-A/CHD	PZRPRESS-A MAINT BYP MOD CH D	SA	SAPMBD	HSM6DT	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1E/EZD-XA6-U6	SIAS PP ZD CH A ISOLATOR	SA	SAPMBD	IID66R	0
A306	1MODPZRPRESS-A/CHE	PZRPRESS-A MAINT BYP MOD CH E	SA	SAPMBE	HSM6ET	0
A306	1E/EZE-XA6-U6	SIAS PP ZE CH A ISOLATOR	SA	SAPMBE	IIE66R	0
A306	1MODPZRPRESS-A/CHF	PZRPRESS-A MAINT BYP MOD CH F	SA	SAPMBF	HSM6FT	0
A306	1E/EZF-XA6-U6	SIAS PP ZF CH A ISOLATOR	SA	SAPMBF	IIF66R	0
A306	1MODPZRPRESS-A/CHG	PZRPRESS-A MAINT BYP MOD CH G	SA	SAPMBG	HSM6GT	0
A306	1E/EZG-XA6-U6	SIAS PP ZG CH A ISOLATOR	SA	SAPMBG	IIG66R	0
A306	1B/SZD-XA10	SIAS PP ZD LOW	SA	SAPSND	BID10D	0
A306	1E/E102A	SIAS PP ZD INPUT	SA	SAPSND	IID2AR	0
1CNT45-1	1PT102A	11 RC PRZR PT	SA	SAPSND	PTD2AR	0
A306	1YXZD-PS1/5	ZD CABINET 5V SENSOR MODULE REFERENCE VOLTA	SA	SAPSND	SPD05R	0
A306	1B/SZE-XA10	SIAS PP ZE LOW	SA	SAPSNE	BIE10D	0
A306	1E/E102B	SIAS PP ZE INPUT	SA	SAPSNE	IIE2BR	0
1CNT45-1	1PT102B	11 RC PRZR PT	SA	SAPSNE	PTE2BR	0
A306	1YXZE-PS1/5	ZE CABINET 5V SENSOR MODULE REFERENCE VOLTA	SA	SAPSNE	SPE05R	0
A306	1B/SZF-XA10	SIAS PP ZF LOW	SA	SAPSNF	BIF10D	0
A306	1E/E102C	SIAS PP ZF INPUT	SA	SAPSNF	IIF2CR	0
1CNT45-1	1PT102C	11 RC PRZR PT	SA	SAPSNF	PTF2CR	0
A306	1YXZF-PS1/5	ZF CABINET 5V SENSOR MODULE REFERENCE VOLTA	SA	SAPSNF	SPF05R	0
A306	1B/SZG-XA10	SIAS PP ZG LOW	SA	SAPSNG	BIG10D	0
A306	1E/E102D	SIAS PP ZG INPUT	SA	SAPSNG	IIG2DR	0
1CNT45-1	1PT102D	11 RC PRZR PT	SA	SAPSNG	PTG2DR	0
A306	1YXZG-PS1/5	ZG CABINET 5V SENSOR MODULLE REFERENCE VOLT	SA	SAPSNG	SPG05R	0
A306	1B/SZD-XA11	SIAS CP ZD HIGH	SA	SASEND	BID11D	0
A429	1PT5313A	1 HVAC/P CNTMT PT TO SIAS	SA	SASEND	PTD3AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	SA	SASEND	SPD48R	0
A306	1B/SZE-XA11	SIAS CP ZE HIGH	SA	SASENE	BIE11D	0
A429	1PT5313B	1 HVAC/P CNTMT PT TO SIAS	SA	SASENE	PTE3BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	SA	SASENE	SPE48R	0
A306	1B/SZF-XA11	SIAS CP ZF HIGH	SA	SASENF	BIF11D	0
A423	1PT5313C	1 HVAC/P CNTMT PT TO SIAS	SA	SASENF	PTF3CR	40
A306	1YXZF-PS1/48	ZF CABINET 48V PT5313C/14C/15C/16C POWER	SA	SASENF	SPF48R	0
A306	1B/SZG-XA11	SIAS CP ZG HIGH	SA	SASENG	BIG11D	0
A423	1PT5313D	1 HVAC/P CNTMT PT TO SIAS	SA	SASENG	PTG3DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	SA	SASENG	SPG48R	0
A306	1YXAL-PS4/15	AL CABINET SIAS/CVCIS/DSS 15V POWER SUPPLY	SA	SPA45R	SPA45R	0
A306	1YXAL-PS4/28	AL CABINET SIAS/CVCIS/DSS 28V POWER SUPPLY	SA	SPA48R	SPA48R	0
A306	12/4AL-XA1	SIAS SUB CH A8	SA	TLA01D	TLA01D	0
A306	12/4AL-XA1	SIAS SUB CH A8	SA	TLA01R	TLA01R	0
A306	12/4AL-XA14	ESFAS SIAS BLOCK CH A LOGIC MODULE	SA	TLA14R	TLA14R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	SB	EBBKR1	CA212T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	SB	EBBKR1	CABBLT	0
A306	1B/SZD-XA10	SIAS PP ZD LOW	SB	SAPSND	BID10D	0
A306	1E/E102A	SIAS PP ZD INPUT	SB	SAPSND	IID2AR	0
1CNT45-1	1PT102A	11 RC PRZR PT	SB	SAPSND	PTD2AR	0
A306	1YXZD-PS1/5	ZD CABINET 5V SENSOR MODULE REFERENCE VOLTA	SB	SAPSND	SPD05R	0
A306	1B/SZE-XA10	SIAS PP ZE LOW	SB	SAPSNE	BIE10D	0
A306	1E/E102B	SIAS PP ZE INPUT	SB	SAPSNE	IIE2BR	0
1CNT45-1	1PT102B	11 RC PRZR PT	SB	SAPSNE	PTE2BR	0
A306	1YXZE-PS1/5	ZE CABINET 5V SENSOR MODULE REFERENCE VOLTA	SB	SAPSNE	SPE05R	0
A306	1B/SZF-XA10	SIAS PP ZF LOW	SB	SAPSNF	BIF10D	0
A306	1E/E102C	SIAS PP ZF INPUT	SB	SAPSNF	IIF2CR	0
1CNT45-1	1PT102C	11 RC PRZR PT	SB	SAPSNF	PTF2CR	0
A306	1YXZF-PS1/5	ZF CABINET 5V SENSOR MODULE REFERENCE VOLTA	SB	SAPSNF	SPF05R	0
A306	1B/SZG-XA10	SIAS PP ZG LOW	SB	SAPSNG	BIG10D	0
A306	1E/E102D	SIAS PP ZG INPUT	SB	SAPSNG	IIG2DR	0
1CNT45-1	1PT102D	11 RC PRZR PT	SB	SAPSNG	PTG2DR	0
A306	1YXZG-PS1/5	ZG CABINET 5V SENSOR MODULLE REFERENCE VOLT	SB	SAPSNG	SPG05R	0
A306	1B/SZD-XA11	SIAS CP ZD HIGH	SB	SASEND	BID11D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A429	1PT5313A	1 HVAC/P CNTMT PT TO SIAS	SB	SASEND	PTD3AR	38
A306	1YXZD-PS1/48	ZD CABINET 48V PT5313A/14A/15A/16A POWER	SB	SASEND	SPD48R	0
A306	1B/SZE-XA11	SIAS CP ZE HIGH	SB	SASENE	BIE11D	0
A429	1PT5313B	1 HVAC/P CNTMT PT TO SIAS	SB	SASENE	PTE3BR	38
A306	1YXZE-PS1/48	ZE CABINET 48V PT5313B/14B/15B/16B POWER	SB	SASENE	SPE48R	0
A306	1B/SZF-XA11	SIAS CP ZF HIGH	SB	SASENF	BIF11D	0
A423	1PT5313C	1 HVAC/P CNTMT PT TO SIAS	SB	SASENF	PTF3CR	40
A306	1YXZF-PS1/48	ZF CABINET 48V PT5313C/14C/15C/16C POWER	SB	SASENF	SPF48R	0
A306	1B/SZG-XA11	SIAS CP ZG HIGH	SB	SASENG	BIG11D	0
A423	1PT5313D	1 HVAC/P CNTMT PT TO SIAS	SB	SASENG	PTG3DR	40
A306	1YXZG-PS1/48	ZG CABINET 48V PT5313D/14D/15D/16D POWER	SB	SASENG	SPG48R	0
A306	1MODCONTPRESS-B/C	SIAS-B CONT PRESS MAINT BYP MOD CH D	SB	SBMBID	HSM7DT	0
A306	1E/EZD-XA1-U1	SIAS CP ZD CH B ISOLATOR	SB	SBMBID	IID11R	0
A306	1MODCONTPRESS-B/C	SIAS-B CONT PRESS MAINT BYP MOD CH E	SB	SBMBIE	HSM7ET	0
A306	1E/EZE-XA1-U1	SIAS CP ZE CH B ISOLATOR	SB	SBMBIE	IIE11R	0
A306	1MODCONTPRESS-B/C	SIAS-B CONT PRESS MAINT BYP MOD CH F	SB	SBMBIF	HSM7FT	0
A306	1E/EZF-XA1-U1	SIAS CP ZF CH B ISOLATOR	SB	SBMBIF	IIF11R	0
A306	1MODCONTPRESS-B/C	SIAS-B CONT PRESS MAINT BYP MOD CH G	SB	SBMBIG	HSM7GT	0
A306	1E/EZG-XA1-U1	SIAS CP ZG CH B ISOLATOR	SB	SBMBIG	IIG11R	0
A306	1MODPZRPRESS-B/CHD	PZRPRESS-B MAINT BYP MOD CH D	SB	SBPMBD	HSM8DT	0
A306	1E/EZD-XA1-U6	SIAS PP ZD CH B ISOLATOR	SB	SBPMBD	IID16R	0
A306	1MODPZRPRESS-B/CHE	PZRPRESS-B MAINT BYP MOD CH E	SB	SBPMBE	HSM8ET	0
A306	1E/EZE-XA1-U6	SIAS PP ZE CH B ISOLATOR	SB	SBPMBE	IIE16R	0
A306	1MODPZRPRESS-B/CHF	PZRPRESS-B MAINT BYP MOD CH F	SB	SBPMBF	HSM8FT	0
A306	1E/EZF-XA1-U6	SIAS PP ZF CH B ISOLATOR	SB	SBPMBF	IIF16R	0
A306	1MODPZRPRESS-B/CHG	PZRPRESS-B MAINT BYP MOD CH G	SB	SBPMBG	HSM8GT	0
A306	1E/EZG-XA1-U6	SIAS PP ZG CH B ISOLATOR	SB	SBPMBG	IIG16R	0
A306	1YXBL-PS4/15	BL CABINET SIAS/CVCIS/DSS/ 15V POWER SUPPLY	SB	SPB45R	SPB45R	0
A306	1YXBL-PS4/28	BL CABINET SIAS/CVCIS/DSS 28V POWER SUPPLY	SB	SPB48R	SPB48R	0
A306	12/4BL-XA1	SIAS SUB CH B8	SB	TLB01D	TLB01D	0
A306	12/4BL-XA1	SIAS SUB CH B8	SB	TLB01R	TLB01R	0
A306	12/4BL-XA14	ESFAS SIAS BLOCK CH B LOGIC MODULE	SB	TLB14R	TLB14R	0
A405	1HS6900	1 HVAC/P CNTMT H2 PURGE ISOL VLV HS	SG	HS690T	HS690T	0
1CNT45-1	1MOV6900	H2 PURGE CONTMT ISOL (CNTMT SIDE)	SG	MV690C	MV690C	0
1CNT45-1	1MOV6900	H2 PURGE CONTMT ISOL (CNTMT SIDE)	SG	MV690T	MV690T	0
A316	1MOV6901	H2 PURGE CONTMT ISOL (PER RM SIDE)	SG	MV691C	MV691C	0
A316	1MOV6901	H2 PURGE CONTMT ISOL (PER RM SIDE)	SG	MV691T	MV691T	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A316	1MOV6902	H2 PURGE FLOW CONTROL DAMPER	SG	SGMV01	MV692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A316	1MOV6903	H2 PURGE REPLACE AIR CONTMT ISOL	SG	SGMV02	MV693T	0
A306	1RYAR-XK9	SIAS SUB CH A2-1	SG	SGRY01	RYA09E	0
A306	1RYAR-XK9	SIAS SUB CH A2-1	SG	SGRY01	RYA09P	0
A306	1RYBR-XK9	SIAS SUB CH B2-2	SG	SGRY02	RYB09E	0
A306	1RYBR-XK9	SIAS SUB CH B2-2	SG	SGRY02	RYB09P	0
A405	1HS2180	1 WGS CNTMT VENT ISOL SV HS	SH	HS180T	HS180T	0
A405	1HS2181	1 WGS CNTMT VENT ISOL SV HS	SH	HS181T	HS181T	0
A405	1HS5460	U-1 DW TO CNTMT ISOL SV HS	SH	HS460T	HS460T	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12
A316	1CV5292	CONTMT ATMOS SMPL ISOL	SH	IC292C	IC292C	0
A316	1SV5292	CONTMT ATMOS SMPL ISOL	SH	IC292C	IC292C	0
A316	1CV5460	U-1 CONTMT ISOL	SH	IC460T	IC460T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A316	1SV5460	U-1 CONTMT ISOL SV	SH	IC460T	IC460T	0
1CNT10-1	1CV5291	CONTMT ATMOS SMPL ISOL	SH	IC921C	IC921C	0
C230	1SV5291	CONTMT ATMOS SMPL ISOL	SH	IC921C	IC921C	0
A316	1MOV2080	CNTMT IA ISOLATION MOV	SH	MV080T	MV080T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A405	1HS2080	1 IA CNTMT MOV HS	SH	SHHS01	HS080T	0
A405	1HS2080A	1 IA CNTMT VLV CIS OVERRIDE HS	SH	SHHS01	HS08AT	0
A405	1HS5460	U-1 DW TO CNTMT ISOL SV HS	SH	SHIC01	HS460D	0
A316	1CV5460	U-1 CONTMT ISOL	SH	SHIC01	IC460C	0
A316	1SV5460	U-1 CONTMT ISOL SV	SH	SHIC01	IC460C	0
A405	1HS5291	1 RE CNTMT PURGE SMPL ISOL CONTR HS	SH	SHIC02	HS291T	0
1CNT10-1	1CV5291	CONTMT ATMOS SMPL ISOL	SH	SHIC02	IC291T	0
C230	1SV5291	CONTMT ATMOS SMPL ISOL	SH	SHIC02	IC291T	0
A405	1HS5292	1 RE CNTMT PURGE SMPL ISOL CONTR HS	SH	SHIC03	HS292T	0
A316	1CV5292	CONTMT ATMOS SMPL ISOL	SH	SHIC03	IC292T	0
A316	1SV5292	CONTMT ATMOS SMPL ISOL	SH	SHIC03	IC292T	0
A316	1MOV2080	CNTMT IA ISOLATION MOV	SH	SHMV01	MV080C	0
A306	1RYBR-XK58	RAS SUB CH B5	SH	SHMV01	RYB58P	0
A306	1RYAR-XK45	SIAS SUB CH A4-7	SH	SHRY01	RYA45E	0
A306	1RYAR-XK45	SIAS SUB CH A4-7	SH	SHRY01	RYA45P	0
A306	1RYBR-XK39	SIAS SUB CH B9-6	SH	SHRY02	RYB39E	0
A306	1RYBR-XK39	SIAS SUB CH B9-6	SH	SHRY02	RYB39P	0
A306	1RYAR-XK49	SIAS SUB CH A9-8	SH	SHRY03	RYA49E	0
A306	1RYAR-XK49	SIAS SUB CH A9-8	SH	SHRY03	RYA49P	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SH	SHRY04	RYB41E	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SH	SHRY04	RYB41P	0
A418	1HS6540B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV01	HS40BD	14
1CNT10-2	1SV6540B	CNTMT H2 ANALYZER S PRIM SHLD	SH	SHSV01	SV40BT	0
A418	1HS6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	HS07BD	14
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A418	1HS5900B	HYDROGEN SAMPLE NO.7	SH	SHSV03	HS00BD	14
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A418	1HS6540C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV04	HS40CD	14
1CNT10-2	1SV6540C	CNTMT H2 ANALYZER PRESS COMPRT	SH	SHSV04	SV40CT	0
A418	1HS6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	HS07CD	14
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A418	1HS5900C	HYDROGEN SAMPLE NO.6	SH	SHSV06	HS00CD	14
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A418	1HS6540D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV07	HS40DD	14
1CNT10-2	1SV6540D	1-SX-5900D ISOL 135' E ATMOS SAMP ISOL	SH	SHSV07	SV40DT	0
A418	1HS6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	HS07DD	14
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A418	1HS5900D	HYDROGEN SAMPLE NO.5	SH	SHSV09	HS00DD	14
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A418	1HS6531	1 PS PRESSURE QUENCH TK 11 O2 SMPL ANALYZER	SH	SHSV10	HS531D	14
A306	1RYBR-XK45	SIAS SUB CH B9-8	SH	SHSV10	RYB45E	0
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV10	SV531D	0
A418	1HS6531	1 PS PRESSURE QUENCH TK 11 O2 SMPL ANALYZER	SH	SHSV11	HS531T	14
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV11	SV531T	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
1CNT10-2	1SV6540B	CNTMT H2 ANALYZER S PRIM SHLD	SH	SV40BD	SV40BD	0
1CNT10-2	1SV6540C	CNTMT H2 ANALYZER PRESS COMPRT	SH	SV40CD	SV40CD	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1CNT10-2	1SV6540D	1-SX-5900D ISOL 135' E ATMOS SAMP ISOL	SH	SV40DD	SV40DD	0
C230	1SV5277	CONT ATMOS RAD MON UNIT 1	SH	SV527D	SV527D	0
1CNT10-2	1SV6540G	CNTMT H2 ANALYZER SAMP RETURN	SH	SV540D	SV540D	0
1CNT10-2	1SV6540G	CNTMT H2 ANALYZER SAMP RETURN	SH	SV540T	SV540T	0
1CNT10-1	1CV1410	CPA SUPP ISOL CV	SI	IC410C	IC410C	0
1CNT10-1	1SV1410	CPA SUPP ISOL CV CONT	SI	IC410C	IC410C	0
A316	1CV1411	CPA SUPP ISOL CV	SI	IC411C	IC411C	0
A316	1SV1411	CPA SUPP ISOL CV CONT	SI	IC411C	IC411C	0
1CNT10-1	1CV1412	CPA EXH ISOL CV	SI	IC412C	IC412C	0
1CNT10-1	1SV1412	CPA EXH ISOL CV CONT	SI	IC412C	IC412C	0
A316	1CV1413	CPA EXH ISOL CV	SI	IC413C	IC413C	0
A316	1SV1413	CPA EXH ISOL CV CONT	SI	IC413C	IC413C	0
A405	1HS1410	CNTMT PURGE SUPPLY VLV 11 HS	SI	SICV01	HS410T	0
1CNT10-1	1CV1410	CPA SUPP ISOL CV	SI	SICV01	IC410T	0
1CNT10-1	1SV1410	CPA SUPP ISOL CV CONT	SI	SICV01	IC410T	0
A405	1HS1411	1 HVAC/P CNTMT PURGE AIR SUPP VLV 12 HS	SI	SICV02	HS411T	0
A316	1CV1411	CPA SUPP ISOL CV	SI	SICV02	IC411T	0
A316	1SV1411	CPA SUPP ISOL CV CONT	SI	SICV02	IC411T	0
A405	1HS1412	1 HVAC/P CNTMT PURGE AIR EXH VLV 11 HS	SI	SICV03	HS412T	0
1CNT10-1	1CV1412	CPA EXH ISOL CV	SI	SICV03	IC412T	0
1CNT10-1	1SV1412	CPA EXH ISOL CV CONT	SI	SICV03	IC412T	0
A405	1HS1413	1 HVAC/P CNTMT PURGE AIR EXH VLV 12 HS	SI	SICV04	HS413T	0
A316	1CV1413	CPA EXH ISOL CV	SI	SICV04	IC413T	0
A316	1SV1413	CPA EXH ISOL CV CONT	SI	SICV04	IC413T	0
A306	1RYAR-XK44	SIAS SUB CH A9-5	SI	SIRY01	RY0A9E	0
A306	1RYAR-XK44	SIAS SUB CH A9-5	SI	SIRY01	RY0A9P	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SI	SIRY04	RY0B9E	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SI	SIRY04	RY0B9P	0
A306	1RYAR-XK62	CRS SUB CH A3	SI	SIRY05	RY1A1E	0
A306	1RYAR-XK62	CRS SUB CH A3	SI	SIRY05	RY1A1P	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SI	SIRY07	RY1B9E	0
A306	1RYBR-XK41	SIAS SUB CH B9-7	SI	SIRY07	RY1B9P	0
A317	1BKR252-11P01	NO 11A RCP SUPPLY FROM SERVICE BUS 12	SL	BHESL2	Open	0
A317	1BKR252-11P02	NO 11A RCP SUPPLY FROM SERVICE BUS 22	SL	BHESL2	Open	0
A317	1BKR252-12P01	NO 12A RCP SUPPLY FROM SERVICE BUS 12	SL	BHESL2	Open	0
A317	1BKR252-12P02	NO 12A RCP SUPPLY FROM SERVICE BUS 22	SL	BHESL2	Open	0
A430	1BKR252-13P01	NO 11B RCP SUPPLY FROM SERVICE BUS 12	SL	BHESL2	Open	0
A430	1BKR252-13P02	NO 11B RCP SUPPLY FROM SERVICE BUS 22	SL	BHESL2	Open	0
A430	1BKR252-14P01	NO 12B RCP SUPPLY FROM SERVICE BUS 12	SL	BHESL2	Open	0
A430	1BKR252-14P02	NO 12B RCP SUPPLY FROM SERVICE BUS 22	SL	BHESL2	Open	0
C230	1HXRCPSWTR11A	11A RCP SEAL WTR HX	SL	SLP11A	HX11AB	0
1CNT26-1	1SEALRCP11A-1	RCP 11A SEAL NUMBER 1	SL	SLP11A	XJ1A1M	0
1CNT26-1	1SEALRCP11A-2	RCP 11A SEAL NUMBER 2	SL	SLP11A	XJ1A2M	0
1CNT26-1	1SEALRCP11A-3	RCP 11A SEAL NUMBER 3	SL	SLP11A	XJ1A3M	0
1CNT26-1	1SEALRCP11A-VS	RCP 11A VAPOR SEAL	SL	SLP11A	XJ1AVM	0
C230	1HXRCPSWTR11B	11B RCP SEAL WTR HX	SL	SLP11B	HX11BB	0
1CNT26-1	1SEALRCP11B-1	RCP 11B SEAL NUMBER 1	SL	SLP11B	XJ1B1M	0
1CNT26-1	1SEALRCP11B-2	RCP 11B SEAL NUMBER 2	SL	SLP11B	XJ1B2M	0
1CNT26-1	1SEALRCP11B-3	RCP 11B SEAL NUMBER 3	SL	SLP11B	XJ1B3M	0
1CNT26-1	1SEALRCP11B-VS	RCP 11B VAPOR SEAL	SL	SLP11B	XJ1BVM	0
C230	1HXRCPSWTR12A	12A RCP SEAL WTR HX	SL	SLP12A	HX12AB	0
1CNT26-2	1SEALRCP12A-1	RCP 12A SEAL NUMBER 1	SL	SLP12A	XJ2A1M	0
1CNT26-2	1SEALRCP12A-2	RCP 12A SEAL NUMBER 2	SL	SLP12A	XJ2A2M	0
1CNT26-2	1SEALRCP12A-3	RCP 12A SEAL NUMBER 3	SL	SLP12A	XJ2A3M	0
1CNT26-2	1SEALRCP12A-VS	RCP 12A VAPOR SEAL	SL	SLP12A	XJ2AVM	0
C230	1HXRCPSWTR12B	12B RCP SEAL WTR HX	SL	SLP12B	HX12BB	0
1CNT26-2	1SEALRCP12B-1	RCP 12B SEAL NUMBER 1	SL	SLP12B	XJ2B1M	0
1CNT26-2	1SEALRCP12B-2	RCP 12B SEAL NUMBER 2	SL	SLP12B	XJ2B2M	0
1CNT26-2	1SEALRCP12B-3	RCP 12B SEAL NUMBER 3	SL	SLP12B	XJ2B3M	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1CNT26-2	1SEALRCP12B-VS	RCP 12B VAPOR SEAL	SL	SLP12B	XJ2BVM	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12
A317	1DISC89-1116	COMPONENT CLG PP 13 DISC SW	SP(PP3)	BHEK12	Start	0
A430	1DISC89-1416	COMPONENT CLG PP 13 DISC SW	SP(PP3)	BHEK12	Start	0
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0
A306	1RYAR-XK43	SIAS SUB CH A9-6	SR	RYA43P	RYA43P	0
A306	1RYBR-XK40	SIAS SUB CH B9-5	SR	RYB40P	RYB40P	0
1TB12-3 (CP)	1CV4406	CST TO HTWL M/U CV	T1	T1CS1F	C3406T	0
1TB12-3 (CP)	1I/P4406	COND STORAGE TO HOTWELL CONT	T1	T1CS1F	C3406T	0
1TB12-3 (CP)	1SV4406	CD STORAGE TO HOTWELL CONTROL SV	T1	T1CS1F	C3406T	0
A405	1LIC4405	CD CONDENSER MAKE-UP AND DUMP CONTROL LIC	T1	T1CS1F	LC405R	0
1TB12-3 (CP)	1LT4405	CD CONDENSER HOTWELL LT	T1	T1CS1F	LT405R	0
2TB27-2E	2CV4406	21 CST TO HTWL M/U CV	T1	T1CS2F	C3B06T	0
2TB12-2 (CP)	2I/P4406	COND STORAGE TO HOTWELL CONTRL	T1	T1CS2F	C3B06T	0
A405	2LIC4405	CD HOTWELL LIC	T1	T1CS2F	LCB05R	0
2TB12-2 (CP)	2LT4405	CD HOTWELL LEVEL CONTROL LT	T1	T1CS2F	LTB05R	0
A226	1CV1637	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3637P	144
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1CV1639	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3639P	144
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A405	1HS1637	11 SRW TURB BLDG ISOL VLV HS	TA	TAFB01	HS637T	0
A405	1HS1639	11 SRW TURB BLDG ISOL VLV HS	TA	TAFB01	HS639T	0
A306	1RYAR-XK20	SIAS SUB CH A5-3	TA	TAFB01	RYA20T	0
A306	1RYBR-XK16	SIAS SUB CH B5-2	TA	TAFB01	RYB16T	0
A226	1CV1600	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3600P	72
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1CV1638	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3638P	72
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A405	1HS1600	12 SRW TURB BLDG ISOL VLV HS	TB	TBFB01	HS600T	0
A405	1HS1638	12 SRW TURB BLDG ISOL VLV HS	TB	TBFB01	HS638T	0
A306	1RYAR-XK20	SIAS SUB CH A5-3	TB	TBFB01	RYA20T	0
A306	1RYBR-XK15	SIAS SUB CH B5-1	TB	TBFB01	RYB15T	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RR	AW11RR	30
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RS	AW11RS	30
A405	1HS3986	11 AFW TURB DRV PP TRIP HS	TF	TF11TP	HS986T	0
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	TF11TP	VT986P	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	TF11TP	VT986P	0
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	VT986O	VT986O	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	VT986O	VT986O	0
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RR	AW12RR	30

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RS	AW12RS	30
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	TG	BHEF1Y	Close/Ope	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	TG	BHEF1Y	Close/Ope	0
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	TG	BHEF1Y	Close/Ope	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	TG	BHEF1Y	Close/Ope	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	TG	BHEF1Y	Close/Ope	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	TG	BHEF1Y	Close/Ope	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Ope	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Ope	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Ope	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Ope	0
A315	1CV4070	11 S/G MS TO AFW PP TURB	TG	BHEF1Y	Open	12
A315	1CV4071	12 S/G MS TO AFW PP TURB	TG	BHEF1Y	Open	12
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0
A405	1HS3988	12 AFW TURB DRV PP TRIP HS	TG	TGTP12	HS988T	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	TGTP12	VT988P	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	TGTP12	VT988P	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	VT988O	VT988O	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	VT988O	VT988O	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1	BHER3B	Open	13
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1	BHER3B	Open	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	TH(HD1	BHER3B	Open	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	TH(HD1	BHER3B	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1	BHER3B	Open	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1	BHER3B	Open	0
1INTK-1	1PUMPSW11	11 SALT WATER PUMP (1MA105)	TH(HD1	BHER3B	Start	168
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1	BHER3B	Throttle	0
A226	1CV5210	11 SRW HX SW OUTLET CV	TH(HD1	BHER3B	Throttle	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1	BHER3B	Throttle	0
A405	1HIC5206	SALT WTR OUT COMP CLG HTEX 11	TH(HD1	BHER3B	Throttle	0
A405	1HS5161	HS FOR 1-SW-5160-CV & 1-SW-5206-CV	TH(HD1	BHER3B	Throttle	0
A405	1HS5210	11B SRW HX TO SALT WATER OUTLET HS	TH(HD1	BHER3B	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1	BHER3B	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1	BHER3B	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1	BHER3B	Throttle	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2	BHER3B	Open	0
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	TH(HD2	BHER3B	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2	BHER3B	Open	0
1INTK-2	1PUMPSW12	12 SALT WATER PUMP (1MA405)	TH(HD2	BHER3B	Start	168
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2	BHER3B	Throttle	0
A226	1CV5212	12 SRW HX SW OUT CV	TH(HD2	BHER3B	Throttle	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2	BHER3B	Throttle	0
A405	1HIC5208	SALT WTR OUT COMP CLG HTEX 12	TH(HD2	BHER3B	Throttle	0
A405	1HS5164	HS FOR 1-SW-5164-CV & 1-SW-5208-CV	TH(HD2	BHER3B	Throttle	0
A405	1HS5212	12B SRW HX TO SALT WATER OUTLET HS	TH(HD2	BHER3B	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2	BHER3B	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2	BHER3B	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2	BHER3B	Throttle	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2	BHER3B	Throttle	0
UNK	1SV1T01/MTS	MECHANICAL TRIP SOLENOID	TT	SVMTVD	SVMTVD	0
A306	1SV1T01/MTSV-A	MASTER TRIP SOLENOID	TT	TTMTSV	SVMTAD	0
A306	1SV1T01/MTSV-B	MASTER TRIP SOLENOID	TT	TTMTSV	SVMTBD	0
1TB27-6	1CVMT-11	11 MT CV	TT	V1CV1C	V1CV1C	0
1TB27-6	1CVMT-12	12 MT CV	TT	V1CV2C	V1CV2C	0
1TB27-6	1CVMT-13	13 MT CV	TT	V1CV3C	V1CV3C	0
1TB27-6	1CVMT-14	14 MT CV	TT	V1CV4C	V1CV4C	0
1TB27-6	1FCVMT-11	11 MT STOP VLV	TT	V1SV1C	V1SV1C	0
1TB27-6	1FCVMT-12	12 MT STOP VLV	TT	V1SV2C	V1SV2C	0
1TB27-6	1FCVMT-13	13 MT STOP VLV	TT	V1SV3C	V1SV3C	0
1TB27-6	1FCVMT-14	14 MT STOP VLV	TT	V1SV4C	V1SV4C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A306	1DISC1Y0901	120I TURB EHC CABINET 1T11 (3500W)	TX	TX24V1	CA091T	0
A306	1FU1T11/F7-F8	TURBINE EHC CABINET	TX	TX24V1	FUT11R	0
A306	1FU1Y0901/FU	120I DISTR PNL BKR 01 FU	TX	TX24V1	FUY09R	0
A306	1HS1TO1 1T11	SUPPLY CONTROL HANDSWITCH	TX	TX24V1	HST11T	0
A306	1X1T11/T6	EH CONTROLLER POWER SUPPLY	TX	TX24V1	SPPS6R	0
1TB45-3	1GEN/1T11/PMG	PERMANENT MAGNETIC GENERATOR	TX	TX24V2	AAPMGC	0
A306	1X1T11/T5	EH CONTROLLER POWER SUPPLY	TX	TX24V2	SPPS5R	0
A306	1YXAL-PS5/15	AL CABINET U/V 15V POWER SUPPLY	TX	TXB24L	SPA55R	0
A306	1YXBL-PS5/28	8L CABINET U/V 28V POWER SUPPLY	TX	TXB24L	SPA58R	0
A306	12/4BL-XA25	TUVL CH B	TX	TXB24L	TLA25D	0
A306	12/4AL-XA25	TRIP UV LOGIC MODULE	TX	TXB24L	TLA25R	0
A306	1DISC1Y0212	ESFAS CABINET 1C68-L (B LOGIC) POWER SUPPLY	TX	TXBKR1	CA112T	0
A306	1BKRESFAS-BL	ESFAS CABINET BL POWER SUPPLY	TX	TXBKR1	CABBLT	0
A306	1RY1T01/XKT/103	ESFAS TO TURBINE TRIP REALY	TX	TXT103	RY103E	0
A306	1RY1T01/XKT/103	ESFAS TO TURBINE TRIP REALY	TX	TXT103	RY103P	0
A306	1RYKT201	MT VAC TRIP AND RESET SYS REL	TX	TXT201	RY201E	0
A306	1RYKT201	MT VAC TRIP AND RESET SYS REL	TX	TXT201	RY201P	0
A306	1RYKT701	MT NO EHC DC INPUT PWR REL	TX	TXT701	RY701D	0
A306	1RYKT701	MT NO EHC DC INPUT PWR REL	TX	TXT701	RY701T	0
A306	1RYKT823	MT REACTOR TRIP BUS U/V OR SG HIGH LVL TRIP REL	TX	TXT823	RY823E	0
A306	1RYKT823	MT REACTOR TRIP BUS U/V OR SG HIGH LVL TRIP REL	TX	TXT823	RY823P	0
A306	1B/SZD-XA7	TT UV ZD DIGITAL	TX	TXTUVD	BIDA7D	0
A306	1FUZD-F1	CH D CONTROL POWER FUSE	TX	TXTUVD	FUDF1R	0
A306	1MODTTUV/CHD	TTUV ZD MAINT BYP MOD	TX	TXTUVD	HSDMBT	0
A306	1HSZD-S1	CH D CONTROL POWER SWITCH S1	TX	TXTUVD	HSDS1T	0
A306	1E/EZD-XA1-U5	TT UV ZD CH B ISOLATOR	TX	TXTUVD	IIDA1R	0
A306	1RYZD-XK9	TTUV ZD INPUT	TX	TXTUVD	RYDK9E	0
A306	1RYZD-XK9	TTUV ZD INPUT	TX	TXTUVD	RYDK9P	0
A306	1YXZD-PS/40	CH D CAB 40VDC ISOL RELAY PWR	TX	TXTUVD	SPD40R	0
A306	1B/SZE-XA7	TT UV ZE DIGITAL	TX	TXTUVE	BIEA7D	0
A306	1FUZE-F1	CH E CONTROL POWER FUSE	TX	TXTUVE	FUEF1R	0
A306	1MODTTUV/CHE	TTUV ZE MAINT BYP MOD	TX	TXTUVE	HSEMBT	0
A306	1HSZE-S1	CH E CONTROL POWER SWITCH S1	TX	TXTUVE	HSES1T	0
A306	1E/EZE-XA1-U5	TT UV ZE CH B ISOLATOR	TX	TXTUVE	IIEA1R	0
A306	1RYZE-XK9	TTUV ZE INPUT	TX	TXTUVE	RYEK9E	0
A306	1RYZE-XK9	TTUV ZE INPUT	TX	TXTUVE	RYEK9P	0
A306	1YXZE-PS/40	CH E CAB 40VDC ISOL RELAY PWR	TX	TXTUVE	SPE40R	0
A306	1B/SZF-XA7	TT UV ZF DIGITAL	TX	TXTUVF	BIFA7D	0
A306	1FUZF-F1	CH F CONTROL POWER FUSE F1	TX	TXTUVF	FUFF1R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1MODTTUV/CHF	TTUV ZF MAINT BYP MOD	TX	TXTUVF	HSFMBT	0
A306	1HSZF-S1	CH F CONTROL POWER SWITCH S1	TX	TXTUVF	HSFS1T	0
A306	1E/EZF-XA1-U5	TT UV ZF CH B ISOLATOR	TX	TXTUVF	IIFA1R	0
A306	1RYZF-XK9	TTUV ZF INPUT	TX	TXTUVF	RYFK9E	0
A306	1RYZF-XK9	TTUV ZF INPUT	TX	TXTUVF	RYFK9P	0
A306	1YXZF-PS/40	CH F CAB 40VDC ISOL RELAY PWR	TX	TXTUVF	SPF40R	0
A306	1B/SZG-XA7	TT UV ZG DIGITAL	TX	TXTUVG	BIGA7D	0
A306	1FUZG-F1	CH G CONTROL POWER FUSE F1	TX	TXTUVG	FUGF1R	0
A306	1MODTTUV/CHG	TTUV ZG MAINT BYP MOD	TX	TXTUVG	HSGMBT	0
A306	1HSZG-S1	CH G CONTROL POWER SWITCH S1	TX	TXTUVG	HSGS1T	0
A306	1E/EZG-XA1-U5	TT UV ZG CH B ISOLATOR	TX	TXTUVG	IIGA1R	0
A306	1RYZG-XK9	TTUV ZG INPUT	TX	TXTUVG	RYGK9E	0
A306	1RYZG-XK9	TTUV ZG INPUT	TX	TXTUVG	RYGK9P	0
A306	1YXZG-PS/40	CH G 40 VDC ISOL RELAY PWR SUP	TX	TXTUVG	SPG40R	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	UQ	BHEUQ1	Throttle	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	UQ	BHEUQ1	Throttle	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A405	1FIC4511A	TURBINE DRIVEN AFW FLOW TO S/G 11	UQ	BHEUQ1	Throttle	0
A405	1FIC4512A	TURBINE DRIVEN AFW FLOW TO S/G 12	UQ	BHEUQ1	Throttle	0
A405	1FIC4525A	MOTOR DRIVEN AFW TO S/G 11	UQ	BHEUQ1	Throttle	0
A405	1FIC4535A	MOTOR DRIVEN AFW TO S/G 12	UQ	BHEUQ1	Throttle	0
A430	1HC4511B	TURBINE DR AFW STM GEN 11	UQ	BHEUQ1	Throttle	0
A430	1HC4512B	TURBINE DR AFW STM GEN 12	UQ	BHEUQ1	Throttle	0
A430	1HC4525B	MOTOR DR AFW STM GEN 11	UQ	BHEUQ1	Throttle	0
A430	1HC4535B	MOTOR DR AFW STM GEN 12	UQ	BHEUQ1	Throttle	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A529	1TY5404	EAST ECCS PP RM NO 1 COOL FANS	V1	RY404E	RY404E	0
A529	1RY1B1448/42	ECCS PP RM AIR CLR 11 42 CONTR	V1	RYA42E	RYA42E	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A405	1HS5172	HS FOR 1-SW-5170-CV AND 1-SW-5171-CV	V1	V1CLSE	HS172T	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	V1CLSE	WC170P	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	V1CLSE	WC171P	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A529	1BKR52-11448	MCC 114R ECCS PP RM 11 COOLER FANS BKR	V1	V1SUPT	CB114T	6
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	V1SUPT	HS404T	0
A529	1RY1B1448/42	ECCS PP RM AIR CLR 11 42 CONTR	V1	V1SUPT	RYA42P	0
A529	1TY5404	EAST ECCS PP RM NO 1 COOL FANS	V1	V1TEMP	RY404P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	WC170D	WC170D	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	WC170O	WC170O	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	WC171D	WC171D	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	V1	WC171O	WC171O	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A423	1TY5405	WEST ECCS PP RM NO 1 COOL FANS	V2	RY405E	RY405E	0
UNK	1RY1B0448/42	ECCS PP RM AIR CLR 12 42 CONTR	V2	RYB42E	RYB42E	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A405	1HS5176	HS FOR 1-SW-5174-CV & 1-SW-5175-CV	V2	V2CLSE	HS176T	0
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0
A405	1HS5173	HS FOR 1-SW-5173-CV	V2	V2INLT	HS173T	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	V2	V2INLT	WC173P	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0
A405	1HS5179	12 SW ECCS PP RM HX OUT HS	V2	V2OTLT	HS179D	0
A405	1HS5179	12 SW ECCS PP RM HX OUT HS	V2	V2OTLT	HS179T	0
A423	1BKR52-10448	MCC 104R ECCS PP RM 12 COOLER FANS BKR	V2	V2SUPT	CB104T	6
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	V2	V2SUPT	HS04AT	0
UNK	1RY1B0448/42	ECCS PP RM AIR CLR 12 42 CONTR	V2	V2SUPT	RYB42P	0
A423	1TY5405	WEST ECCS PP RM NO 1 COOL FANS	V2	V2TEMP	RY405P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	V2	WC173D	WC173D	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	V2	WC173O	WC173O	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0
1TB12-2 (CP)	1PUMPCARSWP11	11 CAR SEAL WTR PUMP (1M0636)	VC	MMS11R	MMS11R	0
1TB12-2 (CP)	1PUMPCARSWP12	12 CAR SEAL WTR PUMP (1M0637)	VC	MMS12R	MMS12R	0
1TB12-2 (CP)	1PUMPCARSWP13	13 CAR SEAL WTR PUMP (1M1636)	VC	MMS13R	MMS13R	0
1TB12-2 (CP)	1PUMPCAR11	11 CAR VAC PP (1MB203)	VC	MMV11R	MMV11R	0
1TB12-2 (CP)	1PUMPCAR12	12 CAR VAC PP (1MB217)	VC	MMV12R	MMV12R	0
1TB12-2 (CP)	1PUMPCAR13	13 CAR VAC PP (1MB303)	VC	MMV13R	MMV13R	0
1INTK-4	1PUMPCWDEWTR11	11 CW DEWATERING PUMP	VC	MPD11R	MPD11R	0
1INTK-4	1PUMPCWDEWTR12	12 CW DEWATERING PUMP	VC	MPD12R	MPD12R	0
1INTK-4	1PUMPCWDEWTR13	13 CW DEWATERING PUMP	VC	MPD13R	MPD13R	0
1INTK-4	1PUMPCWDEWTR14	14 CW DEWATERING PUMP	VC	MPD14R	MPD14R	0
1INTK-4	1PUMPCWDEWTR15	15 CW DEWATERING PUMP	VC	MPD15R	MPD15R	0
1INTK-4	1PUMPCWDEWTR16	16 CW DEWATERING PUMP	VC	MPD16R	MPD16R	0
1INTK-4	1PUMPCW11	11 CIRCULATION WATER PUMP (1MA502)	VC	MYCW1R	MYCW1R	0
1INTK-4	1PUMPCW12	12 CIRCULATION WATER PUMP (1MA503)	VC	MYCW2R	MYCW2R	0
1INTK-4	1PUMPCW13	13 CIRCULATION WATER PUMP (1MA504)	VC	MYCW3R	MYCW3R	0
1INTK-4	1PUMPCW14	14 CIRCULATING WATER PUMP (1MA601)	VC	MYCW4R	MYCW4R	0
1INTK-4	1PUMPCW15	15 CIRCULATING WATER PUMP (1MA602)	VC	MYCW5R	MYCW5R	0
1INTK-4	1PUMPCW16	16 CIRCULATING WATER PUMP (1MA603)	VC	MYCW6R	MYCW6R	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	VC	VC0015	BN101T	0
0NSB27-1	1BKR152-1501	SUPP BKR FROM U-4000-13	VC	VC0015	BN501T	0
0NSB27-1	1BUS1A05	4KV BUS 15	VC	VC0015	BU1A5R	0
U4000-13	1XU-4000-13	13/4KV XFMR U-4000-13	VC	VC0015	TX1X4R	0
0NSB27-1	1BKR152-1506	TIE BKR TO U BUS 16	VC	VC0016	BN506T	0
0NSB27-1	1BUS1A06	4KV BUS 16	VC	VC0016	BU1A6R	0
A405	1YS5225	CW PP'S SEAL WTR M/U STRN	VC	VC00SW	YS225P	0
0NSB27-1	1MCC107SW	MCC 107SW	VC	VC0107	BU7SWR	0
0NSB27-1	1BKR52-1502	107 SW IS MCC	VC	VC0107	CB502T	0
A317	1BKR152-1208	U-440-12A SERVICE TRANSF	VC	VC012A	BN208T	0
A317	1BUS1B02A	480V BUS 12A	VC	VC012A	BUB2AR	0
A317	1BKR52-1201	U-440-12A LOW SIDE BKR	VC	VC012A	CB201T	0
A317	1XU-440-12A	480V XFMR U-440-12A	VC	VC012A	TN12AR	0
A317	1BKR152-1202	U-440-12B SERVICE TRANSF	VC	VC012B	BN202T	0
A317	1BUS1B02B	480V BUS 12B	VC	VC012B	BUB2BR	0
A317	1BKR52-1222	U-440-12B LOW SIDE BKR	VC	VC012B	CB222T	0
A317	1XU-440-12B	480V XFMR U-440-12B	VC	VC012B	TN12BR	0
A430	1BKR152-1310	U-440-13A SERVICE TRANSF	VC	VC013A	BN310T	0
A430	1BUS1B03A	480V BUS 13A	VC	VC013A	BUB3AR	0
A430	1BKR52-1301	1BUS1B03A	VC	VC013A	CB301T	0
A430	1XU-440-13A	480V XFMR U-440-13A	VC	VC013A	TN13AR	0
0NSB27-1	1BKR152-1505	SERV XFER (U-440-15)	VC	VC015A	BN505T	0
0NSB27-1	1BUS1B05	480V BUS 15	VC	VC015A	BU1B5R	0
0NSB27-1	1BKR52-1512	U-440-15 LOW SIDE BKR	VC	VC015A	CB512T	0
0NSB27-1	1XU-440-15	480V XFMR U-440-15	VC	VC015A	TN15AR	0
0NSB27-1	1PNL1P07	LTG DISTR PNL 17	VC	VC0P17	BUP17R	0
0NSB27-1	1BKR52-10719	MCC 107SW DISTR XFMR 17 BKR	VC	VC0P17	CB719T	0
0NSB27-1	1XDT17	LTG DISTR XFMR 17	VC	VC0P17	TMD17R	0
1TB12-2	1CV1627	SRW TO COND VAC PP PCV	VC	VC0SRW	C3627P	0
1TB12-2	1PIC1627	10 SRW CNDSR PP VAC INL PIC	VC	VC0SRW	PC627R	0
A405	1HS6717	CD CNDSR VACUUM BREAKER VLV HS	VC	VC717T	HS717T	0
1TB27-3	1MOV6717	COND VAC BKR	VC	VC717T	MV717T	0
1TB12-3 (CP)	1HS5225	11 CW PP WTRBX INL VLV HS	VC	VCCW1A	HS225T	0
1INTK-4	1LS5214	11 CW PP DEWATERING PP LS	VC	VCCW1A	LS214D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB12-3 (CP)	1MOV5225	11A COND'R INLET STRNR VLV	VC	VCCW1A	MV225P	0
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0
1TB12-3 (CP)	1HS5229	12 CW PP WTRBX INL VLV HS	VC	VCCW2A	HS229T	0
1INTK-4	1LS5216	12 CW PP DEWATERING PP LS	VC	VCCW2A	LS216D	0
1TB12-3 (CP)	1MOV5229	11B COND'R INLET STRNR VLV	VC	VCCW2A	MV229P	0
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0
1TB12-3 (CP)	1HS5233	13 CW PP WTRBX INL VLV HS	VC	VCCW3A	HS233T	0
1INTK-4	1LS5218	13 CW PP DEWATERING PP LS	VC	VCCW3A	LS218D	0
1TB12-3 (CP)	1MOV5233	12A COND'R INLET STRNR VLV	VC	VCCW3A	MV233P	0
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0
1TB12-3 (CP)	1HS5237	14 CW PP WTRBX INL VLV HS	VC	VCCW4A	HS237T	0
1INTK-4	1LS5220	14 CW PP DEWATERING PP LS	VC	VCCW4A	LS220D	0
1TB12-3 (CP)	1MOV5237	12B COND'R INLET STRNR VLV	VC	VCCW4A	MV237P	0
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0
1TB12-3 (CP)	1HS5241	15 CW PP WTRBX INL VLV HS	VC	VCCW5A	HS241T	0
1INTK-4	1LS5222	15 CW PP DEWATERING PP LS	VC	VCCW5A	LS222D	0
1TB12-3 (CP)	1MOV5241	13A COND'R STRNR INLET VLV	VC	VCCW5A	MV241P	0
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0
1TB12-3 (CP)	1HS5245	15 CW PP WTRBX INL VLV HS	VC	VCCW6A	HS245T	0
1INTK-4	1LS5224	16 CW PP DEWATERING PP LS	VC	VCCW6A	LS224D	0
1TB12-3 (CP)	1MOV5245	13B COND'R INLET STRNR VLV	VC	VCCW6A	MV245P	0
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0
1TB12-4	1CV5098	MISC DRN TK TO COND OUT CV	VC	VCMDTK	C3098C	0
1TB12-4	1SV5098	MISC TURB DRN TNK LEV CONT VLV	VC	VCMDTK	C3098C	0
1TB12-4	1CV5098	MISC DRN TK TO COND OUT CV	VC	VCMDTK	C3098T	0
1TB12-4	1SV5098	MISC TURB DRN TNK LEV CONT VLV	VC	VCMDTK	C3098T	0
1TB12-4	1LS5098	11 CD MISC DRN TANK LO LS	VC	VCMDTK	LS098D	0
1TB12-4	1LS5098	11 CD MISC DRN TANK LO LS	VC	VCMDTK	LS098R	0
1TB12-2 (CP)	1CV1754	11 CAR UNIT MOTIVE AIR	VC	VCP011	C3754P	0
1TB12-2	1SV1753	11 CAR BYP & MOTIVE VLV	VC	VCP011	C3754P	0
1TB12-2 (CP)	1CV1755	11 CAR UNIT SYS DIAPHRAM	VC	VCP011	C3755P	0
A317	1SV1755	11 CAR DIAPHRAM VLV	VC	VCP011	C3755P	0
1TB12-2 (CP)	1LCV1753	11 CAR SEP	VC	VCP011	LC753R	0
1TB12-2 (CP)	1PS1755	11 CAR CNDSR VAC PP SEAL LOW PRESSURE WTR PS	VC	VCP011	PS755R	0
A405	1YS1754	11 CAR SEAL WTR M/U STRN	VC	VCP011	YS754P	0
1TB12-2 (CP)	1CV1757	12 CAR UNIT MOTIVE AIR	VC	VCP012	C3757P	0
1TB12-2	1SV1756	12 CAR BYP & MOTIVE VLVS	VC	VCP012	C3757P	0
1TB12-2 (CP)	1CV1758	12 CAR UNIT SYS DIAPHRAM	VC	VCP012	C3758P	0
A317	1SV1758	12 CAR DIAPHRAM VLV	VC	VCP012	C3758P	0
1TB12-2 (CP)	1LCV1756	12 CAR SEP LO LVL CONTROL	VC	VCP012	LC756R	0
1TB12-2 (CP)	1PS1758	12 CAR CNDSR VAC PP SEAL WTR LOW PRESSURE PS	VC	VCP012	PS758R	0
A405	1YS1757	12 CAR SEAL WTR M/U STRN	VC	VCP012	YS757P	0
1TB12-2 (CP)	1CV1760	13 CAR UNIT MOTIVE AIR	VC	VCP013	C3760P	0
1TB12-2	1SV1759	13 CAR BYP & MOTIVE VLVS	VC	VCP013	C3760P	0
1TB12-2 (CP)	1CV1761	13 CAR UNIT SYS DIAPHRAM	VC	VCP013	C3761P	0
A430	1SV1761	13 CAR DIAPHRAM VLV	VC	VCP013	C3761P	0
1TB12-2 (CP)	1LCV1759	SEP LO LVL CONTROL	VC	VCP013	LC759R	0
1TB12-2 (CP)	1PS1761	13 CAR CNDSR VAC PP SEAL WTR LOW PRESSURE PS	VC	VCP013	PS761R	0
A405	1YS1760	13 CAR SEAL WTR M/U STRN	VC	VCP013	YS760P	0
1TB12-3 (CP)	1HXCARSWC11	11 CAR SEAL WTR CLR	VC	VCS011	HXS11B	0
1TB12-3 (CP)	1HXCARSWC11	11 CAR SEAL WTR CLR	VC	VCS011	HXS11P	0
1TB27-1	1RY1B0636/1Y0636	11 RECIRC SEAL PP INTK RE	VC	VCS011	RY036P	0
A405	1YS1765	11 CAR SEAL WTR Y-STRN	VC	VCS011	YS765P	0
1TB12-3 (CP)	1HXCARSWC12	12 CAR SEAL WTR CLR	VC	VCS012	HXS12B	0
1TB12-3 (CP)	1HXCARSWC12	12 CAR SEAL WTR CLR	VC	VCS012	HXS12P	0
1TB27-1	1RY1B0637/1Y0637	12 RECIRC SEAL PP INTK RELAY	VC	VCS012	RY037P	0
A405	1YS1766	12 CAR SEAL WTR Y-STRN	VC	VCS012	YS766P	0
1TB12-3 (CP)	1HXCARSWC13	13 CAR SEAL WTR CLR	VC	VCS013	HXS13B	0
1TB12-3 (CP)	1HXCARSWC13	13 CAR SEAL WTR CLR	VC	VCS013	HXS13P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
1TB27-1	1RY1B1636/1Y1636	13 RECIRC SEAL PP INTK RELAY	VC	VCS013	RY136P	0
A405	1YS1767	13 CAR SEAL WTR Y-STRN	VC	VCS013	YS767P	0
1TB12-4	1CV4681	MN STM SEAL REG	VC	VCTGS1	CV681O	0
1TB12-4	1CV4681	MN STM SEAL REG	VC	VCTGS1	CV681P	0
A405	1HS4659	1 GS GLAND SEAL STM SPLY VLV HS	VC	VCTGS1	HS659T	0
1TB12-4	1MOV4659	1 GS MS SEAL SUPPLY MOV	VC	VCTGS1	MV659P	0
1TB12-4	1PC4681	GS STM SEAL FEED VLV CONTROL PC	VC	VCTGS1	PC681R	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1	BHEV1T	Open	13
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1	BHEV1T	Open	0
A405	1HS5404	1 HVAC/A ECCS PUMP RM CLG FAN HS	VM(RM1	BHEV1T	Open	0
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	VM(RM1	BHEV1T	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1	BHEV1T	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1	BHEV1T	Start	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2	BHEV1T	Open	0
A405	1HS5404A	1 HVAC/A ECCS PUMP RM CLG FAN 12 HS	VM(RM2	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2	BHEV1T	Start	22
A424	1PCV6450	1-SX-6450, 6451, 6452 PCV	VP	CV450T	CV450T	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0
A405	1HS5464	RC SMPL ISOL VLV HS	VP	IC464C	IC464C	0
A405	1HS5464A	RC SMPL LN ISOL OVRRD HS	VP	IC464C	IC464C	0
A430	1HS5464B	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0
A405	1HS5464	RC SMPL ISOL VLV HS	VP	IC464T	IC464T	0
A405	1HS5464A	RC SMPL LN ISOL OVRRD HS	VP	IC464T	IC464T	0
A430	1HS5464B	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
1CNT10-1	1CV5467	1-SX-6452 CV ISOL RCS HOT LEG SAMP HDR CV ISOL	VP	IC467C	IC467C	0
A424	1HS5467	RC SYSTEM 11 HOT LEG SAMPLE	VP	IC467C	IC467C	0
A424	1HS5467A	RCS HT LG SMPL OVRRD	VP	IC467C	IC467C	0
1CNT10-1	1SV5467	RC LOOP HOT LEG SAMPLE VALVE	VP	IC467C	IC467C	0
1CNT10-1	1SV5467A	RC LOOP HOT LEG SAMPLE VALVE	VP	IC467C	IC467C	0
1CNT10-1	1CV5467	1-SX-6452 CV ISOL RCS HOT LEG SAMP HDR CV ISOL	VP	IC467T	IC467T	0
A424	1HS5467	RC SYSTEM 11 HOT LEG SAMPLE	VP	IC467T	IC467T	0
A424	1HS5467A	RCS HT LG SMPL OVRRD	VP	IC467T	IC467T	0
1CNT10-1	1SV5467	RC LOOP HOT LEG SAMPLE VALVE	VP	IC467T	IC467T	0
1CNT10-1	1SV5467A	RC LOOP HOT LEG SAMPLE VALVE	VP	IC467T	IC467T	0
A306	1RYAR-XK45	SIAS SUB CH A4-7	VP	SGRY01	RYA45E	0
A306	1RYAR-XK45	SIAS SUB CH A4-7	VP	SGRY01	RYA45P	0
A306	1RYBR-XK43	SIAS SUB CH B4-7	VP	SGRY02	RYB43E	0
A306	1RYBR-XK43	SIAS SUB CH B4-7	VP	SGRY02	RYB43P	0
A405	1HS3651	SDC RTN ISOL MOV HS	VQ	HS651D	HS651D	0
A405	1HS3652	S/D CLG RETURN HDR VLV HS	VQ	HS652D	HS652D	0
A316	1CV3832	CONTMT SUPPLY CV	VQ	IC832C	IC832C	0
A405	1HS3832	1 CC CNTMT INL CV HS	VQ	IC832C	IC832C	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	VQ	IC832C	IC832C	0
A316	1CV3832	CONTMT SUPPLY CV	VQ	IC832T	IC832T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A405	1HS3832	1 CC CNTMT INL CV HS	VQ	IC832T	IC832T	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	VQ	IC832T	IC832T	0
A316	1CV3833	CONTMT RETN CV	VQ	IC833C	IC833C	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	VQ	IC833C	IC833C	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	VQ	IC833C	IC833C	0
A316	1CV3833	CONTMT RETN CV	VQ	IC833T	IC833T	0
A405	1HS3833	1 CC CNTMT OUT ISOL CV HS	VQ	IC833T	IC833T	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	VQ	IC833T	IC833T	0
A316	1MOV651	SDC RETN ISOL	VQ	MV651C	MV651C	0
A316	1MOV651	SDC RETN ISOL	VQ	MV651X	MV651X	0
1CNT26-2	1MOV652	SDC RETN ISOL	VQ	MV652C	MV652C	0
1CNT26-2	1MOV652	SDC RETN ISOL	VQ	MV652X	MV652X	0
A405	1HS3651	SDC RTN ISOL MOV HS	VQ	VQMV01	HS651T	0
A316	1MOV651	SDC RETN ISOL	VQ	VQMV01	MV651T	0
A405	1HS3652	S/D CLG RETURN HDR VLV HS	VQ	VQMV02	HS652T	0
1CNT26-2	1MOV652	SDC RETN ISOL	VQ	VQMV02	MV652T	0
A316	1CV5460	U-1 CONTMT ISOL	WJ	BHESH1	Shut	0
A316	1SV5460	U-1 CONTMT ISOL SV	WJ	BHESH1	Shut	0
C230	1SV5277	CONT ATMOS RAD MON UNIT 1	WJ	BHESH2	Shut	0
C230	1SV5278	CONTMT ATMOS RMS INLET	WJ	BHESH2	Shut	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
1CNT10-2	1SV6540B	CNTMT H2 ANALYZER S PRIM SHLD	WJ	BHESH2	Shut	0
1CNT10-2	1SV6540C	CNTMT H2 ANALYZER PRESS COMPRT	WJ	BHESH2	Shut	0
1CNT10-2	1SV6540D	1-SX-5900D ISOL 135' E ATMOS SAMP ISOL	WJ	BHESH2	Shut	0
1CNT10-2	1SV6540G	CNTMT H2 ANALYZER SAMP RETURN	WJ	BHESH2	Shut	0
A316	1CV1581	11 CNTMT CLG U NORM INLET	WY	CV581O	CV581O	0
A316	1I/P1581	CNTMT CLR 11 SERV WTR INLT	WY	CV581O	CV581O	0
A316	1SV1581	CNTMT CLR 11 INLT VLV CONTROL	WY	CV581O	CV581O	0
A316	1CV1582	11 CNTMT CLG U EMER DISCH	WY	CV582O	CV582O	0
A316	1SV1582	CNTMT CLR 11 SERV WTR OUT	WY	CV582O	CV582O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0
A316	1CV1589	13 CNTMT CLG U NORM INLET	WY	CV589O	CV589O	0
A316	1I/P1589	CNTMT CLR 13 SERV WTR INLT	WY	CV589O	CV589O	0
A316	1SV1589	CNTMT CLR 13 INLT VLV CONTROL	WY	CV589O	CV589O	0
A316	1CV1590	13 CNTMT CLG U EMER DISCH	WY	CV590O	CV590O	0
A316	1SV1590	CNTMT CLR 13 OUTLT VLV CONTROL	WY	CV590O	CV590O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0
1CNT45-1	1DAMPCAC-11	CAC-11 FUSIBLE DROPOUT PLATE DAMPER	WY	FQW11D	FQW11D	0
1CNT45-2	1DAMPCAC-12	CAC-12 FUSIBLE DROPOUT PLATE DAMPER	WY	FQW12D	FQW12D	0
1CNT69-1	1DAMPCAC-13	CAC-13 FUSIBLE DROPOUT PLATE DAMPER	WY	FQW13D	FQW13D	0
1CNT69-2	1DAMPCAC-14	CAC-14 FUSIBLE DROPOUT PLATE DAMPER	WY	FQW14D	FQW14D	0
A405	1RY1V1581/3/1	11/12 CNTMT CLR SRW CV	WY	RY581D	RY581D	0
A405	1RY1V1589/3/1	13/14 CNTMT CLR SRW CV	WY	RY589D	RY589D	0
A306	1RYAR-XK104	UV SUB CH A3-5	WY	RYA04D	RYA04D	0
A306	1RYAR-XK35	CSAS SUB CH A1-1	WY	RYA35E	RYA35E	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A306	1RYAR-XK36	CSAS SUB CH A1-2	WY	RYA36E	RYA36E	0
A306	1RYAR-XK69	SGIS SUB CH A2	WY	RYA69E	RYA69E	0
A306	1RYAR-XK91	UV SUB CH A2-8	WY	RYA91D	RYA91D	0
A306	1RYBR-XK31	CSAS SUB CH B1-1	WY	RYB31E	RYB31E	0
A306	1RYBR-XK32	CSAS SUB CH B1-2	WY	RYB32E	RYB32E	0
A306	1RYBR-XK58	RAS SUB CH B5	WY	RYB58E	RYB58E	0
A306	1RYBR-XK75	UV SUB CH B2-7	WY	RYB75D	RYB75D	0
A306	1RYBR-XK88	UV SUB CH B3-5	WY	RYB88D	RYB88D	0
1CNT10-1	1FANHVACCTCLR11	CONTAINMENT COOLER 11 FAN (1MB102)	WY	VGW11R	VGW11R	0
1CNT10-1	1FANHVACCTCLR11	CONTAINMENT COOLER 11 FAN (1MB102)	WY	VGW11S	VGW11S	0
1CNT10-2	1FANHVACCTCLR12	CONTAINMENT COOLER 12 FAN (1MB114)	WY	VGW12R	VGW12R	0
1CNT10-2	1FANHVACCTCLR12	CONTAINMENT COOLER 12 FAN (1MB114)	WY	VGW12S	VGW12S	0
1CNT45-1	1FANHVACCTCLR13	CONTAINMENT COOLER 13 FAN (1MB402)	WY	VGW13R	VGW13R	0
1CNT45-1	1FANHVACCTCLR13	CONTAINMENT COOLER 13 FAN (1MB402)	WY	VGW13S	VGW13S	0
1CNT45-2	1FANHVACCTCLR14	CONTAINMENT COOLER 14 FAN (1MB414)	WY	VGW14R	VGW14R	0
1CNT45-2	1FANHVACCTCLR14	CONTAINMENT COOLER 14 FAN (1MB414)	WY	VGW14S	VGW14S	0
A306	1RYAR-XK35	CSAS SUB CH A1-1	WY	WA024F	RYA35T	0
A306	1RYAR-XK91	UV SUB CH A2-8	WY	WA024F	RYA91T	0
A316	1CV1581	11 CNTMT CLG U NORM INLET	WY	WA102F	CV581P	0
A316	1I/P1581	CNTMT CLR 11 SERV WTR INLT	WY	WA102F	CV581P	0
A316	1SV1581	CNTMT CLR 11 INLT VLV CONTROL	WY	WA102F	CV581P	0
A405	1HS1581	11 SRW CNTMT CLR INL VLV CONTR HS	WY	WA102F	HS581T	0
A316	1CV1582	11 CNTMT CLG U EMER DISCH	WY	WAHVCV	CV582P	0
A316	1SV1582	CNTMT CLR 11 SERV WTR OUT	WY	WAHVCV	CV582P	0
A306	1RYAR-XK37	CSAS SUB CH A1-3	WY	WAHVCV	RYA37E	0
A306	1RYAR-XK37	CSAS SUB CH A1-3	WY	WAHVCV	RYA37P	0
1CNT10-1	1HXHVACCTCLR11	11 CNTMT CLR	WY	WAHXBP	HXW11B	0
1CNT10-1	1HXHVACCTCLR11	11 CNTMT CLR	WY	WAHXBP	HXW11P	0
A306	1RYAR-XK104	UV SUB CH A3-5	WY	WB024F	RYA04T	0
A306	1RYAR-XK36	CSAS SUB CH A1-2	WY	WB024F	RYA36T	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A405	1HS1584	12 SRW CNTMT CLR INL VLV CONTR HS	WY	WB102F	HS584T	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0
A306	1RYAR-XK38	CSAS SUB CH A1-4	WY	WBHVCV	RYA38E	0
A306	1RYAR-XK38	CSAS SUB CH A1-4	WY	WBHVCV	RYA38P	0
1CNT10-2	1HXHVACCTCLR12	12 CNTMT CLR	WY	WBHXBP	HXW12B	0
1CNT10-2	1HXHVACCTCLR12	12 CNTMT CLR	WY	WBHXBP	HXW12P	0
A306	1RYBR-XK31	CSAS SUB CH B1-1	WY	WC024F	RYB31T	0
A306	1RYBR-XK75	UV SUB CH B2-7	WY	WC024F	RYB75T	0
A316	1CV1589	13 CNTMT CLG U NORM INLET	WY	WC102F	CV589P	0
A316	1I/P1589	CNTMT CLR 13 SERV WTR INLT	WY	WC102F	CV589P	0
A316	1SV1589	CNTMT CLR 13 INLT VLV CONTROL	WY	WC102F	CV589P	0
A405	1HS1589	13 SRW CNTMT CLR INL VLV CONTR HS	WY	WC102F	HS589T	0
A316	1CV1590	13 CNTMT CLG U EMER DISCH	WY	WCHVCV	CV590P	0
A316	1SV1590	CNTMT CLR 13 OUTLT VLV CONTROL	WY	WCHVCV	CV590P	0
A306	1RYBR-XK33	CSAS SUB CH B1-3	WY	WCHVCV	RYB33E	0
A306	1RYBR-XK33	CSAS SUB CH B1-3	WY	WCHVCV	RYB33P	0
1CNT45-1	1HXHVACCTCLR13	13 CNTMT CLR	WY	WCHXBP	HXW13B	0
1CNT45-1	1HXHVACCTCLR13	13 CNTMT CLR	WY	WCHXBP	HXW13P	0
A306	1RYBR-XK32	CSAS SUB CH B1-2	WY	WD024F	RYB32T	0
A306	1RYBR-XK88	UV SUB CH B3-5	WY	WD024F	RYB88T	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0
A405	1HS1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	HS592T	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0
A306	1RYBR-XK34	CSAS SUB CH B1-4	WY	WDHVCV	RYB34E	0
A306	1RYBR-XK34	CSAS SUB CH B1-4	WY	WDHVCV	RYB34P	0
1CNT45-2	1HXHVACCTCLR14	14 CNTMT CLR	WY	WDHXBP	HXW14B	0
1CNT45-2	1HXHVACCTCLR14	14 CNTMT CLR	WY	WDHXBP	HXW14P	0
A306	1BUS1D01	125D BUS 11	XA	BUV11R	BUV11R	0
A306	1CHGR11	125D BATT CHGR 11	XA	CHX11R	CHX11R	0
A306	2CHGR23	125D BATT CHGR 23	XA	CHX23R	CHX23R	0
A306	1OPAMP11	DC BUS 11 LOAD SHARING CIRCUIT	XA	OAL11R	OAL11R	0
A301	1BATT11	125D BATT 11	XA	XAB11A	BA011R	0
A301	1DISC1D04L	11 125D BATT DISC	XA	XAB11A	LK11AT	0
A301	1DISC1D03L	11 125D BATT DISC	XA	XAB11A	LK11BT	0
A306	1DISC95-1103	11 BATT DISC SW	XA	XAB11A	LKA03T	0
A317	1BKR52-1111	11 BATT CHGR	XA	XAC11E	CBXN1T	0
A306	1FU95-1101/FU	BATTERY CHARGER 11	XA	XAC11E	FU1APR	0
A306	1FU95-1101/FU	BATTERY CHARGER 11	XA	XAC11E	FU1AQR	0
A306	1DISC95-1101	11 BATT CHGR FUSED DISC SW	XA	XAC11E	LKA01T	0
A311	2BKR52-2111	23 BATT CHGR 125 VDC	XA	XAC23E	CBXN5T	0
A306	1FU95-1102/FU	BATTERY CHARGER 23	XA	XAC23E	FU2APR	0
A306	1FU95-1102/FU	BATTERY CHARGER 23	XA	XAC23E	FU2AQR	0
A306	1DISC95-1102	23 BATT CHGR FUSED DISC SW	XA	XAC23E	LKA02T	0
A306	1BUS1D02	125D BUS 12	XB	BUV12R	BUV12R	0
A306	1CHGR12	125D BATT CHGR 12	XB	CHX12R	CHX12R	0
A306	2CHGR24	125D BATT CHGR 24	XB	CHX24R	CHX24R	0
A306	1OPAMP12	DC BUS 12 LOAD CHARING CIRCUIT	XB	OAL12R	OAL12R	0
A304	1BATT12	125D BATT 12	XB	XBB12A	BA012R	0
A304	1DISC1D10L	125D BATT 12 DISC	XB	XBB12A	LK12AT	0
A304	1DISC1D09L	12 125D BATT DISC	XB	XBB12A	LK12BT	0
A306	1DISC95-1203	12 BATT DISC SW	XB	XBB12A	LKB03T	0
A430	1BKR52-1420	12 BATT CHGR	XB	XBC12E	CBXN4T	0
A306	1FU95-1201/FU	BATTERY CHARGER 12	XB	XBC12E	FU1BPR	0
A306	1FU95-1201/FU	BATTERY CHARGER 12	XB	XBC12E	FU1BQR	0
A306	1DISC95-1201	12 BATT CHGR FUSED DISC SW	XB	XBC12E	LKB01T	0
A407	2BKR52-2420	24 BATT CHGR	XB	XBC24E	CBXN8T	0
A306	1FU95-1202/FU	BATTERY CHARGER 24	XB	XBC24E	FU2BPR	0
A306	1FU95-1202/FU	BATTERY CHARGER 24	XB	XBC24E	FU2BQR	0
A306	1DISC95-1202	24 BATT CHGR FUSED DISC SW	XB	XBC24E	LKB02T	0
A302	2BUS2D01	125D BUS 21	XC	BUV21R	BUV21R	0
A302	1CHGR13	125D BATT CHGR 13	XC	CHX13R	CHX13R	0
A302	2CHGR21	125D BATT CHGR 21	XC	CHX21R	CHX21R	0
A302	2OPAMP21	DC BUS 21 LOAD SHARING CIRCUIT	XC	OAL21R	OAL21R	0
A305	2BATT21	125D BATT 21	XC	XCB21A	BA021R	0
A305	2FU2D04F/1600A	125VDC BATTERY 21 1600A FUSE	XC	XCB21A	FUC21R	0
A305	2DISC2D04L	21 125D BATT DISC	XC	XCB21A	LK21AT	0
A305	2DISC2D03L	21 125D BATT DISC	XC	XCB21A	LK21BT	0
A302	2DISC95-2103	21 BATT DISC SW	XC	XCB21A	LKC03T	0
A430	1BKR52-1407	13 BATT CHGR	XC	XCC13E	CBXN3T	0
A302	2FU95-2101/FU	125D BKR FUSE BUS 21	XC	XCC13E	FU1CPR	0
A302	2FU95-2101/FU	125D BKR FUSE BUS 21	XC	XCC13E	FU1CQR	0
A302	2DISC95-2101	13 BATT CHGR FUSED DISC SW	XC	XCC13E	LKC01T	0
A407	2BKR52-2407	21 BATT CHGR	XC	XCC21E	CBXN7T	0
A302	2FU95-2102/FU	125D BKR FUSE BUS 21	XC	XCC21E	FU2CPR	0
A302	2FU95-2102/FU	125D BKR FUSE BUS 21	XC	XCC21E	FU2CQR	0
A302	2DISC95-2102	21 BATT CHGR FUSED DISC SW	XC	XCC21E	LKC02T	0
A302	2BUS2D02	125D BUS 22	XD	BUV22R	BUV22R	0
A302	1CHGR14	125D BATT CHGR 14	XD	CHX14R	CHX14R	0
A302	2CHGR22	125D BATT CHGR 22	XD	CHX22R	CHX22R	0
A302	2OPAMP22	DC BUS 22 LOAD SHARING CIRCUIT	XD	OAL22R	OAL22R	0
A307	2BATT22	125D BATT 22	XD	XDB21A	BA022R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
A307	2FU2D10F/1600A	125VDC BATTERY 22 1600A FUSE	XD	XDB21A	FUD22R	0
A307	2DISC2D10L	22 125D BATT DISC	XD	XDB21A	LK22AT	0
A307	2DISC2D09L	22 125D BATT DISC	XD	XDB21A	LK22BT	0
A302	2DISC95-2203	22 BATT DISC SW	XD	XDB21A	LKD03T	0
A317	1BKR52-1120	14 BATT CHGR	XD	XDC14E	CBXN2T	0
A302	2FU95-2202/FU	125D BKR FUSE BUS 22	XD	XDC14E	FU2DPR	0
A302	2FU95-2202/FU	125D BKR FUSE BUS 22	XD	XDC14E	FU2DQR	0
A302	2DISC95-2202	14 BATT CHGR FUSED DISC SW	XD	XDC14E	LKD02T	0
A311	2BKR52-2120	22 BATT CHGR 125 VDC	XD	XDC22E	CBXN6T	0
A302	2FU95-2201/FU	125D BKR FUSE BUS 22	XD	XDC22E	FU1DPR	0
A302	2FU95-2201/FU	125D BKR FUSE BUS 22	XD	XDC22E	FU1DQR	0
A302	2DISC95-2201	22 BATT CHGR FUSED DISC SW	XD	XDC22E	LKD01T	0
A306	1BUS1Y11	120V INVTR B/U BUS 11	XW	E1B11B	BUB11R	0
A423	1BKR52-10415	SUPP BKR TO 120 VAC INVERTER B/U BUS 11	XW	E1B11B	CBX07T	6
A306	1DISC1Y1101	SUPP TO INVERTER B/U BUS 11 (1X07)	XW	E1B11B	HSX07T	0
A306	1X1X07	120V REG X 11	XW	E1B11B	TMX07R	0
A306	1FU1Y1102/FU	120V INVTR B/U BUS 11 BKR FU	XW	E1B11F	FUB11R	0
A306	1DISC1Y1102	SUPP TO 120 VAC VITAL BUS 11 (1Y01)	XW	E1B11F	HSB11T	0
A306	1DISC1Y01A/S2	11 INV MAN XFER SWITCH	XW	E1B11F	HSI11T	0
A306	1FU1Y1103/FU	120V INVTR B/U BUS 11 BKR FU	XW	E2B12F	FUB12R	0
A306	1DISC1Y1103	SUPP TO 120 VAC VITAL BUS 12 (1Y02)	XW	E2B12F	HSB12T	0
A306	1DISC1Y02A/S2	12 INV MAN XFER SWITCH	XW	E2B12F	HSI12T	0
A306	1FU1Y1104/FU	120V INVTR B/U BUS 11 BKR FU	XW	E3B13F	FUB13R	0
A306	1DISC1Y1104	SUPP TO 120 VAC VITAL BUS 13 (1Y03)	XW	E3B13F	HSB13T	0
A306	1DISC1Y03A/S2	13 INV MAN XFER SWITCH	XW	E3B13F	HSI13T	0
A306	1FU1Y1105/FU	120V INVTR B/U BUS 11 BKR FU	XW	E4B14F	FUB14R	0
A306	1DISC1Y1105	SUPP TO 120 VAC VITAL BUS 14 (1Y04)	XW	E4B14F	HSB14T	0
A306	1DISC1Y04A/S2	14 INV MAN XFER SWITCH	XW	E4B14F	HSI14T	0
A306	1INV1Y01A	120V INVTR 11	XW	INT11R	INT11R	0
A306	1INV1Y02A	120V INVTR 12	XW	INT12R	INT12R	0
A306	1INV1Y03A	120V INVTR 13	XW	INT13R	INT13R	0
A306	1INV1Y04A	120V INVTR 14	XW	INT14R	INT14R	0
P13000-1	1XP-13000-1	13KV/TB SERV XFMR P-13000-1	Y1	TY10PR	TY10PR	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	Y1	Y1BKRA	BN101O	0
13K11/12	1BKR252-1101	U-4000-13 FEEDER	Y1	Y1BKRA	BN101P	0
13K11/12	1BKR252-1102	U-4000-11 FEEDER	Y1	Y1BKRB	BN102O	0
13K11/12	1BKR252-1102	U-4000-11 FEEDER	Y1	Y1BKRB	BN102P	0
13K11/12	1BKR252-1103	U-4000-12 FEEDER	Y1	Y1BKRC	BN103O	0
13K11/12	1BKR252-1103	U-4000-12 FEEDER	Y1	Y1BKRC	BN103P	0
13K11/12	1BKR252-1104	SERVICE BUS 11 FEEDER	Y1	Y1MISA	BN104T	0
13K11/12	1BUS1H01	13KV SERV BUS 11	Y1	Y1MISA	BU1H1R	0
U4000-13	1XU-4000-13	13/4KV XFMR U-4000-13	Y1	Y1XFM4	TX1X4Q	0
1H1101	1EI1H1101REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y1	Y1XFM4	VR101Q	0
U4000-11	1XU-4000-11	13/4KV XFMR U-4000-11	Y1	Y1XFM5	TX1X5Q	0
1H1102	1EI1H1102REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y1	Y1XFM5	VR102Q	0
U4000-12	1XU-4000-12	13/4KV XFMR U-4000-12	Y1	Y1XFM6	TX1X6Q	0
1H1103	1EI1H1103REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y1	Y1XFM6	VR103Q	0
P13000-2	2XP-13000-2	SERVICE TRANSF P-13000-2	Y2	TY20PR	TY20PR	0
13K21/22	2BKR252-2101	U-4000-23 FEEDER	Y2	Y2BKRA	BN2H1O	0
13K21/22	2BKR252-2101	U-4000-23 FEEDER	Y2	Y2BKRA	BN2H1P	0
13K21/22	2BKR252-2102	U-4000-21 FEEDER	Y2	Y2BKRB	BN2H2O	0
13K21/22	2BKR252-2102	U-4000-21 FEEDER	Y2	Y2BKRB	BN2H2P	0
13K21/22	2BKR252-2103	U-4000-22 FEEDER	Y2	Y2BKRC	BN2H3O	0
13K21/22	2BKR252-2103	U-4000-22 FEEDER	Y2	Y2BKRC	BN2H3P	0
13K21/22	2BKR252-2104	SERVICE BUS 21 FEEDER	Y2	Y2MISA	BN2H4T	0
13K21/22	2BUS2H01	13KV SERV BUS 21	Y2	Y2MISA	BU2H1R	0
U4000-23	2XU-4000-23	13/4KV XFMR U-4000-23	Y2	Y2XFM4	TX2X4Q	0
2H2101	2EI2H2101REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y2	Y2XFM4	VR201Q	0
U4000-21	2XU-4000-21	13/4KV XFMR U-4000-21	Y2	Y2XFM5	TX2X5Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FL
2H2102	2EI2H2102REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y2	Y2XFM5	VR202Q	0
U4000-22	2XU-4000-22	13/4KV XFMR U-4000-22	Y2	Y2XFM6	TX2X6Q	0
2H2103	2EI2H2103REG	13 KV VOLTAGE REGULATOR EI/II/JI	Y2	Y2XFM6	VR203Q	0

ROOM	CF-02A-S118AR	F-02B-S118AN	F-02E-C118AM	CF-03A-S119AR	CF-03B-S119AN	CF-03C-F119AM	CF-03D-F119AN	CF-03E-C119AM	CF-04A-F221AM	CF-04B-F221AN	CF-04C-R221AM	CF-04D-C221AM	CF-04E-W221AM	CF-04F-D221AM	CF-05A-F224AM	CF-05B-F224AN	CF-05C-R224AM	CF-05D-C224AM	CF-05E-W224AM	CF-05F-D224AM	F-05G-N224AM	CF-05H-Q224AM	CF-06A-F225AM	CF-06B-F225AN	CF-06C-D225AM	CF-06D-N225AM	CF-07A-F226AM	CF-07B-F226AN	CF-07C-S226AR	CF-07D-S226AN	CF-07E-W226AM	CF-07F-N226AR	CF-07G-N226LN	CF-08A-F227AM	CF-08B-F227AN	CF-08C-C227AM	CF-08D-W227AM	CF-08E-D227AM	F-09A-N227AM	CF-10A-F228AM	CF-10B-F228AN	CF-10C-C228AM
A100	105"	F		105"	F	57"	158"		204"	F	95"	131"	131"	131"	182"	F	111"	131"	131"	131"	103"		175"	F	130"	103"	175"	F	F	F	175"	86"	102"	204"	F	204"	204"	204"	130"	180"	F	180"
A101	F	F		F	F					48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A102	F	F		F	F					48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A103	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A104	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105A	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105B	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A105C	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A106	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A107		F			F																								F	F												
A108	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A109		F			F																								F	F												
A110	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A111	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A112		F			F																								F	F												
A113	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A114		F			F																								F	F												
A115A	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A115B	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A115C	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A116	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A117	45"	F		45"	F		98"		144"	F	35"	71"	71"	71"	122"	F	51"	71"	71"	71"	43"		115"	F	71"	43"	115"	F	F	F	115"	26"	42"	144"	F	144"	144"	144"	70"	120"	F	120"
A118	F	F	F	F	F	F	F	F		48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A119	F	F	F	F	F	F	F	F		48"	48"					25"	13"							25"				25"	F	F			7"		48"						25"	
A120	F	F		F	F					F	F					F	F				F			F		F		F	F	F			F		F						F	
A122	F	F	F	F	F	F	F	F		F	F					F	F				F			F		F		F	F	F			F		F						F	
A200	47"	F		47"	F						20"																		96"	F												
A201	47"	F		47"	F						20"																		96"	F												
A202	47"	F		47"	F						20"																		96"	F												
A203	47"	F		47"	F						20"																		96"	F												
A204	47"	F		47"	F						20"																		96"	F												
A205	71"	F		71"	F					30"	30"					30"	30"				30"			30"		30"		30"	156"	F			30"		30"						30"	
A206	47"	F		47"	F						20"																		96"	F												
A207	41"	F		41"	F						14"																		90"	F												
A208	47"	F		47"	F						20"																		96"	F												
A209	47"	F		47"	F						20"																		96"	F												
A210	47"	F		47"	F						20"																		96"	F												
A211	47"	F		47"	F						20"																		96"	F												
A212	47"	F		47"	F						20"																		96"	F												
A213	47"	F		47"	F						20"																		96"	F												
A214	47"	F		47"	F						20"																		96"	F												
A215	47"	F		47"	F						20"																		96"	F												
A216	47"	F		47"	F						20"																		96"	F												
A216A	47"	F		47"	F						20"																		96"	F												
A217	47"	F		47"	F						20"																		96"	F												
A218	47"	F		47"	F						20"																		96"	F												
A219	47"	F		47"	F						20"																		96"	F												
A220	47"	F		47"	F						20"																		96"	F												
A221	47"	F		47"	F				F	F	F	F	F	F															96"	F												

ATTACHMENT 2 REV:0

* These FLOODS were deleted. See note 12 in Sect. 5.4

ROOM	CF-02A-S11 18AR	F-02B-S11 18AN	F-02E-C11 18AM	CF-03A-S11 19AR	CF-03B-S11 19AN	CF-03C-F11 19AM	CF-03D-F11 19AN	CF-03E-C11 19AM	CF-04A-F12 1AM	CF-04B-F22 1AN	CF-04C-R22 1AM	CF-04D-C22 1AM	CF-04E-W22 1AM	CF-04F-D22 1AM	CF-05A-F22 4AM	CF-05B-F22 4AN	CF-05C-R22 4AM	CF-05D-C22 4AM	CF-05E-W22 4AM	CF-05F-D22 4AM	F-05G-N22 4AM	CF-05H-Q22 4AM	CF-06A-F22 5AM	CF-06B-F22 5AN	CF-06C-D22 5AM	CF-06D-N22 5AM	CF-07A-F22 6AM	CF-07B-F22 6AN	CF-07C-S22 6AR	CF-07D-S22 6AN	CF-07E-W22 6AM	CF-07F-N22 6AR	CF-07G-N22 6LN	CF-08A-F22 7AM	CF-08B-F22 7AN	CF-08C-C22 7AM	CF-08D-W22 7AM	CF-08E-D22 7AM	CF-09A-N22 7AM	CF-10A-F22 8AM	CF-10B-F22 8AN	CF-10C-C22 8AM
A222	47"	F		47"	F						20"																		96"	F												
A223	47"	F		47"	F						20"																		96"	F												
A224	47"	F		47"	F						20"				F	F	F	F	F	F	F								96"	F												
A225	47"	F		47"	F						20"												F	F	F	F			F	F		47"	64"									
A226	71"	F		71"	F					30"	30"					30"	30"				30"		30"	30"		30"	F	F	F	F	F	F	F		30"						30"	
A227	47"	F		47"	F						20"																		96"	F				F	F	F	F	F	F			
A228	47"	F		47"	F						20"																		96"	F										F	F	F
A308																																										
A309																																										
A315																						F																				
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1TB12-1																						F																				
1TB12-2																						F																				
1TB12-2 (CP)																						F																				
1TB12-3																																										
1TB12-3 (CP)																						F																				
1TB12-4																						F																				
1TB27-1																																										
1TB27-2																						F																				
1TB27-3																																										
1TB27-4																																										
1TB27-5E																																										
1TB27-5W																																										
1TB27-6																																										
1TB27-7																																										
1TB45-2																						F																				
1INTK-1																																										
1INTK-2																																										
1INTK-3																																										

ROOM	CF-02A-S11 18AR	F-02B-S11 18AN	F-02E-C11 18AM	CF-03A-S11 19AR	CF-03B-S11 19AN	CF-03C-F11 19AM	CF-03D-F11 19AN	CF-03E-C11 19AM	CF-04A-F22 1AAM	CF-04B-F22 1AAN	CF-04C-R22 1AAM	CF-04D-C22 1AAM	CF-04E-W22 1AAM	CF-04F-D22 1AAM	CF-05A-F22 4AAM	CF-05B-F22 4AAN	CF-05C-R22 4AAM	CF-05D-C22 4AAM	CF-05E-W22 4AAM	CF-05F-D22 4AAM	F-05G-N22 4AAM	CF-05H-Q22 4AAM	CF-06A-F22 5AAM	CF-06B-F22 5AAN	CF-06C-D22 5AAM	CF-06D-N22 5AAM	CF-07A-F22 6AAM	CF-07B-F22 6AAN	CF-07C-S22 6AAR	CF-07D-S22 6AAN	CF-07E-W22 6AAM	CF-07F-N22 6AAR	CF-07G-N22 6LN	CF-08A-F22 7AAM	CF-08B-F22 7AAN	CF-08C-C22 7AAM	CF-08D-W22 7AAM	CF-08E-D22 7AAM	F-09A-N22 7AAM	CF-1A0-F22 8AAM	CF-1B0-F22 8AAN	CF-1C0-C22 8AAM
1INTK-4																																										
2TB12-1																																										
2TB12-2																																										
2TB12-2 (CP)																																										
2TB12-3																																										
2TB12-3 (CP)																																										
2TB12-4																																										
2TB27-1																																										
2TB27-2E																																										
2TB27-2W																																										
2TB27-3																																										
2TB27-4																																										
2TB27-5																																										
2TB27-6																																										
2TB27-7																																										
2TB27-8																																										
2INTK-1																																										
2INTK-2																																										
2INTK-3																																										
2INTK-4																																										
T603		F			F																								F													
T605		F			F																								F													
CC1A																																										
CC1B																																										

ROOM	CF-10D-DR22288AM	CF-10E-RR22288AR	CF-10F-SR22288AR	CF-10G-SN22288AN	CF-10H-SR22288AMR	CF-1A-F3115AM	CF-1B-F3115AN	CF-1C-W3115AM	CF-2A-F3117AM	CF-2B-F3117AN	CF-3A-N3118LM	CF-3B-N3118MM	CF-3C-N3118SM	CF-3D-D3118AM	CF-4A-F3119AM	CF-4B-F3119AN	CF-4C-D3119AM	CF-5A-W3120AM	CF-5B-D3120AM	CF-6A-C3120AM	CF-7A-M4120AM	CF-7B-M4120AN	CF-8A-N6030AR	CF-8A-M4122AM	CF-8B-M4122AN	CF-9A-M4122AM	CF-9B-M4122AN	CF-2A-M4122AM	CF-2B-M4122AN	CF-2A-F4122AM	CF-2B-F4122AN	CF-3A-M5122AM	CF-3B-M5122AN	CF-4A-M5122AM	CF-4B-M5122AN	CF-5A-M5122AM	CF-5B-M5122AN	CF-6A-M5122AM	CF-6B-M5122AN	CF-7A-M5122AM	CF-7B-M5122AN
A100	180"	76"	F	F	F										183"	F	183"	131"	131"	131"	140"	F					140"	F	140"	140"	95"	95"	94"	147"	103"	147"	136"	147"	100"	100"	100"	100"	83"
A101		58"	F	F	F											25"						25"						25"														
A102		63"	F	F	F											25"						25"						25"														
A103	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A104	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105A	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105B	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A105C	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A106	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A107				F																																					
A108	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A109				F																																					
A110	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A111	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A112				F																																					
A113	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A114				F																																					
A115A	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A115B	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A115C	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A116	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A117	120"	16"	F	F	F										123"	F	123"	71"	71"	71"	80"	F					80"	F	80"	80"	35"	35"	34"	87"	43"	87"	76"	87"	40"	40"	40"	40"	23"
A118		63"	F	F	F											25"						25"						25"														
A119		58"	F	F	F											25"						25"						25"														
A120		F	F	F	F											F						F						F														
A122		F	F	F	F											F						F						F														
A200			47"	F																																						
A201			47"	F																																						
A202			47"	F																																						
A203			47"	F																																						
A204			47"	F																																						
A205		30"	71"	F	30"											30"						30"						30"														
A206			47"	F																																						
A207			41"	F																																						
A208			47"	F																																						
A209			47"	F																																						
A210			47"	F																																						
A211			47"	F																		F						F	F	F												
A212			47"	F																																						
A213			47"	F																																						
A214			47"	F																																						
A215			47"	F																																						
A216			47"	F																																						
A216A			47"	F																																						
A217			47"	F																																						
A218			47"	F																																						
A219			47"	F																																						
A220			47"	F																																						
A221			47"	F																		F						F	F	F												

ROOM	CF-10D-D228AM	F-10E-R228AM	CF-10F-S228AR	CF-10G-S228AN	CF-10H-S228MR	CF-11A-F315AM	CF-11B-F315AN	CF-11C-W315AM	CF-12A-F317AM	CF-12B-F317AN	CF-13A-N318LM	CF-13B-N318MM	CF-13C-N318SM	CF-13D-D318AM	CF-14A-F319AM	CF-14B-F319AN	CF-14C-D319AM	CF-15A-W320AM	CF-15B-D320AM	CF-16A-C324AM	F-17A-M419AM	CF-17B-M411AN	CF-18A-M421AM	CF-18B-M421AN	CF-19A-M422AM	CF-19B-M422AN	CF-20A-M428AM	CF-20B-M428AN	CF-21A-F429AM	CF-21B-F429AN	CF-22A-M520AM	CF-22B-M520AN	CF-23A-M525AM	CF-23B-M525AN	CF-24A-M525AM	CF-24B-M525AN	CF-25A-M530AN	CF-25B-M530AN	F-26A-M536AM	CF-26B-M536AN	CF-27A-M537AM	CF-27B-M537AN	CF-28A-N603AR
A222			47"	F																																							
A223			47"	F																																							
A224			47"	F																																							
A225			47"	F																																							31"
A226		30"	71"	F	30"											30"						30"						30"															66"
A227			47"	F																		F						F															
A228	F	F	F	F	F																																						
A308																															32"	32"	F	F	F	F	F	F	F	F	F	F	
A309																					F	F					F	F	54"	54"													
A315						F	F	F		F											F	F					F	F	84"	84"													
A316																																											
A317									F	F	65"	4"		4"																													
A318											F	F	F	F																													
A319															F	F	F																										
A320																		F	F																								
A322																					F	F					F	F	F	F													
A324																				F																							
A326																																											
A406																													F	F			F	F	F	F	F	F	F	F	F	F	
A419																					F	F																					
A421																							F	F																			
A422																									F	F																	
A428																											F	F															
A429																													F	F													
A431																													F	F			F	F	F	F	F	F	F	F	F	F	
A520																															F	F											
A524																																	F	F									
A525																																			F	F							
A530																																					F	F					
A536																																							F	F	F	F	
A537																																							F	F	F	F	
1TB12-1						F	F	F																																			
1TB12-2																																											
1TB12-2 (CP)						102"	174"	63"	102"	174"	63"	63"	32"	63"															50"	89"													
1TB12-3																																											
1TB12-3 (CP)						102"	174"	63"	102"	174"	63"	63"	32"	63"															50"	89"													
1TB12-4																																											
1TB27-1						F	F	F																																			
1TB27-2																																											
1TB27-3																																											
1TB27-4																																											
1TB27-5E																																											
1TB27-5W																																											
1TB27-6																																											
1TB27-7																																											
1TB45-2																																											
1INTK-1																																											
1INTK-2																																											
1INTK-3																																											

ROOM	CF-10D-D22828AM	F-10E-R22828AM	CF-10F-S22828AR	CF-10G-S22828AN	CF-10H-S22828MR	CF-11A-F31515AM	CF-11B-F33115AN	CF-11C-W33115AM	CF-12A-F33117AM	CF-12B-F33117AN	CF-13A-N33118LM	CF-13B-N33118MM	CF-13C-N33118SM	CF-13D-D33118AM	CF-14A-F33119AM	CF-14B-F33119AN	CF-14C-D33119AM	CF-15A-W32200AM	CF-15B-D32200AM	CF-16A-C32204AM	F-17A-M44219AM	CF-17B-M44219AN	CF-18A-M44211AM	CF-18B-M44211AN	CF-19A-M44222AM	CF-19B-M44222AN	CF-20A-M42228AM	CF-20B-M42228AN	CF-21A-F44229AM	CF-21B-F44229AN	CF-22A-M55220AM	CF-22B-M55220AN	CF-23A-M55224AM	CF-23B-M55224AN	CF-24A-M55245AM	CF-24B-M55245AN	CF-25A-M55330AM	CF-25B-M55330AN	CF-26A-M55336AM	CF-26B-M55336AN	CF-27A-M55337AM	CF-27B-M55337AN	CF-28A-N60330AR
1INTK-4																																											
2TB12-1																																											
2TB12-2																																											
2TB12-2 (CP)																																											
2TB12-3																																											
2TB12-3 (CP)																																											
2TB12-4																																											
2TB27-1																																											
2TB27-2E																																											
2TB27-2W																																											
2TB27-3																																											
2TB27-4																																											
2TB27-5																																											
2TB27-6																																											
2TB27-7																																											
2TB27-8																																											
2INTK-1																																											
2INTK-2																																											
2INTK-3																																											
2INTK-4																																											
T603				F																																							F
T605				F																																							
CC1A																													F	F			F	F	F	F	F	F	F	F	F	F	
CC1B																													F	F			F	F	F	F	F	F	F	F	F	F	

ROOM	CF-28B-NF603AN	F-28C-FF603AM	CF-28D*-FF603AN	CF-28E-DF603AM	CF-29A-NF605ARR	CF-29B-NF605AN	CF-29C-FF605AM	CF-29D*-FF605AN	CF-30A-FF205AN	CF-30B-SS205AR	CF-30C-SS205AN	CF-30D-NS205LN	CF-31A-ST12ARR	CF-31B-ST12AN	CF-31C-FT12AM	CF-31D*-FT12AN	CF-31E-IT12AM	CF-32A-FT27AM	CF-32B*-FT27AN	CF-33A-SISPAN	CF-33B-SISPARR	CF-33C-FISPAM	CF-33D*-FISPAN	CF-33E-IISPAM
A100	112"	175"	F	175"	83"	112"	175"	F	F	F	F	102"		F										
A101			25"					25"	25"	F	F	7"		F										
A102			25"					25"	25"	F	F	7"		F										
A103	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A104	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105A	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105B	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A105C	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A106	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A107										F	F			F										
A108	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A109										F	F			F										
A110	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A111	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A112										F	F			F										
A113	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A114										F	F			F										
A115A	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A115B	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A115C	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A116	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A117	52"	115"	F	115"	23"	52"	115"	F	F	F	F	42"		F										
A118			25"					25"	25"	F	F	7"		F										
A119			25"					25"	25"	F	F	7"		F										
A120			F					F	F	F	F	F		F										
A122			F					F	F	F	F	F		F										
A200										96"	F			F										
A201										96"	F			F										
A202										96"	F			F										
A203										96"	F			F										
A204					31"	31"				F	F	64"		F										
A205			30"		66"	66"	30"	30"	F	F	F	F		F										
A206										96"	F			F										
A207										90"	F			F										
A208										96"	F			F										
A209										96"	F			F										
A210										96"	F			F										
A211										96"	F			F										
A212										96"	F			F										
A213										96"	F			F										
A214										96"	F			F										
A215										96"	F			F										
A216										96"	F			F										
A216A										96"	F			F										
A217										96"	F			F										
A218										96"	F			F										
A219										96"	F			F										
A220										96"	F			F										
A221										96"	F			F										

ROOM	CF-28B-N603AN	F-28C-F603AM	CF-28D-F603AN	CF-28E-D603AM	CF-29A-N605AR	CF-29B-N605AN	CF-29C-F605AM	CF-29D-F605AN	CF-30A-F205AN	CF-30B-S205AR	CF-30C-S205AN	CF-30D-N205LN	CF-31A-ST112AR	CF-31B-ST112AN	CF-31C-FT112AM	CF-31D-FT112AN	CF-31E-1T112AM	CF-32A-FT27AM	CF-32B-FT27AN	CF-33A-ISPAN	CF-33B-ISPAR	CF-33C-FISPAM	CF-33D-FISPAN	CF-33E-IISPAM
A222										96"	F			F										
A223										96"	F			F										
A224										96"	F			F										
A225	31"									96"	F			F										
A226	66"	30"	30"	30"				30"	30"	156"	F	30"		F										
A227										96"	F			F										
A228										96"	F			F										
A308																								
A309																								
A315																								
A316																								
A317																								
A318																								
A319																								
A320																								
A322																								
A324																								
A326																								
A406																								
A419																								
A421																								
A422																								
A428																								
A429																								
A431																								
A520																								
A524																								
A525																								
A530																								
A536																								
A537																								
1TB12-1													F	F	F	F	F	F	F					
1TB12-2													F	F	F	F	F	F	F					
1TB12-2 (CP)													F	F	F	F	F	F	F					
1TB12-3													F	F	F	F	F	F	F					
1TB12-3 (CP)													F	F	F	F	F	F	F					
1TB12-4													F	F	F	F	F	F	F					
1TB27-1													F	F	F	F	F	F	F					
1TB27-2													F	F	F	F	F	F	F					
1TB27-3													F	F	F	F	F	F	F					
1TB27-4													F	F	F	F	F	F	F					
1TB27-5E													F	F	F	F	F	F	F					
1TB27-5W													F	F	F	F	F	F	F					
1TB27-6													F	F	F	F	F	F	F					
1TB27-7													F	F	F	F	F	F	F					
1TB45-2																								
1INTK-1																				F	200"	101"	174"	48"
1INTK-2																				F	200"	101"	174"	48"
1INTK-3																				F	200"	101"	174"	48"

ROOM	CF-28B-N603AN	F-28C-FF603AM	CF-28D-FF603AN	CF-28E-DF603AM	CF-29A-NF605AR	CF-29B-NF605AN	CF-29C-FF605AM	CF-29D-FF605AN	CF-30A-FF205AN	CF-30B-SF205AR	CF-30C-SF205AN	CF-30D-NF205LN	CF-31A-ST12ARF	CF-31B-ST12ANF	CF-31C-FT12AMF	CF-31D-FT12ANF	CF-31E-IT12AMF	CF-32A-FT27AMF	CF-32B-FT27ANF	CF-33A-SISPANF	CF-33B-SISPARF	CF-33C-FISPAMF	CF-33D-FISPANF	CF-33E-IISPAMF
1INTK-4																				F	200"	101"	174"	48"
2TB12-1													F	F	F	F	F	F	F					
2TB12-2													F	F	F	F	F	F	F					
2TB12-2 (CP)													F	F	F	F	F	F	F					
2TB12-3													F	F	F	F	F	F	F					
2TB12-3 (CP)													F	F	F	F	F	F	F					
2TB12-4													F	F	F	F	F	F	F					
2TB27-1													F	F	F	F	F	F	F					
2TB27-2E													F	F	F	F	F	F	F					
2TB27-2W													F	F	F	F	F	F	F					
2TB27-3													F	F	F	F	F	F	F					
2TB27-4													F	F	F	F	F	F	F					
2TB27-5													F	F	F	F	F	F	F					
2TB27-6													F	F	F	F	F	F	F					
2TB27-7													F	F	F	F	F	F	F					
2TB27-8													F	F	F	F	F	F	F					
2INTK-1																				F	200"	101"	174"	48"
2INTK-2																				F	200"	101"	174"	48"
2INTK-3																				F	200"	101"	174"	48"
2INTK-4																				F	200"	101"	174"	48"
T603	F	F	F	F							F			F										
T605					F	F	F	F			F			F										
CC1A																								
CC1B																								

Flood Evaluation Query

CF-02A-S118AR

20-Oct-98

TOP	PM	EVALUATION	RI
AA	6BKR	6 breaker challenges.	PAJ
AB	5BKR	5 breaker challenges.	PAJ
AC	4BKR	4 breaker challenges.	PAJ
AD	7BKR	7 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	None	11A and 11B LPSI Loop Isol MOVs (1MOV615 and 1MOV625), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected.	PAJ
F1	None ~~Spec Impt~~ (note 2) (note 1)	~~11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX. Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be.~~	PAJ
F3	None	~~Steam Admission SV's 1SV4070/4071 are covered under top event F1.~~ (note 3)	PAJ
F7	None ~~F~~	~~Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.~~ (note 1)	PAJ
F9	~~F~~ None	~~You loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as is (open) on loss of power.~~ (note 1)	PAJ
FC	None ~~Spec Impt~~	~~AFW Pump Room Emergency Vent Fans 11 & 12 fail along with NSR A/C Unit.~~ (note 1)	PAJ
FF	None	~~Both 11 and 12 AFW Pump Room Exhaust fans fail to start. Covered under Top FC.~~ (note 1)	PAJ
FH	None	~~Loss the ability to start AFW MD Pump 13. Covered under Top F7.~~ (note 1)	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ

notes are contained in RAN 98-065 Sect 5.4 JPK

TOP	PM	EVALUATION	RI
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	None ~~F~~	~~22 and 23 SRW Pump fail.~~ (note 1)	PAJ
GZ	None ~~F~~	~~21 and 23 SRW Pump fail.~~ (note 1)	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pumps fail.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	~~11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.~~ (note 1)	PAJ
IL	None	Air accumulators only. Mechanical operation only.	PAJ
IN	None	Air accumulators only. Mechanical operation only.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	~~Since KX, KY and KZ fail, this top event will be set to success.~~ (note 1)	PAJ
K4	None	~~Since KX, KY and KZ fail, this top event will be set to success.~~ (note 1)	PAJ
KH(PP1)	None	~~Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 11 CCW Pump. 11 Component Cooling Pump fails to start.~~ (note 1)	PAJ
KH(PP2)	None	~~Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 12 CCW Pump. 12 Component Cooling Pump fails to start.~~ (note 1)	PAJ
KH(PP3)	None	~~Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 13 CCW Pump. 13 Component Cooling Pump fails to start.~~ (note 1)	PAJ
KI(HX1)	None	~~Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3824 and 1CV5206). 1CV3824 will fail in the appropriate position. 1CV5206 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.~~ (note 1)	PAJ

TOP	PM	EVALUATION	RI
KI(HX2)	None	~~Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3826 and 1CV5208). 1CV3826 will fail in the appropriate position. 1CV5208 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.~~ (Note 1)	PAJ
KM	None	~~Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3823 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-149 transfers shut or 1HXCC11 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.~~ (Note 1)	PAJ
KN	None	~~Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3825 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-156 transfers shut or 1HXCC12 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.~~ (Note 1)	PAJ
KX	None ~~F~~	~~11 CCW Pump will fail to start/run.~~ (Note 1)	PAJ
KY	None ~~F~~	~~12 CCW Pump will fail to start/run.~~ (Note 1)	PAJ
KZ	None ~~F~~	~~13 CCW Pump will fail to start/run.~~ (Note 1)	PAJ
M1	14BKR	14 breaker challenges.	PAJ
M2	23BKR	23 breaker challenges.	PAJ
M3	17BKR	17 breaker challenges.	PAJ
~~M4~~	~~20BKR~~	~~20 breaker challenges.~~ NOT IN UNIT 1 GENERAL TRANSIENT MODEL.	~~PAJ~~
MH	~~Spec Impt~~	~~1CV4070/4071 are normally closed and fail as-is on loss of power. These valves must be locally vented.~~ (Note 1)	PAJ
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	2BKR	2 breaker challenges.	PAJ
N2	2BKR	2 breaker challenges.	PAJ
N3	1BKR	1 breaker challenge.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	1BKR	1 breaker challenge.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	2BKR	2 breaker challenges.	PAJ
N8	2BKR	2 breaker challenges.	PAJ
NR	Spec Impt ~~None~~	~~Air accumulators only. Mechanical operation only.~~ (Note 4)(Note 1)	PAJ
NR(TC)	Spec Impt	~~2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.~~ (Note 4) (Note 1)	PAJ
NS	None ~~Spec Impt~~	~~2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.~~ (Note 1)	PAJ
QZ	None	~~11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as is on loss of power.~~ (Note 1)	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
S3	None ~~F~~	~~11 and 13 SRW Pumps fail.~~ (Note 1)	PAJ
S4	None ~~F~~	~~12 and 13 SRW Pumps fail.~~ (Note 1)	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SP(PP1)	None	~~11 CC Pumps fails to start/run. Accounted for by Top KX.~~ (Note 1)	PAJ
SP(PP2)	None	~~12 CC Pumps fails to start/run. Accounted for by Top KY.~~ (Note 1)	PAJ
SP(PP3)	None	~~13 CC Pumps fails to start/run. Accounted for by Top KZ.~~ (Note 1)	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463/615/625) are closed and fail close.	PAJ
TA	None ~~F~~	~~1CV1637~~/1639 ~~fail close on loss of power / loss of air.~~ (Note 1)	PAJ

TOP	PM	EVALUATION	RI
TB	None ~~F~~	~~1CV1600/1638 fail close on loss of power / loss of air.~~ (Note 1)	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TG	None	~~Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be. Covered under Top F1.~~ (Note 3)	PAJ
TH(HD1)	None	~~1CV5206/5210 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S3 or K3. Also, 1CV5170/5171 fails open on loss of power and loss of air.~~ (Note 6)	PAJ
TH(HD2)	None	~~1CV5208/5212 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S4 or K4. Also, 1CV5173 fails open on loss of power and loss of air.~~ (Note 6)	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V5	None ~~F~~	~~11 and 12 ECCS exhaust fans fails to start/run.~~ (Note 1)	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	~~1CV1584/1592 fail open loss of power.~~ (Note 1)	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	AA	MWSR1Q	MWSR1Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AA	MWSR3Q	MWSR3Q	32
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	AB	MWSR2Q	MWSR2Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AB	MWSR4Q	MWSR4Q	32
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	AC	MWSR5Q	MWSR5Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AC	MWSR7Q	MWSR7Q	32
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	AD	MWSR6Q	MWSR6Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AD	MWSR8Q	MWSR8Q	32
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	F1	CV4522	CV522P	40
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A226	1CV4532	12 S/G AFW BLOCK VLV	F1	CV4532	CV532P	40
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	CVB22C	CVB22C	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	CVB32C	CVB32C	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB22T	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB32T	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11R	VDA11R	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11S	VDA11S	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12R	VDA12R	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12S	VDA12S	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FF	BHEFCB	Start	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FF	BHEFCB	Start	36
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A205	2CV5212	22 SRW HX SW OUT CV	GW	C2S12O	C2S12O	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22R	MWT22R	32
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22S	MWT22S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23S	MWT23S	32
A205	2CV5152	22 SRW HX SW INLET	GW	S8CV52	C1S52P	60
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	S8H2CV	C2S12P	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21R	MWT21R	32
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21S	MWT21S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23S	MWT23S	32
A205	2CV5150	21 SRW HX SW INLET	GZ	S7H2CV	C1S50P	60
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2CV5210	21 SRW HX SW OUTLET CV	GZ	S7H2CV	C2S10P	60
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	C2210C	C2210C	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	K3CLOS	C2210T	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	C2212C	C2212C	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	K4ISO1	C2212T	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	M1	MBM06Q	MBM06Q	12
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	M1	MVM25Q	MVM25Q	6
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A225	1FANHVACPENETE1	12 PENET RM EXH FAN (1M0402)	M1	VDM02Q	VDM02Q	18.75
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	M1	VDM12Q	VDM12Q	36
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	M1	VDM13Q	VDM13Q	0
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0
A217	1U1409	11 CVC BA TK HTR A	M2	HTN09Q	HTN09Q	6
A217	1U1434	12 BA TK HTR A	M2	HTN34Q	HTN34Q	6
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	M2	MBN06Q	MBN06Q	12
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A227	1MOV615	11A LPSI LOOP ISOL	M2	MVN07Q	MVN07Q	19
A227	1MOV625	11B LPSI LOOP ISOL	M2	MVN08Q	MVN08Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A218	1MOV504	RWT TO CHG PP	M2	MVN23Q	MVN23Q	19
A217	1MOV509	11 BAST GRAVITY FD	M2	MVN24Q	MVN24Q	6
A217	1MOV508	12 BAST GRAVITY FD	M2	MVN30Q	MVN30Q	6
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A217	1X11	1 CVC BA HEAT TRACING XFMR	M2	TMN33Q	TMN33Q	6
A225	1FANHVACPENETE1	11 PENET RM EXH FAN (1M1402)	M2	VDN02Q	VDN02Q	18.75
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	M2	VDN12Q	VDN12Q	36
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	M2	VDN13Q	VDN13Q	0
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0
A215	2U0409	21 CVC BA TK HTR B	M3	HTO09Q	HTO09Q	0
A215	2U0434	22 CVC BA TK HTR B	M3	HTO34Q	HTO34Q	0
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A215	2PUMPCVCBA22	22 CVC BORIC ACID PUMP (2M0406)	M3	MBO06Q	MBO06Q	6
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0
A215	2MOV514	BAPP'S TO CHG PP SUCT DIRECT FD	M3	MVO25Q	MVO25Q	0
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A203	2MOV399	SDC HX RECIRC ISOL	M3	MVO58Q	MVO58Q	6
A204	2FANHVACPENETE2	22 PENET RM EXH FAN (2M1402)	M3	VDO02Q	VDO02Q	18.75
A204	2FANHVACAFWE22	22 AFW PUMP RM EXH (2M0412)	M3	VDO12Q	VDO12Q	36
A204	2FANHVACECCSE22	22 ECCS PUMP RM EXH (2M0413)	M3	VDO13Q	VDO13Q	0
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0
A101	2FAN1448A	ECCS PP RM CLR 21 FAN A (2M1448A)	M4	M4FPPR	VD48AQ	72
A101	2FAN1448B	ECCS PP RM CLR 21 FAN B (2M1448B)	M4	M4FPPR	VD48BQ	72
A101	2FAN1448C	ECCS PP RM CLR 21 FAN C (2M1448C)	M4	M4FPPR	VD48CQ	72
A101	2FAN1448D	ECCS PP RM CLR 21 FAN D (2M1448D)	M4	M4FPPR	VD48DQ	72
A215	2PUMPCVCBA21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6
A206	2MOV615	21B LPSI OUTLET MOV	M4	MVN07Q	MVN07Q	24
A206	2MOV625	21A LPSI LOOP ISOL	M4	MVN08Q	MVN08Q	24
A101	2MOV656	AUX HPSI HDR ISOL	M4	MVN21Q	MVN21Q	54
A101	2MOV655	HPSI HDR X-CONN	M4	MVN22Q	MVN22Q	48
A212	2MOV504	RWT TO CHG PP	M4	MVN23Q	MVN23Q	24
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0
A204	2FANHVACPENETE2	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75
A204	2FANHVACAFWE21	21 AFW PUMP RM EXH (2M1412)	M4	VDN12Q	VDN12Q	36
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A226	1CV5150	11 SRW HX SW INLET	S3	C1150P	C1150P	60
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11R	MWS11R	32
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11S	MWS11S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13S	MWS13S	32
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1CV5210	11 SRW HX SW OUTLET CV	S3	S3H1BV	C2210P	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	C2212O	C2212O	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12R	MWS12R	32
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12S	MWS12S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13S	MWS13S	32
A226	1CV5152	12 SRW HX SW INLET	S4	S4CV52	C1152P	60
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	S4H2BV	C2212P	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1)	BHER3B	Open	13
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1)	BHER3B	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1)	BHER3B	Open	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1)	BHER3B	Throttle	0
A226	1CV5210	11 SRW HX SW OUTLET CV	TH(HD1)	BHER3B	Throttle	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1)	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2)	BHER3B	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2)	BHER3B	Throttle	0
A226	1CV5212	12 SRW HX SW OUT CV	TH(HD2)	BHER3B	Throttle	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2)	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	13
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1)	BHEV1T	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0

Complete

Flood Evaluation Query

CF-02B-S118AN

20-Oct-98

TOP	PM	EVALUATION	RI
AA	6BKR	6 breaker challenges.	PAJ
AB	5BKR	5 breaker challenges.	PAJ
AC	4BKR	4 breaker challenges.	PAJ
AD	7BKR	7 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	None	11A and 11B LPSI Loop Isol MOVs (1MOV615 and 1MOV625), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected.	PAJ
F1 (note 2) (note 1) (note 3)	None ~~Spec Impt~~	11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX. Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be.	PAJ
F3	None	~~Steam Emission SV's 1SV4070/4071 are covered under top event F1.~~ (Note 3)	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	You loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FC	Spec Impt	AFW Pump Room Emergency Vent Fans 11 & 12 fail along with NSR A/C Unit fail.	PAJ
FF	None	Both 11 and 12 AFW Pump Room Exhaust fans fail to start. Covered under Top FC.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ

Notes are contained in RAN 98-065 sect 5.4 JMN

TOP	PM	EVALUATION	RI
FO	None ~~F~~	~~Use FO SF where M3 and M4 fail. 21A SWAC fails and 22A SWAC fails. The Unit 1 Plant Model does not credit anything other than the use of the SWACs. As a result, this function should be considered failed.~~ (Note 7)	PAJ
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	F	22 and 23 SRW Pump fail.	PAJ
GZ	F	21 and 23 SRW Pump fail.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pumps fail.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
I1	None ~~F~~	(Note 7) ~~11 SWAC fails.~~	PAJ
I2	None ~~F~~	(Note 7) ~~12 SWAC fails.~~	PAJ
IL	None	Air accumulators only. Mechanical operation only.	PAJ
IN	None	Air accumulators only. Mechanical operation only.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
K4	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KH(PP1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 11 CCW Pump. 11 Component Cooling Pump fails to start.	PAJ
KH(PP2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 12 CCW Pump. 12 Component Cooling Pump fails to start.	PAJ

TOP	PM	EVALUATION	RI
KH(PP3)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 13 CCW Pump. 13 Component Cooling Pump fails to start.	PAJ
KI(HX1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3824 and 1CV5206). 1CV3824 will fail in the appropriate position. 1CV5206 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KI(HX2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3826 and 1CV5208). 1CV3826 will fail in the appropriate position. 1CV5208 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KM	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KN	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KX	F	11 CCW Pump will fail to start/run.	PAJ
KY	F	12 CCW Pump will fail to start/run.	PAJ
KZ	F	13 CCW Pump will fail to start/run.	PAJ
M1	15BKR	15 breaker challenges.	PAJ
M2	24BKR	24 breaker challenges.	PAJ
M3	18BKR	18 breaker challenges.	PAJ
~~M4~~	~~21BKR~~	~~21 breaker challenges.~~ NOT IN U1 GT.	~~PAJ~~
MH	None ~~Spec Impt~~	~~1CV4070/4071 are normally closed and fail as-is on loss of power. These valves must be locally vented.~~ (Note 7)	PAJ
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	2BKR	2 breaker challenges.	PAJ
N2	2BKR	2 breaker challenges.	PAJ
N3	1BKR	1 breaker challenge. Charging Pump 13 is normally aligned to 480V Bus 11A.	PAJ

TOP	PM	EVALUATION	RI
N4	1BKR	1 breaker challenge. Component Cooling Pump 13 is normally aligned to 480V Bus 11B.	PAJ
N5	1BKR	1 breaker challenge. Charging Pump 23 is normally aligned to 480V Bus 24A.	PAJ
N6	1BKR	1 breaker challenge. Component Cooling Pump 23 is normally aligned to 480V Bus 24B.	PAJ
N7	2BKR	2 breaker challenges.	PAJ
N8	2BKR	2 breaker challenges.	PAJ
NR	F ~~None~~	Air accumulators only. Mechanical operation only. (Note's 1 & 8)	PAJ
NR(TC)	F ~~Spec Impt~~	~~2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.~~ (Note 8) (Note 1)	PAJ
NS	F ~~Spec Impt~~	~~2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.~~ (Note 8)	PAJ
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	None ~~F~~	(Note 9) ~~This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.~~	PAJ
S3	F	11 and 13 SRW Pumps fail.	PAJ
S4	F	12 and 13 SRW Pumps fail.	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SP(PP1)	None	11 CC Pumps fails to start/run. Accounted for by Top KX.	PAJ
SP(PP2)	None	12 CC Pumps fails to start/run. Accounted for by Top KY.	PAJ
SP(PP3)	None	13 CC Pumps fails to start/run. Accounted for by Top KZ.	PAJ
SR	Spec Impt ~~None~~	(note 10) ~~All MOVs (1MOV4144/4145/5462/5463/615/625) are closed and fail close.~~	PAJ

TOP	PM	EVALUATION	RI
TA	F	1CV1637/1639 fail close on loss of power / loss of air.	PAJ
TB	F	1CV1600/1638 fail close on loss of power / loss of air.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TF ~~TF~~	None ~~F~~	~~11 AFW TD Pump fails.~~ (Note 7)	PAJ
TG	None ~~F~~	~~12 AFW TD Pump fails.~~ (Note 7)	PAJ
TH(HD1)	None	1CV5206/5210 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S3 or K3. Also, 1CV5170/5171 fails open on loss of power and loss of air.	PAJ
TH(HD2)	None	1CV5208/5212 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S4 or K4. Also, 1CV5173 fails open on loss of power and loss of air.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V5	F	11 and 12 ECCS exhaust fans fails to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592 fail open loss of power.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB.	BEVENT	" ABOVE F
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	AA	MWSR1Q	MWSR1Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AA	MWSR3Q	MWSR3Q	32
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	AB	MWSR2Q	MWSR2Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AB	MWSR4Q	MWSR4Q	32
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	AC	MWSR5Q	MWSR5Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AC	MWSR7Q	MWSR7Q	32
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	AD	MWSR6Q	MWSR6Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AD	MWSR8Q	MWSR8Q	32
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	F1	CV4522	CV522P	40
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A226	1CV4523	11 S/G AFW BLOCK VLV	F1	CV4523	CV523P	144
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A226	1CV4532	12 S/G AFW BLOCK VLV	F1	CV4532	CV532P	40
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A226	1CV4533	12 S/G AFW BLOCK VLV	F1	CV4533	CV533P	144
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525P	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525R	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535P	144
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535R	144
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0
A226	1CV4550	U-1 TO U-2 AFW X-CONN VLV	F7	F7MPVA	C3550T	144
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	CVB22C	CVB22C	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	CVB23C	CVB23C	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	CVB32C	CVB32C	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	CVB33C	CVB33C	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50O	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50P	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB22T	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB23T	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB32T	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB33T	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11R	0
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11S	0
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18
T603	1FDAFWW1	AFW RM SUPPLY FROM RM 225 TO 1AFW FD	FC	FDAMPR	FD001I	0
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11R	VDA11R	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11S	VDA11S	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12R	VDA12R	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12S	VDA12S	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FF	BHEFCB	Start	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FF	BHEFCB	Start	36
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21R	144
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21S	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22R	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22S	144
A205	2LS5200	21 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS200R	144
A205	2LS5201	22 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS201R	144
A205	2TS5200	21 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS200R	144
A205	2TS5201	22 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS201R	144
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A205	2CV5212	22 SRW HX SW OUT CV	GW	C2S12O	C2S12O	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22R	MWT22R	32
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22S	MWT22S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23S	MWT23S	32
A205	2CV5152	22 SRW HX SW INLET	GW	S8CV52	C1S52P	60
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	S8H2CV	C2S12P	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22B	144
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22P	144
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21R	MWT21R	32
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21S	MWT21S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23S	MWT23S	32
A205	2CV5150	21 SRW HX SW INLET	GZ	S7H2CV	C1S50P	60
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2CV5210	21 SRW HX SW OUTLET CV	GZ	S7H2CV	C2S10P	60
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21B	144
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21P	144
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A116	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11R	CMS11R	144
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11S	CMS11S	144
A226	1LS5200	11 IA SW AIR COMP LS	I1	I1CNTL	LS200R	144
A226	1TS5200	11 IA SW AIR COMP TS	I1	I1CNTL	TS200R	144
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12R	CMS12R	144
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12S	CMS12S	144
A226	1LS5201	12 IA SW AIR COMP LS	I2	I2CNTL	LS201R	144
A226	1TS5201	12 IA SW AIR COMP TS	I2	I2CNTL	TS201R	144
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	C2210C	C2210C	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	K3CLOS	C2210T	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	C2212C	C2212C	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	K4ISO1	C2212T	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	M1	CMM04Q	CMM04Q	144
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	M1	MBM06Q	MBM06Q	12

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	M1	MVM25Q	MVM25Q	6
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A225	1FANHVACPENETE12	12 PENET RM EXH FAN (1M0402)	M1	VDM02Q	VDM02Q	18.75
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	M1	VDM12Q	VDM12Q	36
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	M1	VDM13Q	VDM13Q	0
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	M2	CMN04Q	CMN04Q	144
A217	1U1409	11 CVC BA TK HTR A	M2	HTN09Q	HTN09Q	6
A217	1U1434	12 BA TK HTR A	M2	HTN34Q	HTN34Q	6
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	M2	MBN06Q	MBN06Q	12
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A227	1MOV615	11A LPSI LOOP ISOL	M2	MVN07Q	MVN07Q	19
A227	1MOV625	11B LPSI LOOP ISOL	M2	MVN08Q	MVN08Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A218	1MOV504	RWT TO CHG PP	M2	MVN23Q	MVN23Q	19
A217	1MOV509	11 BAST GRAVITY FD	M2	MVN24Q	MVN24Q	6
A217	1MOV508	12 BAST GRAVITY FD	M2	MVN30Q	MVN30Q	6
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A217	1X11	1 CVC BA HEAT TRACING XFMR	M2	TMN33Q	TMN33Q	6
A225	1FANHVACPENETE11	11 PENET RM EXH FAN (1M1402)	M2	VDN02Q	VDN02Q	18.75
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	M2	VDN12Q	VDN12Q	36
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	M2	VDN13Q	VDN13Q	0
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0
A215	2U0409	21 CVC BA TK HTR B	M3	HTO09Q	HTO09Q	0
A215	2U0434	22 CVC BA TK HTR B	M3	HTO34Q	HTO34Q	0
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	M3	M3FSWC	CMO5AQ	144
A205	2COMPSWAC22B	22 SW AIR COMPRESSOR MOTOR B (2M0405B)	M3	M3FSWC	CMO5BQ	144
A215	2PUMPCVCBA22	22 CVC BORIC ACID PUMP (2M0406)	M3	MBO06Q	MBO06Q	6
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0
A215	2MOV514	BAPP'S TO CHG PP SUCT DIRECT FD	M3	MVO25Q	MVO25Q	0
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A203	2MOV399	SDC HX RECIRC ISOL	M3	MVO58Q	MVO58Q	6
A204	2FANHVACPENETE22	22 PENET RM EXH FAN (2M1402)	M3	VDO02Q	VDO02Q	18.75
A204	2FANHVACAFWE22	22 AFW PUMP RM EXH (2M0412)	M3	VDO12Q	VDO12Q	36

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A204	2FANHVACECCSE22	22 ECCS PUMP RM EXH (2M0413)	M3	VDO13Q	VDO13Q	0
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	M4	M4FCRC	CM05AQ	144
A205	2COMPSWAC21B	21 SW AIR COMPRESSOR MOTOR B (2M1405B)	M4	M4FCRC	CM05BQ	144
A101	2FAN1448A	ECCS PP RM CLR 21 FAN A (2M1448A)	M4	M4FPPR	VD48AQ	72
A101	2FAN1448B	ECCS PP RM CLR 21 FAN B (2M1448B)	M4	M4FPPR	VD48BQ	72
A101	2FAN1448C	ECCS PP RM CLR 21 FAN C (2M1448C)	M4	M4FPPR	VD48CQ	72
A101	2FAN1448D	ECCS PP RM CLR 21 FAN D (2M1448D)	M4	M4FPPR	VD48DQ	72
A215	2PUMPCVCBA21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6
A206	2MOV615	21B LPSI OUTLET MOV	M4	MVN07Q	MVN07Q	24
A206	2MOV625	21A LPSI LOOP ISOL	M4	MVN08Q	MVN08Q	24
A101	2MOV656	AUX HPSI HDR ISOL	M4	MVN21Q	MVN21Q	54
A101	2MOV655	HPSI HDR X-CONN	M4	MVN22Q	MVN22Q	48
A212	2MOV504	RWT TO CHG PP	M4	MVN23Q	MVN23Q	24
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0
A204	2FANHVACPENETE21	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75
A204	2FANHVACAFWE21	21 AFW PUMP RM EXH (2M1412)	M4	VDN12Q	VDN12Q	36
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
A226	1ACC4070	11 S/G AFW STM VLV ACCUM	NR	NRIA99	TK070B	144
A226	1ACC4071	12 S/G STM VLV ACCUM	NR	NRIA99	TK071B	144
A205	2CV1637	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A205	2CV1600	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A205	2ACC4070	IA ACCUMULATOR	NS	NSIA99	TKS70B	144
A205	2ACC4071	IA ACCUMULATOR	NS	NSIA99	TKS71B	144
A205	2CV1638	TB SRW HDR ISOL	NS	NSSRW	N/A	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
A205	2CV1637	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A205	2CV1600	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4523	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4533	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A226	1CV5150	11 SRW HX SW INLET	S3	C1150P	C1150P	60
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11R	MWS11R	32
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11S	MWS11S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13S	MWS13S	32
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1CV5210	11 SRW HX SW OUTLET CV	S3	S3H1BV	C2210P	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	C2212O	C2212O	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12R	MWS12R	32
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12S	MWS12S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13S	MWS13S	32
A226	1CV5152	12 SRW HX SW INLET	S4	S4CV52	C1152P	60
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	S4H2BV	C2212P	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A226	1CV1637	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3637P	144
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1CV1639	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3639P	144

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A226	1CV1600	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3600P	72
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1CV1638	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3638P	72
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RR	AW11RR	30
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RS	AW11RS	30
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	TF11TP	VT986P	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	TF11TP	VT986P	0
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	VT986O	VT986O	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	VT986O	VT986O	0
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RR	AW12RR	30
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RS	AW12RS	30
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	TGTP12	VT988P	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	TGTP12	VT988P	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	VT988O	VT988O	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	VT988O	VT988O	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1)	BHER3B	Open	13
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1)	BHER3B	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1)	BHER3B	Open	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1)	BHER3B	Throttle	0
A226	1CV5210	11 SRW HX SW OUTLET CV	TH(HD1)	BHER3B	Throttle	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1)	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2)	BHER3B	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2)	BHER3B	Throttle	0
A226	1CV5212	12 SRW HX SW OUT CV	TH(HD2)	BHER3B	Throttle	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2)	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	13
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1)	BHEV1T	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE F
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0

Flood Evaluation Query

CF-02E-C118AM N & C118AR *

20-Oct-98

TOP	PM	EVALUATION	RI
AA	3BKR	3 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost. **	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails. **	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
M1	6BKR	6 breaker challenges.	PAJ
M2	6BKR	6 breaker challenges.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
RH	None ~~F~~	~~This~~ human action ~~requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario~~. (Note 9)	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463) are closed and fail close.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	11 ECCS Pump Room Air Cooler covered under Top V1.	PAJ
TH(HD2)	None	12 ECCS Pump Room Air Cooler covered under Top V2.	PAJ
TW	F **	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
V1	F **	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F **	All ECCS Pump Room Fans fail to start/run.	PAJ

** Impact removed for C118AR - see note 38

Notes are contained in RAN 98-065 sect 5.4 JBR

* SEE NOTE 38

TOP	PM	EVALUATION	RI
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CC	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CC	HXB2AP	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CC	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CC	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CC	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CC	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CC	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CC	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CC	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CC	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22

Flood Evaluation Query

CF-03A-S119AR *

20-Oct-98

TOP	PM	EVALUATION	RI
AA	6BKR	6 breaker challenges.	PAJ
AB	5BKR	5 breaker challenges.	PAJ
AC	4BKR	4 breaker challenges.	PAJ
AD	7BKR	7 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	None	11A and 11B LPSI Loop Isol MOVs (1MOV615 and 1MOV625), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected.	PAJ
F1	Spec Impt	11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX. Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be.	PAJ
F3	None	Steam Admission SV's 1SV4070/4071 are covered under top event F1.	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	You loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FC	Spec Impt	AFW Pump Room Emergency Vent Fans 11 & 12 fail along with NSR A/C Unit.	PAJ
FF	None	Both 11 and 12 AFW Pump Room Exhaust fans fail to start. Covered under Top FC.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ

* Some of the impacts for this flood have been changed. See the notes for flood S118AR. The impacts for both are identical. JPK

TOP	PM	EVALUATION	RI
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	F	22 and 23 SRW Pump fail.	PAJ
GZ	F	21 and 23 SRW Pump fail.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
IL	None	Air accumulators only. Mechanical operation only.	PAJ
IN	None	Air accumulators only. Mechanical operation only.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
K4	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KH(PP1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 11 CCW Pump. 11 Component Cooling Pump fails to start.	PAJ
KH(PP2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 12 CCW Pump. 12 Component Cooling Pump fails to start.	PAJ
KH(PP3)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 13 CCW Pump. 13 Component Cooling Pump fails to start.	PAJ
KI(HX1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3824 and 1CV5206). 1CV3824 will fail in the appropriate position. 1CV5206 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ

TOP	PM	EVALUATION	RI
KI(HX2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3826 and 1CV5208). 1CV3826 will fail in the appropriate position. 1CV5208 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KM	None	Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3823 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-149 transfers shut or 1HXCC11 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.	PAJ
KN	None	Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3825 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-156 transfers shut or 1HXCC12 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.	PAJ
KX	F	11 CCW Pump will fail to start/run.	PAJ
KY	F	12 CCW Pump will fail to start/run.	PAJ
KZ	F	13 CCW Pump will fail to start/run.	PAJ
M1	14BKR	14 breaker challenges.	PAJ
M2	23BKR	23 breaker challenges.	PAJ
M3	17BKR	17 breaker challenges.	PAJ
~~M4~~	~~20BKR~~	~~20 breaker challenges.~~ NOT IN U/ GT.	~~PAJ~~
MH	Spec Impt	1CV4070/4071 are normally closed and fail as-is on loss of power. These valves must be locally vented.	PAJ
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	2BKR	2 breaker challenges.	PAJ
N2	2BKR	2 breaker challenges.	PAJ
N3	1BKR	1 breaker challenge.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	1BKR	1 breaker challenge.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	2BKR	2 breaker challenges.	PAJ
N8	2BKR	2 breaker challenges.	PAJ
NR	None	Air accumulators only. Mechanical operation only.	PAJ
NR(TC)	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.	PAJ
NS	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.	PAJ
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
S3	F	11 and 13 SRW Pumps fail.	PAJ
S4	F	12 and 13 SRW Pumps fail.	PAJ
SG	Spec Impt	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment.	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SP(PP1)	None	11 CC Pumps fails to start/run. Accounted for by Top KX.	PAJ
SP(PP2)	None	12 CC Pumps fails to start/run. Accounted for by Top KY.	PAJ
SP(PP3)	None	13 CC Pumps fails to start/run. Accounted for by Top KZ.	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463/615/625) are closed and fail close.	PAJ
TA	F	1CV1637/1639 fail close on loss of power / loss of air.	PAJ

TOP	PM	EVALUATION	RI
TB	F	1CV1600/1638 fail close on loss of power / loss of air.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TG	None	Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be. Covered under Top F1.	PAJ
TH(HD1)	None	1CV5206/5210 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S3 or K3. Also, 1CV5170/5171 fails open on loss of power and loss of air.	PAJ
TH(HD2)	None	1CV5208/5212 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S4 or K4. Also, 1CV5173 fails open on loss of power and loss of air.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V5	F	11 and 12 ECCS exhaust fans fails to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592 fail open loss of power.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	AA	MWSR1Q	MWSR1Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AA	MWSR3Q	MWSR3Q	32
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	AB	MWSR2Q	MWSR2Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AB	MWSR4Q	MWSR4Q	32
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	AC	MWSR5Q	MWSR5Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AC	MWSR7Q	MWSR7Q	32
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	AD	MWSR6Q	MWSR6Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AD	MWSR8Q	MWSR8Q	32
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	F1	CV4522	CV522P	40
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A226	1CV4532	12 S/G AFW BLOCK VLV	F1	CV4532	CV532P	40
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	CVB22C	CVB22C	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	CVB32C	CVB32C	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB22T	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB32T	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11R	VDA11R	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11S	VDA11S	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12R	VDA12R	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12S	VDA12S	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FF	BHEFCB	Start	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FF	BHEFCB	Start	36
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
A224	1CV1645	1B.DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A205	2CV5212	22 SRW HX SW OUT CV	GW	C2S12O	C2S12O	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22R	MWT22R	32
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22S	MWT22S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23S	MWT23S	32
A205	2CV5152	22 SRW HX SW INLET	GW	S8CV52	C1S52P	60
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	S8H2CV	C2S12P	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21R	MWT21R	32
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21S	MWT21S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23S	MWT23S	32
A205	2CV5150	21 SRW HX SW INLET	GZ	S7H2CV	C1S50P	60
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2CV5210	21 SRW HX SW OUTLET CV	GZ	S7H2CV	C2S10P	60
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	C2210C	C2210C	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	K3CLOS	C2210T	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	C2212C	C2212C	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	K4ISO1	C2212T	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	M1	MBM06Q	MBM06Q	12
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	M1	MVM25Q	MVM25Q	6
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A225	1FANHVACPENETE1	12 PENET RM EXH FAN (1M0402)	M1	VDM02Q	VDM02Q	18.75
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	M1	VDM12Q	VDM12Q	36
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	M1	VDM13Q	VDM13Q	0
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0
A217	1U1409	11 CVC BA TK HTR A	M2	HTN09Q	HTN09Q	6
A217	1U1434	12 BA TK HTR A	M2	HTN34Q	HTN34Q	6
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	M2	MBN06Q	MBN06Q	12
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A227	1MOV615	11A LPSI LOOP ISOL	M2	MVN07Q	MVN07Q	19
A227	1MOV625	11B LPSI LOOP ISOL	M2	MVN08Q	MVN08Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A218	1MOV504	RWT TO CHG PP	M2	MVN23Q	MVN23Q	19
A217	1MOV509	11 BAST GRAVITY FD	M2	MVN24Q	MVN24Q	6
A217	1MOV508	12 BAST GRAVITY FD	M2	MVN30Q	MVN30Q	6
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A217	1X11	1 CVC BA HEAT TRACING XFMR	M2	TMN33Q	TMN33Q	6
A225	1FANHVACPENETE1	11 PENET RM EXH FAN (1M1402)	M2	VDN02Q	VDN02Q	18.75
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	M2	VDN12Q	VDN12Q	36
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	M2	VDN13Q	VDN13Q	0
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0
A215	2U0409	21 CVC BA TK HTR B	M3	HTO09Q	HTO09Q	0
A215	2U0434	22 CVC BA TK HTR B	M3	HTO34Q	HTO34Q	0
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A215	2PUMPCVCBA22	22 CVC BORIC ACID PUMP (2M0406)	M3	MBO06Q	MBO06Q	6
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0
A215	2MOV514	BAPP'S TO CHG PP SUCT DIRECT FD	M3	MVO25Q	MVO25Q	0
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A203	2MOV399	SDC HX RECIRC ISOL	M3	MVO58Q	MVO58Q	6
A204	2FANHVACPENETE2	22 PENET RM EXH FAN (2M1402)	M3	VDO02Q	VDO02Q	18.75
A204	2FANHVACAFWE22	22 AFW PUMP RM EXH (2M0412)	M3	VDO12Q	VDO12Q	36
A204	2FANHVACECCSE22	22 ECCS PUMP RM EXH (2M0413)	M3	VDO13Q	VDO13Q	0
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0
A101	2FAN1448A	ECCS PP RM CLR 21 FAN A (2M1448A)	M4	M4FPPR	VD48AQ	72
A101	2FAN1448B	ECCS PP RM CLR 21 FAN B (2M1448B)	M4	M4FPPR	VD48BQ	72
A101	2FAN1448C	ECCS PP RM CLR 21 FAN C (2M1448C)	M4	M4FPPR	VD48CQ	72
A101	2FAN1448D	ECCS PP RM CLR 21 FAN D (2M1448D)	M4	M4FPPR	VD48DQ	72
A215	2PUMPCVCBA21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6
A206	2MOV615	21B LPSI OUTLET MOV	M4	MVN07Q	MVN07Q	24
A206	2MOV625	21A LPSI LOOP ISOL	M4	MVN08Q	MVN08Q	24
A101	2MOV656	AUX HPSI HDR ISOL	M4	MVN21Q	MVN21Q	54
A101	2MOV655	HPSI HDR X-CONN	M4	MVN22Q	MVN22Q	48
A212	2MOV504	RWT TO CHG PP	M4	MVN23Q	MVN23Q	24
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0
A204	2FANHVACPENETE2	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75
A204	2FANHVACAFWE21	21 AFW PUMP RM EXH (2M1412)	M4	VDN12Q	VDN12Q	36
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA106)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A226	1CV5150	11 SRW HX SW INLET	S3	C1150P	C1150P	60
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11R	MWS11R	32
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11S	MWS11S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13S	MWS13S	32
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1CV5210	11 SRW HX SW OUTLET CV	S3	S3H1BV	C2210P	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	C2212O	C2212O	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12R	MWS12R	32
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12S	MWS12S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13S	MWS13S	32
A226	1CV5152	12 SRW HX SW INLET	S4	S4CV52	C1152P	60
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	S4H2BV	C2212P	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1)	BHER3B	Open	13
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1)	BHER3B	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1)	BHER3B	Open	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1)	BHER3B	Throttle	0
A226	1CV5210	11 SRW HX SW OUTLET CV	TH(HD1)	BHER3B	Throttle	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1)	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2)	BHER3B	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2)	BHER3B	Throttle	0
A226	1CV5212	12 SRW HX SW OUT CV	TH(HD2)	BHER3B	Throttle	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2)	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	13
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1)	BHEV1T	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0

Flood Evaluation Query

CF-03B-S119AN *

20-Oct-98

TOP	PM	EVALUATION	RI
AA	6BKR	6 breaker challenges.	PAJ
AB	5BKR	5 breaker challenges.	PAJ
AC	4BKR	4 breaker challenges.	PAJ
AD	7BKR	7 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	None	11A and 11B LPSI Loop Isol MOVs (1MOV615 and 1MOV625), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected.	PAJ
F1	Spec Impt	11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX. Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be.	PAJ
F3	None	Steam Admission SV's 1SV4070/4071 are covered under top event F1.	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	You loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FC	Spec Impt	AFW Pump Room Emergency Vent Fans 11 & 12 fail along with NSR A/C Unit fail.	PAJ
FF	None	Both 11 and 12 AFW Pump Room Exhaust fans fail to start. Covered under Top FC.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ

* Some of the impacts for this flood have been changed. See the notes for flood S118AN. The impacts for S119AN and S118AN are identical
JBM

TOP	PM	EVALUATION	RI
FO	F	Use FO SF where M3 and M4 fail. 21A SWAC fails and 22A SWAC fails. The Unit 1 Plant Model does not credit anything other than the use of the SWACs. As a result, this function should be considered failed.	PAJ
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	F	22 and 23 SRW Pump fail.	PAJ
GZ	F	21 and 23 SRW Pump fail.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
I1	F	11 SWAC fails.	PAJ
I2	F	12 SWAC fails.	PAJ
IL	None	Air accumulators only. Mechanical operation only.	PAJ
IN	None	Air accumulators only. Mechanical operation only.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
K4	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KH(PP1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 11 CCW Pump. 11 Component Cooling Pump fails to start.	PAJ
KH(PP2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 12 CCW Pump. 12 Component Cooling Pump fails to start.	PAJ

TOP	PM	EVALUATION	RI
KH(PP3)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 13 CCW Pump. 13 Component Cooling Pump fails to start.	PAJ
KI(HX1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3824 and 1CV5206). 1CV3824 will fail in the appropriate position. 1CV5206 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KI(HX2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3826 and 1CV5208). 1CV3826 will fail in the appropriate position. 1CV5208 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KM	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KN	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KX	F	11 CCW Pump will fail to start/run.	PAJ
KY	F	12 CCW Pump will fail to start/run.	PAJ
KZ	F	13 CCW Pump will fail to start/run.	PAJ
M1	15BKR	15 breaker challenges.	PAJ
M2	24BKR	24 breaker challenges.	PAJ
M3	18BKR	18 breaker challenges.	PAJ
~~M4~~	~~21BKR~~	~~21 breaker challenges.~~ NOT IN GT.	~~PAJ~~
MH	Spec Impt	1CV4070/4071 are normally closed and fail as-is on loss of power. These valves must be locally vented.	PAJ
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	2BKR	2 breaker challenges.	PAJ
N2	2BKR	2 breaker challenges.	PAJ
N3	1BKR	1 breaker challenge. Charging Pump 13 is normally aligned to 480V Bus 11A.	PAJ

TOP	PM	EVALUATION	RI
N4	1BKR	1 breaker challenge. Component Cooling Pump 13 is normally aligned to 480V Bus 11B.	PAJ
N5	1BKR	1 breaker challenge. Charging Pump 23 is normally aligned to 480V Bus 24A.	PAJ
N6	1BKR	1 breaker challenge. Component Cooling Pump 23 is normally aligned to 480V Bus 24B.	PAJ
N7	2BKR	2 breaker challenges.	PAJ
N8	2BKR	2 breaker challenges.	PAJ
NR	None	Air accumulators only. Mechanical operation only.	PAJ
NR(TC)	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.	PAJ
NS	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.	PAJ
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
S3	F	11 and 13 SRW Pumps fail.	PAJ
S4	F	12 and 13 SRW Pumps fail.	PAJ
SG	Spec Impt	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment.	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SP(PP1)	None	11 CC Pumps fails to start/run. Accounted for by Top KX.	PAJ
SP(PP2)	None	12 CC Pumps fails to start/run. Accounted for by Top KY.	PAJ
SP(PP3)	None	13 CC Pumps fails to start/run. Accounted for by Top KZ.	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463/615/625) are closed and fail close.	PAJ

TOP	PM	EVALUATION	RI
TA	F	1CV1637/1639 fail close on loss of power / loss of air.	PAJ
TB	F	1CV1600/1638 fail close on loss of power / loss of air.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TF	F	11 AFW TD Pump fails.	PAJ
TG	F	12 AFW TD Pump fails.	PAJ
TH(HD1)	None	1CV5206/5210 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S3 or K3. Also, 1CV5170/5171 fails open on loss of power and loss of air.	PAJ
TH(HD2)	None	1CV5208/5212 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S4 or K4. Also, 1CV5173 fails open on loss of power and loss of air.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V5	F	11 and 12 ECCS exhaust fans fails to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592 fail open loss of power.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	AA	MWSR1Q	MWSR1Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AA	MWSR3Q	MWSR3Q	32
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	AB	MWSR2Q	MWSR2Q	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	AB	MWSR4Q	MWSR4Q	32
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	AC	MWSR5Q	MWSR5Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AC	MWSR7Q	MWSR7Q	32
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	AD	MWSR6Q	MWSR6Q	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	AD	MWSR8Q	MWSR8Q	32
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	F1	CV4522	CV522P	40
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A226	1CV4523	11 S/G AFW BLOCK VLV	F1	CV4523	CV523P	144
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A226	1CV4532	12 S/G AFW BLOCK VLV	F1	CV4532	CV532P	40
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A226	1CV4533	12 S/G AFW BLOCK VLV	F1	CV4533	CV533P	144
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525P	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	F1	F1MLV1	C6525R	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535P	144
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1CV4535	12 S/G AFW FLOW CONT VLV	F1	F1MLV2	C6535R	144
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0
A226	1CV4550	U-1 TO U-2 AFW X-CONN VLV	F7	F7MPVA	C3550T	144
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	CVB22C	CVB22C	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	CVB23C	CVB23C	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	CVB32C	CVB32C	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	CVB33C	CVB33C	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50O	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2CV4550	U-2 TO U-1 AFW XCONN VLV	F9	F9M2VA	C3B50P	144
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2CV4522	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB22T	40
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2CV4523	21 S/G AFW BLOCK VLV	F9	F9M2VA	CVB23T	144
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2CV4532	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB32T	40
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2CV4533	22 S/G AFW BLOCK VLV	F9	F9M2VA	CVB33T	144
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11R	0
T603	1HXHVACAFW11	11 AFW PUMP ROOM	FC	FCAC11	CLA11S	0
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18
T603	1FDAFWW1	AFW RM SUPPLY FROM RM 225 TO 1AFW FD	FC	FDAMPR	FD001I	0
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11R	VDA11R	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FC	VDA11S	VDA11S	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12R	VDA12R	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FC	VDA12S	VDA12S	36
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	FF	BHEFCB	Start	36
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	FF	BHEFCB	Start	36
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21R	144
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	FO	UNIT 2	CMS21S	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22R	144
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	FO	UNIT 2	CMS22S	144
A205	2LS5200	21 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS200R	144
A205	2LS5201	22 IA SW AIR COMPR OIL LO LVL SW	FO	UNIT 2	LS201R	144
A205	2TS5200	21 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS200R	144
A205	2TS5201	22 IA SW AIR COMPR HI TEMP SW	FO	UNIT 2	TS201R	144
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A205	2CV5212	22 SRW HX SW OUT CV	GW	C2S12O	C2S12O	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22R	MWT22R	32
A205	2PUMPSRW22	22 SERVICE WATER PUMP (2MA409)	GW	MWT22S	MWT22S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GW	MWT23S	MWT23S	32
A205	2CV5152	22 SRW HX SW INLET	GW	S8CV52	C1S52P	60
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2CV5212	22 SRW HX SW OUT CV	GW	S8H2CV	C2S12P	48
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22B	144
A205	2HXSRW22	22 SRW HX	GW	S8HX22	HXS22P	144
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21R	MWT21R	32
A205	2PUMPSRW21	21 SERVICE WATER PUMP (2MA109)	GZ	MWT21S	MWT21S	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23R	MWT23R	32
A205	2PUMPSRW23	23 SERVICE WATER PUMP (2MA411)	GZ	MWT23S	MWT23S	32
A205	2CV5150	21 SRW HX SW INLET	GZ	S7H2CV	C1S50P	60
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2CV5210	21 SRW HX SW OUTLET CV	GZ	S7H2CV	C2S10P	60
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21B	144
A205	2HXSRW21	21 SRW HX	GZ	S7HX21	HXS21P	144
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HU	BHEF1B	Throttle	144

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	HX	BHEF1A	Throttle	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11R	CMS11R	144
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	I1	CMS11S	CMS11S	144
A226	1LS5200	11 IA SW AIR COMP LS	I1	I1CNTL	LS200R	144
A226	1TS5200	11 IA SW AIR COMP TS	I1	I1CNTL	TS200R	144
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12R	CMS12R	144
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	I2	CMS12S	CMS12S	144
A226	1LS5201	12 IA SW AIR COMP LS	I2	I2CNTL	LS201R	144
A226	1TS5201	12 IA SW AIR COMP TS	I2	I2CNTL	TS201R	144
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	C2210C	C2210C	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1CV5210	11 SRW HX SW OUTLET CV	K3	K3CLOS	C2210T	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	C2212C	C2212C	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A226	1CV5212	12 SRW HX SW OUT CV	K4	K4ISO1	C2212T	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12
A226	1COMPSWAC12	12 SW AIR COMPRESSOR (1M0404)	M1	CMM04Q	CMM04Q	144
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	M1	MBM06Q	MBM06Q	12

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	M1	MVM25Q	MVM25Q	6
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A225	1FANHVACPENETE1	12 PENET RM EXH FAN (1M0402)	M1	VDM02Q	VDM02Q	18.75
A225	1FANHVACAFWE12	12 AFW PUMP RM EXH (1M0412)	M1	VDM12Q	VDM12Q	36
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	M1	VDM13Q	VDM13Q	0
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0
A226	1COMPSWAC11	11 SW AIR COMPRESSOR (1M1404)	M2	CMN04Q	CMN04Q	144
A217	1U1409	11 CVC BA TK HTR A	M2	HTN09Q	HTN09Q	6
A217	1U1434	12 BA TK HTR A	M2	HTN34Q	HTN34Q	6
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	M2	MBN06Q	MBN06Q	12
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A227	1MOV615	11A LPSI LOOP ISOL	M2	MVN07Q	MVN07Q	19
A227	1MOV625	11B LPSI LOOP ISOL	M2	MVN08Q	MVN08Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A218	1MOV504	RWT TO CHG PP	M2	MVN23Q	MVN23Q	19
A217	1MOV509	11 BAST GRAVITY FD	M2	MVN24Q	MVN24Q	6
A217	1MOV508	12 BAST GRAVITY FD	M2	MVN30Q	MVN30Q	6
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A217	1X11	1 CVC BA HEAT TRACING XFMR	M2	TMN33Q	TMN33Q	6
A225	1FANHVACPENETE1	11 PENET RM EXH FAN (1M1402)	M2	VDN02Q	VDN02Q	18.75
A225	1FANHVACAFWE11	11 AFW PUMP RM EXH (1M1412)	M2	VDN12Q	VDN12Q	36
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	M2	VDN13Q	VDN13Q	0
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0
A215	2U0409	21 CVC BA TK HTR B	M3	HTO09Q	HTO09Q	0
A215	2U0434	22 CVC BA TK HTR B	M3	HTO34Q	HTO34Q	0
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22
A205	2COMPSWAC22A	22 SW AIR COMPRESSOR MOTOR A (2M0405A)	M3	M3FSWC	CMO5AQ	144
A205	2COMPSWAC22B	22 SW AIR COMPRESSOR MOTOR B (2M0405B)	M3	M3FSWC	CMO5BQ	144
A215	2PUMPCVCBA22	22 CVC BORIC ACID PUMP (2M0406)	M3	MBO06Q	MBO06Q	6
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0
A215	2MOV514	BAPP'S TO CHG PP SUCT DIRECT FD	M3	MVO25Q	MVO25Q	0
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A203	2MOV399	SDC HX RECIRC ISOL	M3	MVO58Q	MVO58Q	6
A204	2FANHVACPENETE2	22 PENET RM EXH FAN (2M1402)	M3	VDO02Q	VDO02Q	18.75
A204	2FANHVACAFWE22	22 AFW PUMP RM EXH (2M0412)	M3	VDO12Q	VDO12Q	36

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A204	2FANHVACECCSE22	22 ECCS PUMP RM EXH (2M0413)	M3	VDO13Q	VDO13Q	0
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0
A205	2COMPSWAC21A	21 SW AIR COMPRESSOR MOTOR A (2M1405A)	M4	M4FCRC	CM05AQ	144
A205	2COMPSWAC21B	21 SW AIR COMPRESSOR MOTOR B (2M1405B)	M4	M4FCRC	CM05BQ	144
A101	2FAN1448A	ECCS PP RM CLR 21 FAN A (2M1448A)	M4	M4FPPR	VD48AQ	72
A101	2FAN1448B	ECCS PP RM CLR 21 FAN B (2M1448B)	M4	M4FPPR	VD48BQ	72
A101	2FAN1448C	ECCS PP RM CLR 21 FAN C (2M1448C)	M4	M4FPPR	VD48CQ	72
A101	2FAN1448D	ECCS PP RM CLR 21 FAN D (2M1448D)	M4	M4FPPR	VD48DQ	72
A215	2PUMPCVCBA21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6
A206	2MOV615	21B LPSI OUTLET MOV	M4	MVN07Q	MVN07Q	24
A206	2MOV625	21A LPSI LOOP ISOL	M4	MVN08Q	MVN08Q	24
A101	2MOV656	AUX HPSI HDR ISOL	M4	MVN21Q	MVN21Q	54
A101	2MOV655	HPSI HDR X-CONN	M4	MVN22Q	MVN22Q	48
A212	2MOV504	RWT TO CHG PP	M4	MVN23Q	MVN23Q	24
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0
A204	2FANHVACPENETE2	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75
A204	2FANHVACAFWE21	21 AFW PUMP RM EXH (2M1412)	M4	VDN12Q	VDN12Q	36
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
A226	1ACC4070	11 S/G AFW STM VLV ACCUM	NR	NRIA99	TK070B	144
A226	1ACC4071	12 S/G STM VLV ACCUM	NR	NRIA99	TK071B	144
A205	2CV1637	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NR(TC)	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A205	2CV1600	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NR(TC)	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A205	2ACC4070	IA ACCUMULATOR	NS	NSIA99	TKS70B	144
A205	2ACC4071	IA ACCUMULATOR	NS	NSIA99	TKS71B	144
A205	2CV1638	TB SRW HDR ISOL	NS	NSSRW	N/A	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
A205	2CV1637	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3637P	144
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2CV1639	TB SRW HDR ISOL	NS	UNIT 2-TAFB01	C3639P	144
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A205	2CV1600	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3600P	72
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2CV1638	TB SRW HDR ISOL	NS	UNIT 2-TBFB01	C3638P	72
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A226	1CV4522	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4523	11 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A226	1CV4532	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	40
A226	1CV4533	12 S/G AFW BLOCK VLV	QZ	BHEQZ1	Open	144
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A226	1CV5150	11 SRW HX SW INLET	S3	C1150P	C1150P	60
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11R	MWS11R	32
A226	1PUMPSRW11	11 SERVICE WATER PUMP (1MA109)	S3	MWS11S	MWS11S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S3	MWS13S	MWS13S	32
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1CV5210	11 SRW HX SW OUTLET CV	S3	S3H1BV	C2210P	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	C2212O	C2212O	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12R	MWS12R	32
A226	1PUMPSRW12	12 SERVICE WATER PUMP (1MA409)	S4	MWS12S	MWS12S	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13R	MWS13R	32
A226	1PUMPSRW13	13 SERVICE WATER PUMP (1MA411)	S4	MWS13S	MWS13S	32
A226	1CV5152	12 SRW HX SW INLET	S4	S4CV52	C1152P	60
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1CV5212	12 SRW HX SW OUT CV	S4	S4H2BV	C2212P	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A226	1CV1637	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3637P	144
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1CV1639	TURB BLDG SRW HDR 11 ISOL	TA	TAFB01	C3639P	144

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A226	1CV1600	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3600P	72
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1CV1638	TURB BLDG SRW HDR 12 ISOL	TB	TBFB01	C3638P	72
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RR	AW11RR	30
T603	1PUMPAFWTD11	11 AUX FW TURB DRIVEN PP	TF	AW11RS	AW11RS	30
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	TF11TP	VT986P	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	TF11TP	VT986P	0
T603	1CV3986	11 AFW TURB THROT/STOP VLV	TF	VT986O	VT986O	0
T603	1SV3986	11 AFW PP TURB THROT/STOP VLV TRIP	TF	VT986O	VT986O	0
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RR	AW12RR	30
T603	1PUMPAFWTD12	12 AUX FW TURB DRIVEN PP	TG	AW12RS	AW12RS	30
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	TGTP12	VT988P	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	TGTP12	VT988P	0
T603	1CV3988	12 AFW TURB THROT/STOP VLV	TG	VT988O	VT988O	0
T603	1SV3988	12 AFW PP TURB THROT/STOP VLV TRIP	TG	VT988O	VT988O	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1)	BHER3B	Open	13
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1)	BHER3B	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1)	BHER3B	Open	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1)	BHER3B	Throttle	0
A226	1CV5210	11 SRW HX SW OUTLET CV	TH(HD1)	BHER3B	Throttle	60
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1)	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2)	BHER3B	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2)	BHER3B	Throttle	0
A226	1CV5212	12 SRW HX SW OUT CV	TH(HD2)	BHER3B	Throttle	48
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2)	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A226	1CV4525	11 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A226	1CV4535	12 S/G AFW FLOW CONT VLV	UQ	BHEUQ1	Throttle	144
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	13
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1)	BHEV1T	Open	0
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1)	BHEV1T	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2)	BHEV1T	Open	0
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0

Flood Evaluation Query

CF-03C-F119AM

21-Oct-98

TOP	PM	EVALUATION	RI
AA	3BKR	3 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
M1	6BKR	6 breaker challenges.	PAJ
M2	6BKR	6 breaker challenges.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
RH	None ~~F~~	~~This human~~ action ~~requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario~~. (Note 9)	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463) are closed and fail close.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	11 ECCS Pump Room Air Cooler covered under Top V1.	PAJ
TH(HD2)	None	12 ECCS Pump Room Air Cooler covered under Top V2.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ

notes are contained in RAN 98-065 sect 5.4

TOP	PM	EVALUATION	RI
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22

Flood Evaluation Query

CF-03D-F119AN *

29-Oct-98

TOP	PM	EVALUATION	RI
AA	3BKR	3 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
M1	6BKR	6 breaker challenges.	PAJ
M2	9BKR	9 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
~~M4~~	~~1BKR~~	~~1 breaker challenge.~~ NOT IN U1 GT.	~~PAJ~~
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ

* This flood is deleted. See note 12 PAN 98-065 Sect 5.4

JAJ

TOP	PM	EVALUATION	RI
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
SG	Spec Impt	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment.	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463) are closed and fail close.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	11 ECCS Pump Room Air Cooler covered under Top V1.	PAJ
TH(HD2)	None	12 ECCS Pump Room Air Cooler covered under Top V2.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0

Flood Evaluation Query

CF-03E-C119AM

20-Oct-98

TOP	PM	EVALUATION	RI
AA	3BKR	3 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
M1	6BKR	6 breaker challenges.	PAJ
M2	6BKR	6 breaker challenges.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
RH	~~F~~ None	~~This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.~~ *	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463) are closed and fail close.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	11 ECCS Pump Room Air Cooler covered under Top V1.	PAJ
TH(HD2)	None	12 ECCS Pump Room Air Cooler covered under Top V2.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ

* see Note 9 RAN 98-065 Sect. 5.4 JDN

TOP	PM	EVALUATION	RI
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22

Flood Evaluation Query

CF-04A-F221AM

10-Dec-98

TOP	PM	EVALUATION	RI
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
HA	F	1MOV637/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HB	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HW	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
M1	4BKR	4 breaker challenges.	PAJ
M2	5BKR	5 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ

TOP	PM	EVALUATION	RI
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
RH	None ~~F~~	~~This human action requires operators to open 1MOV636/637/646/647. These MOV~~s are ~~normally closed and fail as-is, therefore not allowing operators to~~ open. *	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. **	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	Both MOVs (1MOV635/645) are closed and fail close.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

* see Note 9 in RAN 98-065 sect 5.4 JBK

** see Note 5 in RAN 98-065 sect 5.4 JBK

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRI	CV	PS224R	PS224R	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR IS	SH	SHSV10	SV531D	0
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR IS	SH	SHSV11	SV531T	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0

Flood Evaluation Query

CF-04B-F221AN *

10-Dec-98

TOP	PM	EVALUATION	RI
AA	4BKR	4 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
AC	3BKR	3 breaker challenges.	PAJ
AD	5BKR	5 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
F1	None	11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX.	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	Loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
GW	None	2CV5152, 2CV5153 and 2CV5212 fail open on loss of power and loss of air.	PAJ
GZ	None	2CV5150 and 2CV5210 fail open on loss of power and loss of air.	PAJ
HA	F	11 HPSI Pump fails.	PAJ

* This flood is deleted. See note 12 RAN 98-065 sect 5.4 JBK

TOP	PM	EVALUATION	RI
HB	F	13 HPSI Pump fails.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
K3	None	1CV5210 fails open on loss of power and loss of air. During a RAS, this valve needs to open for recirulation. It is assumed (Per Rob) that this top event will not fail during smaller LOCA size breaks.	PAJ
K4	Fails	1CV5212 fails open on loss of power and loss of air. During a RAS, this valve needs to open for recirulation. It is assumed (Per Rob) that this top event will not fail during smaller LOCA size breaks.	PAJ
M1	11BKR	11 breaker challenges.	PAJ
M2	12BKR	12 breaker challenges.	PAJ
M3	9BKR	9 breaker challenges.	PAJ
~~M4~~	~~5BKR~~	~~5 breaker challenges.~~ NOT IN U1 GT.	~~PAJ~~
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
NR(TC)	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.	PAJ
NS	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.	PAJ
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
S3	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5148 (FO), 1CV5148A (FC), 1CV5151 (FO), 1CV5151A (FC) and 1CV5209 (FO).	PAJ
S4	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5158 (FO), 1CV5158A (FC), 1CV5159 (FO), 1CV5159A (FC), 1CV5211 (FO), 1CV5153 (FO) and 1CV5157 (FC).	PAJ
SG	Spec Impt	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment.	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463/635/645) are closed and fail close.	PAJ
TA	F	1CV1637/1639 fail close on loss of power / loss of air.	PAJ
TB	F	1CV1600/1638 fail close on loss of power / loss of air.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	1CV5210 will fail to it's appropriate position not allowing the operator to throttle valve. Covered by Top S3 or K3.	PAJ
TH(HD2)	None	1CV5212 will fail to it's appropriate position not allowing the operator to throttle valve. Covered by Top S4 or K4.	PAJ

TOP	PM	EVALUATION	RI
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24	4BKR
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12	
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24	4BKR
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12	
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12	
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24	
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24	3 BKR
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12	
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104)	AC	MALP3Q	MALP3Q	39	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16	
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12	
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24	5 BKR
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12	
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12	
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0	
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0	
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0	
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0	
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0	FAILS
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0	
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12	
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0	
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0	
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0	
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0	
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0	FAIL
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0	
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12	
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0	
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0	
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0	
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0	
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0	
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0	
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12	FAILS
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12	
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0	NONE
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0	
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0	
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0	
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0	
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0	NONE
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0	
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0	
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0	
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16	FAILS
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16	
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0	
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0	
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0	
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0	
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0	
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0	
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0	FAILS
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0	
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0	
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16	NONE
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0	NONE
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0	
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0	
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0	
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0	
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0	
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20	NONE
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0	
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0	
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0	
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0	
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0	
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0	NONE
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0	
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0	
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0	
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0	
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0	FAILS
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0	
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0	
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24	
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0	
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0	
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0	
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0	FAILS
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0	
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0	
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12	
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	NONE
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12	
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0	
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0	
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0	FAILS
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0	
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0	
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0	
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24	
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0	
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0	
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0	
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	NONE
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0	
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0	
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0	
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0	
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0	
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0	NONE
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0	
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0	
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0	
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0	
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0	
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0	NONE
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0	
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22	
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0	
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0	
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0	
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0	
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0	
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0	11 BK
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0	
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0	
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22	
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0	
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0	
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0	12 BK
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0	
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0	
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0	
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0	
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0	
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22	
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22	
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22	
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0	
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0	9 BK
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0	
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0	
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0	
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0	
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0	
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0	
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32	
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0	
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0	5 BKR
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0	
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0	
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0	
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0	
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0	
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0	NONE
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0	
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0	
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0	
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0	NONE
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0	
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	1BKR
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12	1BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	NONE
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12	1BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	NONE
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24	
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24	1BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	1BKR
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24	
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24	1BKR
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0	
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0	
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0	SPEC INWT
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0	
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0	
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0	SPEC
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0	INFO
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0	
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	NONE
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	FAILS
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12	
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0	
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0	
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0	
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0	
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0	
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0	
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0	
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0	
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0	
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0	NONE
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0	
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0	
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0	
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0	
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0	
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0	
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0	
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0	
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0	
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0	
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0	
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0	
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0

NDLL

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0	
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0	
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0	
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0	
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0	
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0	
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0	
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0	
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0	
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0	
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0	
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0	
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0	
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0	
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0	
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0	
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0	
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0	
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0	
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0	
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0	SEC. II
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0	
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0	NONE
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV10	SV531D	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV11	SV531T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0	NONE
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0	
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0	
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0	FAILS
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0	
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0	FAILS
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0	FAIL
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0	
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0	NONE
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0	
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0	
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	NONE
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0	FAILS
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	NONE
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0	
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0	
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22	FAIL
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0	
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0	
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22	FAIL
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0	
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0	
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0	
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0	
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0	NONE
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0	
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22	NONE
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22	NONE
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0	
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0	NONE
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	NONE
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0	NONE
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0	

Flood Evaluation Query

CF-04C-R221AM

10-Dec-98

TOP	PM	EVALUATION	RI
AA	4BKR	4 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
AC	3BKR	3 breaker challenges.	PAJ
AD	5BKR	5 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
F1	None ~~Spec Impt~~	~~11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX. Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be.~~ (Note 2) (Note 11) (note 3)	PAJ
F3	None	Steam Admission SV's 1SV4070/4071 are covered under top event F1.	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	Loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FC	Spec Impt	AFW Pump Room Emergency Vent Fans 11 & 12 fail along with NSR A/C Unit fail.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ

notes are contained in RAN 98-065 sect. 5.4 AJK

TOP	PM	EVALUATION	RI
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	None	2CV5152, 2CV5153 and 2CV5212 fail open on loss of power and loss of air.	PAJ
GZ	None	2CV5150 and 2CV5210 fail open on loss of power and loss of air.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
IL	None	Air accumulators only. Mechanical operation only.	PAJ
IN	None	Air accumulators only. Mechanical operation only.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
K4	None	Since KX, KY and KZ fail, this top event will be set to success.	PAJ
KH(PP1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 11 CCW Pump. 11 Component Cooling Pump fails to start.	PAJ
KH(PP2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 12 CCW Pump. 12 Component Cooling Pump fails to start.	PAJ
KH(PP3)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to start 13 CCW Pump. 13 Component Cooling Pump fails to start.	PAJ
KI(HX1)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3824 and 1CV5206). 1CV3824 will fail in the appropriate position. 1CV5206 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ

TOP	PM	EVALUATION	RI
KI(HX2)	None	Since KX, KY and KZ fail, this top event will be set to success. This human action requires the operator to open, close or modulate two valves (1CV3826 and 1CV5208). 1CV3826 will fail in the appropriate position. 1CV5208 will not. This valve will fail open neglecting the capability to throttle this valve. Therefore this top will fail.	PAJ
KM	None	Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3823 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-149 transfers shut or 1HXCC11 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.	PAJ
KN	None	Since KX, KY and KZ fail, this top event will be set to success. Also 1CV3825 will transfer close, which is the undesired affect. But it does not fail top unless 1HVCC-156 transfers shut or 1HXCC12 plugs during operation. Since mechanical components are screened for flood, it will not fail this top, only degrade it.	PAJ
KX	F	11 CCW Pump will fail to start/run.	PAJ
KY	F	12 CCW Pump will fail to start/run.	PAJ
KZ	F	13 CCW Pump will fail to start/run.	PAJ
M1	17BKR	17 breaker challenges.	PAJ
M2	24BKR	24 breaker challenges.	PAJ
M3	16BKR	16 breaker challenges.	PAJ
~~M4~~	~~13BKR~~	~~13 breaker challenges.~~ NOT IN U1 GT.	~~PAJ~~
MH	None ~~Spec Impt~~	~~1CV4070/4071 are normally closed and fail as-is on loss of power. These valves must be locally vented.~~ (Note 3)	PAJ
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	2BKR	2 breaker challenges.	PAJ
N2	2BKR	2 breaker challenges.	PAJ
N3	1BKR	1 breaker challenge.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	1BKR	1 breaker challenge.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	2BKR	2 breaker challenges.	PAJ
N8	2BKR	2 breaker challenges.	PAJ
NR	None	Air accumulators only. Mechanical operation only.	PAJ
NR(TC)	None ~~Spec Impt~~	~~2CV~~1600/1637~~/1638/1639 fail close on loss of power, the undesirable position. Unable to use~~ Unit ~~2 compressors for Unit 1~~. (Note 11)	PAJ
NS	~~Spec Impt~~	~~2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.~~ (Note 11)	~~PAJ~~
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	None ~~F~~	~~This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.~~ (Note 9)	PAJ
S3	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5148 (FO), 1CV5148A (FC), 1CV5151 (FO), 1CV5151A (FC) and 1CV5209 (FO).	PAJ
S4	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5158 (FO), 1CV5158A (FC), 1CV5159 (FO), 1CV5159A (FC), 1CV5211 (FO), 1CV5153 (FO) and 1CV5157 (FC).	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SP(PP1)	None	11 CC Pumps fails to start/run. Accounted for by Top KX.	PAJ
SP(PP2)	None	12 CC Pumps fails to start/run. Accounted for by Top KY.	PAJ
SP(PP3)	None	13 CC Pumps fails to start/run. Accounted for by Top KZ.	PAJ
SR	Spec Impt ~~None~~	All MOVs (1MOV4144/4145/5462/5463/615/625/635/645) are closed and fail close. (note 10)	PAJ

TOP	PM	EVALUATION	RI
TA	None ~~F~~	~~1CV1637/1639 fail close on loss of power / loss of air.~~ (Note 11)	PAJ
TB	None ~~F~~	~~1CV1600/1638 fail close on loss of power / loss of air.~~ (Note 11)	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TG	None	Steam admission Control valves 1CV4070/4071 are normally closed, and will fail as-is(closed) on loss of power. Therefore, operators will be unable to open valves. These valves continuously have air (closing the valve). The operators may bleed air to open valve if need be. Covered under Top F1.	PAJ
TH(HD1)	None	1CV5206/5210 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S3 or K3. Also, 1CV5170/5171 fails open on loss of power and loss of air.	PAJ
TH(HD2)	None	1CV5208/5212 will fail to there appropriate position not allowing the operator to throttle valves. Covered by Top S4 or K4. Also, 1CV5173 fails open on loss of power and loss of air.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V5	F	11 and 12 ECCS exhaust fans fails to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ

TOP	PM	EVALUATION	RI
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA10	AA	MAHP1Q	MAHP1Q	24	4BKR
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA11	AA	MAHP3Q	MAHP3Q	12	
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104	AA	MALP1Q	MALP1Q	12	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA40	AB	MAHP2Q	MAHP2Q	24	4BKR
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA11	AB	MAHP4Q	MAHP4Q	12	
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404	AB	MALP2Q	MALP2Q	12	
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24	
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24	3BKR
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12	
A101	2PUMPSILPSI21	21 LOW PRESS SAFETY INJECTION PUMP (2MA104	AC	MALP3Q	MALP3Q	39	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16	
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12	
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24	5BKR
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12	
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404	AD	MALP4Q	MALP4Q	12	
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0	
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0	
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0	
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0	
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0	FAILS
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0	
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12	
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12	
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0	
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0	
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0	
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0	FAILS
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0	
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0	
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12	
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12	
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0	
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0	
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0	
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0	
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500O	0	
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500O	0	
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500O	0	
A218	1CV500	VOL CONT TNK INLT VLV	CV	CVHV03	CV500P	0	
A218	1LC227A	VOLUME CONTROL TNK LEVEL HIGH	CV	CVHV03	CV500P	0	FAILS
A218	1SV500	VOL CONT TANK INLET CONT VLV	CV	CVHV03	CV500P	0	
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514O	6	
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	CV	CVMV01	MV514P	6	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0	
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0	
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0	
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12	
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011R	MP011R	12	
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	CV	MP011S	MP011S	12	
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012R	MP012R	12	
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	CV	MP012S	MP012S	12	
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508O	MV508O	6	
A217	1MOV508	12 BAST GRAVITY FD	CV	MV508P	MV508P	6	
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509O	MV509O	6	
A217	1MOV509	11 BAST GRAVITY FD	CV	MV509P	MV509P	6	
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0	
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615O	19	
A227	1MOV615	11A LPSI LOOP ISOL	DL	DLL11A	MV615P	19	
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625O	0	
A227	1MOV625	11B LPSI LOOP ISOL	DL	DLL11B	MV625P	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0	NONE
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0	
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0	
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0	
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0	
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0	
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070O	0	
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F1	F1CV70	C8070P	0	
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071O	0	
A227	1SV4071	12 S/G MS TO AFW PP	F1	F1CV71	C8071P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0	SPEC
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0	IMPT
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0	
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0	
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0	
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	F3	BHEF31	Open	0	NONE
A227	1SV4071	12 S/G MS TO AFW PP	F3	BHEF31	Open	0	
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16	FAILS
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0	
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0	
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0	
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0	
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0	
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0	FAILS
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0	
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0	
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0	
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16	
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16	
A225	1HS5472	MCC-101-BT BKR 52-10150 AFW PP RM A/C UNIT 11	FC	FCAC11	HS472T	0	
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470D	18	
A225	1HS5470	AFW PP RM EMERG VENT FAN 11 MCC-114-12	FC	FCAUX1	HS470T	18	SIEC INPT
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471D	18	
A225	1HS5471	AFW PP RM EMERG VENT FAN 12 MCC-104-12	FC	FCAUX2	HS471T	18	
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16	NONE
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0	NONE
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0	
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6	NONE
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6	
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0	
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0	
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0	
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0	
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20	NONE
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0	
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0	
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0	
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0	
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0	
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0	
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0	NONE
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0	
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0	
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0	
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0	
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0	
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0	
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0	FAILS
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0	
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA10	HA	MA011R	MA011R	24	
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA10	HA	MA011S	MA011S	24	
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0	
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0	
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0	
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0	FAILS
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0	
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0	
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0	
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA11	HB	MA013R	MA013R	12	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA11	HB	MA013S	MA013S	12	
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	NONE
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0	
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12	
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0	
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0	FAILS
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0	
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0	
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0	
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0	
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0	
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0	
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA40	HW	MA012R	MA012R	24	
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA40	HW	MA012S	MA012S	24	
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0	
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0	
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0	
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	NONE
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0	
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	IL	ILIA99	TK170B	0	
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	IL	ILIA99	TK171B	0	
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	IL	ILIA99	TK174B	0	NONE
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	IL	ILIA99	TK175B	0	
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	IL	ILIA99	TK177B	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	IL	ILIA99	TK178B	0
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	IN	INIA99	TK173B	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A228	1CV5160	11 CC HX SW INLET	K3	C1160O	C1160O	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	C1160O	C1160O	0
A228	1CV5206	11 CC HX SW OUTLET	K3	C2206O	C2206O	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	C2206O	C2206O	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	C2206O	C2206O	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	CT823R	CT823R	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	CT823R	CT823R	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A228	1CV3823	11 CC HX TEMP CONT BYP	K3	K3COMP	CT823T	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	K3	K3COMP	CT823T	0
A228	1CV5160	11 CC HX SW INLET	K3	K3OTLT	C1160P	0
A228	1SV5160	COMP CLG HTEX 11 SALT WTR INLT	K3	K3OTLT	C1160P	0
A228	1CV5206	11 CC HX SW OUTLET	K3	K3OTLT	C2206P	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	K3	K3OTLT	C2206P	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	K3	K3OTLT	C2206P	0
A228	1CV5162	12 CC HX SW INLET	K4	C1162O	C1162O	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	C1162O	C1162O	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	C1163O	C1163O	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	C1163O	C1163O	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	C2208O	C2208O	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	C2208O	C2208O	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	C2208O	C2208O	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	CT825R	CT825R	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	CT825R	CT825R	0
A228	1CV3825	12 CC HX TEMP CONT BYP	K4	K4CMP1	CT825T	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	K4	K4CMP1	CT825T	0
A228	1CV5162	12 CC HX SW INLET	K4	K4INLT	C1162P	0
A228	1SV5162	COMP CLG HTEX 12 SALT WTR INLT	K4	K4INLT	C1162P	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165O	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165O	0

NONE
NONE
ALL NONE

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A228	1CV5165	12 CC HX SW AUX OUT	K4	K4OPN2	C4165P	0
A228	1SV5165	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4165P	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166O	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166O	0
A228	1CV5166	12 CC HX SW AUX B/U OUTLET	K4	K4OPN2	C4166P	0
A228	1SV5166	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OPN2	C4166P	0
A228	1CV5163	12 CC HX SW NORM B/U OUTLET	K4	K4OTLT	C1163P	0
A228	1SV5163	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C1163P	0
A228	1CV5208	12 CC HX SW NORM OUT	K4	K4OTLT	C2208P	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	K4	K4OTLT	C2208P	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	K4	K4OTLT	C2208P	0
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKC1	Start	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KH(PP1)	BHEKZ1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKC1	Start	12
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KH(PP2)	BHEKZ1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKC1	Start	12
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KH(PP3)	BHEKZ1	Start	12
A228	1CV3826	12 CC HX OUTLET	KI(HX1)	BHEK31	Close	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX1)	BHEK31	Close	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Close	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX1)	BHEK31	Close	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX1)	BHEK31	Close	0
A228	1CV3824	11 CC HX OUTLET	KI(HX1)	BHEK31	Open	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX1)	BHEK31	Open	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX1)	BHEK31	Throttle	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX1)	BHEK31	Throttle	0
A228	1CV3824	11 CC HX OUTLET	KI(HX2)	BHEK31	Close	0
A228	1CV5206	11 CC HX SW OUTLET	KI(HX2)	BHEK31	Close	0
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Close	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KI(HX2)	BHEK31	Close	0
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	KI(HX2)	BHEK31	Close	0
A228	1CV3826	12 CC HX OUTLET	KI(HX2)	BHEK31	Open	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KI(HX2)	BHEK31	Open	0
A228	1CV5208	12 CC HX SW NORM OUT	KI(HX2)	BHEK31	Throttle	0
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	KI(HX2)	BHEK31	Throttle	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	HXC11B	HXC11B	13
A228	1CV3823	11 CC HX TEMP CONT BYP	KM	KMBYPS	CT823P	0
A228	1TIC3823	11 CC HX BYP VLV TEMP CONTL	KM	KMBYPS	TC823R	0
A228	1CV3824	11 CC HX OUTLET	KM	KMCV24	CV824P	0
A228	1SV3824	COMP CLG HX 11 DISCH CONTROL	KM	KMCV24	CV824P	0
A228	1HXCC11	11 COMPONENT COOLING WTR	KM	KMPATH	HXC11P	13
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	HXC12B	HXC12B	13
A228	1CV3825	12 CC HX TEMP CONT BYP	KN	KNBYPS	CT825P	0
A228	1TIC3825	12 CC HX BYP VLV TEMP CONTL	KN	KNBYPS	TC825R	0
A228	1CV3826	12 CC HX OUTLET	KN	KNCV26	CV826P	0
A228	1SV3826	COMP CLG HTEX 12 DISCH CONTROL	KN	KNCV26	CV826P	0
A228	1HXCC12	12 COMPONENT COOLING WTR	KN	KNPATH	HXC12P	13
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11R	MZC11R	12
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	KX	MZC11S	MZC11S	12

FAILS

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12R	MZC12R	12	FAILS
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	KY	MZC12S	MZC12S	12	
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13R	MZC13R	12	FAILS
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	KZ	MZC13S	MZC13S	12	
A217	1U0409	11 BA TK HTR B	M1	HTM09Q	HTM09Q	6	
A217	1U0434	12 BA TK HTR B	M1	HTM34Q	HTM34Q	6	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22	
A217	1PUMPCVCBA12	12 CVC BORIC ACID PUMP (1M0406)	M1	MBM06Q	MBM06Q	12	
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0	
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0	
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0	
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0	17 BKR
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0	
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0	
A217	1MOV514	BAPP TO CHG PP SUCT DIRECT FD	M1	MVM25Q	MVM25Q	6	
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0	
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0	
A225	1FANHVACPENETE1	12 PENET RM EXH FAN (1M0402)	M1	VDM02Q	VDM02Q	18.75	
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	M1	VDM13Q	VDM13Q	0	
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0	
A217	1U1409	11 CVC BA TK HTR A	M2	HTN09Q	HTN09Q	6	
A217	1U1434	12 BA TK HTR A	M2	HTN34Q	HTN34Q	6	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22	
A217	1PUMPCVCBA11	11 CVC BORIC ACID PUMP (1M1406)	M2	MBN06Q	MBN06Q	12	
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0	
A227	1MOV615	11A LPSI LOOP ISOL	M2	MVN07Q	MVN07Q	19	
A227	1MOV625	11B LPSI LOOP ISOL	M2	MVN08Q	MVN08Q	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0	
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0	
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0	
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0	24 BKR
A218	1MOV504	RWT TO CHG PP	M2	MVN23Q	MVN23Q	19	
A217	1MOV509	11 BAST GRAVITY FD	M2	MVN24Q	MVN24Q	6	
A217	1MOV508	12 BAST GRAVITY FD	M2	MVN30Q	MVN30Q	6	
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0	
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0	
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6	
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0	
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0	
A217	1X11	1 CVC BA HEAT TRACING XFMR	M2	TMN33Q	TMN33Q	6	
A225	1FANHVACPENETE1	11 PENET RM EXH FAN (1M1402)	M2	VDN02Q	VDN02Q	18.75	
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	M2	VDN13Q	VDN13Q	0	
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0	
A215	2U0409	21 CVC BA TK HTR B	M3	HTO09Q	HTO09Q	0	
A215	2U0434	22 CVC BA TK HTR B	M3	HTO34Q	HTO34Q	0	
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22	
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22	
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22	
A215	2PUMPCVCBA22	22 CVC BORIC ACID PUMP (2M0406)	M3	MBO06Q	MBO06Q	6	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0	
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0	
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0	1L BKR
A215	2MOV514	BAPP'S TO CHG PP SUCT DIRECT FD	M3	MVO25Q	MVO25Q	0	
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0	
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0	
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0	
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0	
A203	2MOV399	SDC HX RECIRC ISOL	M3	MVO58Q	MVO58Q	6	
A204	2FANHVACPENETE2	22 PENET RM EXH FAN (2M1402)	M3	VDO02Q	VDO02Q	18.75	
A204	2FANHVACECCSE22	22 ECCS PUMP RM EXH (2M0413)	M3	VDO13Q	VDO13Q	0	
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0	
A215	2U1409	21 CVC BA TK HTR A	M4	HTN09Q	HTN09Q	0	
A215	2U1434	22 CVC BA TK HTR A	M4	HTN34Q	HTN34Q	0	
A215	2PUMPCVCBA21	21 CVC BORIC ACID PUMP (2M1406)	M4	MBN06Q	MBN06Q	6	
A215	2MOV509	21 BAST GRAVITY FD	M4	MVN24Q	MVN24Q	0	
A215	2MOV508	22 BAST GRAVITY FD	M4	MVN30Q	MVN30Q	0	
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32	
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0	1 3 BKR
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0	
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0	
A215	2X11	BA HEAT TRACE XFMR 21	M4	TMN04Q	TMN04Q	0	
A204	2FANHVACPENETE2	21 PENET RM EXH FAN (2M0402)	M4	VDN02Q	VDN02Q	18.75	
A204	2FANHVACECCSE21	21 ECCS PUMP RM EXH (2M1413)	M4	VDN13Q	VDN13Q	0	
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0	
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	MH	BHEF1I	Open	0	SPEC. IN
A227	1SV4071	12 S/G MS TO AFW PP	MH	BHEF1I	Open	0	
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0	
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0	
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0	
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0	NONE
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0	
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0	
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0	
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0	
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0	NONE
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12	2BKR
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	N1	MZ106Q	MZ106Q	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12	2BKR
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N2	MZ116Q	MZ116Q	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12	1BKR
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	N3	MZ406Q	MZ406Q	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12	1BKR
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	N4	MZ416Q	MZ416Q	12	
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24	1BKR
A201	2PUMPCC21	21 COMPONENT COOLING PUMP (2MB106)	N5	MZT06Q	MZT06Q	12	
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24	1BKR
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N6	MZT16Q	MZT16Q	12	
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	2BKR
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24	
A201	2PUMPCC22	22 COMPONENT COOLING PUMP (2MB406)	N7	MZT26Q	MZT26Q	12	
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24	2BKR
A201	2PUMPCC23	23 COMPONENT COOLING PUMP (2MB116)	N8	MZT36Q	MZT36Q	12	
A228	1ACC5170	AIR ACCUMULATOR FOR 1CV5170	NR	ILIA99	TK170B	0	
A228	1ACC5171	AIR ACCUMULATOR FOR 1CV5171	NR	ILIA99	TK171B	0	
A228	1ACC5174	AIR ACCUMULATOR FOR 1CV5174	NR	ILIA99	TK174B	0	
A228	1ACC5175	AIR ACCUMULATOR FOR 1CV5175	NR	ILIA99	TK175B	0	
A228	1ACC5177	AIR ACCUMULATOR FOR 1CV5177	NR	ILIA99	TK177B	0	NONE
A228	1ACC5178	AIR ACCUMULATOR FOR 1CV5178	NR	ILIA99	TK178B	0	
A228	1ACC5173	AIR ACCUMULATOR FOR 1CV5173	NR	INIA99	TK173B	0	
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0	
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0	
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0	
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0	SPEC INV
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0	
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0	
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0	
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0	
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0	SPEC INV
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0	
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0	
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	NONE
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0	
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	FAILS
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA10	RH	BHERH1	Start	24	
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA11	RH	BHERH1	Start	12	
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0	
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0	
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0	
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0	
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0	
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0	
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0	NONE
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0	
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0	
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0	
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0	
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0	
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0	
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0

NONE

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0	
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0	
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0	
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0	
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0	
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0	
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0	
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0	
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0	
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0	
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PH	S4	S4H12A	HW708P	0	
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0	
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0	
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0	
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PH	S4	S4H12B	HW710P	0	
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0	
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0	
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0	
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0	
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0	
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0	
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0	
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0	
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0	
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0	
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0	
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0	
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0	
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0	
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0	
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0	
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0	
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0	
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0	SPEC. INV
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0	
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181C	IC181C	12	NONE
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181C	IC181C	12	
A208	1CV2181	U-1 CONTMT WG HDR B/U ISOL	SH	IC181T	IC181T	12	
A208	1SV2181	1-WGS-2181-CV SV	SH	IC181T	IC181T	12	
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV10	SV531D	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV11	SV531T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0	
A228	1PUMPCC11	11 COMPONENT COOLING PUMP (1MB106)	SP(PP1)	BHEK12	Start	12	
A228	1PUMPCC12	12 COMPONENT COOLING PUMP (1MB406)	SP(PP2)	BHEK12	Start	12	ALL NONE
A228	1PUMPCC13	13 COMPONENT COOLING PUMP (1MB116)	SP(PP3)	BHEK12	Start	12	
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0	
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0	
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0	
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0	NONE
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19	
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19	
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0	
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0	
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0	
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0	FAILS
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0	
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0	FAILS
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0	
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0	FAILS
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0	
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0	NONE
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	TH(HD1)	BHER3B	Open	13	
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	TH(HD1)	BHER3B	Open	0	
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	TH(HD1)	BHER3B	Open	0	
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	TH(HD1)	BHER3B	Open	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0	
A228	1CV5206	11 CC HX SW OUTLET	TH(HD1)	BHER3B	Throttle	0	
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0	NONE
A228	1I/P5206	SALT WTR OUT COMPONT CLG HTEX	TH(HD1)	BHER3B	Throttle	0	
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0	
A228	1SV5206	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	
A228	1SV5206A	COMP CLG HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0	
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	TH(HD2)	BHER3B	Open	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	TH(HD2)	BHER3B	Open	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0	
A228	1CV5208	12 CC HX SW NORM OUT	TH(HD2)	BHER3B	Throttle	0	
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0	
A228	1I/P5208	SALT WTR OUT COMPONT CLG HTEX	TH(HD2)	BHER3B	Throttle	0	NONE
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0	
A228	1SV5208	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	
A228	1SV5208A	COMP CLG HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0	
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0	
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0	FAILS
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0	
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0	
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0	
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0	NONE
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0	
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0	
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0	
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	NONE
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0	
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	V1CLSE	WC170P	13	
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	V1CLSE	WC170P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0	
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	V1CLSE	WC171P	0	
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	V1CLSE	WC171P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0	
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0	
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22	
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170D	WC170D	13	FAILS
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170D	WC170D	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0	
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	V1	WC170O	WC170O	13	
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	V1	WC170O	WC170O	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0	
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171D	WC171D	0	
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171D	WC171D	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0	
A228	1CV5171	11 ECCS PP RM AIR CLR SW OUTLET	V1	WC171O	WC171O	0	
A228	1SV5171	ECCS PP RM AIR CLR 11 WTR OUT	V1	WC171O	WC171O	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0	
A228	1CV5174	12 ECCS PP RM AIR CLR SW NORM OUTLET	V2	V2CLSE	WC174P	0	
A228	1SV5174	ECCS PP RM HTEX 12 SLT WTR OUT	V2	V2CLSE	WC174P	0	
A228	1CV5175	12 ECCS PP RM AIR CLR SW NORM B/U OUT	V2	V2CLSE	WC175P	0	
A228	1SV5175	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2CLSE	WC175P	0	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	V2INLT	WC173P	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	V2INLT	WC173P	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0	
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177O	0	
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177O	0	
A228	1CV5177	12 ECCS PP RM AIR CLR SW AUX OUTLET	V2	V2OTLT	C4177P	0	
A228	1SV5177	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4177P	0	
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178O	0	
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178O	0	
A228	1CV5178	12 ECCS PP RM AIR CLR SW AUX B/U OUT	V2	V2OTLT	C4178P	0	
A228	1SV5178	ECCS PP RM AIR CLR 12 WTR OUT	V2	V2OTLT	C4178P	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0	FAILS
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0	
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173D	WC173D	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173D	WC173D	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	V2	WC173O	WC173O	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	V2	WC173O	WC173O	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0	
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11R	VDF11R	0	
A225	1FANHVACECCSE11	11 ECCS PUMP RM EXH (1M1413)	V5	VDF11S	VDF11S	0	FAILS
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12R	VDF12R	0	
A225	1FANHVACECCSE12	12 ECCS PUMP RM EXH (1M0413)	V5	VDF12S	VDF12S	0	
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0	
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0	
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0	
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0	NONE
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0	
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0	
A228	1CV5170	11 ECCS PP RM AIR CLR SW INLET	VM(RM1	BHEV1T	Open	13	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM1	BHEV1T	Open	0	
A228	1SV5170	ECCS PP RM AIR CLR 11 WTR IN	VM(RM1	BHEV1T	Open	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM1	BHEV1T	Open	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1	BHEV1T	Open	0	NONE
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1	BHEV1T	Open	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1	BHEV1T	Start	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1	BHEV1T	Start	22	
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1	BHEV1T	Start	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1	BHEV1T	Start	22	
A228	1CV5173	12 ECCS PP RM AIR CLR SW INLET	VM(RM2	BHEV1T	Open	0	
A228	1SV5173	ECCS PP RM AIR CLR 12 WTR IN	VM(RM2	BHEV1T	Open	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2	BHEV1T	Open	0	NONE
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2	BHEV1T	Start	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2	BHEV1T	Start	22	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2	BHEV1T	Start	22	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0	
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0	NONE
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0	NONE
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0	NONE
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0	

Flood Evaluation Query

CF-04D-C221AM

10-Dec-98

TOP	PM	EVALUATION	RI
CV	None ~~F~~	~~Conservatively set to failure. CVCS relatively unimportant.~~ (Note 13)	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
HA	F	1MOV637/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HB	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HW	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
M1	4BKR	4 breaker challenges.	PAJ
M2	5BKR	5 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
~~M4~~	~~1BKR~~	~~1 breaker challenge.~~ NOT IN U1 GT.	~~PAJ~~
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
RH	None ~~F~~	~~This human action requires operators to open 1MOV636/637/646/647. These MOVs are normally closed and fail as-is, therefore not allowing operators to open.~~ (Note 9)	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV635/645) are normally closed and fail as-is.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

Notes are contained in RAN 98-065 sect 5.4 JPJK

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0	
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0	
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0	
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0	
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0	
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0	
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12	FAILS
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12	
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRI	CV	PS224R	PS224R	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0	NONE
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0	NONE
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0	FAILS
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0	NONE
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0	
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0	4 BKR
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0	
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0	
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0	5 BKR
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0	
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0	
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0	
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0	2 BKR
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0	
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32	1 BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	1 BKR
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12	1 BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	NONE
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12	1 BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	NONE
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24	
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24	1 BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	1 BKR
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24	
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24	1 BKR
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0	FAILS
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0	SEE IMPT
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0	
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0	NONE
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR I	SH	SHSV10	SV531D	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR I	SH	SHSV11	SV531T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0	NONE
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0	
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	NONE
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0	
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	NONE
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0	NONE
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0	

Flood Evaluation Query

CF-04E-W221AM

10-Dec-98

TOP	PM	EVALUATION	RI
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
HA	F	1MOV637/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HB	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HW	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
M1	4BKR	4 breaker challenges.	PAJ
M2	5BKR	5 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
~~M4~~	~~1BKR~~	~~1 breaker challenge.~~ NOT IN UI 6T.	~~PAJ~~
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
RH	None ~~F~~	~~This human action requires operators to open 1MOV636/637/646/647. These MOVs are normally closed and fail as-is, therefore not allowing operators to open.~~ (Note 9)	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV635/645) are normally closed and fail as-is.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

Notes are contained in RAN 98-065 sect 5.4 JJW

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0	
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0	
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0	
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0	
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0	
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0	FAILS
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12	
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0	
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0	
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0	NONE
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0	
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0	
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0	
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0	NONE
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0	
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0	FAILS
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0	
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0	NONE
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0	
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0	
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0	
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0	4BKR
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0	
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0	
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0	
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0	5BKR
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0	
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0	
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0	2BKR
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0	
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32	1BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	1BKR
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12	1BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	NONE
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12	1BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	NONE
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24	
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24	1BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	1BKR
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24	
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24	1BKR
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0	
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	FAILS
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0	
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0	SPEC IMPT
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0	
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0	
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0	
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0	NONE
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV10	SV531D	0	
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR ISOL	SH	SHSV11	SV531T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0	
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0	
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0	NONE
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0	
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0	
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0	
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0	NONE
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	NONE
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0	
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0	
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0	NONE
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0	
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0	
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0	
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0	
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0	
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0	
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0	
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0	
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0	
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0	

Flood Evaluation Query

CF-04F-D221AM

10-Dec-98

TOP	PM	EVALUATION	RI
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
DL	Spec Impt	12A and 12B LPSI Loop Isol MOVs (1MOV635 and 1MOV645), Fail to Open on Demand. LPSIs only used in large break LOCAs. Flood cannot cause a large break LOCA, therefore this top is not affected for LPSI's. HPSI MOV'S (1MOV636/637/646/647) fail to open on demand. This valves are normally closed and fail as-is. Flow paths via MOV's 616/617/626/627 are still available, therefore this top is only impacted.	PAJ
HA	F	1MOV637/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HB	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
HW	F	1MOV636/637/646/647 are normally open and fail as-is during this particular scenario. They are normally closed, but when this top event is used, they will be open and need to close in order not to cavitate the HPSI pumps. Other flow paths exist, but we will conservatively fail for now.	PAJ
M1	4BKR	4 breaker challenges.	PAJ
M2	5BKR	5 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
~~M4~~	~~1BKR~~	~~1 breaker challenge.~~ NOT IN UI DT.	~~PAJ~~
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
RH	None ~~F~~	~~This human action requires operators to open 1MOV636/637/646/647. These MOVs are normally closed and fail as-is, therefore not allowing operators to open.~~ (Note 9)	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV635/645) are normally closed and fail as-is.	PAJ
VP	None	1CV5464 is normally closed and fails close on loss of power & loss of air.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ
WY	None	1CV1584/1592/1585/1593 fail open on loss of power.	PAJ

Notes are contained in RAN 98-005 sect 5.4 JPK

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	DLA12A	MV637P	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	DLA12B	MV647P	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635O	0
A326	1MOV635	12A LPSI LOOP ISOL	DL	DLL12A	MV635P	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645O	0
A326	1MOV645	12B LPSI LOOP ISOL	DL	DLL12B	MV645P	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	DLM12A	MV636P	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	DLM12B	MV646P	0
A326	1MOV636	12A HPSI LOOP ISOL	DL	MV636O	MV636O	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	DL	MV637O	MV637O	0
A326	1MOV646	12B HPSI LOOP ISOL	DL	MV646O	MV646O	0
A326	1MOV647	12B HPSI LOOP ISOL	DL	MV647O	MV647O	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HA	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HA	HATRTL	MV647T	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV647	12B HPSI LOOP ISOL	HB	BHEHW1	Throttle	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HB	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HB	HBTRTL	MV646T	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637C	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	HW	HATRTL	MV637T	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647C	0
A326	1MOV647	12B HPSI LOOP ISOL	HW	HATRTL	MV647T	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636C	0
A326	1MOV636	12A HPSI LOOP ISOL	HW	HBTRTL	MV636T	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646C	0
A326	1MOV646	12B HPSI LOOP ISOL	HW	HBTRTL	MV646T	0
A326	1MOV635	12A LPSI LOOP ISOL	M1	MVM07Q	MVM07Q	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A326	1MOV645	12B LPSI LOOP ISOL	M1	MVM08Q	MVM08Q	0
A326	1MOV636	12A HPSI LOOP ISOL	M1	MVM18Q	MVM18Q	0
A326	1MOV646	12B HPSI LOOP ISOL	M1	MVM19Q	MVM19Q	0
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	M2	MVN18Q	MVN18Q	0
A326	1MOV647	12B HPSI LOOP ISOL	M2	MVN19Q	MVN19Q	0
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A326	1MOV636	12A HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV637	12A AUX HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV646	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A326	1MOV647	12B HPSI LOOP ISOL	RH	BHERH1	Open	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180C	IC180C	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180C	IC180C	0
A326	1CV2180	U-1 CONTMT WG HDR ISOL	SH	IC180T	IC180T	0
A326	1SV2180	1-WGS-2180-CV SV	SH	IC180T	IC180T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SHSV02	SV07BT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SHSV05	SV07CT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SHSV08	SV07DT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR IS	SH	SHSV10	SV531D	0
A326	1SV6531	1-SX-400 ISOL PZR QT O2 ANAL SAMP HDR IS	SH	SHSV11	SV531T	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	SH	SV07BD	SV07BD	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	SH	SV07CD	SV07CD	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	SH	SV07DD	SV07DD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GD	SV07GD	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	SH	SV07GT	SV07GT	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635C	MV635C	0
A326	1MOV635	12A LPSI LOOP ISOL	SR	MV635T	MV635T	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645C	MV645C	0
A326	1MOV645	12B LPSI LOOP ISOL	SR	MV645T	MV645T	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464C	IC464C	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464C	IC464C	0
A326	1CV5464	RCS SAMP HDR CONTMT ISOL	VP	IC464T	IC464T	0
A326	1SV5464	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A326	1SV5464A	RC SAMPLE LINE ISOL VLV CONT	VP	IC464T	IC464T	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A221	1SV6507B	SOUTH PRIM SHLD H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507C	PRESSURIZ COMPRT H2 SAMPL ANAL	WJ	BHESH2	Shut	0
A221	1SV6507D	EAST EL 135 FT H2 SAMPLE ANAL	WJ	BHESH2	Shut	0
A221	1SV6507G	H2 ANAL RETN TO CONTMT ATMOS ISOL	WJ	BHESH2	Shut	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	CV584O	CV584O	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	CV584O	CV584O	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	CV584O	CV584O	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	CV585O	CV585O	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	CV585O	CV585O	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	CV592O	CV592O	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	CV592O	CV592O	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	CV592O	CV592O	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	CV593O	CV593O	0
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	CV593O	CV593O	0
A221	1CV1584	12 CNTMT CLG U NORM INLET	WY	WB102F	CV584P	0
A221	1I/P1584	CNTMT CLR 12 SERV WTR INLT	WY	WB102F	CV584P	0
A221	1SV1584	CNTMT CLR 12 SERV WTR INLT VLV	WY	WB102F	CV584P	0
A326	1CV1585	12 CNTMT CLG U EMER DISCH	WY	WBHVCV	CV585P	0
A326	1SV1585	CNTMT CLR 12 OUT VLV CONTROL	WY	WBHVCV	CV585P	0
A221	1CV1592	14 CNTMT CLG U NORM INLET	WY	WD102F	CV592P	0
A221	1I/P1592	CNTMT CLR 14 SERV WTR INLT	WY	WD102F	CV592P	0
A221	1SV1592	CNTMT CLR 14 INLT VLV CONTROL	WY	WD102F	CV592P	0
A326	1CV1593	14 CNTMT CLG U EMER DISCH	WY	WDHVCV	CV593P	0
A326	1SV1593	CNTMT CLR 14 OUT VLV CONTROL	WY	WDHVCV	CV593P	0

Flood Evaluation Query

CF-05A-F224AM

02-Nov-98

TOP	PM	EVALUATION	RI
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
M2	4BKR	4 breaker challenges.	PAJ
M3	2BKR	2 breaker challenges.	PAJ
~~M4~~	~~1BKR~~	~~1 breaker challenge.~~ NOT IN U1 GT.	~~PAJ~~
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
NR	None	Air accumulators only. Mechanical operation only.	PAJ
SG	None ~~Spec Impt~~	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment. (Note 5)	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ

see Notes in RAN 98-065 sect. 5.4 · JBN

TOP	PM	EVALUATION	RI
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0	
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0	
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0	
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0	
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0	
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0	
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0	
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0	
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12	FAILS
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12	
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12	
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0	
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6	NONE
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6	
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0	NONE
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0	
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0	4 BKR
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0	
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6	
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0	
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0	2 BKR
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0	
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32	1 BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	1 BKR
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12	
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12	1 BKR
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	NONE
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0	
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12	
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12	1 BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	NONE
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0	
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24	
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24	1 BKR
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	1 BKR
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0	
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24	
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24	1 BKR
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0	NONE
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0	
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0	SPEC IMPT
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0	
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0	

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0	NONE
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0	
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0	NONE
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0	
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0	
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0	
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0	
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	NONE
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	

Flood Evaluation Query

CF-05B-F224AN *

03-Nov-98

TOP	PM	EVALUATION	RI
AA	4BKR	4 breaker challenges.	PAJ
AB	4BKR	4 breaker challenges.	PAJ
AC	2BKR	2 breaker challenges.	PAJ
AD	5BKR	5 breaker challenges.	PAJ
CS	F	CS Pump 11 is lost.	PAJ
CT	F	CS Pump 12 is lost.	PAJ
CV	F	Conservatively set to failure. CVCS relatively unimportant.	PAJ
F1	None	11 and 12 S/G AFW Block Valves fail. These valves are normally open and will fail open. Therefore there is no impact on this top. Flow control valves failing open are addressed in top event HX.	PAJ
F7	F	Lost the ability to use Unit 1 AFW MD Pump 13 to supply Unit 1 S/G.	PAJ
F9	F	Loss the ability to use Unit 2 AFW MD Pump 23 to supply Unit 1 S/G. Also, 21 and 22 S/G AFW Block and Flow Valves fail. These valves are normally open and fail as-is (open) on loss of power.	PAJ
FH	None	Loss the ability to start AFW MD Pump 13. Covered under Top F7.	PAJ
FN	None	Only has 2 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
GG	None	1CV1645 / 1CV1646 are both locked open. Both valves have been retired in place and can only be manipulated manually.	PAJ
GW	None	2CV5152, 2CV5153 and 2CV5212 fail open on loss of power and loss of air.	PAJ
GZ	None	2CV5150 and 2CV5210 fail open on loss of power and loss of air.	PAJ
HA	F	11 HPSI Pump fails.	PAJ
HB	F	13 HPSI Pump fails.	PAJ

* This flood is not used. See Note 12 in RAN 98-065 SECT 5.4

JBK

TOP	PM	EVALUATION	RI
HU	None	11 and 12 S/G AFW Flow Control Valves fail open. No Impact.	PAJ
HW	F	12 HPSI is lost. Also 1MOV653, 1MOV654, 1MOV655 and 1MOV656 fail as-is.	PAJ
HX	None	11 and 12 S/G AFW (motor driven feed line) flow control valves fail open. Impact already considered by Top F7 & F9 failure.	PAJ
IP	None	Air accumulators only. Mechanical operation only.	PAJ
K3	None	1CV5210 fails open on loss of power and loss of air. During a RAS, this valve needs to open for recirulation. It is assumed (Per Rob) that this top event will not fail during smaller LOCA size breaks.	PAJ
K4	None	1CV5212 fails open on loss of power and loss of air. During a RAS, this valve needs to open for recirulation. It is assumed (Per Rob) that this top event will not fail during smaller LOCA size breaks.	PAJ
M1	7BKR	7 breaker challenges.	PAJ
M2	11BKR	11 breaker challenges.	PAJ
M3	9BKR	9 breaker challenges.	PAJ
~~M4~~	~~5BKR~~	~~5 breaker challenges.~~ NOT IN U1 GT.	~~PAJ~~
MN	None	Has 6 PCVs. I am assuming that these valves will not fail during a flood.	PAJ
MV	None	1MOV659/660 fail as-is and are normally electrically locked open, there will be no flood impact.	PAJ
N1	1BKR	1 breaker challenge.	PAJ
N2	1BKR	1 breaker challenge.	PAJ
N3	None	13 Charging Pump is normally aligned to 480V Bus 11A (Top N1). See Key Assumption 393.	PAJ
N4	1BKR	1 breaker challenge.	PAJ
N5	None	23 Charging Pump is normally aligned to 480V Bus 24A (Top N7). See Key Assumption 393.	PAJ
N6	1BKR	1 breaker challenge.	PAJ

TOP	PM	EVALUATION	RI
N7	1BKR	1 breaker challenge.	PAJ
N8	1BKR	1 breaker challenge.	PAJ
NR	None	Air accumulators only. Mechanical operation only.	PAJ
NR(TC)	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 1.	PAJ
NS	Spec Impt	2CV1600/1637/1638/1639 fail close on loss of power, the undesirable position. Unable to use Unit 2 compressors for Unit 2.	PAJ
QZ	None	11 & 12 AFW Block valves (1CV4522/4523/4532/4533) are normally open and fail as-is on loss of power.	PAJ
RH	F	This human action requires the operator to start 11 and 13 HPSI Pumps. Both pumps are assumed not to start/run during a flood scenario.	PAJ
S3	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5148 (FO), 1CV5148A (FC), 1CV5151 (FO), 1CV5151A (FC) and 1CV5209 (FO).	PAJ
S4	None	All valves fail to their appropriate positions on loss of power and loss of air. 1CV5158 (FO), 1CV5158A (FC), 1CV5159 (FO), 1CV5159A (FC), 1CV5211 (FO), 1CV5153 (FO) and 1CV5157 (FC).	PAJ
SG	Spec Impt	The hydorgen purge hand switches for MOVs 6902/6903 fail. It is assumed that the MOVs will fail to the undesired position even though that are not located in this scenario. This does impact the top but does not fail it. There is a check valve or MOV downstream of both of these MOVs that isolate containment.	PAJ
SH	None	All valves either are normally closed or will fail closed.	PAJ
SR	None	All MOVs (1MOV4144/4145/5462/5463) are closed and fail close.	PAJ
TA	F	1CV1637/1639 fail close on loss of power / loss of air.	PAJ
TB	F	1CV1600/1638 fail close on loss of power / loss of air.	PAJ
TE	F	1MOV4144 is normally in the closed position and will fail as-is. Therefore, the East Recirculation Header will not function properly.	PAJ
TH(HD1)	None	1CV5210 will fail to it's appropriate position not allowing the operator to throttle valve. Covered by Top S3 or K3.	PAJ

TOP	PM	EVALUATION	RI
TH(HD2)	None	1CV5212 will fail to it's appropriate position not allowing the operator to throttle valve. Covered by Top S4 or K4.	PAJ
TW	F	1MOV4145 is normally in the closed position and will fail as-is. Therefore, the West Recirculation Header will not function properly.	PAJ
TX	None	Has 6 PSs. It is assumed that a flood will not prevent PS activation.	PAJ
UQ	None	1CV4525/4535 are normally open and fail as-is on loss of power. This top only fails when an under feed to the SG occurs.	PAJ
V1	F	All ECCS Pump Room Fans fail to start/run.	PAJ
V2	F	All ECCS Pump Room Fans fail to start/run.	PAJ
VC	None	Has 6 PCVs. I am assuming that these will not fail during a flood.	PAJ
VM(RM1)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V1.	PAJ
VM(RM2)	None	Operator will be unable to start ECCS Pump Room Fans. Covered under Top V2.	PAJ
WJ	None	Several SVs, all normally deenergized (closed), will fail to the deenergized state. Therefore, there is no impact to this top.	PAJ

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	AA	MAAF3Q	MAAF3Q	16
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	AA	MACS1Q	MACS1Q	12
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	AA	MAHP1Q	MAHP1Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AA	MAHP3Q	MAHP3Q	12
A119	1PUMPSILPSI11	11 LOW PRESS SAFETY INJECTION PUMP (1MA104)	AA	MALP1Q	MALP1Q	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	AB	MACS2Q	MACS2Q	12
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	AB	MAHP2Q	MAHP2Q	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	AB	MAHP4Q	MAHP4Q	12
A118	1PUMPSILPSI12	12 LOW PRESS SAFETY INJECTION PUMP (1MA404)	AB	MALP2Q	MALP2Q	12
A101	2PUMPSICS21	21 CONTAINMENT SPRAY PUMP (2MA107)	AC	MACS3Q	MACS3Q	24
A101	2PUMPHPSI21	SI HPSI PUMP 21 (2MA108)	AC	MAHP5Q	MAHP5Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AC	MAHP7Q	MAHP7Q	12
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	AD	MAAF6Q	MAAF6Q	16
A102	2PUMPSICS22	22 CONTAINMENT SPRAY PUMP (2MA407)	AD	MACS4Q	MACS4Q	12
A101	2PUMPHPSI22	SI HPSI PUMP 22 (2MA408)	AD	MAHP6Q	MAHP6Q	24
A102	2PUMPHPSI23	SI HPSI PUMP 23 (2MA110)	AD	MAHP8Q	MAHP8Q	12
A102	2PUMPSILPSI22	22 LOW PRESS SAFETY INJECTION PUMP (2MA404)	AD	MALP4Q	MALP4Q	12
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11B	0
A119	1HXSICS11	11 SHUTDOWN COOLING HX	CS	CS0103	HXC11P	0
A119	1MOV663	SDC RECIRC TO 11 HPSI PP	CS	CS0103	MV663T	0
A119	1CV3828	11 SDC HX OUTLET	CS	CSHX11	CV828P	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CSHX11	CV828P	0
A119	1CV3828	11 SDC HX OUTLET	CS	CV828O	CV828O	0
A119	1SV3828	S/D HX 11 COOL WTR DISCH VLV	CS	CV828O	CV828O	0
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107R	MA107R	12
A119	1PUMPSICS11	11 CONTAINMENT SPRAY PUMP (1MA107)	CS	MA107S	MA107S	12
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12B	0
A118	1HXSICS12	12 SHUTDOWN COOLING HX	CT	CT0103	HXC12P	0
A118	1MOV662	SDC RECIRC TO 13 HPSI PP	CT	CT0103	MV662T	0
A118	1CV3830	12 SDC HX OUTLET	CT	CTXH12	CV830P	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CTXH12	CV830P	0
A118	1CV3830	12 SDC HX OUTLET	CT	CV830O	CV830O	0
A118	1SV3830	S/D HX #12 COMP CLG DISCH VLV	CT	CV830O	CV830O	0
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407R	MA407R	12
A118	1PUMPSICS12	12 CONTAINMENT SPRAY PUMP (1MA407)	CT	MA407S	MA407S	12
A115A	1ACCSTABILIZER11	11 CVC SUCTION STABILIZER	CV	CVCK02	TK011B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK02	TK11BB	0
A115B	1ACCSTABILIZER12	12 CVC SUCTION STABILIZER	CV	CVCK04	TK012B	0
A115A	1ACC233X	11 CVC CHG PUMP DESURGER	CV	CVCK04	TK12BB	0
A115C	1ACCSTABILIZER13	13 CVC SUCTION STABILIZER	CV	CVCK05	TK013B	0
A115C	1ACC233Z	13 CVC CHG PUMP DESURGER	CV	CVCK05	TK13BB	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501C	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501T	0
A115B	1MOV501	VCT OUTLET ISOL	CV	CVMV02	MV501X	0
A103	1PS224Y	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY02	PS24YR	0
A103	1PS224Z	CHRG PUMP LOW SUCTION PRESS TRIP	CV	CVRY05	PSZ24R	0
A103	1PS224ZA	CHRG PUMP LOW SUCT PRESS TRIP	CV	CVRY06	PS24ZR	0
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011R	MC011R	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	CV	MC011S	MC011S	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012R	MC012R	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	CV	MC012S	MC012S	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013R	MC013R	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013R	MC013R	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	CV	MC013S	MC013S	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	CV	MC013S	MC013S	12
A103	1PS224X	CHARGING PUMP LOW SUCTION PRESS TRIP	CV	PS224R	PS224R	0
A226	1SV4522	11 S/G AFW BLOCK SV	F1	CV4522	CV522P	0
A226	1SV4523	11 S/G AFW BLOCK SV	F1	CV4523	CV523P	0
A226	1SV4532	12 S/G AFW BLOCK SV	F1	CV4532	CV532P	0
A226	1SV4533	12 S/G AFW BLOCK SV	F1	CV4533	CV533P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	F1	F1MLV1	C6525R	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535P	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	F1	F1MLV2	C6535R	0
A226	1SV4550	U-1 TO U-2 AFW X-CONN SV	F7	F7MPVA	C3550T	0
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QR	MA13QR	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	F7	MA13QS	MA13QS	16
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB22C	CVB22C	0
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	CVB23C	CVB23C	0
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB32C	CVB32C	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	CVB33C	CVB33C	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50O	0
A205	2SV4550	U-2 AUX FEED X-CONN VLV	F9	F9M2VA	C3B50P	0
A205	2SV4522	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB22T	0
A205	2SV4523	S/G 21 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB23T	0
A205	2SV4532	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB32T	0
A205	2SV4533	S/G 22 AFW MOTOR SYS ISOL VLV	F9	F9M2VA	CVB33T	0
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QR	MA23QR	16
A205	2PUMPAFWMD23	23 AUX FW MTR DRIVEN PP (2MA415)	F9	MA23QS	MA23QS	16
A226	1PUMPAFWMD13	13 AUX FW MTR DRIVEN PP (1MA116)	FH	BHEF71	Start	16
A226	1PCV4512	1 IA SUPP ACCUM 11A & 11B PCV	FN	FN0000	CV512P	0
A226	1PCV4520	11B AFW AIR ACCUMULATOR OUTLET PCV	FN	FN0000	CV520P	0
A224	1CV1645	1B DG SUPP FROM U-1 SRW	GG	GGSRW1	CVA45P	6
A224	1CV1646	1B DG RTN TO U-1 SRW	GG	GGSRW1	CVA46P	6
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	C2S12O	C2S12O	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	C2S12O	C2S12O	0
A205	2SV5152	SERV WTR HTEX 22 SALT WTR INLT	GW	S8CV52	C1S52P	0
A205	2CV5153	22 SRW HX SW NORM B/U OUTLET	GW	S8H2CV	C1S53P	20
A205	2SV5153	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C1S53P	0
A205	2I/P5212	SALT WTR OUT SERV WTR HTEX	GW	S8H2CV	C2S12P	0
A205	2SV5212	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5212A	SERV WTR HTEX 22 SALT WTR OUT	GW	S8H2CV	C2S12P	0
A205	2SV5150	SERV WTR HTEX 21 SALT WTR INLT	GZ	S7H2CV	C1S50P	0
A205	2I/P5210	SALT WTR OUT SERV WTR HTEX	GZ	S7H2CV	C2S10P	0
A205	2SV5210	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A205	2SV5210A	SERV WTR HTEX 21 SALT WTR OUT	GZ	S7H2CV	C2S10P	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1AP	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BB	0
A119	1HX108	#11 BEARING COOLER	HA	HA1CCW	HXB1BP	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AB	0
A119	1HXSTF/BOX11A	HPSI PUMP 11	HA	HA1CCW	HXS1AP	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BB	0
A119	1HXSTF/BOX11B	HPSI PUMP 11	HA	HA1CCW	HXS1BP	0
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1B	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A119	1HX109	#11 HPSI PP SEAL COOLER	HA	HA1CCW	HXSC1P	0
A119	1MOV656	AUX HPSI HDR ISOL	HA	HADISA	MV656P	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011R	MA011R	24
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	HA	MA011S	MA011S	24
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3AP	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BB	0
A118	1HX110	#13 BEARING COOLER	HB	HB3CCW	HXB3BP	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AB	0
A118	1HXSTF/BOX13A	HPSI PUMP 13	HB	HB3CCW	HXS3AP	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BB	0
A118	1HXSTF/BOX13B	HPSI PUMP 13	HB	HB3CCW	HXS3BP	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3B	0
A118	1HX111	#13 HPSI PP SEAL COOLER	HB	HB3CCW	HXSC3P	0
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013R	MA013R	12
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	HB	MA013S	MA013S	12
A118	1MOV654	HPSI HDR ISOL	HB	MV654P	MV654P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HU	BHEF1B	Throttle	0
A118	1PUMPHPSI12	12 HIGH PRESS SAFETY INJECTION PUMP	HW	BHEHW1	Start	12
A119	1MOV656	AUX HPSI HDR ISOL	HW	HADISA	MV656P	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2AP	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BB	0
A119	1HX408	#12 HPSI PP BRG COOLER	HW	HW1CCW	HXB2BP	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AB	0
A118	1HXSTF/BOX12A	HPSI PUMP 12	HW	HW1CCW	HXS2AP	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BB	0
A118	1HXSTF/BOX12B	HPSI PUMP 12	HW	HW1CCW	HXS2BP	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2B	0
A119	1HX409	#12 HPSI PP SEAL COOLER	HW	HW1CCW	HXSC2P	0
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012R	MA012R	24
A119	1PUMPSIHP12	12 HIGH PRESS SAFETY INJECTION PUMP (1MA408)	HW	MA012S	MA012S	24
A118	1MOV653	HPSI HDR X-CONN	HW	MV653O	MV653O	0
A118	1MOV653	HPSI HDR X-CONN	HW	MV653P	MV653P	0
A118	1MOV654	HPSI HDR ISOL	HW	MV654P	MV654P	0
A119	1MOV655	HPSI HDR X-CONN	HW	MV655P	MV655P	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	HX	BHEF1A	Throttle	0
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	IP	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	IP	IPIA99	TK646B	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	C2210C	C2210C	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	C2210C	C2210C	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	C2210C	C2210C	0
A226	1ZC5210	1CV5210 POSITIONER	K3	C2210C	C2210C	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	K3	K3CLOS	C2210T	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	K3	K3CLOS	C2210T	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	K3	K3CLOS	C2210T	0
A226	1ZC5210	1CV5210 POSITIONER	K3	K3CLOS	C2210T	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	C2212C	C2212C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	C2212C	C2212C	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	C2212C	C2212C	0
A226	1ZC5212	1CV5212 POSITIONER	K4	C2212C	C2212C	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	K4	K4ISO1	C2212T	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	K4	K4ISO1	C2212T	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	K4	K4ISO1	C2212T	0
A226	1ZC5212	1CV5212 POSITIONER	K4	K4ISO1	C2212T	0
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	M1	M1FPPR	VD48AQ	22
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	M1	M1FPPR	VD48BQ	22
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	M1	M1FPPR	VD48CQ	22
A118	1MOV654	HPSI HDR ISOL	M1	MVM21Q	MVM21Q	0
A118	1MOV653	HPSI HDR X-CONN	M1	MVM22Q	MVM22Q	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	M1	MVM30Q	MVM30Q	0
A118	1MOV660	MINI FLOW RETN TO RWT	M1	MVM32Q	MVM32Q	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	M1	MVM44Q	MVM44Q	0
A226	1FAN5334	SRW HX RM EXH FAN 18B (1M0451)	M1	VDM51Q	VDM51Q	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	M2	M2FPPR	VD48AQ	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	M2	M2FPPR	VD48BQ	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	M2	M2FPPR	VD48CQ	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	M2	M2FPPR	VD48DQ	22
A111	0PUMP6552	1PNL1C140 SAMPLE PUMP	M2	MBN40Q	MBN40Q	0
A119	1MOV656	AUX HPSI HDR ISOL	M2	MVN21Q	MVN21Q	0
A119	1MOV655	HPSI HDR X-CONN	M2	MVN22Q	MVN22Q	0
A115B	1MOV501	VCT OUTLET ISOL	M2	MVN31Q	MVN31Q	0
A118	1MOV659	MINI FLOW RETN TO RWT	M2	MVN32Q	MVN32Q	0
A224	1MOV399	SDC HX RECIRC STOP	M2	MVN37Q	MVN37Q	6
A122	1MOV4144	CONTMT SUMP OUT ISOL	M2	MVN44Q	MVN44Q	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	M2	MVN57Q	MVN57Q	0
A115A	1MOV269	SI DISCH TO CHG HDR CORE FLUSH ISOL	M2	MVN64Q	MVN64Q	0
A226	1FAN5335	SRW HTEX RM FAN VU-18A (1M1441)	M2	VDN41Q	VDN41Q	0
A102	2FAN0448A	ECCS PP RM CLR 22 FAN A (2M0448A)	M3	M3FPPR	VD48AQ	22
A102	2FAN0448B	ECCS PP RM CLR 22 FAN B (2M0448B)	M3	M3FPPR	VD48BQ	22
A102	2FAN0448C	ECCS PP RM CLR 22 FAN C (2M0448C)	M3	M3FPPR	VD48CQ	22
A111	0PUMP6521	1PNL1C139 SAMPLE PUMP	M3	MBO59Q	MBO59Q	0
A102	2MOV654	HPSI HDR ISOL	M3	MVO21Q	MVO21Q	0
A102	2MOV653	HPSI HDR X-CONN	M3	MVO22Q	MVO22Q	0
A120	2MOV5463	U-2 CONTMT RECIRC PIPE TUNNEL	M3	MVO30Q	MVO30Q	0
A102	2MOV660	MINI FLOW RETN TO RWT	M3	MVO32Q	MVO32Q	0
A120	2MOV4145	CONTMT SUMP OUTLET ISOL	M3	MVO44Q	MVO44Q	0
A105B	2MOV269	SI TO CHG HDR CORE FLUSH	M3	MVO57Q	MVO57Q	0
A205	2FAN5334	SRW HX RM EXH FAN 19B (2M0451)	M3	VDO51Q	VDO51Q	0
A105B	2MOV501	VCT OUTLET ISOL	M4	MVN31Q	MVN31Q	32
A102	2MOV659	MINI FLOW RETN TO RWT	M4	MVN32Q	MVN32Q	0
A120	2MOV4144	CONTMT SUMP OUTLET ISOL	M4	MVN44Q	MVN44Q	0
A120	2MOV5462	U-2 CONTMT RECIRC PIPE TUNNEL	M4	MVN57Q	MVN57Q	0
A205	2FAN5335	SRW HX RM SPLY FAN 19A (2M1437)	M4	VDN37Q	VDN37Q	0
A226	1PCV5000	11 SGFP BRG OIL PRESS REG VLV	MN	MNFW58	PC000R	0
A226	1PCV4993	11 SGFPT CONT OIL PRESS REG	MN	MNFW58	PC993R	0
A226	1PCV4999	11 SGFPT OIL PRESS REG VLV	MN	MNFW58	PC999R	0
A226	1PCV5043	12 SGFP TLO PP DISCH PCV	MN	MNFW68	PC043R	0
A226	1PCV5048	12 SGFP TLO RESERVOIR INLET PCV	MN	MNFW68	PC048R	0
A226	1PCV5049	12 FW SGFP TLO TO PP BRGS PCV	MN	MNFW68	PC049R	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659P	0
A118	1MOV659	MINI FLOW RETN TO RWT	MV	MV0A11	MV659X	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660P	0
A118	1MOV660	MINI FLOW RETN TO RWT	MV	MV0A11	MV660X	0
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N1	MC104Q	MC104Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N1	MC104Q	MC104Q	12
A115A	1PUMPCVCCHG11	11 RX COOLANT CHARGING PUMP (1MB115)	N2	MC115Q	MC115Q	12
A115	1DISC89-1104A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115	1DISC89-1404A	CHARGING PUMP 13 DISC SW	N3	MC404Q	MC404Q	0
A115C	1PUMPCVCCHG13	13 RX COOLANT CHARGING PUMP (1MB404)	N3	MC404Q	MC404Q	12
A115B	1PUMPCVCCHG12	12 RX COOLANT CHARGING PUMP (1MB415)	N4	MC415Q	MC415Q	12
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N5	MCT04Q	MCT04Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N5	MCT04Q	MCT04Q	24
A105A	2PUMPCVCCHG21	21 CVC CHARGING PUMP (2MB115)	N6	MCT05Q	MCT05Q	24
A105	2DISC89-2104A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105	2DISC89-2404A	CHARGING PUMP 23 DISC SW	N7	MCT14Q	MCT14Q	0
A105C	2PUMPCVCCHG23	23 CVC CHARGING PUMP (2MB404)	N7	MCT14Q	MCT14Q	24
A105B	2PUMPCVCCHG22	22 CVC CHARGING PUMP (2MB415)	N8	MCT15Q	MCT15Q	24
A224	1ACC1645	AIR ACCUMULATOR FOR 1CV1645	NR	IPIA99	TK645B	0
A224	1ACC1646	AIR ACCUMULATOR FOR 1CV1646	NR	IPIA99	TK646B	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NR(TC)	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NR(TC)	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NR(TC)	UNIT 2-TBFB01	C3638P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	NSSRW	N/A	0
A205	2SV1637	TURB & EHC OIL SERV WTR ISOL VLV	NS	UNIT 2-TAFB01	C3637P	0
A205	2SV1639	TURB LUB & EHC OIL SERVWTR ISO	NS	UNIT 2-TAFB01	C3639P	0
A205	2SV1600	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3600P	0
A205	2SV1638	TURB BLDG SERV WTR ISOL VLV	NS	UNIT 2-TBFB01	C3638P	0
A226	1SV4522	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4523	11 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4532	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A226	1SV4533	12 S/G AFW BLOCK SV	QZ	BHEQZ1	Open	0
A119	1PUMPSIHP11	11 HIGH PRESS SAFETY INJECTION PUMP (1MA108)	RH	BHERH1	Start	24
A118	1PUMPSIHP13	13 HIGH PRESS SAFETY INJECTION PUMP (1MA110)	RH	BHERH1	Start	12
A226	1SV5150	SERV WTR HTEX 11 SALT WTR INLT	S3	C1150P	C1150P	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148C	C2148C	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148C	C2148C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148C	C2148C	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148C	C2148C	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148O	C2148O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148O	C2148O	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	C2148O	C2148O	0
A226	1CV5148A	11A SRW HX SW STRAINER FLUSHING VALVE	S3	C2148T	C2148T	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2148T	C2148T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2148T	C2148T	0
A226	1SV5148A	11A SRW HX SW STRAINER FLUSHING SV	S3	C2148T	C2148T	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151C	C2151C	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151C	C2151C	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151C	C2151C	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151C	C2151C	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	C2151O	C2151O	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A316	1MOV6902	H2 PURGE FLOW CONTROL DAMPER	SG	SGMV01	MV692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A316	1MOV6903	H2 PURGE REPLACE AIR CONTMT ISOL	SG	SGMV02	MV693T	0
A316	1CV5292	CONTMT ATMOS SMPL ISOL	SH	IC292C	IC292C	0
A316	1SV5292	CONTMT ATMOS SMPL ISOL	SH	IC292C	IC292C	0
A316	1CV5460	U-1 CONTMT ISOL	SH	IC460T	IC460T	0
A316	1SV5460	U-1 CONTMT ISOL SV	SH	IC460T	IC460T	0
A316	1MOV2080	CNTMT IA ISOLATION MOV	SH	MV080T	MV080T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A316	1CV5460	U-1 CONTMT ISOL	SH	SHIC01	IC460C	0
A316	1SV5460	U-1 CONTMT ISOL SV	SH	SHIC01	IC460C	0
A316	1CV5292	CONTMT ATMOS SMPL ISOL	SH	SHIC03	IC292T	0
A316	1SV5292	CONTMT ATMOS SMPL ISOL	SH	SHIC03	IC292T	0
A316	1MOV2080	CNTMT IA ISOLATION MOV	SH	SHMV01	MV080C	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0
A316	1CV1411	CPA SUPP ISOL CV	SI	IC411C	IC411C	0
A316	1SV1411	CPA SUPP ISOL CV CONT	SI	IC411C	IC411C	0
A316	1CV1413	CPA EXH ISOL CV	SI	IC413C	IC413C	0
A316	1SV1413	CPA EXH ISOL CV CONT	SI	IC413C	IC413C	0
A316	1CV1411	CPA SUPP ISOL CV	SI	SICV02	IC411T	0
A316	1SV1411	CPA SUPP ISOL CV CONT	SI	SICV02	IC411T	0
A316	1CV1413	CPA EXH ISOL CV	SI	SICV04	IC413T	0
A316	1SV1413	CPA EXH ISOL CV CONT	SI	SICV04	IC413T	0
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615C	MV615C	19
A227	1MOV615	11A LPSI LOOP ISOL	SR	MV615T	MV615T	19
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625C	MV625C	0
A227	1MOV625	11B LPSI LOOP ISOL	SR	MV625T	MV625T	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	TG	BHEF1Y	Close/Open	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	TG	BHEF1Y	Close/Open	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Open	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Open	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Open	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	TG	BHEF1Y	Close/Open	0
A227	1SV4070	11 S/G ISOL VLV AFW PP 11 & 12	TG	BHEF1Y	Open	0
A227	1SV4071	12 S/G MS TO AFW PP	TG	BHEF1Y	Open	0
A316	1CV4511	11 S/G AFW FLOW CONT VALVE	UQ	BHEUQ1	Throttle	0
A316	1CV4512	12 S/G AFW FLOW CONT VALVE	UQ	BHEUQ1	Throttle	0
A316	1I/P4511A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4511B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4512A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1I/P4512B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A316	1CV3832	CONTMT SUPPLY CV	VQ	IC832C	IC832C	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	VQ	IC832C	IC832C	0
A316	1CV3832	CONTMT SUPPLY CV	VQ	IC832T	IC832T	0
A316	1SV3832	COMP CLG INTO CNTMT VLV CONT	VQ	IC832T	IC832T	0
A316	1CV3833	CONTMT RETN CV	VQ	IC833C	IC833C	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	VQ	IC833C	IC833C	0
A316	1CV3833	CONTMT RETN CV	VQ	IC833T	IC833T	0
A316	1SV3833	COMP CLG OUTLT CNTMT ISOL CONT	VQ	IC833T	IC833T	0
A316	1MOV651	SDC RETN ISOL	VQ	MV651C	MV651C	0
A316	1MOV651	SDC RETN ISOL	VQ	MV651X	MV651X	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A316	1MOV651	SDC RETN ISOL	VQ	VQMV01	MV651T	0
A316	1CV5460	U-1 CONTMT ISOL	WJ	BHESH1	Shut	0
A316	1SV5460	U-1 CONTMT ISOL SV	WJ	BHESH1	Shut	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0
A316	1CV1581	11 CNTMT CLG U NORM INLET	WY	CV581O	CV581O	0
A316	1I/P1581	CNTMT CLR 11 SERV WTR INLT	WY	CV581O	CV581O	0
A316	1SV1581	CNTMT CLR 11 INLT VLV CONTROL	WY	CV581O	CV581O	0
A316	1CV1582	11 CNTMT CLG U EMER DISCH	WY	CV582O	CV582O	0
A316	1SV1582	CNTMT CLR 11 SERV WTR OUT	WY	CV582O	CV582O	0
A316	1CV1589	13 CNTMT CLG U NORM INLET	WY	CV589O	CV589O	0
A316	1I/P1589	CNTMT CLR 13 SERV WTR INLT	WY	CV589O	CV589O	0
A316	1SV1589	CNTMT CLR 13 INLT VLV CONTROL	WY	CV589O	CV589O	0
A316	1CV1590	13 CNTMT CLG U EMER DISCH	WY	CV590O	CV590O	0
A316	1SV1590	CNTMT CLR 13 OUTLT VLV CONTROL	WY	CV590O	CV590O	0
A316	1CV1581	11 CNTMT CLG U NORM INLET	WY	WA102F	CV581P	0
A316	1I/P1581	CNTMT CLR 11 SERV WTR INLT	WY	WA102F	CV581P	0
A316	1SV1581	CNTMT CLR 11 INLT VLV CONTROL	WY	WA102F	CV581P	0
A316	1CV1582	11 CNTMT CLG U EMER DISCH	WY	WAHVCV	CV582P	0
A316	1SV1582	CNTMT CLR 11 SERV WTR OUT	WY	WAHVCV	CV582P	0
A316	1CV1589	13 CNTMT CLG U NORM INLET	WY	WC102F	CV589P	0
A316	1I/P1589	CNTMT CLR 13 SERV WTR INLT	WY	WC102F	CV589P	0
A316	1SV1589	CNTMT CLR 13 INLT VLV CONTROL	WY	WC102F	CV589P	0
A316	1CV1590	13 CNTMT CLG U EMER DISCH	WY	WCHVCV	CV590P	0
A316	1SV1590	CNTMT CLR 13 OUTLT VLV CONTROL	WY	WCHVCV	CV590P	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151O	C2151O	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151O	C2151O	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	C2151O	C2151O	0
A226	1CV5151A	11B SRW HX SW STRAINER FLUSHING VALVE	S3	C2151T	C2151T	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	C2151T	C2151T	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	C2151T	C2151T	0
A226	1SV5151A	11B SRW HX SW STRAINER FLUSHING SV	S3	C2151T	C2151T	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AB	0
A226	1HXSRW11A	11A SERVICE WATER PHE	S3	S3H11A	HX11AP	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BB	0
A226	1HXSRW11B	11B SERVICE WATER PHE	S3	S3H11B	HX11BP	0
A226	1CV5148	11A SRW HX STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1HS5148	11A SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1AV	C2148P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2148P	0
A226	1SV5148	11A SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1AV	C2148P	0
A226	1CV5209	11A SRW HX SALT WATER OUTLET VLV	S3	S3H1AV	C2209P	0
A226	1FIC5209	11A SRW HX SW OUTLET FLOW INDICATOR	S3	S3H1AV	C2209P	0
A226	1P/P5209	1CV5209 A/S VOLUME BOOSTER	S3	S3H1AV	C2209P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1AV	C2209P	0
A226	1SV5209	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1SV5209A	11A SRW HX SALT WATER OUTLET SV	S3	S3H1AV	C2209P	0
A226	1CV5151	11B SRW HX SW STRAINER DIVERTER VALVE	S3	S3H1BV	C2151P	0
A226	1HS5148A	11A/11B SRW HX STRAINER MODE SELECT	S3	S3H1BV	C2151P	0
A226	1PNL1C200	11A/11B SRW HX STRAINER CONTROL	S3	S3H1BV	C2151P	0
A226	1SV5151	11B SRW HX SW STRAINER DIVERTER SV	S3	S3H1BV	C2151P	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	S3	S3H1BV	C2210P	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	S3	S3H1BV	C2210P	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	S3	S3H1BV	C2210P	0
A226	1ZC5210	1CV5210 POSITIONER	S3	S3H1BV	C2210P	0
A226	1CV5153	12 SRW HX SW NORM B/U OUTLET	S4	C1153P	C1153P	20
A226	1SV5153	SERV WTR HTEX 12 SALT WTR OUT	S4	C1153P	C1153P	0
A226	1CV5157	12A/12B SRW HX SALT WATER OUTLET VLV	S4	C2157T	C2157T	0
A226	1I/P5157	12A/12B SRW HX SW OUT I/P	S4	C2157T	C2157T	0
A226	1P/P5157	1CV5157 A/S VOLUME BOOSTER	S4	C2157T	C2157T	0
A226	1SV5157	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1SV5157A	12A/12B SRW HX SALT WATER BYPASS SV	S4	C2157T	C2157T	0
A226	1ZC5157	1CV5157 POSITIONER	S4	C2157T	C2157T	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158C	C2158C	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158C	C2158C	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158C	C2158C	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158C	C2158C	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	C2158O	C2158O	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158O	C2158O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158O	C2158O	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	C2158O	C2158O	0
A226	1CV5158A	12A SRW HX SW STRAINER FLUSHING VALVE	S4	C2158T	C2158T	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	C2158T	C2158T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2158T	C2158T	0
A226	1SV5158A	12A SRW HX SW STRAINER FLUSHING SV	S4	C2158T	C2158T	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159C	C2159C	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159C	C2159C	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159C	C2159C	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	C2159O	C2159O	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159O	C2159O	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	C2159O	C2159O	0
A226	1CV5159A	12B SRW HX SW STRAINER FLUSHING VALVE	S4	C2159T	C2159T	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2159T	C2159T	0
A226	1SV5159A	12B SRW HX SW STRAINER FLUSHING SV	S4	C2159T	C2159T	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	C2212O	C2212O	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	C2212O	C2212O	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	C2212O	C2212O	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	C2212O	C2212O	0
A226	1ZC5212	1CV5212 POSITIONER	S4	C2212O	C2212O	0
A226	1SV5152	SERV WTR HTEX 12 SALT WTR INLT	S4	S4CV52	C1152P	0
A226	1HVSRW-707	MANUAL SRW INLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW707P	0
A226	1HVSRW-708	MANUAL SRW OUTLET ISOLATION VLV TO 12A PHE	S4	S4H12A	HW708P	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AB	0
A226	1HXSRW12A	12A SERVICE WATER PHE	S4	S4H12A	HX12AP	0
A226	1HVSRW-709	MANUAL SRW INLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW709P	0
A226	1HVSRW-710	MANUAL SRW OUTLET ISOLATION VLV TO 12B PHE	S4	S4H12B	HW710P	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BB	0
A226	1HXSRW12B	12B SERVICE WATER PHE	S4	S4H12B	HX12BP	0
A226	1CV5158	12A SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2AV	C2158P	0
A226	1HS5158	12A SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1HS5158A	12A/12B SRW HX STRAINER MODE SELECT	S4	S4H2AV	C2158P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2158P	0
A226	1SV5158	12A SRW HX SW STRAINER DIVERTER SV	S4	S4H2AV	C2158P	0
A226	1CV5211	12A SRW HX SALT WATER OUTLET VLV	S4	S4H2AV	C2211P	0
A226	1FIC5211	12A SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2AV	C2211P	0
A226	1P/P5211	1CV5211 A/S VOLUME BOOSTER	S4	S4H2AV	C2211P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2AV	C2211P	0
A226	1SV5211	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1SV5211A	12A SRW HX SALT WATER OUTLET SV	S4	S4H2AV	C2211P	0
A226	1ZC5211	1CV5211 POSITIONER	S4	S4H2AV	C2211P	0
A226	1CV5159	12B SRW HX SW STRAINER DIVERTER VALVE	S4	S4H2BV	C2159P	0
A226	1HS5159	12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2159P	0
A226	1SV5159	12B SRW HX SW STRAINER DIVERTER SV	S4	S4H2BV	C2159P	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	S4	S4H2BV	C2212P	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	S4	S4H2BV	C2212P	0
A226	1PNL1C201	12A/12B SRW HX STRAINER CONTROL	S4	S4H2BV	C2212P	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	S4	S4H2BV	C2212P	0
A226	1ZC5212	1CV5212 POSITIONER	S4	S4H2BV	C2212P	0
A111	1HS6902	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV01	HS692T	0
A111	1HS6903	1 HVAC/P H2 PURGE CONTR HS	SG	SGMV02	HS693T	0
A111	0PCV6512	O2 ANAL CAB SAMP INLET PCV	SH	PC512R	PC512R	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SHSV03	SV00BT	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SHSV06	SV00CT	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SHSV09	SV00DT	0
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	SH	SV00BD	SV00BD	0
A111	1SV5900C	U-1 PZR 1-SX-5900C	SH	SV00CD	SV00CD	0
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	SH	SV00DD	SV00DD	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144C	MV144C	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	SR	MV144T	MV144T	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145C	MV145C	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	SR	MV145T	MV145T	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462C	MV462C	0
A122	1MOV5462	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV462T	MV462T	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463C	MV463C	0
A122	1MOV5463	U-1 CONTMT RECIRC PIPE TUNNEL	SR	MV463T	MV463T	0
A226	1SV1637	TURB LUBE&EHC OIL SERVWTR ISOL	TA	TAFB01	C3637P	0
A226	1SV1639	TURB LUB & EHC OIL SERV WTR IS	TA	TAFB01	C3639P	0
A226	1SV1600	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3600P	0
A226	1SV1638	TURB BLDG SERV WTR ISOL VLV	TB	TBFB01	C3638P	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	MV144O	MV144O	0
A122	1MOV4144	CONTMT SUMP OUT ISOL	TE	TE0101	MV144P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	TH(HD1)	BHER3B	Open	0
A226	1FIC5210	11A SRWHX SW OUTLET FLOW INDICATOR	TH(HD1)	BHER3B	Throttle	0
A226	1P/P5210	1CV5210 A/S VOLUME BOOSTER	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1SV5210A	SERV WTR HTEX 11 SALT WTR OUT	TH(HD1)	BHER3B	Throttle	0
A226	1ZC5210	1CV5210 POSITIONER	TH(HD1)	BHER3B	Throttle	0
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	TH(HD2)	BHER3B	Open	0
A226	1FIC5212	12B SRWHX SW OUTLET FLOW INDICATOR	TH(HD2)	BHER3B	Throttle	0
A226	1P/P5212	1CV5212 A/S VOLUME BOOSTER	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1SV5212A	SERV WTR HTEX 12 SALT WTR OUT	TH(HD2)	BHER3B	Throttle	0
A226	1ZC5212	1CV5212 POSITIONER	TH(HD2)	BHER3B	Throttle	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	MV145O	MV145O	0
A122	1MOV4145	CONTMT SUMP OUT ISOL	TW	TW0101	MV145P	0
A224	1PS4404	11 MT CONDENSER LOW VACUUM PS	TX	PS404D	PS404D	0
A224	1PS4405	11 MT CONDENSER LOW VACUUM PS	TX	PS405D	PS405D	0
A224	1PS4407	12 MT CONDENSER LOW VACUUM PS	TX	PS407D	PS407D	0
A224	1PS4408	12 MT CONDENSER LOW VACUUM PS	TX	PS408D	PS408D	0
A224	1PS4410	13 MT CONDENSER LOW VACUUM PS	TX	PS410D	PS410D	0
A224	1PS4411	13 MT CONDENSER LOW VACUUM PS	TX	PS411D	PS411D	0
A226	1I/P4525A	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4525B	11 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535A	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A226	1I/P4535B	12 AFW FLO CONTR VLV I/P	UQ	BHEUQ1	Throttle	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	TS404D	TS404D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC170P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1CLSE	WC171P	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	V1TEMP	TS404R	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205B	0
A119	1HXHVACECCS11	ECCS PUMP ROOM AIR COOLER 11	V1	V1TRFR	HX205P	0
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AR	VD11AR	22
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	V1	VD11AS	VD11AS	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BR	VD11BR	22
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	V1	VD11BS	VD11BS	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CR	VD11CR	22
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	V1	VD11CS	VD11CS	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DR	VD11DR	22
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	V1	VD11DS	VD11DS	22
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170D	WC170D	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC170O	WC170O	0
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171D	WC171D	0

ROOM#	INCLUDED COMP	DESCRIPTION	TOP	FB	BEVENT	" ABOVE FLOOR	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	V1	WC171O	WC171O	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	TS405D	TS405D	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2INLT	WC173P	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	V2TEMP	TS405R	0	
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207B	0	
A118	1HXHVACECCS12	ECCS PUMP ROOM AIR COOLER 12	V2	V2TRFR	HX207P	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AR	VD12AR	22	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	V2	VD12AS	VD12AS	22	BX1
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BR	VD12BR	22	
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	V2	VD12BS	VD12BS	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CR	VD12CR	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	V2	VD12CS	VD12CS	22	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173D	WC173D	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	V2	WC173O	WC173O	0	
A226	1PCV5214	11 CW PP SEAL WTR PCV	VC	VCCW1A	PC214R	0	
A226	1PCV5216	12 CW PP SEAL WTR PCV	VC	VCCW2A	PC216R	0	
A226	1PCV5218	13 CW PP SEAL WTR PCV	VC	VCCW3A	PC218R	0	
A226	1PCV5220	14 CW PP SEAL WTR PCV	VC	VCCW4A	PC220R	0	NO
A226	1PCV5222	15 CW PP SEAL WTR PCV	VC	VCCW5A	PC222R	0	
A226	1PCV5224	16 CW PP SEAL WTR PCV	VC	VCCW6A	PC224R	0	
A119	1TS5404	ECCS PUMP ROOM 11 COOLING FAN	VM(RM1)	BHEV1T	Open	0	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM1)	BHEV1T	Open	0	
A119	1FAN1448A	ECCS PP RM CLR 11 FAN A (1M1448A)	VM(RM1)	BHEV1T	Start	22	
A119	1FAN1448B	ECCS PP RM CLR 11 FAN B (1M1448B)	VM(RM1)	BHEV1T	Start	22	N
A119	1FAN1448C	ECCS PP RM CLR 11 FAN C (1M1448C)	VM(RM1)	BHEV1T	Start	22	
A119	1FAN1448D	ECCS PP RM CLR 11 FAN D (1M1448D)	VM(RM1)	BHEV1T	Start	22	
A118	1TS5405	ECCS PUMP ROOM 12 COOLING FAN	VM(RM2)	BHEV1T	Open	0	
A118	1FAN0448A	ECCS PP RM CLR 12 FAN A (1M0448A)	VM(RM2)	BHEV1T	Start	22	NO
A118	1FAN0448B	ECCS PP RM CLR 12 FAN B (1M0448B)	VM(RM2)	BHEV1T	Start	22	
A118	1FAN0448C	ECCS PP RM CLR 12 FAN C (1M0448C)	VM(RM2)	BHEV1T	Start	22	
A111	1SV5900B	U-1 CONTMT S PRI SHLD 1-SX-5900B	WJ	BHESH2	Shut	0	
A111	1SV5900C	U-1 PZR 1-SX-5900C	WJ	BHESH2	Shut	0	NO
A111	1SV5900D	U-1 CONTMT 135' E 1-SX-5900D	WJ	BHESH2	Shut	0	