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(1)

Although the FSAR already contains most of the design information described above, the licensee committed by letter dated [January 19, 1995], to confirm that these details are appropriately reflected in the FSAR, the TRM, the improved TS Bases or that they will be included in the next required update of these documents. The licensee has also committed to maintain an auditable record of, and an implementation schedule for, the procedure changes associated with the development of the improved TS. The licensee will also maintain the documentation of these changes in accordance with the record retention requirements in the QA plan and the TRM.

The staff has concluded that appropriate controls have been identified for all of the current specifications, information, and requirements that are being moved to licensee-controlled documents. Until incorporated in the FSAR and procedures, changes to these provisions will be controlled in accordance with the applicable current procedures that control these documents. The NRC will audit the relocated provisions following implementation to ensure that an appropriate level of control has been achieved. The staff has concluded that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly in 10 CFR 50.59. Accordingly, these specifications, information, and requirements, as described in detail in this safety evaluation, may be removed from the CTS and placed in the FSAR or other licensee-controlled documents as specified herein.

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5.5.12, "Explosive Gas and Storage Tank Radioactivity Monitoring

(2)

Use and Application

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The requirements of CTS 3/4.11.2.5 and 3/4.3.3.2.10 are being ~~moved to~~ replaced with an administrative controls program, improved TS ~~5.5.2, "Primary Coolant Sources Outside Containment," that corresponds to CTS 6.7.4.a~~. The use of the system name in this program specification does not require a definition. Thus, the existing requirements for the gaseous waste processing system are not reduced by omitting this definition. See Section 5 of this safety evaluation for additional discussion of improved TS ~~5.5.2.~~ 5.5.12

(6) The definitions MEMBER OF THE PUBLIC and UNRESTRICTED AREA are contained in 10 CFR 20.1003. Thus, including them in the CTS is redundant. Therefore, these definitions can be omitted from the improved TS, consistent with the STS.

(7) The requirements contained in the definition OFFSITE DOSE CALCULATION MANUAL (ODCM) has been placed in improved TS 5.5.1, "Offsite Dose Calculation Manual (ODCM)," in conformance with the STS. Therefore, it is not necessary to include ODCM as a defined term in the improved TS.

(8) Existing definitions PURGE - PURGING, VENTILATION EXHAUST TREATMENT SYSTEM, VENTING, and SOURCE CHECK have been deleted in conformance with the STS because they are not used as defined terms in the CTS.

(9) Existing definition PROCESS CONTROLS PROGRAM (PCP)has been removed from the CTS along with the associated administrative controls program specified in CTS 6.12, "PROCESS CONTROLS PROGRAM (PCP)," to conform with the STS. These requirements have been placed in the FSAR. See Section III.5.2 of this safety evaluation for additional discussion of this change.

(10) Existing definition REPORTABLE EVENT has been deleted because it is redundant to the detailed definition of a reportable event in 10 CFR 50.72 and 50.73. This change will have no effect on current reporting practices at VEGP and does not reduce any reporting requirements.

(11) Existing definition SITE BOUNDARY is not needed in the improved TS because it has been replaced with an equivalent description in improved TS 4.1.1, "Site and Exclusion Area Boundaries (EAB)," in conformance with the STS.

Although removal of these terms from the list of definitions is considered less-restrictive, the relaxations of existing specifications containing these terms is brought about by changes to the CTS discussed elsewhere in this

safety evaluation. Therefore, omission of these definitions from the improved TS does not, by itself, reduce existing restrictions on plant operation; therefore, these changes are acceptable.

1.3 More Restrictive Requirements

The licensee, in electing to implement STS Section 1.1 definitions, proposed the following more restrictive condition.

(1) The existing definition of SDM has been made more restrictive by adding the requirement to change the fuel and moderator temperatures to the hot zero power temperatures when the unit is in MODE 1 or 2. This ensures that the power defect due to shutting down the reactor from MODE 1 or 2 is accounted for in the SDM.

This added requirement is consistent with current practice at VEGP, conforms to the STS, and is acceptable.

1.4 Significant Differences from the STS

In electing to adopt the STS, the licensee proposed a number of definitions that do not conform to the corresponding STS definitions. These definitions are CHANNEL CALIBRATION, CHANNEL OPERATIONAL TEST, TRIP ACTUATING DEVICE OPERATIONAL TEST, and the PTLR. These differences are the following:

(1) The licensee proposed to omit from the CHANNEL CALIBRATION definition the language in the STS definition regarding the method of calibrating temperature sensing elements (resistance temperature detectors(RTDs) and thermocouples) because it is not part of the CTS definition.

The existing definition of CHANNEL CALIBRATION does require calibration of the sensors, but does not specify the technique for calibrating RTDs or thermocouples. Whether the RTDs or thermocouples are calibrated using cross calibration techniques (as specified in the STS definition) or bath immersion ~~(used by the licensee)~~ is considered by the licensee to be irrelevant to the definition. The licensee considers both techniques equally valid, and thus concludes it is sufficient for the purpose of the definition to simply require that they be calibrated.

(3)

This difference is based on maintainig the flexibility of the existing definition and the licensee's decision not to backfit the STS language in question. Because the proposed definition is consistent with the current requirement, this difference is acceptable.

(2) The licensee proposed to omit the STS requirement to include the display in the definitions of the following types of instrumentation

to be OPERABLE in MODES 1 and 2 as specified in improved TS LCO 3.1.4, "Rod Group Alignment Limits," (and also in corresponding CTS LCO 3.1.3.1) this action requirement is deleted. This does not change existing requirements because the definition of MODE 3, 4, and 5 requires the reactor to be ¢ 1% shutdown (k_{eff} _ 0.99). These administrative changes do not reduce existing requirements.

(5) In the event that the requirements CTS 3/4.1.3.1, ACTION b (one inoperable, but trippable, rod) were not met within the specified Completion Times, CTS LCO 3.0.3 would require placing the plant in MODE 3 within 6 hours. This requirement is retained as ACTION C of improved TS 3.1.4 to conform to the presentation in the STS.

(6) CTS 4.1.3.2, to verify that individual rod positions are within the alignment limit, has been retained as improved TS SR 3.1.4.1, with descriptive procedural information relocated to the Bases (as noted in Table 1), and with wording changes to conform to the presentation of corresponding STS SR 3.1.5.1.

3.1.5 Shutdown Bank Insertion Limits

(7) Improved TS LCO 3.1.5, "Shutdown Bank Insertion Limits," applies to shutdown banks, not to individual shutdown rods, as does corresponding CTS 3.1.3.5, "Shutdown Rod Insertion Limits." Instead, individual rods (both in shutdown banks and in control banks) are addressed by improved TS LCO 3.1.4, "Rod Group Alignment Limits." This presentation change is consistent with corresponding STS LCO 3.1.5, "Rod Group Alignment Limits," and STS LCO 3.1.6, "Shutdown Bank Insertion Limits."

Similarly, CTS 3.1.3.6, "Control Rod Insertion Limits," which already applies to control banks, not individual rods, is entitled "Control Bank Insertion Limits" in corresponding improved TS LCO 3.1.6, also consistent with the STS presentation.

(4)

(8) The ACTION of CTS 3/4.1.3.5 contains an exception to taking the actions required. This exception is when performing the 92-day Frequency rod freedom-of-movement-verification test, CTS ~~4.1.3.2,~~ 4.1.3.1.2 corresponding to improved TS SR 3.1.4.2. Because this exception permits operation with the LCO not met, it is equivalent to saying the LCO does not apply. Therefore, this exception is presented as a Note in the Applicability of improved TS 3.1.5, consistent with corresponding STS 3.1.6.

A similar change has been made to the ACTION and Applicability of CTS 3/4.1.3.6, "Control Rod Insertion Limits," in corresponding improved TS 3.1.6, "Control Bank Insertion Limits."

(9) Required Actions have been added to the ACTIONS of CTS 3/4.1.3.5 and CTS 3/4.1.3.6 to verify that the SDM is within limit or to initiate boration

administrative change in presentation of the current requirement, and is acceptable.

3.1.3.2 Power Distribution Limits

Current power distribution limit specifications that are being retained in the improved TS have been administratively reformatted and reorganized to conform to the presentation of STS Section 3.2, as summarized in Table 2-2. Discussions of the administrative changes that are significant follow.

3.2.1 Heat Flux Hot Channel Factor ($F_Q(Z)$)

(1) CTS 4.2.2.1 specifies an exception to the MODE entry restrictions of CTS 4.0.4 for CTS surveillances for $F_Q(Z)$. Because the SR Frequencies of the $F_Q(Z)$ surveillances retained in improved TS 3.2.1 specify performance after entry into MODE 1, an exception to corresponding improved TS SR 3.0.4 would be superfluous. Because the existing allowance is effectively unchanged, omission of this exception is considered an administrative change.

(2) The requirements of CTS 4.2.2.2.f have been retained as improved TS SR 3.2.1.2 consistent with the STS. The term "penalty" was added to emphasize that the factor specified in the COLR is used to offset possible increases in $F_Q(Z)$ between surveillances. This change clarifies the intent of the existing requirement and is, therefore, purely administrative.

3.2.2 Nuclear Enthalpy Rise Hot Channel Factor ($F^N_{\Delta H}$)

(3) CTS 3/4.2.3, ACTION c, has been retained as Required Action A.3 of improved TS, in conformance with STS 3.2.2, Required Action A.3. In addition, a Note has been added to clarify that Required Action A.3 is only required if THERMAL POWER has to be reduced to less than 50% RTP to comply with Required Actions A.1.1 or A.1.2.1. Because this Note serves to clarify the intent of the existing action requirement, the addition of this Note is considered an administrative change.

However this Note differs from the corresponding Note in the STS. See Subsection 3.4.3.2 of Part III of this safety evaluation for discussion of this difference.

(4) CTS 4.2.3.1 specifies an exception to the MODE entry restrictions of CTS 4.0.4 for the CTS surveillance for $F^N_{\Delta H}$. Because the SR Frequencies of the $F^N_{\Delta H}$ surveillance, CTS 4.2.3.2, specify performance after entry into MODE 1, an exception to corresponding improved TS SR 3.0.4 would be superfluous. Because the existing allowance is effectively unchanged,

The Action Statements currently specified by CTS Table 3.3-1 are given as ACTIONS (Conditions, Required Actions and Completion Times) in improved TS 3.3.1. The ACTIONS applicable to each RTS instrument function are specified in improved TS Table 3.3.1-1.

The general requirements of CTS 4.3.1.1 and 4.3.1.2, to perform all applicable surveillances, including response time testing (improved TS SR 3.3.1.15), have been replaced by specific requirements for each RTS instrumentation function. All Surveillance Requirements are given in the STS format following the LCO and ACTIONS in improved TS 3.3.1. Each Surveillance Frequency is specified as part of the associated Surveillance Requirement. Similarly, each SR Note in CTS Table 4.3-1 is stated with the associated SR instead of in a list at the end of the table. The Surveillance Requirements applicable to each RTS instrument function are specified in improved TS Table 3.3.1-1. In addition, the word analog, has been deleted from the defined term ANALOG CHANNEL OPERATIONAL TEST (ACOT).

The TOTAL NUMBER OF CHANNELS column in CTS Table 3.3-1 has been revised and renamed the REQUIRED CHANNELS column in improved TS Table 3.3.1-1. When one or more required instrument channels, as specified in this column, are inoperable for a given function, the ACTIONS of improved TS 3.3.1 that would apply would be determined from the CONDITIONS column of Table 3.3.1-1.

The MINIMUM CHANNELS OPERABLE column of CTS Table 3.3-1 has been eliminated because the ACTIONS for each RTS instrument function are no longer referenced from it. Instead the ACTIONS are referenced from the new REQUIRED CHANNELS and CONDITIONS columns of improved TS Table 3.3.1-1.

Numbered discussions of specific administrative changes that are significant follow. The improved TS instrument function or functions are listed in italics before each discussion or discussions that apply.

3.3.1.2.a Power Range Neutron Flux - High

(2) Notes 2 and 4 of CTS Table 4.3-1, modify the daily channel calibration (calorimetric comparison) of the power range neutron flux - high RTS trip function. This surveillance has been retained as improved TS SR 3.3.1.2 in which these existing notes have been incorporated, ~~which~~ with the following omissions.

The exception to CTS 4.0.4 in existing Note 2 has been omitted ~~required~~ because the Frequency of SR 3.3.1.2 is conditional (Note 2 of SR 3.3.1.2). As described in the improved TS Section 1.4, "Frequency," a conditional Frequency does not become due until the specified conditions are met (i.e., THERMAL POWER ≥ 15% RTP).

Existing Note 4, which excludes neutron detectors from channel calibration, has been omitted, because SR 3.3.1.2 does not specify a channel calibration but simply requires a comparison with a calorimetric

heat balance. Note 1 of SR 3.3.1.2 requires adjusting indicated power to within 2% of the calorimetric power.

This change is considered administrative because it clarifies the intent of the existing Notes while retaining the existing Surveillance Requirement.

3.3.1.2.b Power Range Neutron Flux - Low;
3.3.1.3 Power Range Neutron Flux Rate - High Positive Rate;
3.3.1.6 Overtemperature ΔT;
3.3.1.7 Overpower ΔT;
3.3.1.8.b Pressurizer Pressure - High; and
3.3.1.13 Steam Generator Water Level - Low Low

(3) ACTION E of improved TS 3.3.1 is a new ACTION applicable to RTS instrument functions previously associated with ACTIONS 2 or 6 of CTS Table 3.3-1 and for which the action to be in Mode 3 is appropriate to remove the unit from the MODE of Applicability for the affected function. The addition of the requirement to be in Mode 3 in 12 hours is in accordance with the STS. This Required Action provides an alternative to CTS 3.0.3 if any of the other REQUIRED ACTIONS for the affected functions can not be completed in the allotted time. Thus, this change is considered administrative.

3.3.1.4 Intermediate Range Neutron Flux

(4) The MODE 2 Applicability for the intermediate range instrumentation has been adjusted to accommodate the presentation of associated ACTION G and ACTION H in improved TS 3.3.1. Specifically, MODE 2 has been divided into a > P-6 condition (new Applicability Note c) and a < P-6 condition (new Applicability Note d). This change conforms to the STS which contains separate actions for the intermediate range instrumentation above and below P-6. (Note that ACTION G is a new more restrictive requirement. See Subsection 3.3.3.1 of Part III of this safety evaluation for additional discussion.)

3.3.1.5 Source Range Neutron Flux; and
3.3.8 High Flux at Shutdown Alarm (HFASA))

(5) Improved TS 3.3.1.5 contains a new LCO requiring only one source range neutron flux channel to be OPERABLE, instead of two, in MODES 3, 4, and 5 provided the RTBs are open (Applicability Note e). Currently, the LCO for corresponding RTS instrument function 6.b of CTS Table 3.3-1, does not explicitly state the OPERABILITY, action, and surveillance requirements on source range instrumentation with the reactor trip breakers (RTBs) open in MODES 3, 4, and 5. It only specifies requirements with the RTBs closed.

this change groups the SRs to the most appropriate function for OPERABILITY concerns.

The Frequencies of these SRs have also been changed to be in accordance with applicable portions of CTS Notes 3 and 6 (clarifying that monthly and quarterly mean 31 EFPD and 92 EFPD respectively for these surveillances). In addition, the new SRs do not require the 4.0.4 exception given in CTS Notes 3 and 6, because these SRs are conditional with the Frequency specified with the required power level in the SR itself.

Finally, the exclusion for the neutron detectors from the Channel Calibration given by CTS Note 4 has been adopted as Note 2 of SR 3.3.1.6. This is appropriate, because the neutron detectors cannot be ~~calibrated.~~ adjusted per the definition of CHANNEL CALIBRATION.

(6)

All these changes are administrative, are consistent with the STS, and are acceptable.

3.3.1.8.a Pressurizer Pressure - Low;
3.3.1.9 Pressurizer Water Level - High;
3.3.1.10.b Reactor Coolant Flow - Low - Two Loops
3.3.1.11 Undervoltage RCPs; and
3.3.1.12 Underfrequency RCPs

(7) ACTION M of improved TS 3.3.1 has been developed from ACTION 6 of CTS Table 3.3-1, for RTS instrument functions that have an Applicability of MODE 1 > P-7 (low power reactor trips block). A separate ACTION for these functions is appropriate because the default action (to remove the unit outside the Applicability) that must be added to each ACTION to conform to the STS, is the same -- reduce power < P-7 if the inoperable channel has not been placed in trip within 6 hours. This presentation enhancement of the existing action requirements is considered an administrative change to conform to the STS.

3.3.1.8.a Pressurizer Pressure - Low

(8) The time constant Note ** of CTS Table 2.2-1 for the pressurizer pressure-low function has been moved to improved TS Table 3.3.1-1 for this function. In the improved TS all information pertaining to the RTS instrument functions appear on Table 3.3.1-1. This change is administrative and consistent with the STS.

3.3.1.17 Reactor Trip Breakers (RTBs)

(9) A clarifying Note (Note k) has been added to the RTB function. Note k specifies that RTB bypass breakers racked in and closed are included in the instrument function to meet the LCO requirement for 2 trains. The bypass breakers are counted as one of the required trains and all

The power operation requirements of the

by this specification, this deletion is an administrative improvement in the presentation of existing requirements. Therefore, removal of these redundant requirements is acceptable.

(26) CTS Table 3.3-3 Notation b, affecting the power operation setpoint of the containment area (ventilation isolation) radiation monitors, has been revised to delete the references to an initial setpoint and the first fuel cycle. The setpoint is ≤ 50 times background level during power operation. ~~This~~ Note ~~has~~ have been placed in corresponding Table 3.3.6-1 as Note (d) and the setpoint has been placed directly in the Trip Setpoint column. In addition, Note (d) states that the setpoint applies during MODES 1, 2, 3, and 4, and not just during power operation as currently required.

(7)

CTS Table Notation a has been retained as improved TS Table 3.3.6-1, Note (c), and states that the ≤ 15 mr/hr setpoint applies during CORE ALTERATIONS and movement of irradiated fuel assemblies within containment. These words clarify the intent of the existing requirement of "during refueling operations."

The revision to both of these Notes is considered an administrative clarification of the current requirements. It is, therefore, acceptable.

(27) CTS Table 3.3-3 Notation c references CTS 6.7.4.f.7 for the setpoint of the gaseous, particulate, and iodine monitors. Corresponding improved TS 5.5.4.h and 5.5.4.i replace CTS 6.7.4.f.7. This Note has been retained as Note (b) of improved TS Table 3.3.6-1 and has been revised to reference the new specification. This is purely an administrative change.

3.3.7 Control Room Emergency Filtration System (CREFS) Actuation Instrumentation

(28) CTS 3/4.3.2.10, ESFSAS Instrument Function 10, "CREFS," has been reformatted to conform to the presentation of STS 3.3.7, as indicated in Table 2-3. The new Required Channels column in improved TS Table 3.3.7-1 replaces the Minimum Channels OPERABLE column of corresponding CTS Table 3.3-2 for the CREFS actuation function. It has been is revised to match the format and presentation of the STS and also for the VEGP design (common control room, 4 100% capacity trains, with two air intakes, each monitored by a redundant set of radiation detectors). Since the CTS contains specific action requirements for up to 4 channels of actuation logic and 4 channels of radiogas monitors inoperable, a total of 4 of each of these channels is specified to be OPERABLE in the table. The Note "(2 per unit)" has been added to clarify that the total number is made of 2 redundant sets of channels. Current licensing basis only requires a total of 1 manual initiation channel operable (each train is

Subsection 3.2.3.6 of Part III of this safety evaluation. In addition, the new ACTIONS contain two other Notes that clarify existing requirements. Note 2 allows each air lock to be treated independently in the ACTIONS. And Note 3 requires entering the containment specification action requirements if air lock leakage exceeds the overall containment leakage rate limit, L_a. Because these Notes are consistent with existing requirements and plant operating practices, these changes are purely administrative.

(4) CTS 4.6.1.1.b has been deleted because it requires verifying compliance with the requirements of CTS 3/4.6.1.3 for the containment air locks, which is redundant and unnecessary. In addition, no Frequency for this surveillance is specified. This change is purely administrative because the appropriate CTS OPERABILITY requirements, ACTIONS, and Surveillance Requirements for the air locks have been retained in corresponding improved TS 3.6.2.

(5) The acceptance criteria for air lock seal leak testing contained in CTS 4.6.1.3.a (seal leakage is less than 0.01 L_a when measured for at least 30 seconds at a constant pressure of 37 psig) has been moved to improved TS 5.5.17, "CLRT Program." This change is purely administrative and conforms to the STS presentation of these requirements ~~when~~ considering that Option B of Appendix J ~~has been adopted~~ will have been adopted at improved TS implementation.

(8)

3.6.3 Containment Isolation Valves (CIVs)

(6) CTS 4.6.1.1.a and associated Note *, to verify inoperable penetrations are isolated, have been reworded and moved to improved TS 3.6.3. CTS 4.6.1.1.a has become SR 3.6.3.3 for manual valves and blind flanges outside containment, and Note * (except for the last sentence) has become SR 3.6.3.4 for manual valves and blind flanges inside containment.

In addition, the requirement of the last sentence of CTS 4.6.1.1.a, to verify penetrations isolated by de-activated automatic valves, has been moved to ACTION A of improved TS 3.6.3 as Required Action A.2. This presentation clarifies and directly connects the verification of de-activated automatic valves to an inoperable isolation valve. By making this verification a Required Action, the potential to miss a required verification, resulting from an inoperable automatic isolation valve that is not part of the plant procedure for SR 3.6.3.3, has been reduced. This change in presentation of these existing requirements is purely administrative.

(7) The last sentence of Note * to CTS 4.6.1.1.a, regarding the blind flange on the fuel transfer canal, has been retained as Note 2 of improved TS SR 3.6.3.4, for verifying isolation devices inside containment. This is

a plant-specific Note that is consistent with the CTS. In addition, editorial changes for clarity and conformance to the STS presentation of Notes have been made. This change is purely administrative because the existing level of restriction has been retained.

(8) The requirements of CTS 3/4.6.1.7 for containment ventilation isolation valves have been placed with the requirements of CTS 3/4.6.3 for all other CIVs in improved TS 3.6.3, "Containment Isolation Valves." This change places all containment isolation valves in one specification and is consistent with the STS. This change to conform to the STS presentation of CIV requirements is purely administrative.

(9) Four Notes have been added to the ACTIONS of CTS 3/4.6.3 and CTS 3/4.6.1.7 which have been combined in improved TS 3.6.3, and which apply to all containment isolation valves, including the containment purge and exhaust valves. Note 1 provides an allowance to open containment isolation valves required to be closed (except for the 24" purge valves) under administrative controls. (This relaxation of the current requirements, which contain no provision for unisolating inoperable penetration flow paths under administrative control, is also discussed in Subsection 3.2.3.6 of Part III of this safety evaluation.) Notes 2, 3, and 4 are purely administrative changes because they only clarify the intent of the existing requirements. These clarifications are (a) to treat each penetration flow path separately, (b) to enter the affected system specification made inoperable by isolation of containment penetration flow paths in accordance with the ACTIONS of Specification 3.6.3, and (c) to enter Specification 3.6.1 if CIV leakage exceeds containment leakage limits.

3.1.3.7 Plant Systems

Current plant system specifications that have been retained in the improved TS have been administratively reformatted and reorganized to conform to the presentation of STS Section 3.7, as indicated in Table 2-7. Discussions of the administrative changes that are significant follow. The improved TS plant system specification is given in italics before the discussion or discussions that apply.

3.7.1 Main Steam Safety Valves (MSSVs)

(9) (1) A note has been added to the ACTIONS of CTS 3/4.7.1.1, consistent with the STS, to clarify that each MSSV is to be treated separately. Because no technical change is involved, the addition of this Note is purely administrative.

(3) Removal of Applicability Condition of During Movement of Loads Over Irradiated Fuel

The requirements of several specifications in the CTS are applicable during the movement of loads over irradiated fuel. The licensee has proposed to delete such requirements from these specifications. These current specifications are listed under the corresponding specification(s) in the improved TS.

(4)

Improved TS 3.3.6, Containment Ventilation Isolation Instrumentation:
3/4.3.2.3.b → ~~3/4.3.2.2.b~~, ESFAS Instrumentation - Containment Ventilation Isolation; Table 3.3-2, Notation c; and Table 4.3-2, Note #
3/4.3.3.1.2, Radiation Monitoring for Plant Operations - Containment Ventilation; and Table 3.3-4, Notation a

Improved TS 3.3.7, Control Room Emergency Filtration System (CREFS) Actuation Instrumentation:
3/4.3.2.10, ESFAS Instrumentation - CREFS; Table 3.3-2, Notation e; and Table 4.3-2, Note #
3/4.3.3.1.3, Radiation Monitoring for Plant Operations - Control Room Air Intake; and Table 3.3-4, Notation b

3.7.12, CREFS - Both Units Shutdown:
3/4.7.6, CREFS (Common System)

3.8.2, AC Sources - Shutdown:
- 3/4.8.1.2, A.C. Sources - Shutdown; ACTION

Background: At VEGP, an overhead heavy load handling system (OHLHS) is defined in Section 9.1.5 of the FSAR as a system which lifts loads weighing more than the combined weight of a single spent fuel assembly and its handling tool. Anything weighing less than or equal to this (2300 pounds) is defined in Section 9.1.4 of the FSAR as a light load handling system (LLHS). LLHSs were not evaluated as heavy loads. With respect to movement of loads over irradiated fuel at VEGP, there are two areas of concern: the fuel handling building and containment.

Note that fuel handling accident analysis in FSAR Section 15.7.4 states that the fuel handling building post accident exhaust system is not required to function in order to maintain the releases from a fuel handling accident below acceptable levels. In addition, no credit is taken for filtration by the containment purge exhaust system during the brief period of time (about 10 seconds) before automatic isolation of the containment purge system.

Fuel Handling Building: Within the fuel handling building, there is the spent fuel cask bridge crane, the cask lifting device bridge crane, and

Control Room Habitability The preceding discussion addressed the potential offsite radiological consequences of dropping a load other than a fuel assembly onto irradiated fuel. However, the radiological impact on the control room environment following a load drop without actuation of the CREFS system must also be considered. The FSAR does not address this issue. Therefore, in the absence of an analysis of the potential radiation dose to plant operations staff in the control room, the licensee offered the following justification. The CREFS is a system that is common to both control rooms consisting of two full capacity trains from each unit. Therefore, CREFS is effectively a four train system. When one or both units are in MODE 1, 2, 3, or 4, or are conducting CORE ALTERATIONS or moving irradiated fuel, the CTS and the improved TS require all four trains to be OPERABLE. Therefore, control room habitability is only a concern in the event a load is dropped onto irradiated fuel when both units are shutdown in MODE 5 or 6 and the licensee is niether moving irradiated fuel nor conducting CORE ALTERATIONS. It is unlikely that these conditions would occur concurrently with all four CREFS trains being inoperable. Assumming that three trains could not operate at all and that the fourth train would not start automatically on a control room air intake radiogas actuation signal, manual initiation of CREFS would still be possible. Because of the strict administrative controls already in place for crane operation over irradiated fuel at VEGP, the operator will learn of the load drop immediately and would start CREFS within a very short time, minimizing the potential radiation dose above that which would be expected were CREFS to automatically start. To minimize the potential adverse radiological effect on control room habitability, the licensee committed to require by ~~plant administrative procedures~~ the TRM that at least one train of CREFS be capable of manual initiation during movement of loads over irradiated fuel in both the containment and refueling buildings.

(10)

Adminstrative Controls for Load Handling Load handling operations for loads that are or could be handled over or in proximity to irradiated fuel are controlled by written procedures. Each procedure addresses:

- The specific equipment required to handle load (e.g., special lifting device, slings, shackles, turnbuckles, clevises, load cell, etc.).
- The requirements for crane operator and riggers qualification.
- The requirements for inspection prior to load movement and acceptance criteria for inspection.
- The defined safe load path and provisions to provide visual reference to the crane operator and/or signal person of the safe load path envelope.
- Specific steps and proper sequence to be followed for handling load.

3.2.2 Nuclear Enthalpy Rise Hot Channel Factor ($F^N_{\Delta H}$)

(3) In conformance with STS 3.2.2, ACTION B, the requirement of CTS 3/4.2.3, ACTION b (second part), to reduce THERMAL POWER to less than 5% RTP (MODE 2) within the next 2 hours has been retained as improved TS 3.2.2, ACTION B, except that the Completion Time for reaching MODE 2 has been relaxed to 6 hours. This increase in Completion Time is reasonable based on operating experience regarding the time required to reach MODE 2 from full power conditions in an orderly manner and without challenging plant systems. This time provides a sufficient restriction, based on operating experience and the low likelihood of an event during this period, to avoid an undue risk to public health and safety.

(4) In addition, this action requirement now applies to any improved TS 3.2.2 Required Action that is not met within the associated Completion Time, not just to corresponding Required Action A.2 of improved TS 3.2.2.

3.2.3 Axial Flux Difference (AFD)

(4) VEGP is presently operated using the Relaxed Axial Offset Control (RAOC) methodology. The existing provision of CTS 4.2.1.1.a.2, to monitor AFD once per hour until the AFD monitor alarm is updated after restoration to OPERABLE status, is a holdover from the time when VEGP was operated using the Constant Axial Offset Control (CAOC) methodology. As such, CTS 4.2.1.1.a.2 has been relaxed to require the AFD to be monitored at least once per hour only while the AFD monitor alarm is inoperable, in improved TS SR 3.2.3.1.

Similarly, CTS 4.2.1.1.b also applies to use of the CAOC methodology. Thus this surveillance has also be deleted.

(5) ACTION a.2 of CTS 3/4.2.1 requires (a) reducing THERMAL POWER below 50% RTP and (b) reducing the power range neutron flux high trip setpoints to $\leq$ 55% RTP in the event AFD is outside its specified limits. The second requirement has been deleted in conformance with the ACTIONS of corresponding STS 3.2.3B. As documented in a letter dated September 5, 1990, from J. R. Hinds, Westinghouse Owners Group (WOG), to Jose A. Calvo, NRC, it was agreed that this action requirement may be deleted. Reducing THERMAL POWER below 50% RTP maintains the plant in a benign condition since under the RAOC methodology there are no AFD limits below 50% RTP. In addition, a rapid rise to greater than 50% RTP with AFD outside limits does not immediately create an unacceptable situation.

Since the transient analysis setpoint calculations for $f(\Delta I)$ (input to the overtemperature delta-T (OTDT) trip function) are based on the same core power distributions that the fuel designers use for a reload cycle design, the OTDT trip function should provide an acceptable level of protection for such an excursion.

Reducing the setpoints increases the likelihood of a reactor trip potentially challenging safety systems. Because the OTDT trip function provides adequate protection in the event of a power excursion above 50% RTP when the AFD is outside its limits, reducing the power range neutron flux high trip setpoints to ≤ 55% RTP is not justified.

3.2.4 Quadrant Power Tilt Ratio (QPTR)

(4) (6) In the event the QPTR exceeds its limit of 1.02 but remains ≤ 1.09, ACTION a.1 of CTS 3/4.2.4 requires QPTR to be calculated once per hour until either QPTR is restored to within its limit or until THERMAL POWER is reduced to < 50% RTP. This action requirement has been replaced by Required Action A.2.1 of improved TS 3.2.4, to calculate QPTR (i.e., perform SR 3.2.4.1) once per 12 hours until QPTR is restored to within its limit. The 12-hour interval for calculating QPTR while it is outside its limit is reasonable when coupled with the requirement of Required Action A.1 to reduce thermal power by 3% for each 1% QPTR exceeds 1.0, because any additional change in QPTR would be slow.

In the event the 12-hour verification identifies a change in QPTR warranting an additional power reduction, Required Action A.2.2 allows 2 hours to reach the new power level, similar to Required Action A.1. These proposed action requirements provide sufficient restriction, based on operating experience and the low likelihood of an event during this period, to avoid an undue risk to public health and safety. The existing requirement to calculate QPTR once per hour is, therefore, excessive. In addition, it could needlessly divert the attention of the control room staff from correcting the QPTR out-of-limit condition. Therefore, this change is acceptable.

(4) (7) In the event the QPTR exceeds its limit of 1.02 but ≤ 1.09, ACTION a.3 of CTS 3/4.2.4 requires --

- verifying restoration of the QPTR to within its limit within 24 hours, or
- reducing THERMAL POWER to less than 50% RTP within the next 2 hours, and
- reducing the power range netron flux - high trip setpoints to ≤ 55% RTP within the next 4 hours.

In addition, ACTION a.4 of CTS 3/4.2.4 requires --

- correcting the cause of the out-of-limit condition prior to increasing THERMAL POWER;
- verifying QPTR is within its limits at least once per hour for 12 hours subsequent to ~~[resuming]~~ resuming operation above 50% RTP or until verified acceptable at ≥ 95% RTP.

(4)

THERMAL POWER level, in turn, provides additional margin below the fuel design limits during conditions in which a radial tilt is indicated. This additional margin ensures that the fuel design limits are not challenged by local power peaking. The conservatism in these design margins provides additional assurance that operation at the reduced power level for the time required to achieve equilibrium plus 24 hours will not result in a challenge to the fuel design limits.

Finally, Required Action A.2.1 requires determining QPTR by calculation once per 12 hours to identify any increase from the initial value above 1.02 or any increase since the previous determination. This time is considered appropriate because the QPTR is not expected to change rapidly. Should an increase be detected, Required Action A.2.2 requires reducing power further, proportional to the increase, within 2 hours, the same as the Completion Time of Required Action A.1.

Required Actions A.4, and A.5 Prior to increasing thermal power above the limit based on the amount that QPTR exceeds 1.0 (specified by the more limiting of Required Action A.1 and A.2)--

- Required Action A.4 specifies confirming that the safety analysis results remain valid for the duration of operation under the change in core radial power distribution that resulted in QPTR exceeding its limit.

- Once A.4 is completed, Required Action A.5 requires recalibrating the excore detectors to show zero tilt to enable detection of any subsequent changes in QPTR.

These two action requirements provide assurance of safe operation above the limit of Required Action A.1 or A.2.2, and provide an operational restriction equivalent to that of CTS 3/4.2.4 ACTION a.4 (first part).

(11)

Required Action A.6 Within 24 hours after reaching RTP or within 48 hours after exceeding the limit of Required Action A.1 or A.2.2, whichever occurs first, Required Action A.6 specifies reverifying the peaking factors are within limits. This is necessary following recalibration of the excore detectors to show QPTR equals 1.0.

(4)

These action requirements are sufficient to ensure that resuming operation above 50% RTP will not pose an undue risk to public health and safety. Thus, the requirement of CTS 3/4.2.4 ACTION a.4 (second part) to verify QPTR is within its limit once per 12 hours, subsequent to operation above 50% RTP, until QPTR is verified acceptable at THERMAL POWER ≥ 95% RTP, is overly restrictive, and may be deleted.

Required Actions A.1 through A.6 will ensure that the unit continues to operate within the envelope of the safety analyses in the event QPTR

(8) The CTS 3.2.4 limit of 1.09 for QPTR has been deleted to conform to the STS. CTS 3/4.2.4, ACTIONS b and c, which are based on QPTR exceeding 1.09, have also been deleted.

ACTION b applies to QPTR in excess of 1.09 due to misalignment of a shutdown rod or a control rod. This action requirement is no longer necessary to be contained in the QPTR specification because improved TS 3.1.4, "Rod Group Alignment Limits," in combination with the requirements of improved TS 3.2.4, "QPTR," adequately addresses this condition.

CTS ACTION c, which applies to QPTR in excess of 1.09 due to causes other than the misalignment of either a shutdown rod or a control rod, contains the following requirements, which are similar to those of CTS ACTION b:

- ACTION c.1 requires calculating QPTR each hour until either QPTR ≤ 1.02 or THERMAL POWER is ≤ 50% RTP.

- ACTION c.2 requires reducing THERMAL POWER to ≤ 50% RTP within 2 hours as long as QPTR remains above 1.02, and also reducing the power range neutron flux - high trip setpoint.

- ACTION c.3 requires correcting the cause of the out-of-limit condition prior to increasing power, plus additional hourly determinations for 12 hours or until verified within limit with THERMAL POWER above 95% RTP.

(4) In contrast, improved TS 3.2.4 Required Action A.1 (or A.2.2) would require reducing THEMAL POWER to ≥ 3% below RTP for each 1% (that is 0.01) of QPTR ≥ 1.00 within 2 hours. Thus if QPTR were 1.09, THERMAL POWER must be reduced to ≤ (100% - 9X3) or ≤ 73% RTP within 2 hours. This is less restrictive than the CTS action requirement. (Note that the CTS and the improved TS power reduction requirements are equivalent when QPTR reaches approximately(1.00 + 0.50/3) or about 1.17.) The 2-hour Completion Time to reduce power is considered acceptable because, in the case of QPTR out of limit for causes other than a misaligned rod, the core tilt will occur gradually over an extended period of time. Also, in most cases, to achieve the specified power reduction within 2 hours, the operators would have begin reducing power within a short time after QPTR exceeds the limit of 1.02 (the QPTR alarm setting). This power reduction will immediately act to mitigate the tilt by increasing margin to the conservatively-set fuel design limits ensuring that these limits are not challenged by local peaking. Thus, operation at the reduced power level for the time required to achieve equilibrium conditions so that QPTR can be accurately determined will not result in a challenge to the fuel design limits. Therefore, the CTS conservative

(4) action of reducing power to ≤ 50% RTP within 2 hours results in a

instrument functions in the CTS previously evaluated in WCAP-10271 and accepted by the NRC. (See discussion (12) above.) Therefore, the changes in the COT Frequencies justified in WCAP-10271 are applicable to the semi-automatic switchover to containment emergency sump function generated by the RWST level low-low signal coincident with safety injection. This is based on the small increase in signal unavailability and a comparison to unavailability changes for other signals specifically evaluated in WCAP-10271 and accepted by the NRC.

3.3.3 Post Accident Monitoring (PAM) Instrumentation

(17) The requirements of CTS Table 3.3-8 for condensate storage level have been revised to only require two channels for the OPERABLE tank as opposed to requiring two channels per tank (implying 2 OPERABLE channels of level indication are required for the other, potentially inoperable, tank). At VEGP, only one condensate storage tank (CST) is required to be OPERABLE at any given time. There is no need to require two channels of level instrumentation for the tank that is not required to be OPERABLE. This is consistent with improved TS 3.7.6, "CST," which only requires one CST to be OPERABLE.

(18) CTS 4.3.3.6.2 requires a CHANNEL CALIBRATION of the containment hydrogen concentration monitors at least once per 6 months on a STAGGERED TEST BASIS (current definition). This surveillance has been revised to be consistent with the improved TS CHANNEL CALIBRATION surveillance for the other PAM instrumentation channels, improved TS SR 3.3.3.2. The improved TS require the CHANNEL CALIBRATION of both containment hydrogen concentration monitor channels every 18 months, consistent with the STS, and also the CHANNEL CALIBRATION Frequency of RTS and ESFAS instrumentation channels. In addition, the hydrogen monitors only provide indication of hydrogen concentration in containment. They are not required during or immediately after a design basis accident because peak hydrogen concentrations would not be reached until several days after a worst case DBA, as described in the Bases for improved TS 3.6.7, "Hydrogen Recombiners." Should the monitors fail, manual sampling would be still available to monitor hydrogen concentration. Therefore, the 18-month CHANNEL CALIBRATION Frequency is acceptable.

3.3.4 Remote Shutdown System (RSS)

(19) ACTION a of CTS 3/4.3.3.5.1 requires restoring the OPERABILITY of an inoperable remote shutdown monitoring channel in 7 days. This action requirement has been replaced by ACTION A of improved TS 3.3.4. ACTION A requires restoring the OPERABILITY an inoperable function, not just a channel, and allows 30 days to do so. The 7-day Completion Time for individual channels no longer applies. The 30 day Completion Time is

appropriate based on industry operating experience and the low probability of an event that would require the evacuation of the control room. Therefore, this change in the RSS action requirements, which conforms to the STS, is acceptable.

(20) The requirement of CTS 3.3.3.5.2, to be capable of using the remote shutdown panels to control the residual heat (RHR) removal system for removing decay heat, has been deleted, consistent with the STS. The RHR system is not placed into service until MODE 4, which is outside the Applicability of the RSS specification. Only the auxiliary feedwater (AFW) system and at least one steam generator are required for achieving MODE 3 from outside the control room. Thus, control of RHR system components from the RSS panels is not necessary. Therefore, the requirement for this capability to be OPERABLE may be deleted.

(12) (21) The required channels of condensate storage tank (CST) level instrumentation in CTS Table 3.3-7 for the RSS has been revised from two channels to one channel per tank for the OPERABLE tank in improved TS Table 3.3.4-1. Upon implementation of the design modification, Improved TS 3.7.6 only requires one CST to be OPERABLE, so only the channel for that tank needs to be OPERABLE.

3.3.5 4.16 kV ESF Bus Loss of Power (LOP) Instrumentation

(22) The time allowed to bypass a loss of power (LOP) channel has been increased from 2 hours, as given in ACTION 29a of CTS Table 3.3-2, to 4 hours in ACTION A of improved TS 3.3.5, consistent with the STS and all other similar bypass time limits used in the TS. The additional 2 hours allows a more reasonable time to perform surveillances. The affected instrument function consists of 4 channels configured in a 2/4 logic. The allowance to bypass an inoperable channel allows another channel to be tested in the trip condition. The resulting instrument function logic, 1-out-of-2, still retains the capability to withstand a single failure.

The proposed increase in the time allowed for testing in bypass is based on a comparison with other instrumentation that has been specifically analyzed for the risk significance of allowing a channel to be bypassed for up to 4 hours for testing. Examples of RTS instrument functions where 4 hours are currently allowed for testing in bypass are:

Power Range instrumentation - 2/4 logic
Overtemperature delta T - 2/4 logic
Overpower delta T - 2/4 logic
Pressurizer Pressure - High - 2/4 logic
Pressurizer Pressure - Low - 2/4 logic
Steam Generator Water Level - Low - 2/4 logic

failure of Train B (single failure) and delay of filtration of the control room air (supply and recirculation) until the lag train (Train A) is fully functioning. Therefore, starting either Train A or B in the event of inoperable CREFS actuation instrumentation will be consistent with the accident analyses. The proposed change will provide additional flexibility in that it will allow the train with shortest run time on the filters to be used. Therefore, deletion of this Note is acceptable.

This same Note occurs in CTS 3/4.7.6, CREFS, and has been deleted from corresponding improved TS 3.7.10 for the same reasons just described.

3.3.8 High Flux at Shutdown Alarm

(31) CTS RTS instrumentation function 6.b, "Source Range Neutron Flux Shutdown," references ACTION 5 of CTS Table 3.3-1. ACTION 5 contains the requirement that valves 1208-U4-175, 1208-U4-176, 1208-U4-177, and 1208-U4-183 be closed and secured in position ~~whenever the RCS is in MODE 5 with the loops not filled, MODE 6, and~~ whenever less than the required source range instrumentation is operable. Corresponding STS 3.3.9, "Boron Dilution Protection System," which is supported by this instrument function, only specifies that any valve used to isolate unborated water sources be closed and secured in position, but does not specify which valves must be used for isolation. It is implicit that the applicable valves are specified in plant procedures. Thus, the licensee has proposed to adopt the STS requirement for isolating unborated water sources in corresponding improved TS 3.3.8, "High Flux at Shutdown Alarm (HFASA)," which is applicable in MODES 3, 4, and 5. Specification 3.3.8, Required Action B.2, will require verifying that the unborated water source is isolated within 4 hours in the event an HFASA instrument channel is inoperable for 48 hours or upon both channels becoming inoperable. This is a less restrictive requirement because the TS will no longer be specific as to which valves must be used to isolate unborated water sources. However, the change is acceptable because plant procedures will require that at least one valve in each flow path from the reactor makeup water storage tank (RMWST) (the RMWST is the unborated water source at VEGP) to the suction of each charging pump be closed and secured in position. Administrative controls will ensure that these valves are maintained closed when required. The fact that the TS will continue to require that the isolation valves be secured in position will ensure that the valves are not inadvertently opened.

The existing VEGP TS requirements are overly restrictive because (a) other valves besides the four specified in the CTS can be used to effectively isolate the RMWST, and (b) the four valves specified provide double isolation of each flow path. This double isolation coupled with the requirement that each valve be secured in position would effectively

required by improved TS 5.6.6. CTS 3.4.9.1 has been retained as improved TS LCO 3.4.3 which requires maintaining the RCS P/T values within the limits specified in the PTLR instaed of these CTS Figures.

CTS 3/4.4.9.1 addresses P/T limits associated with parameters that may change with reactor vessel fluence, requiring processing of changes to the TS to update these limits for each reactor vessel fluency period. It is essential to safety that the unit be operated within the bounds of the RCS P/T limits, and that the overpressure protection system power operated relief valve (PORV) setpoints be set to appropriate limits. Additionally, it is essential to safety that a requirement to maintain the unit within the appropriate P/T bounds be retained in the TS. However, the specific values of these limits may be modified by licensees, without affecting safety, provided the changes are made in accordance with an NRC approved methodology.

(14) The PTLR will contain the specific values for these parameters, and the methodology used to calculate these values will be contained in WCAP-14040, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and RCS Heatup and Cooldown Curves." The PTLR will be submitted to the NRC in accordance with improved TS 5.6.6.c.4. In addition, the words "during heatup, cooldown, criticality, and inservice leak and hydrostatic testing" will be deleted since they are redundant to the Applicability of improved TS 3.4.3 of "At all times."

Because the NRC has approved the methodology for updating the RCS P/T limits for VEGP, the PTLR update for each reactor vessel fluency period must be provided ~~for~~ NRC ~~review,~~ and the requirement to operate the units within the required boundaries has been retained in improved TS 3.4.3, this change is acceptable. (15) to the

(4) Required Action C.1 requires initiating action immediately to restore P/T prameter(s) to within limits, instead of the existing requirement to restore the parameter(s) within 30 minutes. Requiring initiation of restoration action immediately is less restrictive than specifying when restoration action must be completed. The proposed Completion Time is acceptable because most violations are not anticipated to be severe, the plant is in MODE 5 or 6, and the new action requirement will allow restoration to be accomplished in a more controlled manner.

3.4.7 RCS Loops - MODE 5, Loops Filled

(5) Improved TS LCO 3.4.7 Note 4 has been added to corresponding CTS 3.4.1.4.1 to allow all RHR loops to be removed from operation during planned heatup to MODE 4 when at least one RCS loop is in operation. This is acceptable since the running RCS loop provides sufficient heat removal capability, while the RHR loops remain OPERABLE should they be needed. This also facilitates an orderly transition from MODE 5 to MODE 4.

(15) The first revision to the PTLR after initial implementation of the PTLR will be submitted to the NRC for prior review and approval. Subsequent revisions may be made without prior approval.

3.4.10, this allowance is restricted to one valve out of service at a time for lift setting. Considering the importance of adjusting the setpoints of these valves under conditions similar to their normal operating conditions (for accurate lift settings) and the limitations provided in the Note, this allowance is reasonable and beneficial to plant operational safety. Therefore, this Note is acceptable.

3.4.11 Pressurizer Power Operated Relief Valves (PORVs)

(9) The ACTIONS of CTS 3/4.4.4 for the PORVs are differentiated by whether the PORV is inoperable because of seat leakage (ACTION a), or for other reasons (ACTION b). The ACTIONS of improved TS 3.4.11 are grouped not according to seat leakage, but according to whether the PORV is (ACTION A) or is not (ACTIONS B and E) capable of being manually cycled. At VEGP, the PORVs are required for manual actuation only. No automatic function is assumed for these valves in any DBA or transient analysis. The PORVs may be considered inoperable for many reasons. However, if the valve can be manually cycled, the safety function is available. Focusing on the capability for manual operation is consistent with the PORV design and the safety analysis.

However, this results in less restrictive action requirements for a PORV that is inoperable for reasons other than seat leakage and loss of manaul actuation capability. ~~For example, if the PORV is inoperable because it is incapable of automatic operation,~~ In this case, CTS ACTION a would not apply, but ACTION b would apply, and it would require within an hour closing and removing power from the associated block valve. However, improved TS ACTION A would apply to this Condition, and would only require closing the associated block valve. This action is more appropriate since the manual actuation capability has not been lost. Therefore, the change in the focus of the ACTIONS on the OPERABILITY of the manual actuation function is acceptable.

(16)

(30) (10) CTS 4.4.4.1.b, to perform a CHANNEL CALIBRATION on the PORVs every 18 months, has been removed from the CTS, ~~and placed in plant procedures.~~ This surveillance is not needed because the automatic operation of the PORVs is not assumed in the VEGP accident analyses for MODES 1, 2, or 3. This surveillance is also not contained in the STS.

3.4.12 Cold Overpressure Protection System (COPS)

(11) The requirement of CTS 4.4.9.3.1.a, to perform an ANALOG CHANNEL OPERATIONAL TEST (ACOT) on the power operated relief valve (PORV) actuation channel within 31 days prior to entering a condition in which the PORV is required to be OPERABLE (entering MODE 4 from MODE 3), has been replaced by a requirement to perform the CHANNEL OPERATIONAL TEST (COT) within 12 hours after decreasing RCS cold leg temperature to ≤

be based on an RCS water inventory balance or by containment radioactivity (or both) plus a containment inspection. Continued operation with an inoperable sump monitor in accordance with ACTION A is acceptable because timely detection of RCS LEAKAGE is ensured by the diversity of the indication provided by the two remaining sump monitors, the radioactivity monitors, and/or containment cooler condensate flow rate, in addition to the daily performance of the RCS water inventory balance.

In the event two or more sumps are unmonitored, however, ACTION B, allows 30 days to restore at least two sumps to monitored status, again provided an RCS water inventory balance is performed once per 24 hours. The 30-day Completion Time is acceptable because the daily RCS water inventory balance and the other available RCS LEAKAGE detection systems are sufficient to detect RCS LEAKAGE.

Two RCS LEAKAGE Detection Systems Inoperable: In the event only one system is OPERABLE, CTS 3.0.3 would require a plant shutdown. The proposed ACTIONS, however, may be combined in accordance with Section 1.3, "Completion Times," and, therefore, would permit operation to continue for up to 30 days before ACTION F would require a unit shutdown. In particular

- With only the three sump level monitors OPERABLE, the ACTIONS require on a daily basis either an RCS water inventory balance or obtaining and analyzing a grab sample of the containment atmosphere.

(17)

- With only one of the two required radioactivity monitors and less than three sump level monitors OPERABLE, the ACTIONS require on a daily basis an RCS water inventory balance.

- With only the containment air cooler condensate flow rate monitor and less than three sump level monitors OPERABLE, the ACTIONS require on a daily basis an RCS water inventory balance.

The 30-day Completion Time is acceptable because the daily RCS water inventory balance is sufficient to detect RCS LEAKAGE, and because other diverse means of detecting RCS LEAKAGE are still available.

No OPERABLE RCS LEAKAGE Detection Systems: In the event all the required RCS LEAKAGE detection systems are inoperable, ACTION G requires immediate entry into LCO 3.0.3, which is consistent with the CTS. This ACTION would apply even if two of the three containment sump level monitors were still OPERABLE. A daily RCS water inventory balance is not sufficient compensation for operation with an unmonitored sump and no other means of automatically detecting RCS LEAKAGE.

of the interlock. Consequently, an 18-month Frequency for testing the interlock is considered sufficient to ensure proper operation of the interlock when challenged by personnel error. Therefore, this change is acceptable.

3.6.3 Containment Isolation Valves (CIVs)

(12) A Note has been added to CTS 4.6.1.1.a and Note * in the corresponding valve and blind flange surveillance requirements (SR 3.6.3.3 for manual valves and blind flanges outside containment, and SR 3.6.3.4 for manual valves and blind flanges inside containment, respectively). The Note allows verification of valves and blind flanges located in high radiation areas by use of administrative means. This is considered acceptable because access to these areas is restricted for ALARA reasons. Therefore, the probability of these devices becoming misaligned, once they have been initially verified in the proper position (by other than administrative means), is small. Therefore, this Note, which is consistent with the STS, is acceptable.

(13) Note 1 to the ACTIONS of improved TS 3.6.3 provides a new allowance to intermitently open containment isolation valves, required by the ACTIONS to be closed (except for the 24" purge valves), under administrative controls. This is acceptable because the administrative controls consists of a dedicated operator at the valve in continuous communication with the control room. This control provides protection equivalent to the automatic isolation function. The large purge valves are excluded due to size and the direct flow path from inside containment to the outside. Note 1 offers flexibility for conducting testing and repair of inoperable CIVs while maintaining sufficient restrictions through the requirement for administrative controls to ensure the isolation function will be accomplished if needed. Therefore, Note 1 is acceptable.

It should be noted that Note * to CTS 3.6.3 regarding this same allowance for the containment hydrogen monitors is considered to be included in the allowance specified by Note 1.

(14) CTS 3.6.1.7.b has been retained as improved TS SR 3.6.3.2 with an added allowance to open the 14-inch purge valves under administrative control for purge or venting operations and for post-maintenance testing on the purge and exhaust system. The various activities that may be performed under administrative controls are described in the Bases discussion of improved TS SR 3.6.3.2. This includes those activities currently listed in CTS 3.6.1.7.b and the additional activity of maintenance testing. This provision will facilitate troubleshooting and testing of the mini-purge fans in order to maintain the capability of the fans to support ALARA and respirable air quality considerations for personnel entry.

3.7.5 Auxiliary Feedwater (AFW) System

(6) The VEGP turbine-driven AFW pump is equipped with redundant steam supply lines. Either line will meet 100% of the steam requirements for the turbine-driven AFW pump. However, CTS 3/4.7.1.2 does not credit this redundancy. Under the CTS, if a steam supply line were inoperable, the turbine-driven AFW pump would be considered inoperable, and ACTION a of CTS 3/4.7.1.2 would allow 72 hours to restore the pump to OPERABLE status. The licensee has added improved TS ACTION A to the AFW system action requirements to address the redundancy of the steam supply lines to the turbine-driven AFW pump. ACTION A of improved TS 3.7.2 allows 7 days to restore an inoperable steam supply line. The Completion Time of 7 days is based on the availability of the redundant OPERABLE steam supply line, the availability of 2 redundant OPERABLE motor-driven AFW pumps, and the low probability of an event occurring during this time that would require the inoperable steam supply line. Therefore, this change is acceptable.

(7) The details of AFW pump performance data in CTS 4.7.1.2.1..a.1) and 4.7.1.2.1.a.2) have been moved to the plant procedures that implement ~~the~~ this surveillance requirement, consistent with the STS. The revised wording of the surveillance, improved TS SR 3.7.5.2, acknowledges that the pump performance may be verified at other points (beside recirculation flow) on the head curve, and allows plant procedures to define appropriate point(s) on the head curve to verify, consistent with the IST program requirements. Note that this change falls under less restrictive change type 3 as defined in the general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.

(4)

(8) CTS 4.7.1.2.1.b.1), the surveillance for verifying automatic valve actuations in the AFW system, has been revised consistent with the STS to exempt valves from the required testing if those valves are normally locked or sealed in position such that they are not required to actuate to perform their safety function. This is acceptable because the AFW system can still perform its safety function.

3.7.10 Control Room Emergency Filtration System (CREFS) - Both Units Operating;
3.7.11 CREFS - One Unit Operating; and
3.7.12 CREFS - Both Units Shutdown

(9) ACTION D of improved TS 3.7.10, ACTION F of improved TS 3.7.11, and ACTION F of improved TS 3.7.12, for control room air temperature not within limits, have been added to the corresponding ACTIONS of CTS 3/4.7.6 for the CREFS. CTS 3/4.7.6 contains a surveillance to verify

time per fuel cycle Completion Time of either 14 days or 21 days in ACTION H are acceptable given the combination of the Wilson switchyard high reliability, the 97 percent availability of the combustion turbine facility. for electrical generation, along with the weather tolerant direct buried power line capable of supplying emergency power to any of the VEGP ESF buses, and the resulting reduction in CDF.

(19)

ACTIONS B and C In the event one DG is discovered to be inoperable, ACTION B, consistent with the STS and CTS, allows 72 hours days to restore the DG to OPERABLE status. However, if the SAT is available (not being used as an offsite AC source or in place of another inoperable DG, and is OPERABLE), then ACTION C would apply instead, and would allow 7 days to restore the DG to OPERABLE status. This Completion Time is less restrictive but is acceptable for the reasons given above.

However, if while in Condition C, the SAT becomes unavailable, then Note 2 of Condition C requires initiating operation in accordance with Condition B "concurrently immediately" and also to continue operation in accordance with Condition C. Thus, Condition C would not be "exited" (which would reset the associated Completion Times). If the SAT were not made available before the 3-day Completion Time of ACTION B or the 7-day Completion Time of ACTION C expired, whichever occurs first, then a unit shutdown would be required by ACTION I.

(20)

ACTIONS B and H As stipulated in Notes 1 and 2 of Condition H, once each refueling cycle ~~with prior planning~~, the licensee may take each DG out of service in accordance with ACTION H, ~~solely to perform the manufacturer's recommended 18-month DG preventive maintenance~~, in lieu of either ACTION B or C, provided the SAT is available as a standby source in place of the affected DG. Required Action H.4 allows 14 days to restore the DG to OPERABLE status for the cyclic preventive maintenance for each DG. However, for one DG per unit per cycle, the Note preceding the second Completion Time of Required Action H.4 allows this maintenance to be replaced by the performance of what the licensee describes as the "25% teardown maintenance." For this more extensive preventive maintenance, which is ~~only~~ normally expected to be performed once per 10 years for each DG, a Completion Time of 21 days has been specified. The 14-day and 21-day Completion Times allow sufficient time, based upon previous DG overhaul maintenance experience, to properly perform the necessary work, and includes some time to correct any unanticipated problems. These Completion Times are acceptable because (a) the DG outage is intended to be a planned activity, (b) the use of ACTION H is limited to once per cycle per DG thus it is infrequent, and (c) the SAT is an acceptable standby AC source in place of the affected DG during these time periods, as descibed above. In addition, these Completion Times are acceptable because (d) they are measured from the

(21)

provided adverse indications don't warrant the "25% teardown maintenance" at an increased frequency in accordance with the manufacturer's recommended maintenance program

time of initial failure to meet the LCO. As such, it is unlikely the licensee would initiate a DG overhaul and operation in accordance with ACTION H if any other AC Sources or other opposite train safety systems were inoperable.

In the event the SAT becomes unavailable while operating in accordance with ACTION H, Note 4 of Condition H requires initiating operation in accordance with Condition B "concurrently immediately" and also to continue operation in accordance with Condition H. Thus, Condition H would not be "exited" (which would reset the associated Completion Times). If the SAT were not made available before the 3-day Completion Time of ACTION B or the 14-day (21-day) Completion Time of ACTION H expired, whichever occurs first, then a unit shutdown would be required by ACTION I.

Because Conditions C and H are stated identically, i.e., "One DG inoperable AND SAT (common system) unavailable,"

ACTIONS C and H

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do not apply to

Note 1 to Condition C and Note 2 to Condition H specifiy that when the provisions of ACTION H are being used for maintenance on a DG, then the provisions of ACTION C ~~can not be used for~~ the same DG concurrently. ~~Generally, it would not be permitted following discovery of an inoperable DG with the SAT available an entry into Condition C, to subsequently enter Condition H to accomplish the cyclic overhaul of the DG, in addition to completing the DG corrective maintenance, for the purpose of avoiding a unit shutdown when the 7-day Completion Time of Required Action C.4 expires.~~ Condition H is intended to be used ~~solely~~ for ~~previously scheduled~~ DG ~~cyclic preventive~~ maintenance and design changes which will require greater than the 7-day Completion Time of Condition C.

extensive

ACTIONS A, B, C, and H

Required Actions A.3, B.4, and C.4 have a second Completion Time that is measured from the time of initial failure to meet the LCO. For Required Actions A.3 (to restore an inoperable offsite AC source) and B.4 (to restore an inoperable DG), a 6-day Completion time is specified and is based upon the 72-hour Completion Time for each of these Required Actions. The purpose of the 6-day Completion Time is to limit continuous operation with the LCO not met to the sum of their respective 72-hour AC source allowed outage times. Similarly, if the SAT is available, Required Action C.4 specifies a 10-day Completion Time, which is the sum of the 7-day Completion Time of Required Action C.4 for an inoperable DG and the 72-hour Completion Time for an inoperable offsite AC source.

These Completion Times are considered to be additional operational restrictions, as explained in discussion (3) in Subsection 3.3.3.8 of Part III of this safety evaluation. However, the adoption of ACTIONS C and H created a potential conflict regarding the use of the 6-day Completion Times for Required Actions A.3 and B.4. In the event the

load being rejected is well within the rating of the transformers, switchgear, and breakers. Furthermore, the current reversal resulting from a DG full load rejection does not affect the protective relays (differential or overcurrent) of the reserve auxiliary transformer (RAT), the standby auxiliary transformer (SAT) (if being used as an offsite circuit), or the ESF bus. The resulting voltage transient from the full load rejection is not significant (-2.3% on the ESF bus as verified by test, which is acceptable).

(23) The 24 hour run will start and operate the DG in the same manner as the current monthly surveillance that is performed at power. Although the DG will be operated in parallel with the grid for a longer period than the monthly surveillance, the normal DG protection features will be in service and will operate to provide the appropriate protective function in the event of a grid disturbance. During the 24 hour run, the DG is loaded to 110%, which is more than the current monthly testing load, but is consistent with the DG rating and well within the rating of the transformers, switchgear, and breakers. In addition, the performance of the 24 hour run in and of itself will not cause perturbations to the electrical distribution systems. The allowance to perform the 24 hour run at power does not preclude the use of procedural controls to ensure the test is not performed or is terminated if grid conditions become unstable or if grid stability is threatened (approaching storms etc.).

For a 2-hour period

Finally, the hot restart test of the DG will have no impact if performed during power operation because the DG does not connect to the ESF bus during this test. Verification of the capability of the fuel oil transfer system will also not impact DG OPERABILITY. Thus, it also will have no impact if performed during power operation.

Based on the preceding discussion, deletion of this performance restriction from these surveillances is acceptable.

(8) The required load of 7000 kW specified in CTS 4.8.1.1.2.h.3 (DG full load rejection test) has been revised to the load range of 6800 kW to 7000 kW to provide an acceptable range that still meets the objective of the full load rejection test. This change is consistent with the STS which specifies a kW range for the performance of this test. Since 6800 kW is still above the full load of a DG, this change it is acceptable.

(9) CTS 4.8.1.1.2.h.7, the DG 24-hour full load run surveillance, contains specific time, voltage, and frequency criteria that must be satisfied when starting the DG for the 24-hour run. These criteria are identical to those contained in CTS 4.8.1.1.2.g.1, the 6-month DG start test from ambient conditions, and CTS 4.8.1.1.2.h.5, the 18-month test of the DG to start on an ESF actuation signal without a loss of offsite power. Because these surveillances, which have been retained as SR 3.8.1.7 and SR 3.8.1.11, adequately demonstrate the capability of the DG to meet

electrolytes in representative cells. Therefore, the remaining surveillances continue to provide adequate assurance of battery OPERABILITY.

(15) The requirement of CTS 4.8.2.1.c.2, to verify terminals "clean and tight," applies only to nickel cadmium batteries, which are not installed at VEGP. This is based on the reviewers note in the STS Bases for corresponding STS SR 3.8.4.4 and IEEE Standard P1106. In addition, verification of tightness may result in unnecessary stress to each connection when torque is applied to confirm tightness. If the connections satisfy the resistance requirements of CTS 4.8.2.1.c.3 (improved SR 3.8.4.5) (performed at the same 18-month Frequency) they can be assumed to be sufficiently torqued. Therefore, it is acceptable to delete this requirement.

3.8.5 DC Sources - Shutdown

(16) Since improved TS LCO 3.8.5 requires supplying power to all required loads, if one or more required DC loads are not being supplied, the DC source is considered inoperable. This represents an additional restriction on plant operation as described in discussion ( ) of Subsection 3.3.3.8 of Part III of this safety evaluation. However, in this event, it may not be necessary to suspend CORE ALTERATIONS, movement of irradiated fuel, or positive reactivity additions. Plant safety would also be ensured by declaring inoperable all required equipment without DC power and taking the specified ACTIONS of the governing specifications. This option is given by Required Action A.1.1 of improved TS 3.8.5. Adopting this optional provision is considered to be less restrictive because it offers additional flexibilty in responding to an inoperable DC source. Therefore, this change, which is consistent with the STS and the ACTIONS of improved TS 3.8.2 for AC sources in MODES 5 and 6, is acceptable.

3.8.6 Battery Cell Parameters

(17) Consistent with the STS, Note (a) of improved TS Table 3.8.6-1 has been added to corresponding CTS Table 4.8-2 which specifies the battery cell parameter limits. This Note provides an allowance for the electrolyte level to temporarily increase above the maximum level during equalizing charges provided it does not overflow. This level excursion is acceptable since it is due to gas generation during the charge and is expected to return to normal after the charge.

(18) Notes (1) and (2) of CTS Table 4.8-2 have been combined in new Specification 3.8.6, "Battery Cell Parameters," as ACTION A. A 31-day Completion Time has been adopted, consistent with the STS, for restoring

additions. CTS would allow the plant to remain between P-6 and P-10 with a single channel inoperable.

3.3.1.16.b Reactor Trip System Interlocks - Low Power Reactor Trips Block, P-7

(2) Improved TS Table 3.3.3-1 lists the P-7 interlock as a separate function, consistent with the STS. Although P-7 is comprised of inputs from P-10 and P-13, which appear in CTS Table 3.3-1, P-7 was not explicitly listed. This change is actually administrative because the capability of the P-7 logic function to automatically enable/block the associated train of the following RTS functions may be considered necessary for the OPERABILITY of each RTS train for these functions (improved TS function numbers have been used).

8.a	Pressurizer Pressure - Low
9	Pessurizer Water Level - High
10.b	Reactor Coolant Flow - Low - Two Loops
11	Undervoltage RCPs
12	Underfrequency RCPs

(4) Thus, in the event of an inoperable P-7 interlock, the ACTIONS of CTS 3/4.3.1 would result in appropriate remedial actions being taken - by entering the ACTION for each supported function. By calling P-7 out separately with its own ACTION, the existing ACTIONS have been simplified, but not relaxed. Improved TS ACTION S requires restoring P-7 to the required state for the existing plant condition within 1 hour or being in MODE 2 within 7 hours. This change is considered more restrictive because of the explicit requirement of improved TS SR 3.3.1.5 to perform an ACTUATION LOGIC TEST every 31 days on a STAGGERED TEST BASIS. This surveillance was not previously specified for the above RTS functions that P-7 supports.

3.3.1.17 Reactor Trip Breakers (RTBs);
3.3.1.18 RTB Undervoltage and Shunt Trip Mechanisms; and
3.3.1.19 Automatic Trip Logic

(3) Improved TS 3.3.1 ACTION V requires immediate entry into LCO 3.0.3 if an inoperable trip mechanism, RTB, or automatic trip logic on opposite trains are concurrently inoperable. The addition of ACTION V to the RTBs, trip mechanisms, and Automatic Trip Logic functions ensures that if two channels become inoperable (a loss of function) appropriate action is taken immediately to place the plant in a safe condition. The addition of this condition is consistent with the STS and represents an additional restriction on plant operation.

3.3.1.17 Reactor Trip Breakers; and
3.3.1.18 Reactor Trip Breaker Undervoltage and Shunt Trip Mechanisms

(4) In the event an undervoltage or shunt trip attachment is inoperable, the first statement of ACTION 13 of CTS Table 3.3-1 allows 48 hours to restore it to OPERABLE status, or to declare the associated RTB inoperable. In this case, CTS ACTION 10 would apply. With one RTB inoperable ACTION 10 requires placing the unit in MODE 3 within 6 hours. However, it also permits bypassing the inoperable RTB for 2 hours for surveillance testing of the other channel.

The second statement in ACTION 13 of CTS Table 3.3-1, allows bypassing a reactor trip breaker (RTB) for the time required for performing maintenance to restore the trip mechanism to OPERABLE status. In consideration of the first statement, it appears that under ACTION 13, the RTB with the inoperable mechanism could be bypassed for a significant fraction, if not all, of the 48-hour Completion Time.

23

Because it is desirable to more clearly express the intent of the bypass allowance, the second statement of ACTION 13 has been revised and moved in accordance with STS 3.3.1 ACTION R, as a Note in corresponding improved TS ACTION T. This Note allows bypassing one RTB train for 2 hours for maintenance, as well as surveillance testing (already permitted by CTS ACTION 10). This change is considered more restrictive because a 2-hour limit is more restrictive than a potential 48-hour bypass limit.

on the shunt and UV trip mechanisms

Improved TS ACTION U, which applies to the diverse trip mechanisms, retains the 48-hour restoration requirement and the 6-hour shutdown to MODE 3 requirement.

3.3.2 Engineered Safety Features Actuation System (ESFAS) Instrumentation
3.3.2.2.c Containment Spray - Containment Pressure High - 3

(5) In the event one channel of the containment pressure high-3 instrument function is inoperable, ACTION 17 of CTS Table 3.3-2 contained no specific time limit for placing the channel in bypass. Such a limit has been established in ACTION E of improved TS 3.3.2. Required Action E.1 allows 6 hours to place an inoperable channel in bypass, consistent with the STS. This change is considered more restrictive because the CTS did not specify a time limit.

3.3.4 Remote Shutdown System (RSS)

(6) CTS 3/4.3.3.5.1 ACTION b, for one or more inoperable transfer switch and control circuits, has been replaced by improved TS 3.3.4, ACTIONS A and B. These ACTIONS apply to both the monitoring instruments and the transfer and control circuits; i.e., to all remote shutdown functions.

increase compensates for changes in the existing procedural requirement for demonstrating the pumps are inoperable. Instead of ~~verifying~~ the requirement that the motor circuit breakers ~~are~~ be open, the operator must verify that the ~~pump~~ An example is if the hand switch is in the pull-to-lock position and ~~that~~ at least one valve in the discharge flow path is closed. In addition, these procedural details will be contained in the associated Bases and plant procedure, in conformance with the STS. See discussion (3) under Subsection 3.2 for discussion of the removal of procedural information from the TS.

(24)

With the pump hand switch in pull-to-lock, a closed valve in the discharge flow path isolating the safety injection pumps from the RCS, and more frequent verification of switch and valve position, adequate assurance is provided that the safety injection pumps will not inadvertently inject into the RCS while allowing the pumps to be more readily available to respond to a loss of inventory. Safety injection pumps are rendered incapable of injecting into the RCS by at least two independent means such that a single failure or single operator action will not result in an injection into the RCS.

3.4.13 RCS Operational LEAKAGE

(10) CTS 4.4.6.2.1.d require performing an RCS water inventory balance within 72 hours after entering MODE 4. This requirement has been modified in improved TS SR 3.4.13.1, consistent with the STS, to require the initial water inventory balance to be performed within 12 hours after achieving steady state operation in MODE 3 or 4 and once per 72 hours thereafter. This is potentially more restrictive because the inventory balance may be required sooner and more often than currently required. As explained in the Bases, were a transient to occur such that the 72-hour interval plus 25% (18-hour) grace period would expire before reaching steady-state operation, subsequent performance of the SR would be required within the 12-hour period after again achieving steady state operation. This change is acceptable because steady state operation is required to perform a proper, useful inventory balance.

3.4.14 RCS PIV LEAKAGE

(11) ACTION C of improved TS 3.4.14 is a new requirement for the RCS PIV leakage limit function. This ACTION addresses an inoperable RHR system suction isolation valve interlock. Although a surveillance requirement (CTS 4.5.2.d.1) for this function was included in the CTS ECCS Operating specification, this interlock has never been specifically addressed in the ACTIONS of the ECCS Operating or Shutdown specifications. In the event the interlock is inoperable, the CTS ECCS operating specification, 3/4.5.2, would require declaring the associated ECCS train inoperable and restoring it to OPERABLE status within 72 hours. In contrast, new ACTION C only allows 4 hours to restore the interlock to OPERABLE status (the same as for any other inoperable PIV). Since the interlock function involves the RHR PIVs, the new ACTION for this interlock contains an appropriate but more restrictive Action.

(12) A time limit of 24 hours has been added to CTS 4.4.6.2.2 as the third Frequency of corresponding improved TS SR 3.4.14.1 for testing PIVs that have been actuated. This 24-hour Frequency is potentially more restrictive than the existing surveillance which specificed no time limit. Within 24 hours is a reasonable and practical time limit for performing this leak test, and is acceptable.

3.4.15 RCS Leakage Detection Instrumentation

(13) The existing RCS leakage detection instrumentation OPERABILITY requirements in CTS 3.4.6.1 have been retained in improved TS LCO 3.4.15, but the associated ACTIONS have been revised in conformance with corresponding STS 3.4.15. In particular, the daily performance of an RCS water inventory balance when the required containment sump monitor, radioactivity monitor, or containment air cooler condensate flow rate monitor is inoperable, has been added to the ACTIONS (improved TS Required Actions B.1, C.1.2, and D.2) as an operating condition during the ~~30-day period.~~ Completion Time period. (25)

3.4.16 RCS Specific Activity

(14) Improved TS SR 3.4.16.3 (corresponding to CTS Table 4.4-4, item 3, Note ***, radiochemical analysis of E-bar) contains a new requirement to determine E-bar within the 31 days after a minimum of 2 effective full power days and 20 days of MODE 1 operation since the reactor was last subcritical for ≥ 48 hours. This 31-day condition for the initial performance of this surveillance following a plant shutdown ≥ 48 hours may result in determining E-bar more often than the existing 6-month Frequency. In addition, delaying this determination up to 31 days allows sufficient time to ensure that the radioactive materials in the reactor coolant have reached an equilibrium concentration following the shutdown and startup transients.

3.3.3.5 Emergency Core Cooling Systems (ECCS)

3.5.1 Accumulators

(1) ACTION D of improved TS 3.5.1 for the Condition of more than one accumulator being inoperable is potentially more restrictive than the existing ACTIONS of CTS 3/4.5.1. If an accumulator were inoperable because of a closed isolation valve, CTS ACTION b would apply. And if a second accumulator were inoperable for any other reason, CTS ACTION a would apply also. Thus, the CTS would allow operation for a short time period before requiring a shutdown by either of these ACTIONS. In contrast, improved TS ACTION D would require entering LCO 3.0.3

(b) emergency operating procedures require decreasing AFW flow to the point where the recirculation valves on the motor-driven AFW pumps open.

(29) Modification Description and Schedule Modifications to the CSTs and the AFW system for each unit are planned ~~during 1996~~ to allow the AFW pump recirculation flow to be routed to the CST that is supplying the AFW pump suction. This planned modification and the revision of associated operating procedures will make the two CSTs completely redundant.

TS Change Proposal The proposed changes to current TS 3/4.7.1.3, to be reflected in corresponding improved TS 3.7.6, for the CST, are based on the post modification CST design with two 100% capacity CSTs. The proposed changes in the LCO, ACTIONS, and Surveillance Requirement are consisdered appropriate and acceptable for a system with two redundant CSTs.

Interim Specification Since the planned CST modification is not anticipated to be complete until after implementation of the improved TS, the licensee has has proposed an interim specification based on the existing design, improved TS 3.7.6a. This interim specification includes ACTIONS and surveillance requirements appropriate for the non-redundant CSTs. This specification is more restrictive because it requires maintaining 420,000 gallons of safety-related CST volume and keeping the AFW pumps aligned to a CST with 340,000 gallons of safety-related CST volume. In addition, to ensure the safety analyses assumptions for the volume required in the TS bases are met, the licensee has committed to implement the following practices in plant operating procedures:

- When the AFW pumps are in operation, upon the level of the tank aligned to the AFW pumps reaching the level associated with 340,000 gallons, three of the four RCPs will be stopped;

(26) - If CST 2 is in service and the turbine-driven AFW pump is not needed to maintain SG level, the pump will be stopped; and

- SG levels will be raised with the motor-driven AFW pumps at a flow rate sufficient to ensure the recirculation flow control valves are closed, and if this is not possible, then the pumps will be started and stopped as necessary to maintain SG levels.

Decrease in Regulatory Burden This required CST volume in improved TS 3.7.6a is consistent with the existing design assumptions and established operating practices at VEGP. Specification 3.7.6a will be superceded by improved TS 3.7.6 once the licensee has implemented the new CST AFW recirculation design. This arrangement will relieve the

licensee and the NRC of the burden of processing an additional license amendment for the CST Specification within a short time after the improved TS are implemented.

Difference Between the Current TS CST Required Volume and the CST Required Volume in Proposed Specification 3.7.6a The interim requirement for 420,000 gallons of safety-related CST volume is based on two main differences between the calculation that was used as a basis for the original 340,000 gallon requirement, reflected in the current TS, and current plant operating procedures. The original calculation assumed that the recirculation flow from the motor-driven AFW pumps automatically isolates after approximately one minute of operation. However, plant procedures currently instruct the operator to throttle AFW pump flow to the extent that the recirculation flow from the motor-driven pumps will be automatically reestablished. If AFW pump suction is taken from CST V4001 initially, then the calculation did not account for the recirculation flow transferred from CST V4001 to CST V4002. Furthermore, the original calculation assumed only one RCP running whereas current operating procedures would allow all four RCPs to be running. This requires additional water volume to accommodate the increased heat input to the RCS from the operating RCPs. Currently, because of these issues, administrative controls are in place that require both CSTs OPERABLE (both tanks > 340,000 gallons) so that suction can be transferred to CST V4002 to recover the volume transferred by the recirculation flow.

Finally, the requirement to maintain 340,000 gallons in the CST aligned to supply the AFW pumps is based on the need to ensure sufficient time exists for the operator to switch the AFW pump suction supply to the other CST. The requirement to maintain the AFW pumps aligned to the CST with a safety-related volume of 340,000 gallons allows much more time than is actually required to switch AFW pump suction. With the procedural controls in place to ensure that the unnecessary RCPs and AFW pumps are removed from operation and to ensure appropriate management of the recirculation flows, the potential for consuming the full 340,000 gallons, thus requiring a switch to the other CST, is significantly reduced.

Evaluation The proposed interim specification for the CST systems will apply until ~~both units go through their next refueling outage and the~~ (27) the applicable appropriate modifications and procedure revisions have been made for ~~each~~ unit. It contains restrictions sufficient to ensure that the safety analysis assumptions for the CST function will be satisfied. Following implementation of the CST design modification, proposed improved TS 3.7.6 will apply. It also contains restrictions appropriate for redundant CSTs to ensure that the CST function assummed in the safety analysis will continue to be satisfied. Therefore, the

3.9.2 Unborated Water Source Isolation Valves

(2) Consistent with the STS, additional requirements have been added to ACTION b, to immediately close and secure any open or unsecured valves, of CTS 3/4.9.1 in corresponding ACTION A of improved TS 3.9.2. These are Required Action A.1, to immediately suspend CORE ALTERATIONS, and Required Action A.3, to perform SR 3.9.1.1 (verify boron concentration) within 12 hours. The 12-hour Completion Time, although greater than the 4-hour time given in the STS, is consistent with the current VEGP licensing basis for the performance of this surveillance as required in ACTION b of CTS 3/4.9.2 in the event both required source range monitors are inoperable. ACTION A is also modified by a Note that requires performing Required Action A.3 any time Condition A is entered, consistent with the STS. This requirement ensures boron concentration will be verified, regardless of how fast the affected valve is closed, by preventing the Condition from being exited until Required Action A.3 has been completed.

3.9.3 Nuclear Instrumentation

(3) ACTION b of CTS 3/4.9.2, to determine boron concentration of the RCS every 12 hours in the event both source range monitors are inoperable, has been retained as Required Action B.2 of corresponding improved TS 3.9.3. In addition, ACTION b has been revised to also require initiation of action to restore one monitor to OPERABLE status immediately in Required Action B.1, consistent with the STS.

3.9.5 RHR and Coolant Circulation - High Water Level

(4) Note * to CTS 3.9.8.1, an allowance to remove the RHR train from operation for up to 1 hour per 8-hour period, is been retained as a Note to improved TS LCO 3.9.5. In addition, it has been made more restrictive by adding a provision that prevents any action from being taken that might reduce the boron concentration while the RHR Loop is out of service. In this condition, without forced circulation, uniform boron concentration in the RCS can not be assured. This change is consistent with the STS.

3.9.7 Refueling Cavity Water Level

(5) The Applicability of CTS 3/4.9.10.1, for reactor vessel water level during movement of fuel assemblies or with irradiated fuel assemblies seated within the reactor vessel, has been increased in corresponding improved TS 3.9.7, the refueling cavity water level specification, consistent with the STS. The additional restriction of "During CORE ALTERATIONS, except during latching and unlatching control rod drive

3/4.9 Refueling Operations

(18) Decay Time

This specification places a time limit on reactor subcriticality prior to the movement of irradiated fuel assemblies in the reactor vessel. This ensures that sufficient time has elapsed for the radioactive decay of short-lived fission products and is consistent with the assumptions used in the safety analysis. However, the schedule restraints of the activities required prior to moving irradiated fuel in the reactor vessel after a shutdown prevents the time limit of this specification from being exceeded. The preparations for moving fuel include RCS cooldown, depressurization, boration, removal of the reactor vessel head and upper internals and flooding the reactor cavity to the required level. Thus, in practice, it is not physically possible to violate the time limitation of this specification. Therefore, CTS 3/4.9.5 may be relocated to the TRM.

(4)

(19) Communications

This specification requires communication between the control room and the refueling station, to ensure that any significant change in the facility status observed on the control room instrumentation can be communicated to the refueling station personnel. However, this communication is not credited in any DBA or transient analyses. Therefore, CTS 3/4.9.5 may be relocated to the TRM.

(20) Refueling Machine

This specification ensures that the refueling machine and auxiliary hoist in the containment will have sufficient load capacity for their intended purposes and will be used correctly during refueling. Additionally, this specification ensures that the core internals and reactor vessel are protected from excessive lifting force during refueling operations. Although this specification contains requirements designed to prevent damage to fuel assemblies, core internals, and the reactor vessel, these requirements are not relied upon to prevent or mitigate the consequences of the design basis fuel handling accident in the containment. The limitations of this specification only apply to design requirements. Design control requirements are adequately governed by regulation and the licensee's quality assurance plan. These requirements need not be repeated in the TS. Therefore, CTS 3/4.9.6 may be relocated to the TRM.

50.54(m)(2)(iv) and repeating it in TS is not necessary to ensure safe operation of the facility.

5.5 Programs and Manuals
5.5.6 Prestressed Concrete Containment Tendon Surveillance Program

(13) CTS 3.6.1.6, "Containment Structural Integrity," requires maintaining the structural integrity of the prestressing tendons of the containments consistent with the acceptance criteria of associated specification 4.6.1.6, "Containment Prestressing System" (which has a more appropriate title). Also associated with CTS 3.6.1.6 are action requirements in the event the criteria are not satisfied.

However, this LCO represents just one aspect of containment OPERABILITY, which is required by improved TS 3.6.1, "Containment." Thus, this requirement is retained as improved TS LCO 3.6.1 ("Containment shall be OPERABLE.") and associated SR 3.6.2, regarding verifying the structural integrity of the containment in accordance with a new programmatic specification, improved TS 5.5.6, "Prestressed Concrete Containment Tendon Surveillance Program." Thus, failure to meet the program is failure to meet the containment LCO.

The detailed information contained in CTS 4.6.1.6 for performing the tendon surveillances has, therefore, been relocated to the specified program and associated procedures. (Note that this corresponds to less restrictive change type 3 as defined inthe general discussion of less restrictive requirements at the beginning of Part III of this safety evaluation.)

28 (13a) *5.5.12 Explosive Gas and Storage Tank Radioactivity Monitoring*
5.5.17 Containment Leakage Rate Testing Program

(14) The licensee has proposed to adopt Option B of Appendix J to 10 CFR Part 50. As required for adopting Option B, the licensee has proposed adding a containment leakage rate testing programmatic specification in the administrative controls chapter of the TS. The adoption of Option B and this specification is fully addressed in discussion (1) of Subsection 3.2.3.6 of Part III of this safety evaluation.

5.6 Reporting Requirements

(15) Consistent with the STS, the requirement of CTS 6.8.1.1 to submit a startup report to the NRC has been deleted from the TS. This report required no staff approval and was submitted following startup. Therefore, it does not contribute to safe operation of the facility. The approved quality assurance plan and the FSAR startup testing program will ensure that the activities associated with the preparation of this report are adequately performed and that appropriate corrective actions, if required, are taken.

ENCLOSURE 2

GPC COMMENTS ON DRAFT SAFETY EVALUATION OF PROPOSED TECHNICAL SPECIFICATIONS - VOGTLE ELECTRIC GENERATING PLANT UNITS 1 AND 2 NRC LETTER DATED FEBRUARY 1, 1996

1. The proposed change reflects the actual wording of the improved TS.

2. The proposed change corrects a typographical error.

3. The proposed change clarifies the applicability of improved TS LCO 3.7.6.

4. The valves must be administratively controlled when they are open whether a purge or vent operation is in progress or not.

5. The proposed change reflects the actual wording of the improved TS Bases.

6. The referenced STS difference was withdrawn with our revised submittal.

3.2.4 Quadrant Power Tilt Ratio (QPTR)

(7) The wording of STS 3.2.4, Required Action A.1, has been revised from

Reduce THERMAL POWER to ≥ 3% RTP for each 1% of QPTR > 1.00. (below)

to

Limit THERMAL POWER *to* ≥ 3% RTP for each 1% of QPTR > 1.00.

(1)

It is not unusual, upon startup, for QPTR to be > 1.02 because of transient core conditions. These transient conditions are usually self-correcting as a direct result of power ascension. Since ACTION A of STS 3.2.4 provides for continued operation for an unlimited period, it is acceptable per STS LCO 3.0.4 to enter the applicability of STS 3.2.4 with QPTR in excess of 1.02, provided the Required Actions are met. Stating Required Action A.1 to require *limiting* rather than *reducing* THERMAL POWER is more compatible with the case where the Applicability of STS 3.2.4 is entered with QPTR in excess of 1.02.

(8) STS 3.2.4 Required Action A.2 has been adopted as Required Actions A.2.1 and A.2.2 in order to make it clear that if the once-per-12-hour QPTR measurement determines that an additional reduction in power is required, below the level initially determined by Required Action A.1, then 2 hours are allowed to complete the additional power reduction. A Note has been added to the Completion time column to clarify that the 2-hour Completion Time of Required Action A.2.2 begins upon completion of the 12-hour QPTR measurement. These differences from STS Required Action A.2 are considered clarifications of the intent of the STS and are acceptable.

(9) As discussed in Subsection 3.2.3.2 of part III of this safety evaluation, the initial Completion Time for STS 3.2.4, Required Action A.3, has been modified from "24 hours" to "24 hours after achieving equilibrium conditions with THERMAL POWER limited by Required Action A.1," in improved TS 3.2.4, Required Action A.3.

(10) A new Note would be added to STS 3.2.4 ACTION A, in the Condition column, to clarify that improved TS 3.2.4 Required Action A.6 must be completed whenever Required Action A.5 is implemented. This is based on the concern that completion of Required Action A.5 would restore compliance with the LCO and Required Action A.6 would never be performed.

(11) Required Action A.5 of STS LCO 3.2.4 states that the excore detectors should be calibrated to show zero QPTR. Quadrant power tilt is expressed in terms of a ratio. Thus, the absence of a tilt will manifest itself as QPTR = 1.00 rather than zero. Therefore, Required Action A.5 of improved TS 3.2.4 requires calibrating to show QPTR = 1.00.

(12) The Note 1 to STS SR 3.2.4.1 (which is consistent with the last sentence of the CTS definition of QPTR) has been adopted in improved TS SR 3.2.4.1 but has been revised to reflect the fact that the three-channel measurement is valid at any power level above 50% RTP, not just below 75% RTP. When THERMAL POWER is ≥ 75% RTP, the incore detectors are used

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3.b	Containment Isolation - Phase B Isolation
4.e and 4.f	Steam Line Isolation - High Steam Line Flow in Two Steam Lines
4.g and 4.h	Steam Line Isolation - High Steam Line Flow
6.b	Auxiliary Feedwater - Automatic Actuation Logic and Actuation relays (Balance of Plant ESFAS)
6.f	Auxiliary Feedwater - Undervoltage Reactor Coolant Pump
6.h	Auxiliary Feedwater - AFW Pump Suction Transfer on Suction Pressure - Low
7.c	Automatic Switchover to Containment Sump - RWST Level - Low
8.c	ESFAS Interlocks - T_{avg} - Low Low, P-12
8.d	ESFAS Interlocks - SG Water Level - High High, P-14

Therefore, these functions have not been adopted in Specification 3.3.2. The Notes in Table 3.3.2-1 have been renumbered accordingly. upper case

(17) The ESFAS action statements in the CTS allow bypassing "a channel" and are not limited to "the inoperable channel." The corresponding Notes in the improved TS 3.3.2 ACTIONS C, D, E, G, H, I, and K have been revised to agree with the CTS. All esfas instrumentation functional groups except Number 8, ESFAS Interlocks, reflect this STS difference. (Specifically, Functions 1.b, 1.c, 1.d, and 1.e; 2.b and 2.c; 3.(b); 4.b, 4.c, and 4.d; 5.a, 5.b, and 5.c; 6.a and 6.b; and 7.a and 7.b.)

(2)

3.3.2.1.a Safety Injection - Manual Initiation;
3.3.2.2.a Containment Spray - Manual Initiation;
3.3.2.3.a Phase A Containment Isolation - Manual Initiation;
3.3.2.4.a Steam Line Isolation - Manual Initiation; and
3.3.2.8.a ESFAS Interlocks - Reactor Trip, P-4

(18) The word "train" in STS ACTIONS B and F, and Function 2.a of Table 3.3.2-1, were not adopted, consistent with the CTS terminology for single channel trains.

3.3.2.4 Steam Line Isolation

(19) At VEGP, each steam line has two isolation valves in series. Each isolation valve has a bypass valve associated with it. Only one isolation valve and associated bypass must be closed to isolate a steam line. Applicability Note (i) of STS Table 3.3.2-1 has not been adopted. Instead corresponding Note (c) of Table 3.3.2-1 retains the requirement of Notation 'f' of CTS Table 3.3-2, to be consistent with VEGP design.

3.3.2.5 Turbine Trip and Feedwater Isolation

(20) At VEGP, each feedwater line has two isolation valves (includes the feedwater regulating valve which is a credited isolation at VEGP) in series. Each isolation valve has a bypass valve associated with it. Only one isolation valve and associated bypass must be closed in each feedwater line to isolate feedwater. Applicability Note (j) of STS Table 3.3.2-1 has not been adopted. Instead corresponding Note (f) of Table 3.3.2-1 has been adopted to be consistent with VEGP design. This new VEGP-specific Note recognizes that Vogtle has two main isolation valves per main feedwater line (MFIV and MFRV) each with its own bypass

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are consistent with the ACTIONS in CTS Table 3.3-8 and CTS 3/4.3.3.6, which clearly define the diverse channel OPERABILITY requirements.

Second, the format and presentation of the proposed ACTIONS more closely match the format and presentation of the STS reactor trip system (RTS) TS and ESFAS TS. The VEGP specific ACTIONS work the same way (same Condition A to reference applicable Conditions from the Table) as the STS RTS and ESFAS specifications. Since the STS PAM TS use a different format and addresses the Conditions listed on the associated Table differently than the STS RTS and ESFAS TS, the VEGP specific PAM ACTIONS represent a human factors and consistency improvement over the STS PAM TS. Note that this change combined with the proposed ACTIONS Table change in the Remote Shutdown TS make all the VEGP instrument TS ACTIONS Tables work and look similar.

Third, the proposed ACTIONS Conditions contain Notes for the containment isolation valve position indication channels. The Notes allow the Condition to be entered on a per penetration basis for this function. Without this allowance, Condition entry for a second valve position indication channel on a different penetration could be interpreted to be prohibited by the Condition wording of "One required channel inoperable". This change is considered a clarification of the intent of the STS to allow this Condition to be entered on a per penetration basis. The addition of this Note is consistent with the application of this type of Note in other areas of the STS for similar purposes.

(30) The phrase in STS SR 3.3.3.1 "that is normally energized" describing PAM instrument functions requiring a CHANNEL CHECK has been omitted from SR 3.3.3.1. All PAM instrument channels listed in improved TS Table 3.3.3-1 are normally energized. Thus this condition to the SR is not necessary at VEGP.

(3)

(31) VEGP-specific Note (a) of Table 3.3.3-1 clarifies that only one set of condensate storage tank level instrumentation is required OPERABLE to be consistent with Specification 3.7.6, ~~which~~ which becomes applicable upon the respective implementation of the design modification requires only one of the two condensate storage tanks in each unit to be OPERABLE. This Note is not found in STS Table 3.3.3 because only one tank is assumed in the plant design upon which the STS is based. Accordingly, STS Notes (a), (b), and (c) have been renumbered as (b), (c), and (d) in improved TS Table 3.3.3-1.

Specification 3.7.6

3.3.4 Remote Shutdown System

(32) The word "monitoring" has been inserted in the STS wording of SR 3.3.4.1, CHANNEL CHECK, and SR 3.3.4.3, CHANNEL CALIBRATION, to describe to which instrumentation these surveillances apply. VEGP-specific Table 3.3.4-1 contains two types of instruments, "Monitoring" and "Transfer and Control Circuits". SR 3.3.4.1 and SR 3.3.4.3 apply only to indicating (monitoring) instrument channels. This clarification is consistent with CTS 4.3.3.5.1.a and 4.3.3.5.1.b, and also the intent of the STS.

3.3.5 4.16 kV ESF Bus Loss of Power (LOP) Instrumentation

(33) The ACTIONS of improved TS 3.3.5 differ from the ACTIONS of STS 3.3.5 because of plant-specific design and existing TS requirements that have

STS 3.3.5 ACTIONS	Improved TS 3.3.5 ACTIONS
C.1 Enter applicable Condition(s) and Required Action(s) for the associated DG made inoperable by LOP DG start instrumentation. Immediately	E.1 Enter applicable Condition(s) and Required Action(s) for the associated DG made inoperable by LOP DG start instrumentation. Immediately

The licensee stated that the STS phrase "per bus" could be interpreted to mean that channels on both ESF buses must be inoperable in order for STS Conditions A or B to apply. To prevent this misinterpretation, this phrase has been replaced by the phrase "on one or both buses" which more clearly describes the situation addressed by STS Conditions A and B. In addition, the word "only" has been added to render Condition A exclusive with respect to the other conditions in which multiple channels are inoperable. This was necessary because with multiple channels inoperable, placing more than one channel of one function on the same bus in trip would result in actuation of the diesel generators, which was not the intent of STS Required Action A.1.

Condition B has been divided into improved TS Conditions B and C. Improved TS Condition B clearly addresses the situation in which one or two functions with two or more channels inoperable on a single bus. Once in this Condition, the affected instrument function (loss of or degraded voltage) may no longer be single failure proof or may no longer be functional for the affected bus. In this case, operation in the Applicability of the LCO must be limited. Improved TS ACTION B allows 12 hours to restore the instrument function to the capability of continued operation permitted by ACTION A. The 12-hour Completion Time is based on the improved TS allowance for an inoperable ESF bus load sequencer. This time is appropriate because the affected instrument channels (loss of or degraded voltage) are inputs to the load sequencer and rely on sequencer circuits to perform their required actuations. Thus, the inoperability of more than one channel of either the loss of voltage or degraded voltage function, associated with a given ESF bus, is no worse than the inoperability of a load sequencer associated with that bus. Since the actuation logic and relays for the loss of power instruments (both AF pump and diesel generator start) are an integral part of the sequencer, an inoperable sequencer may prevent the loss of power instruments from performing their intended functions. Therefore 12 hours provides a reasonable and consistent Completion Time, based on the time allowed for an inoperable sequencer, for these instruments when Condition B becomes applicable.

Improved TS Condition C corresponds to the situation in which both buses each have at least one function with at least two inoperable channels. In this Condition, STS Required Action B.1 has been revised to require restoring at least three channels of the affected function to OPERABLE status on one of the buses within 1 hour. The effect of this action would be to return to the situation addressed by improved TS Condition B, ~~with~~ provided its 12-hour Completion Time has not expired.

Improved TS ACTION D has been added to the Actions of STS 3.3.5 to provide the appropriate shutdown actions if improved TS ACTION A, B, or C have not been met when in MODES 1, 2, 3, or 4. Unlike STS Required

range instrumentation as appropriate, and the specific water level can vary over the range of steam generator operating conditions so long as the highest point of the U-tubes remains covered. Plant procedures will provide the minimum indicated levels to ensure the U-tubes are completely submerged. See discussion (3) of Subsection 3.3.3.4 of Part III of this safety evaluation.

3.4.6 RCS Loops - MODE 4

(5) Note 2 and Note 3 to STS LCO 3.4.6 and 3.4.7, respectively, have been adopted with changes to conform with Note ** to CTS 3.4.1.3 regarding required conditions for starting idle RCS loops in MODE 4, and Note *** for starting idle RCS loops in MODE 5 with loops filled.

3.4.8 RCS Loops - MODE 5, Loops Not Filled

(6) Specification 3.4.8 retains the existing requirement of CTS 3/4.4.1.4.2 to isolate unborated water sources. This requirement, not contained in STS 3.4.8, is necessary to preclude a boron dilution event in MODE 5 with the RCS loops not filled.

3.4.9 Pressurizer

(7) The 18-month Frequency of SR 3.4.9.2, pressurizer heater capacity verification, which was a change in the 92-day Frequency of corresponding CTS 4.4.3.2, also differs from the 92-day Frequency of STS SR 3.4.9.2. The change from 92 days to 18 months was based on the recommendations of Generic Letter 93-05. At VEGP, the pressurizer heaters are in constant use during normal power operation and operators should be aware of any problems that may arise with the heaters. Therefore, a surveillance interval of 18 months is appropriate. See discussion (6) of Subsection 3.2.3.4 of Part III of this safety evaluation.

3.4.10 Pressurizer Safety Valves

(8) The Note to the Applicability of STS LCO 3.4.10, regarding the setting of the pressurizer code safety valves under ambient conditions, has not been adopted because the pressurizer code safety valves at VEGP are tested in MODE 3 on the way down for a refueling outage. If the valves are tested successfully, they remain in place awaiting startup. If the valves must be removed for maintenance, they are bench tested under conditions simulating actual operating ambient conditions. Therefore, the Note modifying the Applicability of STS 3.4.10 is not applicable to VEGP.

(6)

3.4.10 Pressurizer Safety Valves; and
3.4.12 Cold Overpressure Protection Systems (COPS)

(9) The MODE 4 Applicability of STS 3.4.10 and STS 3.4.12 (MODE 4 with RCS cold leg temperature > 275°F and ≤ 275°F, respectively) has not been adopted because the VEGP cold overpressure protection system (COPS) enable temperature is 350°F, the transition temperature between MODES 3 and 4. The COPS is required to be OPERABLE in MODES 4, 5, and 6 with

Specification 3.6.3 are listed in FSAR table 16.3-4. None of these valves are associated with closed systems. Rather, the associated system TS governs OPERABILITY of such valves. Therefore, there is no need for STS Condition C and no need for the Notes to Conditions A and B. Accordingly, these provisions have not been adopted.

In addition, STS ACTION D, pertaining to shield building leakage, does not apply to the VEGP design, and has also not been adopted. STS ACTIONS E, and F have thus been designated as ACTIONS C and D in Specification 3.6.3.

(4) CTS 4.6.1.7.2, leak test requirement for valves with resilient seals (containment ventilation purge and exhaust isolation valves at VEGP), was revised by Amendment Nos. 89 and 67, on July 7, 1995, to change the Frequency from 3 months to 18 months (refueling outage). Corresponding improved TS SR 3.6.3.6 retains this 18-month Frequency. Consequently, the 92-day Frequency of corresponding STS SR 3.6.3.6 and Required Action E.3 of STS 3.6.3, with its 92-day periodic Completion Time for performing this surveillance when such valves are used for isolating an inoperable penetration, have not been adopted. The licensee has proposed to retain the existing requirement and will not backfit. The 18-month Frequency of purge valve leakage testing ensures that a purge valve with resilient seals used for isolation in accordance with improved TS 3.6.3, ACTION C (corresponding to STS ACTION E), will be in the current test interval (i.e., OPERABLE) in the event its isolation function is needed. Therefore, this STS difference is acceptable.

(5) As previously addressed in discussion (14) of Subsection 3.2.3.6 of Part III of this safety evaluation, the conditions under which CTS 3.6.1.7.b allows the 14-inch purge valves to be opened have been broadened in corresponding improved TS SR 3.6.3.2. The revised conditions stipulate, however, that ~~administrative control of the purge or vent operation is in place.~~ This change is less restrictive than the conditions given in STS SR 3.6.3.2 for opening the 14-inch valves.

(6) Note 2 to SR 3.6.3.4 is not contained in STS SR 3.6.3.4, but is consistent with the last sentence of Note * to CTS 4.6.1.1.a. This Note clarifies the requirement for checking the blind flange on the fuel transfer canal.

(7) Specification 3.6.3 omits the following STS surveillances that do not apply to the VEGP design: SR 3.6.3.6, SR 3.6.3.9, SR 3.6.3.10, and SR 3.6.3.11. STS SR 3.6.3.7 and SR 3.6.3.8 have accordingly been designated SR 3.6.3.6 and SR 3.6.3.7, respectively, in Specification 3.6.3.

3.6.6 Containment Spray and Cooling Systems

(8) Consistent with CTS 3/4.6.2.1 and 3/4.6.2.3, improved TS 3.6.6 does not contain ACTIONS D, E, and F of STS 3.6.6. But STS ACTIONS A, B, and C, corresponding to improved TS ACTIONS A, C, and B, have been adopted with the following difference. ACTION B specifies 3 days, not 7 days, to restore an inoperable cooling train to OPERABLE status.

moisture content accumulated in the filters has been reduced to less than or equal to 70% relative humidity (an assumption of the applicable safety analysis).

(20) CTS 4.7.6.a, the VEGP-specific surveillance to monitor control room air temperature every 12 hours, has been retained as SR 3.7.10.1. This surveillance ensures that the control room cooling function of the CREFS is OPERABLE. The VEGP CREFS contains the cooling coils that provide control room air temperature control after a control room isolation (CRI). The chilled water is supplied by the essential chilled water system which is covered by CTS 3/4.7.11, "ESF Room Coolers and Safety-Related Chiller Systems," that has been retained as Specification 3.7.14. The essential chilled water system supplies other systems in addition to the CREFS. The maintenance of the control room air temperature below 85°F ensures the operational requirements of equipment located in the control room will not be exceeded. The design cooling capacity of the essential chilled water system combined with the CREFS and the limitation of the normal control room ambient temperature (before CRI) ensure the capability of the CREFS to maintain the control room temperature within limit after a CRI.

3.7.14 ESF Room Cooler and Safety-Related Chiller System

(21) CTS 3/4.7.11 for the ESF room cooler and safety-related chiller system has been retained as VEGP-specific Specification 3.7.14, which is not contained in the STS.

3.4.3.8 Electrical Power Systems

General

3.8.1 AC Sources - Operating

(1) The automatic load sequencers are listed in STS LCO 3.8.1 as AC Sources. Although an automatic load sequencers may affect an AC Source, it does not constitute an AC Source distinct from the offsite circuits and diesel generators. Thus, LCO 3.8.1 has been worded differently from STS LCO 3.8.1 to differentiate the automatic load sequencers from the list of AC Sources. for activities such as DG maintenance and design changes

(2) The ACTIONS of Specification 3.8.1 differ from the ACTIONS of STS 3.8.1 because of the reliance on the standby auxiliary transformer (SAT) to justify longer allowed outage times (AOTs) for a diesel generator (DG) in one unit at a time. Specifically, improved TS ACTIONS C and H are not contained in the STS. Anytime a DG becomes inoperable and the SAT is verified to be available as a backup standby AC source, ACTION C allows 7 days to restore the DG to OPERABLE status. Once per refueling cycle each DG may be made inoperable solely with the intention of performing manufacturer recommended maintenance (i.e., partial tear-down maintenance and inspection) provided the SAT is available as a backup standby AC source, by entering ACTION H, instead of ACTION C. ACTION H specifies either a 14-day or a 21-day AOT to complete the maintenance and to restore the DG to OPERABLE status. Specification 3.8.1 also contains Notes at the beginning of the ACTIONS table and in ACTIONS A, B, C, and H to specify the correct use of these VEGP-specific ACTIONS.

(5)