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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

WNP-2 PROJECT

QUALITY VERIFICATION PROGRAM
OVERVIEW REPORT

BECHTEL POWER CORPORATION			WASHINGTON PUBLIC POWER SUPPLY SYSTEM	
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QUALITY VERIFICATION PROGRAM

PROGRAM OVERVIEW REPORT

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTD)

TABLE OF CONTENTS (CONTD)

LIST OF FIGURES

OVERVIEW REPORT

OF THE

WNP-2 QUALITY VERIFICATION PROGRAM

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

DOCKET NO. 50-397

SEPTEMBER 1, 1983

SECTION 1.0

INTRODUCTION

This section identifies the overall purpose and scope of the Supply System Quality Verification Program (QVP); how, when and by whom it was initiated and implemented; and how it is reported. It also provides a guide through the sixty-six reports developed during the course of the program.

1.1 Purpose and Scope

The purpose of the QVP is to verify the adequacy of safety-related construction work completed in the WNP-2 plant prior to July, 1980. This is achieved by a combination of hardware reinspection and documentation review for a significant sample of both construction activities performed on site and fabrication activities performed off site.

The scope of the QVP is all Quality Class I (QC I) and Quality Class II Seismic Category I (QC II SC I) work performed prior to July, 1980, the time of WNP-2 Stop Work Order No. 009 (SWO #9). This work is all that could be considered to be safety related, and was performed by seventy-one site construction contractors or prepurchase vendors. Each one of these is addressed by the QVP.

1.2 Implementation

The QVP was administered by the Supply System and was reviewed by the Supply System Project and Corporate Quality Assurance (QA) departments, the NRC and an independent technical consultant, Technical Audit Associates, Inc.

The QVP is divided into three specific program elements:

- o Prepurchase and Inactive Contracts (PP&IA)
- o Systems Completion (for active contracts)
- o Special Tasks

A diverse group of project organizations were involved in the implementation of the QVP. The following list identifies each organization and its respective activities.

Supply System QVP Office	-	Manage Program Review and Approve Procedures, and Reports Perform/Administer Special Tasks Element Administer Prepurchase and Inactive Contracts Element Monitor Performance of Participants
Supply System Project & Corporate QA	-	Perform PP&IA Document Review Review and Approve Reports Audit and Surveillance
Supply System Project/ Corporate Engineering	-	Perform Reviews for Special Tasks Element Review Evaluations of Related Programs Provide Technical Support
Construction Manager (Bechtel)	-	Manage Active Contracts Perform Contract 215 Reverification Perform QVP/CAT Comparison Perform NDE Verification Perform Contractor Surveillance Perform Audits Prepare Reports
Contractor	-	Perform Reinspections Prepare Reports

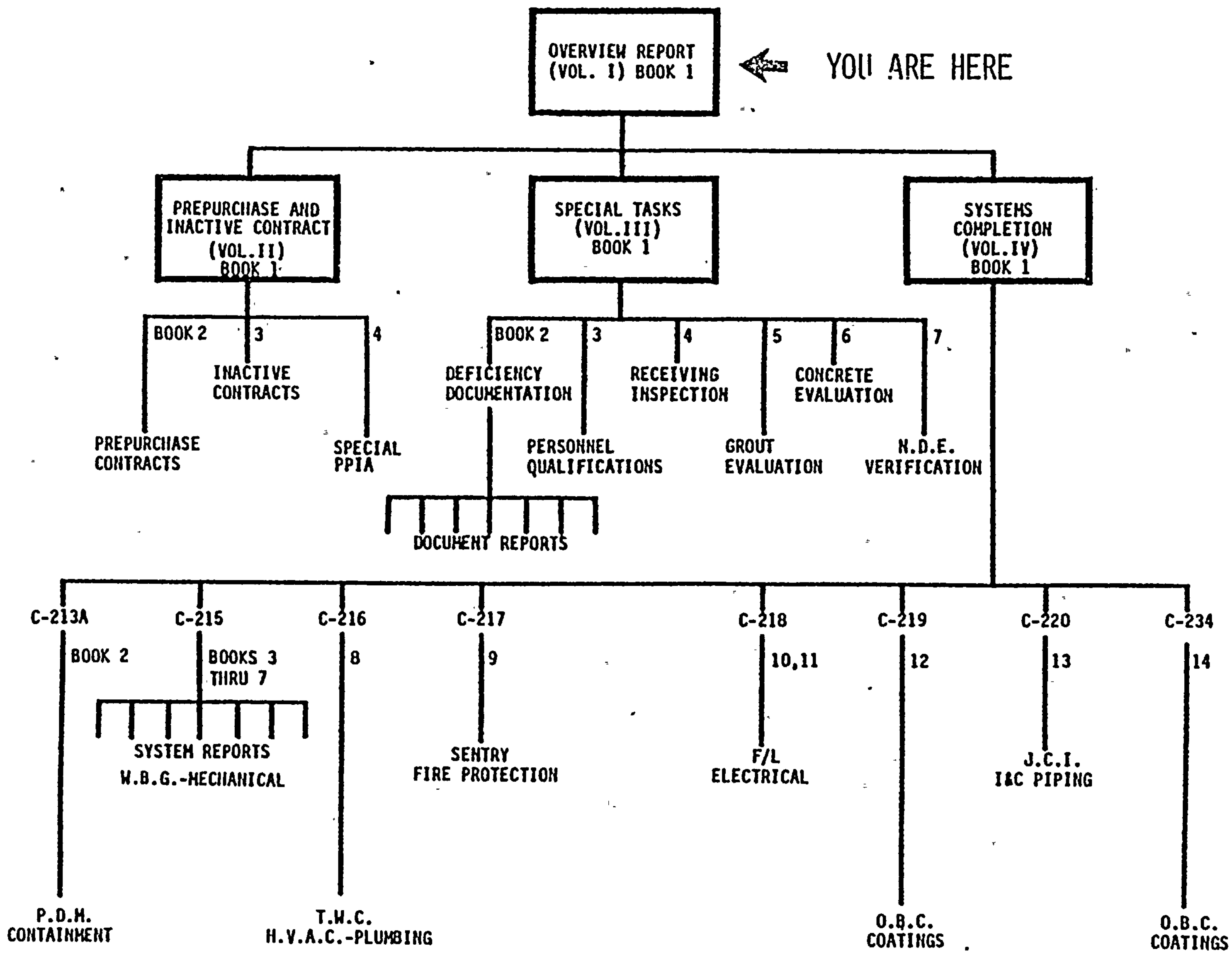
1.3 Reports

The QVP reports have been prepared in three levels of detail. First, this Overview Report presents a compendium of the program, the factors which brought about its implementation, the results of the investigations, and the conclusions drawn therefrom. The second level reports are the three program element reports which provide a summary statement of the total activities performed within the three major elements of the program. The third level reports consist of specific individual reports on activities within the three program elements.

Four volumes containing 26 books with 66 individually-approved reports comprise the QVP Library.

The interrelationship of these reports is demonstrated in Figure 1-1, QVP Report Hierarchy.

The amount of documentation and background material for the activities performed in the QVP is voluminous. These records are being integrated into a comprehensive file at the Project records vault.



QUALITY VERIFICATION PROGRAM REPORT HIERARCHY

Figure 1-1

SECTION 2.0

SUMMARY AND CONCLUSIONS

The safety-related work completed at WNP-2 prior to July, 1980, has been verified by the Quality Verification Program. On the basis of the Program findings, the Supply System concludes that the quality concerns resulting in the NRC's 50.54(f) request are based upon indications of a quality assurance program breakdown because of poor performance by one mechanical subcontractor, untimely response to NRC questions on construction quality, and failure to limit the backlog of unresolved deficiencies.

The management improvements, coupled with the QVP reviews and reinspections, appropriate corrective actions by the Project, and other extensive special inspection programs, have resolved the quality concerns which brought about the NRC's request. The safety-related work completed at WNP-2 prior to July, 1980, now meets the requirements for safe operation of the plant.

2.1 Summary

Major quality issues were identified at WNP-2 by the raising of a number of specific issues during the course of construction, such that the overall quality program in existence prior to July, 1980, was put into question. The Supply System responded to this question with a program of reviews and reinspections to address the adequacy of hardware in the plant. The focus of the reviews became the Quality Verification Program, which embraced 24 special related inspection or corrective-action programs. The QVP is complete, and its results, along with those of these other related programs, some of which are continuing, provide the assurance that the quality of work meets the standard required for safe and reliable operation of the plant.

The construction of WNP-2 comprises some 200 contracts. Of these, 71 contain safety-related work that was accomplished prior to July, 1980. The QVP addresses a that prior work by sample hardware inspections and document reviews in three major areas:

- Systems Completion (Active Contracts) - This task reviews the work performed by eight site construction contractors active after restart of construction in mid-1981.

- Prepurchase and Inactive Contracts - This task covers 49 procurement contracts, and 13 site construction contractors no longer active at the time of the stopwork in mid-1980.

- Special Tasks - Six tasks which are not addressed in the other two elements of the program, respond to specific questions raised in the NRC's 10CFR50.54(f) request.

The program was conducted by an organization with no direct involvement in construction of the plant. The effectiveness of this independent group was periodically tested by management to assure that the objective of verifying the adequacy of prior construction was met, and that priorities were maintained. This was accomplished by management reviews and independent quality assurance audits.

Regular frequent reports were required to inform the Supply System and the NRC of program activities and results. NRC's interaction provided a critical overview of the program to assure commitments were met and implementation was adequate.

It is estimated that about 1.5 million manhours of effort and 42 million dollars in cost were invested to determine the adequacy of prior construction at WNP-2, including special related programs.

The process of selecting a representative sample of hardware began with a determination of the population of work completed and accepted prior to July, 1980, and not reworked or subsequently reinspected by another special program. Such special programs were evaluated for their contribution to fulfilling the objectives of the QVP and, if qualified, the reinspections were not repeated. Hardware samples for reinspection by QVP were selected at random by major commodity from within each contract, and documented prior to inspection.

Reinspections were conducted in a manner that assured suspected problems based upon previous review findings were sought wherever possible, and that personnel performing the inspections were not those who originally inspected the hardware. The inspections accomplished by the QVP did not include disassembly of plant components (some valuable related programs evaluated by QVP did perform component disassembly and detailed inspection), however, QVP inspections included some specialized testing. Current work procedures and instructions were used to inspect the work in order to benefit from the improved procedures resulting from the earlier Restart Program.

Reinspections were performed by active contractors' QC inspectors with appropriate surveillance by the Construction Manager (CM), except in the case of the mechanical contract, which was inspected by the CM's own QC Engineers. All other reviews and reinspections were conducted by the Supply System or CM personnel.

Results of the reinspections were compiled and evaluated to determine the safety significance and trends of identified deficiencies. Based upon this evaluation, inspection samples were increased to focus on the specific problems or characteristics identified by trend analysis.

2.2 Results

In the area of mechanical construction, 128 piping isometrics and 661 supports were reinspected. These comprise 10,000 welds. The construction of mechanical components was found to be acceptable, with two exceptions: 1) undersize welds on pipe supports, which was resolved by

the Project's initiation of a repeat as-built program, engineering analysis, and rework where necessary; and 2) undersize welds on small-bore socket-weld fittings, which was resolved by engineering evaluation and additional reinspection by the Project.

The containment vessel and associated piping and structures were verified by reinspection of 280 feet of welds and 82 hardware items, and review of quality and test records, resulting in the determination that the containment installation is acceptable. Other indicators of vessel construction quality were provided by the NDE Verification Task.

The reinspections in the civil/structural area included 189 structural steel items comprising approximately 2500 welds. Early in the program a large number of minor discrepancies were identified, evaluated, and accepted by the designer. Generic reinspection acceptance criteria were developed to eliminate the repetitious process of documentation, analysis, and acceptance of these items. The reinspections resulted in the structural steel being found acceptable with three exceptions: 1) also determined early in the program, bolting of framework in the containment drywell was found to be incomplete, and was resolved by a 100% reinspection/retorque program; 2) two connections were misaligned and had undersize welds, which were reworked and caused reinspection of the two remaining like connections (they were acceptable); and 3) two welded beam connections were found unacceptable, which were reworked and caused reinspection of all remaining similar connections (also acceptable).

Concrete was not reinspected in this Program. However, a technical evaluation of procedures, specifications, and quality records was performed revealing that, although there were a number of previously-recorded and accepted deviations from the requirements for reinforcement, consolidation, and formwork, the finally-completed concrete structures are acceptable. The NRC Construction Appraisal Team's recent inspection also identified similar deviations. These do not appear to be serious faults affecting the integrity of the concrete structures, however, the Project investigated this matter further and provided a resolution to the NRC.

All types of grout installations were sampled and destructively tested for compressive strength. Sand-cement grout was found to be deficient in certain applications. These deficiencies have been corrected and/or identified for replacement so that all grout is acceptable.

In the heating, ventilating, and air-conditioning (HVAC) area, 109 ductwork items, 25 supports, and 18 equipment components were reinspected. Very few minor deviations (not safety significant) were identified, leading to the determination that the HVAC installation is acceptable.

The reinspections in the electrical area included 293 cables (comprising 16 miles of cable), 1516 terminations, 13 equipment components, and two containment penetrations. There were only minor deviations from the requirements for this work. One questionable trend was identified, that of crimping on terminal lugs, which is resolved by the 100% coverage of terminations in system line-up testing by the Supply System. Aside from this trend, the electrical construction is acceptable.

Although the majority of electrical raceways and supports were installed prior to July, 1980, they were not reinspected in the QVP because they had not been final-inspected and accepted at that time. Inspection of conduits, trays, and supports are covered by current programs using procedures that were approved during the Restart Program.

In the area of instrumentation, 61 instrument racks, 251 local instruments, eight miles of tubing, and 4500 supports were reinspected as a part of the contractor's 100% as-built/reverification program. Deviations from the requirements for the work were few, but were corrected as part of the program. This 100% examination assures that installation work associated with instrumentation is acceptable.

The applicable portions of fire protection systems in the plant were also reinspected, including 400 conduit supports and 49 fire-extinguisher brackets. Only a few very minor discrepancies were identified in the reinspections, leading to the assessment that the work is acceptable.

Repeat nondestructive examination was performed for 60 radiographs, 60 penetrant tests, and 95 magnetic-particle tests. The NDE work was found to be acceptable. During the repeat examinations a welding problem was identified on a containment attachment, which is currently being addressed by the Project.

Long-lead procurement items were verified by reinspection of 87 equipment components, technical review of 155 procedures, industry validation of 35 vendors' qualifications and experience, and review of quality records for 49 contracts. Hardware furnished by these vendors was found satisfactory. The review of records led to identification of a generic testing deficiency associated with cranes and hoists, which is resolved by a 100% retest program.

Personnel qualifications of engineering, NDE, QC, and construction personnel were verified by acceptability of the work and associated records reviews. Qualifications of the personnel involved in the work were found acceptable.

Receiving inspection activities were found to be generally effective in identifying discrepant material, as verified by hardware reinspection of installed items and repeat receiving inspection of stored material.

Technical disposition of deficiency and design-change documents was verified by independent review of 807 documents for technical adequacy. All were found to be correct.

2.3 QVP/CAT Comparison

As the end of QVP activities approached, and the Project neared completion, the NRC Office of Inspection and Enforcement sent a Construction Appraisal Team (CAT) to assess the adequacy of safety-related construction at WNP-2. The CAT devoted some 2000 manhours of inspection effort at the plant to that end. A comparison of the CAT's inspection results

with those of the QVP was requested by NRC, Region V, to determine whether the CAT inspection undermined or confirmed the QVP results. The comparison was performed on reinspected items installed prior to July, 1980, and it was determined that where the same hardware items were inspected by both CAT and QVP, the results were identical. Where similar hardware components were inspected, the CAT inspections confirmed the findings of the QVP with the following exceptions:

- <u>Concrete</u> - QVP verification of concrete construction in the plant was accomplished by technical review of requirements and records. CAT inspections included field tests for compressive strength and physical excavation of cast-in-place members to expose and check reinforcement. The results in each program have similar findings, and the QVP review shows that the Project identified and addressed deficiencies during installation. A separate report responding directly to the CAT inspection addresses the concrete issues.

- <u>Weld-O-Let Weld Size</u> - Undersized welds for weld-o-let fittings were found in the CAT inspections but were not identified by the QVP. The Project has now reinspected all such fittings for weld size.

2.4 <u>Conclusions</u>

The NRC's 50.54(f) request directed the Supply System to respond with a plan to review completed safety-related work to determine whether the quality assurance program at WNP-2 was adequate to assure the work was properly performed.

The Supply System has completed its programs of review and reinspection to the depth necessary to respond to questions asked in the 50.54(f) request. These questions are repeated below with summary responses based on the culmination of these programs.

- <u>Were there cases where the required quality procedures and specifications were not applied to the work?</u>

  The results of the QVP reinspections show that, although there were a few deficient areas and isolated deficiencies, the work is acceptable and, therefore, meets the requirements of the procedures and specifications. The reinspections were performed to current requirements to take advantage of the software improvements made in restarting the work in 1981. Review of a sample of procedures in place at the time of the work indicate those procedures would assure production of quality work, in spite of a few procedure discrepancies.

  The review of completed work (not already covered by special programs) generally shows that quality procedures were applied and resulted in acceptable construction. Two areas of pervasive deficiency were apparent: crane testing and undersized socket welds on small-bore flange fittings, which were resolved as discussed in Section 2.3.

- Were there instances in which improperly qualified personnel performed and inspected the work?

  QVP reviews show that there were instances in which improperly qualified personnel were involved in the work. The reviews also show that the Project's quality programs were effective in identifying those instances, in that the QVP detected only isolated occurrences of improperly qualified personnel being missed by past or current quality programs.

- Were receipt inspection requirements followed for contractor produced items and why weren't deficiencies detected during receipt inspection?

  Procedure deficiencies of a non-technical nature were identified for some contractors' receipt inspection activities. One contractor was found, by the quality program in effect at the time, to have significant problems with material segregation and storage. QVP reviews, along with other recent reviews performed by the Project, show that safety-related material in storage at the time of restart of construction meets the specified requirements. The hardware reinspections and record reviews conducted in the QVP have shown that material installed also meets the requirements.

- Were correct dispositions made for nonconformance reports, design changes, field change requests, and information requests?

  The results of technical reviews of documents which disseminated technical information, and of the procedures used to control them, show that these documents were dispositioned competently and acceptably by the A/E's engineers and the contractor's engineers.

- On the basis of review of existing records and a sampling of previously inspected work, are quality and test records associated with the work complete and accurate?

  The reviews and reinspections of thousands of hardware components show that the quality and test records accurately represent the adequacy of the installations in most cases. There were cases of inadequacy of records and cases of difference between the records and the installation. In those instances, corrective action was initiated to completely resolve the problems, and extended as necessary to address the generic implications.

The safety-related work completed at WNP-2 prior to July, 1980, has been verified by the Quality Verification Program. On the basis of the Program findings, the Supply System concludes that:

- The quality concerns resulting in the NRC's June, 1980, 50.54(f) request are based upon indications of a quality assurance program

breakdown because of: 1) poor performance by one mechanical subcontractor (Leckenby Company), 2) untimely response to NRC questions on construction quality, and 3) failure to limit the backlog of unresolved deficiencies.

Management improvements, coupled with the Quality Verification Program's reviews and reinspections, appropriate corrective actions by the Project, and other extensive special inspection programs, have resolved the quality concerns which brought about the NRC's 50.54(f) request.

- The major construction-related quality problems at WNP-2 had been identified by the Project prior to commencement of QVP reinspections. Special programs were established to resolve these problems, with the results that few major problems were identified by QVP reinspections and reviews.

- The safety-related work completed at WNP-2 prior to July, 1980, now meets the requirements for safe operation of the plant.

SECTION 3.0

HISTORY

A complete understanding of the QVP requires some knowledge of the background events leading to development of the program and its implementation. This section provides such a chronology of participants' actions ultimately leading to verification of the adequacy of hardware in the plant.

3.1 NRC Request and Supply System Response

The Director of the NRC's Office of Inspection and Enforcement (IE) said in his June 17, 1980, request regarding Quality Assurance(1) under 10CFR50.54(f), that the IE staff did not have sufficient information at the time to conclude that WNP-2 was being constructed in compliance with the construction permit. On the same date, he notified(2) the Supply System of a number of items not in compliance with conditions of the facility license, and imposed certain civil penalties.

The 50.54(f) request letter instructed the Supply System to submit a plan and schedule for reviewing completed safety-related work accomplished by contractors who did not have NRC reviewed quality assurance programs, to assure such work was properly performed.

On July 17, 1980, the Supply System responded(3) to the Commission's instructions and regulations with a plan and schedule which detailed specific commitments to review the completed safety-related work in the plant and issued SWO #9(4) to stop safety-related work until problems were resolved. The Supply System's review plan became known by the acronym RCSW (Reverification of Completed Safety-Related Work), and addressed review of the work by contracts: active site contracts, pre-purchase contracts, and already-closed site contracts. The review covered short term, intermediate, and continuing phases of evaluation, and was accomplished by three task forces:

- o Task Force I, which was to expedite the resolution of an outstanding backlog of problems and concerns on the project.
- o Task Force II, which was to verify that previously completed work is adequate.
- o Task Force III, which was designed to assure that management systems used to control continuing work were adequate.

[1]Superscript numbers in parentheses correspond to items in Section 9.0, List of References

The work of Task Force II specifically became the RCSW Program, or "Reverification Program" and the Supply System notified the NRC in its first bi-monthly progress report[5] that because of the enormity of this task, the work was being divided into two phases:

- o Phase I would cover review of contractors' procedures for control of on-going work, and verification of very-recent construction. (This activity became the Restart Program.)

- o Phase II would cover verification of safety-related work completed prior to the time work was stopped.

The second progress report[6] informed the NRC that Task Force II was again refocused to delete hardware reinspections from Phase I; that the verification of hardware would be completed at a later date; and that plans for this effort were being formulated and expected to be in place by February 1, 1981. The main thrust of Project activities at this point became the release of work for construction by commodities following completion of Task Force efforts, with the exception of Task Force II, Phase II. For example, late in January, 1981, repair of the girth weld on the Sacrificial Shield Wall was restarted.

Planning for the Task Force II, Phase II effort (which was to eventually become the QVP) began in earnest early in 1981 when management emphasis shifted to verification as restart reviews were being completed. Meanwhile, management improvements were being made which would strengthen the project's ability to complete the plant successfully. These points are discussed later in this section. For completeness of this historical account, some brief information about the Restart Program is provided immediately hereafter, as it related to the QVP.

3.2 Restart Program

A plan[7] listing all of the review actions required for the restart of safety-related construction stopped by SWO #9 was provided to the NRC with the Supply System's first progress report. These review actions included:

- o Listing of safety-related (QC I SC I and QC II SC I) contractor work activities.

- o Identification and resolution of the backlog of contractors' concerns which could affect restart (e.g. NCR dispositions, approved drawings, reviewed procedures, etc.).

- o Evaluation of contractors' then-current work and inspection controls to assure quality controls were effective:

  - Review of procedures for proper approval; incorporation of SAR, specification, code, and standard requirements; and qualification of welding and special processes.

- Review of personnel qualifications and training.

- Review of documentation to determine the then-current backlog, completeness, traceability, legibility, and adequacy of the contractors' reviews.

- Assessment and statusing of 50.55(e)s, Part 21s, NRC concerns, NCRs, CARs, audit findings, and deficiency trends.

o Independent review and assessment of the results of the above, culminating in an objective evaluation of the safety-significant work to be restarted, to assure that:

  - Minimal risk of quality problems would result from the resumption of work.

  - Reinspection of previously completed work would not be prevented.

  - Full compliance with the work requirements was achieved.

Upon satisfactory completion of the reviews of the Restart Program, each contractor was released to restart work by Project direction, under NRC observation. All contractors performing safety-related work were released, or conditionally-released, by mid-1981. A conditional release carried with it a commitment to complete a specific review activity, usually on only a small portion of the work. Only upon documented completion of such a commitment was the contractor unconditionally released for restart of construction.

The summary findings of the Restart Program, which could provide insight into potential areas where quality problems might exist, were used in planning the reinspections of the QVP, as discussed in Section 6.0.

3.3 Management System Improvements

In the same time period as the Restart Program was conducted, the Supply System was strengthening management of its projects. The Supply System decentralized the authority for each project so that more direct management attention could be provided at the sites for timely response to construction problems that arose. Program Directors were assigned at each project. Also, a Corporate Nuclear Safety Director was assigned to assist with the resolution of safety issues as they arose.

At the WNP-2 Project, the Bechtel Power Corporation (BPC) was engaged as the Construction Management and Construction Completion Contractor, which, in addition to bringing its experience and expertise to the Project, provided the opportunity to focus the Burns and Roe, Inc. efforts on the Architect/Engineer (A/E) Function. Burns and Roe (BRI) became responsible for only engineering and could concentrate on completing the design. A Richland office having full technical authority was established

by the A/E, which significantly improved the A/E's participation in resolution of field problems, responsiveness in resolving design problems, and technical interface with Supply System Engineering.

As Construction Completion Contractor, BPC assumed responsibility for the mechanical piping systems, following completion of the bulk construction by the major mechanical contractor. The mechanical contractor was responsible for installation of most of the plant's safety systems, and may have been largely responsible (through lack of control of a subcontractor) for the quality issues leading to the NRC's 50.54(f) request and work stoppage.

Bechtel continues in this construction-completion role today. As bulk construction is completed by the site contractors, the finish work in each system is accomplished by BPC to the point where each system is ready for "turnover" to the Supply System's Test and Startup (T&SU) organization for preoperational and acceptance testing. A Systems Completion Plan[8] outlining the verification activities to be accomplished on past work taken over by BPC during this phase of construction is part of the original QVP program description.

3.4 QVP Planning and Implementation

Early in 1981, with Restart Program reviews well on the way to completion, planning of the verification reinspections of hardware began. Project management review of each stage of development of the plan for this work was accomplished through detailed presentations and technical discussions and critiques. In May, 1981, the program was sufficiently scoped and defined for informal presentation and review with NRC Region V representatives. This program was titled "Quality Verification Program"[9] so that a clear distinction could be drawn between this and previous efforts called "Reverification" which did not include reviews of quality records and reinspection of hardware items. It is noted, however, that BPC's participation in the QVP is reported and referred to as "Reverification" because in its construction parlance, "verification" is accomplished while performing its normal quality assurance functions. For the practical purpose of understanding the many QVP reports, the terms are considered synonymous.

Having evolved from the planning effort, the QVP was established as a program which would address the adequacy of past work and its supporting documentation through an integrated arrangement of record reviews and hardware reinspections, utilizing resources of the Supply System, BPC, and the active contractors. After a series of presentations and reviews conducted throughout its development, the QVP was approved by WNP-2 Project management in June, 1981, and inaugurated by issuance of an instruction manual at an indoctrination presentation to key managers and Program participants. Personnel training and contractor indoctrination was accomplished immediately thereafter, and performance of the review activities by the participants followed. Procedures[10] were prepared for performing the work in this Program, and all participating contractors were required to have approved reverification plans in place prior to commencement of reviews and reinspections.

While a more complete description of the provisions of the QVP is presented in Section 4.0, the following information is provided to identify the major participants:

- Program Management

  The Supply System established an independent QVP office attached to its Construction Management Department to manage and report verification activity. This office, under a QVP Manager, was responsible for directing and monitoring the efforts of participants and reporting to Project management in frequent reports and presentations, and reporting to the NRC through the Program Director's bi-monthly progress reports.

- Systems Completion

  This element of the QVP was established to verify the work of active site contracts and was accomplished by the Bechtel Reverification Group (BRG). The name of this task is derived from BPC's systems completion responsibility. The BRG managed the construction contractor participation in the program, performed the reviews and reinspections of the former mechanical contractor's work, and regularly reported to the Supply System.

- Prepurchase and Inactive (PP&IA) Contracts

  This element of the QVP addresses the verification of work performed by closed site contracts and prepurchase contracts, and was accomplished by the Project QA organization. Verifying these contracts by record review and contract history review was nearly completed in early 1983, when the NRC raised questions on the ability of such reviews to provide adequate confidence of hardware quality, compared to that which can be achieved by sample reinspection. Additional review of the work accomplished in these contracts, including hardware reinspection, was performed by BPC forces in mid-1983.

- Special Tasks

  This element of the QVP was established to address issues not logically covered above, and was accomplished by QVP office forces. There are six issues; three were originally committed and answered specific questions of the NRC's 50.54(f) request, and three were added during the course of the program.

QVP review and reinspection activities commenced late in 1981 and were completed by mid-1983. Technical analysis of results, as well as evaluation of deficiencies identified during the course of the work, was performed by the A/E, with assistance and consultation by BPC, the Supply System and others. This analysis of results and report preparation got underway in early 1982, and is now complete.

3.5 Audits

Beginning with the Project management reviews of QVP planning, this Program and its participants have been repeatedly scrutinized by Supply System management and quality assurance organizations until completion of the Program, including their review and acceptance of this report.

Thirteen formal audits of this Program or its activities were conducted during the course of the work, including thorough management assessment and independent consultant evaluation of the Program philosophy and methods. Seventy-five surveillances by QA/QC organizations verify that review activities met requirements. Periodic presentations were required by Project management to assure that commitments were met and the Program continued to meet its objectives.

The NRC's regional office sent a team composed of five senior staff members to the Project site in February 1983, to evaluate performance and results of the QVP. Additional work was committed to resolve questions arising from this evaluation.

The above audits and evaluations of this Program are more fully discussed in Section 5.0.

3.6 Reporting to the NRC

In its response to the NRC's 50.54(f) request, the Supply System stated that reports of the verification activities would be provided to the Region V office at two-month intervals. These bi-monthly progress reports were continued until the eleventh report covering May and June 1982, when, by agreement with the Regional Administrator, a quarterly reporting interval began.

The Supply System's reports summarize the progress and results of the verification activities and generally kept the regional office apprised of quality issues associated with verification of past work. These reports do not address construction in progress.

Periodic presentations were made to the Region V staff during the course of the QVP, usually as a part of Project meetings. During the planning activity, in April 1981, the Program Director addressed the QVP in a meeting at Walnut Creek. In subsequent meetings (which included QVP as an agenda item) the QVP Manager presented timely information of Program interest.

A more complete summary of Supply System/Region V interactions is provided by the following chronological listing of major events associated with the QVP. NRC involvement is discussed further in Section 5.0.

06/17/80 10CFR50.54(f) Request Regarding Quality Assurance, to NO Strand, WPPSS, from Victor Stello, Jr., NRC

07/17/80 Supply System Response, Notice of Violation & Additional Information 10CFR50.54(f), to Victor Stello, Jr., NRC, from NO Strand, WPPSS

07/31/80 WNP-2 Project Restart Plan approved by Supply System

10/16/80 First Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RL Ferguson, WPPSS

11/12/80 WNP-2 Management System Description, to RH Engelken, NRC, from RG Matlock, WPPSS

12/29/80 Second Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

01/23/81 WNP-2-WBG-215-F-81-0183, "Release of Sacrificial Shield Wall Girth Weld Repair", to PJ Garcia, WBG, from GI Wells, WPPSS

03/12/81 Third Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS - QVP Planning Under Way

05/15/81 Fourth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

06/19/81 Quality Verification Program Begins: Presentations, Indoctrinations, Procedures

07/01/81 Fifth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

09/04/81 Sixth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

11/06/81 NRC Region V Meeting (Walnut Creek, CA) Project Status Review, QVP Presentation, RG Matlock, et al

11/19/81 Seventh Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS - QVP Reinspection Under Way

01/28/82 Eighth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

03/26/82 Ninth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

06/10/82 Tenth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

08/09/82 Eleventh Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

10/19/82 Twelfth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS

01/14/83 NRC Region V Meeting (Walnut Creek, CA) Project Construction Status Review, QVP Presentation, RG Matlock, et al

01/24/83	Corporate Licensing & Assurance Audit of QVP, Audit 83-242, conducted 01/24-31/83
01/27/83	Thirteenth Progress Report - 10CFR50.54(f), to RH Engelken, NRC, from RG Matlock, WPPSS
02/15/83	Introductory Presentation to NRC Region V Task Team, Inspection of QVP at WNP-2, conducted 02/15-18/83
03/17/83	NRC Region V Meeting (WNP-2), Task Team Findings on QVP
03/30/83	NRC Region V Meeting (Walnut Creek, CA) Project Status Review, including QVP, RG Matlock, et al
04/18/83	Transmittal of Commitment Summary in regard to NRC's 50.54(f) Request dated 06/17/80. Summary dated 04/01/83
04/26/83	Fourteenth Progress Report - 10CFR50.54(f), to JB Martin, NRC, from CS Carlisle, WPPSS
05/16/83	NRC Construction Assessment Team (CAT) Inspection of WNP-2, conducted 05/16-27/83 and 06/07-17/83
06/07/83	NRC Region V Meeting (Walnut Creek, CA), Project Status Review, QVP Presentation, Detailed Work Discussion, DW Mazur, CS Carlisle, et al
06/21/83	NRC Region V Meeting (WNP-2), QVP Presentation, DW Mazur, CS Carlisle, et al
06/22/83	NRC CAT Inspection Exit Meeting

SECTION 4.0

PROGRAM DESCRIPTION

The basic program to accomplish the reviews and reinspections of hardware at WNP-2 is described in this section. This description includes an overview of the major tasks/elements of the QVP, and the procedures and instructions used by the participants. It also identifies the contracts covered by the reviews and compares the reviews accomplished with the Supply System's original commitments to the NRC.

4.1 Scope

The QVP is the last remaining element of the program initiated in July, 1980, following the commitments made by the Supply System in response to the NRC's 50.54(f) letter. The scope of the program is the performance of those activities necessary to verify the adequacy of safety-related work in the WNP-2 plant completed prior to July, 1980. For the purpose of QVP, safety-related work is defined as any work which is designated by the Project as QC I or QC II SC I. This work is all that could be considered to be safety-related. A much smaller population of items can be considered critical to the safe operation of the plant; however, the definition of "critical" is subject to some engineering judgement. The inclusion of all QC I and QC II SC I hardware in the QVP is a conservative approach to verifying the adequacy of safety-related hardware and installations in the plant.

The verification reinspections conducted in this Program were accomplished primarily by complete visual techniques. There are exceptions, however, where additional physical testing or destructive work was performed. In each such case, the benefits of more complete information were weighed against the consequences of destroying completed work.

The QVP serves to assure the adequacy of construction at WNP-2 prior to July, 1980. The work performed after July, 1980, is outside the QVP scope because it has been performed under an improved management system and QA program. This is described in Section 6.0. The combination of the QVP to verify past work, and the improved QA programs to control new work, serves to assure the adequacy of all the work performed at WNP-2 during the entire construction period.

The QVP consists of two types of inspection/review activities. The first type is the direct Program activity. This activity is divided into three major elements:

- o Active Contracts
- o Prepurchase and Inactive Contracts
- o Special Tasks

These three elements of the direct portion of the QVP are described in Sections 4.2, 4.3 and 4.4. The second type of inspection/review activity is the indirect programs which are referred to as "related programs" and are described in Section 4.5. These programs were performed outside the formal QVP organizational structure, but were evaluated to determine compatibility with QVP objectives.

A diagrammatic representation of how all the above programs combine to assure the adequacy of WNP-2 is shown in Figure 4-1.

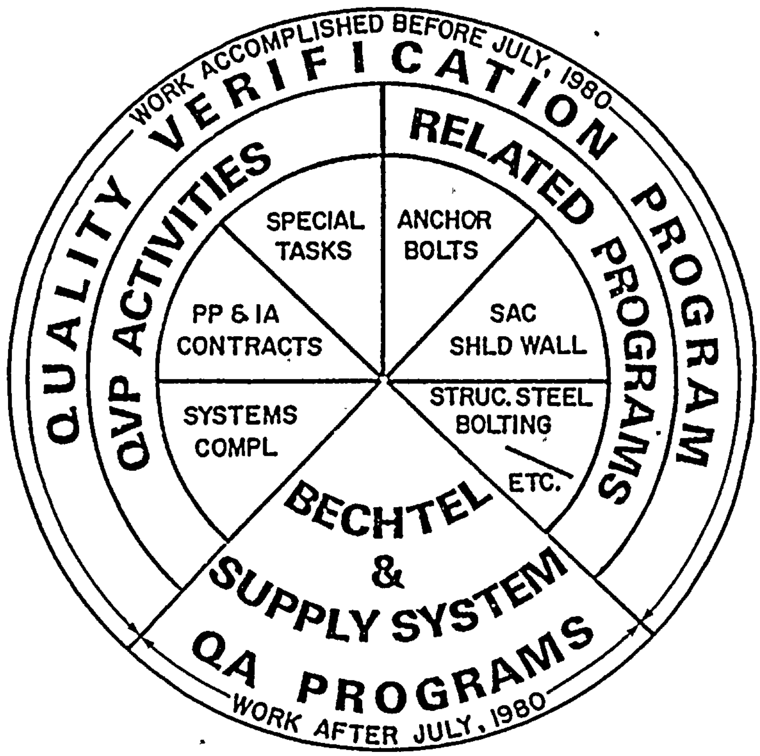


Figure 4-1

4.1.1 Summary of Commitments

A number of commitments were made to the NRC by the Supply System in the response to the NRC's 50.54(f) letter, as discussed in Section 3.0. The Project initiated three task forces to perform these committed actions:

- o Task Force I - Reduce Problem Backlog
- o Task Force II - Reverification of Completed Safety-Related Work
  - Phase 1 - Restart
  - Phase 2 - QVP
- o Task Force III - Management System Improvements

The above commitments have been uniquely identified in a document entitled Summary of Commitments. This document generally describes the activity which responds to each commitment and is included as Attachment 4-1.

4.1.2 General Instructions

The instructions for Task Force II are included in the Reverification of Completed Safety-Related Work (RCSW) Manual.(11) Volumes I and II of the RCSW Manual contain the instructions for the Restart Program (Phase 1 of RCSW). The Restart Program for each contractor has been reviewed by the NRC and will not be discussed further.

The general instructions for the QVP are contained in Volume III of the RCSW Manual. These Quality Verification Instructions (QVI's) are described briefly below:

QVI-01 - Quality Verification Program

This instruction identifies the activities necessary to verify the adequacy of safety-related work in the WNP-2 plant completed prior to July, 1980. These activities comprise the Program implemented by the WNP-2 Project. The Supply System's Construction Management organization is responsible for this Program.

QVI-02 - Quality Verification Organization and Functional Responsibilities

This instruction describes the organization and functional responsibilities for fulfilling the requirements of the QVP. The functions of organizations performing activities in this Program are established in this instruction.

QVI-03 - Quality Verification Program Accountability

This instruction establishes WNP-2 Project organizational responsibility for the activities necessary to implement the QVP. It is used by Project participants to identify overall scope of their activities, and authorizes them to proceed with the Program.

QVI-04 - Deficiency Document Review

This instruction describes the process for performing reviews of deficiency documents to establish whether or not the dispositions of nonconformances, design changes, field change requests, and information requests, were technically correct.

QVI-05 - Evaluating Special Reviews for Quality Verification Program Credit

This is an instruction for evaluating special inspections or reviews performed by Project organizations or site contractors to correct identified deficiencies. The objective of this evaluation is to determine whether or not those inspections or reviews meet the objectives of the QVP and if so, document the results and acknowledge credit.

QVI-06 - Prepurchase and Inactive Site Contracts Evaluation, and Selection for Reinspection

This instruction describes the methods utilized to evaluate QC I and QC II SC I prepurchase and inactive site contracts to determine the need for verification reinspection.

QVI-07 - Active Site Contracts Evaluation, and Selection for Reinspection

This instruction describes the methods utilized to record the decision not to perform quality verification reinspection on QC I and QC II SC I active site contracts.

QVI-08 - Reverification Inspection Team Concept

This instruction describes the team-concept method to be used for verification reinspections of hardware at WNP-2. The team-concept method encompasses documenting and resolving discrepancies in the field. This QVI is applicable to reinspections for those contracts determined on a case basis by the Supply System QVP Manager.

QVI-09 - Special Structural Steel Reinspection Criteria

This instruction describes the criteria to be used to determine the significance of discrepancies discovered during the verification reinspections of structural steel welding at WNP-2.

QVI-08 and -09 were mainly used for the reinspection of hardware installed by contract 215, but were also used for reinspection of piping supports installed by contract 233, under

the special PP&IA program. A description of the development of these two instructions is included in the Contract 215 Reverification Report (Vol. IV, Book 3).

4.1.3 Contract Applicability

The construction of WNP-2 comprises some 200 contracts. Of these, 67 contain safety-related work that was accomplished prior to July, 1980. For the purpose of the QVP, these contracts can be categorized as one of the following:

- o Active Contract - a contract which installed QC I or QC II SC I hardware prior to July, 1980, and was restarted in 1981.

- o Inactive Contract - a contract which installed QC I or QC II SC I hardware prior to July, 1980, and was either closed prior to Restart or realigned at the time of the Restart Program.

- o Prepurchase Contract - a vendor supplying QC I or QC II SC I hardware to the Supply System prior to July, 1980.

A list of all contracts which contain safety-related work completed prior to July, 1980, is provided in Figure 4-2. This figure identifies the contracts as active, inactive or prepurchase contracts, and their respective elements of the QVP. The list in Figure 4-2 results from an initial list committed by the Supply System's 50.54(f) response letter, plus others subsequently identified. Four of the original contracts listed were found to have not actually furnished safety-related hardware; these are also identified in the figure.

The scope of work within the QVP can be divided into a number of major activities. Figure 4-3, Quality Verification Matrix, shows a method of dividing this work (by critical construction activities), and identifies the approximate work status as of June, 1980; the contracts responsible for the work; and the direct and indirect elements of the Program which serve to assure the adequacy of the plant.

4.2 Active Contracts

4.2.1 Contract Applicability

The Construction Completion Contractor, BPC, was responsible under the Systems Completion element of the QVP for the reinspection of nine active site contractors. These contractors are identified in Figure 4-2.

Contract No.	Contractor	Description of Contract Work	Program Element
2	General Electric	Nuclear Steam Supply	PP
7	Battelle Northwest	Meteorological Study	PP
17	Pathway Bellows	Refueling Bellows	PP
18	Farr Company	Standby Gas Treatment & HEPA Filters	PP
22A	Joy Manufacturing	HVAC Fans	PP
23	Byron Jackson	Standby Service Water Pumps	PP
24	HJICO, Inc.	Shop Fabricated Tanks	PP
28	Buffalo Forge	HVAC Fans	PP
31A	Whiting	Overhead Building Cranes	PP
32CD	Clayton	Jib Cranes	PP
35A	Crane Co.	Pumps and Motors	PP
36	Acme Concrete	Production & Delivery of Concrete	PP
41A	Velan	Nuclear Valves	PP
41B	Anchor/Darling	Nuclear Valves	PP
42A	Fisher Controls	Control Valves	PP
42B*	Fisher Controls	Control Valves	PP
47A	Westinghouse	Switchgear	PP
48	Westinghouse	480 Volt Substation	PP
49	I T E Imperial	Motor Control Centers	PP
51A	ESB, Inc.	Batteries	PP
51B	Power Conversion	Battery Chargers	PP
52*	Solid State Controls	Uninterruptible Power Supply	PP
53	Stewart Stevenson	Diesel Generators	PP
55	Westinghouse	Containment Electrical Penetrations	PP
57	Kinemetrics	Accelerometers	PP
58	Jelco	Instrument Racks	PP
59	General Electric	Instrument & Control Boards	PP
60A*	Sentry Equipment Corp.	Sampling & Analysis Systems	PP
62A	Okonite	Electrical Cable	PP
62B	Raychem	Electrical Cable	PP
62C	Rockbestos	Electrical Cable	PP
67	H K Porter	Air Handling Units	PP
68	BIF	Isolation Valves	PP
69	Velan	Check Valves	PP
71	Air Products & Chemicals	Hydrogen Recombiner	PP
73	Elgar	15KVA Inverters	PP
90	Leckenby	Pipe Whip Restraints	PP
92A	Ingersoll Rand	Sampling Probes	PP
92B	Kaman Sciences	Radiation Monitoring	PP
93	GPE Controls	Vacuum Breaker Valves	PP
94	B F Shaw	MSRV Discharge	PP
205	Stewart Erikson	Reactor Building Substructure	IA
206	Bovee Crail	General Construction	IA
206A	Peter Kiewit Sons	Architectural Construction	IA
207	Pittsburgh-DesMoines	Structural Steel	IA
209	Rigging International	Rigging of Reactor Pressure Vessel	IA
210	Peter Kiewit Sons	Architectural Construction	IA
213	Pittsburgh-DesMoines	Primary Containment Vessel	IA
213A	Pittsburgh-DesMoines	Containment Modifications	A
215	WSH/Boecon/GERI	Mechanical	A
216	Waldinger	HVAC/Plumbing	A
217	Sentry	Fire Protection	A
218	Fischbach/Lord	Electrical	A
219	OB cannon	Coatings - Drywell	A
220	Johnson Controls	Instrumentation & Controls	A
221	Pacific Testing Lab.	Construction Testing	IA
221A	Pacific Testing Lab.	Construction Testing	A
225	McMillan Brothers	Make-up Water Pumphouse	IA
226	Sime	Reactor Building Excavation	IA
233	B F Shaw	Spray Pond Alteration	IA
234	OB Cannon	Coatings - Wetwell	A
235	GE I&SE	Reactor Instrument Modifications	IA
6426	Wright-Schuchart-Harbor	Interim General Construction	IA
6809	Bethlehem	Reinforcing Steel	PP
6904	Welk Brothers	Annular Sleeves	PP
6905*	Welk Brothers	Skimmer Surge Tank	PP
6912	Pybus	Structural Steel	PP
6917	Texas Pipe	Pipe Spools	PP
7012	Brand Industrial	Form Separation System	PP
7426	Northwest Copper	Exhaust Duct	PP
12409	Buehler Nuclear Products	BWR High-Density Spent Fuel Racks	PP

A = Active, IA = Inactive, PP = Prepurchase
* = Review identified no safety related hardware

Figure 4-2

ITEM	CRITICAL ACTIVITY	WORK COMPL. PRIOR TO 6/80	CONTRACTS* PERFORMING WORK	QUALITY VERIFICATION ACTIONS
1	Soil Work	100%	206,206A,205,210,6426,226,225	2,E,T
			218	E
			215	E,M
2	Concrete/Rebar/Embeds (Including Pipe)	95%	205,206,206A,6426,210,225,233	2,3
			215	3,A,M
			216,218,220	3,A
3	Containment	90%	213	2,V
			213A	1
4	Structural Steel	90%	206,206A, 207,210	2,F
			215	1,A,B,F,M,N,X
5	Equipment Installation	85%	209	2,T
			216,218,220	1,J,O
			215	J,M,O,S
			207,235	2,J,O
6	Piping/Valves	85%	205,206,206A,213,233,6426	2,J
			213A,220	1,J,W
			215	1,I,J,M,P,W
7	Hangers	80%	213,233	2,J
			213A,216,217,220	1
			215	1,G,H,I,M,Q
8	Concrete Inserts/Anchor Bolts	80%	206,206A,210,233,6426	2,C
			213A,216,217,218,220	C
			215	1,C,M
9	Cable Tray/Conduit/Supports	80%	218(Installed, not QC-Accepted)	N/A
			217	1,R
10	Cable/Terminations	70%	218	1,J
11	HVAC Ducting/Supports	50%	216	1
12	Tubing/Supports/Instrumentation	60%	220	1,J,O
13	Cathodic Protection/Grounding	90%	206,206A,210,6426	2
			215	M
			218(Installed, not QC-Accepted)	N/A
14	Insulation	60%	215	M
15	Coatings	50%	213,219,234	L
16	NDE	75%	Prepurchase and Inactive Contracts	2,3
			Active Site Contracts	1,3
			215	1,D,K,M
17	Procurement	90%	Supply System and Inactive Contracts	2
			Active Site Contracts	1

*Major contracts performing the critical activity are underlined.

DIRECT VERIFICATION PROGRAMS

1 - QVP Active Contracts
2 - QVP Prepurchased & Inactive Contracts
3 - QVP Special Tasks

INDIRECT PROGRAMS EVALUATED BY QVP

A - Sacrificial Shield Wall
B - Pipe Whip Restraints Repair
C - Concrete Expansion Anchor Bolts(79-02)
D - Weld Radiograph Review
E - Soil Backfill Testing
F - Structural Steel Bolting
G - Lubrite Plate Inspection
H - Sway Brace Bracket Inspection (Pipe Support)
I - Pipe & Hanger As-Built
J - Test & Start-Up Component Inspection
K - Pre Service Inspection
L - Coating Rework
M - WBG Documentation Completion
N - 541' Steel Fabrication Program
O - Equipment Qualification
P - Arc Strike Inspection
Q - Hanger Balancing
R - Fire Protection Raceway Support Welds
S - BPC Equipment Inspection
T - RPV Set Task Force
U - Building Settlement
V - 213 Documentation Task Force
W - Weld-o-let Inspection
X - Leckenby Components Inspection

WNP-2 QUALITY VERIFICATION MATRIX
SAFETY-RELATED WORK

Figure 4-3

Contract 221A performed construction testing services only, and did not install hardware at WNP-2. An evaluation of this contract was performed in accordance with instruction QVI-07 and is reported in Volume IV, Book 1. The result of this evaluation is that reinspection of contract 221A work is inappropriate.

Contract 210A, Peter Kiewit Sons, for general construction is not listed in Figure 4-2, but was initially in the scope of the Program. However, it was subsequently determined that this contract did not perform any work prior to July, 1980, and therefore, is outside the scope of the QVP.

4.2.2 Program Content

The Systems Completion element of the QVP consists of reinspection of a sample of work completed prior to July, 1980, and review of the documentation associated with the sample. The reinspection sample, when compared with its documentation, validates the quality records for the entire population of hardware. The inspections were performed by BPC and the contractors, as discussed in Section 5.0.

The results of the reinspections are analyzed to determine the nature and number of deficiencies. Following this analysis, a decision is made: either further reinspection is required, or a positive statement is made about the remaining hardware, based upon the results of the sample reinspection. The methodology for selecting samples, performing inspections and evaluating results is discussed further in Section 6.0.

4.2.3 Plans and Procedures

The verification of active contractors was performed in accordance with BPC Procedure SWP/P-G-14, "Reverification Coordination". This procedure directs the interactions of BPC Construction Management with the Supply System and contractors to meet the requirements of the QVP. A copy of this procedure and BPC's plan for verification are covered in Volume IV, Book 1.

The contractors' plans and procedures used for the verification activities are included in the respective contract reverification reports.

4.3 Prepurchase and Inactive Contracts

4.3.1 Contract Applicability

Forty-nine prepurchase contracts and 13 inactive site contracts comprise the scope of the PP&IA element of the QVP. These contracts are identified in Figure 4-2.

4.3.2 Program Content

The PP&IA element of the QVP is composed of two phases of work. First, the reviews outlined in the original program description and second, the special examination conducted in response to questions raised by the Region V Task Team in February, 1983[12]. These phases of PP&IA contract verification are covered separately below.

4.3.2.1 First Phase, Project QA Review

Documentation reviews of the quality records for safety-related hardware are accomplished to establish whether or not the records meet specification, code, and FSAR requirements. These reviews are conducted by the Project QA organization (PQA) in accordance with established procedures.

A review of the quality history of each contract is then performed by a cooperative effort between PQA and the QVP office to determine areas of questionable performance which could need further examination or inspection. This review consists of at least the following:

- The collective results of document reviews
- Past vendor surveillances
- Past NRC-identified problems
- Equipment operating history, if any
- The collective results of NCRs and CARs

The results of the above are considered to identify the need for hardware inspection. If such a need is identified, then hands-on hardware inspection is performed by the appropriate Project organization in much the same manner as discussed in paragraph 4.2.2.

4.3.2.2 Second Phase, Special PP&IA Review

All 62 PP&IA contracts are candidates for review in this phase of the program, to confirm the effectiveness of the first phase of review. Each of the 62 contracts is evaluated against four criteria to determine which contracts warrant application of the full review process:

- Did the contractor have an NRC-reviewed QA program? If so, no further review is necessary as such contracts are outside the scope of the 50.54(f) requests.

- o Did the contractor furnish critical or unique components? If not, drop from further review.

- o Can the work or component(s) be meaningfully reinspected? If not, develop special plan for verification.

- o Is the work adequately verified by other related reinspection programs? If so, drop from further review.

The full review process for contracts selected for further review has three parts:

- o <u>Performance History Review</u>

  A determination of the contractor's qualifications as a contractor/supplier to the nuclear industry is accomplished by reviewing his history of performance on other similar projects prior to and during his work at WNP-2.

- o <u>Procedure Review</u>

  A review for technical adequacy of the contractor's procedures is performed. Procedures are selected from among those the contractor was required to submit for A/E approval, and are those which are particularly critical to the work processes.

- o <u>Record Review and Hardware Reinspection</u>

  A review of quality documentation and a visual reinspection of a representative sample of the contractor's work is performed.

Following the above steps, results of reviews and reinspections are analyzed for each contract to determine if they are adequate to verify acceptability of the hardware or if deficiencies identified indicate that additional reinspection of a larger sample should be performed. Inspections are performed and results are analyzed in the manner discussed in Paragraph 4.2.2.

4.4 <u>Special Tasks</u>

The Special Tasks element of the QVP was initially instigated to address three specific questions contained in the NRC's 50.54(f) letter:

- o "Were correct dispositions made for nonconformances, design changes, field change requests, and information requests?

o Were there instances in which improperly qualified personnel performed and inspected the work?

o Were receipt inspection requirements followed for contractor produced items and why weren't deficencies detected during receipt inspection?"

The Special Tasks element of the Program was designed to address these issues because they did not readily fall into the scope of the contract inspection elements of the QVP discussed in Sections 4.2 and 4.3. During the period the QVP was being implemented, three more tasks were incorporated in this element. These three tasks address grout, concrete and nondestructive examination (NDE). The following sections describe the six "special tasks".

4.4.1 Deficiency Document Review

The Deficiency Document Review (DDR) was established to determine whether the dispositions of nonconformances, design changes, field change requests, and information requests were correct, and is divided into two parts:

o Site documentation, subject to disposition by BRI.

o Contractors' internal documentation, dispositioned by contractors' personnel or BRI.

An examination of the procedures governing the control of each document identified for review under this program is conducted to determine that each disposition was subject to sufficient scrutiny to reasonably assure its adequacy. Where it can be demonstrated that an independent review for technical adequacy of deficiency-document dispositions or design-change information was conducted, an investigation is made to determine that surveillances on these reviews were performed to assure adherence to procedures, and to confirm that corrective action was taken where required. Where previous adequate independent reviews cannot be established, or to confirm the adequacy of previous, procedurally-conducted reviews, a random 10% sample of selected documents is reviewed for technical adequacy.

4.4.2 Personnel Qualifications Review

The Personnel Qualifications Review (PQR) was established to ascertain that properly qualified personnel performed and inspected the work or where qualifications were suspect, appropriate corrective action was taken. The review is divided into two parts:

o Examination of A/E engineering personnel competency.

o Examination of contractors' engineering and non-engineering personnel's work adequacy.

The engineering portion of this review consists of assessment of A/E and contractors' engineers by analyzing the results of the DDR. The reviews conducted there are qualitatively analyzed and researched for performance trends.

The second part of this review comprises an analysis of the results of reinspections in other elements of the QVP, previous corrective actions, PQA surveillances, and special reviews to determine the adequacy of the work and thereby the competence of non-engineering personnel.

4.4.3 Receiving Inspection Review

The Receiving Inspection Review (RIR) was established to provide insight into receiving inspection practices by assuring acceptability of material in the plant, both stored and installed. This task does not wholly verify contractors' past receiving inspection practices and inspection personnel qualifications.

To assure stored material acceptability, analysis of repeat receiving inspections performed on material in storage at the time of the stopwork is performed.

The acceptability of the installed items is verified by review and analysis of hardware reinspection and review of documentation accomplished in other elements of the QVP.

These actions are not directly responsive to the NRC's question on receiving inspection in its 50.54(f) request, because at the time of the stopwork, the plant was approximately 85% complete, and it was considered of less value to assess contractors' past receiving inspection programs than to provide assurance that the material in the plant was acceptable. The RIR task analyzed the information resulting from the above actions to contribute to an assessment of past receiving inspections and confirm material acceptability.

4.4.4 Grout Evaluation

The WNP-2 Project identified a lack of material traceability and quality control for the installation of sand-cement grout in contract 215. A field testing program was initiated to determine suitability of the installations, whereby cores of in-place grout are recovered, tested for compressive strength, and the test results compared with specification requirements. This program was implemented and expanded in three phases:

- Phase I, contract 215 sand-cement grout
- Phase II, all contracts, all grout types
- Phase III, expanded sample from Phase II.

The results are analyzed to determine the adequacy of original installations or the need for replacement.

4.4.5 Cast-In-Place Concrete Evaluation

This task was initiated because meaningful reinspection of concrete and reinforcing steel cannot be accomplished without destructive techniques. A special technical review was conducted to collect quality-related information on concrete construction in the plant and provide a comprehensive assessment of its structural integrity.

The evaluation of concrete work at WNP-2 includes a technical review of applicable contract specifications and procedures, quality records, related programs, and other investigations. A determination of the adequacy of concrete work is made on the basis of these review results and takes into account the Project's resolution of the NRC's Construction Appraisal Team inspection findings.

4.4.6 NDE Verification

This task was initiated late in the Program and responds to an issue raised in an NRC review of the QVP. It was established to verify that NDE performed on the Project prior to July, 1980, is of satisfactory quality to conform with requirements. The task includes repeat NDE on a sample of previously examined hardware and an evaluation of other NDE programs.

4.5 Special Related Programs

A number of special reinspection programs have been conducted at WNP-2 for a variety of reasons:

- o Project response to IE Bulletin
- o Project response to a recognized or potential deficiency
- o Project management attention to a critical activity

These special programs were generally performed on 100% of the hardware under investigation, although some of the programs were performed on a sample basis. A list of special programs related to quality verification is provided in Figure 4-4. This figure identifies each program with a brief statement about its content. Each of these programs is either reported within the context of the QVP or an evaluation of the special program is included in a QVP report.

IDENT	Name	Description	Where Reported Vol. No.	Bk. No.
A	SACRIFICIAL SHIELD WALL EVALUATION	100% reinspection of accessible welds and other (contract 215)	IV	3
B	PIPE WHIP RESTRAINTS REPAIR PROGRAM	100% rework/reinspection (90, 215)	II	2
C	CONCRETE EXPANSION ANCHOR BOLT EVAL. (79-02)	Sample inspection and retorque (A11)	IV	1
D	WELD RADIOGRAPH REVIEW	Reread all ASME radiographs (215)	III	7
E	SOIL BACKFILL TESTING PROGRAM	Sample density testing, assessment (A11)	II	4
F	STRUCTURAL STEEL BOLTING	Sample retorque (215, 206, 206A, 210)	IV	3
G	LUBRITE PLATE INSPECTION	100% reinspection (215)	IV	3
H	SWAY-STRUT ASSEMBLY INSPECTION PROGRAM	100% field check (215)	IV	3
I	PIPE & HANGER AS-BUILT	100% field check QC I hangers, S. B. piping (215)	IV	3
J	TEST & STARTUP COMPONENT INSPECTION	Open-and-inspect mechanical & electrical equipment (A11)	IV	3, 10
K	PRE SERVICE INSPECTION	Repeat examination of ASME welds (215)	III	7
L	COATING REWORK	Reinspection of QC I coatings (219, 234)	IV	12, 14
M	WBG DOCUMENTATION COMPLETION	Review quality records (215)	IV	7
N	541'. STEEL FABRICATION PROGRAM	100% reinspection & rework 541' steel (215)	IV	6
O	EQUIPMENT QUALIFICATION	Field check critical equipment mounting (A11)	IV	3
P	ARC STRIKE INSPECTION	100% piping reinspection (215)	IV	3
Q	HANGER BALANCING	Check and adjust hangers (215)	IV	3
R	FPS RACEWAY SUPPORT WELDS	100% reinspection of welds in fire protection raceways (217)	IV	9
S	BPC EQUIPMENT INSPECTION	Document review, field check equipment (215)	IV	3
T	RPV SET TASK FORCE	Management review of RPV installation (209)	II	4
U	BUILDING SETTLEMENT	Monitoring program (205)	II	4
V	213 DOCUMENTATION TASK FORCE	Management review of quality records (213)	II	4
W	WELD-O-LET INSPECTION	100% reinspection for weld size (215, 220)	IV	3
X	LECKENBY-FABRICATED COMPONENTS INSPECTION	100% Reinspection (215)	IV	3

SPECIAL RELATED PROGRAMS

Figure 4-4

COMMITMENT SUMMARY[1]

Washington Public Power Supply System
Letter No. G02-80-153, 7/17/80

(In Response to USNRC Letter No. EA-80-153, 6/17/80, 10CFR 50.54(f) Request)

COMMITMENT STATEMENTS	DISCUSSION
Phase I - Short Term	
o Management resources have been allocated to three Task Forces to develop plans to a) expedite resolution of outstanding problem backlog at WNP-2, b) verify adequacy of prior work, and c) assure the management systems used to control continuing work are adequate.	a) Task Force I - Problem Backlog: Plans for reducing the backlog of problems were initially outlined in Letter G02-80-259 to Region V, 11/12/80. Activities to carry out the plans have varied as necessary to respond to ongoing Project developments. Project instructions were issued for specific actions to be accomplished by participants. b) Task Force II - Reverification: This Task Force effort was separated into two phases: Task Force II, Phase I - The Restart Program reviewed procedures to assure that work could be resumed with confidence that past problems would not recur. Task Force II, Phase II - The Quality Verification Program was initiated in June 1981 to verify work completed prior to June, 1980. Reviews and reinspections were carried out through 1982. Results are now being analyzed.

[1] Supersedes the "COMPARISON" of commitments to Quality Verification Program activities, dated July 1982.

Attachment 4-1

c) Task Force III - Management System Improvements:

Management system improvements were addressed during the restart period. Measures to assure adequate management controls would be in place were initially outlined in Letter G02-80-259. These were further revised and improved by a new Construction Management Contractor being engaged in 1981 to carry out completion of the Project. The mechanical contract work was assumed by a new Systems Completion Contractor.

o Each Task Force has been directed to review standards of performance and detailed controls for work methods. Recommendations for improvements will be a principal output of the Task Force efforts.

Controls for work methods were checked as a part of the Restart procedures reviews, in accordance with project instructions developed for that purpose. The actual reduction of backlogs of problems provides evidence that recommended inprovements were carried out.

o A requirement for approval by the Assistant Director of Technology prior to resumption of installation activities was placed on the WNP-2 major mechanical contract on June 19 pending additional owner evaluation of work methods, controls, and establishment of standards of performance. Key personnel were assigned to perform the evaluation.

This commitment was revised to require Program Director approval (IOM F-80-5928, 11/30/80) instead of the Assistant Director of Technology. Prior to each contractor's restart of construction, the activities leading to restart were reviewed by Task Force personnel, Project Quality Assurance, and in some cases, an independent review by corporate personnel was performed. Restart occurred on a commodity basis prior to unconditional release of the contractor's work. Shortly thereafter, however, the mechanical work was placed in the scope of WNP-2's Systems Completion Contractor.

- A plan has been established to perform summary evaluations of other contractors' current work controls at WNP-2 to reassure ourselves that quality controls are effective and that resumption of work following the current labor related work stoppage would have minimal risk of quality problems and would not preclude inspection of past work.

  Accordingly, on July 17, we directed all contractors doing safety-significant installation work at the site to stop work until these reviews are completed.

Phase II - Intermediate

This phase will last until January 1, 1981, and will include:

- Completion of all reviews of safety-related hardware and records associated with those cases where past quality problems occurred and in those cases where timely review is essential to integrate with the startup sequence or is essential for timely evaluation of management controls. The overall review plan is given in Attachment 1.

- The results from the above reviews will be applied to our evaluation of management controls, and any necessary changes will be made to WNP-2 in this phase.

- Reinspection was performed during ongoing construction, but its schedule was integrated with the system startup sequence. Verification reinspections were completed in each system prior to turnover.

Review of work controls for contractors performing safety-related construction work at WNP-2 was accomplished by the Task Forces associated with the Restart Program.

These contractors were individually released to resume construction by approval of the Program Director following satisfactory completion of reviews and corrective actions. Actual restarts were accomplished in early 1981.

These intermediate-term commitments were not met on the schedule originally anticipated. It became apparent early in the Restart activities that, to perform a thorough review of prior work, even in only those areas where past problems occurred, it would be necessary to separate the Task Force II review actions into two phases: Restart and Reverification. It was decided that work could be resumed, provided new installations did not prevent access to previously-installed hardware for reinspection. It was necessary to complete the evaluation of management controls prior to restarting construction, but this was done without applying results of hardware reinspections. Sufficient knowledge was acquired from the review of procedures and control methods to resume work with confidence that the management improvements made would result in quality construction. The Restart activities were actually completed in June, 1981, and the Quality Verification Program activities are scheduled to be complete in July, 1983.

- The reviews of safety-related hardware and records will be completed in this phase and knowledge gained in reviewing past work at WNP-2 will be applied to evaluations of management control systems at all projects.

These reviews are now (4/83) being completed and the results evaluated. During the course of all review actions, including those accomplished prior to resuming construction, knowledge acquired was disseminated to other Supply System Projects for use in evaluating management controls. This was accomplished through a corporate-administered "Lessons Learned" Program.

- Further changes will be made in construction management systems which increase Owner awareness of contractor and subcontractor activities. Where necessary, Owner personnel will be resident with contractors for a sufficient time to evaluate work methods and quality controls. Additionally, certain contractor procedures are being individually analyzed and necessary improvements will be made. These actions will improve working level communication with the Owner and will permit more timely action to resolve problems.

Owner representatives were placed in residence with some of the contractors during the Restart Program reviews. However, the methods for completing construction at WNP-2 had been altered by engaging a highly-experienced Construction Manager early in 1981. All work is being accomplished under Bechtel Power Corporation's Quality Assurance Program.

Contractor procedures used in the ongoing work after restart were reviewed and improved by the Restart Program task forces. Very close direct review and approval of contractors' management plans for resuming and continuing work were required prior to release for restart.

- It is recognized that the resolution of outstanding concerns and problems at WNP-2 requires additional resources, more management involvement, improved performance standards, and improved tracking systems designed to inform project management of deviations from performance standards and require timely resolution and followup. Detailed recommendations will be made by the Task Forces.

Task Force I reviewed the overall status of outstanding project issues and made recommendations that backlogs of Requests for Information, Project Engineering Directives, Nonconformance Reports, Corrective Action Requests, 50.55(e)'s, and NRC Inspection Items be reduced and management controls be established to minimize future backlogs. Performance standards have been established for deficiency reports, and backlog status is tracked for all items and reported in the Program Director's Report.

o The quality assurance program will be augmented by more project, construction, and engineering management awareness and involvement in resolution of quality problems.	In addition to the normal management interfaces on the Project, a Monthly Program Director's Review is conducted to keep management informed and involved in significant problem issues. The review format requires participation by the Quality Assurance Department.
In both the intermediate and continuing phases, the following conditions will apply:	
o Reports on these contract-by-contract reviews will be prepared and given to the NRC Resident Inspector, and forwarded to Region V every two months until completion.	Bimonthly Reports have been provided to NRC, Region V until 9/82. With NRC concurrence, the frequency of reporting was revised to quarterly.
o Repairs or further action on identified deficiencies will be reported in accordance with 10CFR50.55(e) and Part 21. Deficiencies not meeting these criteria will be in the periodic reporting and available for review by the Resident Inspector.	The Project has adhered to this commitment throughout the course of the Restart Program and Quality Verification Program as evident from the reports.
o In addition to the contract-by-contract review presented in the schedule associated with the 50.54(f) response, we have provided a model of our strengthened system verification process, which provides further assurance of the acceptability of components and structures integrated into a system.	The verification process was rearranged when the Quality Verification Program (QVP) was prepared. Logic and flow diagrams are used in the QVP description to illustrate program activities and to depict the interrelated elements of the plans.
In conclusion, I reiterate that our corporate energy is dedicated to compliance with law, our public responsibility for nuclear safety and the need to resolve these issues on a rigorous schedule.	As presented to the NRC in regular progress reports since the June 1980 Stopwork, the Project has fulfilled these obligations in the past and continues to do so in its ongoing activities. Enormous resources have been dedicated to sample reinspections by all Project participants, in order to determine the adequacy of safety-related work accomplished prior to the stopwork.

The following is a "comparison" of commitments of the plan submitted as Attachment 1 with the activities accomplished (or under way) by the Supply System in its Restart and Quality Verification Programs. This attachment embodies the 50.54(f) Commitments. Subsequent attachments, also listed hereafter with a brief description of the contents, do not record commitments, per se. Rather, they provide a snapshot of activities under way or envisioned at the time of the response letter.

Revisions to the information in the Attachment 1 comparison subsequent to a July, 1982 version (submitted to the NRC with Bimonthly Progress Report No. 11) are indicated by vertical lines in the right-hand margin.

Commitment Statements	Discussion
A. Summary	
This program describes the plan the Supply System will implement for the review and/or reinspection of completed safety work to determine the adequacy of documentation, installation and hardware. Also, included is a schedule for the review of contractors, subcontractors and prepurchased equipment contractors.	A general description of activities accomlished by the Supply System to review and reinspect completed safety-related work, and therefore comply with the provisions of this plan, is presented here. Although there are no basic deviations from the objectives and policies of this plan, changes from specific provisions have occurred. Because some intermediate-term commitments were not met on the schedule originally planned, and because the amount of review associated with past work was greater than anticipated, another schedule was presented in the Quality Verification Program (QVP) document, QVI-01, Section 6.0. This schedule was not periodically updated because there are several contributing schedules involved in planning the work of the QVP, each of which was updated as necessary during the course of work.

B. Objectives

The objectives of this program are to:

- Determine whether the quality assurance program was adequate in the past to assure completed safety-related work was properly performed.

  The Restart Program and Independent Review Team reviewed on-site contractor quality programs and that activity resulted in improvements to those programs. The QVP, while not specifically directed toward assessment of those programs, is dedicated to determining the adequacy of work completed by the contractors prior to the stopwork. The acceptability of that work will provide a relevant demonstration of the ability of past Quality Assurance Programs to confirm that safety-related work was performed properly.

- Identify need for repairs or further action.

  Deficiency-review results and problems identified during Restart were used to plan QVP reinspections (reference: Generic Problem Areas List). NCRs or other appropriate nonconformance and corrective-action directives have been written for deficiencies encountered in the QVP.

- Apply knowledge gained to the review of QA programs at other Supply System Nuclear Projects.

  Applicable knowledge has been disseminated through the corporate-administered Lessons Learned Program. This process will continue as appropriate through QVP completion.

C. Policies

The review and/or inspection of safety-related work at WNP-2 will be accomplished in accordance with the following policies:

- Review of records, installation and hardware will be accomplished under Owner direction and control.

  The QVP, like Restart before it, is a Supply System program. It is directed by the Supply System with participation by personnel in all site organizations. Project instructions provided management direction for all activities.

o Review shall be integrated with on-going work plans and management systems to assure proper priority, feed back to ongoing work, and to adjust the review response to knowledge acquired.	Project direction had been given to participating organizations requiring verification of systems to be complete before turnover to the Supply System. Program activities were carefully scheduled to precede any construction milestones which would deny reinspection access. Program instructions identify considerations to be given for an increase in inspection samples when negative reinspection results are acquired.
o This program will have priority over ongoing work. The project construction work pace will be adjusted accordingly.	The decision to resume construction prior to completing reinspection changed the perception of this commitment. Verification of hardware in each system by sample reinspection <u>before system turnover</u> is a requirement identified in the the Project's Master Work List control system. This policy assures that past work was neither covered by new work nor overlooked.
o The basis for key decisions will be documented.	QVP logic is documented in various program instructions. Specific decisions impacting the work of project participants are issued by letter from the WNP-2 Program Director or Construction Manager.

D. <u>Program Description</u>

The basic elements of the review and/or reinspection program are described below:

1. Identify all contractors, subcontractors and prepurchased equipment contractors performing safety-related work, the status of their work and the status of final documentation review.	This was initially accomplished in the Restart Program. The list of closed contracts has been reviewed and amended during the course of QVP, as identified in regular progress reports. This list now includes thirteen more contracts than originally planned.

2. The review and/or reinspection program will be accomplished by using the following process. The attached logic diagram depicts the program.

The process for review and reinspection of past work was rearranged as described in Program instructions. The revised implementation process is more compatible with project activities and still assures that the proper reviews and reinspections are performed.

2.1 Determine the criticality and priority of items for review and/or reinspection.

This determination was not made in the same manner described in the original examples given in the other attachments to the Supply System's 50.54(f)-response letter. All QC-I/SC-I hardware items, furnished or installed by seventy contracts, were considered to be candidates for reinspection in the QVP, and reinspection priority was determined by the system turnover schedule.

As the review effort on prepurchase and inactive contracts draws to a close, the Supply System is initiating a special review of hardware furnished or installed by these contracts to determine if there are critical components which should be reinspected, regardless of other program reviews which indicate otherwise. Procedures and documentation for these components are also covered by this review.

2.1.1 Evaluate the significance of the safety function, complexity of construction, time period of construction or fabrication activity, assessment, and trending of deficiency documentation, and discussions with selected crafts and quality control personnel.

Some of these considerations were made during Restart and in QVP. However, determination of hardware reinspections were more dependent upon results of the documentation review. Trends of deficiency documentation established during Restart reviews, along with other identified concerns, were compiled into a Generic Problem Areas List, which was used in the development of reverification plans. Discussions were not held with craft personnel, but were held with QA, QC, and Field Engineering personnel to aid in determining past problems.

2.1.2 Identify all contractors with critical work remaining. These contractors will be the first priority for review. . .

Accomplished in the Restart Program. For QVP, however, emphasis on systems completion had more properly prioritized reviews and reinspections in the field in conjunction with system turnover.

2.1.3 Identify and evaluate all contractors with any work remaining which could limit access for reinspection of completed critical work.

Scheduling of reinspection activities was accomplished by system priority as stated above, not by contractor or commodity. For the randomly selected reinspections performed by the QVP, no such selected sample of prior work has been identified as having been covered by new work accomplished since Restart.

2.2 Determine whether other inspection or evaluation programs have satisfied or will satisfy the requirements of this program. These inspections or evaluations will be referred to Engineering for a documented evaluation of compliance with reinspection objectives. Quality Assurance and Management will review and approve results.

In the QVP, credit is taken for inspections performed by other programs only if they were appropriate and were conducted with sufficient independence to be objective. These programs are reviewed in accordance with established guidelines and the results documented (Ref. QVI-05). There are a number of such programs which have reviewed work that was already in place at the time of the stopwork.

2.3 Record Review - A review of a significant number of quality records for critical items shall be performed.

QC-1/SC-1 hardware comprises the candidate population for review and reinspection (these were considered to be the "critical items"). As identified in the model diagram sent along with the 50.54(f)-response letter, a 10% sample of the QC-I/SC-I hardware and records was to be reviewed. In much of the work, 100% of the documentation was reviewed.

2.3.1 Quality and Work Procedures.

o Verify that procedures incorporate applicable requirements from ths SAR, specification, code, and standards.	Accomplished for current site contractor procedures by the Restart Program. Procedures for contracts already closed were not reviewed for technical adequacy, but were reviewed to determine that appropriate engineering approval had been obtained. In certain instances in the Special Tasks element of QVP, inactive-contract procedures were reviewed to ascertain appropriate document control measures were in place. Further, a special effort, briefly outlined in Section 2.1, will address technical adequacy of procedures for closed contracts.
o Verify that procedures were approved by appropriate approval authorities.	Accomplished in QVP review of inactive contracts, and Restart review of active contracts.
o Verify that welding and special procedures were qualified.	Accomplished in QVP review of inactive contracts, and Restart review of active contracts.
2.3.2 Review personnel (welding/NDE/QC/Engineering) qualifications to determine whether they were qualified.	Welding, NDE, and QC Inspectors' qualifications are covered by document reviews described in Sections 3.1 and 4.1 of the QVP. The techniques described in Section 5.2 provide positive information on engineering qualifications by demonstrating individual performance, and are more valuable than less direct methods, such as verification of resume statements and the like. This review is not intended to be a resume search.

2.3.3 Review deficiency reports (NCRs, CARs, IRs, RFIs, etc.) for the following:

o Significance of backlog on quality aspects.	Accomplished by Task Force I, Deficiency Reviews.
o Quality of disposition as written.	Covered on a sample basis by the Special Tasks element of the QVP: Deficiency Document Review.
o Quality of disposition as implemented.	Covered on a sample basis by the reinspections of the Systems Completion element of the QVP.
2.3.4 Review selected sample of work packages for: o Completion of all required inspections. o Use of proper forms. o Completeness of package. o Adequacy of review by contractor personnel.	Covered by QVP, Section 3.0 for active contracts, and Section 4.0 for inactive contracts. In some cases, more than a sample are reviewed: 100% of Contract 215 (active) and all inactive contractors' quality documentation were reviewed.
2.3.5 If significant problems are identified, escalation of Records Reviews will be applied as shown in the logic diagram.	The diagram is not a specific part of the QVP. Appropriate consideration is given to escalation of inspections/reviews in all parts of the Program as outlined in Section 5.1.
2.4 <u>Receipt Inspection</u> - Evaluation of Site Contractor receipt inspection programs will be conducted.	No specific actions are directed to assessing the contractors' past programs, as this is not considered useful. Reinspections of the mechanical contractor's stored ASME material, and reinspection of owner-furnished, prepurchased material in storage was performed prior to use in the plant. Previously installed material was reinspected as a part of the Systems Completion and Prepurchase and Inactive Contracts elements of the QVP, and this included appropriate receiving-inspection attributes. Vendor drawings and information were utilized as appropriate for these and other inspection points. Deficiencies identified during reinspection of installed material, although pos-

sibly receiving-inspection-related, are resolved within the project's corrective action process, and no specific action will be taken to identify their source.

2.4.1 Critical Items received by the contractor will be identified.

For the purpose of this program, critical items are basically defined as QC-I or QCII/SC-I.

2.4.2 Contractor's documented receiving inspection programs will be reviewed for adequacy. This review shall include the following considerations:

o Inclusion of PSAR and Specification Requirements.

Active contractor procedures for receiving inspection were reviewed in the Restart Program for inclusion of FSAR and specification requirements. Results of these reviews are being considered in QVP review of receiving inspection activities.

o Receiving Inspection personnel qualifications.

Receiving inspection personnel qualifications were checked prior to restart of construction. Earlier personnel will not be checked because only general requirements existed prior to restart, and verification is not considered useful. A more valuable method was the reinspection of stored material to verify that it meets project requirements, which indicates whether past inspections were satisfactory.

o Use of drawings, vendor data and/or vendor specifications.

Relevant information provided by the vendor is utilized in performing verification reinspections of stored and installed hardware.

o Review of deficiencies identified subsequent to receipt inspection to determine if they should have been documented at receipt inspection.

This will not be done. It would provide indirect information which is inconclusive because of the difficulty in determining if discovered deficiencies existed at the time of receiving inspection. Further, the reviews, inspections, and tests performed by the project in this and other programs are directed to verifying the in-place end product.

2.4.3	If the receiving inspection program is judged to not be adequate, a significant sample of installed hardware shall be reinspected.	The Quality Verification Program provided a complete reinspection of the mechanical contractor's critical items which had a potential for installation in in the plant, to verify correct initial receiving inspection. With minor exceptions, the material was found satisfactory. The Supply System initiated a complete reinspection of owner-furnished materials in their custody. For hardware already installed, a 10% sample was reinspected to determine its acceptability.
2.4.4	If the receipt inspection program is judged adequate, a smaller sample of reinspection shall be accomplished.	Covered in 2.4.3.
2.4.5	Significant problems identified during the reinspection program shall result in a progressively larger sample size.	For prepurchased material in storage, 100% was reinspected. For the mechanical contractor's ASME material in storage, 100% was reinspected. For previously installed material, the Quality Verification Program analyzes the nature and number of deficiencies discovered in the reinspection process to determine appropriate increases in sampling.
2.5	Installation Reinspections - Installation Reinspections not covered by the reviews performed in 2.2 shall be accomplished as follows.	Installation reinspections are accomplished by the Quality Verification Program.
2.5.1	Critical work activities within the contractor's scope of work shall be identified. Critical work and activities are determined as identified in Section 2.1.	Covered in Section 2.1.
2.5.2	A significant sample of work activities will be selected for reinspection.	Basically, ten percent of the QC-I/SC-I items in the plant which are not covered by other inspection or evaluation programs are reinspected on a systems basis. The reinspections are repeat final visual inspections of the hardware.

2.5.3 Reinspection shall independently verify adequacy of the activity, as well as the accuracy of the associated records.	QC instructions have been provided to cover the reinspection activities and review of quality records. The instructions require that independence of the inspectors be maintained.
2.5.4 If significant problems are found in the installation, a progressively larger sample will be reinspected.	The QVP analyzes the nature and number of deficiencies discovered in the reinspection process to determine appropriate increases in sampling.
2.6 <u>Deficiencies</u> - Deficiencies identified during the performance of record review, reinspection of installations and received material shall be documented.	Deficiencies are recorded on Inspection Reports and Nonconformance Reports. The deficiencies are described and the corresponding deficiency-documents are identified in the final reports of the QVP.
2.6.1 An analysis of the number and types of deficiencies identified shall be performed to determine the root cause of the problem and appropriate corrective action initiated. Relevant information will be communicated to all projects.	Many deficiencies were identified and trended in the Restart Program, and subsequent management changes were made at WNP-2. The results of the analysis of these task force efforts were disseminated to all projects through the corporate-administered Lessons Learned Program. Likewise, the information on deficiency trends arising from the QVP are being communicated through that program.
2.6.2 Deficiencies meeting the requirements of 10CFR50.55(e) and/or Part 21 shall be reported to the NRC in accordance with approved procedures. Others shall be summarized in the bimonthly report to the NRC Region V Office.	Appropriate reporting to the NRC has been accomplished during the Restart and Quality Verification Programs. In addition, detailed reports of the reviews and reinspections are being prepared to record the findings of the QVP, and will be published at the completion of the program.

ATTACHMENT 2 of 50.54(f)

Commitment Statements:

This attachment gives an example of the application of review criteria to Contract 216. It describes a rationale for selecting hardware for review.

Basically all QC-I and SC-I hardware which has been completed, inspected, and accepted prior to July, 1980, are candidates for review in the QVP. Not all work will be sampled for reinspection; however, decisions for not reinspecting the work of a contract or a system will be documented in the reports of the reinspection programs.

ATTACHMENT 3 of 50.54(f)

Commitment Statements:

Attachment 3 is a description of the features, scopes, and functions of the three Supply System Task Forces established to respond to the 50.54(f) information request.

Task Force activities have been or are being performed in accordance with the provisions of this attachment. Aside from the condition where much of the Task Force III activity was identified and performed within Task Force II, Phase I, there have been and there are no anticipated significant deviations from the provisions of the attachment.

ATTACHMENT 4 of 50.54(f)

Commitment Statements:

Attachment 4 is an illustration of a Flow Diagram for a system verification process.

There are no significant departures from elements illustrated. More detailed illustrations of the verification processes are included in the Quality Verification Program description.

ATTACHMENT 5 of 50.54(f)

Commitment Statements:

Attachment 5 specifically relates to then-near-term actions for Contract 215.

Except for some of the verification of past work, these issues were addressed in earlier activities, prior to the restart of construction. The past work is covered in the Quality Verification Program. The construction scope of Contract 215 was transferred to the Systems Completion Contractor.

ATTACHMENT 6 of 50.54(f)

Commitment Statements:

Attachment 6 described then-recent actions to strengthen management control of the Project.

This was a historical snapshot of management actions during the period preceding the cessation of work. The attachment contained no specific commitments pertaining to verification tasks. A number of these activities continue today.

SECTION 5.0

PROGRAM MANAGEMENT

This section describes the organization and management activities which control the QVP, and the methods by which close coordination and control were achieved.

5.1 Organization

The QVP was performed by the Supply System and its Construction Management Contractor, BPC. The Supply System QVP Manager was responsible for the overall implementation of the program. The QVP Manager, while reporting to the Supply System Construction Manager, was not directly involved in the ongoing construction of the plant. Figure 5-1 is a functional organization chart which illustrates the activities and responsibilities of the Program participants.

5.2 Program Interfaces

5.2.1 Internal Control

The activities which comprise the QVP have been performed by a diverse group of participants. This was realized at the beginning of the Program, so conscious steps were taken to ensure the Program was properly implemented. This was particularly the case in the Systems Completion element where verification of active contracts was being performed by the Construction Manager and the construction contractors.

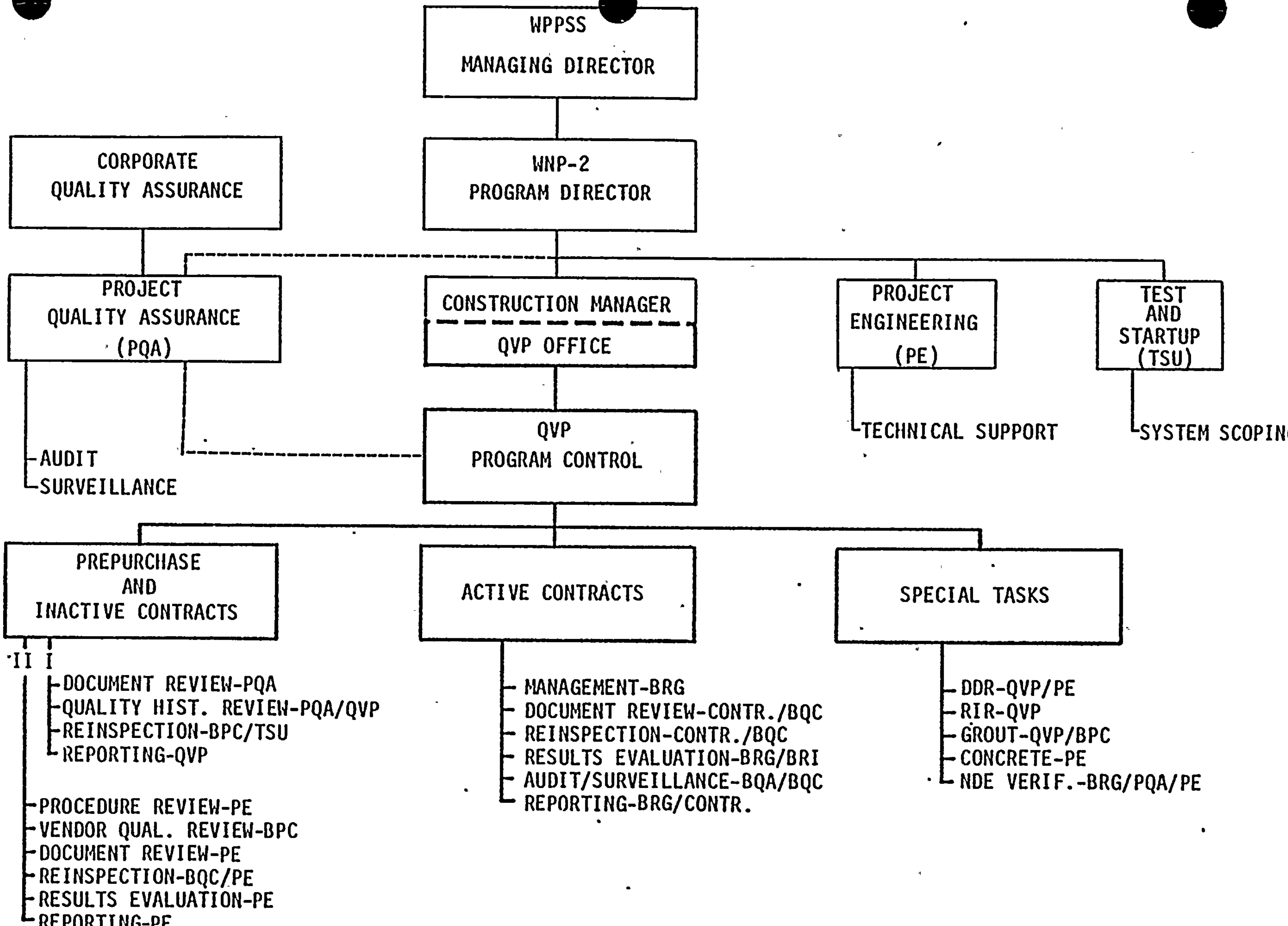
5.2.1.1 QVP - Bechtel Reverification Group

Daily interface meetings were held with the QVP Manager, his appropriate staff members, and the BRG lead engineer. The detailed philosophy for reinspection, progress and results were discussed at these meetings.

The BRG held frequent meetings with the contractors during the preparation and implementation of the Program. The QVP office was kept informed of these activities and participated in many of the contractor meetings.

5.2.1.2 QVP - Project

The internal control between the QVP office and other Project departments was managed by normal administrative processes. Requests for action were initiated by memoranda, and such actions were monitored by regular interface meetings.



QVP FUNCTIONAL ORGANIZATION

Figure 5-1

The main Project-related activities were the meetings between the QVP staff and the Project QA department for the control of the PP&IA document review; and the meetings among the QVP staff, Corporate and Project Engineering departments, Project QA, the A/E and active site contractors for the Special Tasks element of the QVP.

5.2.2 Management Involvement

WNP-2 Project management received information on the depth, status and findings of the QVP from a number of regular meetings between QVP participants and Project management staff, both Supply System and Bechtel. The major informational meetings are as follows:

- o Daily meetings with the Supply System Construction Manager
- o Periodic informal meetings with the WNP-2 Program Director
- o Formal presentations to Project management
- o Presentation to Corporate Nuclear Safety Review Board
- o BRG presentations to BPC corporate representatives

Project management also obtained information during the preparation of presentations to outside organizations, and feedback from its independent consultants, as discussed in Section 5.4.

5.2.3 NRC Involvement

The NRC Resident Inspectors kept themselves informed of the activities of the QVP by a variety of means:

- o The Resident Inspector (RI) attended many of the daily interface meetings between the QVP and the BRG, at which time these meetings were extended beyond the normal daily scope to address broader issues.
- o The RI attended the program presentations to Project management and some presentations to external auditors.
- o The RI requested copies of all BRG outgoing correspondence and all significant QVP correspondence. In addition, the RI receives copies of all completed reports.
- o The RI was provided additional information or documentation upon request during the course of the Program. These requests were tracked by the QVP office to ensure they were met. Tracked items included those which were recorded during NRC weekly and monthly exit meetings, as well as the RI's informal requests.

The QVP Manager periodically gave presentations to the NRC Region V staff on the QVP. These presentations have covered a broad spectrum of the Program, including content, results, status and methodology. Questions on Program content and methodology have, at times, resulted in additional Program commitments.

5.3 Reporting

The reports discussed in this section are those periodic reports related to management of the Program. The large number of reports which describe the activities and results of the Program are identified in Section 1.0 and will not be discussed here.

5.3.1 Internal Program Reports

The internal reporting of active construction contracts between the BRG and the QVP consisted of a semi-monthly report which described the status of the program and the major activities occuring during the report period. This report includes the semi-monthly reports submitted to the BRG by each of the contractors. These reports describe the status and activities for each contract.

In January, 1983, the frequency of BRG reporting was reduced to monthly because of the reduced level of reinspection activity toward the end of the Program.

5.3.2 Reports To Management

The QVP Manager submitted weekly reports to the Supply System Construction Manager. These reports contained general information and a section on each of the three major elements of the QVP. Information for the latter sections was prepared by each of the lead engineers in the QVP office. This report provided a detailed and accurate status of the activities being performed in the Program.

5.3.3 Reports To NRC

The Supply System provided periodic reports to the NRC Region V office describing the major activities in the QVP during the reporting periods. These reports were initiated to meet a commitment made in response to the NRC's 50.54(f) letter. Initially, the report described the activities occurring during earlier phases of the RCSW program (refer to Section 3.0). However, from mid-1981 onwards the Restart Program was complete and the reports dealt solely with the QVP.

The reports contain a description of the major activities occurring during the report period, including a description of any changes in the Program by which the Project was meeting its

commitments in the 50.54(f) response letter. The status of the Program is described along with the major findings.

The reports were initially submitted on a bi-monthly basis which continued until the end of June, 1982. From July 1, 1982, the reports were submitted on a quarterly basis, pursuant to an agreement between the Supply System Program Director and the Region V Administrator.

5.4 Audits

The QVP was periodically scrutinized through rigorous reviews by auditing agencies, both internal and external to the Project. Thirteen audits and 75 surveillances were conducted during the implementation period of the Program. These are listed below and discussed hereinafter.

Audits & Surveillances

Overall Program		
Audit	Jan 82	Project QA
Management Assessment	Apr 82	Corporate QA
Audit	Jun 82-Sep 83	TAA
Audit	Jul 82	Administrative Auditor
Surveillance	Oct 82	Project QA
Audit	Jan 83	Corporate QA
Bechtel		
Audit	Jun-Jul 82	Bechtel QA
Audit	Sep 82	Corporate QA
Audit	Jan 83	Bechtel QA
Contractors		
5 Audits	Jan-Oct 82	Bechtel QA
74 Surveillances	Dec-81 - Oct 82	Bechtel QC

5.4.1 Internal Audits

5.4.1.1 Bechtel QA

Bechtel QA performed two audits of BPC's and five audits of the contractors' QVP activities. These audits verified

the implementation of the Program to the applicable procedures. They consisted of reviews to ensure compliance with Program requirements and thoroughness of reinspection. The audit reports are included in the appropriate book of Volume IV.

5.4.1.2 Bechtel QC

Bechtel QC performed a total of 74 surveillances of the contractors during the reinspection activities. These surveillances were performed to ensure compliance with Program requirements, and are included in the respective contract reports (Volume IV).

5.4.2 Management Reviews

5.4.2.1 Management Assessment

WNP-2 Project management initiated a Management Assessment of the QVP in April, 1982.(13) The Management Assessment Team consisted of senior personnel from the Supply System Corporate QA organization. The objective of the assessment was to provide the WNP-2 Program Director with an evaluation of the ongoing Quality Verification Program's capabilities to satisfy the commitments made in the July, 1980, response to the NRC's 50.54(f) request.

The assessment was performed by a thorough review of commitments, reports to NRC, QVP procedures and correspondence; interviews with a complete cross-section of the personnel involved; and selected observations of the functioning program.

The assessment identifies a number of areas in the Program which required strengthening in order to most effectively meet the commitments. It also identifies a number of strong points, the most important of which was the knowledge, attitude, qualification, and organization of the personnel assigned to the Program. The Project initiated corrective action to strengthen the weak areas.

5.4.2.2 Technical Audit Associates (TAA)

The Supply System obtained the services of TAA to perform an independent review of the WNP-2 Plant Verification Program, of which QVP is a part. The Plant Verification Program is described in separate reports.(14) TAA is a select group of senior management personnel, each of whom has many years of responsible experience in the nuclear industry.

TAA performed an ongoing review of the QVP which includes an in-depth review of selected Program reports. These reviews were performed to ensure the technical validity of the Program, its assumptions and conclusions.

5.4.2.3 Corporate QA

The Supply System Corporate QA organization performed an audit of BRG in September, 1982,[15] and an audit of the QVP in January, 1983.[16] These audits confirm the adequacy of the implementation of the Program as well as the inclusion of resolutions to earlier Management Assessment findings.

5.4.2.4 Project QA

The Project QA organization performed an audit of the QVP in January, 1982,[17] to ensure the Program was being correctly implemented by its major participants.

Project QA performed a surveillance in October, 1982,[18] to ensure Management Assessment findings had been resolved.

5.4.2.5 Administrative Auditor

The Supply System Administrative Auditor, who reports to the Board of Directors and interfaces with the Office of the Washington State Auditor, reviewed the Program in July, 1982.

5.4.3 NRC Overview and Inspections

The NRC Region V office has comprehensively covered the QVP during the period of its implementation. This has been achieved through the events outlined herein as well as by the direct involvement of the Resident Inspector discussed earlier.

- In February, 1983, a Region V Task Team reviewed the QVP against the commitments in the Supply System's original response to the 50.54(f) request. This team identified 11 issues which were discussed at a meeting in March, 1983.[19] At this meeting, Project responses to the questions raised were provided and additional commitments were made by the Supply System.

- In June, 1983, the Supply System made a QVP presentation at the Region V office as part of an overall Project status report. This presentation evolved into a work session in which eight additional questions were raised. These questions were answered at a presentation at the Project site later that month, and also included additional commitments.[20]

- Early in the Program, the RI requested notification prior to performing any reinspection activities. This enabled the RI to perform unannounced checks of the adequacy of the reinspections.

- The RI or Region V representatives have reviewed reports generated as a part of the Program. These reviews have included independent inspections of a sample of hardware to confirm the adequacy of the reinspections.

- The RI or Region V representatives have reviewed the implementation of many aspects of the Program during its progress.

5.5 Resources and Cost

The Supply System and its contractors have expended approximately 150,000 manhours of effort in the execution of the QVP. This estimate includes those resources dedicated to reviews, inspections, management activities, and construction-craft support of the Program, but does not include the resources expended in special related programs. An estimate of these manhours, identified by Project organization, is provided below. The total cost of the QVP is estimated to approach $10 million.

ESTIMATE OF
QVP PERSONNEL RESOURCES

ORGANIZATION	AVERAGE NO. PERSONNEL	MANHOURS X 1000
QVP Office	6	23
BRG Office	6	18
Project Engineering	8	15
Corporate Engineering	5	1
Project QA	6	28
Bechtel QA	2	4
Grout Program	13	6
Contractors	51	53
TOTALS	96	148

In addition to QVP resources, the Project has expended in excess of one and one-quarter million manhours and $32 million on special related programs to verify the work in place.

SECTION 6.0

METHODOLOGY

This section addresses the rationale applied to sampling, and the techniques used to select hardware items for reinspection and design change documents for review. It covers the philosophy applied to inspections in this Program and the methods used to perform them. It also addresses the rationale used to evaluate results of the inspections and reviews so that conclusions may be drawn and appropriate corrective actions initiated. The entire process is displayed in the logic diagram in Figure 6-3 near the end of this section.

6.1 Sampling Rationale

6.1.1 Active Contracts

6.1.1.1 Determine Hardware Population

The process of selecting a representative sample of hardware begins with a determination of the population of safety-related work completed by the construction force and accepted by the contractors' QC prior to July, 1980. The contractors' own management system control lists are used to do this wherever possible.

Those items constructed and accepted after July, 1980, are excluded from the scope of QVP because of the strengthened construction controls in place at the time of the NRC-approved restart. These improvements in the management system are:

- o Contractors' improved management systems, QA Programs, and procedures reviewed by Restart Program
- o New Construction Manager/Construction Completion Contractor with NRC-reviewed QA Program
- o Retraining of construction personnel and inspectors to improved procedures
- o Strengthened A/E responsibility for design by separating design and construction management functions
- o Realignment of contract scopes to avoid duplication of work types
- o Supply System management improvements made to strengthen projects.

The next step in the process is to determine those components which were reworked after July, 1980, either because of redesign or previously identified deficiencies. If so, the current Project QA Program covers this work, and the components can be removed from the scope of QVP.

The above does not affect the validity of the sampling process or the scope for the purpose of verification, because QVP addresses all safety-related work which was constructed, inspected and accepted prior to July, 1980, and which remains in place.

The final step in the determination of the population is the evaluation of other related programs to determine if these programs meet the requirements of the QVP. These programs were addressed in Section 4.5. If the programs meet the requirements of the QVP, then the population of hardware covered by these programs is eliminated from the scope of reinspection and the overall population for sampling is adjusted.

6.1.1.2 Select Items

The 50.54(f)-response letter committed the Supply System to review a "significant sample" of records and hardware. The logic diagram in the response letter indicates 10% of the records will be reviewed. Ten percent, therefore, has been taken to define "significant sample" for hardware as well.

For the larger contracts, a 10% sample size is considered to be a very significant amount, which allows statistical results and projections to be determined with a great degree of confidence.

The sample selection process is as follows:

- o Separate each contractor's work scope into similar components, i.e., piping, hangers, duct pieces, etc.
- o Select 10% of each component type at random using appropriate random number tables, hand selection, number generators, etc.
- o Document the sample selected prior to inspection.

For contracts 215 and 218, because of the large work scope, components are selected from within startup systems to facilitate schedule requirements. The system turnover schedule was used to guide the order of inspections for maintaining priority over on-going construction.

For contract 215, a random 10% sample of piping isometrics was selected within each system. The hangers on those isometrics comprise the 10% sample of hangers across the contract. A check was made to verify that the sample size of hangers was adequate to cover the total number of hangers installed by contract 215. This sampling process did not negate the randomness of hanger selection, rather, it selected hangers in random sub-groups.

To verify that the random samples represent a typical cross-section of the total population, a check was performed for contract 215, mechanical construction, and contract 218, electrical construction, the two largest active contracts. This was a comparison of the time of installation of the the sample with the time of installation of the total population. The excellent correlation between the sample and the total population is apparent from examining Figures 6-1a and b for contract 215 hardware, and Figures 6-2a and b for contract 218. The graphs are plotted on different scales (10X) to facilitate comparison of the 10% samples with the total populations.

A random selection should provide a correct distribution across time period, personnel performing and inspecting the work, complexity of installation, etc. The time-period check of the sample against the population shows this to be true.

6.1.2 PP&IA Contracts

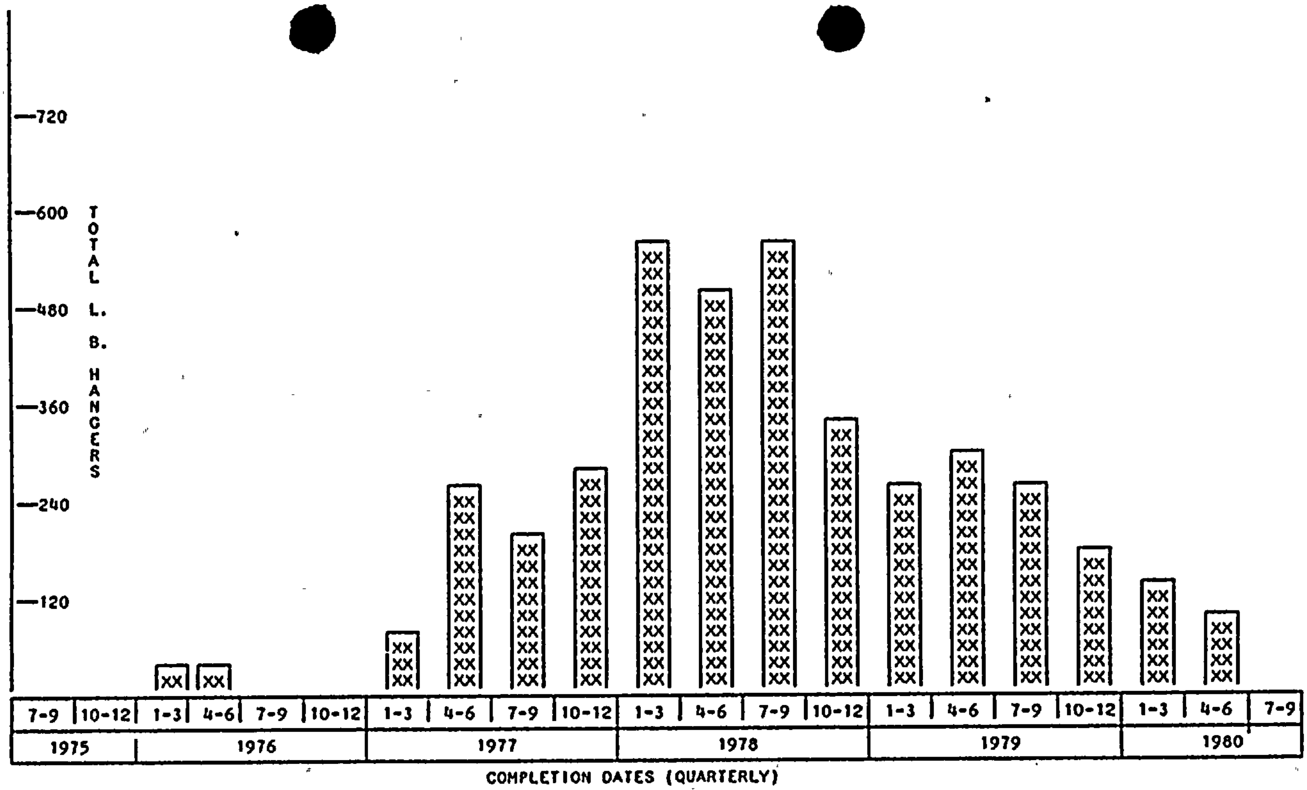
6.1.2.1 Determine Population

All of the hardware provided in the plant by these contracts is subject to verification. Therefore, in the first phase of the PP&IA element of the Program documentation for all safety-related hardware is subject to review, and hardware reinspection is determined by consideration of the results of the document reviews, contract-quality-history reviews, and special related programs.

In the second phase of this element, the process is oriented to reinspection of hardware, and the methodology for determining the candidate population for reinspection virtually follows that described in Paragraph 6.1.1.1.

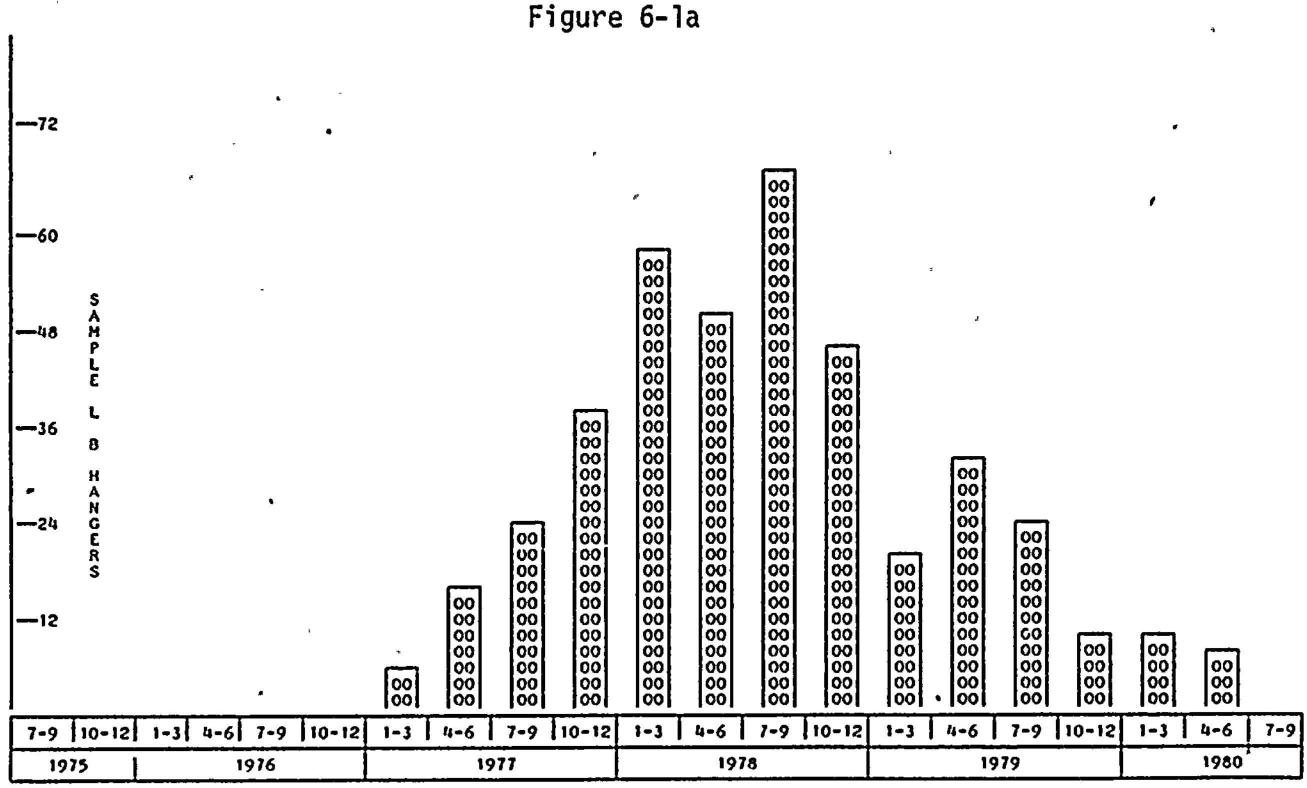
6.1.2.2 Select Items

In both phases, following a decision to reinspect hardware, the sampling process for items which lend themselves to discrete counting is identical to that outlined in Paragraph 6.1.1.2. In the case of unique items for which discrete counting is inappropriate, such as, one safety-related crane, a reinspection plan is established.



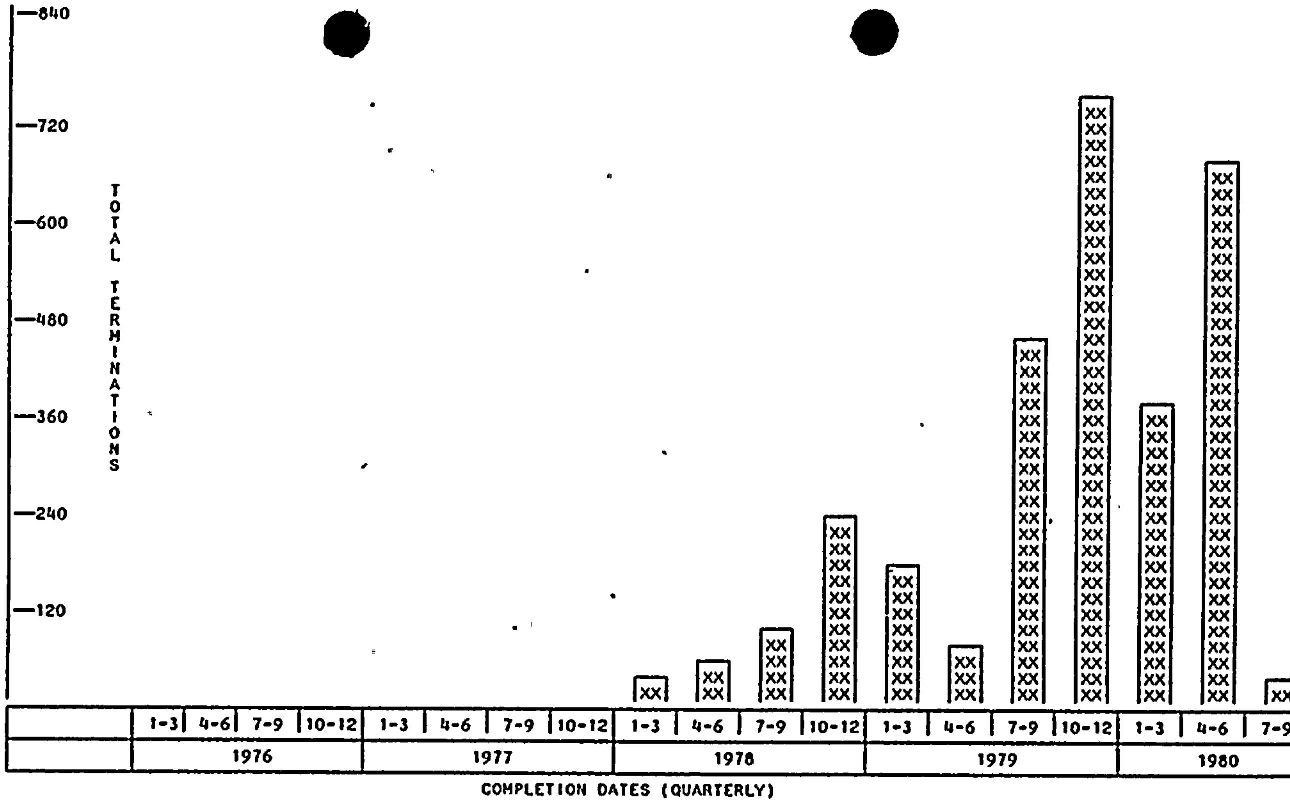
CONTRACT 215 LARGE-BORE HANGER POPULATION

Figure 6-1a



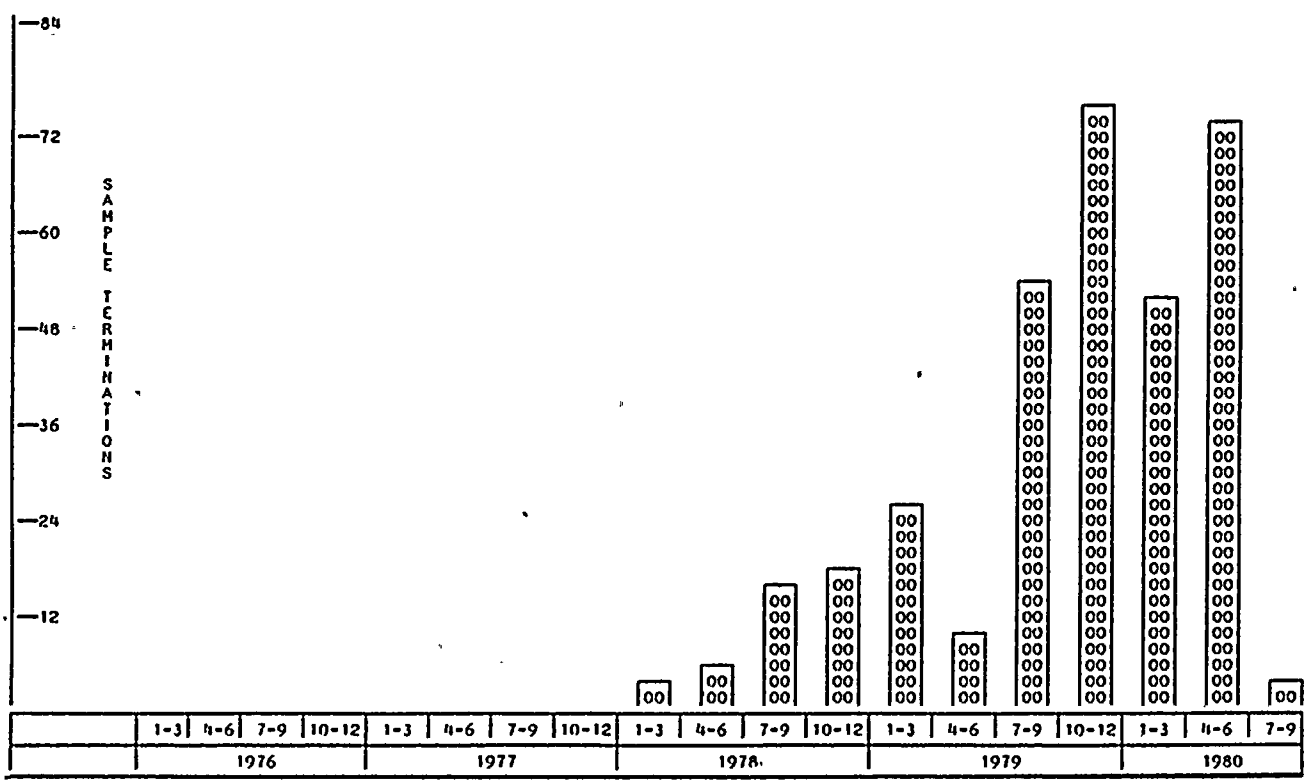
CONTRACT 215 LARGE-BORE HANGER SAMPLE

Figure 6-1b



CONTRACT 218 CABLE TERMINATION POPULATION

Figure 6-2a



CONTRACT 218 CABLE TERMINATION SAMPLE

Figure 6-2b

6.1.3 Special Tasks

6.1.3.1 Deficiency Document Review

The determination of the candidate population of design-change documents, the segregation of documents into generic groups, the evaluation of past activities and special programs, and the random selection follow essentially the same process as that described for active contracts in Section 6.1.1.

6.1.3.2 Personnel Qualifications Review

This task utilizes the results of reviews conducted in other elements of the Program, and does not, in itself, include a sampling process.

6.1.3.3 Receiving Inspection Review

This task uses information obtained from a combination of 1) inspections in other elements of the Program, and 2) repeat receiving inspection of 100% of the hardware in storage at the time of the stop work order. The task does not, in itself, include a sampling process.

6.1.3.4 Grout Evaluation

The sampling and testing of grout microcores was accomplished in three phases. In the first phase, samples of one type of grout were selected randomly from one contract to determine the extent of an identified problem. This effort was later extended in the second phase to address a total population of all grout types in all contracts. Sampling of grout microcores was extended in the third phase to meet criteria established in NRC IE Bulletin 79-02,[(21)] for achieving a 95% confidence level that defects could exist in less than 5% of the population.

6.1.3.5 Cast-In-Place Concrete Evaluation

A technical review of essentially all quality records, procedures, specifications, and test results in all contracts which provided QC I or QC II SC I concrete construction in the plant, was directed to characterizing the quality of that work. The task does not, in itself, include a sampling process.

6.1.3.6 NDE Verification

The total population of NDE work completed prior to July, 1980, was determined by review of all contracts which produced safety-related work. An evaluation was then made of other related programs to ascertain verification activities already performed. Random samples were selected from the resultant population to meet the criteria established in IE Bulletin 79-02.

6.2 Inspection Philosophy

6.2.1 Generic Problem Areas

A set of Generic Problem Areas (GPA's) was developed prior to performing any reinspections. These GPA's were compiled from a review of the following items:

- NRC Inspection Reports
- 50.55(e) Reports
- Restart Findings
- System Walkdowns

The GPA's consist of a list of 50 areas where problems had been identified on work completed prior to July, 1980. The purpose of the GPA's was to ensure, whenever possible, that reinspections adequately addressed the concerns over previous work. For active contracts, this was achieved by assigning the GPA's to all applicable contractors and requiring that the review process address each GPA. The ability of the reinspection to address the GPA is, of course, dependent upon the extent the problem remains visible in the final configuration.

The list of GPA's is covered more fully in Volume IV, Book I.

6.2.2 Personnel Independence

The hardware inspections and document reviews for active contracts were performed by either the contractors' QC inspectors or Bechtel QC engineers. The BQC engineers were obviously independent of the original inspections. The inspections performed by the contractors on their own work were performed by subcontractors or by the contractors' own QC personnel and surveillance of this was performed by BQC. In the latter case, the inspection personnel were not allowed to be those who performed the original inspection.

The PP&IA and Special Tasks elements were performed by Supply System or BPC personnel who were independent of the designers and constructors who performed the original work.

6.2.3 Inspection Scope

The reinspections of hardware were complete, repeat, final, visual inspections of the hardware components. These inspections were performed either to current contractor procedures, which, for active contracts, had been reviewed and approved during the Restart Program, or to new instructions or procedures. In general, disassembly or destructive work was not performed in order to repeat the inspections. However, sandblasting of major welded components was performed in order to adequately and critically examine the weld quality on pipe supports and structural steel.

Inspections of code-stamped items from ASME vendors were not reinspected for weld quality, nor were standard off-the-shelf components reinspected, provided that proper surveillance had been performed on the vendor. This is documented as Key Decision #2(22) in the QVP. The code data reports for ASME hardware are considered to be objective evidence of acceptability for these items, since they provide legal documentation of an independent inspection.

The document reviews were repeat technical reviews and were performed in accordance with current approved procedures on the quality records that support the hardware selected for reinspection.

The review scope of the Special Tasks element is adequately addressed in the descriptive information provided in Section 4.0.

6.2.4 Inspection Schedule

For active contracts, the inspections were performed and the results evaluated prior to turnover of a startup system from BPC to the Supply System. This maintained the priority over on-going work, and is documented as Key Decision #1(23) in the QVP. Although some items were inaccessible for reinspection, no items were made inaccessible by work performed after July, 1980.

For inactive contracts, inspections were performed as soon as practical after the need for reinspection was identified.

6.3 Inspection Results Evaluation

This section presents the methodology for evaluating inspection and review results.

6.3.1 Active Contracts

The scope of reinspections varies greatly from contract to contract and hence the complexity of an analysis of the reinspection results also varies greatly. The deficiency evaluation process is described in this section for the most complex contract. The same major steps were applied to all contracts, but the specific details are simpler. The major steps of the deficiency evaluation process are:

- o Sort the negative inspection results for common deficiencies, e.g., undercut, undersize, as-built variance, etc.

- o Check for deficiency coverage by a special related 100% inspection program. Eliminate these from further analysis, e.g.:

  - Arc strike program
  - As-built program
  - Hanger balancing

<u>NOTE</u>: Inspection programs performed under BPC's current QA program are corrective programs, where necessary.

- o Review common deficiencies (not covered by related programs) for safety significance:

  - Consider specification and code requirements, SAR commitments, etc.
  - Consider multiple deficiencies on components.
  - Determine remaining design margins with deficiency.
  - Determine likelihood and probable cause of failure, i.e., seismic event, design loading, etc.
  - Extrapolate identified deficiencies to population not reinspected.

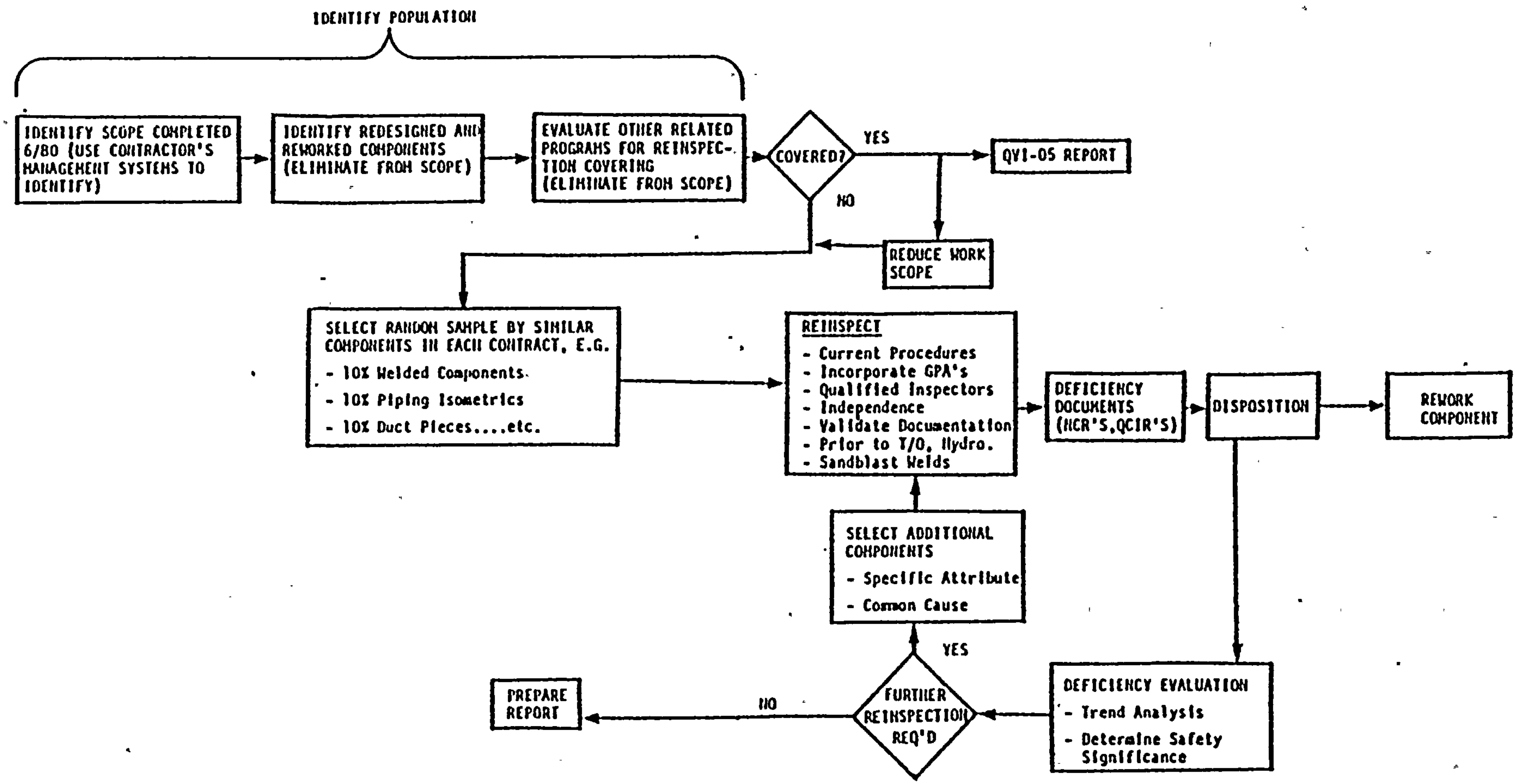
- o If deficiencies are determined to be safety significant, sort for common causes and examine characteristics surrounding the deficiencies, such as (for contract 215):

  - Welder
  - QC Inspector
  - System
  - Component

- o Collect results of individual steps, search for common causes (e.g., QC Inspector vs number of weld deficiencies).

- o Perform further reinspection of the identified problem area.

The entire reinspection and results evaluation process is shown in Figure 6-3.



QUALITY VERIFICATION PROGRAM REINSPECTION PROCESS LOGIC DIAGRAM

Figure 6-3

6.3.2 Prepurchase and Inactive Contracts

The major steps of the deficiency evaluation process for PP&IA contracts closely follow those for the active contracts:

- o Sort the negative inspection or review results for common deficiencies (weld undersize, wrong material, etc.) and by commodity (valves, pumps, motor control center, etc.).

- o Analyze the sorted results to determine the safety significance of deficiencies.

- o Analyze the sorted results to determine if generic or repeating trends exist. If so, analyze further for common causes (same welder, same QC inspector, etc.).

- o Review the results of trend analysis and the determination of safety significance. Determine whether further inspection is required.

- o If further inspection is required, select additional components for reinspection, based on common causes of deficiencies and specific attributes found deficient.

6.3.3 Special Tasks

6.3.3.1 Deficiency Document Review

The sequence of steps for the evaluation of document dispositions found technically inadequate in this review follow essentially the same process as that for active contracts:

- o Sort the discrepant documents by type, contract, dispositioning engineer, discipline, and date of disposition.

- o Submit the discrepant dispositions for review by PQA and BRI to determine safety significance and corrective action requirements.

- o Review sorted documents for generic trends (same dispositioner, same contract, etc.), and record reslts.

- o If additional review is determined to be required, select an enlarged sample based on the trend analysis results (contract, document type, etc.).

6.3.3.2 Personnel Qualifications Review

The Personnel Qualifications Review is an analysis other elements of the QVP which ensures the competency and therefore the qualifications of those associated with quality affecting work. The process for the analysis of deficiencies discovered in these programs is discussed throughout this section. Two general areas are covered:

- o Technical inadequacy of dispositions by engineering personnel is addressed in the Deficiency Document Review.

- o Substandard performance by nonengineering personnel is addressed in active contracts, PP&IA contracts, NDE review, and others.

If a programmatic deficiency is found during this review, it is addressed through the existing management corrective action request system.

6.3.3.3 Receiving Inspection Review

The Receiving Inspection Review is an analysis of the effectiveness of several site programs to ensure the adequacy of material installed or in storage awaiting installation at the time of the stop work order. These programs include the active and PP&IA contract reviews, test and startup program, and special reviews. The process of analysis of deficiencies is presented throughout this section. Generic deficiencies identified in other reviews, as well as programmatic deficiencies identified as a result of this review, are resolved through the existing management corrective action request system.

6.3.3.4 Grout Evaluation

The sequence of steps for the evaluation of grout compressive-strength-test results which fail to meet specified requirements is as follows:

- o Sort nonconforming results by grout type, installing contractor, use, and date of installation.

- o Review sorted results for generic trends (same contractor, same grout application).

- o Submit noncomforming results to BRI for a comparison and analysis of test results to design requirements and corrective action if required.

- o Increase sample size in accordance with IE Bulletin 79-02 sampling requirements if BRI review of nonconforming test results indicates the grout strength is not acceptable.

6.3.3.5 Concrete Evaluation

The concrete quality evaluation is a collection, trend analysis, and discussion of quality issues in all contracts which installed concrete. Generic deficiencies identified in the contract work were resolved through the management corrective action programs in effect at the time of construction. These formed the basis for the evaluation.

6.3.3.6 NDE Verification

The actions associated with evaluation of deficiencies in NDE verification are essentially the same as those for active contracts. Sample sizes are increased in accordance with IE Bulletin 79-02 requirements.

SECTION 7.0

PROGRAM RESULTS

This section presents the quantitative results of the QVP reinspections of hardware and reviews of quality records, procedures, and design change documents. Those instances where further investigation was necessary are also identified.

7.1 Active Contracts

7.1.1 Contract 213A, PDM

Pittsburgh-Des Moines Corporation (PDM) was responsible for the installation of components and piping for the containment. A substantial amount of the pre-1980 work was reinspected and/or reworked to resolve a major Corrective Action Request (CAR) generated during Restart. Of the hardware not addressed by the CAR, a sample of 40 items, representing weld pads, pedestal connections, downcomer attachments, and penetrations was selected from a population of 208 items. As a result of the reinspection of this hardware, the sample was increased in two areas (weld pads - 100%, pedestal connections - 20%) for a total sample of 82. The only safety-significant deficiencies were identified on weld pads, where the inspection covered them all; the ten significant deficiencies were reworked.

7.1.2 Contract 215, WBG

Wright-Schuchart-Harbor/Boecon/GERI (WBG) was responsible for the installation of mechanical systems and equipment for the plant, and certain structural steel in the containment drywell. A large portion of the pre-1980 work has been redesigned and/or reworked, or reinspected by special related programs. The reworked hardware is not covered in the figures presented below.

Samples were selected in the areas of piping, hangers, and structural steel:

- Piping - A sample of 128 isometrics (1700 welds) was selected from a population of 1033. There was one increase in sample size during performance of this program (15, increased to 19 small-bore isometrics because of undersized socket welds). A total of 11 deficiencies identified in the remaining reinspections were reworked, although later analysis showed none would have failed in service. Engineering analysis of reinspection results indicated a potential problem, however. To resolve it, the flange-connection socket welds in small-bore high-energy systems are being reinspected for undersized welds.

- Hangers - A sample of 661 hangers (9000 welds) was selected from a population of 6300. There were no increases in sample size. Forty-six deficiencies identified in the reinspections were reworked, although later analysis showed none would have failed in service. One recurring deficiency in this group was undersized welds, which is in part the reason for the Project's decision to repeat the as-built effort on pipe supports.

- Structural Steel - A sample of 152 structural components (1700 welds) was selected from a population of 899 beam connections, and pipe-whip-supports. One increase in sample size was made because of misalignment of members at a particular type of connection (100%, to four beam seats). Forty-two deficiencies were reworked, although later analysis showed none would have failed in service.

7.1.3 Contract 216, TWC

The Waldinger Corporation (TWC) was responsible for the installation of HVAC and plumbing systems. A sample of 151 items, representing ductwork, equipment, and supports, was selected from a population of 1495 items. No significant deficiencies were identified and no increases in sample were necessary.

7.1.4 Contract 217, Sentry

The Sentry Automatic Sprinkler Company was responsible for the installation of fire protection systems. A sample of 449 brackets and conduit supports was selected from a population of 3312 items. No significant deficiencies were identified and no increases in sample were necessary.

7.1.5 Contract 218, F/L

Fischbach/Lord Electric Company (F/L) was responsible for the installation of electrical systems and equipment. A sample of 1824 items was selected from a population of 17,700 cables, terminations, equipment, and penetrations. No significant deficiencies were identified, but the A/E considered it advisable to confirm that terminations were checked for proper crimping again during system line-up tests. This has been confirmed, and no other increases in sample were necessary.

7.1.6 Contract 219, OBC

Oliver B. Cannon and Son, Inc. (OBC) was responsible for the containment drywell coating system. Because of construction wear and tear, the coating was fully reinspected and extensively reworked.

7.1.7 Contract 220, JCI

Johnson Controls, Inc. (JCI) was responsible for the installation of control and instrumentation systems. JCI performed a reinspection/as-built program on all QC-I and SC-I installations, including 4812 components and 45,000 feet of tubing and piping. Deficiencies identified were corrected as part of this 100% program.

7.1.8 Contract 234, OBC

Oliver B. Cannon and Son, Inc. was responsible for finishing the coating system for the containment wetwell, which also received a full reinspection because of construction wear and tear, and was reworked extensively.

7.2 Inactive Contracts

7.2.1 Contract 205, S/E

Stewart/Erikson (S/E) was responsible for construction of the reactor building concrete substructure. Review of the quality records and contract history, and analysis of concrete placement records resulted in no safety-significant deficiencies being identified.

7.2.2 Contract 206, B/C

Bovee/Crail Construction Company (B/C) was responsible for concrete and steel construction of major plant buildings and spray ponds. The review of quality records and contract history resulted in a decision to reinspect a sample of welded steel construction. A sample of 37 beams was selected from a population of 186 structural members. One increase in sample size was made because of two cases of deficient welding on beam moment-connections (100%, to 30 moment-connections). Concrete construction was not accessible for visual reinspection (except superficial surface check), but analysis of placement records and procedures resulted in no safety-significant deficiencies being identified.

7.2.3 Contract 206A, PKS

Peter Kiewit Sons Company (PKS) was responsible for general construction of major plant buildings. The review of quality records and contract history, and the analysis of concrete placement records and procedures resulted in no safety-significant deficiencies being identified.

7.2.4 Contract 207, PDM

The Pittsburgh-Des Moines Corporation was responsible for the steel superstructure of the Reactor and Turbine-Generator Buildings and the Circulating-Water Pumphouse. The review of quality records, procedures, and contract history resulted in no safety-significant deficiencies being identified; and a cursory field inspection of the Reactor Building superstructure disclosed no deficiencies.

7.2.5 Contract 209, RI/L

Rigging International/Lampson, Inc. (RI/L) was responsible for rigging, lifting, and setting the reactor pressure vessel, head, and other reactor components. Review of quality records and procedures resulted in the determination that the services provided by this contractor were acceptably performed.

7.2.6 Contract 210, PKS

Peter Kiewit Sons Company was responsible for general and architectural construction in the major plant buildings, including doors, siding roofing, concrete, and steel. The review of quality records and contract history, and analysis of concrete placement records and procedures, resulted in no safety-significant deficiencies being identified. Earlier problems associated with ray-proof doors were resolved by post-1980 construction.

7.2.7 Contract 213, PDM

The Pittsburgh-Des Moines Corporation was responsible for construction of the ASME containment vessel. Because of the large amount of welding in this work, a sample of 60 weld radiographs and 60 welds were selected to establish a 95% confidence that at least 95% of the original NDE work was adequate. No NDE deficiencies were revealed by this inspection, but lamellar discontinuities were discovered in a weld pad. The Project is currently pursuing the resolution of this issue, including its generic implications.

A sample of 280 feet of weld was also selected for visual reinspection, resulting in the identification of a fillet-weld undersize condition on attachments to the containment. The records show this condition had already been identified, evaluated, and determined to be acceptable in the past.

7.2.8 Contract 225, McMillan

McMillan Brothers Construction Company was responsible for construction of the Make-up Water Pumphouse. Review of the quality records and contract history, and analysis of concrete

placement records resulted in no safety-significant deficiencies being identified. A cursory field inspection of the pumphouse also disclosed no deficiencies.

7.2.9 Contract 226, Sime

Sime Construction Company was responsible for excavation for the Reactor Building foundation, and associated backfilling. Review of the quality records and contract history resulted in no deficiencies being identified.

7.2.10 Contract 233, Shaw

The B. F. Shaw Company was responsible for Spray Pond piping and supports. Review of the quality records and procedures resulted in no safety-significant deficiencies being identified. A sample of eight pipe supports was selected from a population of approximately 60, resulting in the addition of Spray Pond supports to the Project's as-built program. Seven pipe supports were reinspected for weld quality, identifying a number of discrepancies which are currently under review by the A/E. If any of these are determined to be significant deficiencies, the inspection sample will be increased appropriately.

A sample of piping was also reinspected, including proper weld-out of weld-o-let fittings, with no deficiencies being identified. Another indicator of pipe welding quality is provided by the NDE Verification Task.

7.2.11 Contract 235, GE I&SE

General Electric Installation and Service Engineering was responsible for modifications to instrument control boards. Review of quality records and contract history resulted in no deficiencies being identified. Two major switchgear components containing GE I&SE modifications were reinspected as part of the prepurchase contracts verification. No deficiencies were identified.

7.2.12 Contract 6426, WSH

Wright-Schuchart-Harbor (WSH) was responsible for interim continuation of the concrete construction begun by the defaulted contract 206. Review of quality records and contract history, and analysis of concrete placement records and procedures, resulted in no safety-significant deficiencies being identified.

7.3 Prepurchase Contracts

There were 49 prepurchase contracts providing mechanical, electrical, HVAC, and miscellaneous components to the Project. These contracts were reviewed in two phases, as were the inactive site contracts. Results of the major review activities are combined and summarized below.

- o Documents - The review of quality records and contract performance histories for all contracts resulted in isolated deficiencies being identified, but only in two contracts were there indications of an adverse trend: cranes and diesel-generators. Reinspection follow-up 1) resolved open issues on the diesel-generators, and 2) led to an increase in test-record review for cranes, eventually resulting in a Project program to retest all cranes and hoists.

- o Vendor Qualifications - Review of vendor qualifications was accomplished by sampling the nuclear industry experience history of 45 vendors, resulting in one contractor whose qualifications could not be confirmed (jib-crane vendor, no longer in business).

- o Procedures - A technical review was performed by sampling 187 procedures from 36 contracts, resulting in no safety-significant deficiencies being identified.

- o Hardware - In addition to the crane and diesel-generator reinspections mentioned above, a sample of 89 mechanical, electrical, HVAC, and other components was selected from a population of 643 items representing 29 individual vendor contracts. No safety significant deficiencies were identified in this equipment.

7.4 Special Tasks

7.4.1 Deficiency Document Review

Burns and Roe was responsible for review and disposition of design-change documents and deficiency documents used on the Project. A sample of 658 deficiency documents was selected for technical review. All dispositions were found to be adequate.

The contractors were also responsible for certain limited design work. A sample of 149 contractors' internal deficiency documents was selected for technical review, with no dispositions found to be inadequate.

7.4.2 Personnel Qualifications Review

A qualitative review was performed of 1) 20 site construction contracts and two construction testing contracts, 2) the A/E review of vendor submittals, and 3) the performance of engineering personnel dispositioning deficiency documents. The review results show that both construction and engineering personnel performed competently, and that individual cases of unqualified personnel involved in prior work had already been identified by the Project.

7.4.3 Receiving Inspection Review

Repeat receiving inspections of material in storage at the time of the stop work order yielded no significant deficiencies.

Reinspection of installed material is characterized by the information throughout this Results section of the report. On the whole, receiving inspections were effective.

7.4.4 Grout Evaluation

A statistical sampling method conforming with IE Bulletin 79-02 was used to investigate and test the strength of all grout-types installed by contractors at WNP-2. Sand-cement grout was found to be unsatisfactory and was replaced where necessary. This issue has been separately reported as 10CFR50.55(e) Item No. 73.

7.4.5 Concrete Evaluation

Review of concrete quality and placement records for 14 contracts responsible for production, installation, and testing of concrete, and review of procedures used for the work of six major concrete contractors at WNP-2, resulted in no unresolved deficiencies being identified. Characteristic problems encountered during construction included reinforcing steel misplacement, honeycombing, and formwork misalignment.

7.4.6 NDE Verification

A sample of 60 radiographs were reviewed, repeat penetrant-testing was performed on 60 welds, and repeat magnetic-particle testing was performed on 95 welds, all to verify the prior nondestructive examination performed by seven NDE contractors. No significant NDE deficiencies were identified, however, a problem with a containment weld pad was identified (discussed in Section 7.2.7).

SECTION 8.0

QVP/CAT COMPARISON

The QVP evaluation of the NRC's Construction Appraisal Team (CAT) findings consists of a review to determine the similarity of conclusions with those of the QVP and to assess the significance of the results. This section presents a comparative analysis of the CAT inspection findings versus those of the QVP.

8.1 Scope of Evaluation

The categories listed below represent the construction areas investigated during verification by the QVP and inspection by the CAT:

- o Electrical and Instrumentation
- o Mechanical
- o Welding and Nondestructive Examination
- o Civil/Structural

The analysis included hereinafter is arranged in these categories.

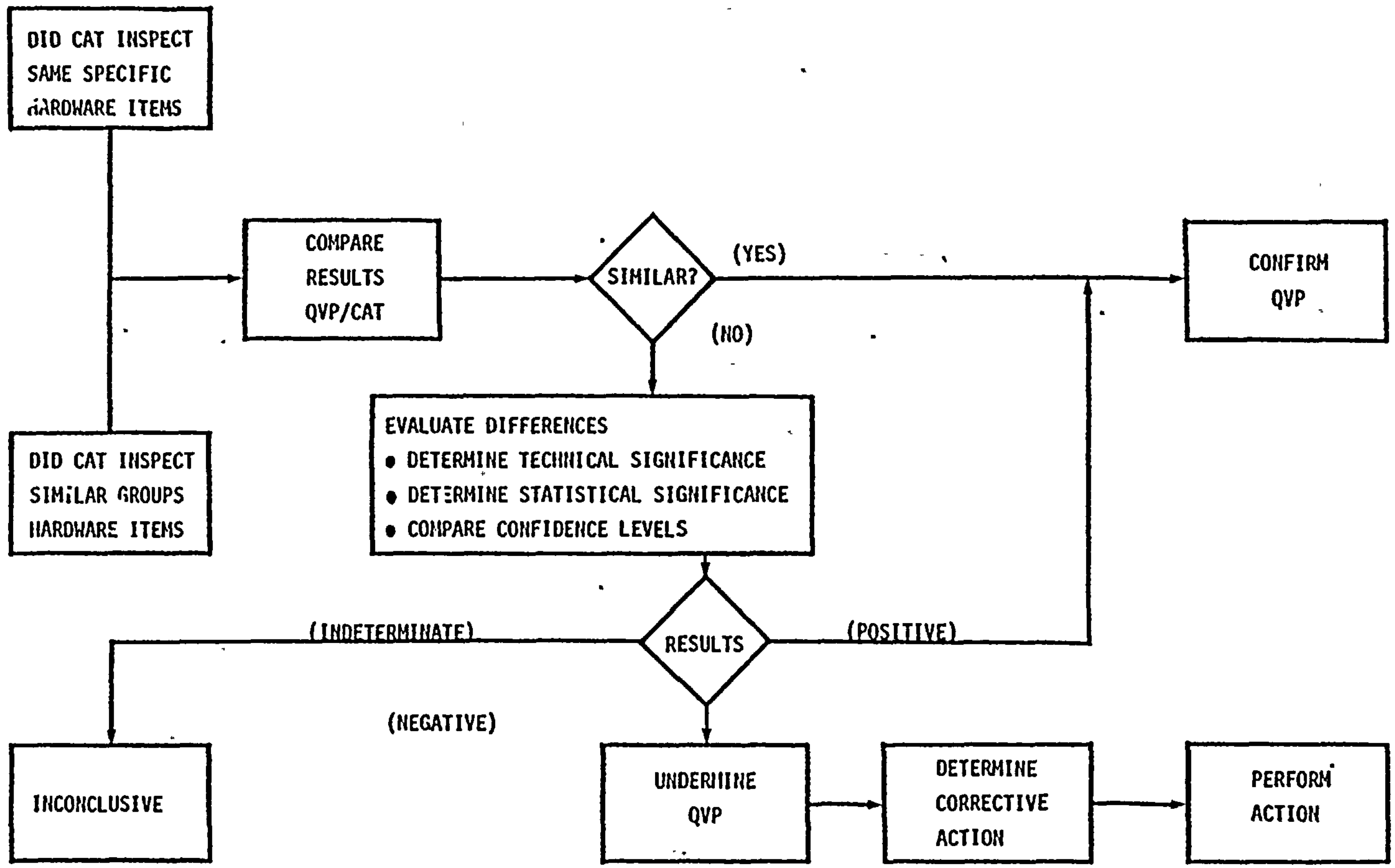
The evaluation is based upon the scope of the QVP and does not, therefore, address all CAT results. The Project's response to CAT findings is covered elsewhere[24].

8.2 Program Description

The evaluation consists of a review of the report issued by the CAT to determine all the items inspected, and each item installed prior to July 1980. The hardware items on the resulting list are compared with the list of QVP-reinspected items to identify those specifically reinspected by both programs. Hardware which is similar is also identified, to aid in broader comparison of results.

Next, the findings of each program are compared on both, a specific-item basis and a similar-item basis, to determine the similarity of findings. Differences are evaluated and results are reported. Significant differences requiring corrective action are individually addressed.

A logic diagram for the evaluation process is presented in Figure 8-1.



EVALUATION OF RESULTS OF CAT FINDINGS VS QVP - LOGIC DIAGRAM

Figure 8-1

8.3 Evaluation

Hardware items inspected by the CAT, which were installed and accepted prior to July, 1980, are collected in the categories identified in Section 8.1, and presented in Tables 8-A through 8-D. The numerical results of the inspections are included and compared in the tables. CAT-inspected items which do not appear in the tables are those which were completed after July, 1980, or are issues which have arisen after that date.

8.4 Comparison Results

8.4.1 Electrical and Instrumentation

There were three cases in which the same hardware items were inspected by both the CAT and the QVP. In two cases, identical findings were recorded. In the third case, Containment Instrument Air System, the minor deficiencies identified by the CAT are, most likely, construction damage which occurred since the QVP inspection of that system one year earlier. Otherwise, the results for the third case are also identical.

Overall, the results of both inspections compare favorably, regarding consistency of findings. The CAT report concludes that activities in the electrical and instrumentation construction areas appear to be adequate. This is the same conclusion reached by the QVP.

8.4.2 Mechanical Construction

There were no cases in which the same hardware items were inspected by both the QVP and the CAT so, no direct comparison can be made. The CAT identified a trend of inconsistency between design drawings and pipe supports, a situation also identified in QVP reinspections.

Even though only limited information can be discerned from this comparison due to the wide variation in number of items examined by both programs, the CAT results would still appear to support QVP conclusions.

8.4.3 Welding and NDE

There was one area in which the same items were examined by both the QVP and the CAT. Contract 215 (WBG - Mechanical) radiographs of pipe welds previously re-examined by Bechtel and the Supply System were also reviewed by the CAT. Findings were essentially identical, i.e., film density deficiencies exist in the original WBG radiographs, which the Project was aware of and has separately addressed.

In the area of piping inspection, the CAT identified a weld undersize condition on weld-o-let fittings, which was not identified by QVP inspections. To resolve the existence of a trend of these deficiencies, the Project has performed a reinspection of all weld-o-let fittings installed by the mechanical and instrumentation contractors. The weld-o-lets and piping in the spray ponds were randomly inspected for this condition.

The QVP identified a problem with undersized welds on small bore flange-connection socket welds. This area was apparently not addressed by the CAT.

Other than the above, conclusions drawn in the reinspection programs are similar.

8.4.4 Civil/Structural Construction

There was one area in which the same hardware items were examined in both programs, welded beam connections. Inspection findings were identical.

In other areas, the CAT checked structural steel bolts retorqued by the Project's existing program and found no discrepancies. Concrete and reinforcing steel were inspected by CAT by physical testing and destructive examination methods. The QVP addressed concrete construction by technical review of procedures and quality records for compliance with requirements. The basic results of both programs are the same. CAT members' concerns over the significance of concrete inspection findings have been separately addressed by the Project.

Specific Items/ Inspection Characteristic	Total Items Inspected By CAT	Items Inspected by CAT Installed Prior to 7/80	Deficiencies Identified by CAT On Pre-7/80 Items	Specific Items Inspected by Both CAT & QVP	Comparison of Specific Item Results	QVP Inspection of Similar Items	Deficiencies Identified by QVP
Cable Routing	18	10	1	1	Identical Findings Recorded	293	3
Cable Identification	18	10 (1)	1	0	No Basis for a Specific Comparison	5,665	6
Cable Termination	189 Cable Ends, 928 Terminations	189 Cable Ends, 928 Terminations (2)	8	0	No Basis for a Specific Comparison	344 Cable Ends 1516 Terminations	44
Electrical Equipment	30	30	1	1	Identical Findings Recorded	13	1
Electrical Penetration	7	7	0	0	No Basis for a Specific Comparison	2	0
Instrument Panel	6	1	1	0	No Basis for a Specific Comparison	61	0
Containment Instrument Air	Entire System	Entire System	8 (Minor)	5 ISOs	No Basis for a Specific Comparison	5 ISOs	35

(1) QVP unable to identify actual of identifiers examined by CAT. Multible labels in cables.
(2) QVP unable to sort Pre 7/80 items for this statistic. Number shown indicates total items examined by CAT.

ELECTRICAL AND INSTRUMENTATION STATISTICS
Table 8-A

Specific Items/ Inspection Characteristic	Total Items Inspected By CAT	Items Inspected by CAT Installed Prior to 7/80	Deficiencies Identified by CAT On Pre-7/80 Items	Specific Items Inspected by Both CAT & QVP	Comparison of Specific Item Results	QVP Inspection of Similar Items	Deficiencies Identified by QVP
Pipe Supports	49 Supports	7 Supports	0	0	No Basis For Specific Comparison	409 Supports 8000 Welds	25
Radial Beam Stiffener Plates	1	1	1	0	No Basis For Specific Comparison	137 Structural Steel Members 1500 Welds	N/A (See Table 8-C)
Piping Isometrics	18	5	0	0	No Basis For Specific Comparison	128	N/A

MECHANICAL STATISTICS
Table 8-B

Specific Items/ Inspection Charactistic	Total Items Inspected By CAT	Items Inspected by CAT Installed Prior to 7/80	Deficiencies Identified by CAT On Pre-7/80 Items	Specific Items Inspected by Both CAT & QVP	Comparison of Specific Item Results	QVP Inspection of Similar Items	Deficiencies Identified by QVP
Piping Isometrics	24	7	5	0	No Basis For Specific Comparison	57	0
Weld Radiograph Review	126	93	4 Later shown Not To Be Deficiencies	52	QCP did not Identify Deficiencies On Same . Items	2690 Radiographs	N/A

WELDING AND NDE STATISTICS
Table 8-C

Specific Items/ Inspection Charactistic	Total Items Inspected By CAT	Items Inspected by CAT Installed Prior to 7/80	Deficiencies Identified by-CAT On Pre 7/80 Items	Specific Items Inspected by Both CAT & QVP	Comparison of Specific Item Results	QVP Inspection of Similar Items	Deficiencies Identified by QVP
In-Situ Concrete Quality	14	14	0	0	N/A	0	N/A
Reinforcement Steel Placement	12	12	10	0	N/A	0	N/A
Structural Steel Bolted Connections	39	39	0	100% Inspected By Related Program	N/A	100% Inspection By Related Program	N/A
Structural Steel Welded Connections	40	40	6	12	Identical Findings Recorded	137 Structural Steel Members Approximate 1500 Welds	42

CIVIL/STRUCTURAL STATISTICS

Table 8-D

SECTION 9.0

REFERENCES

1. Letter No. EA-80-020 to NO Strand, WPPSS, from Victor Stello, Jr., NRC, dated 06/17/80 Subject: 10CFR50.54(f) Request Regarding Quality Assurance

2. Ibid., Attached Notice of Violation

3. Letter No. G02-80-153 to Victor Stello, Jr., NRC, from NO Strand, WPPSS, dated 07/17/80 Subject: WPPSS Nuclear Project No.2, Docket No.50-397, EA-80-020, Notice of Violation and Additional Information - 10CFR50.54(f)

4. Letter No. WNP2MCL-F-80-0113 to All Contractors from DE Dobson, WPPSS, dated 07/17/80 Subject: WPPSS Nuclear Project No.2, Contract 2808, Stop Work Order, Quality Class I Work, #009

5. Letter No. G02-80-223 to RH Engelken, NRC, from RL Ferguson, WPPSS, dated 10/16/80 Subject: WPPSS Nuclear Project No.2, Docket No.50-397, First Progress Report - 10CFR50.54(f)

6. Letter No. G02-80-287 to RH Engelken, NRC, from RG Matlock, WPPSS, dated 12/29/80 Subject: WPPSS Nucler Project No.2, Docket No.50-397, Second Progress Report - 10CFR50.54(f)

7. RCSW Manual, Vol. II, Instruction PJT-01, Plan--WNP-2 Restart of Safety Related Work, dated 07/31/80, Revision 1, dated 12/17/80, Revision 2, dated 01/26/81

8. Ibid., Vol. III, Instruction QVI-01, QVP Program Description, WNP-2 Quality Class I Systems Completion Plan, dated June 18, 1981

9. Ibid., Vol. III

10. Ibid.

11. RCSW Manual Vol. II - Project Instructions

12. Meeting Agenda, March 17, 1983, at WNP-2 between NRC, Region V and Supply System

13. Letter No. QA-JRZ-82-215 to RG Matlock, WPPSS, from RB Glasscock, WPPSS, dated 06/03/82 Subject: Assessment of WNP-2 Quality Verification Program - Report

14. WNP-2 Plant Verification Program, Revision 1, October, 1982

15. WPPSS Corporate Licensing & Assurance Audit No. 82-221 of Bechtel Power Corporation - WNP-2, dated August 30-September 3, 1982

16. Letter No. CA-JRZ-83-023 to RG Matlock, WPPSS, from TJ Houchins, WPPSS, dated 02/15/83 Subject: Corporate Licensing and Assurance Audit 83-242

17. Letter No. QA2-82-023 to RG Matlock, WPPSS, from RT Johnson, WPPSS, dated 01/25/82 Subject: PQA Audit Report WNP2-82-1, Quality Verification Program

18. WPPSS Surveillance Report No. 82-148-SS, Quality Verification Program dated 10/18-25/82

19. Meeting Agenda, March 17, 1983, at WNP-2 between NRC, Region V and Supply System

20. Meeting Agenda, June 21, 1983 at WNP-2 between NRC, Region V and Supply System

21. NRC IE Bulletin 79-02 to NO Strand, WPPSS, from RH Engelken, NRC, dated 03/08/79 Subject: Pipe Support Base Plate Designs Using Concrete Expansion Anchor Bolts

22. Letter No. WPBEC-C0500-F-82-283 to TA Mangelsdorf, BPC, from RG Matlock, WPPSS, dated 03/26/82 Subject: Quality Verification Program Key Decision No. 2

23. Letter No. WPBEC-C0500-F-81-0803 to TA Mangelsdorf, BPC, from WC Bibb, WPPSS, dated 09/03/81 Subject: Quality Verification Program Key Decision No. 1

24. Letter No. G02-83-732 to JB Martin, NRC, from CS Carlisle, WPPSS, dated 08/15/83 Subject: Nuclear Project 2 - Construction Appraisal Team Issues

ENGINEERING REPORT

WNP-2 ENVIRONMENTAL QUALIFICATION REPORT
FOR SAFETY RELATED EQUIPMENT

SEPTEMBER 1983

purpose of the plant specific analysis is to demonstrate that sufficient margin exists between the GE Generic Profile and WNP-2 plant specific profile and to define the post accident conditions as required by NUREG 0588 (Figure C2).

3.2.2 Spray

Operator initiation of a demineralized water spray could be used in primary containment at WNP-2 to mitigate the effects of an accident. No credit for this operator action has been taken in defining the temperature/pressure conditions inside containment. However, since spray impingement could occur (by operator action) its effect on Class 1E equipment inside primary containment has been evaluated.

3.2.3 Radiation Inside and Outside Containment

The accident radiation environments in the primary containment has been defined according to Section II.B.2 of NUREG 0737 (Reference 7) and NUREG 0588, Rev. 1. The calculated accident environment is based on the most severe nonmechanistic design basis accident during or following which equipment must function. This includes consideration of the entire spectrum of FSAR Chapter 15 accidents which can lead to a degraded core condition. The source term assumptions for postulated accidents are consistent with those defined in NUREG 0588 and Regulatory Guides 1.3 and 1.7. The source terms are calculated using the ORIGEN code (Reference 8).

For the review performed in this report the radiation environment in the primary containment was defined per Reference 19. This is a plant specific evaluation. Reference 19 contains the methodology and results of this evaluation. The results of this evaluation are provided in Appendix B for general areas of the containment and Reactor Building and also in Appendix C for each specific piece of equipment.

The radiation environment in the reactor building (secondary containment) is defined according to Section II.B.2 of NUREG 0737 (Reference 7) and

NUREG 0588, Rev. 1 and includes the sum of direct accident gamma dose, airborne gamma dose and 40-year normal gamma dose. The airborne dose is conservatively based on the maximum primary containment to reactor building leakage rate.

Airborne activity in both the containment and reactor building was calculated using the plateout assumptions of NUREG CR-0009 (Reference 9).

The reactor building (secondary containment) was divided into zones to define the equipment doses. The worst target (Class 1 component with the highest dose) in each zone was then chosen. The total integrated dose (TID) to this component was calculated using the QAD-P5A computer code (Reference 10). This TID was used as the required qualification level for most equipment in the zone. In some zones multiple target specific TID's were calculated where there was wide variation of radiation levels within the zone.

The methodology and results of the zone dose radiation evaluations are documented in calculation packages in Reference 11. Appendix B of this report contains a table of the radiation doses inside primary containment and the radiation zone maps for the reactor building. It should be noted that the containment and the reactor building radiation levels are six month integrated doses. Doses for equipment with shorter operating times were determined from the calculated packages in Reference 11 and are detailed in Appendix C on Equipment Qualification Report Summary Sheets.

3.2.3.1 Beta Radiation

The beta radiation effects on equipment important to safety are evaluated. Beta dose calculation and methods are presented in Reference 19 and 26.

Most equipment important to safety on WNP-2 are installed with watertight electrical conduit and are constructed such that beta produces surface effects only to the external housing of the equipment. Internal sensitive components within the equipment are not exposed. There are, however, some

However, equipment important to safety in primary containment is designed and installed to function in conditions which include high pressure, moisture, and water spray. Watertight electrical conduit and non-ventilated NEMA 3 and NEMA 4 equipment enclosures are specified. Where required, cable entry ports are sealed using Qualified Equipment Sealing methods. Where these conditions exist, beta is shielded from internal components and an evaluation of beta radiation is not required.

Some equipment, even though not of a ventilated design, has the potential during long-term exposure to varying high pressure and beta conditions of receiving some beta exposure. Equipment important to safety within the primary containment is reviewed and three potentially susceptable equipment types (terminal boxes with pressure relieving ports, continuous duty motors, and a few locations where exposed cabling was necessary) are identified. For these equipment types, detailed evaluation which included beta effects are performed.

Beta Evaluation Status

Evaluations have been completed for equipment important to safety identified in the Justification for Interim Operation (Table A, Qualified Status) contained in Appendix D. The remaining equipment important to safety, Table B and Justified components from Table A, will be evaluated as described above and any corrective actions completed prior to November 1985. 9/83

3.2.4 Flooding

The top of the main vents from the drywell to the suppression pool are approximately 12 inches above the drywell floor. This is the maximum flood level since any excess water would drain to the suppression pool. No Class 1E equipment or connections are located between the diaphram floor and the top of the downcomer vent pipes inside the wetwell except for the wetwell level system and wetwell temperature monitors which are totally enclosed in water tight conduit systems.

As required by NUREG 0803 (Reference 15), the effects due to line breaks in the Control Rod Drive system have been evaluated. No safety related equipment would be submerged due to a break in this system (Reference 16).

The possibility of flooding in the reactor building has been evaluated. The reactor building flooding analysis was completed (Reference 23 and Reference 25). The procedure used in this evaluation consisted of the following sequential steps:

1. Calculate the maximum source flow (gpm) for each room. Includes high energy and moderate energy lines.

2. Calculate the water depth using the following assumptions:

   - Floor area used to determine water depth excluded floor opening areas, in order to allow for curbs and lips.

   - Twenty minute operator reaction time was allowed per NRC Question 211.059.

   - No exit flow was considered.

3. Perform a field walkdown to identify room exit paths (for drainage) and equipment located below conservative flood level for impacted areas.

4. Re-calculate flood level considering water exit paths.

5. List equipment still flooded following recalculation.

6. Perform a safe shutdown analysis.

7. List flooded equipment required for safe shutdown.

8. Protect, relocate, or qualify equipment required for safe shutdown that is impacted by flood analysis.

Modification of the drain system for 4 MCC Rooms was required by the Moderate Energy Pipe Break Analysis. The results of this shutdown analysis for flooding (Reference 24) indicate that WNP-2 can be safely shutdown with alternate safety related equipment not affected by flooding and that flooded equipment will not defeat accomplishment of the safety function. Based on this flooding is not a required qualification parameter for WNP-2 safety related electrical equipment in secondary containment. 9/83

The operator is alerted to flooding by leak detection sensors and can take action to initiate alternate safety systems not affected by flooding if required. As the operator is alerted to flooding, instrumentation that may subsequently become flooded and provide erroneous indication will not mislead the operator to take inappropriate action. 9/83

3.2.5 Temperature/Pressure Outside Containment

Class 1E equipment in the reactor building could be exposed to two postulated accident types: a LOCA/MSLB in primary containment or an HELB in the reactor building. These conditions were determined from References 5, 6, and 12. As explained in Section 4.0 of this report, equipment is evaluated to the worst accident environment in which it is required to function.

A LOCA/MSLB in primary containment would cause an increase in the reactor building's temperature and humidity. The maximum conditions are presented in Profile 4 of Appendix B (Reference 21).

The pressure/temperature effects of all postulated high energy line breaks in the reactor building were determined. Breaks in the following high energy lines were considered:

26" main steam line (envelops feedwater line break)

4" RCIC steam line
6" RWCU steam line
4" RWCU steam line
4" Auxiliary steam
3" Auxiliary steam

Temperature/pressure profiles were developed for all areas that could be affected by these breaks. These profiles are presented in Appendix B. In addition, it was verified that pressure/temperature affects from moderate energy line breaks in these areas are less than the high energy line breaks.

The accident profile due to a main steam line break in the steam tunnel was determined from Reference 5. The remaininq temperature/pressure profiles in the reactor building were developed using the RELAP4 and COMPARE MODIA computer models (References 13 and 14). Detailed modeling of compartments and fluid flow paths were made. Heat sinks were modeled using appropriate heat transfer correlations.

For areas of the reactor building secondary containment where no high energy line breaks affects are postulated but moderate energy line breaks could be present, it has been determined that the pressure/temperature profile number 4 (effects in secondary containment of a LOCA/MSCB inside containment) exceed the moderate energy pressure/temperature conditions. Therefore, equipment in the secondary containment is qualified to at least the pressure/temperature profile No. 4.

3.3 MILD ENVIRONMENT AREAS IN SECONDARY CONTAINMENT

A mild environment is an area in which the maximum temperatures, pressures and humidity are not expected to chanqe significantly during or following design basis events. In addition, the cumulative gamma radiation dose to equipment in these areas is below 10^4 rad (Reference 17). 9/83

Some of the motor control center rooms in the reactor building are classified as mild environments. These rooms are isolated and serviced by Class 1 HVAC systems so the temperature, pressure and humidity conditions will not change significantly. Also, the total gamma radiation dose (normal + accident) in these rooms is less than 10^4 rad. 9/83

Section 4.2.3 provides the Supply System's position on environmental qualification of safety related equipment in a mild environment.

A reasonable effort will be made to procure in kind equipment which are qualified to the requirements of 10CFR50.49. When this is not feasible, sound reasons to the contrary will be established consistent with NRC generic letter No. 8209 (April 20, 1982). Replacements in kind will be used which, at a minimum, preserve the present qualification status of equipment at WNP-2 (NUREG 0588, Category II). 9/83

If it is not feasible to procure in kind replacements, then a reasonable effort will be made to procure engineering approved substitutes to the requirements of 10CFR50.49. If it is not feasible to obtain such replacements then engineering approved substitutes will be procured to the present qualification status of equipment at WNP-2 (NUREG 0588, Category II).

Subcomponents

In kind spares will be used when available. Subcomponents used as identical spares for existing qualified equipment will be qualified to Category II as a minimum, by virtue of qualification of the related component.

If an identical spare is not employed, an engineering approved substitute, which does not degrade the qualification of the original, may be used.

5.0 QUALIFICATION RESULTS

The environmental qualification of the components identified on the Class 1E Equipment List and active Safety Related Mechanical List (Appendix A) has been evaluated. The status of the evaluations is presented on the Equipment Qualification Reports in Appendix C. A justification for interim operation pending completion of the full Environmental Qualification Program is complete (see Section 6 and Appendix D).

The Class 1E List (Appendix A) identifies the safety related electrical equipment, along with its respective qualification status. The available qualification documentation has been obtained and reviewed for this equipment. The reviews, supplemented by engineering analyses, have determined that most of the components meet the intent of NUREG 0588, Category II. In some cases, it has been determined that there is insufficient documentation to support complete qualification. The method for completing the qualification is included on the individual Equipment Qualification Reports in Appendix C. This equipment will be qualified by November 30, 1985.

The following closure activities are being completed for equipment important to safety identified in Table "A", Appendix D (i.e., that equipment required to be qualified or justified prior to fuel load).

- Field verification that equipment whose corrective action is replacement with qualified equipment has been accomplished prior to fuel load.

- Completion of corrective action of equipment interface has been accomplished prior to fuel load for primary containment equipment.

- Receipt of qualification documentation and completion of QID files (Q' Status).

The following activities are being completed for equipment important to safety identified in Table B and that equipment statused as "J" in Table A of Appendix D (i.e., that equipment that must be qualified by no later than November 30, 1985).

- o Development of a detailed plan that assures final qualification of all equipment important to safety by November 30, 1985.

On-going activities that will continue throughout the life of the plant include:

- o Review of Design Changes to assure qualified equipment is procured and installed in accordance with 10CFR50.49 as implemented by the WNP-2 equipment qualification program.

- o Continuing input to the scheduled maintenance system for equipment replacement or required maintenance based on the Equipment Qualification Program results.

- o Continuing review and modification of the SMS program based on results from Maintenance/Surveillance activities.

- o Review of spares and replacement equipment to assure qualification level is maintained and upgraded where necessary.

- o Continued participation in and review of industry efforts in the equipment qualification area and review of NRC notices, circulars and bulletins as they are received with respect to the equipment qualification.

11. EDS Nuclear Inc., Zone Dose Calculations, Series 0740-004-xxx.

12. Impell Corporation, Reactor Building Environmental Analysis, calculation 0740-032-137-THI, Rev. 0, dated September 9, 1983.

13. Idaho National Engineering Laboratory, "RELAP4/MOD5, A Computer Program for Transient Thermal Hydraulic Analysis of Nuclear Reactors and Related Systems", Volumes I and II, ANCR-NUREG 1335, September 1976.

14. COMPARE MOD1A - NUREG/CR-1185.

15. NRC Office of Nuclear Reactor Regulation, "Generic Safety Evaluation Report Regarding Integrity of BWR Scram System Piping", NUREG 0803.

16. Washington Public Power Supply System, "Supply System Response to NRC SER Issue - Pipe Breaks in BWR Scram Discharge Volume", Memo R. O. Vosburgh to C. D. Taylor, December 30, 1981.

17. EPRI, "Radiation Effects on Organic Materials in Nuclear Plants", Report NP-2129, Project 1707-3, November 1981.

18. Washington Public Power Supply System, "Acceptance Criteria for WNP-2 Safety Related Equipment Qualification", TDP 3.32.

19. WNP-2 Final Shielding Evaluation Report, September 1982.

20. Washington Public Power Supply System Calculation NE-02-82-39-0.

21. Washington Public Power Supply System Calculation NE-02-81-14-0.

9. PLANT LOCATION — The location of the component within the plant by building, elevation and coordinates.

10. Q.S. — Qualification Status (second column) indicates the environmental qualification of the equipment. The following list shows the meaning of the codes used.

- A or X - Acceptable, thermal aging completed
- B or Y - Acceptable, thermal aging being covered by surveillance
- C - Acceptable, not installed
- D - No documentation in files
- G - Being requalified by modification of the hardware or the environment
- J - Justification provided | 9/83
- M - Being requalified by analysis
- N - Not Acceptable
- P - Purchasing qualified replacement
- R - Documentation not complete
- T - Being requalified by test

The first column shows the seismic qualification status.

11. HOURS — The time, in hours, a component is required to function following an accident. | 9/83

12. EQUIPMENT DESCRIPTION — A description of the equipment function.

13. DRAWING — The plant P&ID on which the component appears.

14. USE — Contains codes which describe equipment use during accident and/or normal plant shutdown conditions. The USE field is based on Item 2 Appendix E of NUREG 0588.

The "USE" input field is a two-digit field. The first digit shows the equipment operability requirement for accident mitigation and the second shows the equipment operability requirements for Hot or Cold shutdown conditions.

X X

0 — The equipment is not required before, during or after an accident.

Example: Equipment in this category provides no active function, but may provide a passive function by containing radioactive material outside the Reactor Building. It need not be qualified to demonstrate operability, even under non-accident service environments.

1 — Equipment that will experience the environmental conditions of design basis accidents for which it must function to mitigate said accidents, and that will be qualified to demonstrate operability in the accident environment for the time required for accident mitigation with safety margin to failure.

```
                                                       STATUS      ***SEISMIC (S) PARAMETERS***     *ENV. (E) PARAMETERS*
          EPN                  MFG            MODEL      S E   QID   TM  HL TEST ANL FO C    FREQ   AGING  DBE  C   HOURS
                     DESCRIPTION                   BLDG ELEV DETAIL  ZONE  ROOM     ACCURACY           COMPOSITE EPN
 CONTRACT  LEVEL  EC  USE  SAFETY FUNCTION  A/E DRAWING   A/E ZONE

CAC-CNTR-1A                  I005   A103D                      A X  045002    N  621                               10  S   4320
 CONTACTOR FOR CAC-EHC-1A                            R  577 M.8/7.0     R73   A
 71         2     A    1 0    D              71-00-0104          E11

CAC-CNTR-1B                  I005   A103D                      X X  045002    Y  621                               10  S   4320
 CONTACTOR FOR CAC-EHC-1B                            R  577 M.7/7.1     R73
 71         2     A    1 0    D              71-00-0104          D11

CAC-EHC-1A                   C332   SA213-T347 S.S.            A X  109007    N  621                                       4320
 37 KW PREHEATER                                     R  580 M.5/6.6     R73   R604                     CAC-HR-1A+
 71         2     A    1 0    D                    M554          E14

CAC-EHC-1B                   C332   SA213-T347 S.S.            X X  109007    N  621                                       4320
 37 KW PREHEATER                                     R  580 M.5/7.4     R73   R604                     CAC-HR-1B+
 71         2     A    1 0    D                    M554          E2

CAC-EHO-FCV/1A               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  10  S   4320
 EHO FOR CAC-FCV-1A                                  R  575 L.9/5.3     R73   R611                     CAC-FCV-1A+
 42A        2     A    1 0   D                     M554          J10

CAC-EHO-FCV/1B               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  00  S   4320
 EHO FOR CAC-FCV-1B                                  R  565 J.6/6.7     R61   R509                     CAC-FCV-1B+
 42A        2     A    1 0   D                     M554          H6

CAC-EHO-FCV/2A               I206   NH91J4002F2218             A X  110004  P  Y  121  03         33+   10143  10  S   4320
 EHO FOR CAC-FCV-2A                                  R  558 M.2/7.1     R63   A504                     CAC-FCV-2A+
 42A        2     A    1 0   D                     M554          G11

CAC-EHO-FCV/2B               I206   NH91J4002F211B             A X  110004  P  Y  121  03         33+   10143  00  S   4320
 EHO FOR CAC-FCV-2B                                  R  560 M.4/6.6     C66                            CAC-FCV-2B+
 42A        2     A    1 0   D                     M554          G6

CAC-EHO-FCV/3A               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  10  S   4320
 EHO FOR CAC-FCV-3A                                  R  494 M.8/4.4     R33   R206                     CAC-FCV-3A+
 42A        2     A    1 0   D                     M554          D11

CAC-EHO-FCV/3B               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  00  S   4320
 EHO FOR CAC-FCV-3B                                  R  496 J.2/7.4     R31                            CAC-FCV-3B
 42A        2     A    1 0   D                     M554          C6

CAC-EHO-FCV/4A               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  10  S   4320
 EHO FOR CAC-FCV-4A                                  R  493 M.4/7.8     R33   R214                     CAC-FCV-4A+
 42A        2     A    1 0   D                     M554          E11

CAC-EHO-FCV/4B               I206   NH91J4002F2L18             A X  110004  P  Y  121  03         33+   10143  00  S   4320
 EHO FOR CAC-FCV-4B                                  R  492 N.2/6.0     R33   R206                     CAC-FCV-4B+
 42A        2     A    1 0   D                     M554          E6

CAC-EHO-FCV/5A               I206   NH91H4070F3L16             A X  110004  P  N  121  03         33+   10143  10  S   4320
 EHO FOR CAC-FCV-5A                                  R  572 M.6/6.5     R73                            CAC-FCV-5A+
 71         2     A    1 0   D                     M554          F14
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SEISMIC (S) PARAMETERS / *ENV. (E) PARAMETERS*

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TH	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CAC-EHO-FCV/5B	EHO FOR CAC-FCV-5B	71	2	A	1 0	D	I206	NH91H4070F3L16	M554	R	573	M.5/7.5	F2	A X	110004	R73	P	N	121		03	33+	10143	00	S	4320	CAC-FCV-5B+
CAC-EHO-FCV/6A	EHO FOR CAC-FCV-6A	71	2	A	1 0	D	I206	NH91H4070F3L16	M554	R	572	M.6/6.5	G12	A X	110001	R73	P	N	121		03	33+	10143	10	S	4320	CAC-FCV-6A+
CAC-EHO-FCV/6B	EHO FOR CAC-FCV-6B	71	2	A	1 0	D	I206	NH91H4070F3L16	M554	R	573	M.5/7.5	G4	A X	110004	R73	P	N	121		03	33+	10143	00	S	4320	CAC-FCV-6B+
CAC-EHO-TCV/4A	EHO FOR CAC-TCV-4A	71	2	A	1 0	D	I206	NH92H9970F3L29	M554	R	573	M.5/6.6	D12	A X	110001	R73	P	N	121		03	33+	10143	10	S	4320	CAC-TCV-4A+
CAC-EHO-TCV/4B	EHO FOR CAC-TCV-4B	71	2	A	1 0	D	I206	NH92H9970F3L29	M554	R	573	M.5/7.4	D4	A X	110001	R73	P	N	121		03	33+	10143	00	S	4320	CAC-TCV-4B+
CAC-EHO-V/1A	37 KW PREHEATER	71	2	A	1 0	D	I206	NH95H2670F3L2	M554	R	573	M.5/6.6	F15	A X	110002	R73	P	N	121	R604	03	33+	10143	10	S	4320	CAC-V-1A+
CAC-EHO-V/1B	EHO FOR CAC-V-1B	71	2	A	1 0	D	I206	NH95H2670F3L2	M554	R	573	M.5/7.4	F2	A X	110002	R63	P	N	121		03	33+	10143	00	S	4320	CAC-V-1B+
CAC-EHO-V/2A	EHO FOR CAC-V-2A	71	2	A	1 0	D	I206	NH91H2070F3L2	M554	R	573	M.5/6.6	F12	A X	110004	R73	P	N	121		03	33+	10143	10	S	4320	CAC-V-2A+
CAC-EHO-V/2B	EHO FOR CAC-V-2B	71	2	A	1 0	D	I206	NH91H2070F3L2	M554	R	573	M.5/7.4	F4	A X	110004	R63	P	N	121		03	33+	10143	00	S	4320	CAC-V-2B+
CAC-EHO-V/3A	EHO FOR CAC-V-3A	71	2	A	1 0	D	I206	NH91H2070F3L2	M554	R	573	M.5/6.6	D12	A X	110004	R73	P	N	121	R612	03	33+	10143	10	S	4320	CAC-V-3A+
CAC-EHO-V/3B	EHO FOR CAC-V-3B	71	2	A	1 0	D	I206	NH91H2070F3L2	M554	R	573	M.5/7.4	D4	A X	110004	R63	P	N	121		03	33+	10143	00	S	4320	CAC-V-3B
CAC-FT-1A	FT TO CAC-FIC-1A	220	3	P	2 0	G	R369	1153DB3	M554	R	575	L.9/5.3	J11	Y X	156009	R63	R	N	114			50				4320	
CAC-FT-1B	FT TO CAC-FIC-1B	220	3	P	2 0	G	R369	1153DB3	M554	R	551	H.7/8.1	J5	Y X	156009	R61	R	N	114			50				4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CAC-FT-2A	FT TO CAC-FIC-2A	220	3	P	2 0	G	R369	1153DB3	M554	R	551	N.8/5.7	611	Y X	156009	R63	R	N	114			50				4320	
CAC-FT-2B	FT TO CAC-FIC-2B	220	3	P	2 0	G	R369	1153DB3	M554	R	551	H.7/8.1	G5	Y X	156009	R61	R	N	114			50				4320	
CAC-FT-3A	FT TO CAC-FIC-3A	220	3	P	2 0	G	R369	1153DB3	M554	R	504	N.8/5.5	D11	Y X	156009	R43	R	N	114			50				4320	
CAC-FT-3B	FT TO CAC-FIC-3B	220	3	P	2 0	G	R369	1153DB3	M554	R	504	L4/9.3	D5	Y X	156009	R43	R	N	114			50				4320	
CAC-FT-4A	FT TO CAC-FIC-4A	220	3	P	2 0	G	R369	1153DB3	M554	R	504	N8/5.5	F11	Y X	156009	R43	R	N	114			50				4320	
CAC-FT-4B	FT TO CAC-FIC-4B	220	3	P	2 0	G	R369	1153DB3	M554	R	504	N.0/4.9	F5	Y X	156009	R43	R	N	114			50				4320	
CAC-FT-5A	SCRUBBER 1A SW INLET FT	71	3	P	2 0	G2	B080	386	M554	R	473	M.3/6.8	G14	X X	156004	R73		N	621	R604			01653	10	E	4320	CAC-HR-1A+
CAC-FT-5B	SCRUBBER 1B SW INLET FT	71	3	P	2 0	G2	B080	386	M554	R	578	M.3/7.5	G2	X X	156004	R73		N	621	R604			06153	10	E	4320	CAC-HR-1B+
CAC-FT-6A	FT TO CAC-FC-67A	71	3	A	1 0	D	B080	386	M554	R	575	M.5/6.5	F12	X X	156004	R73		N	621	R604			06153	10	E	4320	CAC-HR-1A+
CAC-FT-6B	FT TO CAC-FC-67B	71	3	A	1 0	D	B080	386	M554	R	575	M.5/7.3	F4	X X	156004	R73		N	621	R604			06153	10	E	4320	CAC-HR-1B+
CAC-FT-7A	FT TO CAC-FIC-67A	71	3	A	1 0	D	B080	386	M554	R	575	M.3/6.6	F12	X X	156004	R73		N	621	R604			06153	10	E	4320	CAC-HR-1A+
CAC-FT-7B	FT TO CAC-FIC-67B	71	3	A	1 0	D	B080	386	M554	R	576	M.3/7.4	F4	X X	156004	R73		N	621	R604			06153	10	E	4320	CAC-HR-1B+
CAC-LT-1A	LT FOR MS-1A	71	2	A	1 0	D	B080	386	M554	R	574	M.3/6.8	D13	X X	209002	R73		N	621	R604			06153	10	E	4320	CAC-HR-1A+

PROGRAM C1E-STO

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV.	DRAWING	DETAIL A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CAC-LT-1B LT FOR MS-1B	71	2	A	1 0	D	B080	386	M554	R	574	M.3/7.5	D3	X X	209002	R73		N	621	R604			06153	10	E	4320	CAC-HR-1B+
CAC-M-FN/1A MTR FOR CAC-FN-1A	71	2	A	1 0	D	W120	75D42473	M554	R	572	M.5/6.6	E13	X X	213048	R73		N	621	R604						4320	CAC-HR-1A+
CAC-M-FN/1B MTR FOR CAC-FN-1B	71	2	A	1 0	D	W120	75D42473	M554	R	572	M.5/7.4	F3	X X	213048	R73		N	621	R604						4320	CAC-HR-1B+
CAC-MO-11 MOTOR OPERATOR CAC-V-11	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	560	M.2/6.5	G6	A X	221001	R63	P	Y	114	R511		33+				4320	CAC-V-11+
CAC-MO-13 .361HP/3.8A MOTOR OPER. CAC-V-13	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	495	N.4/6.0	E6	A X	221001	R33		N	14	R206	00	35				4320	CAC-V-13+
CAC-MO-15 .361HP/5.8A MO FOR CAC-V-15	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	570	J.8/6.8	H6	A X	221001	R61	P	Y	114	R509		33+				4320	CAC-V-15+
CAC-MO-17 .361HP/3.8A MOTOR OPER. CAC-V-17	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	494	J.0/7.4	D6	A X	221001	R31	P	Y	114	R211		33+				4320	CAC-V-17+
CAC-MO-2 MOTOR OPERATOR CAC-V-2	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	558	M.2/7.1	G10	A X	221001	R73	P	Y	114	R604		33+				4320	CAC-V-2+
CAC-MO-4 .361HP/3.8A MOTOR OPER. CAC-V-4	41A	2	A	1 0	D	L200	SMB-000-5	M554	R	495	M.2/7.8	F10	A X	221001	R33	P	N	114	R206		33+				4320	CAC-V-4+
CAC-MO-6 MOTOR OPERATOR CAC-V-6	41A	2	A	1 0	D	L200	SMP-000-5	M554	R	575	L.9/5.0	H10	A X	221001	R73	P	Y	114	R611		33+				4320	CAC-V-6+
CAC-MO-8 MOTOR OPERATOR CAC-V-8	41A	2	A	1 C	D	L200	SMB-000-5	M554	R	480	M.8/4.3	D10	A X	221001	R33	P	Y	114	R206		33+				4320	CAC-V-8+
CAC-PT-1A 0-30 PSIG FOR CAC-FN-1A	71	2	P	2 0	G2	B080	386	M554	R	572	M.5/6.6	F13	X X	259006	R73		N	621				06153	10	E	4320	CAC-HR-1A+
CAC-PT-1B 0-30 PSIG FOR CAC-FN-1B	71	2	P	2 0	G2	B060	386	M554	R	575	M.5/7.4		X X	259006	R73		N	621				06153	10	E	4320	CAC-HR-1B+

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CAC-PT-68A	B080	386	X X	259006				06153	10	E	4320	PRESS TRANS ON CAC-MS-1A	R	572	M.5/6.6	R73		CAC-HR-1A+	71	2	A	1 0	D	M554	D13
CAC-PT-68B	B080	386	X X	259006		N	621	06153	10	E	4320	PRESS TRANS ON CAC-MS-1B	R	572	M.5/7.4	R73		CAC-HR-1B+	71	2	A	1 0	D	M554	D03
CAC-RLY-4A/CR1	A500	RXMK1	X X	283011				06153	14		4320	OPEN INDICATION RELAY CAC-FCV-4A	R	476	N.1/9.0			E-JB-TB/R364+	218	3	A	1 0	I	E519/13	G3
CAC-RLY-4A/CR2	A500	RXMK1	X X	283011				06153	14		4320	CLOSED INDICATION RELAY CAC-FCV-4A	R	476	N.1/9.0			E-JB-TB/R364+	218	3	A	1 0	I	E519/13	G3
CAC-RLY-4B/CR1	A500	RXMK1	X X	283011				06153	05		4320	OPEN INDICATION RELAY CAC-FCV-4B	R	476	N.0/8.3			E-JB-TB/R363+	218	3	A	1 0	I	E519/13	G3
CAC-RLY-4B/CR2	A500	RXMK1	X X	283011				06153	05		4320	CLOSED INDICATION RELAY CAC-FCV-4B	R	476	N.0/8.3			E-JB-TB/R363+	213	3	A	1 0	I	E519/13	G3
CAC-RLY-FCV1A80	A500	RXMK1	X X	283011	R	N	021	06153	10		4320	POWER AVAIL RLY FOR CAC-FCV-1A	R	475	N.1/9.3	R33	R206	E-JB-TB/R364+	218	3	P	2 0	G1	M519/15	K1
CAC-RLY-FCV1B80	A500	RXMK1	X X	283011	R	N	021	06153	00		4320	POWER AVAIL RLY FOR CAC-FCV-1B	R	475	N.0/8.3	R33	R206	E-JB-TB/R363+	218	3	P	2 0	G1	E519/15	K1
CAC-RLY-FCV2A80	A500	RXMK1	X X	283011	R	N	021	06153	10		4320	POWER AVAIL RLY FOR CAC-FCV-2A	R	475	N.1/9.3	R33	R206	E-JB-TB/R364+	218	3	P	2 0	G1	E519/15	K4
CAC-RLY-FCV2B80	A500	RXMK1	X X	283011	R	N	021	06153	00		4320	POWER AVAIL RLY FOR CAC-FCV-2B	R	475	N.0/8.3	R43	R305	E-JB-TB/R363+	218	3	P	2 0	G1	E519/15	K4
CAC-RLY-FCV3A80	A500	RXMK1	X X	283011	R	N	021	06153	10		4320	POWER AVAIL RLY FOR CAC-FCV-3A	R	475	N.1/9.3	R33	R206	E-JB-TB/R364+	218	3	P	2 0	G1	E519/15	K4
CAC-RLY-FCV3B80	A500	RXMK1	X X	283011	R	N	021	06153	00		4320	POWER AVAIL RLY FOR CAC-FCV-3B	R	475	N.0/8.3	R33	R206	E-JB-TB/R363+	218	3	P	2 0	G1	E519/15	K4
CAC-RLY-FCV4A80	A500	RXMK1	X X	283011	R	N	021	06153	10		4320	POWER AVAIL RLY FOR CAC-FCV-4A	R	475	N.1/9.3	R33	R206	E-JB-TB/R364+	218	3	P	2 0	G1	E519/13	H3

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TH	ZONE	HL	TEST	ROOM	AGING	DBE C	HOURS	COMPOSITE EPN
CAC-RLY-FCV4B80 / POWER AVAIL RLY FOR CAC-FCV-4B / 218	3	P	2 0	G1	A500	RXMK1	E519/13	R	475	N.1/9.3	H3	X X.	283011	R	R33	N	021	R206	06153	00	4320	E-JB-TB/R363+
CAC-TE-1A1 / INPUT TO TEMP RECORDER 1A / 71	2	P	2 0	G	T165	80500	M554	R	580	M.5/6.6	E13	X X	339006		R73	N	621	R604			4320	CAC-HR-1A+
CAC-TE-1A2 / TEMPERATURE ELEMENT ON CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/6.4	E13	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1A3 / TEMP ELEMENT ON CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/6.4	D14	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1A4 / TEMP ELEMENT ON CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/6.4	D14	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1A5 / TEMP ELEMENT ON CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/6.4	D14	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1A6 / TEMP ELEMENT ON CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	575	M.3/6.4	D14	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1A7 / TEMP ELEMET ON OUTLT OF CAC-EHC-1A / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/6.4	D14	X X	339006		R73	N	621				4320	CAC-HR-1A+
CAC-TE-1B1 / INPUT TO TEMP RECORDER 1B / 71	2	P	2 0	G	T165	80500	M554	R	580	M.5/7.4	E3	X X	339006		R73	N	621	R604			4320	CAC-HR-1B+
CAC-TE-1B2 / TEMP ELEMENT ON CAC-EHC-1B / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/7.2	E3	X X	339006		R73	N	621				4320	CAC-HR-1B+
CAC-TE-1B3 / TEMP ELEMENT ON CAC-EHC-1B / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/7.2	D2	X X	339006		R73	N	621				4320	CAC-HR-1B+
CAC-TE-1B4 / TEMP ELEMENT ON CAC-EHC-1B / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/7.2	D2	X X	339006		R73	N	621				4320	CAC-HR-1B+
CAC-TE-1B5 / TEMP ELEMENT ON CAC-EHC-1B / 71	2	P	2 0	G	T165	80500	M554	R	576	M.3/7.2		X X	339006		R73	N	621				4320	CAC-HR-1B+

EPN	MFG	MODEL	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TH	HL TEST	ANL FO C	FREQ	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CAC-TE-1B6	T165	80500	X X	339006	N	621						4320	TEMP ELEMENT ON CAC-EHC-1B	R	575	M.3/7.2	R73			CAC-HR-1B+	71	2	P	2 0	G	M554	D2
CAC-TE-1B7	T165	80500	X X	339006	N	621						4320	TEMP ELEMENT ON CAC-EHC-1B	R	576	M.3/7.2	R73			CAC-HR-1B+	71	2	P	2 0	G	M554	D2
CAC-TE-2A	T165	80500	X X	339006	N	621						4320	PREHEATER 1A HI TEMP ALARM	R	581	M.5/6.6	R73	R604		CAC-HR-1A+	71	2	A	1 0	D	M554	E13
CAC-TE-2B	T165	80500	X X	339006	N	621						4320	PREHEATER 1B HI TEMP ALARM	R	581	M.5/7.4	R73	R604		CAC-HR-1B+	71	2	A	1 0	D	M554	E2
CAC-TE-3A	T165	80500	X X	339006	N	621						4320	PREHEATER 1A HI TEMP ALARM	R	576	M.5/6.6	R73	R604		CAC-HR-1A+	71	2	A	1 0	D	M554	E14
CAC-TE-3B	T165	80500	X X	339006	N	621						4320	PREHEATER 1B HI TEMP ALARM	R	576	M.5/7.4	R73	R604		CAC-HR-1B+	71	2	A	1 0	D	M554	E2
CAC-TE-4A	T165	80500	X X	339006	N	621						4320	TEMP ELEMENT DISCH FROM CAC-HS-1B	R	579	M.5/6.7	R73	R604		CAC-HR-1A+	71	2	A	1 0	D	M554	E14
CAC-TE-4B	T165	80500	X X	339006	N	621						4320	TEMP ELEMENT DISCH FROM CAC-HS-1B	R	579	M.5/7.5	R73	R604		CAC-HR-4B+	71	2	A	1 0	D	M554	E4
CAC-TE-5A	T165	80500	X X	339006	N	621						4320	PREHEATER 1A HI TEMP SHUTDOWN	R	576	M.5/6.6	R73	R604		CAC-HR-1A+	71	2	A	1 0	D	M544	D13
CAC-TE-5B	T165	80500	X X	339006	N	621						4320	PREHEATER 1B HI TEMP SHUTDOWN	R	576	M.5/7.4	R73	R604		CAC-HR-1B+	71	2	A	1 0	D	M554	D2
CAC-TE-6A	T165	80500	X X	339006	N	621						4320	MOISTURE SEPTR 1A HI TEMP SHUTDOWN	R	578	M.5/6.6	R73	R604		CAC-HR-1A+	71	2	A	1 0	D	M554	E13
CAC-TE-6B	T165	80500	X X	339006	N	621						4320	MOISTURE SEPTR 1B HI TEMP SHUTDOWN	R	578	M.5/7.4	R73	R604		CAC-HR-1B+	71	2	A	1 0	D	M554	E13
CAC-TE-7A	T165	80500	X X	339006					06153	14	E	4320	TEMP ELEMENT DISCH FROM CAC-FN-1A	R	580	M.5/6.6				CAC-HR-1A+	71	2	A	1 0	D	M554	E13

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CAC-TE-7B TEMP ELEMENT DISCH FROM CAC-FN-1B	71	2	A	1 0	D	T165	80500	M554	R	580	M.5/7.4	E3	X X.	339006								06153	04	E	4320	CAC-HR-1B+
CAS-V-453 1" SO GLOBE ROOT CTRL WW VAC BRKRS	215	2	A	1 0	B1	F095	MV250-4	M510	R	479	M.3/7.5	K8	R X	361009								01014	10	Z	4320	CAS-V-453+
CEP-POS-V/1A POS FOR CEP-V-1A	68	2	A	1 3	I	N007	EA74080100	M543	R	563	J.1/5.4	J13	A X	200015	R62										4320	CEP-V-1A+
CEP-POS-V/1B POS FOR CEP-V-1B	68	2	A	1 3	I	N007	EA170	M543	R	563	J.4/5.3	J13	A X	200009	R62										4320	CEP-V-1B+
CEP-POS-V/2A POS FOR CEP-V-2A	68	2	A	1 3	I	N007	EA74080100	M543	R	558	J.1/5.4	J13	A X	200015	R62										4320	CEP-V-2A+
CEP-POS-V/2B POS FOR CEP-V-2B	68	2	A	1 3	I	N007	EA170	M543	R	559	J.4/5.3	J13	A X.	200009	R62										4320	CEP-V-2B+
CEP-POS-V/3A POS FOR CEP-V-3A	68	2	A	1 3	I	N007	EA740	M543	R	491	H.4/5.4	C14	A X	200015	R62										4320	CEP-V-3A+
CEP-POS-V/3B POS FOR CEP-V-3B	68	2	A	1 3	I	N007	EA170	M543	R	495	H.5/5.4	C14	A X	200009	R62										4320	CEP-V-3B+
CEP-POS-V/4A POS FOR CEP-V-4A	68	2	A	1 3	I	N007	EA740	M543	R	491	H.5/5.6	C14	A X	200015	R62										4320	CEP-V-4A+
CEP-POS-V/4B POS FOR CEP-V-4B	68	2	A	1 3	I	N007	EA170	M543	R	495	H.5/5.4	C14	A X	200009	R62										4320	CEP-V-4B+
CEP-SPV-1A SOLENOID PILOT FOR CEP-V-1A IR-67	58	2	A	1 3	B1,F	A499	WJH8316A74	M543	R	552	M.8/5.8	K12	X X	315004	R63	R	N	114	R504	03	33+				4320	E-IR-67+
CEP-SPV-1B SOLENOID PILOT FOR CEP-V-1B IR-67	58	2	A	1 3	B1,F	A499	WJHT831654	M543	R	553	M.8/5.8	J13	X X	315004	R63	R	N	114	R504	03	33+				4320	E-IR-67+
CEP-SPV-2A SOLEN[illegible]D PILOT FOR CEP-V-2A IR-6[illegible]	58	2	A	1 3	B1,F	A499	WJHT8316A76	M543	R	554	H.7[illegible].1		X X	315004	R61	R	N	114	R504	03	33+				4320	E-IR-68+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	ZONE	TH	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CEP-SPV-2B	SOLENOID PILOT FOR CEP-V-2B IR-68	58	2	A	1 3	B1,F	A499	WJHT831654	M543	R	554	H.7/8.1	X X	J13	315004	R61	R	N	114	R504	03	33+				4320	E-IR-68+
CEP-SPV-3A	SOLENOID PILOT FOR CEP-V-3A IR-62	58	2	A	1 3	B1,F	A499	WJHT831654	M543	R	477	H.4/6.8	X X	C15	315004	R31	R	N	114	R206	03	33+				4320	E-IR-62+
CEP-SPV-3B	SOLENOID PILOT FOR CEP-V-3B IR-62	58	2	A	1 3	B1,F	A499	WJHT831654	M543	R	478	H.4/6.8	X X	C14	315004	R31	R	N	114	R206	03	33+				4320	E-IR-62+
CEP-SPV-4A	SOLENOID PILOT FOR CEP-V-4A IR-63	58	2	A	1 3	B1,F	A499	WJHT8316A74	M543	R	507	L.4/9.3	X X	C15	315004	R43	R	N	114	R305	03	33+				4320	E-IR-63+
CEP-SPV-4B	SOLENOID PILOT FOR CEP-V-4B IR-63	58	2	A	1 3	B1,F	A499	WJHT831654	M543	R	507	L.4/9.3	X X	C14	315004	R43	R	N	114	R305	03	33+				4320	E-IR-63+
CIA-MO-20	MOTOR OPERATOR CIA-V-20	215	2	A	1 3	B1	L200	SMB-000-5	M556	R	542	J.3/7.0	A X	J6	221001	R51	P	N	114			33+		00	C	24	CIA-V-20+
CIA-MO-30A	1HP MOTOR OPERATOR CIA-V-30A	215	2	A	1 3	B1	L200	SMB-000-5	M556	R	541	J.5/4.3	A X	H6	221001	R52	P	N	114	R404		33+		10	C	4320	CIA-V-30A+
CIA-MO-30B	1HP MOTOR OPERATOR CIA-V-30B	215	2	A	1 3	B1	L200	SMB-000-5	M556	R	543	N.7/6.9	A X	F6	221001	R52	P	N	114	R404		33+		10	C	4320	CIA-V-30B+
CIA-PROG-1A	16 STEP PROGR. TO N2 BOTTLES SPV'S	58	3	A	1 0	C,E	A611	1820B1020XX	M556	R	554	M.8/5.7	X J	J7	254001	R63	F	N	21	R504	00	33	06153	10	E	4320	E-IR-67+
CIA-PROG-1B	20 STEP PROGR.TO N2 BOTTLE SPV'S	58	3	A	1 0	C,F	A611	1820B1020XX	M556	R	556	H.7/8.2	X T	F7	254001	R61	F	N	21	R504	00	33	06153	10	E	4320	E-IR-68+
CIA-PS-21A	DIV.1 CIA N2 HDR PRESSURE IR-67	58	2	A	1 3	C,E	B080	288	M556	R	557	M.8/5.7	A X	J6	256007	R63	R	N	121	R504		09				4320	E-IR-67+
CIA-PS-21B	DIV.2 CIA N2 HDP PRESSURE IR-68	58	2	A	1 3	C,E	B080	288	M556	R	554	H.7/8.1	B X	F6	256007	R61	R	N	121	R504		09				4320	E-IR-68+
CIA-PS-22A	REMOTE LOCAL PS	220	2	A	1 3	C,F	A499	SB11AKR	M556	R	552	M.8/5.7	X J	H7	256001	R63	R	N	114			50				4320	E-IR-67+

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	ANL	FO	C	FREQ	AGING	DRE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CIA-PS-22B	A499	SB11AKR	X T	256001	R	N	114				50				4320	CIA NITROGEN HEADER PRESSURE IR-68	R	551	H.7/8.2	R61			E-IR-68+	220	2	A	1 3	C,F	M556	67
CIA-PT-21A	R369	1151GP7A22T0003PB	X X	259003	R	N	114				50				4320	CIA HEADER PRESS. IR-67	R	552	M.8/5.7	R63			E-IR-67+	59	2	A	1 3	I	M556	J6
CIA-PT-21B	R369	1151GP7A22T0003PB	X X	259003	R	N	114				50				4320	CIA HEADER PRESS. IR-68	R	550	H.7/8.2	R61			E-IR-68+	59	2	A	1 3	I	M556	F6
CIA-RLY-21A	S440	219XBXP	X J	283041								06153	10	Z	4320	CONTROL RELAY CLOSES ON LO PRESS	R	548	M.8/5.7				E-IR-67+	218	3	A	1 0	E	E519/18	F6
CIA-RLY-21B	S440	219XBXP	X R	283041								06153	10	Z	4320	CONTROL RELAY CLOSES ON LO PRESS	R	550	H.7/8.2				E-IR-68+	218	3	A	1 0	C,E	E519/18	F6
CIA-RLY-22A	A109	EGPI-002	X J	283052								06153	14		4320	RLY FOR CIA-PS-22A	R	552	M.8/5.7				E-IR-67+	218	3	A	1 0	C,E	E519/1A	
CIA-RLY-22B	A109	EGPI-002	X D	283052								06153	04		4320	RLY FOR CIA-PS-22B	R	548	H.8/8.2				E-JB-TB/IR68/2+	218	3	A	1 0	C,E	E519/1A	
CIA-SPV-10A	M095	MV252-3	X J	315023								01014	10	Z	4320	0.5" SOL PILOT ON N2 BOTTLE DISCH	R	440	N.1/4.3	R23	R105			215	2	A	1 0	C	M556	G8
CIA-SPV-10B	M095	MV252-3	X T	315023								01014	10	Z	4320	0.5" SOL PILOT ON N2 BOTTLE DISCH.	R	440	N.1/7.0	R23	R105			215	2	A	1 0	C	M556	F8
CIA-SPV-11A	M095	MV252-3	X J	315023								01014	10	Z	4320	0.5" SOL PILOT ON N2 BOTTLE DISCH	R	440	N.1/4.3	R23	R105			215	2	A	1 0	C	M556	G8
CIA-SPV-11B	M095	MV252-3	X T	315023								01014	10	Z	4320	0.5" SOL PILOT ON N2 BOTTLE DISCH	R	440	N.1/7.0	R23	R105			215	2	A	1 0	C	M556	F8
CIA-SPV-12A	M095	MV252-3	X J	315023								01014	10	Z	4320	0.5" SOL PILOT ON N2 BOTTLE DISCH	R	440	N.1/4.3	R23	R105			215	2	A	1 0	C	M556	68
CIA-SPV-12B	M095	MV252-3	X T	315023								01014	10	Z	4320	0.5" S[illegible] PILOT ON N2 BOTTLE DISCH	R	440	N.1[illegible]0	R23	R105			215	2	A	1 0	C	M556	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	A/E ZONE	STATUS S E	QID	ZONE	ROOM	TM	HL	TEST	ANL	FO	C	FREQ	ACCURACY	AGING	DBE	C	HOURS	COMPOSITE EPN
CIA-SPV-13A	0.5" SOL PILOT ON N2 BOTTLE DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	G8	X J	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-13B	0.5" SOL PILOT ON N2 BOTTLE DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-14A	0.5" SOL PILOT ON N2 BOTTLE DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	G8	X J	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-14B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-15A	.5" SOL PILOT VLL ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	G8	X J	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-15B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M195	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-16B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-17B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-18B	0.5" SOL PILOT ON N2 BOTTLE DISCH.	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-19B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-1A	0.5" SOL PILOT ON N2 BOTTLE DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.0/4.3	G8	X J	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-1B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105									01014	10	Z	4320	
CIA-SPV-2A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	G8	X J	315023	R23	R105									01014	10	Z	4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL	A/E ZONE	QID	ZONE	ROOM	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING	DOE	C	HOURS	COMPOSITE EPN
CIA-SPV-2B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-3A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-3B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-4A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-4B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-5A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-5B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-6A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-6B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-7A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-7B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1/7.0	F8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-8A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X J	N.1/4.3	G8	315023	R23	R105			01014	10	Z	4320	
CIA-SPV-8B	.5" S[illegible]PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440		X T	N.1[illegible]0		315023	R23	R105			01014	10	Z	4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM ZONE	HL ROOM	TEST	ANL	FO	C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CIA-SPV-9A	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/4.3	G8	X J	315023	R23	R105						01014	10	Z	4320	
CIA-SPV-9B	.5" SOL PILOT VLV ON N2 BTTL DISCH	215	2	A	1 0	C	M095	MV252-3	M556	R	440	N.1/7.0	F8	X T	315023	R23	R105						01014	10	Z	4320	
CIA-TDS-1A	3 SEC DELAY FOR CIA-PROGR-1A		3	A	1 0	C,E	A109	7022AE	E519/1B	R	554	M.8/5.8	D6	X U	283013								05273	10		4320	E-IR-67+
CIA-TDS-1B	3 SEC DELAY FOR CIA-PROGR-1B		3	A	1 0	C,E	A109	7022AE	E519/1B	R	554	H.7/8.2	D6	X T	283013								05273	10		4320	E-IR-68+
CMS-AY-1	H2 ANALYZER	92B	2	A	1 3	I	B135	7C	M543	R	548	M.6/4.5	E6	R J	025002	R63							06153	10	E	4320	CMS-SR-13+
CMS-AY-2	H2 ANALYZER	92B	2	A	1 3	I	B135	7C	M543	R	548	M.6/4.9	H14	R R	025002								06153	10	E	4320	CMS-SR-14+
CMS-AY-3	CONTAINMENT OXYGEN ANALYZER	92B	2	A	1 3	I	B135	755	M543	R	548	M.6/4.5	E14	J	025002									13	E	4320	CMS-SR-13+
CMS-AY-4	CONTAINMENT OXYGEN ANALYZER	92B	2	A	1 3	I	B135	755	M543	R	548	M.6/4.9	E6	R	025002									04	E	4320	CMS-SR-14+
CMS-H-SR13/T5	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	H.1/4.5		Z X	166003									15	E	4320	
CMS-H-SR13/T6	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	H.1/4.5		Z X	166003									15	E	4320	
CMS-H-SR13/T7	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	H.1/4.5		Z X	166003									15	E	4320	
CMS-H-SR13/T8	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	H.1/4.5		Z X	166003									15	E	4320	
CMS-H-SR14/T5	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	H.1/4.9		Z X	166003									05	E	4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING / DETAIL	STATUS S E	QID	ZONE	A/E ZONE	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING COMPOSITE EPN	DRE	C	HOURS
CMS-H-SR14/T6	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	M.1/4.9	Z X	166003					05	E	4320
CMS-H-SR14/T7	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	M.1/4.9	Z X	166003					05	E	4320
CMS-H-SR14/T8	CMS LOCA HEAT TRACE	SS	2	A	1 0	I	T185	SSK	E941	R	548	M.1/4.9	Z X	166003					05	E	4320
CMS-LE-3A	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	435	45 DEG AZ	J		C17	B10		02294	15	E	4320
CMS-LE-3B	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	500	60 DEG AZ	J		C37	B10		02294	15	E	4320
CMS-LE-4A	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	435	270 DEG AZ	T		C17	B10		02294	05	E	4320
CMS-LE-4B	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	500	240 DEG AZ	T		C37	B10		02294	05	E	4320
CMS-LE-5A	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	435	135 DEG AZ	T		C17	B10		02294	05	E	4320
CMS-LE-5B	SUPPRESSION POOL LEVEL ELEMENT	218	2	A	1 0	I	E210	MODEL 616	M543	C	500	60 DEG AZ	T		C37	B10		02294	05	E	4320
CMS-LS-1	LEVEL SWITCH CONT WATER LEVEL	218	2	A	1 0	I	F132	8-66	M543	C	503		Z X	207024		D7		06153	11	E	4320
CMS-LS-2	LEVEL SWITCH CONT WATER LEVEL	218	2	A	1 0	I	F132	8-66	M543	C	518		Z X	207024		E8		06153	11	E	4320
CMS-LS-3	LEVEL SWITCH CONT WATER LEVEL	218	2	A	1 0	I	F132	8-66	M543	C	551		Z X	207024		H10		06153	12	E	4320
CMS-LS-4	LEVEL SWITCH CONT WATER LEVEL	218	2	A	1 0	I	F132	8-66	M543	C	570		Z X	207024				06153	12	E	4320

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	ANL	FO C	FREQ	AGING	DBE	C	HOURS
CMS-LT-1	R369	1151DP4D22T0003AB	X X	209007		N	14	00		50				4320
CMS-LT-2	R369	1151DP4D22T0003AB	X X	209007		N	14	00		50				4320
CMS-LT-2R	R369	1153-DB4	X X	156001							05253	03	E	4320
CMS-ME-1	P047	600-09A	X X	217002							04153	10	E	4320
CMS-ME-2	F047	600-09A	X X	217002							04153	10	E	4320
CMS-ME-3	F047	600-09A	X X	217002							04153	10	E	4320
CMS-ME-4	P047	600-09A	X X	217002							04153	10	E	4320
CMS-ME-5	F047	600-09A	X X	217002							04153	10	E	4320
CMS-PT-1	R369	1153AB5	Y X	156009	R	N	114			50				4320
CMS-PT-2	R369	1153GB6	Y X	156009	R	N	114			50				4320
CMS-PT-2R	R369	1151GP4E22PB	X X	259003	R	N	114			50				4320
CMS-PT-3	R369	1151GP7E22PB	X X	259003	R	N	114			50				4320
CMS-PT-4	R369	1151GP7E22PB	X X	259003	R	N	114			5C				4320

EPN	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN
CMS-LT-1	SUPPRESS CHAMB WTR LEVEL MONITOR	R	465	J.5/4.3	R32	R206		
CMS-LT-2	SUPPRES CHAMBER WTR LEVEL MONIT IR	R	464	M.2/7.7	R33	R214		
CMS-LT-2R	SUPPRESSION POOL WATER LEVEL	R	464	M.2/7.7	C36			
CMS-ME-1	ME FOR DRYWELL	R	536	190 D AZ	C45			
CMS-ME-2	ME FOR DRYWELL	R	536	195 D AZ	C46			
CMS-ME-3	ME FOR DRYWELL	R	536	195 D AZ	C44			
CMS-ME-4	ME FOR DRYWELL	R	536	190 D AZ	C54			
CMS-ME-5	ME FOR DRYWELL	R	536	45 D AZ	C56			
CMS-PT-1	CONTAINMENT PRESS. MONITORING IR-6	R	555	M.8/5.8	R63			E-IR-67+
CMS-PT-2	CONTAINMENT PRESS MONITORING IR-68	R	551	H.7/8.1	R61			E-IR-68+
CMS-PT-2R	PRIMARY CONT. PRESS.	R	550	H.7/8.2	R61			E-IR-68+
CMS-PT-3	SUPPRES.CHAMB.PRESS.MONITOR IR-6f	R	501	N.8/5.3	R43	R305		E-IR-66+
CMS-PT-4	SUPPRES.CHAMB.PRESS.MONITOP IR-6?	R	501	L.4/9.3	R41	R305		E-IR-63+

EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CMS-LT-1	59	2	A	1 3	I	M543	B14
CMS-LT-2	59	2	A	1 3	I	M543	B6
CMS-LT-2R	59	2	P	2 0	G	M543	B6
CMS-ME-1	220	2	P	2 3	G	M543	E13
CMS-ME-2	220	2	P	2 0	G	M543	F7
CMS-ME-3	220	2	P	2 3	G	M543	E7
CMS-ME-4	220	2	P	2 0	G	M543	E13
CMS-ME-5	220	2	P	2 3	G	M543	E7
CMS-PT-1	220	2	A	1 3	I	M543	F13
CMS-PT-2	220	2	A	1 3	I	M543	C7
CMS-PT-2R	59	2	P	2 0	G	M543	G7
CMS-PT-3	59	2	A	1 0	I	M543	C15
CMS-PT-4	59	2	A	1 0	I	M543	F6

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CMS-PT-5	CONTAINMENT PRESS.MONITORING IR-67	59	2	A	1 3	I	R369	1151GP7E22PB	M543	R	555	M.8/5.8	G13	X X	259003	R63	R	N	114	R504	50				4320	E-IR-67+
CMS-PT-6	CONTAINMENT PRESS.MONITORING IR-68	59	2	A	1 3	I	R369	1151GP7E22PB	M543	R	551	H.7/8.1	H7	X X	259003	R61	R	N	114	R504	50				4320	E-IR-68+
CMS-PT-6R	CONTAINMENT PRESS.HIGH RANGE	59	2	P	2 0	G	R369	1151GP7E22PB	M543	R	550	N.7/8.2	H7	X X	259003	R61	R	N	114		50				4320	E-IR-68+
CMS-PT-7	-5TO+3PS/GPTFORDIVICONT.PRESSMON.	220	2	A	1 3	I	R369	1153-GB7	M543	R	552	M.8/5.8	G13	X X	156001	R63						05253	11	E	4320	E-IR-67+
CMS-PT-8	=5TO+3PS/G FOR DIVII CONTPRESS.MCN	220	2	A	1 3	I	R369	1153-AB5	M543	R	550	H.7/8.2	J7	X X	156001	R61						05253	11	E	4320	E-IR-68+
CMS-RE-27E	DIVI CMS RAD ELEMENTS (1-105 R/HR)	218	2	A	1 3	I	V115	875	M543	C	516	300 DEG AZ	H12	X X	277007	W42						06153	13	E	4320	
CMS-RE-27F	DIVII CMS RAD ELEMENT(1-105R/HR)	218	2	A	1 3	I	V115	875	M543	C	516	45 DEG AZ	G8	X X	277007	W42						06153	03	E	4320	
CMS-RMS-HTP71	CS FOR CMS LOCA HT TRACE	SS	3	P	2 0	G1	G080	CR2940YB203D		R	548	M.1/4.4		Y J	285017							06153	13	E	20	E-JB-HTP/7B/E+
CMS-RMS-HTP80	CS FOR MCS LOCA HT TRACE	SS	3	P	2 0	G1	G080	CR2940YB203D		R	548	M.1/4.7		Y R	285012							06153	03	E	4320	E-JB-HTP/8B/A+
CMS-SR-13+	SAMPLE RACK 13 FOR H2O2	92A	1	P	2 0	H	B135	771172	M569	R	548	M.3/4.5	G4	X	025002							06303	05	E		CMS-SR-13+
CMS-SR-14+	SAMPLE RACK 14 FOR H2O2	92A	1	P	2 0	H	B135	771172	M569	R	569	M.3/4.7	G4	X	025002							06303	05	E		CMS-SR-14+
CMS-TE-1	AIR INLET RECIRC PUMP MOTOR A	218	2	A	1 3	I	F329	TC2370CCA250TT68JXH7	M543	C	517	115 DEG AZ	E13	X J	339003	C47						06153	11	E	4320	
CMS-TE-10	CRA-F[illegible]A DISCHARGE TEMP	216	2	A	1 3	I	W108	101-1-A-3-C-8-2-1	M543	C	512	72 [illegible] AZ		X P	339025	C45						06153	11	E	4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV		STATUS S E	DETAIL A/E ZONE	QID	ZONE	***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS
CMS-TE-11	CRA-FN-1B DISCHARGE AIR TEMP	216	2	A	1 3	I	W108	101-1-A-3-C-8-2-1	M543	C	520	193 DEG AZ	X P	D11	339025	C46		06153	11	E	4320
CMS-TE-12	CRA-FN-1C DISCHARGE TEMP	216	2	A	1 3	I	W108	101-1-A-3-C-8-2-1	M543	C	520	260 DEG AZ	X P	D8	339025	C46		06153	11	E	4320
CMS-TE-13	CRA-FN-2A DISCHARGE AIR TEMP	216	2	A	1 3	I	W108	101-1-A-3-C-8-2-1	M543	C	549	355 DEG AZ	X P	J11	339025	C54		06153	11	E	4320
CMS-TE-14	CRA-FN-2B DISCHARGE AIR TEMP	216	2	A	1 3	I	W108	101-1-A-3-C-8-2-1	M543	C	544	220 DEG AZ	X P	J9	339025	C56		06153	11	E	4320
CMS-TE-2	CONT TEMP MONITOR	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	517	150 DEG AZ	X J	E11	339003	C47		05103	11	E	4320
CMS-TE-24	CONTAINMENT HEAD MONITOR	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	596	330 DEG AZ	X R	K8	339003	C74		06153	04	E	4320
CMS-TE-25	CONTAINMENT HEAD MONITOR	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	596	210 DEG AZ	X R	K9	339003	R76		06153	04	E	4320
CMS-TE-26	CONTAINMENT HEAD MONITOR	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	596	90 DEG AZ	X J	K11	339003	R77		06153	14	E	4320
CMS-TE-27	CRA-FC-5B DISCHARGE TEMPERATURE	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	553	210 DEG AZ	X J	J12	339003	C66		06153	14	E	4320
CMS-TE-28	CRA-FN-5C AREA TEMPERATURE	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	560	144 DEG AZ	X R	J8	339003	C67		06153	14	E	4320
CMS-TE-29	CRA-FC-2A AREA TEMPERATURE	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	560	72 DEG AZ	X J	G11	339003	C65		06153	14	E	4320
CMS-TE-3	AIR INLET RECIRC PUMP MOTOR	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	517	300 DEG AZ	X R	E8	339003	C44		06153	14	E	4320
CMS-TE-30	AIR TEMPERATURE AT ELEV 547	218	2	A	1 3	I	M329	TC2370CCA250TT68JXH7	M543	C	560	0 DEG AZ	X J	G12	339003	C65		06153	14	E	4320

EPN	CONTRACT	LEVEL	DESCRIPTION	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	STATUS S E	QID	ZONE	A/E ZONE	***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS	COMPOSITE EPN
CHS-TE-31	218	2	CRA-FC-2B AREA TEMPERATURE	A	1 3	I	H329	TC2370CCA250TT68JXH7	C	560	288 DEG AZ	M543	X R	339003	C64	G9		06153	14	E	4320	
CHS-TE-4	218	2	AIR INLET RECIRC PUMP MOTOR	A	1 3	I	H329	TC2370CCA250TT68JXH7	C	550	280 DEG AZ	M543	X R	339003	C44	E7		06153	14	E	4320	
CHS-TE-5	216	2	CRA-FC-1A AIR INLET TEMP	A	1 3	I	W108	101-1-A-3-C-8-2-1	C	504	72 DEG AZ	M543	X P	339025	C45	C13		06153	11	E	4320	
CHS-TE-6	216	2	CRA-FC-1C AIR INLET TEMP	A	1 3	I	W108	101-1-A-3-C-8-2-1	C	504	190 DEG AZ	M543	X P	339025	C46	C12		06153	11	E	4320	
CHS-TE-7	216	2	CRA-FC-1C AIR INLET TEMP	A	1 3	I	W108	101-1-A-3-C-8-2-1	C	504	275 DEG AZ	M543	A P	339025	C44	D8		06153	11	E	4320	
CHS-TE-8	218	2	CRA-FC-2A AIR INLET TEMPERATURE	A	1 3	I	W108	101-1-A-3-C-8-2-1	C	560	355 DEG AZ	M543	X P	339025	C64	H12		06153	11	E	4320	
CHS-TE-9	216	2	CRA-FN-2B AIR INLET TEMP	A	1 3	I	W108	101-1-A-3-C-8-2-1	C	547	222 DEG.AZ	M543	X P	339025	C56	H8		06153	11	E	4320	
CHS-TS-4A	218	2	SAMPLE RACK 13 HEAT TRACE TEMP SW	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.7/4.3	M543	J	355020				06153	12	E	4320	
CHS-TS-4B	218	2	SAMPLE RACK 13 HEAT TRACE TEMP SW	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.7/4.3	M543	J	355020				06153	12	E	4320	
CHS-TS-4C	218	2	SAMPLE RACK 13 HEAT TRACE TEMP SW	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.7/4.3	M543	J	355020				06153	12	E	4320	
CHS-TS-4D	218	2	SAMPLE RACK 13 HEAT TRACE TEMP SW	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.7/4.3	M543	J	355020				06153	12	E	4320	
CHS-TS-5A	218	2	SAMPLE RACK 13 HEAT TRACE TEMP SW1	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.7/4.5	M543	J	355020				06153	12	E	4320	
CHS-TS-5B	218	2	SAMPL[illegible]ACK 13 HEAT TRACE TEMP SW	A	1 0	I	A499	SC11AR/QT11A4R	R	548	M.[illegible]5	M543	J	355020				06153	12	E	4320	

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

PAGE NO 00019
DATE 09/06/83

EPN / CONTRACT | LEVEL | DESCRIPTION EC USE | MFG SAFETY FUNCTION | MODEL A/E | BLDG ELEV DRAWING | STATUS S E DETAIL A/E ZONE | QID ZONE | ***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C ROOM ACCURACY FREQ | *ENV. (E) PARAMETERS* AGING DBE C HOURS COMPOSITE EPN

CMS-TS-5C A499 SC11AR/QT11A4R J 355020 06153 12 E 4320
SAMPLE RACK 13 HEAT TRACE TEMP SW R 548 M.7/4.5
218 2 A 1 0 I M543

CMS-TS-5D A499 SC11AR/QT11A4R U 355020 06153 12 E 4320
SAMPLE RACK 13 HEAT TRACE TEMP SW R 548 M.7/4.5
218 2 A 1 0 I M543

CMS-TS-8A A499 SC11AR/QT11A4R P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-8B A499 SC11AR/QT11A4R P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-8C A499 SC11AR/QT11A4R P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-8D A499 SC11AR/QT11A4R P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-9A A499 SC11AR/QT11A4R X P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-9B A499 SC11AR/QT11A4R X P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-9C A499 SC11AR/QT11A4R X P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CMS-TS-9D A499 SC11AR/QT11A4R X P 355020 06153 02 E 4320
SAMPLE RACK 14 HEAT TRACE TEMP SW R 548 M.7/5.0
218 2 A 1 0 I M543

CRA-M-FN/3A R165 324TCZ X X 213037 Y 03313 10 E 4320
10HP/17.1A MTR DRIVER CRA-FN-3A C 536 45 D AZ R17 B55 CRA-FN-3A+
2 2 A 1 3 D M543 F12

CRA-M-FN/3B R165 324TCZ X X 213037 Y 03313 00 E 4320
10HP/17.1A MTR DRIVER CRA-FN-3B C 536 175 D AZ R17 C57 CRA-FN-3B+
2 2 A 1 3 D M543 F9

CRA-M-FN/3C R165 324TCZ X X 213037 Y 03313 00 E 4320
10HP/17.1A MTR DRIVER CRA-FN-3C C 536 315 D AZ R17 R54 CRA-FN-3C+
2 2 A 1 3 D M543 F8

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV / DETAIL / A/E ZONE	STATUS S E	QID	ZONE	TM	HL / ROOM	TEST	ANL FO C ACCURACY	FREQ	***SEISMIC (S) PARAMETERS*** / *ENV. (E) PARAMETERS* AGING / COMPOSITE EPN	DBE	C	HOURS
CRA-M-FN/4A					R165	254TCZ				Y X	213038			Y				03313	10	E	4320
10HP/17.1A MTR DRIVER CRA-FN-4A								C	572 330 D AZ		R17	C74						CRA-FN-4A*			
2	2	A	1 3	D			M543		J10												
CRA-M-FN/4B					R165	254TCZ				Y X	213038			Y				03313	00	E	4320
10HP/17.1A MTR DRIVER CRA-FN-4B								C	572 206 D AZ		R17	C74						CRA-FN-4B*			
2	2	A	1 3	D			M543		J9												
CRA-M-FN/5A					R165	324TCZ				X X	213050			Y	14	00	60	03313	10	E	4320
10HP/17.1A MTR DRIVER CRA-FN-5A								C	564 160 D AZ		R17	C74						CRA-FN-5A*			
2	2	A	1 3	D			M543		J8												
CRA-M-FN/5B					R165	324TCZ				X X	213050			Y	14	00	60	03313	00	E	4320
10HP/17.1A MTR DRIVER CRA-FN-5B								C	564 20 D AZ		R17	C74						CRA-FN-5B*			
2	2	A	1 3	D			M543		J11												
CRA-M-FN/5C					R165	324TCZ				X X	213050			Y	14	00	60	05253	01	E	4320
10HP/17.1A MTR DRIVER CRA-FN-5C								C	564 270 D AZ		R17	C74						CRA-FN-5C*			
2	2	A	1 3	D			M543		H8												
CRA-M-FN/5D					R165	324TCZ				X X	213050			Y	14	00	60	03313	00	E	4320
10HP/17.1A MTR DRIVER CRA-FN-5D								C	564 90 D AZ		R17	C74						CRA-FN-5D*			
2	2	A	1 3	D			M543		H11												
CRD-IR-3*					B341	X10175EM401				X X	315024								00		
CRD INSTR RACK								R	522 M.8/3.8									CRD-IR-3*			
215	1	P	2 3	H			M528		D14												
CRD-LS-13E					M040	5.0-751-2X-MPG-M14HY				X X	207004		W	N	14	00	00				4320
CRD LEVEL SWITCH								R	528 J.2/4.9			R52		R408							
02C12	2	P	2 3	G			M528		H7												
CRD-LS-13F					M040	5.0-751-2X-MPG-M14HY				X X	207004		W	N	14	00	00				4320
CRD LEVEL SWITCH								R	522 J.0/4.9			R52		R408							
02C12	2	P	2 3	G			M528		H7												
CRD-LS-13G					M040	751				X X	207004							06153	02	E	4320
SCRAM DISCHARGE INSTR VOL-A LEVEL								R	522 J.0/7.0												
02	2	P	2 3	G			M528		H11												
CRD-LS-13H					M040	751				X X	207004							06153	02	E	4320
SCRAM DISCHARGE INSTR VOL-A LEVEL								R	522 J.0/7.0												
02	2	P	2 3	G			M528		H11												
CRD-POS-1260219					M302	BZE6-2RN72				Y X	248003			N	612						.17
POSITION SWITCH								R	528 L5/8.4									CRD-HCU-0219*			
02C12	3	A	1 0	A			M528		C4												
CRD-POS-1260223					M302	BZE6-2RN72				Y X	248003			N	612						.17
POSITI[illegible] SWITCH								R	528 L5/[illegible]									CRD-HCU-0223*			
02C12	3	A	1 0	A			M528														

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID ZONE	TM HL	TEST ROOM	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1260227 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0227+	.17
CRD-POS-1260231 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0231+	.17
CRD-POS-1260235 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0235+	.17
CRD-POS-1260239 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0239+	.17
CRD-POS-1260243 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0243+	.17
CRD-POS-1260615 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	06153	00	E	CRD-HCU-0615+	.17
CRD-POS-1260619 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0619+	.17
CRD-POS-1260623 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0623+	.17
CRD-POS-1260627 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0627+	.17
CRD-POS-1260631 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612				CRD-HCU-0631+	.17
CRD-POS-1260635 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0635+	.17
CRD-POS-1260639 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0639+	.17
CRD-POS-1260643 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612				CRD-HCU-0643+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL / A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	TH	HL	ROOM	ANL	FO C	FREQ	ACCURACY	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1260647 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-0647*	.17
CRD-POS-1261011 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1011*	.17
CRD-POS-1261015 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1015*	.17
CRD-POS-1261019 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1019*	.17
CRD-POS-1261023 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1023*	.17
CRD-POS-1261027 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1027*	.17
CRD-POS-1261031 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1031*	.17
CRD-POS-1261035 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-1035*	.17
CRD-POS-1261039 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-1039*	.17
CRD-POS-1261043 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-1043*	.17
CRD-POS-1261047 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-1047*	.17
CRD-POS-1261051 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003		N	612								CRD-HCU-1051*	.17
CRD-POS-1261407 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003		N	612								CRD-HCU-1407*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	MFG	SAFETY FUNCTION	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TM	HL	TEST / ROOM	ANL	FO C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1261411 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1411+	.17
CRD-POS-1261415 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1415+	.17
CRD-POS-1261419 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1419+	.17
CRD-POS-1261423 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1423+	.17
CRD-POS-1261427 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1427+	.17
CRD-POS-1261431 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1431+	.17
CRD-POS-1261435 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1435+	.17
CRD-POS-1261439 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1439+	.17
CRD-POS-1261443 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1443+	.17
CRD-POS-1261447 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1447+	.17
CRD-POS-1261451 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1451+	.17
CRD-POS-1261455 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612							CRD-HCU-1455+	.17
CRD-POS-1261803 POSITION SWITCH 02C12	3	A	1 0	M302	A	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612							CRD-HCU-1803+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	A/C ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1261807 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1807*	.17
CRD-POS-1261811 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1811*	.17
CRD-POS-1261815 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1815*	.17
CRD-POS-1261819 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1819*	.17
CRD-POS-1261823 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1823*	.17
CRD-POS-1261827 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1827*	.17
CRD-POS-1261831 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1831*	.17
CRD-POS-1261835 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1835*	.17
CRD-POS-1261839 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1839*	.17
CRD-POS-1261843 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			CRD-HCU-1843*	.17
CRD-POS-1261847 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1847*	.17
CRD-POS-1261851 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1851*	.17
CRD-POS-1261855 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1855*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID ZONE	TM HL	TEST ROOM	***SEISMIC (S) PARAMETERS*** ANL FO C. ACCURACY FREQ	*ENV. (E) PARAMETERS* AGING DBE C COMPOSITE EPN	HOURS
CRD-POS-1261859 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612		CRD-HCU-1859*	.17
CRD-POS-1262203 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2203*	.17
CRD-POS-1262207 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2207*	.17
CRD-POS-1262211 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2211*	.17
CRD-POS-1262215 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2215*	.17
CRD-POS-1262219 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2219*	.17
CRD-POS-1262223 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2223*	.17
CRD-POS-1262227 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2227*	.17
CRD-POS-1262231 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612		CRD-HCU-2231*	.17
CRD-POS-1262235 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612		CRD-HCU-2235*	.17
CRD-POS-1262239 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612		CRD-HCU-2239*	.17
CRD-POS-1262243 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612		CRD-HCU-2243*	.17
CRD-POS-1262247 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612		CRD-HCU-2247*	.17

CONTRACT	EPN	LEVEL	DESCRIPTION	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING / DETAIL	A/E ZONE	STATUS S E	QID	ZONE	HL	TEST ROOM	COMPOSITE EPN	HOURS
02C12	CRD-POS-1262251	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003		N	612	CRD-HCU-2251*	.17
02C12	CRD-POS-1262255	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003		N	612	CRD-HCU-2255*	.17
02C12	CRD-POS-1262259	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003		N	612	CRD-HCU-2259*	.17
02C12	CRD-POS-1262603	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2603*	.17
02C12	CRD-POS-1262607	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2607*	.17
02C12	CRD-POS-1262611	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2611*	.17
02C12	CRD-POS-1262615	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2615*	.17
02C12	CRD-POS-1262619	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2619*	.17
02C12	CRD-POS-1262623	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2623*	.17
02C12	CRD-POS-1262627	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2627*	.17
02C12	CRD-POS-1262631	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003		N	612	CRD-HCU-2631*	.17
02C12	CRD-POS-1262635	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003		N	612	CRD-HCU-2635*	.17
02C12	CRD-POS-1262639	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003		N	612	CRD-HCU-2639*	.17

Column headings as printed: EPN; CONTRACT LEVEL; MFG; DESCRIPTION; EC USE SAFETY FUNCTION; MODEL; A/E; BLDG ELEV; STATUS S E; DETAIL; A/E DRAWING; A/E ZONE; QID ZONE; ***SEISMIC (S) PARAMETERS***: TM HL TEST ROOM ANL FO C ACCURACY FREQ; *ENV. (E) PARAMETERS*: AGING DBE C HOURS; COMPOSITE EPN

EPN CONTRACT	DESCRIPTION	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TM	HL	TEST / ROOM	ANL	FO	C	ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1262643 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612									CRD-HCU-2643+	.17
CRD-POS-1262647 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612									CRD-HCU-2647+	.17
CRD-POS-1262651 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612									CRD-HCU-2651+	.17
CRD-POS-1262655 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612									CRD-HCU-2655+	.17
CRD-POS-1262659 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003			N	612									CRD-HCU-2659+	.17
CRD-POS-1263003 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3003+	.17
CRD-POS-1263007 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3007+	.17
CRD-POS-1263011 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3011+	.17
CRD-POS-1263015 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3015+	.17
CRD-POS-1263019 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3019+	.17
CRD-POS-1263023 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3023+	.17
CRD-POS-1263027 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003			N	612									CRD-HCU-3027+	.17
CRD-POS-1263031 02C12	POSITION SWITCH	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003			N	612									CRD-HCU-3031+	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	FC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	TM	HL	TEST ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1263035 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3035+	.17
CRD-POS-1263039 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003		N	612						CRD-HCU-3039+	.17
CRD-POS-1263043 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3043+	.17
CRD-POS-1263047 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3047+	.17
CRD-POS-1263051 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3051+	.17
CRD-POS-1263055 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3055+	.17
CRD-POS-1263059 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003		N	612						CRD-HCU-3059+	.17
CRD-POS-1263403 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003		N	612						CRD-HCU-3403+	.17
CRD-POS-1263407 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003		N	612						CRD-HCU-3407+	.17
CRD-POS-1263411 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003		N	612						CRD-HCU-3411+	.17
CRD-POS-1263415 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003		N	612						CRD-HCU-3415+	.17
CRD-POS-1263419 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003		N	612						CRD-HCU-3419+	.17
CRD-POS-1263423 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		248003		N	612						CRD-HCU-3423+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TM HL	TEST ROOM ANL FO C ACCURACY FREQ	*ENV. (E) PARAMETERS* AGING DBE C COMPOSITE EPN	HOURS
CRD-POS-1263427 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3427*	.17
CRD-POS-1263431 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3431*	.17
CRD-POS-1263435 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3435*	.17
CRD-POS-1263439 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3439*	.17
CRD-POS-1263443 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3443*	.17
CRD-POS-1263447 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3447*	.17
CRD-POS-1263451 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3451*	.17
CRD-POS-1263455 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3455*	.17
CRD-POS-1263459 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3459*	.17
CRD-POS-1263803 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3803*	.17
CRD-POS-1263807 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3807*	.17
CRD-POS-1263811 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3811*	.17
CRD-POS-1263815 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3815*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST	HOURS	COMPOSITE EPN
CRD-POS-1263819	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3819*
CRD-POS-1263823	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3823*
CRD-POS-1263827	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3827*
CRD-POS-1263831	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3831*
CRD-POS-1263835	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3835*
CRD-POS-1263839	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3839*
CRD-POS-1263843	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3843*
CRD-POS-1263847	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3847*
CRD-POS-1263851	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3851*
CRD-POS-1263855	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3855*
CRD-POS-1263859	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-3859*
CRD-POS-1264203	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-4203*
CRD-POS-1264207	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	.17	CRD-HCU-4207*

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	STATUS S E	DETAIL	A/E ZONE	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-POS-1264211	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	L.5/3.7	C4	248003	N	612	CRD-HCU-4211+	.17
CRD-POS-1264215	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	L.5/3.7	C4	248003	N	612	CRD-HCU-4215+	.17
CRD-POS-1264219	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	L.5/3.7	C4	248003	N	612	CRD-HCU-4219+	.17
CRD-POS-1264223	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	L.5/3.7	C4	248003	N	612	CRD-HCU-4223+	.17
CRD-POS-1264227	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	L.5/3.7	C4	248003	N	612	CRD-HCU-4227+	.17
CRD-POS-1264231	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003	N	612	CRD-HCU-4231+	.17
CRD-POS-1264235	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003	N	612	CRD-HCU-4235+	.17
CRD-POS-1264239	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4239+	.17
CRD-POS-1264243	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4243+	.17
CRD-POS-1264247	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4247+	.17
CRD-POS-1264251	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4251+	.17
CRD-POS-1264255	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4255+	.17
CRD-POS-1264259	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	Y X	K.2/3.7	C4	248003		612	CRD-HCU-4259+	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1264607 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4607+	.17
CRD-POS-1264611 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4611+	.17
CRD-POS-1264615 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4615+	.17
CRD-POS-1264619 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4619+	.17
CRD-POS-1264623 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4623+	.17
CRD-POS-1264627 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-4627+	.17
CRD-POS-1264631 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4631+	.17
CRD-POS-1264635 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4635+	.17
CRD-POS-1264639 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4639+	.17
CRD-POS-1264643 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4643+	.17
CRD-POS-1264647 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4647+	.17
CRD-POS-1264651 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4651+	.17
CRD-POS-1264655 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-4655+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	DETAIL	A/E ZONE	STATUS S E	QID	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1265011	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5011+	.17
CRD-POS-1265015	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5015+	.17
CRD-POS-1265019	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5019+	.17
CRD-POS-1265023	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5023+	.17
CRD-POS-1265027	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5027+	.17
CRD-POS-1265031	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5031+	.17
CRD-POS-1265035	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5035+	.17
CRD-POS-1265039	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5039+	.17
CRD-POS-1265043	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5043+	.17
CRD-POS-1265047	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5047+	.17
CRD-POS-1265051	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	K.2/3.7	C4	Y X	248003	612	CRD-HCU-5051+	.17
CRD-POS-1265415	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5415+	.17
CRD-POS-1265419	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	M528	L.5/3.7	C4	Y X	248003	612	CRD-HCU-5419+	.17

Column headings as printed: EPN; MFG; MODEL; STATUS S E; QID; ***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ; *ENV. (E) PARAMETERS* AGING DBE C HOURS; DESCRIPTION; BLDG ELEV; DETAIL; ZONE; ROOM; ACCURACY; COMPOSITE EPN; CONTRACT; LEVEL; EC; USE; SAFETY FUNCTION; A/E DRAWING; A/E ZONE.

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	***SEISMIC (S) PARAMETERS*** TH / HL TEST ROOM / ZONE / ANL FO C / ACCURACY / FREQ	*ENV. (E) PARAMETERS* AGING DBE C / COMPOSITE EPN	HOURS
CRD-POS-1265423 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-5423*	.17
CRD-POS-1265427 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X	C4	248003	612	CRD-HCU-5427*	.17
CRD-POS-1265431 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-5431*	.17
CRD-POS-1265435 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-5435*	.17
CRD-POS-1265439 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-5439*	.17
CRD-POS-1265443 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X	C4	248003	612	CRD-HCU-5443*	.17
CRD-POS-1265447 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	A X	C4	248003	612	CRD-HCU-5447*	.17
CRD-POS-1265819 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	A X	C4	248003	612	CRD-HCU-5819*	.17
CRD-POS-1265823 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	A X	C4	248003	612	CRD-HCU-5823*	.17
CRD-POS-1265827 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	A X	C4	248003	612	CRD-HCU-5827*	.17
CRD-POS-1265831 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	A X	C4	248003	612	CRD-HCU-5831*	.17
CRD-POS-1265835 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	A X	C4	248003	612	CRD-HCU-5835*	.17
CRD-POS-1265839 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	A X	C4	248003	612	CRD-HCU-5839*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID ZONE	TM	HL	TEST ROOM	ANL	FO	C	ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1265843 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	A X	C4	248003			612									CRD-HCU-5843*	.17
CRD-POS-1270219 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0219*	.17
CRD-POS-1270223 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0223*	.17
CRD-POS-1270227 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0227*	.17
CRD-POS-1270231 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0231*	.17
CRD-POS-1270235 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003		N	612									CRD-HCU-0235*	.17
CRD-POS-1270239 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003		N	612									CRD-HCU-0239*	.17
CRD-POS-1270243 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003		N	612									CRD-HCU-0243*	.17
CRD-POS-1270615 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0615*	.17
CRD-POS-1270619 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0619*	.17
CRD-POS-1270623 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0623*	.17
CRD-POS-1270627 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0627*	.17
CRD-POS-1270631 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003		N	612									CRD-HCU-0631*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID ZONE	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-POS-1270635	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-0635+	.17
CRD-POS-1270639	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-0639+	.17
CRD-POS-1270643	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-0643+	.17
CRD-POS-1270647	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-0647+	.17
CRD-POS-1271011	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1011+	.17
CRD-POS-1271015	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1015+	.17
CRD-POS-1271019	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1019+	.17
CRD-POS-1271023	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1023+	.17
CRD-POS-1271027	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1027+	.17
CRD-POS-1271031	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y X	248003	N	612	CRD-HCU-1031+	.17
CRD-POS-1271035	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-1035+	.17
CRD-POS-1271039	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-1039+	.17
CRD-POS-1271043	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	[illegible]	Y X	248003	N	612	CRD-HCU-1043+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	MFG / USE	MODEL / SAFETY FUNCTION	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	E	QID ZONE	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1271047 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1047+	.17
CRD-POS-1271051 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1051+	.17
CRD-POS-1271407 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1407+	.17
CRD-POS-1271411 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1411+	.17
CRD-POS-1271415 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1415+	.17
CRD-POS-1271419 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1419+	.17
CRD-POS-1271423 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1423+	.17
CRD-POS-1271427 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1427+	.17
CRD-POS-1271431 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-1431+	.17
CRD-POS-1271435 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1435+	.17
CRD-POS-1271439 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1439+	.17
CRD-POS-1271443 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1443+	.17
CRD-POS-1271447 POSITION SWITCH 02C12	3	A	M302 1 0	BZE6-2RN72 A	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-1447+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S	STATUS E	A/E ZONE	QID	HL	TEST	COMPOSITE EPN	HOURS
CRD-POS-1271451	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y	X	C4	248003	N	612	CRD-HCU-1451*	.17
CRD-POS-1271455	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y	X	C4	248003	N	612	CRD-HCU-1455*	.17
CRD-POS-1271803	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1803*	.17
CRD-POS-1271807	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1807*	.17
CRD-POS-1271811	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1811*	.17
CRD-POS-1271815	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1815*	.17
CRD-POS-1271819	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1819*	.17
CRD-POS-1271823	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1823*	.17
CRD-POS-1271827	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1827*	.17
CRD-POS-1271831	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y	X	C4	248003	N	612	CRD-HCU-1831*	.17
CRD-POS-1271835	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y	X	C4	248003	N	612	CRD-HCU-1835*	.17
CRD-POS-1271839	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y	X	C4	248003	N	612	CRD-HCU-1839*	.17
CRD-POS-1271843	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y	X		248003	N	612	CRD-HCU-1843*	.17

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

PAGE NO 00039
DATE 09/06/83

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1271847 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-1847*	.17
CRD-POS-1271851 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-1851*	.17
CRD-POS-1271855 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-1855*	.17
CRD-POS-1271859 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-1859*	.17
CRD-POS-1272203 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2203*	.17
CRD-POS-1272207 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2207*	.17
CRD-POS-1272211 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2211*	.17
CRD-POS-1272215 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2215*	.17
CRD-POS-1272219 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2219*	.17
CRD-POS-1272223 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2223*	.17
CRD-POS-1272227 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2227*	.17
CRD-POS-1272231 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2231*	.17
CRD-POS-1272235 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2235*	.17

Column headings as printed: EPN; CONTRACT; LEVEL; MFG; DESCRIPTION; EC; USE; SAFETY FUNCTION; MODEL; A/E; BLDG ELEV; DRAWING; STATUS S E; DETAIL; A/E ZONE; QID; ZONE; ***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ; ROOM; ACCURACY; *ENV. (E) PARAMETERS* AGING DBE C HOURS; COMPOSITE EPN

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	MFG	USE	SAFETY FUNCTION	MODEL	A/E	BLDG	ELEV	A/E DRAWING	STATUS S E	DETAIL / A/E ZONE	QID	ZONE	TM	HL	TEST / ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-POS-1272239 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2239+	.17
CRD-POS-1272243 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2243+	.17
CRD-POS-1272247 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2247+	.17
CRD-POS-1272251 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2251+	.17
CRD-POS-1272255 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2255+	.17
CRD-POS-1272259 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003			N	612						CRD-HCU-2259+	.17
CRD-POS-1272603 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2603+	.17
CRD-POS-1272607 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2607+	.17
CRD-POS-1272611 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2611+	.17
CRD-POS-1272615 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2615+	.17
CRD-POS-1272619 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2619+	.17
CRD-POS-1272623 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003			N	612						CRD-HCU-2623+	.17
CRD-POS-1272627 POSITION SWITCH 02C12	3	A	M302	1 0	A	BZE6-2RN72	M528	R	528	L5/8.4	Y X	[illegible]	248003			N	612						CRD-HCU-2627+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1272631	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-2631*	.17
CRD-POS-1272635	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2635*	.17
CRD-POS-1272639	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2639*	.17
CRD-POS-1272643	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2643*	.17
CRD-POS-1272647	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2647*	.17
CRD-POS-1272651	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2651*	.17
CRD-POS-1272655	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2655*	.17
CRD-POS-1272659	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	Y X	C4	248003	N	612	CRD-HCU-2659*	.17
CRD-POS-1273003	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-3003*	.17
CRD-POS-1273007	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-3007*	.17
CRD-POS-1273011	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-3011*	.17
CRD-POS-1273015	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-3015*	.17
CRD-POS-1273019	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	Y X	C4	248003	N	612	CRD-HCU-3019*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1273023	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	L5/8.4	M528	C4	Y X	248003	N	612	CRD-HCU-3023*	.17
CRD-POS-1273027	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	L5/8.4	M528	C4	Y X	248003	N	612	CRD-HCU-3027*	.17
CRD-POS-1273031	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3031*	.17
CRD-POS-1273035	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3035*	.17
CRD-POS-1273039	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3039*	.17
CRD-POS-1273043	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3043*	.17
CRD-POS-1273047	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3047*	.17
CRD-POS-1273051	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3051*	.17
CRD-POS-1273055	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3055*	.17
CRD-POS-1273059	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	K.2/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3059*	.17
CRD-POS-1273403	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	L.5/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3403*	.17
CRD-POS-1273407	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	L.5/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3407*	.17
CRD-POS-1273411	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	R	528	L.5/3.7	M528	C4	Y X	248003	N	612	CRD-HCU-3411*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	TEST	COMPOSITE EPN	HOURS
CRD-POS-1273415	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y	X	248003	N	612	CRD-HCU-3415+	.17
CRD-POS-1273419	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y	X	248003	N	612	CRD-HCU-3419+	.17
CRD-POS-1273423	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y	X	248003	N	612	CRD-HCU-3423+	.17
CRD-POS-1273427	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y	X	248003	N	612	CRD-HCU-3427+	.17
CRD-POS-1273431	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3431+	.17
CRD-POS-1273435	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3435+	.17
CRD-POS-1273439	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3439+	.17
CRD-POS-1273443	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3443+	.17
CRD-POS-1273447	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3447+	.17
CRD-POS-1273451	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3451+	.17
CRD-POS-1273455	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3455+	.17
CRD-POS-1273459	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-3459+	.17
CRD-POS-1273803	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y	X	248003	N	612	CRD-HCU-3803+	.17

Header columns as printed (seismic and environmental parameter columns otherwise empty): ***SEISMIC (S) PARAMETERS*** — QID, ZONE, TM, HL, TEST, ROOM, ANL, FO C, ACCURACY, FREQ; *ENV. (E) PARAMETERS* — AGING, DBE, C, HOURS, COMPOSITE EPN.

EPN	CONTRACT	LEVEL	DESCRIPTION	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TH / HL / ROOM	TEST / ANL / FO C / ACCURACY / FREQ	*ENV. (E) PARAMETERS* COMPOSITE EPN	HOURS
CRD-POS-1273807	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3807*	.17
CRD-POS-1273811	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3811*	.17
CRD-POS-1273815	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3815*	.17
CRD-POS-1273819	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3819*	.17
CRD-POS-1273823	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3823*	.17
CRD-POS-1273827	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-3827*	.17
CRD-POS-1273831	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3831*	.17
CRD-POS-1273835	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3835*	.17
CRD-POS-1273839	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-3839*	.17
CRD-POS-1273843	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-3843*	.17
CRD-POS-1273847	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-3847*	.17
CRD-POS-1273851	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y X	248003	N	612	CRD-HCU-3851*	.17
CRD-POS-1273855	02C12	3	POSITION SWITCH	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	[illegible]	Y X	248003	N	612	CRD-HCU-3855*	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1273859 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-3859+	.17
CRD-POS-1274203 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4203+	.17
CRD-POS-1274207 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4207+	.17
CRD-POS-1274211 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4211+	.17
CRD-POS-1274215 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4215+	.17
CRD-POS-1274219 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4219+	.17
CRD-POS-1274223 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4223+	.17
CRD-POS-1274227 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4227+	.17
CRD-POS-1274231 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4231+	.17
CRD-POS-1274235 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4235+	.17
CRD-POS-1274239 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4239+	.17
CRD-POS-1274243 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4243+	.17
CRD-POS-1274247 POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4247+	.17

Header columns also printed (no values on this page): TM, TEST, ANL, FO, C, FREQ, ACCURACY, ***SEISMIC (S) PARAMETERS***, *ENV. (E) PARAMETERS* AGING, OBE, C.

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1274251 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4251+	.17
CRD-POS-1274255 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4255+	.17
CRD-POS-1274259 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4259+	.17
CRD-POS-1274607 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4607+	.17
CRD-POS-1274611 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4611+	.17
CRD-POS-1274615 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4615+	.17
CRD-POS-1274619 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4619+	.17
CRD-POS-1274623 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4623+	.17
CRD-POS-1274627 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L5/8.4	C4	Y	X	248003	N	612	CRD-HCU-4627+	.17
CRD-POS-1274631 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4631+	.17
CRD-POS-1274635 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4635+	.17
CRD-POS-1274639 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K2/8.4	C4	Y	X	248003	N	612	CRD-HCU-4639+	.17
CRD-POS-1274643 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003	N	612	CRD-HCU-4643+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL	A/E ZONE	QID	TM	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-POS-1274647 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-4647+	.17
CRD-POS-1274651 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-4651+	.17
CRD-POS-1274655 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-4655+	.17
CRD-POS-1275011 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		C4	248003		N	612	CRD-HCU-5011+	.17
CRD-POS-1275015 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		C4	248003		N	612	CRD-HCU-5015+	.17
CRD-POS-1275019 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		C4	248003		N	612	CRD-HCU-5019+	.17
CRD-POS-1275023 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		C4	248003		N	612	CRD-HCU-5023+	.17
CRD-POS-1275027 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	Y X		C4	248003		N	612	CRD-HCU-5027+	.17
CRD-POS-1275031 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-5031+	.17
CRD-POS-1275035 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-5035+	.17
CRD-POS-1275039 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-5039+	.17
CRD-POS-1275043 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-5043+	.17
CRD-POS-1275047 POSITION SWITCH 02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	Y X		C4	248003		N	612	CRD-HCU-5047+	.17

Column headings as printed: EPN / DESCRIPTION / CONTRACT LEVEL EC USE — MFG — SAFETY FUNCTION — MODEL — A/E — BLDG ELEV DRAWING — STATUS S E DETAIL A/E ZONE — QID ZONE — ***SEISMIC (S) PARAMETERS*** TM HL TEST ROOM ANL FO C ACCURACY FREQ — *ENV. (E) PARAMETERS* AGING DBE C HOURS COMPOSITE EPN

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM HL	ROOM	COMPOSITE EPN	HOURS
CRD-POS-1275051	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5051*	.17
CRD-POS-1275415	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5415*	.17
CRD-POS-1275419	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5419*	.17
CRD-POS-1275423	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5423*	.17
CRD-POS-1275427	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5427*	.17
CRD-POS-1275431	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5431*	.17
CRD-POS-1275435	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5435*	.17
CRD-POS-1275439	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5439*	.17
CRD-POS-1275443	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5443*	.17
CRD-POS-1275447	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y X	248003	N	612	CRD-HCU-5447*	.17
CRD-POS-1275819	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5819*	.17
CRD-POS-1275823	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZF6-2RN72	M528	R	528	L.5/3.7	C4	Y X	248003	N	612	CRD-HCU-5823*	.17
CRD-POS-1275827	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	L.5/3.7		Y X	248003	N	612	CRD-HCU-5827*	.17

Other column headings printed but empty for these rows: ***SEISMIC (S) PARAMETERS*** TEST ANL FO C ACCURACY FREQ; *ENV. (E) PARAMETERS* AGING DBE C

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	HL	TEST	COMPOSITE EPN	HOURS
CRD-POS-1275831	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003		N	612	CRD-HCU-5831+	.17
CRD-POS-1275835	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003		N	612	CRD-HCU-5835+	.17
CRD-POS-1275839	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003		N	612	CRD-HCU-5839+	.17
CRD-POS-1275843	POSITION SWITCH	02C12	3	A	1 0	A	M302	BZE6-2RN72	M528	R	528	K.2/3.7	C4	Y	X	248003		N	612	CRD-HCU-5843+	.17
CRD-SPV-110A	1.5" SOL. CAS-F-6 DISCH.	02C12	2	P	2 0	G1	A499	HVA-103-632	M528	R	529	M.6/3.8	D13	X	X	315024	R53			CRD-IR-3+	4320
CRD-SPV-110B	1.5" SOL. CAS-F-6 DISCH.	02C12	2	P	2 0	G1	A499	HVA-103-632	M528	R	528	M.8/3.8	D14	X	X	315024	R53			CRD-IR-3+	4320
CRD-SPV-1170219	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612	CRD-HCU-0219+	.17
CRD-SPV-1170223	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612	CRD-HCU-0223+	.17
CRD-SPV-1170227	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612	CRD-HCU-0227+	.17
CRD-SPV-1170231	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612	CRD-HCU-0231+	.17
CRD-SPV-1170235	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612	CRD-HCU-0235+	.17
CRD-SPV-1170239	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612	CRD-HCU-0239+	.17
CRD-SPV-1170243	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612	CRD-HCU-0243+	.17

EPN	MFG	MODEL	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** HL	TEST	*ENV. (E) PARAMETERS* HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1170615	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0615*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170619	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0619*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170623	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0623*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170627	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0627*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170631	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0631*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170635	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0635*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170639	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0639*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170643	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0643*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1170647	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0647*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171011	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1011*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171015	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1015*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171019	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1019*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171023	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1023*	02C12	2	A	1 0	A	M528	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	HL	ROOM	HOURS	COMPOSITE EPN
CRD-SPV-1171027	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1027*
CRD-SPV-1171031	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1031*
CRD-SPV-1171035	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1035*
CRD-SPV-1171039	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1039*
CRD-SPV-1171043	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1043*
CRD-SPV-1171047	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1047*
CRD-SPV-1171051	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1051*
CRD-SPV-1171407	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1407*
CRD-SPV-1171411	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1411*
CRD-SPV-1171415	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1415*
CRD-SPV-1171419	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1419*
CRD-SPV-1171423	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1423*
CRD-SPV-1171427	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	.17	CRD-HCU-1427*

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1171431	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1431*	.17
CRD-SPV-1171435	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1435*	.17
CRD-SPV-1171439	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1439*	.17
CRD-SPV-1171443	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1443*	.17
CRD-SPV-1171447	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1447*	.17
CRD-SPV-1171451	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1451*	.17
CRD-SPV-1171455	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1455*	.17
CRD-SPV-1171803	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1803*	.17
CRD-SPV-1171807	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1807*	.17
CRD-SPV-1171811	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1811*	.17
CRD-SPV-1171815	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1815*	.17
CRD-SPV-1171819	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1819*	.17
CRD-SPV-1171823	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4		A X	315020	N	612	CRD-HCU-1823*	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	TEST	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1171827	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1827+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171831	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1831+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171835	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1835+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171839	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1839+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171843	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1843+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171847	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1847+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171851	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1851+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171855	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1855+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1171859	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1859+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1172203	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2203+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1172207	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2207+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1172211	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2211+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1172215	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2215+	02C12	2	A	1 0	A	M528	D2

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	TM	HL	TEST	ANL	FO	C	FREQ	COMPOSITE EPN	AGING	DBE	C	HOURS
CRD-SPV-1172219 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612					CRD-HCU-2219*				.17
CRD-SPV-1172223 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612					CRD-HCU-2223*				.17
CRD-SPV-1172227 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612					CRD-HCU-2227*				.17
CRD-SPV-1172231 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612					CRD-HCU-2231*				.17
CRD-SPV-1172235 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2235*				.17
CRD-SPV-1172239 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2239*				.17
CRD-SPV-1172243 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2243*				.17
CRD-SPV-1172247 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2247*				.17
CRD-SPV-1172251 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2251*				.17
CRD-SPV-1172255 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2255*				.17
CRD-SPV-1172259 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A	X	315020		N	612					CRD-HCU-2259*				.17
CRD-SPV-1172603 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A	X	315020		N	612					CRD-HCU-2603*				.17
CRD-SPV-1172607 SCRAM SOLENOID PILOT CRD-V-126&127 02C1[illegible]	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4		A	X	315020		N	612					CRD-HCU-2607*				.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	DETAIL	STATUS S E	A/E ZONE	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1172611 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2611+	.17
CRD-SPV-1172615 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2615+	.17
CRD-SPV-1172619 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2619+	.17
CRD-SPV-1172623 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2623+	.17
CRD-SPV-1172627 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2627+	.17
CRD-SPV-1172631 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2631+	.17
CRD-SPV-1172635 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2635+	.17
CRD-SPV-1172639 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2639+	.17
CRD-SPV-1172643 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2643+	.17
CRD-SPV-1172647 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2647+	.17
CRD-SPV-1172651 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2651+	.17
CRD-SPV-1172655 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2655+	.17
CRD-SPV-1172659 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	M528	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2659+	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1173003	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3003*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173007	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3007*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173011	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3011*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173015	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3015*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173019	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3019*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173023	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3023*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173027	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-3027*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173031	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3031*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173035	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3035*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173039	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3039*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173043	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3043*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173047	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3047*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1173051	A610	HVA904052-J	A X	315020	N	612	.17	SCRA[illegible]LENOID PILOT CRD-V-126&127	R	530	K.[illegible]7	CRD-HCU-3051*	02C1[illegible]	2	A	1 0	A	M528	[illegible]

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN / DESCRIPTION / CONTRACT — LEVEL — EC — USE — SAFETY FUNCTION — MFG — MODEL — A/E — BLDG ELEV — A/E DRAWING — STATUS S E — DETAIL — A/E ZONE — QID — ZONE — ***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ — ROOM — ACCURACY — *ENV. (E) PARAMETERS* AGING DBE C HOURS — COMPOSITE EPN

CRD-SPV-1173055					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	K.2/3.7					CRD-HCU-3055*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173059					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3059*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173403					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3403*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173407					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3407*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173411					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3411*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173415					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3415*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173419					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3419*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173423					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3423*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173427					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	L.5/3.7					CRD-HCU-3427*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173431					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	K.2/3.7					CRD-HCU-3431*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173435					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	K.2/3.7					CRD-HCU-3435*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173439					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	K.2/3.7					CRD-HCU-3439*	
02C12	2	A	1 0	A			M528			D2						
CRD-SPV-1173443					A610	HVA904052-J					A X	315020	N	612		.17
SCRAM SOLENOID PILOT CRD-V-126&127								R	530	K.2/3.7					CRD-HCU-3443*	
02C12	2	A	1 0	A			M528			D2						

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST	HOURS	COMPOSITE EPN
CRD-SPV-1173447 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3447+
CRD-SPV-1173451 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3451+
CRD-SPV-1173455 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3455+
CRD-SPV-1173459 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3459+
CRD-SPV-1173803 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3803+
CRD-SPV-1173807 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3807+
CRD-SPV-1173811 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3811+
CRD-SPV-1173815 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3815+
CRD-SPV-1173819 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3819+
CRD-SPV-1173823 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3823+
CRD-SPV-1173827 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3827+
CRD-SPV-1173831 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	.17	CRD-HCU-3831+
CRD-SPV-1173835 SCRA[illegible]LENOID PILOT CRD-V-126&127	02C1[illegible]	2	A	1 0	A	A610	HVA904052-J	M529	R	530	K.[illegible]7		A X	315020	N	612	.17	CRD-HCU-3835+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	STATUS S E	DETAIL	A/E ZONE	QID	HL	TEST / ROOM	HOURS	COMPOSITE EPN
CRD-SPV-1173839	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3839*
CRD-SPV-1173843	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3843*
CRD-SPV-1173847	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3847*
CRD-SPV-1173851	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3851*
CRD-SPV-1173855	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3855*
CRD-SPV-1173859	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	K.2/3.7	D2	315020	N	612	.17	CRD-HCU-3859*
CRD-SPV-1174203	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4203*
CRD-SPV-1174207	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4207*
CRD-SPV-1174211	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4211*
CRD-SPV-1174215	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4215*
CRD-SPV-1174219	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4219*
CRD-SPV-1174223	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4223*
CRD-SPV-1174227	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	A X	L.5/3.7	D2	315020	N	612	.17	CRD-HCU-4227*

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                EPN                 MFG                  MODEL                      STATUS       ***SEISMIC (S) PARAMETERS***        *ENV. (E) PARAMETERS*
                          DESCRIPTION                             BLDG ELEV       S E    QID   TM  HL TEST ANL FO C    FREQ   AGING  DBE  C   HOURS
CONTRACT    LEVEL         EC   USE   SAFETY FUNCTION  A/E DRAWING                 DETAIL    ZONE   ROOM      ACCURACY              COMPOSITE EPN
                                                                                  A/E ZONE

CRD-SPV-1174231            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4231*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174235            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4235*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174239            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4239*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174243            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4243*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174247            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4247*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174251            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4251*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174255            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4255*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174259            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 K.2/3.7                                     CRD-HCU-4259*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174607            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 L.5/3.7                                     CRD-HCU-4607*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174611            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 L.5/3.7                                     CRD-HCU-4611*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174615            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 L.5/3.7                                     CRD-HCU-4615*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174619            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 L.5/3.7                                     CRD-HCU-4619*
 02C12         2     A    1 0   A            M528          D2

CRD-SPV-1174623            A610    HVA904052-J                   A X  315020    N  612                                                   .17
 SCRAM SOLENOID PILOT CRD-V-126&127                R  530 L.5/3.7                                     CRD-HCU-4623*
 02C12         2     A    1 0   A            M528
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EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	STATUS S E	BLDG	ELEV	DETAIL	A/E ZONE	QID ZONE	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1174627 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-4627*	.17
CRD-SPV-1174631 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4631*	.17
CRD-SPV-1174635 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4635*	.17
CRD-SPV-1174639 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4639*	.17
CRD-SPV-1174643 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4643*	.17
CRD-SPV-1174647 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4647*	.17
CRD-SPV-1174651 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4651*	.17
CRD-SPV-1174655 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	K.2/3.7	D2	315020	N	612	CRD-HCU-4655*	.17
CRD-SPV-1175011 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-5011*	.17
CRD-SPV-1175015 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-5015*	.17
CRD-SPV-1175019 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-5019*	.17
CRD-SPV-1175023 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-5023*	.17
CRD-SPV-1175027 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	A X	R	530	L.5/3.7	D2	315020	N	612	CRD-HCU-5027*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1175031	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5031*	.17
CRD-SPV-1175035	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020		612	CRD-HCU-5035*	.17
CRD-SPV-1175039	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5039*	.17
CRD-SPV-1175043	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5043*	.17
CRD-SPV-1175047	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5047*	.17
CRD-SPV-1175051	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5051*	.17
CRD-SPV-1175415	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	CRD-HCU-5415*	.17
CRD-SPV-1175419	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	CRD-HCU-5419*	.17
CRD-SPV-1175423	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	CRD-HCU-5423*	.17
CRD-SPV-1175427	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N	612	CRD-HCU-5427*	.17
CRD-SPV-1175431	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5431*	.17
CRD-SPV-1175435	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N	612	CRD-HCU-5435*	.17
CRD-SPV-1175439	SCRA[illegible]LENOID PILOT CRD-V-126&127	02C1[illegible]	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.[illegible]7	[illegible]	A X	315020	N	612	CRD-HCU-5439*	.17

EPN	CONTRACT	LEVEL	DESCRIPTION	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	HL	ROOM	HOURS	COMPOSITE EPN
CRD-SPV-1175443	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5443*
CRD-SPV-1175447	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5447*
CRD-SPV-1175819	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5819*
CRD-SPV-1175823	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5823*
CRD-SPV-1175827	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5827*
CRD-SPV-1175831	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5831*
CRD-SPV-1175835	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5835*
CRD-SPV-1175839	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5839*
CRD-SPV-1175843	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	K.2/3.7	M528	D2	A X	315020	N	612	.17	CRD-HCU-5843*
CRD-SPV-1180219	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	L5/R.4	M528	D2	A X	315020	N	612	.17	CRD-HCU-0219*
CRD-SPV-1180223	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	L5/R.4	M528	D2	A X	315020	N	612	.17	CRD-HCU-0223*
CRD-SPV-1180227	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	L5/R.4	M528	D2	A X	315020	N	612	.17	CRD-HCU-0227*
CRD-SPV-1180231	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	R	530	L5/R.4	M528	D2	A X	315020	N	612	.17	CRD-HCU-0231*

Column headings as printed: EPN, CONTRACT, LEVEL, DESCRIPTION, EC, USE, SAFETY FUNCTION, MFG, MODEL, BLDG ELEV, DETAIL, A/E DRAWING, A/E ZONE, STATUS S E, QID, ZONE, ***SEISMIC (S) PARAMETERS*** TH HL TEST ROOM ANL FO C ACCURACY FREQ, *ENV. (E) PARAMETERS* AGING DBE C HOURS, COMPOSITE EPN

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1180235	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0235*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180239	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0239*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180243	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0243*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180615	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0615*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180619	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0619*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180623	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0623*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180627	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0627*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180631	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-0631*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180635	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0635*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180639	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0639*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180643	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0643*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1180647	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-0647*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181011	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5[illegible]	CRD-HCU-1011*	02C1[illegible]	2	A	1 0	A	M528	[illegible]

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TH HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1181015	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1015*	.17
CRD-SPV-1181019	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1019*	.17
CRD-SPV-1181023	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1023*	.17
CRD-SPV-1181027	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1027*	.17
CRD-SPV-1181031	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1031*	.17
CRD-SPV-1181035	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1035*	.17
CRD-SPV-1181039	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1039*	.17
CRD-SPV-1181043	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1043*	.17
CRD-SPV-1181047	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1047*	.17
CRD-SPV-1181051	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	D2	A X	315020	N	612	CRD-HCU-1051*	.17
CRD-SPV-1181407	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1407*	.17
CRD-SPV-1181411	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1411*	.17
CRD-SPV-1181415	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	D2	A X	315020	N	612	CRD-HCU-1415*	.17

Other printed headings: STATUS, ANL FO C, FREQ, ACCURACY, *ENV. (E) PARAMETERS* AGING DBE C HOURS, COMPOSITE EPN.

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1181419	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1419*	.17
CRD-SPV-1181423	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1423*	.17
CRD-SPV-1181427	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1427*	.17
CRD-SPV-1181431	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1431*	.17
CRD-SPV-1181435	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1435*	.17
CRD-SPV-1181439	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1439*	.17
CRD-SPV-1181443	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1443*	.17
CRD-SPV-1181447	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1447*	.17
CRD-SPV-1181451	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1451*	.17
CRD-SPV-1181455	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	K2/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1455*	.17
CRD-SPV-1181803	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1803*	.17
CRD-SPV-1181807	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	R	530	L5/8.4	M528	D2	A	X	315020	N	612	CRD-HCU-1807*	.17
CRD-SPV-1181811	SCRAM SOLENOID PILOT CRD-V-126&127	02C1[illegible]	2	A	1 0	A	A610	HVA904052-J	R	530	L5/[illegible]	M528	[illegible]	A	X	315020	N	612	CRD-HCU-1811*	.17

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

PAGE NO 00067
DATE 09/06/83

EPN	MFG	MODEL	STATUS S	STATUS E	QID	HL	TEST	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	FC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1181815	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1815*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181819	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1819*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181823	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1823*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181827	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1827*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181831	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-1831*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181835	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1835*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181839	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1839*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181843	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1843*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181847	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1847*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181851	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1851*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181855	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1855*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1181859	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-1859*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182203	A610	HVA904052-J	A	X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2203*	02C12	2	A	1 0	A	M528	D2

Other column headers printed: ***SEISMIC (S) PARAMETERS*** TM, ANL, FO, C, FREQ, ZONE, ROOM, ACCURACY; *ENV. (E) PARAMETERS* AGING, DBE, C (no values printed in these columns).

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	A/E DRAWING	STATUS S E	DETAIL / A/E ZONE	QID	HL	TEST / ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1182207 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2207*	.17
CRD-SPV-1182211 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2211*	.17
CRD-SPV-1182215 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2215*	.17
CRD-SPV-1182219 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2219*	.17
CRD-SPV-1182223 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2223*	.17
CRD-SPV-1182227 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2227*	.17
CRD-SPV-1182231 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-2231*	.17
CRD-SPV-1182235 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2235*	.17
CRD-SPV-1182239 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2239*	.17
CRD-SPV-1182243 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2243*	.17
CRD-SPV-1182247 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2247*	.17
CRD-SPV-1182251 SCRAM SOLENOID PILOT CRD-V-126&127 02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2251*	.17
CRD-SPV-1182255 SCRA[illegible]LENOID PILOT CRD-V-126&127 02C1[illegible]	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K2[illegible]	A X	[illegible]	315020	N	612	CRD-HCU-2255*	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1182259	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-2259+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182603	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2603+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182607	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2607+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182611	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2611+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182615	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2615+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182619	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2619+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182623	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2623+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182627	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2627+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182631	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L5/8.4	CRD-HCU-2631+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182635	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-2635+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182639	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-2639+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182643	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-2643+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1182647	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K2/8.4	CRD-HCU-2647+	02C12	2	A	1 0	A	M528	D2

EPN	CONTRACT	LEVEL	DESCRIPTION	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SPV-1182651	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2651*	.17
CRD-SPV-1182655	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2655*	.17
CRD-SPV-1182659	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K2/8.4	A X	D2	315020	N	612	CRD-HCU-2659*	.17
CRD-SPV-1183003	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3003*	.17
CRD-SPV-1183007	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3007*	.17
CRD-SPV-1183011	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3011*	.17
CRD-SPV-1183015	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3015*	.17
CRD-SPV-1183019	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3019*	.17
CRD-SPV-1183023	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3023*	.17
CRD-SPV-1183027	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	L5/8.4	A X	D2	315020	N	612	CRD-HCU-3027*	.17
CRD-SPV-1183031	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020	N	612	CRD-HCU-3031*	.17
CRD-SPV-1183035	02C12	2	SCRAM SOLENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A Y	D2	315020	N	612	CRD-HCU-3035*	.17
CRD-SPV-1183039	02C1[illegible]	2	SCRA[illegible]LENOID PILOT CRD-V-126&127	A	1 0	A	A610	HVA904052-J	M528	R	530	K.[illegible]7	A X	[illegible]	315020	N	612	CRD-HCU-3039*	.17

SEISMIC (S) PARAMETERS (TM, HL, TEST, ANL, FO C, FREQ, ACCURACY) — *ENV. (E) PARAMETERS* (AGING, DBE, C, HOURS)

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                                                      STATUS        ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
           EPN                 MFG            MODEL    S E   QID   TM  HL TEST ANL FO C    FREQ    AGING  DOE  C   HOURS
                     DESCRIPTION                  BLDG ELEV  DETAIL  ZONE  ROOM    ACCURACY           COMPOSITE EPN
CONTRACT    LEVEL   EC   USE  SAFETY FUNCTION  A/E DRAWING  A/E ZONE

CRD-SPV-1183043              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3043+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183047              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3047+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183051              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3051+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183055              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3055+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183059              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3059+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183403              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3403+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183407              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3407+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183411              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3411+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183415              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3415+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183419              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3419+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183423              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3423+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183427              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 L.5/3.7                               CRD-HCU-3427+
 02C12         2     A    1 0    A              M528          D2

CRD-SPV-1183431              A610    HVA904052-J               A X  315020     N  612                                      .17
 SCRAM SOLENOID PILOT CRD-V-126&127                   R  530 K.2/3.7                               CRD-HCU-3431+
 02C12         2     A    1 0    A              M528          D2
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PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1183435	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3435*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183439	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3439*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183443	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3443*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183447	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3447*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183451	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3451*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183455	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3455*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183459	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-3459*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183803	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-3803*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183807	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-3807*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183811	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-3811*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183815	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-3815*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183819	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-3819*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1183823	A610	HVA904052-J	A X	315020	N	612	.17	SCRA[illegible]LENOID PILOT CRD-V-126&127	R	530	L.[illegible]7	CRD-HCU-3823*	02C1[illegible]	2	A	1 0	A	M528	

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID ZONE	TM	HL	TEST ROOM	ANL FO C ACCURACY	FREQ	AGING DBE C COMPOSITE EPN	HOURS
CRD-SPV-1183827 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	A X	D2	315020		N	612			CRD-HCU-3827+	.17
CRD-SPV-1183831 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3831+	.17
CRD-SPV-1183835 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3835+	.17
CRD-SPV-1183839 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3839+	.17
CRD-SPV-1183843 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3843+	.17
CRD-SPV-1183847 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3847+	.17
CRD-SPV-1183851 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3851+	.17
CRD-SPV-1183855 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3855+	.17
CRD-SPV-1183859 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	A X	D2	315020		N	612			CRD-HCU-3859+	.17
CRD-SPV-1184203 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	A X	D2	315020		N	612			CRD-HCU-4203+	.17
CRD-SPV-1184207 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	A X	D2	315020		N	612			CRD-HCU-4207+	.17
CRD-SPV-1184211 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	A X	D2	315020		N	612			CRD-HCU-4211+	.17
CRD-SPV-1184215 SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	A X	D2	315020		N	612			CRD-HCU-4215+	.17

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SPV-1184219	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4219*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184223	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4223*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184227	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4227*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184231	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4231*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184235	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4235*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184239	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4239*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184243	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4243*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184247	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4247*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184251	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4251*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184255	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4255*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184259	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4259*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184607	A610	HVA904052-J	A X	315020	N	612	.17	SCRAM SOLENOID PILOT CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4607*	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184611	A610	HVA904052-J	A X	315020	N	612	.17	SCRA[illegible]LENOID PILOT CRD-V-126&127	R	530	L.[illegible]7	CRD-HCU-4611*	02C1[illegible]	2	A	1 0	A	M528	D2

EPN	MFG	MODEL	STATUS S E	QID	TM HL TEST ROOM	HOURS	DESCRIPTION	SAFETY FUNCTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE		A/E DRAWING	A/E ZONE
CRD-SPV-1184615	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4615+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184619	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4619+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184623	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4623+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184627	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-4627+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184631	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4631+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184635	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4635+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184639	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4639+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184643	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4643+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184647	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4647+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184651	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4651+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1184655	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	K.2/3.7	CRD-HCU-4655+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1185011	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-5011+	02C12	2	A	1 0	A	M528	D2
CRD-SPV-1185015	A610	HVA904052-J	A X	315020	N 612	.17	SCRAM SOLENOID PILOT	CRD-V-126&127	R	530	L.5/3.7	CRD-HCU-5015+	02C12	2	A	1 0	A	M528	D2

EPN	DESCRIPTION	MFG	MODEL	BLDG	ELEV	DETAIL	STATUS S E	QID	HL	TEST	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE	COMPOSITE EPN	HOURS
CRD-SPV-1185019	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5019*	.17
CRD-SPV-1185023	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5023*	.17
CRD-SPV-1185027	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5027*	.17
CRD-SPV-1185031	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5031*	.17
CRD-SPV-1185035	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020		612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5035*	.17
CRD-SPV-1185039	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5039*	.17
CRD-SPV-1185043	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5043*	.17
CRD-SPV-1185047	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5047*	.17
CRD-SPV-1185051	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	K.2/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5051*	.17
CRD-SPV-1185415	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5415*	.17
CRD-SPV-1185419	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5419*	.17
CRD-SPV-1185423	SCRAM SOLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.5/3.7	A X	315020	N	612	02C12	2	A	1 0	A	M528	D2	CRD-HCU-5423*	.17
CRD-SPV-1185427	SCRA[illegible]OLENOID PILOT CRD-V-126&127	A610	HVA904052-J	R	530	L.[illegible]7	A X	315020	N	612	02C1[illegible]	2	A	1 0	A	M528	[illegible]	CRD-HCU-5427*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	SEISMIC (S) PARAMETERS TH HL TEST / ZONE ROOM	COMPOSITE EPN	DBE	C	HOURS
CRD-SPV-1185431	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5431+			.17
CRD-SPV-1185435	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5435+			.17
CRD-SPV-1185439	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5439+			.17
CRD-SPV-1185443	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5443+			.17
CRD-SPV-1185447	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5447+			.17
CRD-SPV-1185819	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N 612	CRD-HCU-5819+			.17
CRD-SPV-1185823	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N 612	CRD-HCU-5823+			.17
CRD-SPV-1185827	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	L.5/3.7	D2	A X	315020	N 612	CRD-HCU-5827+			.17
CRD-SPV-1185831	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5831+			.17
CRD-SPV-1185835	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5835+			.17
CRD-SPV-1185839	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5839+			.17
CRD-SPV-1185843	SCRAM SOLENOID PILOT CRD-V-126&127	02C12	2	A	1 0	A	A610	HVA904052-J	M528	R	530	K.2/3.7	D2	A X	315020	N 612	CRD-HCU-5843+			.17
CRD-SPV-182	SOL. VALVE TO CRD-V-180/181	02	2	A	1 G	A,D1	V030	V070900-45S/N10	M528	R	525	J.1/4.8	C10	P	315026			16	E	.17

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                                                                   STATUS        ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
            EPN                  MFG                  MODEL                S E    QID    TH  HL TEST ANL FO C     FREQ   AGING  DBE   C    HOURS
                      DESCRIPTION                                BLDG ELEV   DETAIL      ZONE    ROOM      ACCURACY              COMPOSITE EPN
CONTRACT    LEVEL    EC   USE    SAFETY FUNCTION    A/E DRAWING   A/E ZONE

CRD-SPV-9                        V030     V70900-46                      P   315026                                           06   E    .17
 1.5" SOLENOID CAS TO CRD-V-10                                  R  528 J.2/4.6
 02C12          2      A    1 0    A                    M528             D12

CRD-SV-120/0219                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0219*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0223                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0223*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0227                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0227*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0231                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0231*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0235                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 K2/8.4                                   CRD-HCU-0235*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0239                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 K2/8.4                                   CRD-HCU-0239*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0243                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 K2/8.4                                   CRD-HCU-0243*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0615                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0615*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0619                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0619*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0623                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0623*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0627                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"SOLENOID WITHDRAW EXHAUST VALVE                             R  522 L5/8.4                                   CRD-HCU-0627*
 02C12          2      A    1 0    A,B1                 M528             C4

CRD-SV-120/0631                  A610     HVA1709662A                  X X  324007      N  612                                          .17
 .5"S[illegible]NOID WITHDRAW EXHAUST VALVE                      R  522 L5[illegible]4                              CRD-HCU-0631*
 02C[illegible]        2      A    1 0    A,B1               M528
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EPN	MFG	MODEL	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/0635	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-0635*	.17
CRD-SV-120/0639	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-0639*	.17
CRD-SV-120/0643	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-0643*	.17
CRD-SV-120/0647	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-0647*	.17
CRD-SV-120/1011	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1011*	.17
CRD-SV-120/1015	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1015*	.17
CRD-SV-120/1019	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1019*	.17
CRD-SV-120/1023	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1023*	.17
CRD-SV-120/1027	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1027*	.17
CRD-SV-120/1031	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	X X	C4	324007	N	612	CRD-HCU-1031*	.17
CRD-SV-120/1035	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-1035*	.17
CRD-SV-120/1039	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-1039*	.17
CRD-SV-120/1043	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	X X	C4	324007	N	612	CRD-HCU-1043*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/1047 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1047+	.17
CRD-SV-120/1051 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1051+	.17
CRD-SV-120/1407 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1407+	.17
CRD-SV-120/1411 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1411+	.17
CRD-SV-120/1415 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1415+	.17
CRD-SV-120/1419 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1419+	.17
CRD-SV-120/1423 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1423+	.17
CRD-SV-120/1427 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1427+	.17
CRD-SV-120/1431 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-1431+	.17
CRD-SV-120/1435 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1435+	.17
CRD-SV-120/1439 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1439+	.17
CRD-SV-120/1443 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1443+	.17
CRD-SV-120/1447 .5"SO[illegible]OID WITHDRAW EXHAUST VALVE 02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2[illegible]	[illegible]	X	X	324007	N	612	CRD-HCU-1447+	.17

EPN	CONTRACT	LEVEL	DESCRIPTION	EC	USE	MFG	SAFETY FUNCTION	MODEL	A/E DRAWING	BLDG	ELEV	STATUS S E	DETAIL	A/E ZONE	QID	TH	HL	TEST / ROOM	ANL	FO	C	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CRD-SV-120/1451	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	K2/8.4	C4	324007		N	612									.17	CRD-HCU-1451+
CRD-SV-120/1455	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	K2/8.4	C4	324007		N	612									.17	CRD-HCU-1455+
CRD-SV-120/1803	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1803+
CRD-SV-120/1807	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1807+
CRD-SV-120/1811	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1811+
CRD-SV-120/1815	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1815+
CRD-SV-120/1819	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1819+
CRD-SV-120/1823	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1823+
CRD-SV-120/1827	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1827+
CRD-SV-120/1831	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	L5/8.4	C4	324007		N	612									.17	CRD-HCU-1831+
CRD-SV-120/1835	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	K2/8.4	C4	324007		N	612									.17	CRD-HCU-1835+
CRD-SV-120/1839	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	K2/8.4	C4	324007		N	612									.17	CRD-HCU-1839+
CRD-SV-120/1843	02C12	2	.5"SOLENOID WITHDRAW EXHAUST VALVE	A	1 0	A610	A,B1	HVA1709662A	M528	R	522	X X	K2/8.4	C4	324007		N	612									.17	CRD-HCU-1843+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/1847	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1847*	.17
CRD-SV-120/1851	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1851*	.17
CRD-SV-120/1855	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1855*	.17
CRD-SV-120/1859	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-1859*	.17
CRD-SV-120/2203	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2203*	.17
CRD-SV-120/2207	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2207*	.17
CRD-SV-120/2211	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2211*	.17
CRD-SV-120/2215	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2215*	.17
CRD-SV-120/2219	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2219*	.17
CRD-SV-120/2223	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2223*	.17
CRD-SV-120/2227	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2227*	.17
CRD-SV-120/2231	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2231*	.17
CRD-SV-120/2235	.5"S[illegible]OID WITHDRAW EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K2[illegible]		X	X	324007	N	612	CRD-HCU-2235*	.17

EPN	MFG	MODEL	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/2239	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2239+	.17
CRD-SV-120/2243	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,D1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2243+	.17
CRD-SV-120/2247	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,P1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2247+	.17
CRD-SV-120/2251	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2251+	.17
CRD-SV-120/2255	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2255+	.17
CRD-SV-120/2259	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,P1	M528	R	522	K2/8.4	C4	X	X	324007	N	612	CRD-HCU-2259+	.17
CRD-SV-120/2603	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2603+	.17
CRD-SV-120/2607	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2607+	.17
CRD-SV-120/2611	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,C1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2611+	.17
CRD-SV-120/2615	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,P1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2615+	.17
CRD-SV-120/2619	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	P	1 0	A,[illegible]1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2619+	.17
CRD-SV-120/2623	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M529	R	522	L5/8.4	C4	X	X	324007	N	61?	CRD-HCU-2623+	.17
CRD-SV-120/2627	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-2627+	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SV-120/2631	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	L5/8.4	CRD-HCU-2631+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2635	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2635+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2639	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2639+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2643	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2643+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2647	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2647+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2651	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2651+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2655	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2655+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/2659	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	K2/8.4	CRD-HCU-2659+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/3003	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	L5/8.4	CRD-HCU-3003+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/3007	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	L5/8.4	CRD-HCU-3007+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/3011	A610	HVA1709662A	X X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	L5/8.4	CRD-HCU-3011+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/3015	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW EXHAUST VALVE	R	522	L5/8.4	CRD-HCU-3015+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-120/3019	A610	HVA1709662A	X X	324007	N	612	.17	.5"S[illegible]NOID WITHDRAW EXHAUST VALVE	R	522	L5[illegible]	CRD-HCU-3019+	02C[illegible]	2	A	1 0	A,B1	M528	[illegible]

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN	DESCRIPTION	CONTRACT	LEVEL	EC.	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/3023	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-3023+	.17
CRD-SV-120/3027	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L5/8.4	C4	X	X	324007	N	612	CRD-HCU-3027+	.17
CRD-SV-120/3031	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X	X	324007	N	612	CRD-HCU-3031+	.17
CRD-SV-120/3035	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3035+	.17
CRD-SV-120/3039	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3039+	.17
CRD-SV-120/3043	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3043+	.17
CRD-SV-120/3047	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3047+	.17
CRD-SV-120/3051	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3051+	.17
CRD-SV-120/3055	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3055+	.17
CRD-SV-120/3059	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X	X	324007	N	612	CRD-HCU-3059+	.17
CRD-SV-120/3403	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X	X	324007	N	612	CRD-HCU-3403+	.17
CRD-SV-120/3407	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X	X	324007	N	612	CRD-HCU-3407+	.17
CRD-SV-120/3411	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X	X	324007	N	612	CRD-HCU-3411+	.17

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

DATE 09/06/83

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST	COMPOSITE EPN	HOURS
CRD-SV-120/3415 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-3415+	.17
CRD-SV-120/3419 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-3419+	.17
CRD-SV-120/3423 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-3423+	.17
CRD-SV-120/3427 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-3427+	.17
CRD-SV-120/3431 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3431+	.17
CRD-SV-120/3435 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3435+	.17
CRD-SV-120/3439 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3439+	.17
CRD-SV-120/3443 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K2/8.4	C4	X X	324007	N	612	CRD-HCU-3443+	.17
CRD-SV-120/3447 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3447+	.17
CRD-SV-120/3451 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3451+	.17
CRD-SV-120/3455 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3455+	.17
CRD-SV-120/3459 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3459+	.17
CRD-SV-120/3803 .5"S[illegible]OID WITHDRAW EXHAUST VALVE 02C1[illegible]	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	522	L.[illegible]7		X X	324007	N	612	CRD-HCU-3803+	.17

Column headings as printed: CONTRACT, EPN LEVEL, DESCRIPTION EC USE, SAFETY FUNCTION, MFG, MODEL, A/E DRAWING, BLDG ELEV, DETAIL, A/E ZONE, STATUS S E, QID, ZONE, ***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ, ROOM, ACCURACY, *ENV. (E) PARAMETERS* AGING DBE C HOURS, COMPOSITE EPN.

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	OID ZONE	TM	HL	TEST ROOM	ANL	FO	C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CRD-SV-120/3807	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3807+
CRD-SV-120/3811	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3811+
CRD-SV-120/3815	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3815+
CRD-SV-120/3819	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3819+
CRD-SV-120/3823	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3823+
CRD-SV-120/3827	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3827+
CRD-SV-120/3831	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3831+
CRD-SV-120/3835	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3835+
CRD-SV-120/3839	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,E1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3839+
CRD-SV-120/3843	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3843+
CRD-SV-120/3847	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,E1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3847+
CRD-SV-120/3851	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3851+
CRD-SV-120/3855	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	X X	C4	324007		N	612								.17	CRD-HCU-3855+

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST / ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/3859 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-3859*	.17
CRD-SV-120/4203 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4203*	.17
CRD-SV-120/4207 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4207*	.17
CRD-SV-120/4211 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4211*	.17
CRD-SV-120/4215 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4215*	.17
CRD-SV-120/4219 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4219*	.17
CRD-SV-120/4223 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4223*	.17
CRD-SV-120/4227 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4227*	.17
CRD-SV-120/4231 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4231*	.17
CRD-SV-120/4235 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4235*	.17
CRD-SV-120/4239 .5"SOLENOID WITHDRAW EXHAUST-VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4239*	.17
CRD-SV-120/4243 .5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4243*	.17
CRD-SV-120/4247 .5"SO[illegible]OID WITHDRAW EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.[illegible]7	[illegible]	X X	324007	N	612	CRD-HCU-4247*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV / DETAIL	A/E ZONE	STATUS S E	QID	TM	HL / ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/4251 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4251+	.17
CRD-SV-120/4255 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4255+	.17
CRD-SV-120/4259 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4259+	.17
CRD-SV-120/4607 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4607+	.17
CRD-SV-120/4611 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4611+	.17
CRD-SV-120/4615 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4615+	.17
CRD-SV-120/4619 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4619+	.17
CRD-SV-120/4623 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4623+	.17
CRD-SV-120/4627 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 L.5/3.7	C4	X X	324007	N	612	CRD-HCU-4627+	.17
CRD-SV-120/4631 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4631+	.17
CRD-SV-120/4635 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4635+	.17
CRD-SV-120/4639 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4639+	.17
CRD-SV-120/4643 .5"SOLENOID WITHDRAW EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522 K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4643+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM HL	TEST	COMPOSITE EPN	HOURS
CRD-SV-120/4647	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4647*	.17
CRD-SV-120/4651	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4651*	.17
CRD-SV-120/4655	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-4655*	.17
CRD-SV-120/5011	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5011*	.17
CRD-SV-120/5015	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5015*	.17
CRD-SV-120/5019	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5019*	.17
CRD-SV-120/5023	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5023*	.17
CRD-SV-120/5027	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5027*	.17
CRD-SV-120/5031	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5031*	.17
CRD-SV-120/5035	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5035*	.17
CRD-SV-120/5039	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5039*	.17
CRD-SV-120/5043	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5043*	.17
CRD-SV-120/5047	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.[illegible]7	[illegible]	X X	324007	N	612	CRD-HCU-5047*	.17

EPN	MFG	MODEL	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-120/5051	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5051+	.17
CRD-SV-120/5415	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5415+	.17
CRD-SV-120/5419	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5419+	.17
CRD-SV-120/5423	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5423+	.17
CRD-SV-120/5427	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5427+	.17
CRD-SV-120/5431	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K2/8.4	C4	X X	324007	N	612	CRD-HCU-5431+	.17
CRD-SV-120/5435	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5435+	.17
CRD-SV-120/5439	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5439+	.17
CRD-SV-120/5443	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5443+	.17
CRD-SV-120/5447	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5447+	.17
CRD-SV-120/5819	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5819+	.17
CRD-SV-120/5823	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5823+	.17
CRD-SV-120/5827	A610	HVA1709662A	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,F1	M528	R	522	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5827+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST	COMPOSITE EPN	HOURS
CRD-SV-120/5831	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5831*	.17
CRD-SV-120/5835	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5835*	.17
CRD-SV-120/5839	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5839*	.17
CRD-SV-120/5843	.5"SOLENOID WITHDRAW EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	522	K.2/3.7	C4	X X	324007	N	612	CRD-HCU-5843*	.17
CRD-SV-121/0219	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0219*	.17
CRD-SV-121/0223	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0223*	.17
CRD-SV-121/0227	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0227*	.17
CRD-SV-121/0231	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0231*	.17
CRD-SV-121/0235	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0235*	.17
CRD-SV-121/0239	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0239*	.17
CRD-SV-121/0243	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0243*	.17
CRD-SV-121/0615	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0615*	.17
CRD-SV-121/0619	.5"SOLENOID INSERT EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5[illegible]	[illegible]	A X	324007	N	612	CRD-HCU-0619*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL / A/E ZONE	STATUS S E	QID	TM ZONE	HL	TEST ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-SV-121/0623 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-0623*	.17
CRD-SV-121/0627 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-0627*	.17
CRD-SV-121/0631 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-0631*	.17
CRD-SV-121/0635 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4 C4	A X	324007		N	612						CRD-HCU-0635*	.17
CRD-SV-121/0639 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	K2/8.4 C4	A X	324007		N	612						CRD-HCU-0639*	.17
CRD-SV-121/0643 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4 C4	A X	324007		N	612						CRD-HCU-0643*	.17
CRD-SV-121/0647 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4 C4	A X	324007		N	612						CRD-HCU-0647*	.17
CRD-SV-121/1011 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1011*	.17
CRD-SV-121/1015 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1015*	.17
CRD-SV-121/1019 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1019*	.17
CRD-SV-121/1023 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1023*	.17
CRD-SV-121/1027 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1027*	.17
CRD-SV-121/1031 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4 C4	A X	324007		N	612						CRD-HCU-1031*	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	STATUS S E	DETAIL	A/E ZONE	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/1035	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2/8.4	C4	324007	N	612	CRD-HCU-1035+	.17
CRD-SV-121/1039	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2/8.4	C4	324007	N	612	CRD-HCU-1039+	.17
CRD-SV-121/1043	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2/8.4	C4	324007	N	612	CRD-HCU-1043+	.17
CRD-SV-121/1047	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2/8.4	C4	324007	N	612	CRD-HCU-1047+	.17
CRD-SV-121/1051	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2/8.4	C4	324007	N	612	CRD-HCU-1051+	.17
CRD-SV-121/1407	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1407+	.17
CRD-SV-121/1411	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1411+	.17
CRD-SV-121/1415	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1415+	.17
CRD-SV-121/1419	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1419+	.17
CRD-SV-121/1423	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1423+	.17
CRD-SV-121/1427	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	L5/8.4	C4	324007	N	612	CRD-HCU-1427+	.17
CRD-SV-121/1431	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A Y	L5/8.4	C4	324007	N	612	CRD-HCU-1431+	.17
CRD-SV-121/1435	.5"SO[illegible]NOID INSERT EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	A X	K2[illegible]	[illegible]	324007	N	612	CRD-HCU-1435+	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	TEST	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	HOURS	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SV-121/1439	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K2/8.4	CRD-HCU-1439+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1443	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K2/8.4	CRD-HCU-1443+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1447	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K2/8.4	CRD-HCU-1447+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1451	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K2/8.4	CRD-HCU-1451+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1455	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K2/8.4	CRD-HCU-1455+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1803	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1803+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1807	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1807+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1811	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1811+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1815	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1815+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1819	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1819+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1823	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1823+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1827	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1827+	.17	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-121/1831	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L5/8.4	CRD-HCU-1831+	.17	02C12	2	A	1 0	A,B1	M528	C4

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/1835	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1835+	.17
CRD-SV-121/1839	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1839+	.17
CRD-SV-121/1843	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1843+	.17
CRD-SV-121/1847	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1847+	.17
CRD-SV-121/1851	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1851+	.17
CRD-SV-121/1855	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1855+	.17
CRD-SV-121/1859	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-1859+	.17
CRD-SV-121/2203	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-2203+	.17
CRD-SV-121/2207	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-2207+	.17
CRD-SV-121/2211	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-2211+	.17
CRD-SV-121/2215	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-2215+	.17
CRD-SV-121/2219	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A	X	324007	N	612	CRD-HCU-2219+	.17
CRD-SV-121/2223	.5"S[illegible]OID INSERT EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5[illegible]	M528		A	X	324007	N	612	CRD-HCU-2223+	.17

Header fields as printed: EPN, MFG, MODEL, STATUS S E, QID, ***SEISMIC (S) PARAMETERS*** (TM, HL, TEST, ANL, FO, C, FREQ, ZONE, ROOM, ACCURACY), *ENV. (E) PARAMETERS* (AGING, DBE, C, HOURS, COMPOSITE EPN), CONTRACT, LEVEL, DESCRIPTION, EC, USE, SAFETY FUNCTION, A/E DRAWING, BLDG ELEV, DETAIL, A/E ZONE.

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/2227	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2227+	.17
CRD-SV-121/2231	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2231+	.17
CRD-SV-121/2235	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2235+	.17
CRD-SV-121/2239	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2239+	.17
CRD-SV-121/2243	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2243+	.17
CRD-SV-121/2247	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2247+	.17
CRD-SV-121/2251	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2251+	.17
CRD-SV-121/2255	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2255+	.17
CRD-SV-121/2259	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K2/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2259+	.17
CRD-SV-121/2603	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2603+	.17
CRD-SV-121/2607	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2607+	.17
CRD-SV-121/2611	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2611+	.17
CRD-SV-121/2615	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L5/8.4	M528	C4	A X	324007	N	612	CRD-HCU-2615+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	MFG	MODEL	SAFETY FUNCTION	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/2619 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2619+	.17
CRD-SV-121/2623 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2623+	.17
CRD-SV-121/2627 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2627+	.17
CRD-SV-121/2631 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2631+	.17
CRD-SV-121/2635 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2635+	.17
CRD-SV-121/2639 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2639+	.17
CRD-SV-121/2643 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2643+	.17
CRD-SV-121/2647 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2647+	.17
CRD-SV-121/2651 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2651+	.17
CRD-SV-121/2655 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2655+	.17
CRD-SV-121/2659 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2659+	.17
CRD-SV-121/3003 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3003+	.17
CRD-SV-121/3007 .5"S[illegible]OID INSERT EXHAUST VALVE 02C1[illegible]	2	A	1 0	A610	HVA1709661A	A,B1	M528	R	528	L5[illegible]	[illegible]	A X	324007	N	612	CRD-HCU-3007+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/3011	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-3011+	.17
CRD-SV-121/3015	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-3015+	.17
CRD-SV-121/3019	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-3019+	.17
CRD-SV-121/3023	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-3023+	.17
CRD-SV-121/3027	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-3027+	.17
CRD-SV-121/3031	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3031+	.17
CRD-SV-121/3035	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3035+	.17
CRD-SV-121/3039	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3039+	.17
CRD-SV-121/3043	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3043+	.17
CRD-SV-121/3047	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3047+	.17
CRD-SV-121/3051	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3051+	.17
CRD-SV-121/3055	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3055+	.17
CRD-SV-121/3059	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A	X	324007	N	612	CRD-HCU-3059+	.17

EPN	MFG	MODEL	STATUS S E	QID	TM HL	TEST ROOM	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE	HOURS
CRD-SV-121/3403	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3403*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3407	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3407*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3411	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3411*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3415	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3415*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3419	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3419*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3423	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3423*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3427	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	L.5/3.7	CRD-HCU-3427*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3431	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K.2/3.7	CRD-HCU-3431*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3435	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K.2/3.7	CRD-HCU-3435*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3439	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K.2/3.7	CRD-HCU-3439*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3443	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K.2/3.7	CRD-HCU-3443*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3447	A610	HVA1709661A	A X	324007	N	612	.5"SOLENOID INSERT EXHAUST VALVE	R	528	K.2/3.7	CRD-HCU-3447*	02C12	2	A	1 0	A,B1	M528	C4	.17
CRD-SV-121/3451	A610	HVA1709661A	A X	324007	N	612	.5"SO[illegible]OID INSERT EXHAUST VALVE	R	528	K.[illegible]7	CRD-HCU-3451*	02C1[illegible]	2	A	1 0	A,B1	M528		.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM HL	ROOM	HOURS	COMPOSITE EPN
CRD-SV-121/3455 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3455+
CRD-SV-121/3459 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3459+
CRD-SV-121/3803 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3803+
CRD-SV-121/3807 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3807+
CRD-SV-121/3811 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3811+
CRD-SV-121/3815 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3815+
CRD-SV-121/3819 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3819+
CRD-SV-121/3823 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3823+
CRD-SV-121/3827 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3827+
CRD-SV-121/3831 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3831+
CRD-SV-121/3835 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3835+
CRD-SV-121/3839 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3839+
CRD-SV-121/3843 .5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	.17	CRD-HCU-3843+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	A/E ZONE	STATUS S E	QID	TM HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/3847	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3847+	.17
CRD-SV-121/3851	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3851+	.17
CRD-SV-121/3855	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3855+	.17
CRD-SV-121/3859	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3859+	.17
CRD-SV-121/4203	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4203+	.17
CRD-SV-121/4207	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4207+	.17
CRD-SV-121/4211	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4211+	.17
CRD-SV-121/4215	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4215+	.17
CRD-SV-121/4219	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4219+	.17
CRD-SV-121/4223	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4223+	.17
CRD-SV-121/4227	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4227+	.17
CRD-SV-121/4231	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4231+	.17
CRD-SV-121/4235	.5"S[illegible]OID INSERT EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.[illegible]7		A X	324007	N	612	CRD-HCU-4235+	.17

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                                                                  STATUS          ***SEISMIC (S) PARAMETERS***    *ENV. (E) PARAMETERS*
         EPN                 MFG                   MODEL            S E    QID    TH  HL TEST ANL FO C    FREQ    AGING  DBE   C    HOURS
                       DESCRIPTION                            BLDG ELEV  DETAIL     ZONE    ROOM     ACCURACY             COMPOSITE EPN
CONTRACT      LEVEL    EC    USE    SAFETY FUNCTION    A/E DRAWING    A/E ZONE

CRD-SV-121/4239              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4239+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4243              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4243+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4247              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4247+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4251              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4251+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4255              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4255+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4259              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4259+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4607              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4607+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4611              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4611+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4615              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4615+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4619              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4619+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4623              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4623+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4627              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 L.5/3.7                                     CRD-HCU-4627+
 02C12          2      A    1 0   A,B1                 M528           C4

CRD-SV-121/4631              A610     HVA1709661A                       A X  324007      N  612                                      .17
 .5"SOLENOID INSERT EXHAUST VALVE                          R  528 K.2/3.7                                     CRD-HCU-4631+
 02C12          2      A    1 0   A,B1                 M528           C4
```

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID			COMPOSITE EPN	HOURS
CRD-SV-121/4635	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4635+	.17
CRD-SV-121/4639	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4639+	.17
CRD-SV-121/4643	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4643+	.17
CRD-SV-121/4647	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4647+	.17
CRD-SV-121/4651	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4651+	.17
CRD-SV-121/4655	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4655+	.17
CRD-SV-121/5011	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5011+	.17
CRD-SV-121/5015	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5015+	.17
CRD-SV-121/5019	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5019+	.17
CRD-SV-121/5023	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5023+	.17
CRD-SV-121/5027	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5027+	.17
CRD-SV-121/5031	.5"SOLENOID INSERT EXHAUST VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5031+	.17
CRD-SV-121/5035	.5"S[illegible]OID INSERT EXHAUST VALVE	02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.[illegible]7		A X	324007	N	612	CRD-HCU-5035+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/5039 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5039*	.17
CRD-SV-121/5043 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5043*	.17
CRD-SV-121/5047 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5047*	.17
CRD-SV-121/5051 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5051*	.17
CRD-SV-121/5415 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5415*	.17
CRD-SV-121/5419 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5419*	.17
CRD-SV-121/5423 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5423*	.17
CRD-SV-121/5427 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5427*	.17
CRD-SV-121/5431 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5431*	.17
CRD-SV-121/5435 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5435*	.17
CRD-SV-121/5439 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5439*	.17
CRD-SV-121/5443 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5443*	.17
CRD-SV-121/5447 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5447*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-121/5819 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	X X	324007	N	612	CRD-HCU-5819+	.17
CRD-SV-121/5823 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5823+	.17
CRD-SV-121/5827 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5827+	.17
CRD-SV-121/5831 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5831+	.17
CRD-SV-121/5835 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5835+	.17
CRD-SV-121/5839 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5839+	.17
CRD-SV-121/5843 .5"SOLENOID INSERT EXHAUST VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5843+	.17
CRD-SV-122/0219 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0219+	.17
CRD-SV-122/0223 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0223+	.17
CRD-SV-122/0227 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0227+	.17
CRD-SV-122/0231 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0231+	.17
CRD-SV-122/0235 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0235+	.17
CRD-SV-122/0239 .5"SO[illegible]OID WITHDRAW DRIVE VALVE 02C1[illegible]	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2[illegible]	[illegible]	A X	324007	N	612	CRD-HCU-0239+	.17

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	A/E ZONE	STATUS S E	QID	TM HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-122/0243 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0243+	.17
CRD-SV-122/0615 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0615+	.17
CRD-SV-122/0619 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0619+	.17
CRD-SV-122/0623 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0623+	.17
CRD-SV-122/0627 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0627+	.17
CRD-SV-122/0631 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-0631+	.17
CRD-SV-122/0635 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0635+	.17
CRD-SV-122/0639 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0639+	.17
CRD-SV-122/0643 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0643+	.17
CRD-SV-122/0647 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-0647+	.17
CRD-SV-122/1011 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1011+	.17
CRD-SV-122/1015 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1015+	.17
CRD-SV-122/1019 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1019+	.17

Column headings as printed: EPN, DESCRIPTION, CONTRACT, LEVEL, EC, USE, SAFETY FUNCTION, MFG, MODEL, A/E, BLDG ELEV, DRAWING, DETAIL, A/E ZONE, STATUS S E, QID, ZONE, ***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ, ROOM, ACCURACY, *ENV. (E) PARAMETERS* AGING DBE C HOURS, COMPOSITE EPN

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-122/1023 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1023*	.17
CRD-SV-122/1027 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1027*	.17
CRD-SV-122/1031 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1031*	.17
CRD-SV-122/1035 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1035*	.17
CRD-SV-122/1039 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1039*	.17
CRD-SV-122/1043 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1043*	.17
CRD-SV-122/1047 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1047*	.17
CRD-SV-122/1051 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1051*	.17
CRD-SV-122/1407 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1407*	.17
CRD-SV-122/1411 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1411*	.17
CRD-SV-122/1415 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1415*	.17
CRD-SV-122/1419 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,[illegible]1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1419*	.17
CRD-SV-122/1423 .5"SO[illegible]NOID WITHDRAW DRIVE VALVE	02C1[illegible]	2	A	1 0	A,F1	A610	HVA1709661A	M528	R	528	L5[illegible]	[illegible]	A X	324007	N	612	CRD-HCU-1423*	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	TEST	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SV-122/1427	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1427+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1431	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1431+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1435	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1435+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1439	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1439+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1443	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1443+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1447	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1447+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1451	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1451+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1455	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4	CRD-HCU-1455+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1803	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1803+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1807	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1807+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1811	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1811+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1815	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1815+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/1819	A610	HVA1709661A	A X	324007	N	612	.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4	CRD-HCU-1819+	02C12	2	A	1 0	A,B1	M528	C4

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-122/1823	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1823+	.17
CRD-SV-122/1827	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1827+	.17
CRD-SV-122/1831	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-1831+	.17
CRD-SV-122/1835	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1835+	.17
CRD-SV-122/1839	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1839+	.17
CRD-SV-122/1843	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1843+	.17
CRD-SV-122/1847	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1847+	.17
CRD-SV-122/1851	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1851+	.17
CRD-SV-122/1855	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1855+	.17
CRD-SV-122/1859	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007	N	612	CRD-HCU-1859+	.17
CRD-SV-122/2203	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2203+	.17
CRD-SV-122/2207	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2207+	.17
CRD-SV-122/2211	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2211+	.17

Column headings also printed: ***SEISMIC (S) PARAMETERS*** (TM HL TEST ANL FO C, ACCURACY, FREQ); *ENV. (E) PARAMETERS* (AGING DBE C HOURS).

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM	HL	TEST	ROOM	ANL	FO C	FREQ	ACCURACY	AGING	DBE	C	HOURS	COMPOSITE EPN
CRD-SV-122/2215	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2215+
CRD-SV-122/2219	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2219+
CRD-SV-122/2223	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2223+
CRD-SV-122/2227	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4.	A X	324007		N	612									.17	CRD-HCU-2227+
CRD-SV-122/2231	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2231+
CRD-SV-122/2235	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2235+
CRD-SV-122/2239	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2239+
CRD-SV-122/2243	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2243+
CRD-SV-122/2247	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2247+
CRD-SV-122/2251	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2251+
CRD-SV-122/2255	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2255+
CRD-SV-122/2259	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2259+
CRD-SV-122/2603	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A X	324007		N	612									.17	CRD-HCU-2603+

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-122/2607 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2607+	.17
CRD-SV-122/2611 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2611+	.17
CRD-SV-122/2615 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2615+	.17
CRD-SV-122/2619 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2619+	.17
CRD-SV-122/2623 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2623+	.17
CRD-SV-122/2627 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2627+	.17
CRD-SV-122/2631 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L5/8.4	C4	A	X	324007	N	612	CRD-HCU-2631+	.17
CRD-SV-122/2635 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2635+	.17
CRD-SV-122/2639 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2639+	.17
CRD-SV-122/2643 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2643+	.17
CRD-SV-122/2647 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2647+	.17
CRD-SV-122/2651 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2651+	.17
CRD-SV-122/2655 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K2/8.4	C4	A	X	324007	N	612	CRD-HCU-2655+	.17

Header columns not populated on this page: ***SEISMIC (S) PARAMETERS*** TM, ANL FO C, ACCURACY, FREQ, ZONE; *ENV. (E) PARAMETERS* AGING, DBE, C.

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	ANL	FO	C	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SV-122/2659	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K2/8.4				CRD-HCU-2659+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3003	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3003+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3007	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3007+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3011	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3011+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3015	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3015+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3019	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3019+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3023	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3023+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3027	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	L5/8.4				CRD-HCU-3027+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3031	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K.2/3.7				CRD-HCU-3031+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3035	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K.2/3.7				CRD-HCU-3035+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3039	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K.2/3.7				CRD-HCU-3039+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3043	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K.2/3.7				CRD-HCU-3043+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-122/3047	A610	HVA1709661A	A X	324007		N	612								.17	.5"SOLENOID WITHDRAW DRIVE VALVE	R	528	K.2/3.7				CRD-HCU-3047+	02C12	2	A	1 0	A,B1	M528	C4

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL / A/E DRAWING	BLDG	ELEV	DETAIL / A/E ZONE	STATUS S E	QID	TM HL	TEST ROOM	***SEISMIC (S) PARAMETERS*** ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING DBE C COMPOSITE EPN	HOURS
CRD-SV-122/3051 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3051+	.17
CRD-SV-122/3055 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3055+	.17
CRD-SV-122/3059 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3059+	.17
CRD-SV-122/3403 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3403+	.17
CRD-SV-122/3407 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,P1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3407+	.17
CRD-SV-122/3411 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3411+	.17
CRD-SV-122/3415 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3415+	.17
CRD-SV-122/3419 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3419+	.17
CRD-SV-122/3423 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3423+	.17
CRD-SV-122/3427 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	L.5/3.7 C4	A X	324007	N	612			CRD-HCU-3427+	.17
CRD-SV-122/3431 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3431+	.17
CRD-SV-122/3435 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3435+	.17
CRD-SV-122/3439 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709661A M528	R	528	K.2/3.7 C4	A X	324007	N	612			CRD-HCU-3439+	.17

EPN / DESCRIPTION / CONTRACT LEVEL EC USE SAFETY FUNCTION	MFG	MODEL / A/E DRAWING	BLDG ELEV	STATUS S E / DETAIL / A/E ZONE	QID / ZONE	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C / ROOM	FREQ / ACCURACY	*ENV. (E) PARAMETERS* AGING DBE C / COMPOSITE EPN	HOURS
CRD-SV-122/3443 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3443+	.17
CRD-SV-122/3447 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3447+	.17
CRD-SV-122/3451 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3451+	.17
CRD-SV-122/3455 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3455+	.17
CRD-SV-122/3459 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3459+	.17
CRD-SV-122/3803 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3803+	.17
CRD-SV-122/3807 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3807+	.17
CRD-SV-122/3811 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3811+	.17
CRD-SV-122/3815 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3815+	.17
CRD-SV-122/3819 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3819+	.17
CRD-SV-122/3823 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3823+	.17
CRD-SV-122/3827 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 L.5/3.7	A X C4	324007	N 612		CRD-HCU-3827+	.17
CRD-SV-122/3831 .5"SOLENOID WITHDRAW DRIVE VALVE 02C12 2 A 1 0 A,B1	A610	HVA1709661A M528	R 528 K.2/3.7	A X C4	324007	N 612		CRD-HCU-3831+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TM HL TEST	ZONE ROOM	ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING DBE C	COMPOSITE EPN	HOURS
CRD-SV-122/3835	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3835*	.17
CRD-SV-122/3839	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3839*	.17
CRD-SV-122/3843	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3843*	.17
CRD-SV-122/3847	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3847*	.17
CRD-SV-122/3851	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3851*	.17
CRD-SV-122/3855	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3855*	.17
CRD-SV-122/3859	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612				CRD-HCU-3859*	.17
CRD-SV-122/4203	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4203*	.17
CRD-SV-122/4207	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4207*	.17
CRD-SV-122/4211	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4211*	.17
CRD-SV-122/4215	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4215*	.17
CRD-SV-122/4219	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4219*	.17
CRD-SV-122/4223	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612				CRD-HCU-4223*	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	QID	A/E ZONE	TM	HL TEST ROOM	ANL FO C ACCURACY	FREQ	AGING DBE C COMPOSITE EPN	HOURS
CRD-SV-122/4227 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	324007	C4	N	612			CRD-HCU-4227+	.17
CRD-SV-122/4231 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4231+	.17
CRD-SV-122/4235 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4235+	.17
CRD-SV-122/4239 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4239+	.17
CRD-SV-122/4243 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4243+	.17
CRD-SV-122/4247 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4247+	.17
CRD-SV-122/4251 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4251+	.17
CRD-SV-122/4255 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4255+	.17
CRD-SV-122/4259 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	324007	C4	N	612			CRD-HCU-4259+	.17
CRD-SV-122/4607 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	324007	C4	N	612			CRD-HCU-4607+	.17
CRD-SV-122/4611 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	324007	C4	N	612			CRD-HCU-4611+	.17
CRD-SV-122/4615 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	324007	C4	N	612			CRD-HCU-4615+	.17
CRD-SV-122/4619 .5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	324007	C4	N	612			CRD-HCU-4619+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	HL	TEST / ROOM	COMPOSITE EPN	HOURS
CRD-SV-122/4623	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-4623*	.17
CRD-SV-122/4627	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-4627*	.17
CRD-SV-122/4631	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4631*	.17
CRD-SV-122/4635	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4635*	.17
CRD-SV-122/4639	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4639*	.17
CRD-SV-122/4643	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4643*	.17
CRD-SV-122/4647	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4647*	.17
CRD-SV-122/4651	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4651*	.17
CRD-SV-122/4655	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	K.2/3.7	A X	C4	324007	N	612	CRD-HCU-4655*	.17
CRD-SV-122/5011	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-5011*	.17
CRD-SV-122/5015	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-5015*	.17
CRD-SV-122/5019	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-5019*	.17
CRD-SV-122/5023	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	M528	R	528	L.5/3.7	A X	C4	324007	N	612	CRD-HCU-5023*	.17

Column headings printed but without entries on this page: TH, ANL, FO C, FREQ, ACCURACY (***SEISMIC (S) PARAMETERS***); AGING, DBE, C (*ENV. (E) PARAMETERS*).

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	TM HL	TEST / ROOM	HOURS	COMPOSITE EPN
CRD-SV-122/5027	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5027+
CRD-SV-122/5031	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5031+
CRD-SV-122/5035	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5035+
CRD-SV-122/5039	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5039+
CRD-SV-122/5043	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5043+
CRD-SV-122/5047	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5047+
CRD-SV-122/5051	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5051+
CRD-SV-122/5415	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5415+
CRD-SV-122/5419	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5419+
CRD-SV-122/5423	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5423+
CRD-SV-122/5427	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	L.5/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5427+
CRD-SV-122/5431	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5431+
CRD-SV-122/5435	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	K.2/3.7	M528	C4	A X	324007	N	612	.17	CRD-HCU-5435+

Column headings as printed: ***SEISMIC (S) PARAMETERS*** (TM, HL, TEST, ANL, FO, C, FREQ, ROOM, ACCURACY); *ENV. (E) PARAMETERS* (AGING, DBE, C, HOURS, COMPOSITE EPN); STATUS S E, QID, ZONE.

EPN	DESCRIPTION	CONTRACT	LEVEL	EC.	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	STATUS S E	DETAIL	A/E ZONE	QID	HL	ROOM	HOURS	COMPOSITE EPN
CRD-SV-122/5439	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5439+
CRD-SV-122/5443	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5443+
CRD-SV-122/5447	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5447+
CRD-SV-122/5819	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	L.5/3.7	C4	324007	N	612	.17	CRD-HCU-5819+
CRD-SV-122/5823	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	L.5/3.7	C4	324007	N	612	.17	CRD-HCU-5823+
CRD-SV-122/5827	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	L.5/3.7	C4	324007	N	612	.17	CRD-HCU-5827+
CRD-SV-122/5831	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5831+
CRD-SV-122/5835	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5835+
CRD-SV-122/5839	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5839+
CRD-SV-122/5843	.5"SOLENOID WITHDRAW DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709661A	R	528	M528	A X	K.2/3.7	C4	324007	N	612	.17	CRD-HCU-5843+
CRD-SV-123/0219	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	M528	A X	L5/8.4	C4	324007	N	612	.17	CRD-HCU-0219+
CRD-SV-123/0223	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	M528	A X	L5/8.4	C4	324007	N	612	.17	CRD-HCU-0223+
CRD-SV-123/0227	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	M528	A X	L5/8.4	C4	324007	N	612	.17	CRD-HCU-0227+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	TEST ROOM	HOURS	COMPOSITE EPN
CRD-SV-123/0231	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0231+
CRD-SV-123/0235	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0235+
CRD-SV-123/0239	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0239+
CRD-SV-123/0243	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0243+
CRD-SV-123/0615	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0615+
CRD-SV-123/0619	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0619+
CRD-SV-123/0623	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0623+
CRD-SV-123/0627	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0627+
CRD-SV-123/0631	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0631+
CRD-SV-123/0635	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0635+
CRD-SV-123/0639	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0639+
CRD-SV-123/0643	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0643+
CRD-SV-123/0647	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	.17	CRD-HCU-0647+

SEISMIC (S) PARAMETERS *ENV. (E) PARAMETERS*

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	TM	HL	TEST ROOM	ANL	FO	C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
CRD-SV-123/1011 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1011+	.17
CRD-SV-123/1015 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1015+	.17
CRD-SV-123/1019 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1019+	.17
CRD-SV-123/1023 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1023+	.17
CRD-SV-123/1027 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1027+	.17
CRD-SV-123/1031 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1031+	.17
CRD-SV-123/1035 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A	X	324007		N	612								CRD-HCU-1035+	.17
CRD-SV-123/1039 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A	X	324007		N	612								CRD-HCU-1039+	.17
CRD-SV-123/1043 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A	X	324007		N	612								CRD-HCU-1043+	.17
CRD-SV-123/1047 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A	X	324007		N	612								CRD-HCU-1047+	.17
CRD-SV-123/1051 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A	X	324007		N	612								CRD-HCU-1051+	.17
CRD-SV-123/1407 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1407+	.17
CRD-SV-123/1411 .5"SOLENOID INSERT DRIVE VALVE	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A	X	324007		N	612								CRD-HCU-1411+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	STATUS S E	BLDG	ELEV	DETAIL	A/E ZONE	QID	***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ ZONE ROOM ACCURACY		*ENV. (E) PARAMETERS* COMPOSITE EPN	AGING DBE C HOURS
CRD-SV-123/1415	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1415+	.17
CRD-SV-123/1419	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1419+	.17
CRD-SV-123/1423	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1423+	.17
CRD-SV-123/1427	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1427+	.17
CRD-SV-123/1431	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1431+	.17
CRD-SV-123/1435	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CRD-HCU-1435+	.17
CRD-SV-123/1439	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CRD-HCU-1439+	.17
CRD-SV-123/1443	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CPD-HCU-1443+	.17
CRD-SV-123/1447	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CRD-HCU-1447+	.17
CRD-SV-123/1451	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CRD-HCU-1451+	.17
CRD-SV-123/1455	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	K2/8.4	C4	324007	N	612	CRD-HCU-1455+	.17
CRD-SV-123/1803	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1803+	.17
CRD-SV-123/1807	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	A X	R	527	L5/8.4	C4	324007	N	612	CRD-HCU-1807+	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	A/E DRAWING	STATUS S	E	DETAIL A/E ZONE	QID	HL	TEST	COMPOSITE EPN	HOURS
CRD-SV-123/1811 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1811*	.17
CRD-SV-123/1815 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1815*	.17
CRD-SV-123/1819 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1819*	.17
CRD-SV-123/1823 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1823*	.17
CRD-SV-123/1827 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1827*	.17
CRD-SV-123/1831 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	A	X	C4	324007	N	612	CRD-HCU-1831*	.17
CRD-SV-123/1835 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1835*	.17
CRD-SV-123/1839 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1839*	.17
CRD-SV-123/1843 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1843*	.17
CRD-SV-123/1847 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1847*	.17
CRD-SV-123/1851 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1851*	.17
CRD-SV-123/1855 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1855*	.17
CRD-SV-123/1859 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1	0 A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	A	X	C4	324007	N	612	CRD-HCU-1859*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/2203 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2203*	.17
CRD-SV-123/2207 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2207*	.17
CRD-SV-123/2211 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2211*	.17
CRD-SV-123/2215 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2215*	.17
CRD-SV-123/2219 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2219*	.17
CRD-SV-123/2223 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2223*	.17
CRD-SV-123/2227 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2227*	.17
CRD-SV-123/2231 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-2231*	.17
CRD-SV-123/2235 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2235*	.17
CRD-SV-123/2239 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2239*	.17
CRD-SV-123/2243 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2243*	.17
CRD-SV-123/2247 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2247*	.17
CRD-SV-123/2251 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2251*	.17

Additional column headings printed (no values on this page): ***SEISMIC (S) PARAMETERS*** TH, TEST, ANL, FQ, C, FREQ, ACCURACY; *ENV. (E) PARAMETERS* AGING, DBE, C.

EPN	MFG	MODEL	STATUS S E	QID	HL	TEST ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DRAWING	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	A/E ZONE
CRD-SV-123/2255	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K2/8.4	CRD-HCU-2255+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2259	A610	HVA1709662A	A X	324007			.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K2/8.4	CRD-HCU-2259+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2603	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2603+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2607	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2607+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2611	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2611+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2615	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2615+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2619	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2619+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2623	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2623+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2627	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2627+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2631	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L5/8.4	CRD-HCU-2631+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2635	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K2/8.4	CRD-HCU-2635+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2639	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K2/8.4	CRD-HCU-2639+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/2643	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K2/8.4	CRD-HCU-2643+	02C12	2	A	1 0	A,B1	M528	C4

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/2647 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2647+	.17
CRD-SV-123/2651 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2651+	.17
CRD-SV-123/2655 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2655+	.17
CRD-SV-123/2659 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K2/8.4	C4	A X	324007	N	612	CRD-HCU-2659+	.17
CRD-SV-123/3003 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3003+	.17
CRD-SV-123/3007 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3007+	.17
CRD-SV-123/3011 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	P	2 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3011+	4320
CRD-SV-123/3015 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3015+	.17
CRD-SV-123/3019 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3019+	.17
CRD-SV-123/3023 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3023+	.17
CRD-SV-123/3027 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L5/8.4	C4	A X	324007	N	612	CRD-HCU-3027+	.17
CRD-SV-123/3031 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3031+	.17
CRD-SV-123/3035 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3035+	.17

EPN	MFG	MODEL	STATUS S E	QID	HL	ROOM	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CRD-SV-123/3039	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3039+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3043	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3043+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3047	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3047+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3051	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3051+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3055	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3055+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3059	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	K.2/3.7	CRD-HCU-3059+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3403	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3403+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3407	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3407+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3411	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3411+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3415	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3415+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3419	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3419+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3423	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3423+	02C12	2	A	1 0	A,B1	M528	C4
CRD-SV-123/3427	A610	HVA1709662A	A X	324007	N	612	.17	.5"SOLENOID INSERT DRIVE VALVE	R	527	L.5/3.7	CRD-HCU-3427+	02C12	2	A	1 0	A,B1	M528	C4

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TH HL	ZONE ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE C	COMPOSITE EPN	HOURS
CRD-SV-123/3431	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3431+	.17
CRD-SV-123/3435	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3435+	.17
CRD-SV-123/3439	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3439+	.17
CRD-SV-123/3443	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3443+	.17
CRD-SV-123/3447	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3447+	.17
CRD-SV-123/3451	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3451+	.17
CRD-SV-123/3455	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3455+	.17
CRD-SV-123/3459	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612					CRD-HCU-3459+	.17
CRD-SV-123/3803	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612					CRD-HCU-3803+	.17
CRD-SV-123/3807	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612					CRD-HCU-3807+	.17
CRD-SV-123/3811	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612					CRD-HCU-3811+	.17
CRD-SV-123/3815	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612					CRD-HCU-3815+	.17
CRD-SV-123/3819	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,P1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612					CRD-HCU-3819+	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/3823 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-3823+	.17
CRD-SV-123/3827 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-3827+	.17
CRD-SV-123/3831 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3831+	.17
CRD-SV-123/3835 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3835+	.17
CRD-SV-123/3839 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3839+	.17
CRD-SV-123/3843 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3843+	.17
CRD-SV-123/3847 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3847+	.17
CRD-SV-123/3851 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3851+	.17
CRD-SV-123/3855 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3855+	.17
CRD-SV-123/3859 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-3859+	.17
CRD-SV-123/4203 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4203+	.17
CRD-SV-123/4207 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4207+	.17
CRD-SV-123/4211 .5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4211+	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/4215 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4215+	.17
CRD-SV-123/4219 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4219+	.17
CRD-SV-123/4223 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4223+	.17
CRD-SV-123/4227 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4227+	.17
CRD-SV-123/4231 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4231+	.17
CRD-SV-123/4235 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4235+	.17
CRD-SV-123/4239 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4239+	.17
CRD-SV-123/4243 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4243+	.17
CRD-SV-123/4247 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4247+	.17
CRD-SV-123/4251 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4251+	.17
CRD-SV-123/4255 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4255+	.17
CRD-SV-123/4259 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-4259+	.17
CRD-SV-123/4607 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-4607+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	HL	TEST ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/4611	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4611+	.17
CRD-SV-123/4615	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4615+	.17
CRD-SV-123/4619	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4619+	.17
CRD-SV-123/4623	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4623+	.17
CRD-SV-123/4627	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4627+	.17
CRD-SV-123/4631	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4631+	.17
CRD-SV-123/4635	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4635+	.17
CRD-SV-123/4639	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4639+	.17
CRD-SV-123/4643	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4643+	.17
CRD-SV-123/4647	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4647+	.17
CRD-SV-123/4651	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4651+	.17
CRD-SV-123/4655	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	K.2/3.7	M528	C4	A X	324007	N	612	CRD-HCU-4655+	.17
CRD-SV-123/5011	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	R	527	L.5/3.7	M528	C4	A X	324007	N	612	CRD-HCU-5011+	.17

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ROOM	COMPOSITE EPN	HOURS
CRD-SV-123/5015	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5015*	.17
CRD-SV-123/5019	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5019*	.17
CRD-SV-123/5023	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5023*	.17
CRD-SV-123/5027	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5027*	.17
CRD-SV-123/5031	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5031*	.17
CRD-SV-123/5035	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5035*	.17
CRD-SV-123/5039	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5039*	.17
CRD-SV-123/5043	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5043*	.17
CRD-SV-123/5047	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5047*	.17
CRD-SV-123/5051	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	K.2/3.7	C4	A X	324007	N	612	CRD-HCU-5051*	.17
CRD-SV-123/5415	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5415*	.17
CRD-SV-123/5419	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5419*	.17
CRD-SV-123/5423	.5"SOLENOID INSERT DRIVE VALVE	02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R	527	L.5/3.7	C4	A X	324007	N	612	CRD-HCU-5423*	.17

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG ELEV DRAWING	STATUS S E / DETAIL / A/E ZONE	OID ZONE	***SEISMIC (S) PARAMETERS*** TH HL TEST ROOM	ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING DBE C HOURS / COMPOSITE EPN
CRD-SV-123/5427 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 L.5/3.7	A X C4	324007	N 612			.17 CRD-HCU-5427+
CRD-SV-123/5431 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5431+
CRD-SV-123/5435 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5435+
CRD-SV-123/5439 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5439+
CRD-SV-123/5443 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5443+
CRD-SV-123/5447 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5447+
CRD-SV-123/5819 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 L.5/3.7	A X C4	324007	N 612			.17 CRD-HCU-5819+
CRD-SV-123/5823 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 L.5/3.7	A X C4	324007	N 612			.17 CRD-HCU-5823+
CRD-SV-123/5827 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 L.5/3.7	A X C4	324007	N 612			.17 CRD-HCU-5827+
CRD-SV-123/5831 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5831+
CRD-SV-123/5835 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5835+
CRD-SV-123/5839 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5839+
CRD-SV-123/5843 .5"SOLENOID INSERT DRIVE VALVE 02C12	2	A	1 0	A,B1	A610	HVA1709662A	M528	R 527 K.2/3.7	A X C4	324007	N 612			.17 CRD-HCU-5843+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV.	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TM	HL	TEST	ANL	FO C	ROOM	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CSP-DPT-4	SUPP CHMBR ATMOS DIFF PRESS	220	3	A	1 3	B1	R369	1153DB3	R	501	L.2/9.3	M543	C14	X	X	156009										06153	02	E	4320	E-IR-63+
CSP-DPT-5	SUPP CHMBR ATMOS DIFF PRESS	220	3	A	1 3	B1	R369	1153DB3	R	501	N.1/4.8	M543	C6	X	X	156009										06153	02	E	4320	E-IR-64+
CSP-DPT-6	SUPP CHMBR ATMOS DIFF PRESS	220	3	A	1 3	B1	R369	1153DB3	R	501	N.1/4.8	M543	C6	X	X	156009										06153	02	E	4320	E-IR-64+
CSP-POS-V/1	POS FOR CSP-V-1	58	2	A	1 3	I	N007	EA740	R	508	M.5/7.5	M543	D5	A	X	200015													4320	CSP-V-1+
CSP-POS-V/10/P1	POS FOR CSP-V-10	58	2	A	1 3	I	A415	4-3869-002	R	491	M.5/5.1	E519/11	E3	X	X	248002										06153	00	E	4320	CSP-V-10+
CSP-POS-V/10/P2	POS FOR CSP-V-10	58	2	A	1 3	I	A415	4-3869-002	R	491	M.9/5.1	E519/11	E3	X	X	248002										06153	00	E	4320	CSP-V-10+
CSP-POS-V/10/P3	POS FOR CSP-V-10		2	A	1 3	I	A415	4-3869-002	R	491	M.9/5.1	E519/11	E3	X	X	248002										06153	00	E	4320	CSP-V-10+
CSR-POS-V/10/P4	POS FOR CSP-V-10	3	2	A	1 3	I	A415	4-3869-002	R	491	M.9/5.1	E519/11	E3	X	X	248002										06153	00	E	4320	CSP-V-10+
CSP-POS-V/10/P9	POS FOR CSP-V-10		2	A	1 3	I	A415	4-3869-002	R	491	M.9/5.1	E519/11	E3	X	X	248002										06153	00	E	4320	CSP-V-10+
CSP-POS-V/2	POS FOR CSP-V-2	58	2	A	1 3	I	N007	EA740	R	508	M.5/7.4	M543	D6	A	X	200015													4320	CSP-V-2+
CSP-POS-V/3	POS FOR CSP-V-3	58	2	A	1 3	I	N015	EA740-80100	R	483	M.6/7.6	M543	D5	A	X	200015													4320	CSP-V-3+
CSP-POS-V/4	POS FOR CSP-V-4	58	2	A	1 3	I	N015	EA740-80100	R	478	M.6/7.6	M543	C5	A	X	200015													4320	CSP-V-4+
CSP-POS-V/5	POS FOR CSP-V-5	58	2	A	1 3	I	N015	EA740-80100	R	477	M.7/7.6	M543	C5	A	X	200015	R43		N	14	00				35				4320	CSP-V-5+

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	STATUS S E	DETAIL	A/E ZONE	QID	ZONE	TM	HL	TEST	ROOM	ANL	FO	C	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
CSP-POS-V/6 POS FOR CSP-V-6	58	2	A	1 3	I	N015	EA740-80100	R	488	M543	N X	H.6/6.1	B14	200015	R43		N	14		00				35				4320	CSP-V-6*
CSP-POS-V/7/P1 POS FOR CSP-V-7		2	A	1 3	I	A415	4-3869-002	R	475	E519/11	X X	N.5/7.7	E3	248002											06153	00	E	4320	CSP-V-7*
CSP-POS-V/7/P2 POS FOR CSP-V-7		2	A	1 3	I	A415	04-3869-002	R	475	E519/11	X X	N.5/7.7	E3	248002											06153	00	E	4320	CSP-V-7*
CSP-POS-V/7/P3 POS FOR CSP-V-7		2	A	1 3	I	A415	04-3869-002	R	475	E519/11	X X	N.5/7.7	E3	248002											06153	00	E	4320	CSP-V-7*
CSP-POS-V/7/P4 POS FOR CSP-V-7		2	A	1 3	I	A415	04-3869-002	R	475	E519/11	X X	N.5/7.7	E3	248002											06153	00	E	4320	CSP-V-7*
CSP-POS-V/7/P9 POS FOR CSP-V-7		2	A	1 3	I	A415	04-3869-002	R	475	E519/11	X X	N.5/7.7	E3	248002											06153	00	E	4320	CSP-V-7*
CSP-POS-V/8/P1 POS FOR CSP-V-8		2	A	1 3	I	A415	04-3869-002	R	491	E519/11	X X	H.6/6.0	E3	248002											06153	00	E	4320	CSP-V-8*
CSP-POS-V/8/P2 POS FOR CSP-V-8		2	A	1 3	I	A415	04-3869-002	R	491	E519/11	X X	H.6/6.0	E3	248002											06153	00	E	4320	CSP-V-8*
CSP-POS-V/8/P3 POS FOR CSP-V-8		2	A	1 3	I	A415	04-3869-001	R	491	E519/11	X X	H.6/6.0	E3	248002											06153	00	E	4320	CSP-V-8*
CSP-POS-V/8/P4 POS FOR CSP-V-8		2	A	1 3	I	A415	04-3869-001	R	491	E519/11	X X	H.6/6.0	F3	248002											06153	00	E	4320	CSP-V-8*
CSP-POS-V/8/P9 POS FOR CSP-V-8		2	A	1 3	I	A415	04-3869-001	R	491	E519/11	X X	H.6/6.0	L3	248002											06153	00	E	4320	CSP-V-8*
CSP-POS-V/9 POS FOR CSP-V-9	58	2	A	1 3	I	N015	D2400X	R	490	M543	C X	H.9/5.1	B6	200009	R43													4320	CSP-V-9*
CSP-RLY-ARCSPV5 CONTROL RELAY FOR CSP-V-5	58	3	A	1 3	B1	A500	RXMK1	R	501	E519/18	X	N.0/4.8	K4	288015														4320	E-IR-64*

EPN	MFG	MODEL	STATUS S	STATUS E	QID	TH	HL	TEST	ANL FO C	FREQ	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
CSP-RLY-ARCSPV6	A500	RXMK1		X	288015						4320	CONTROL RELAY FOR CSP-V-6	R	501	L.4/9.4			E-IR-63+	58	3	A	1 3	B1	E519/18	K4
CSP-RLY-ARCSPV9	A500	RXMK1		X	288015						4320	CONTROL RELAY FOR CSP-V-9	R	501	N.0/4.8			E-IR-64+	58	3	A	1 3	B1	E519/18	K4
CSP-RLY-CR4	S440	219XBXP		X	283041						4320	CONTROL RELAY FOR CSP-V-6	R	501	L.4/9.4			E-IR-63+	58	3	A	1 3	B1	E519/18	K4
CSP-RLY-CR5	S440	219XBXP		X	283041						4320	CONTROL RELAY FOR CSP-V-5	R	501	N.0/4.8			E-IR-64+	58	3	A	1 3	B1	E519/18	K4
CSP-RLY-CR6	S440	219XBXP		X	283041						4320	CONTROL RELAY FOR CSP-V-9	R	501	N.0/4.8			E-IR-64+	58	3	A	1 3	B1	E519/18	K4
CSP-SPV-1	A499	WJHT8316A76	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-1 IR-66	R	505	N.7/5.5	R43	R305	E-IR-66+	58	2	A	1 3	B1,F	M543	D5
CSP-SPV-10A	A610	WJHT8316A76	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT (CLOSE) CSP-V-10	R	471	N.0/4.0	R33	R206	E-IR-65+	58	2	A	1 3	B1,F	M543	B6
CSP-SPV-10B	A610	WJHT8316A76	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT (OPEN) CSP-V-10	R	471	N.0/4.0	R33	R206	E-IR-65+	58	2	A	1 3	B1,F	M543	B6
CSP-SPV-2	A499	WJHT831654	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-2 IR-63	R	507	L.4/9.3	R43	R305	E-IR-63+	58	2	A	1 3	B1,F	M543	D6
CSP-SPV-3	A499	WJHT8316A76	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-3 IR-65	R	476	N.0/3.9	R33	R206	E-IR-65+	58	2	A	1 3	B1,F	M543	D5
CSP-SPV-4	A499	WJHT8316A74	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-4 - IR-64	R	505	N.0/4.9	R43	R305	E-IR-64+	58	2	A	1 3	B1,F	M543	C4
CSP-SPV-5	A499	WJHT8316A74	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-5 IR-64	R	505	N.0/4.8	R43	R309	E-IR-64+	58	2	A	1 3	B1,F	M543	C5
CSP-SPV-6	A499	WJHT8316A54	X	X	315004	R	N	114	03	33+	4320	SOLENOID PILOT FOR CSP-V-6 IR-63	R	501	L.4/9.3	R43	R305	E-IR-63+	58	2	A	1 3	B1,F	M543	D14

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                                                          STATUS     ***SEISMIC (S) PARAMETERS***   *ENV. (E) PARAMETERS*
        EPN                MFG                 MODEL       S E   QID   TM  HL TEST ANL FO C   FREQ   AGING  DBE  C   HOURS
              DESCRIPTION                          BLDG ELEV   DETAIL   ZONE  ROOM   ACCURACY          COMPOSITE EPN
CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION   A/E DRAWING   A/E ZONE

CSP-SPV-7A                 A499    WJHT831654              X X  315004  R  N  114  03        33+                  4320
 SOLENOID PILOT(CLOSE)CSP-V-7 IR-65             R  478 N.0/3.9     R33   R206               E-IR-65+
 58           2      A   1 3   B1,F          M543              C5

CSP-SPV-7B                 A499    WJHT831654              X X  315004  R  N  114  03        33+                  4320
 SOLENOID PILOT(OPEN)CSP-V-7 IR-65              R  476 N.0/3.9     R33   R206               E-IR-65+
 58           2      A   1 3   B1,F          M543              C5

CSP-SPV-8A                 A499    WJHT831654              X X  315004  R  N  114  03        33+                  4320
 SOL PILOT OPEN FOR CSP-V-8                     R  478 H.4/6.8     R32   R206               E-IR-62+
 58           2      A   1 3   B1,F          M543              B15

CSP-SPV-8B                 A499    WJHT831654              X X  315004  R  N  114  03        33+                  4320
 SOL PILOTCLOSE FOR CSP-V-8                     R  477 H.4/6.8     R32   R206               E-IR-62+
 58           2      A   1 3   B1,F          M543              B15

CSP-SPV-9                  A499    WJHT8316A74             X X  315004  R  N  114  03        33+                  4320
 SOLENOID PILOT FOR CSP-V-9 IR-64               R  505 N.0/4.9     R43   R305               E-IR-64+
 58           3      A   1 3   B1,F          M543              B6

CSP-V-93                   T020    82M-002                 Z X  361015                              06303   05       4320
 SOLENOID VALVE                                 R  471 M.7/7.7
 SS           2      A   1 3   B1            M783              F5

CSP-V-96                   T020    82M-002                 Z X  361015                              06303   05       4320
 SOLENOID VALVE                                 R  501 M.7/7.7
 SS           2      A   1 3   B1            M783              H4

CSP-V-97                   T020    82M-002                 Z X  361015                              06303   15       4320
 SOLENOID VALVE                                 R  501 M.7/7.7
 SS           2      A   1 3   B1            M783              H4

CSP-V-98                   T020    82M-002                 Z X  361015                              06303   15       4320
 SOLENOID VALVE                                 R  471 M.7/7.7
 SS           2      A   1 3   B1            M783

E-CONN-X100A/01            A380    AMPHENOL JACK#82-503    X X  049001      Y                       04293   00  E    4320
 SOURCE RANGE NI CONNECTOR                      C  507 98 D AZ R40    C47                       E-X-100A+
 55           3      P   2 3   H             E539/30

E-CONN-X100A/02            A380    AMPHENOL PLUG#28650     X X  049002      Y                       04293   00  E    4320
 SOURCE RANGE NI CONNECTOR                      C  507 98 D AZ R40    C47                       E-X-100A+
 55           3      P   2 3   H             E539/31

E-CONN-X100B/01            A380    AMPHENOL JACK#82-503    X X  049001      Y                       04293   00  E    4320
 SOURCE RANGE NI CONNECTOR                      C  507 102 D AZ R40   R47                       E-X-100B+
 55           3      P   2 3   H             E539/30

E-CONN-X100B/02            A380    AMPHENOL PLUG#28650     X X  049002      Y                       04293   00  E    4320
 SOURCE RANGE NI CONNECTOR                      C  507 102 D AZ R40   C47                       E-X-100B+
 55           3      P   2 3   H             E539/31
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EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	ANL	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG ELEV DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
E-CONN-X100C/01	A380	AMPHENOL JACK#82-503	X X	049001		Y				04293	00	E	4320	SOURCE RANGE NI CONNECTION	C 511 315 D AZ R40	C44		E-X-100C+	55	3	P	2 3	H	E539/30	
E-CONN-X100C/02	A380	AMPHENOL PLUG#28650	X X	049002		Y				04293	00	E	4320	SOURCE RANGE NI CONNECTION	C 511 315 D AZ R40	C44		E-X-100C+	55	3	P	2 3	H	E539/31	
E-CONN-X100D/01	A380	AMPHENOL JACK#82-503	X X	049001		Y				04293	10	E	4320	SOURCE RANGE NI CONNECTION	C 511 322 D AZ R40	C44		E-X-100D+	55	3	P	2 3	H	E539/30	
E-CONN-X100D/02	A380	AMPHENOL PLUG#28650	X X	049002		Y				04293	10	E	4320	SOURCE RANGE NI CONNECTION	C 511 322 D AZ R40	C44		E-X-100D+	55	3	P	2 3	H	E539/31	
E-CONN-X102A/01	A382	SOLIDSTRAND 34130	X X	049006		Y							4320	CONNECTOR (SPLICE)	C 534 185 D AZ R40	C56		E-X-102A+	218	3	P	2 3	H	E539	
E-CONN-X102A/02	R098	WCSF-N SHRINK TUBE	A X	049007		Y							4320	CONNECTOR	C 534 185 D AZ R40			E-X-102A+	218	3	P	2 3	H	E539	
E-CONN-X102B/01	A382	SOLIDSTRAND 34130	X X	049006		Y							4320	CONNECTOR (SPLICE)	C 534 219 D AZ R40	C56		E-X-102B+	218	3	P	2 3	H	E539	
E-CONN-X102B/02	R098	WCSF-N SHRINK TUBE	A X	049007		Y							4320	CONNECTOR	C 534 219 D AZ R40			E-X-102B+	218	3	P	2 3	H	E539	
E-IR-61+	J035	757-E-518	X X	185002	F	N	121	01	24					R BLDG INSTRU RACK DIV II	R 422 N1/3.5			E-IR-61+	58	1	P	2 0	H	M567	M10
E-IR-62+	J035	757-E-597	X X	185002	F	N	121	01	33					R BLDG INST RACK DIV I	R 471 H4/6.8		R206	E-IR-62+	58	1	P	2 0	H	M568	E14
E-IR-63+	J035	DWG 757-E-599	X X	185002	F	N	21	01	33					R BLDG INSTRU RACK DIV II	R 501 L.4/9.4		R305	E-IR-63+	58	1	P	2 0	H	M568	C6
E-IR-64+	J035	DWG 757-C-652	X X	185002	F	N	21	01	33					R BLDG INSTRU RACK DIV II	R 501 N/4.8		R305	E-IR-64+	58	1	P	2 0	H	M568	G4
E-IR-65+	J035	757-E-520	X X	185002	F	N	21	01	33					R BLDG INSTRU RACK DIV I	R 471 N.0/4.0		R206	E-IP-65+	58	1	P	2 0	H	M568	M10

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	TM	HL	TEST	ANL FO C ACCURACY	FREQ	ROOM	COMPOSITE EPN
E-IR-66+ R BLDG INSTRU RACK DIV I	58	1	P	2 0	H	J035	757-E-502	M568	R	501	N.8/5.5	F3	X	X	185002	F	N	21	01	33	R305	E-IR-66+
E-IR-67+ R BLDG INSTRU RACK DIV I	58	1	P	2 0	H	J035	757-E-601	M569	R	548	M.8/5.7	F4	X	X	185002	F	N	21	01	33	R504	E-IR-67+
E-IR-68+ R BLDG INSTRU RACK DIV II	58	1	P	2 0	H	J035	757-E-522	M569	R	548	H.7/8.1	D8	X	X	185002	F	N	21	01	33	R504	E-IR-68+
E-IR-69+ R BLDG INSTRU RACK DIV II	58	1	P	2 0	H	J035	757-E-524	M569	R	522	N.0/8.1	D10	X	X	185002	F	N	21	01	33	R504	E-IR-69+
E-IR-70+ RCC INSTRU RACK DIV II	58	1	P	2 3	H	J035	757-E-526	M569	R	522	J.0/4.0	H14	X	X	185002	F	N	21	01	33	R404	E-IR-70+
E-IR-71+ R BLDG INSTRU RACK DIV I	58	1	P	2 3	H	J035	757-E-528	M569	R	522	J.0/6.9	E14	X	X	185002	F	N	21	01	33	R408	E-IR-71+
E-IR-72+ CONT INSTRU AIR INSTRU RACK	58	1	P	2 3	H	J035	757-E-516	M569	R	522	H.8/8.3	D14	X	X	185002	F	N	21	01	33	R404	E-IR-72+
E-IR-73+ MSIV LEAKAGF CONTROL IR	58	1	P	2 0	H	J035	757-E-603	M569	R	522	H.4/4.2	G15	X	X	185002	F	N	21	01	33	R404	E-IR-73+
E-IR-74+ MSIV LEAKAGE CONTROL IR	58	1	P	2 0	H	J035	757-E-564	M569	R	522	H.4/7.0	E14	X	X	185002	F	N	21	01	33	R404	E-IR-74+
E-IR-P001+ LPCS INSTRU RACK	.02	1	P	2 0	H	G080	127D1819TC	M568	R	471	K.0/4.2	G13	Y	X	185003	F	N	121	03	10	R206	E-IR-P001+
E-IR-P002+ RWCU INSTRU RACK	02	1	P	2 3	H	G080	127D1821TC	M569	R	522	N.7/5.0	G10	Y	X	185003	F	N	121	03	10	R404	E-IR-P002+
E-IR-P004+ RPV INST RACK A	02	1	P	2 3	H	G080	127D1827TC	M569	R	522	J.5/7.2	D13	Y	X	185003	F	N	121	03	10	R404	E-IR-P004+
E-IR-P005+ RPV INST RACK C	02	1	P	2 3	H	G080	127D1833TC	M569	R	522	N.7/5.6	F9	Y	X	185003	F	N	121	03	10	R404	E-IR-P005+

EPN	MFG	MODEL	STATUS S E	QID	TH	HL	TEST	ANL	FREQ	AGING	DBE	C	DESCRIPTION	BLDG	ELEV	DETAIL	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
E-IR-P006+	G080	127D1834TC	Y X	185003	F	N	121	03	10				RECIRC PUMP A INST RACK	R	471	L.5/4.1		E-IR-P006+	02	1	P	2 3	H	M568	G12
E-IR-P008+	G080	145C3432TC	R X	185003	F	N	21	03		06153	00	G	SRM/IRM CONTROL RLY RACK	R	522	M.7/9.3	R403	E-IR-P008+	02	1	P	2 3	H	M569	C10
E-IR-P009+	G080	127D1822TC	Y X	185003	F	N	121	03	10				JET PUMP INST PNL A	R	471	J.7/8.0		E-IR-P009+	02	1	P	2 1	H	M568	D13
E-IR-P010+	G080	127D1832TC	Y X	185003	F	N	121	03	10				JET PUMP INST PNL B	R	471	M.6/4.5		E-IR-P010+	02	1	P	2 1	H	M568	G11
E-IR-P011+	G080	127D1825TC	R X	185003	F	N	21	03		06153	00	G	SLC INST RACK	R	568	M.8/4.3	R504	E-IR-P011+	02	1	P	2 3	H	M569	G4
E-IR-P015+	G082	368X270TCG1	Y X	185003	F	N	121	03	10				MN STM FLOW INST B	R	501	H.7/7.3	R305	E-IR-P015+	02	1	P	2 3	H	M568	D8
E-IR-P017+	G080	127D1828TC	Y X	185003	F	N	121	03	10				RCIC SYS INST RACK	R	471	L.0/8.0		E-IR-P017+	02	1	P	2 1	H	M568	D12
E-IR-P018+	G080	127D1836TC	Y X	185003	F	N	121	03	10				RHR-INST RACK DIV 1	R	501	J.5/3.8		E-IR-P018+	02	1	P	2 3	H	M568	H7
E-IR-P021+	G080	127D1841TC	Y X	185003	F	N	121	03	10				RHR INST RACK DIV II	R	501	H.9/9.3	R305	E-IR-P021+	02	1	P	2 3	H	M568	C8
E-IR-P022+	G080	127D1838TC	Y X	185003	F	N	121	03	10				RECIRC PUMP B INST PNL	R	471	M.5/7.9		E-IR-P022+	02	1	P	2 3	H	M568	D11
E-IR-P024+	G080	127D1840TC	Y X	185003									HPCS INST RACK	R	471	L.1/4.1		E-IR-P024+	02	1	P	2 0	H	M568	G12
E-IR-P025+	G080	127D1844TC	Y X	185003	F	N	121	03	10				NM STM FLOW INST RACK B	R	501	L.9/3.7	R305	E-IR-P025+	02	1	P	2 3	H	M568	H5
E-IR-P026+	G080	127D1830TC	Y X	185003	F	N	121	03	10				RPV INST RACK D	R	522	J.8/4.6	R404	E-IR-P026+	02	1	P	2 3	H	M569	G13

EPN	MFG	MODEL	STATUS S E	QID	TH	HL	TEST	ANL	FO C	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
E-IR-P027+	G080	127D1929TC	X	185003									G		REACTR VESSEL LVL+ PRES INST RK B	R	522	M.8/6.6				E-IR-P027+	02	1	P	2 3	H	M569	E10
E-IR-P029+	G080	127D1843TC	Y X	185003	F	N	121	03		10					HPCS DG LOGIC RACK	R	471	K.9/3.8		R206		E-IR-P029+	02	1	P	2 0	H	M568	H12
E-IR-P030+	G080	145C3488TC	Y X	185003	F	N	121	03		10					IRM/SRM PRE-AMP RACK	R	501	K.6/3.5		R305		E-IR-P030+	02	1	P	2 3	H	M568	H6
E-IR-P031+	G082	145C3488TC	Y X	185003	F	N	121	03		10					IRM/SRM PRE-AMP RACK	R	501	H.4/7.7		R305		E-IR-P031+	02	1	P	2 3	H	M568	D8
E-IR-P032+	G080	145C3488TC	Y X	185003	F	N	121	03		10					IRM/SRM PRE-AMP RACK	R	507	L.5/3.5		R305		E-IR-P032+	02	1	P	2 3	H	M568	H5
E-IR-P033+	G080	145C3488TC	Y X	185003	F	N	121	03		10					IRM/SRM PRE-AMP RACK	R	501	H.8/8.3				E-IR-P033+	02	1	P	2 3	H	M568	D8
E-IR-P039+	G080	163C1148TC	A X	185003	F	N	121	03		10					REVAB DIV I INST PNL	R	522	H.7/7.0				E-IR-P039+	02	1	P	2 0	H	M569	E10
E-IR-P040+	G080	163C1144TC	A X	185003	F	N	121	03		10					REVAB DIV II INST PNL	R	522	N.2/4.2				E-IR-P040+	02	1	P	2 0	H	M569	H10
E-JB-HTP/7B/E+	F119	NONE	X X								06153	06			CMS HEAT TRACE PANEL	R	548	H.1/4.4				E-JB-HTP/7B/E+	218	1	P	2 3	I	E940/1	
E-JB-HTP/8B/A+	F119	NONE	X X								06153	06			CMS HEAT TRACE PANEL	R	548	H.1/4.7				E-JB-HTP/8B/A+	218	1	P	2 3	I	E940/2	
E-JB-TB/IR68/2+	F119	NONE	X X	283052										#	INSTR. RACK IR-68 AUX. TERM BOX	R	548	H.8/8.2					218	1	P	2 0	H		
E-JB-TB/R363+			X X	283011											CAC LOCAL TERMINAL BOX,DIV II	R	471	N/8.3						1	P	2 0	D	E696	C7
E-JB-TB/R364+			X X	283011											CAC LOCAL TERMINAL BOX,DIV I	R	471	N.1/9.0						1	P	2 0	D	E696	F7

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
E-PP-7AE+	INST & CONT POWER PANEL	218	1	A	1 3	H	S345	QM-02653-28EE	R	474	N.2/9.3	E504	J9	X X	252002		W	N	121	R206	10	06303	10	E		E-PP-7AE+
E-PP-8AE+	INST & CONT POWER PANEL	218	1	A	1 3	H	S345	QM-02653-28EE	R	474	N.0/8.5	E504	J3	X X	252002		W	N	121		10	06303	10	E		E-PP-8AE+
E-SH-10+	6.9 KV SWGR FOR E-CB-RPT3B	47A	1	P	2 3	L	W120	75-DHP-500	R	471	L.0/9.0	E502/4	J8	X M	305001		F	N	127		04	04153	00	B		E-SH-10+
E-SH-11+	SWITCHGEAR TO RRC-M-1A+	47A	1	P	2 3	L	W120	75-DHP-500	R	522	H.8/7.4	E502/4	G14	X M	305001		F	N	127		04	04153	00	B		E-SH-11+
E-SH-12+	SWITCHGEAR TO RCC-M-1B	47A	1	P	2 3	L	W120	75-DHP-500	R	522	H.5/8.0	E502/4	G8	X M	305001		F	N	127		04	04153	00	B		E-SH-12+
E-SH-9+	6.9 KV SWGR FOR E-CB-RPT3A	47A	1	P	2 3	L	W120	75-DHP-500	R	471	K.3/9.0	E502/4	J14	X M	305001		F	N	127		04	04153	00	B		E-SH-9+
E-X-100A+	NEUTRON MONITOR ELECT PENET TB	55	1	P	2 3	H	W120	WX-32647	C	507	97 DEG AZ	S796		X X	382003	C47		Y							4320	E-X-100A+
E-X-100B+	NEUTRON MONITOR ELECT PENET TB	55	1	P	2 3	H	W120	WX-32647	C	507	103 DEG AZ	S796		X X	382003	C47		Y							4320	E-X-100B+
E-X-100C+	NEUTRON MONITOR ELECT PENET TB	55	1	P	2 3	H	W120	WX-32647	C	511	315 DEG AZ	S796		X X	382003	C44		Y							4320	E-X-100C+
E-X-100D+	NEUTRON MONITOR ELECT PENET TB	55	1	P	2 3	H	W120	WX-32647	C	511	327 DEG AZ	S796		X X	382003	C44		Y							4320	E-X-100D+
E-X-101A+	CRD FOS INDIC ELECT PENET TB	55	1	P	2 3	H	W120	WX-32648	C	511	132 DEG AZ	S796		X X	382003	C47		Y							4320	E-X-101A+
E-X-101B+	CRD POS INDIC ELECT PENET TB	55	1	P	2 3	H	W120	WX-32648	C	511	138 DEG AZ	S796		X X	382003	C47		Y							4320	E-X-101B+
E-X-101C+	CRD POS INDIC ELECT PENET TB	55	1	P	2 3	H	W120	WX-32648	C	511	312 DEG AZ	S796		X X	382003	C44		Y							4320	E-X-101C+

EPN	DESCRIPTION	MFG	MODEL	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	BLDG	ELEV	DETAIL / A/E ZONE	STATUS S E	QID	TM ZONE	HL ROOM	TEST	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
E-X-101D+	CRD POS INDIC ELECT PENFT TB	W120	WX-32648	55	1	P	2 3	H	S796	C	511	318 DEG AZ	X X	382003	C44	Y							4320	E-X-101D+
E-X-102A+	T/C AND RTD ELECT PENET TB	W120	WX-32649	55	1	P	2 3	H	S796	C	534	189 DEG AZ	X X	382003	C56	Y							4320	E-X-102A+
E-X-102B+	T/C AND RTD ELECT PENET TB	W120	WX-32649	55	1	P	2 3	H	S796	C	534	218 DEG AZ	X X	382003	C56	Y							4320	E-X-102B+
E-X-103A+	MED VOLTAGE POWER ELECT PENET TB	W120	WX-32555	55	1	P	2 3	H	S796	C	534	203 DEG AZ	X X	382001	C56	Y				05313	10		4320	E-X-103A+
E-X-103B+	MED VOLTAGE POWER ELECT PENET TB	W120	WX-32555	55	1	P	2 3	H	S796	C	534	212 DEG AZ	X X	382001	C56	Y				05313	10		4320	E-X-103B+
E-X-103C+	MED VOLTAGE POWER ELECT PENET TB	W120	WX-32555	55	1	P	2 3	H	S796	C	534	305 DEG AZ	X X	382001	C54	Y				05313	10		4320	E-X-103C+
E-X-103D+	MED VOLTAGE POWER ELECT PENET TB	W120	WX-32555	55	1	P	2 3	H	S796	C	534	322 DEG AZ	X X	382001	C54	Y				05313	10		4320	E-X-103D+
E-X-104A+	LOW VOLTAGE POWER ELECT PENET TB	W120	WX-32651	55	1	P	2 3	H	S796	C	511	112 DEG AZ	X X	382003	C47	Y							4320	E-X-104A+
E-X-104B+	LOW VOLTAGE POWER ELECT PENET TB	W120	WX-32651	55	1	P	2 3	H	S796	C	511	115 DEG AZ	X X	382003	C47	Y							4320	E-X-104B+
E-X-104C+	LOW VOLTAGE POWER ELECT PENET TB	W120	WX-32651	55	1	P	2 3	H	S796	C	534	192 DEG AZ	X X	382003	C56	Y							4320	E-X-104C+
E-X-104D+	LOW VOLTAGE POWER ELECT PENET TB	W120	WX-32651	55	1	P	2 3	H	S796	C	534	222 DEG AZ	X X	382003	C56	Y							4320	E-X-104D+
E-X-105A+	CONTROL AND INDIC ELECT PENFT TB	W120	WX-32650	55	1	P	2 3	H	S796	C	507	100 DEG AZ / EB	X X	382003	C47	Y							4320	E-X-105A+
E-X-105B+	CONTROL AND INDIC ELECT PENET TB	W120	WX-32650	55	1	P	2 3	H	S796	C	511	135 DEG AZ	X X	382003	C47	Y							4320	E-X-105B+

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	ANL	FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
E-X-105C+	W120	WX-32650	X X	382003		Y								4320	CONTROL AND INDIC ELECT PENET TB	C	534	195 DEG AZ	C56		E-X-105C+	55	1	P	2 3	H	S796	
E-X-105D+	W120	WX-32650	X X	382003		Y								4320	CONTROL AND INDIC ELECT PENET TB	C	534	225 DEG AZ	C56		E-X-105D+	55	1	P	2 3	H	S796	
E-X-107A+	W120	WX-32652	X X	382003		Y								4320	LO VOLT PWR/CT/IND ELECT PENET TB	C	475	52 DEG AZ	C35		E-X-107A+	55	1	P	2 3	H	S796	
E-X-107B+	W120	WX-32652	X X	382003		Y								4320	LO VOLT PWR/CT/IND ELECT PENET TB	C	475	240 DEG AZ	C36		E-X-107B+	55	1	P	2 3	H	S796	F15
EDR-POS-V/19	N007	SAI-133	C P	248005							05023	11	S	4320	POS FOR CONT ISO VLV	R	468	M.8/4.5			EDR-V-19+	68	2	A	1 0	B1,I	M537	D9
EDR-POS-V/20	N007	SAI-133	C J	248005							05023	11	S	4320	POS FOR EDR-V-20	R	468	M.8/4.5			EDR-V-20+	68	2	A	1 0	B1,I	M537	D9
EDR-SPV-19	A499	WJHT831654	X X	315004	R	N	114	03		33+				4320	PILOT VALVE FOR CONT ISO VLV V-19	R	426	N.1/3.6	R13	R10	E-IR-61+	58	2	A	1 0	B1	M537	D9
EDR-SPV-20	A499	WJHT831654	X X	315004	R	N	114	03		33+				4320	PILOT VALVE FOR CONT ISO VLV V-20	R	477	N.0/3.9	R33	R206	E-IR-65+	58	2	A	1 0	B1	M537	D9
FDR-LS-41	M040	BCS-751	Z X	207027							06153	10	E	4320	LD RHR PMP RM A	R	422		R12			215	2	A	1 0	F	M539	B11
FDR-LS-42	M040	BCS-751	Z X	207027							06153	00	E	4320	LD RHR PMP RM B	R	422		R13			215	2	A	1 0	F	M539	B14
FDR-LS-43	M040	BCS-751	Z X	207027							06153	00	E	4320	LD RHR PMP RM C	R	422		R12			215	2	A	1 0	F	M539	B10
FDR-LS-44	M040	BCS-751	Z X	207027							06153	00	E	4320	LD RCIC PMP RM	R	422		R12			215	2	A	1 0	F	M539	B13
FDR-LS-45	M040	BCS-751	Z X	207027							06153	10	E	4320	LD LPCS PMP RM	R	422		R12			215	2	A	1 0	F	M539	B9

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                                                               STATUS       ***SEISMIC (S) PARAMETERS***        *ENV. (E) PARAMETERS*
          EPN               MFG                  MODEL          S E    QID    TM  HL TEST ANL FO C    FREQ     AGING  DBE   C   HOURS
                   DESCRIPTION                         BLDG ELEV DETAIL  ZONE   ROOM      ACCURACY               COMPOSITE EPN
.CONTRACT   LEVEL  EC  USE   SAFETY FUNCTION     A/E DRAWING  A/E ZONE

FDR-LS-46                   M040    BCS-751                      Z X  207027                                   01653   10   E    4320
 LD HPCS PMP RM                                          R  422              R12
 215          2     A    1 0    F                 M539        B8

FDR-POS-V/3                 N007    SAI-133                      C P  248004                                   05023   11   S    4320
 POS FOR FDR-V-3                                         R  467 M.0/4.1                                     FDR-V-3+
 41           2     A    1 0    B1,I              M539        D6

FDR-POS-V/4                 N007    SAI-133                      C J  248004                                   05023   11   S    4320
 POS FOR FDR-V-4                                         R  467 M.0/4.1                                     FDR-V-4+
 41           2     A    1 0    B1,I              M539        D6

FDR-SPV-3                   A499    WJHT831654                   A X  315004  R   N  114   03          33+                        4320
 CONT. F R ISO VLV                                       R  426 N.1/3.6      R13  R10                       E-IR-61+
 58           2     A    1 0    B1                M539        D6

FDR-SPV-4                   A499    WJHT831654                   A X  315004  R   N  114   03          33+                        4320
 SOLENOID PILOT FOR FDR-V-4 IR-65                        R  477 N.0/3.9      R33  R206                      E-IR-65+
 58           2     A    1 0    B1                M539        D6

FPC-MO-153                  L200    SMB-000-5                    A X  221001  P   Y  114               33+          06            4320
 MO FOR FPC-V-153                                        R  452 K/7.9        R21                            FPC-V-153+
 41A          2     A    1 3    B1                M526        B11

FPC-MO-154                  L200    SMB-000-5                    A X  221001  P   Y  114               33+          06            4320
 MO FOR FPC-V-154                                        R  452 J9/8         R21                            FPC-V-154+
 41A          2     A    1 3    B1                M526        B11

FPC-MO-156                  L200    SMB                          A X  221001  P   Y  114               33+          06            4320
 MO FOR FPC-V-156                                        R  468 K2/8.2       R21                            FPC-V-156+
 41A          2     A    1 3    B1                M526        C11

FPC-TE-7                                                         R D                                                00   B        4320
 FUEL POOL                                               R  572              R31
 215          2     A    1 3    F                 M526        H11

HPCS-FIS-6                  B080    289                          Y X  140001      N   14   00          33+                          24
 HPCS-P-1 DISCH             P22-P024                     R  475 L.2/3.4      R33  R206                      E-IR-P024+
 02E22        3     A    1 0    C                 M520        F4

HPCS-FT-5                   P040    50-555-11CMA4WCF             Y J  156003      N   14   00          33+  05153   10   P        4320
 HPCS-P-1 DISCH                                          R  475 L.1/4.1      R33  R206                      E-IR-P024+
 02           3     A    1 0    I                 M520        D4

HPCS-LS-1A                  M040    3.5-751-1X-MPG-M14HY         X X  207002                                   05253   11   E    24
 HPCS-P-1 EMERGENCY SWITCHOVER                           R  446 H.6/5.0      E
 215          2     A    1 0    C                 M527        J8

HPCS-LS-1B                  M040    3.5-751-1X-MPG-M14HY         X X  207002                                   05253   11   E    24
 HPCS-P-1 EMERGENCY SWITCHOVER                           R  446 H.6/5.0      E
 215          2     A    1 0    C                 M527        J7
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                                                                        STATUS          ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
          EPN                MFG                     MODEL                  S E    QID    TM  HL TEST ANL FO C     FREQ   AGING  DBE  C   HOURS
               DESCRIPTION                                    BLDG ELEV  DETAIL      ZONE   ROOM      ACCURACY               COMPOSITE EPN
CONTRACT    LEVEL  EC  USE  SAFETY FUNCTION      A/E DRAWING  A/E ZONE

HPCS-LS-2A                   M040    3.5-751-1X-MPG-M14HY          X X  207002       N   14  00                      06303   17  E     24
 SUPPRESSION POOL LVL HPCS VLV CNTL                      R  467 J.5/4.3         R32
 02E22       2     A    1 0   C                      M543         B14

HPCS-LS-2B                   M040    3.5-751-1X-MPG-M14HY          X X  207002       N   14  00                      06303   17  E     24
 SUPPRESSION POOL LVL HPCS VLV CNTL                      R  468 L.8/7.9         R33
 02E22       2     A    1 0   C                      M543         B5

HPCS-M-P/1                   G080    5K6357XC10A/PZ55              R X  213032       N                               05153   10  E   4320
 3000HP/373A.MOTOR DRIVER HPCS-P-1                       R  430 M.2/3.7         R13  R11                     HPCS-P-1+
 02E         2     A    1 0   C.E                    M520         B6

HPCS-M-P/3                   W120    TBDP/256T                     X X  213016                                                          4320
 15HP/18A MOTOR FOR HPCS-P-3                             R  424 L.5/3.5         R13  R11                     HPCS-P-3+
 35A         2     A    1 0   C.E                    M520         C6

HPCS-MO-1                    L200    SMB-000-25                    A X  221001  P    N  114               33+                           4320
 1.6HP 3.4A MOTOR OPER. HPCS-V-1                         R  435 M.0/3.9         R13  R11                     HPCS-V-1+
 02E22       2     A    1 0   C.E                    M520         C7

HPCS-MO-10                   L200    SMB-3-150                     A X  221001       N  114               33+                             24
 26.0HP MOTOR OPERATOR HPCS-V-10                         R  451 M/3.8           R23  R106                    HPCS-V-10+
 02E22       2     A    1 0   C.E                    M520         E3

HPCS-MO-11                   L200    SMB-3-150                     A X  221001  P    N  114               33+                             24
 9.75HP MOTOR OPERATOR HPCS-V-11                         R  453 M/3.8           R23  R106                    HPCS-V-11+
 02E22       2     A    1 0   C.E                    M520         E3

HPCS-MO-12                   L200    SMB-2-40                      A X  221001  P    N  114               33+                             24
 5HP 8.4A MOTOR OPER. HPCS-V-12                          R  430 M/3.4           R13  R11                     HPCS-V-12+
 02E22       2     A    1 0   C.E                    M520         B5

HPCS-MO-15                   L200    SMB-2-40                      A X  221001  P    Y  114               33+              10           4320
 MOTOR OPERATOR HPCS-V-15                                R  455 L.4/3.8         R23  R106                    HPCS-V-15+
 02E22       2     A    1 0   C.E                    M520         D7

HPCS-MO-23                   L200    SMB-4-150                     A X  221001  P    N  114               33+                           24
 9.75HP MOTOR OPERATOR HPCS-V-23                         R  451 L.6/3.9         R23  R106                    HPCS-V-23+
 02E22       2     A    1 0   C                      M520         E5

HPCS-MO-4                    L200    SMB-4-200                     A X  221001  P    Y  114               33+                           4320
 26HP 35A MOTOR OPERATOR HPCS-V-4                        R  540 M.3/7.3         R53  R404                    HPCS-V-4+
 02E22       2     A    1 0   C.E                    M520         G7

HPCS-PIS-13                  E080    288                           Y X  198001       N  121               09                            24
 HPCS-P-3 LOW DISCH ALARM H22-P024                       R  475 L.2/3.9         R33  R206                    E-IR-P024+
 02E22       3     P    2 0   G                      M520         C4

HPCS-PIS-3                   B080    288                           X X  198001                                       06153   02  E     24
 HPCS-P-1 SUCTION PRESSURE                               R  428 L.1/3.5
 02E22       3     P    2 0   G                      M520         D6
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	SEISMIC (S) PARAMETERS: TH HL TEST ANL FO C	ZONE	ROOM	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
HPCS-PS-12	HPCS-P-1 DISCH	215	2	A	1 0	C,E	S382	SN-AA3-X10SST	R	471	L.2/3.9	M520	B5	X X	256016	R N 114	R33	R206		33+				24	E-IR-P024+
HPCS-PT-4	PT FOR HPCS-P-1 DISCH PRESS	02E22	3	P	2 0	G	B040	556	R	471	L.2/3.9	M520	B5	Y X	259001		R33				06103	13	E	4320	E-IR-P024+
HY-V-17A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	M.0/4.5	M530	E5	X X	361012		T26				06153	13		.17	
HY-V-17B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	J.8/7.3	M530	E4	X X	361012		T26				06153	13		.17	
HY-V-18A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	M.0/4.5	M530	E5	X X	361012		T26				06153	13		.17	
HY-V-18B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	J.8/7.3	M530	E4	X X	361012		T26				06153	13		.17	
HY-V-19A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	M.0/4.5	M530	E5	X X	361012		T26				06153	13		.17	
HY-V-19B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	J.8/7.3	M530	E4	X X	361012		T26				06153	13		.17	
HY-V-20A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	M095	MV250	R	525	M.0/4.5	M530	D5	X	361009		T26				01014	13	Z	.17	
HY-V-20B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	M095	MV250	R	525	J.8/7.3	M530	E4	R X	361009		T26				01014	13	Z	.17	
HY-V-33A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	M.0/4.5	M530	E13	X X	361012		R51				06153	13		.17	
HY-V-33B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	J.8/7.3	M530	E13	X X	361012		R51				06153	13		.17	
HY-V-34A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	R	525	M.0/4.5	M530	E13	X X	361012		R51				06153	13		.17	

EPN	DESCRIPTION	CONTRACT	LEVEL	FC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TM	HL ROOM	TEST	ANL	FO C ACCURACY	FREQ	AGING	DBE	C	HOURS
HY-V-34B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	M530	R	525	J.8/7.3	E13	X	X	361012	R51							06153	13		.17
HY-V-35A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	M530	R	525	M.0/4.5	E13	X	X	361012	R51							06153	13		.17
HY-V-35B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	T020	82M-002	M530	R	525	J.8/7.3	E13	X	X	361012	R51							06153	13		.17
HY-V-36A	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	M095	MV250	M530	R	525	M.0/4.5	E13		X	361009	R51							01014	13	Z	.17
HY-V-36B	.75" SOLEN. ISO. VALVE	215	2	A	1 0	B1	M095	MV250	M530	R	525	J.8/7.3	E13		X	361009	R51							01014	13	Z	.17
LD-TE-18A	LD TE RHR EQUIP AREA AMB TEMP	02E31	2	A	1 0	F,P1	P427	282-N1A72	807E154TC/	R	468	M.7/9.0	3B	X	X	339004			N		01		99+	06153	10	E	24
LD-TE-18B	LD TE RHR EQUIP AREA AMB TEMP	02E31	2	A	1 0	F,B1	P427	282-N1A72	807E154TC/	R	465	K.0/9.0	3F	X	X	339004			N		01		99+	06153	10	E	24
LD-TE-18C	LD TE RHR EQUIP AREA AMB TEMP	02E31	2	A	1 0	F,P1	P427	282-N1A72	807E154TC/	R	468	M.7/9.0	3B	X	X	339004			N		01		99+	06153	10	E	24
LD-TE-18D	LD TE RHR EQUIP AREA AMB TEMP	02E31	2	A	1 0	F,B1	P427	282-N1A72	807E154TC/	R	465	K.0/9.0	3F	X	X	339004			N		01		99+	06153	10	E	24
LD-TE-1A	LD TE RWCU PMP RM 1 INLET VENT	02E31	2	A	1 0	F,P1	N070	P/P 145C3224P001	807E154TC/	R	532	M.8/4.7	2B2	X	X	339004		W	N		01		99+	06153	10	E	24
LD-TE-1B	LD TE RWCU PMP RM 1 INLET VENT	02E31	2	A	1 0	F,P1	N070	P/P 145C3224P001	807E154TC/	R	532	M.6/4.4	2F2	X	X	339004		W	N		01		99+	06153	10	E	24
LD-TE-1C	LD TE RWCU PMP RM 2 INLET VENT	02E31	2	A	1 0	F,P1	N070	P/P 145C3224P001	807E154TC/	R	532	M.8/5.0	2B4	X	X	339004		W	N		01		99+	06153	10	E	24
LD-TE-1D	LD TE RWCU PMP RM 2 INLET VENT	02E31	2	A	1 0	F,P1	N070	P/P 145C3224P001	807E154TC/	R	532	N.2/5.4	2F4	X	X	339004		W	N		01		99+	06153	10	E	24

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM HL	ROOM	TEST ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS
LD-TE-1E	LD TE RWCU HEAT EXCH RM INLET VENT	02E31	2	A	1 0	F,B1	N070	P/P 145C3224P001	R	554	K.1/3.4	807E154TC/	2B5	X X	339004		N		01	99+	06153	10	E	24
LD-TE-1F	LD TE RWCU HEAT EXCH RM INLET VENT	02E31	2	A	1 0	F,B1	N070	P/P 145C3224P001	R	554	K.1/3.4	807E154TC/	2F5	X X	339004		N		01	99+	06153	10	E	24
LD-TE-27A	LD TE RHR EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	432	L5/9.4	807E154TC/	3B9	X X	339004	R13	N	R7	01	99+	06153	10	E	24
LD-TE-27B	LD TE RHR EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	432	K9/9.4	807E154TC/	3F9	X X	339004	R11	N	R6	01	99+	06153	10	E	24
LD-TE-27C	LD TE RHR EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	432	L5/9.4	807E154TC/	3B	X X	339004	R13	N	R7	01	99+	06153	10	E	24
LD-TE-27D	LD TE RHR EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	432	K9/9.4	807E154TC/	3F	X X	339004	R11	N	R6	01	99+	06153	10	E	24
LD-TE-28A	LD TE RHR EQUIP AREA OUTLET VENT	02E31	2	A	1 0	F,B1	P427	282W1A72	R	461	L3/9.3	807E154TC/	3E9	X X	339004	R23	N	R115	01	99+	06153	10	E	24
LD-TE-28B	LD TE RHR EQUIP AREA OUTLET VENT	02E31	2	A	1 0	F,B1	P427	282W1A72	R	465	K.9/9.3	807E154TC/	3K7	X X	339004	R21	N	R116	01	99+	06153	10	E	24
LD-TE-28C	LD TE RHR EQUIP AREA OUTLET VENT	02E31	2	A	1 0	F,B1	P427	282W1A72	R	461	L3/9.3	807E154TC/	3E	X X	339004	R23	N	R115	01	99+	06153	10	E	24
LD-TE-28D	LD TE RHR EQUIP AREA OUTLET VENT	02E31	2	A	1 0	F,B1	P427	282F9T37	R	465	K.9/9.3	807E154TC/	3K	X X	339004	R21	N	R116	01	99+	06153	10	E	24
LD-TE-29A	LD TE MN STM LINE TUNNEL INLET VEN	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	502	H.4/5.8	807E154TC/	3B5	X X	339004	R42	N	R310	01	99+	06153	10	E	24
LD-TE-29B	LD TE MN STM LINE TUNNEL INLET VEN	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	502	H.4/5.8	807E154TC/	3B6	X X	339004	R42	N	R310	01	99+	06153	10	E	24
LD-TE-29C	LD TE MN STM LINE TUNNEL INLET VEN	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	502	H.4/6.6	807E154TC/	3F5	X X	339004	R41	N	R310	01	99+	06153	10	E	24

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG ELEV / A/E DRAWING	STATUS S E / DETAIL / A/E ZONE	QID / ZONE	TM	HL / ROOM	TEST ANL FO C / ACCURACY	FREQ	AGING	DBE	C	HOURS
LD-TE-29D					P427	N145C3224PI		X X	339004.		N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL INLET VEN							R 502	H.4/6.2	R41		R310	01					
02E31	2	A	1 0	F,B1			807E154TC/	3F6									
LD-TE-2A					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE RWCU PMP RM 1 OUTLET VENT							R 532	M.3/4.5									
02E31	2	A	1 0	F,B1			807E154TC/	2E2									
LD-TE-2B					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE RWCU PMP RM 1 OUTLET VENT							R 532	M.3/4.5									
02E31	2	A	1 0	F,B1			807E154TC/	2K2									
LD-TE-2C					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE RWCU PMP RM 2 OUTLET VENT							R 532	M.8/5.4									
02E31	2	A	1 0	F,B1			807E154TC/	2E4									
LD-TE-2D					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE RWCU PMP RM 2 OUTLET VENT							R 532	M.8/5.4									
02E31	2	A	1 0	F,B1			807E154TC/	2K4									
LD-TE-2E					P427	288F9734		X X	339004		N	01	99+	06153	10	E	24
LD TE RWCU HEAT EXCH RM OUTLET VEN							R 570	L.9/4.4	R62		R510						
02E31	2	A	1 0	F,B1			807E154TC/	2E5									
LD-TE-2F					P427	282N1A72		X X	339004		N	01	99+	06153	10	E	24
LD TE RWCU HEAT EXCH RM OUTLET VEN							R 570	L.9/4.4	R62		R510						
02E31	2	A	1 0	F,B1			807E154TC/	2K5									
LD-TE-30A					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL OUTLET V							R 526	J.0/5.9	R42		R310						
02E31	2	A	1 0	F,B1			807E154TC/	3E5									
LD-TE-30B					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL OUTLET V							R 526	J.0/5.6	R42		R310						
02E31	2	A	1 0	F,B1			807E154TC/	3E6									
LD-TE-30C					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL OUTLET V							R 526	J.0/5.2	R41								
02E31	2	A	1 0	F,B1			807E154TC/	3K5									
LD-TE-30D					P427	282N1A72		X X	339004	W	N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL OUTLET V							R 526	J.0/6.1	R41		R310						
02E31	2	A	1 0	F,B1			807E154TC/	3K6									
LD-TE-31A					N070	N145C3224PI		X X	339004		N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL AMB TEMP							R 502	H.7/5.8	R42		R310						
02E31	2	A	1 0	F,B1			807E154TC/	3B7									
LD-TE-31B					N070	N145C3224PI		X X	339004		N	01	99+	06153	10	E	24
LD TE MN STM LINE TUNNEL AMB TEMP							R 502	H.7/5.6	R42		R310						
02E31	2	A	1 0	F,B1			807E154TC/	3B8									

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TM	HL	ROOM	TEST ANL FO C	FREQ	AGING	DBE	C	HOURS
LD-TE-31C	LD TE MN STM LINE TUNNEL AMB TEMP	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	502	H.7/6.6	807E154TC/	3F7	A	X	339004	R41		N	R310	01	99+	06153	10	E	24
LD-TE-31D	LD TE MN STM LINE TUNNEL AMB TEMP	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	502	H.7/6.2	807E154TC/	3F8	A	X	339004	R41		N	R310	01	99+	06153	10	E	24
LD-TE-3A	LD TE RWCU PMP RM 1	02E31	2	A	1 0	F,B1	P427	282N1A72	R	532	M.5/4.6	807E154TC/	2B9	X	X	339004			N		01	99+	06153	10	E	24
LD-TE-3B	LD TE RWCU PMP RM 1	02E31	2	A	1 0	F,B1	P427	282N1A72	R	532	M.5/4.6	807E154TC/	2F9	X	X	339004		W	N		01	99+	06153	10	E	24
LD-TE-3C	LD TE RWCU PMP RM 2	02E31	2	A	1 0	F,B1	P427	282N1A72	R	532	M.8/5.3	807E154TC/	2B	X	X	339004		W	N		01	99+	06153	10	E	24
LD-TE-3D	LD TE RWCU PMP RM 2	02E31	2	A	1 0	F,B1	P427	282N1A72	R	532	M.8/5.3	807E154TC/	2F	X	X	339004		W	N		01	99+	06153	10	E	24
LD-TE-3E	LD TE RWCU HEAT EXCH RM	02E31	2	A	1 0	F,B1	P427	282N1A72	R	570	L.0/4.1	807E154TC/	2B6	X	X	339004	R61		N	R510	01	99+	06153	10	E	24
LD-TE-3F	LD TE RWCU HEAT EXCH RM	02E31	2	A	1 0	F,B1	P427	282N1A72	R	570	L.0/4.1	807E154TC/	2F6	X	X	339004	R61		N	R510	01	99+	06153	10	E	24
LD-TE-4A	LD TE RCIC EQUIP AREA	02E31	2	A	1 0	F,B1	P427	282N1A72	R	467	J.0/7.5	807E154TC/	3B4	X	X	339004	R21		N	R112	01	99+	05153	10	E	24
LD-TE-4B	LD TE RCIC EQUIP AREA	02E31	2	A	1 0	F,B1	P427	282N1A72	R	467	J.0/7.5	807E154TC/	3F4	X	X	339004	R21		N	R112	01	99+	06153	10	E	24
LD-TE-5A	LD TE RCIC EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	436		807E154TC/	3B2	X	X	339004			N		01	99+	06153	10	E	24
LD-TE-5B	LD TE RCIC EQUIP AREA INLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	436		807E154TC/	3F2	X	X	339004			N		01	99+	06153	10	E	24
LD-TE-6A	LD-TE RCIC EQUIP AREA OUTLET VENT	02E31	2	A	1 0	F,B1	N070	N145C3224PI	R	460	H.4/7.5	807E154TC/	3F2	X	X	339004	R21		N	R112	01	99+	06153	10	E	24

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                                                                 STATUS          ***SEISMIC (S) PARAMETERS***        *ENV. (E) PARAMETERS*
        EPN                  MFG                  MODEL            S E    QID   TM   HL TEST ANL FO C      FREQ     AGING  DBE  C   HOURS
              DESCRIPTION                                BLDG ELEV  DETAIL     ZONE    ROOM      ACCURACY                 COMPOSITE EPN
CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION    A/E DRAWING    A/E ZONE

LD-TE-6B                    N070    N145C3224PI                   X X  339004        N          01          99+     06153   10  E    24
 LD-TE RCIC EQUIP AREA OUTLET VENT                       R  460 H.4/7.5        R21   R112
 02E31        2      A     1 0   F,E1              807E154TC/       3K2

LPCS-FIS-4                  B080    289A                          Y X  140001        N   14   00            33+                          24
 LPCS-P-1 DISCH FLOW        H22-P001                     R  475 K.0/4.2        R32   R206                         E-IR-P001+
 02E21        3      A     1 0   C                 M520             B14

LPCS-FT-3                   R369    1151DP5E22-PB                 Y X  156005        N   14   00            33+     05153   00  P   4320
 LPCS-P-1 DIS FLOW TX                                    R  473 K.0/4.2        R32                                E-IR-P001+
 02E21        3      A     1 0   C                 M520             B14

LPCS-M-P/1                  G080    5K6347XC65A/PZ42              R X  213032        N                                  05153   10  E   4320
 1500 HP/192A MTR DRIVER P-1                             R  429 K.2/3.8        R12   R12                          LPCS-P-1+
 02E21        2      A     1 0   C                 M520             B11

LPCS-M-P/2                  W120    75040786                      X X  213016                                           06303   01  E   4320
 15HP/20A MTR FOR LPCS-P-2 WATERLEG                      R  422 J.8/3.6        R12   R12                          LPCS-P-2+
 02E21        2      A     1 0   C                 M520             C12

LPCS-MO-1                   L200    SMB-0-40                      A X  221001   P    Y  114                 33+                             4320
 1.62HP MOTOR OPERATOR LPCS-V-1                          R  452 K/4.1          R12   R114                         LPCS-V-1+
 41A          2      A     1 0   C,B1              M520             D11

LPCS-MO-11                  L200    SMB-000-5                     A X  221001   P    Y  114                 33+                             4320
 MOTOR OPERATOR LPCS-FCV-11                              R  425 K.2/3.5        R12   R12                          LPCS-FCV-11+
 02E21        2      A     1 0   C                 M520             B13

LPCS-MO-12                  L200    SMB-3-60                      A X  221001   P    N  114                 33+             00  C    24
 3.89HP MOTOR OPERATOR LPCS-V-12                         R  454 K.0/3.6        R22   R114                         LPCS-V-12+
 41B          2      A     1 0   C,B1              M520             E15

LPCS-MO-5                   L200    SMB-3-100                     A X  221001   P    Y  114                 33+                             4320
 9.75HP MOTOR OPERATOR LPCS-V-5                          R  530 L.8/4.3        R53   R404                         LPCS-V-5+
 41A          2      A     1 0   B1,C              M520             G11

LPCS-PIS-1                  R290    SP-222-C                      Y D  245003                                       03283   00  S    24
 LPCS-P-1 DISCH TO ADS PERMISSIVE                        R  475 K.0/4.2        R32                                E-IR-P001+
 02E21        2      A     1 0   C                 M520             B13

LPCS-PIS-5                  B080    288                           Y X  086001   R    N  114                 33+     06153   02  E   4320
 LPCS-P-1 DISCHARGE H22-P001                             R  471 K.0/4.2        R12   R12                          E-IR-P001+
 02           2      P     2 0   G                 M520             B14

LPCS-PS-9                   B069    P1H-M340SS-V                  Y X  256005   R    N                                                       24
 LPCS PMP DISCH PS TO ADS PERMISSIV                      R  471 K.0/4.2        R12   R12                          E-IR-P001+
 02E21        2      A     1 0   C                 M520             B13

LPRM-CONN-12RCD             A380    CAT. X901-200                 R J  049003        Y                                  06153   11  E   .17
 CONNECTOR FOR LPRM-DET-1-2R.C.D                         C  501 BENEATH RPV
 02B13        3      P     2 3   L                 807E163TC
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EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	STATUS S E	QID	AGING	OBE	C	HOURS
LPRM-CONN-13CDA CONNECTOR FOR LPRM-DET-13C,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-14ABD CONNECTOR FOR LPRM-DET-1-4A,B,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV		J	049003	06153	11	E	.17
LPRM-CONN-15ABC CONNECTOR FOR LPRM-DET-1-5A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-16BCD CONNECTOR FOR LPRM-DET-1-6B,C,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-21ABC CONNECTOR FOR LPRM-DET-2-1A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-22DAB CONNECTOR FOR LPRM-DET-2-2D,A,B	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-23CDA CONNECTOR FOR LPRM-DET-2-3C,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV		J	049003	06153	11	E	.17
LPRM-CONN-24BCD CONNECTOR FOR LPRM-DET-2-4B,C,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-25ABC CONNECTOR FOR LPRM-DET-2-5A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-26DAB CONNECTOR FOR LPRM-DET-2-6C,A,B	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-27CDA CONNECTOR FOR LPRM-DET-2-7 ,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-31CDA CONNECTOR FOR LPRM-DET-3-1C,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17
LPRM-CONN-32DAB CONNECTOR FOR LPRM-DET-3-2D,A,B	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	BENEATH RPV	807E163TC	J	049003	06153	11	E	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	STATUS S E	QID	DETAIL / ZONE	AGING	DBE	C	HOURS
LPRM-CONN-33ABC CONNECTOR FOR LPRM-DET-3-3A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-34BCD CONNECTOR FOR LPRM-DET-3-4B,C,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-35CDA CONNECTOR FOR LPRM-DET-3-5C,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-36DAB CONNECTOR FOR LPRM-DET-3-6D,A,B	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-37ABC CONNECTOR FOR LPRM-DET-3-7A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-41CDA CONNECTOR FOR LPRM-DET-4-1C,D,A	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-42BCD CONNECTOR FOR LPRM-DET-4-2B,C,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-43ABC CONNECTOR FOR LPRM-DET-4-3A,B,C	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-44DAB CONNECTOR FOR LPRM-DET-4-4D,A,B	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-45CDA CONNECTOR FOR LPRM-DET-4-5C,D,A	02B13	3	P	2 3	L	A380	CAT X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	10	E	.17
LPRM-CONN-46BCD CONNECTOR FOR LPRM-DET-4-6B,C,D	02B13	3	P	2 3	L	A380	CAT. X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17
LPRM-CONN-47ABC CONNECTOR FOR LPRM-DET-4-7A,B,C	02B13	3	P	2 3	L	A380	CAT X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	13	E	.17
LPRM-CONN-51ABC CONNECTOR FOR LPRM-DET-5-1A,B,C	02B13	3	P	2 3	L	A380	CAT X901-200	C	501	807E163TC	J	049003	BENEATH RPV	06153	11	E	.17

EPN	MFG	MODEL	STATUS S E	QID	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING
LPRM-CONN-52BCD	A380	CAT X901-200	J	049003	06153	01	E	.17	CONNECTOR FOR LPRM-DET-5-2B,C,D	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-53CDA	A380	CAT X901-200	J	049003	06153	13	E	.17	CONNECTOR FOR LPRM-DET-5-3C,D,A	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-54DAB	A380	CAT X901-200	J	049003	06153	13	E	.17	CONNECTOR FOR LPRM-DET-5-4D,A,B	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-55ABC	A380	CAT X901-200	J	049003	06153	13	E	.17	CONNECTOR FOR LPRM-DET-5-5A,B,C	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-56BCD	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-5-6B,C,D	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-57CDA	A380	CAT X901-200	J	049003	06153	13	E	.17	CONNECTOR FOR LPRM-DET-5-7C,D,A	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-61ABC	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-6-1A,B,C	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-62DAB	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-6-2D,A,B	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-63CDA	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-6-3C,D,A	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-64BCD	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-6-4B,C,D	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-65ABC	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-6-5A B C	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-66DAB	A380	CAT X901-200	J	049003	06153	13	E	.17	CONNECTOR FOR LPRM-DET-6-6C,A,B	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC
LPRM-CONN-72DAB	A380	CAT X901-200	J	049003	06153	11	E	.17	CONNECTOR FOR LPRM-DET-7-2D,A,B	C	501	BENEATH RPV	02B13	3	P	2 3	L	807E163TC

Other printed column headings (no entries on this page): ***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ ZONE ROOM ACCURACY; *ENV. (E) PARAMETERS* COMPOSITE EPN; A/E ZONE

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                                                          STATUS     ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
          EPN                  MFG                MODEL       S E    QID   TM  HL TEST ANL FO C   FREQ    AGING  DBE  C   HOURS
                    DESCRIPTION                         BLDG ELEV  DETAIL   ZONE    ROOM      ACCURACY        COMPOSITE EPN
CONTRACT   LEVEL  EC   USE   SAFETY FUNCTION   A/E DRAWING   A/E ZONE

LPRM-CONN-73ABC              A380    CAT X901-200                  J  049003                            06153   11   E    .17
 CONNECTOR FOR LPRM-DET-7-3A,B,C                        C  501 BENEATH RPV
 02B13       3      P    2 3   L                  807E163TC

LPRM-CONN-74BCD              A380    CAT X901-200                  J  049003                            06153   11   E    .17
 CONNECTOR FOR LPRM-DET-7-4B,C,D                        C  501 BENEATH RPV
 02B13       3      P    2 3   L                  807E163TC

LPRM-CONN-75CDA              A380    CAT X901-200                  J  049003                            06153   13   E    .17
 CONNECTOR FOR LPRM-DET-7-5C,D,A                        C  501 BENEATH RPV
 02B13       3      P    2 3   L                  807E163TC

LPRM-DET-12BCD               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 12B,C,D                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-13CDA               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 13C,D,A                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-14ABD               G080    163C1154G1                  X J  067002                                     11   G    .17
 PWR RGE DET ASSM CH 14A,B,D                            C  501 IN RPV
 02C51       2      A    1 0   L

LPRM-DET-15ABC               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 15A,B,C                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-16BCD               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 16B,C,D                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-21ABC               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 21A,B,C                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-22DAB               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 22D,A,B                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-23CDA               G080    163C1154G1                  X J  067002                                     11   G    .17
 PWR RGE DET ASSM CH 23C,D,A                            C  501 IN RPV
 02C51       2      A    1 0   L

LPRM-DET-24BCD               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 24B,C,D                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC

LPRM-DET-25ABC               G080    163C1154G1                  X J  067002   W   Y       04                    11   G    .17
 PWR RGE DET ASSM CH 25A,B,C                            C  501 IN RPV
 02C51       2      A    1 0   L                  807E163TC
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	STATUS S E	DETAIL	A/E DRAWING	QID	TH	HL	ANL	DBE	C	HOURS
LPRM-DET-26DAB	PWR RGE DET ASSM CH 26D,A,B	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-27CDA	PWR RGE DET ASSM CH 27C,D,A	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-31CDA	PWR RGE DET ASSM CH 31C,D,A	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-32DAB	PWR RGE DET ASSM CH 32D,A,B	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-33ABC	PWR RGE DET ASSM CH 33A,B,C	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-34BCD	PWR RGE DET ASSM CH 34B,C,D	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-35CDA	PWR RGE DET ASSM CH 35C,D,A	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	13	G	.17
LPRM-DET-36DAB	PWR RGE DET ASSM CH 36D,A,B	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-37ABC	PWR RGE DET ASSM CH 37A,B,C	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-41CDA	PWR RGE DET ASSM CH 41C,D,A	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-42BCD	PWR RGE DET ASSM CH 42B,C,D	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-43ABC	PWR RGE DET ASSM CH 43A,B,C	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17
LPRM-DET-44DAB	PWR RGE DET ASSM CH 44D,A,B	02C51	2	A	1 0	L	G080	163C1154G1	C	501	X J	IN RPV	807E163TC	067002	W	Y	04	11	G	.17

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E ZONE	A/E DRAWING	STATUS S	STATUS E	QID	TH	HL	ANL	DBE	C	HOURS
LPRM-DET-45CDA LPRM DET	02C51	2	A	1 0	L	G080	163C11	C	501	DN RPV	807E163TC	X	J	067002	W	Y	04	13	G	.17
LPRM-DET-46BCD PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-47ABC PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	13	G	.17
LPRM-DET-51ABC PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-52BCD PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	*	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-53CDA PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-54DAB PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-55ABC PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-56BCD PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-57CDA PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	13	G	.17
LPRM-DET-61ABC PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-62DAB PWR RGE DET ASSM	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17
LPRM-DET-63CDA PWR RGE DET ASSM CH 63C,D,A	02C51	2	A	1 0	L	G080	163C1154G1	C	501	IN RPV	807E163TC	X	J	067002	W	Y	04	11	G	.17

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                                                   STATUS       ***SEISMIC (S) PARAMETERS***     *ENV. (E) PARAMETERS*
        EPN                MFG            MODEL     S E   QID   TH  HL TEST ANL FO C    FREQ    AGING  DBE  C   HOURS
                 DESCRIPTION                  BLDG ELEV  DETAIL      ZONE   ROOM     ACCURACY          COMPOSITE EPN
CONTRACT   LEVEL  EC  USE   SAFETY FUNCTION   A/E DRAWING   A/E ZONE

LPRM-DET-64BCD           G080    163C1154G1                    X J  067002  W  Y       04                    11   G    .17
 PWR RGE DET ASSM CH 64B,C,D                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-65ABC           G080    163C1154G1                    X J  067002  W  Y       04                    11   G    .17
 PWR RGE DET ASSM CH 65A,B,C                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-66DAB           G080    163C1154G1                    X J  067002  W  Y       04                    13   G    .17
 PWR RGE DET ASSM CH 66D,A,B                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-72DAB           G080    163C1154G1                    X J  067002  W  Y       04                    11   G    .17
 PWR RGE DET ASSM CH 72D,A,B                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-73ABC           G080    163C1154G1                    X J  067002  W  Y       04                    11   G    .17
 PWR RGE DET ASSM CH 73A,B,C                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-74BCD           G080    163C1154G1                    X J  067002  W  Y       04                    11   G    .17
 PWR RGE DET ASSM CH 74B C,D                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

LPRM-DET-75CDA           G080    163C1154G1                    X J  067002  W  Y       04                    16   G    .17
 PWR RGE DET ASSM CH 75C,D,A                           C  501 IN RPV
 02C51       2      A    1 0   L                 807E163TC

MS-CONN-V22A/J1          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-1 FOR VLV MS-V-22A                    C  513 5 D AZ R27                       MS-V-22A+
 218         3      P    2 3   G1                E539/21

MS-CONN-V22A/J2          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-2 FOR VLV MS-V-22A                    C  513 5 D AZ R27                       MS-V-22A+
 218         3      P    2 3   G1                E539/21

MS-CONN-V22A/J3          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-3 FOR VLV MS-V-22A                    C  513 5 D AZ R27                       MS-V-22A+
 218         3      P    2 3   G1                E539/21

MS-CONN-V22A/J4          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-4 FOR VLV MS-V-22A                    C  513 5 D AZ R27                       MS-V-22A+
 218         3      P    2 3   G1                E539/21

MS-CONN-V22B/J1          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-1 FOR VLV MS-V-22B                    C  513 5 D AZ R27                       MS-V-22B+
 218         3      P    2 3   G1                E539/21

MS-CONN-V22B/J2          C515    N-11105-01                    X X  049008                          06153    14        4320
 CONN FOR POS SW-2 FOR VLV MS-V-22B                    C  513 15 D AZ R27                      MS-V-22B+
 218         3      P    2 3   G1                E539/21
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG ELEV DETAIL A/E ZONE	A/E DRAWING	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ ZONE ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS	COMPOSITE EPN
MS-CONN-V22B/J3	CONN FOR POS SW-3 FOR VLV MS-V-22B	218	3	P	2 3	G1	C515	N-11105-01	C 513 15 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22B+
MS-CONN-V22B/J4	CONN FOR POS SW-4 FOR VLV MS-V-22B	218	3	P	2 3	G1	C515	N-11105-01	C 513 15 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22B+
MS-CONN-V22C/J1	CONN FOR POS SW-1 FOR VLV MS-V-22C	218	3	P	2 3	G1	C515	N-11105-01	C 513 345 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22C+
MS-CONN-V22C/J2	CONN FOR POS SW-2 FOR VLV MS-V-22C	218	3	P	2 3	G1	C515	N-11105-01	C 513 345 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22C+
MS-CONN-V22C/J3	CONN FOR POS SW-3 FOR VLV MS-V-22C	218	3	P	2 3	G1	C515	N-11105-01	C 513 345 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22C+
MS-CONN-V22C/J4	CONN FOR POS SW-4 FOR VLV MS-V-22C	218	3	P	2 3	G1	C515	N-11105-01	C 513 345 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22C+
MS-CONN-V22D/J1	CONN FOR POS SW-1 FOR VLV MS-V-22D	218	3	P	2 3	G1	C515	N-11105-01	C 513 355 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22D+
MS-CONN-V22D/J2	CONN FOR POS SW-2 FOR VLV MS-V-22D	218	3	P	2 3	G1	C515	N-11105-01	C 513 355 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22D+
MS-CONN-V22D/J3	CONN FOR POS SW-3 FOR VLV MS-V-22D	218	3	P	2 3	G1	C515	N-11105-01	C 513 355 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22D+
MS-CONN-V22D/J4	CONN FOR POS SW-4 FOR VLV MS-V-22D	218	3	P	2 3	G1	C515	N-11101-01	C 513 355 D AZ R27	E539/21	X X	049008		06153	14		4320	MS-V-22D+
MS-CONN-V28A/J1	CONN FOR POS SW-1 FOR VLV MS-V-28A	218	3	P	2 3	G1	C515	N-11105-01	R 513 H.7/5.9	E539/21	X X	049008		06153	04		4320	MS-V-28A+
MS-CONN-V28A/J2	CONN FOR POS SW-2 FOR VLV MS-V-28A	218	3	P	2 3	G1	C515	N-11105-01	R 513 H.7/5.9	E539/21	X X	049008		06153	04		4320	MS-V-28A+
MS-CONN-V28A/J3	CONN FOR POS SW-3 FOR VLV MS-V-28A	218	3	P	2 3	G1	C515	N-11105-01	R 513 H.7/5.9	E539/21	X X	049008		06153	05		4320	MS-V-28A+

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                  EPN                    MFG               MODEL                  STATUS          ***SEISMIC (S) PARAMETERS***       *ENV. (E) PARAMETERS*
                       DESCRIPTION                                                 S E   QID   TM  HL TEST ANL FO C     FREQ    AGING  DBE  C   HOURS
CONTRACT     LEVEL   EC   USE   SAFETY FUNCTION   A/E DRAWING   BLDG ELEV   DETAIL   ZONE   ROOM    ACCURACY                  COMPOSITE EPN
                                                                 A/E ZONE

MS-CONN-V28B/J1          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-1 FOR VLV MS-V-28B                R  513 H.7/5.8                                    MS-V-28B+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28B/J2          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-2 FOR VLV MS-V-28B                R  513 H.7/5.8                                    MS-V-28B+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28B/J3          C515     N-11105-01                     Y X  049008                                  06153    04       4320
 CONN FOR POS SW-3 FOR VLV MS-V-28B                R  513 H.7/5.8                                    MS-V-28B+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28C/J1          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-1 FOR VLV MS-V-28C                R  513 H.7/5.6                                    MS-V-28C+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28C/J2          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-2 FOR VLV MS-V-28C                R  513 H.7/5.6                                    MS-V-28C+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28C/J3          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-3 FOR VLV MS-V-28C                R  513 H.7/5.6                                    MS-V-28C+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28D/J1          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-1 FOR VLV MS-V-28D                R  513 H.7/6.1                                    MS-V-28D+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28D/J2          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-2 FOR VLV MS-V-28D                R  513 H.7/6.1                                    MS-V-28D+
 218          3    P    2 3   G1            E539/21

MS-CONN-V28D/J3          C515     N-11105-01                     X X  049008                                  06153    04       4320
 CONN FOR POS SW-3 FOR VLV MS-V-28D                R  513 H.7/6.1                                    MS-V-28D+
 218          3    P    2 3   G1            E539/21

MS-DPIS-11A              B080     288A                           Y X  086001  R   N  121          09                            .17
 PCIS HI STM FLOW LINE D - H22-P015                R  506  H6/7.3       R41   R305                   E-IR-P015+
 02H          3    A    1 0   B1            M529           D3

MS-DPIS-11B              B080     288A                           Y X  086001  R   N  121          09                            .17
 PCIS HI STM FLOW LINE D                           R  475 M.5/7.9       R33   R206                   E-IR-P022+
 02H          3    A    1 0   B1,I,F        M529           D3

MS-DPIS-11C              B080     288A                           Y X  086001  R   N  121          09                            .17
 PCIS HI STM FLOW LINE D                           R  475 M.5/4.5       R33   R206                   E-IR-P010+
 02E31        3    A    1 0   B1,I,F        M529           C3

MS-DPIS-11D              B080     288A                           Y X  086001  R   N  121          09                            .17
 PCIS HI STM FLOW LINE D                           R  505 L.9/3.7       R43   R305                   E-IR-P025+
 02H          3    A    1 0   B1,I,F        M529           C3
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EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-DPIS-810A PCIS HI STM FLOW LINE C 58	3	A	1 0	B1,I,F	B080	288A	M529	R	501	H.7/7.3	E3	Y X	086001	R41						05253	11	G	.17	E-IR-P015+
MS-DPIS-810B PCIS HI STM FLOW LINE C 58	3	A	1 0	B1,I,F	B080	288A	M529	R	471	M.5/7.9	E3	Y X	086001	R33						05253	11	G	.17	E-IR-P022+
MS-DPIS-810C PCIS HI STM FLOW LINE C 58	3	A	1 0	B1,I,F	B080	288A	M529	R	471	M.5/4.5	E3	Y X	086001	R33						05253	01	G	.17	E-IR-P010+
MS-DPIS-810D PCIS HI STM FLOW LINE C 58	3	A	1 0	B1,I,F	B080	288A	M529	R	505	L.9/3.7	E3	Y X	086001	R43						05253	01	G	.17	E-IR-P025+
MS-DPIS-8A PCIS HI STM FLOW LINE A - H22-P015 02E31	3	A	1 0	B1,I,F	B080	288A	M529	R	505	H.6/7.3	E14	Y X	086001	R41	R	N	121	R305	09				.17	E-IR-P015+
MS-DPIS-8B PCIS HI STM FLOW LINE A - H22-P022 02E	3	A	1 0	B1,I,F	B080	288A	M529	R	475	M.5/7.9	E14	Y X	086001	R33	R	N	121	R206	09				.17	E-IR-P022+
MS-DPIS-8C PCIS HI STM FLOW LINE A 02E31	3	A	1 0	B1,I,F	B080	288A	M529	R	475	M.5/4.5	E14	Y X	086001	R33	R	N	121	R206	09				.17	E-IR-P010+
MS-DPIS-8D PCIS HI STM FLOW LINE A 02E31	3	A	1 0	B1,I,F	B080	288A	M529	R	505	L.9/3.6	E14	Y X	086001	R43	R	N	121	R305	09				.17	E-IR-P025+
MS-DPIS-9A PCIS HI STM LINE A H22-P015 02E31	3	A	1 0	B1,I,F	B080	288A	M529	R	504	H.6/7.3	D14	Y X	086001	R41	R	N	121	R305	09				.17	E-IR-P015+
MS-DPIS-9B PCIS HI STM FLOW LINE B H22-P022 02E31	3	A	1 0	B1	B080	288A	M529	R	475	M.6/8.1	D14	Y X	086001	R53	R	N	121	R404	09				.17	E-IR-P022+
MS-DPIS-9C PCIS HI STM FLOW LINE B 02E31	3	A	1 0	B1	B080	288A	M529	R	475	M.5/4.5	C14	Y X	086001	R33	R	N	121	R206	09				.17	E-IR-P010+
MS-DPIS-9D PCIS HI STM FLOW LINE B 02E31	3	A	1 0	B1	B080	288A	M529	R	505	L.9/3.6	C14	Y X	086001	R43	R	N	121	R305	09				.17	E-IR-P025+
MS-FT-33A MS FLOW - - H22-P010 02	2	P	2 3	G	G080	50555111BNAA4PCA	M530	R	471	M.5/4.5	H12	Y X	156003	R33									4320	E-IR-P010+

EPN / DESCRIPTION / CONTRACT LEVEL EC USE	MFG	MODEL / SAFETY FUNCTION	BLDG ELEV / A/E DRAWING	STATUS S E / DETAIL / A/E ZONE	QID / ZONE	TM	HL / ROOM	TEST	ANL FO C / ACCURACY	FREQ	AGING / COMPOSITE EPN	DBE	C	HOURS
MS-FT-33B	G080	50555111BNAA4WCA		Y X	156003									4320
MS FLOW - - H22-P009			R 471	J.6/8.1	C34						E-IR-P009+			
02B22 2 P 2 3 G			M530	H6										
MS-FT-33C	G080	50555111BNAA4EAH		Y X	156003									4320
MS FLOW - - H22-P010			R 471	M.5/4.5	R33						E-IR-P010+			
02B22 2 P 2 3 G			M530	H13										
MS-FT-33D	G080	50555111BNAA4WCH		Y X	156003									4320
MS FLOW - - H22-P009			R 471	J.6/8.1	C34						E-IR-P009+			
02B22 2 P 2 3 G			M530	H5										
MS-LIS-100A	B080	288A		Y X	086001						06153	12	G	24
REACTOR HIGH LEVEL			R 526	J.5/7.2							E-IR-P004+			
02 2 A 1 0 C														
MS-LIS-100B	B080	288A		Y X	086001						06153	12	G	24
REACTOR HIGH LEVEL			R 526	J.5/7.2							E-IR-P004+			
02 2 A 1 0 C														
MS-LIS-24A	B080	288A		Y X	198001	R	N	121		09				24
REACTOR LEVEL 3 AND 8 TRIPS			R 526	J.5/7.2	R51						E-IR-P004+			
02B 2 A 1 0 A,B1,C			M529	H12										
MS-LIS-24B	B080	288A		X X	198001	R	N	121		09				24
RPV LEVEL 3 & 8 TRIPS	H22-P027		R 526	J.5/4.7	R53		R404				E-IR-P026+			
02B 2 A 1.0 A,B1			M529	J5										
MS-LIS-24C	B080	288A		Y X	198001	R	N	121		09				24
RPV LEVEL 3& 8 TRIPS	H22-P005		R 526	N.7/5.8	R53		R404				E-IR-P005+			
02B 2 A 1 0 A,B1,C			M529	H5										
MS-LIS-24D	B080	288A		X X	198001	R	N	121		09				24
RPV LEVEL 3 & 8 TRIPS	H22-P026		R 526	M.5/7.9	R52		R404				E-IR-P022+			
02B 2 A 1 0 A,B1			M529	J12										
MS-LIS-31A	B080	288A		Y X	198001	R	N	121		09				24
VESSEL LEVEL FOR HPCS	H22-P004		R 526	J.5/7.1	R51		R404				E-IR-P004+			
02B 2 A 1 0 C			M529	H14										
MS-LIS-31B	B080	288A		Y X	198001	R	N	121		09				24
VESSEL LEVEL FOR HPCS	H22-P005		R 526	N.7/5.6	R53		R404				E-IR-P005+			
02B 2 A 1 0 C			M529	H4										
MS-LIS-31C	B080	288A		Y X	198001	R	N	121		09				24
VESSEL LEVEL FOR HPCS	H22-P004		R 526	J.5/7.1	R51		R404				E-IR-P004+			
02B 2 A 1 0 C			M529	H14										
MS-LIS-31D	B080	288A		Y X	198001	P	N	121		09				24
VESSEL LEVEL FOR HPCS H22-P005			R 526	N.7/5.8	R51		R404				E-IR-P005+			
02B 2 A 1 0 C			M529	H4										

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG / MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C / ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-LIS-36A MS LEVEL 02B22	2	P	2 0	G	Y010 4418C H22-P026	R	526	J.5/4.7	M529	J14	A X	198002	R52	W	N	14		00	33+				24	E-IR-P026+
MS-LIS-36B MS LEVEL 02B22	2	P	2 0	G	Y010 4418C H22-P027	R	526	M.8/6.6	M529	J14	A X	198002	R52		N	14		00	33+				24	E-IR-P027+
MS-LIS-36C MS LEVEL 02B22	2	P	2 0	G	Y010 4418C H22-P026	R	526	M.8/6.6	M529	H4	A X	198002	R53	F	N	14		00	33+				24	E-IR-P026+
MS-LIS-36D MS LEVEL 02B22	2	P	2 0	G	Y010 4418C H22-P027	R	527	M.8/6.6	M529	H4	Y X	198002	R53	F	N	14		00	33+				24	E-IR-P027+
MS-LIS-37A RPV LEVEL 1 & 2 TRIP 02B	2	A	1 0	A	B080 288A H22-P026	R	526	J.7/4.7	M529	J13	X X	198001	R52	R	N	121	R404		09				24	E-IR-P026+
MS-LIS-37B RPV LEVEL 1 & 2 TRIP 02B	2	A	1 0	A	B080 288A H22-P027	R	526	M.8/6.6	M529	H4	X X	198001	R53	R	N	121	R404		09				24	E-IR-P027+
MS-LIS-37C RPV LEVEL 1 & 2 TRIP 02B	2	A	1 0	A	B080 288A H22-P026	R	526	J.7/4.7	M529	J13	X X	198001	R52	R	N	121	R404		09				24	E-IR-P026+
MS-LIS-37D RPV LEVEL 1 & 2 TRIP 02B	2	A	1 0	A	B080 288A H22-P027	R	526	M.7/6.8	M529	H4	X X	198001	R53	R	N	121	R404		09				24	E-IR-P027+
MS-LIS-38A RPV LEVEL 3 TRIP 02B22	2	A	1 0	A	B080 288A H22-P026	R	524	J.9/4.5	M529	J12	X X	198001	R52	R	N	121	R404		09				24	E-IR-P026+
MS-LIS-38B RPV LEVEL 3 TRIP 02B	2	A	1 0	A	B080 288A H22-P027	R	526	M.7/6.8	M529	J5	X X	198001	R53	R	N	121	R404		09				24	E-IR-P027+
MS-LITS-26A RPV LEVEL 2 TRIP 02B22	2	A	1 0	A	B080 288A H22-P004	R	530	J.0/4.5	M529	H13	Y J	199001	R51	F	N	14	R404	00	33+	04153	10	S	4320	E-IR-P004+
MS-LITS-26B RPV LEVEL 2 TRIP 02B22	2	A	1 0	A	B080 760	R	526	J.7/4.8	M529	H4	Y X	199001	R53	F	N	14	R404	00	33+	04153	10	S	24	E-IR-P026+
MS-LITS-26C RPV LEVEL 2 TRIP 02B22	2	A	1 0	A	B080 760 H22-P005	R	526	N.7/5.7	M529	H4	A R	199001	R53		N	14	R404	00	33+	04153	10	S	24	E-IR-P005+

EPN	MFG	MODEL	STATUS S E	QID	TH	HL	TEST	ANL	FREQ	AGING	DBE	C	HOURS	DESCRIPTION		BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
MS-LITS-26D	B080	760	Y R	199001		N	14	00	33+	04153	10	S	4320	RPV LEVEL 2 TRIP	H22-P026	R	526	M.7/6.8	R53		E-IR-P027+	02B	2	A	1 0	A	M529	J13
MS-LITS-44A	B080	760	Y P	199001						04153	10	P	4320	MS LEVEL TRIP	H22-P010	R	475	M.7/4.7	R33		E-IR-P010+	02B22	2	A	1 0	I	M530	H14
MS-LITS-44B	B080	760	Y R	199001		N	14	00	33+	04153	10	S	4320	MS LEVEL TRIP	H22-P009	R	475	J.7/8.0	C34		E-IR-P009+	02B22	2	A	1 0	I	M530	G6
MS-LT-27	B040	555	Y X	209005	R	N				05153	10	G	4320	MS LEVEL	H22-P027	R	523	M.8/6.6	R53		E-IR-P027+	02H	2	P	2 0	G	M529	J4
MS-MO-16	L200	SMB-000-7.5	A X	221001	P	Y	114		33+				4320	MOTOR OPERATOR MS-V-16		C	504	0 D AZ R37	C45		MS-V-16+	41A	2	A	1 3	B1,F	M529	B13
MS-MO-19	L200	SMB-000-5	A X	221001	P	N	114		33+				4320	0.36HP 3.8A MOTOR OPERATOR MS-V-19		R	504	H.8/6.2	R42	R310	MS-V-19+	41A	2	A	1 3	B1,F	M529	B14
MS-MO-67A	L200	SMB-000-5	A X	221001	P		114		33+				24	.5 HP MOTOR OPERATOR FOR MS-V-67A		R	505	H.2/5.9	R42	R310	MS-V-67A+	215	2	A	1 3	B1,F	M529	F13
MS-MO-67B	L200	SMB-000-5	A X	221001	P		114		33+				24	.5 HP MOTOR OPERATOR FOR MS-V-67B		R	505	H.2/5.3	R42	R310	MS-V-67B+	215	2	A	1 3	B1,F	M529	D13
MS-MO-67C	L200	SMB-000-5	A X	221001	P		114		33+				24	.5 HP MOTOR OPERATOR FOR MS-V-67C		R	505	H.2/6.1	R41	R310	MS-V-67C+	215	2	A	1 3	B1,F	M529	F4
MS-MO-67D	L200	SMB-000-5	A X	221001	P		114		33+				24	.5 HP MOTOR OPERATOR FOR MS-V-67D		R	505	H.2/6.1	R41	R310	MS-V-67D+	215	2	A	1 3	B1,F	M529	D4
MS-POE-1A	T068	BBN-424-ISO	X X	246001						06153	11		4320	ACOUSTIC POS SENSOR RV 1A		C	547	24 D AZ	C55			C0442	2	A	1 3	I	M529	F11
MS-POE-1B	T068	BBN-424-ISO	X X	246001						06153	11		4320	ACOUSTIC POS SENSOR RV1B		C	547	45 D AZ	C55			C0442	2	A	1 3	I	M529	D11
MS-POE-1C	T068	BBN-424-ISO	X X	246001						06153	11		4320	ACOUSTIC POS SENSOR RV1C		C	547	313 D AZ	C54			C0442	2	A	1 3	I	M529	F6

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	MFG	USE	SAFETY FUNCTION	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	AGING	DBE	HOURS
MS-POE-1D ACOUSTIC POS SENSOR RV1D C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	333 D AZ	E7	X X	246001	C54	06153	11	4320
MS-POE-2A ACOUSTIC POS SENSOR RV2A C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	35	F10	X X	246001	C55	06153	11	4320
MS-POE-2B ACOUSTIC POS SENSOR RV2B C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	60 D AZ	D10	X X	246001	C55	06153	11	4320
MS-POE-2C ACOUSTIC POS SENSOR RV2C C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	305 D AZ	F7	X X	246001	C54	06153	11	4320
MS-POE-2D ACOUSTIC POS SENSOR RV2D C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	321 D AZ	E7	X X	246001	C54	06153	11	4320
MS-POE-3A ACOUSTIC POS SENSOR RV3A C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	45 D AZ	F9	X X	246001	C55	06153	11	4320
MS-POE-3B ACOUSTIC POS SENSOR RV3B C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	67 D AZ	D10	X X	246001	C55	06153	11	4320
MS-POE-3C ACOUSTIC POS SENSOR RV3C C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	293 D AZ	E8	X X	246001	C54	06153	11	4320
MS-POE-3D ACOUSTIC POS SENSOR RV3D C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	315 D AZ	E8	X X	246001	C54	06153	11	4320
MS-POE-4A ACOUSTIC POS SENSOR RV4A C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	60 D AZ	F9	X X	246001	C55	06153	11	4320
MS-POE-4B ACOUSTIC POS SENSOR RV4B C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	75 D AZ	D9	X X	246001	C55	06153	11	4320
MS-POE-4C ACOUSTIC POS SENSOR RV4C C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	288 D AZ	F8	X X	246001	C54	06153	11	4320
MS-POE-4D ACOUSTIC POS SENSOR RV4D C0442	2	A	T068	1 3	I	BBN-424-ISO	M529	C	547	305 D AZ	E8	X X	246001	C54	06153	11	4320

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG ELEV	STATUS S E / DETAIL / A/E ZONE	QID / ZONE	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ / ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING / COMPOSITE EPN	DBE	C	HOURS
MS-POE-5B					T068	BBN-424-ISO			X X	246001		06153	11		4320
ACOUSTIC POS SENSOR RV5B								C 547 80	D AZ	C55					
C0442	2	A	1 3	I			M529		E9						
MS-POE-5C					T068	BBN-424-ISO			X X	246001		06153	11		4320
ACOUSTIC POS SENSOR RV5C								C 547 279	D AZ	C54					
C0442	2	A	1 3	I			M529		F8						
MS-POS-V/22A/1					N007	EA740-86010			N P	200015		06153	11	P	4320
POS SW-1 FOR VLV MS-V-22A								C 513 5D	AZ R27			MS-V-22A+			
02B	2	A	1 3	A,I			M529		F12						
MS-POS-V/22A/2					N007	EA740-86010			N P	200015			14	P	4320
POS SW-2 FOR VLV MS-V-22A								C 513 5D	AZ R27			MS-V-22A+			
02B	2	A	1 3	A,I			M529		F12						
MS-POS-V/22A/3					N007	EA740-86010			N P	200015			14	P	4320
POS SW-3 FOR VLV MS-V-22A								C 513 5D	AZ R27			MS-V-22A+			
02B	2	A	1 3	A,I			M529		F12						
MS-POS-V/22A/4					N007	EA740-86010			N P	200015			14	S	4320
POS SW-4 FOR VLV MS-V-22A								C 513 5D	AZ R27			MS-V-22A+			
02B	2	A	1 3	A,I			M529		F12						
MS-POS-V/22B/1					N007	EA740-86010			B P	200015		06153	11	P	4320
POS SWITCH-1 FOR VLV MS-V-22B								C 513 315	D AZ R27			MS-V-22B+			
02B	2	A	1 3	A,I			M529		E12						
MS-POS-V/22B/2					N007	EA740-86010			B P	200015			14	P	4320
POS SWITCH-2 FOR VLV MS-V-22B								C 513 315	D AZ R27			MS-V-22B+			
02B	2	A	1 3	A,I			M529		E12						
MS-POS-V/22B/3					N007	EA740-86010			B P	200015			14	P	4320
POS SWITCH-3 FOR VLV MS-V-22B								C 513 315	D AZ R27			MS-V-22B+			
02B	2	A	1 3	A,I			M529		E12						
MS-POS-V/22B/4					N007	EA740-86010			B P	200015			14	S	4320
POS SWITCH-4 FOR VLV MS-V-22B								C 513 315	D AZ R27			MS-V-22B+			
02B	2	A	1 3	A,I			M529		E12						
MS-POS-V/22C/1					N007	EA740-86010			N P	200015		06153	11	P	4320
POS SWITCH-1 FOR VLV MS-V-22C								C 513 345	D AZ R27			MS-V-22C+			
02B	2	A	1 3	A,I			M529		F5						
MS-POS-V/22C/2					N007	EA740-86010			N P	200015			14	P	4320
POS SWITCH-2 FOR VLV MS-V-22C								C 513 345	D AZ R27			MS-V-22C+			
02B	2	A	1 3	A,I			M529		F5						
MS-POS-V/22C/3					N007	EA740-86010			N P	200015			14	P	4320
POS SWITCH-3 FOR VLV MS-V-22C								C 513 345	D AZ R27			MS-V-22C+			
02B	2	A	1 3	A,I			M529		F5						

EPN	MFG	MODEL	STATUS S E	QID	AGING	DBE	C	HOURS	DESCRIPTION	BLDG ELEV DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
MS-POS-V/22C/4	N007	EA740-86010	N P	200015		14	S	4320	POS SWITCH-4 FOR VLV MS-V-22C	C 513 345 D AZ R27	MS-V-22C+	02B	2	A	1 3	A,I	M529	F5
MS-POS-V/22D/1	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-1 FOR VLV MS-V-22D	C 513 355 D AZ R27	MS-V-22D+	02B	2	A	1 3	A,I	M529	E5
MS-POS-V/22D/2	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-2 FOR VLV MS-V-22D	C 513 355 D AZ R27	MS-V-22D+	02B	2	A	1 3	A,I	M529	E5
MS-POS-V/22D/3	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-3 FOR VLV MS-V-22D	C 513 355 D AZ R27	MS-V-22D+	02B	2	A	1 3	A,I	M529	E5
MS-POS-V/22D/4	N007	EA740-86010	B P	200015		14	S	4320	POS SWITCH-4 FOR VLV MS-V-22D	C 513 355 D AZ R27	MS-V-22D+	02B	2	A	1 3	A,I	M529	E5
MS-POS-V/28A/1	N007	EA740-86010	B P	200015	06153	11	P	4320	POS SWITCH-1 FOR VLV MS-V-28A	R 513 H.7/5.9	MS-V-28A+	02B	2	A	1 3	A,I	M529	F13
MS-POS-V/28A/2	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-2 FOR VLV MS-V-28A	R 513 H.7/5.9	MS-V-28A+	02B	2	A	1 3	A,I	M529	F13
MS-POS-V/28A/3	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-3 FOR VLV MS-V-28A	R 513 H.7/5.9	MS-V-28A+	02B	2	A	1 3	A,I	M529	F13
MS-POS-V/28B/1	N007	EA740-86010	B P	200015	06153	11	P	4320	POS SWITCH-1 FOR VLV MS-V-28B	R 513 H.7/5.8	MS-V-28B+	02B	2	A	1 3	A,I	M529	E13
MS-POS-V/28B/2	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-2 FOR VLV MS-V-28B	R 513 H.7/5.8	MS-V-28B+	02B	2	A	1 3	A,I	M529	E13
MS-POS-V/28B/3	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-3 FOR VLV MS-V-28B	R 513 H.7/5.8	MS-V-28B+	02B	2	A	1 3	A,I	M529	E13
MS-POS-V/28C/1	N007	EA740-86010	B P	200015	06153	11	P	4320	POS SWITCH-1 FOR VLV MS-V-28C	R 513 H.7/5.6	MS-V-28C+	02B	2	A	1 3	A,I	M529	F4
MS-POS-V/28C/2	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-2 FOR VLV MS-V-28C	R 513 H.7/5.6	MS-V-28C+	02B	2	A	1 3	A,I	M529	F4

EPN / DESCRIPTION / CONTRACT LEVEL EC USE SAFETY FUNCTION — MFG — MODEL — A/E — BLDG ELEV DRAWING — STATUS S E DETAIL A/E ZONE — QID ZONE — ***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ ROOM ACCURACY — *ENV. (E) PARAMETERS* AGING DBE C HOURS COMPOSITE EPN

EPN	MFG	MODEL	STATUS S E	QID	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	A/E ZONE
MS-POS-V/28C/3	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-3 FOR VLV MS-V-28C	R	513	H.7/5.6		MS-V-28C+	02B	2	A	1 3	A,I	M529	F4
MS-POS-V/28D/1	N007	EA740-86010	B P	200015	06153	11	P	4320	POS SWITCH-1 FOR VLV MS-V-28D	R	513	H.7/6.1		MS-V-28D+	02B	2	A	1 3	A,I	M529	E4
MS-POS-V/28D/2	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-2 FOR VLV MS-V-28D	R	513	H.7/6.1		MS-V-28D+	02B	2	A	1 3	A,I	M529	E4
MS-POS-V/28D/3	N007	EA740-86010	B P	200015		14	P	4320	POS SWITCH-3 FOR VLV MS-V-28D	R	513	H.7/6.1		MS-V-28D+	02B	2	A	1 3	A,I	M529	E4
MS-POT-1A	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 1A	C	547	24 D AZ	C55		C0442	3	A	1 3	I	E529	F11
MS-POT-1B	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 1B	C	547	45 D AZ	C55		C0442	3	A	1 3	I	E529	D11
MS-POT-1C	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 1C	C	547	313 D AZ	C54		C0442	3	A	1 3	I	M529	F6
MS-POT-1D	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 1D	C	547	333 D AZ	C54		C0442	3	A	1 3	I	M529	E7
MS-POT-2A	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 2A	C	547	35 D AZ	C55		C0442	3	A	1 3	I	M529	F10
MS-POT-2B	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 2B	C	547	60 D AZ	C55		C0442	3	A	1 3	I	M529	D10
MS-POT-2C	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 2C	C	547	305 D AZ	C54		C0442	3	A	1 3	I	M529	F7
MS-POT-2D	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 2D	C	547	321 D AZ	C54		C0442	3	A	1 3	I	M529	F7
MS-POT-3A	T068	504B	Z X	249002	06153	11		4320	PREAMP/ACOUSTIC POS SENSOR 3A	C	547	45 D AZ	C55		C0442	3	A	1 3	I	M529	F9

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                                                              STATUS          ***SEISMIC (S) PARAMETERS***     *ENV. (E) PARAMETERS*
           EPN                   MFG               MODEL        S E     QID    TH  HL TEST ANL FO C     FREQ     AGING  DBE  C   HOURS
                     DESCRIPTION                        BLDG ELEV.  DETAIL    ZONE   ROOM      ACCURACY                COMPOSITE EPN
CONTRACT     LEVEL   EC    USE   SAFETY FUNCTION   A/E DRAWING   A/E ZONE

MS-POT-3B                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 3B                       C  547 67 D AZ         C55
 C0442        3       A     1 3   I                M529          D10

MS-POT-3C                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 3C                       C  547 293 D AZ        C54
 C0442        3       A     1 3   I                M529          E8

MS-POT-3D                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 3D                       C  547 293 D AZ        C54
 C0442        3       A     1 3   I                M529          E8

MS-POT-4A                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 4A                       C  547 60 D AZ         C55
 C0442        3       A     1 3   I                M529          F9

MS-POT-4B                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 4B                       C  547 7 75 D AZ       C55
 C0442        3       A     1 3   I                M529          D9

MS-POT-4C                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 4C                       C  547 288 D AZ        C54
 C0442        3       A     1 3   I                M529          F8

MS-POT-4D                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 4D                       C  547 305 D AZ        C54
 C0442        3       A     1 3   I                M529          E8

MS-POT-5B                         T068     504B                     Z X  249002                                      06153  11        4320
 PREAMP/ACOUSTIC POS SENSOR 5B                       C  522                 C55
 C0442        3       A     1 3   I                M529

MS-POT-5C                         T068     504B                     Z X  249002                                      06153  13        4320
 PREAMP/ACOUSTIC POS SENSOR 5C                       C  547 279 D AZ        C54
 C0442        3       A     1 3   I                E529          F8

MS-PS-20A                         B069     B1T-M12SS                Y X  256002  R  N                                                   24
 MAIN STEAM ISO. VLV SCRAM INTERLOK                  R  524 J.5/7.2         R51                        E-IR-P004*
 02B22        2       A     1 0   A                M529          M12

MS-PS-20B                         B069     B1T-M12SS                Y X  256002  R  N                                                   24
 MS ISO VLV SCRAM INTLK                              R  526 J.8/4.7         R53   R404                 E-IR-P027*
 02B22        2       A     1 0   A                M529          J5

MS-PS-20C                         B069     B1T-M12SS                Y X  256002  R  N                                                   24
 MS ISO VLV SCRAM INTLK                              R  524 N.8/5.8         R53.  R404                 E-IR-P005*
 02B22        2       A     1 0   A                M529          H5

MS-PS-20D                         B069     B1T-M12SS                Y X  256002  R  N                                                   24
 MS ISO VLV SCRAM INTLK                              R  524 M.8/6.6         R52   R404                 E-IR-P026*
 02B22        2       A     1 0   A                M529          J12
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	ROOM	COMPOSITE EPN	HOURS
MS-PS-23A	HIGH VESSEL PRESSURE	02B22	2	A	1 0	A	B069	B1T-M12SS	M529	R	524	J.5/7.1	H13	Y X	256002	R51	R	N	R404	E-IR-P004+	24
MS-PS-23B	HIGH VESSEL PRESSURE	02B22	2	A	1 0	A	B069	B1T-M12SS	M529	R	524	J.8/4.7	J5	Y X	256002	R53	R	N	R404	E-IR-P026+	24
MS-PS-23C	HIGH VESSEL PRESSURE	02B22	2	A	1 0	A	B069 H22-P005	B1T-M12SS	M529	R	526	N.8/5.8	H5	Y X	256002	R53	R	N	R404	E-IR-P005+	24
MS-PS-23D	HIGH VESSEL PRESSURE	02B22	2	A	1 0	A	B069 H22-P026	B1T-M12SS	M529	R	524	J.9/4.5	J13	Y X	256002	R52	R	N	R404	E-IR-P026+	24
MS-PS-39A	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	Y X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39B	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39C	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39D	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39E	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M530	R	524	J.9/4.5	J15	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39F	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39G	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	524	J.9/4.5	J13	A X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39H	RELIEF VLV PRESS SWITCH	02B	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	526	J.9/4.5	J13	Y X	256002	R52	R	N	R404	E-IR-P026+	4320
MS-PS-39J	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	M529	R	526	J.9/4.5	J13	Y X	256002	R52	R	N	R404	E-IR-P026+	4320

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	TM	HL	ZONE	ROOM	TEST	ANL	FO	C	FREQ	ACCURACY	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-PS-39K	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	526	J.9/4.5	M529	U13	A X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39L	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	526	J.9/4.5	M529	J13	A X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39M	RELIEF VLV PRESSURE SWCH H22-P26	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	A X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39N	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39P	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39R	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39S	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39U	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-39V	RELIEF VLV PRESS SWITCH	02B22	2	P	2 0	C	B069	B1T-M12SS-GE	R	524	J.9/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-45A	MS PRESSURE H22-P026	02B22	2	P	2 0	G	B069	B1T-M12SS-GE	R	524	J.5/4.5	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-45B	MS PRESSURE H22-P026	02B22	2	P	2 0	G	B069	B1T-M12SS-GE	R	524	N.3/9.0	M529	J13	Y X	256002	R	N	R52	R404										4320	E-IR-P026+
MS-PS-45C	MS PRESSURE H22-P027	02B22	2	P	2 0	G	B069	B1T-M12SS-GE	R	524	M.7/6.8	M529	J5	Y X	256002	R	N	R53	R404										4320	E-IR-P027+
MS-PS-45D	MS PRESSURE H22-P027	02B22	2	P	2 0	G	B069	B1T-M12SS-GE	R	524	M.7/6.8	M529	J5	Y X	256002	R	N	R53	R404										24	E-IR-P027+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TH	ZONE	HL	TEST	ANL	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-PS-47A	DRYWELL	02B22	2	A	1 0	C	S382	12N-AA5-X10TT	M529	R	526	J.5/7.2	G12	Y X	256016	R	R51	N	114			33+				24	E-IR-P004+
MS-PS-47B	DRYWELL PRESS FOR HPCS H22-P005	02B22	2	A	1 0	C	S382	12N-AA5-X10TT	M529	R	524	N.8/5.8	G4	Y X	256016	R	R53	N	114		R404	33+				24	E-IR-P005+
MS-PS-47C	DRYWELL PRESSURE	02B22	2	A	1 0	C	S382	12N-AA5-X10TT	M529	R	524	J.5/7.2	G12	Y X	256016	R	R51	N	114			33+				24	E-IR-P004+
MS-PS-47D	DRYWELL PRESS FOR HPCS H22-P005	02B22	2	A	1 0	C	S382	12N-AA5-X0TT	M529	R	524	N.8/5.8	G4	Y X	256016	R	R53	N	114		R404	33+				24	E-IR-P005+
MS-PS-48A	DRYWELL PRESSURE H22-P026	02B22	2	A	1 0	C	S382	12N-AA5-X1051TT	M529	R	529	J.5/4.5	G12	A X	256016	R	R52	N	114		R404	33+				24	E-IR-P026+
MS-PS-48B	DRYWELL PRESSURE H22-P027	02B22	2	A	1 0	C	S382	12N-AA5-X1051TT	M529	R	526	M.7/6.8	G5	Y X	256016	R	R53	N	114		R404	33+				24	E-IR-P027+
MS-PS-48C	DRYWELL PRESSURE H22-P026	02B22	2	A	1 0	C	S382	12N-AA5-X1051TT	M529	R	529	J.5/4.5	G12	A X	256016	R	R52	N	114	00	R404	33+				24	E-IR-P026+
MS-PS-48D	DRYWELL PRESSURE H22-P027	02B22	2	A	1 0	C	S382	12N-AA5-X1051TT	M529	R	526	M.7/6.8	G5	A X	256016	R	R53	N	114		R404	33+				24	E-IR-P027+
MS-PT-2	PRESS TO REMOTE SHUTDOWN C61-N006	02C61	2	P	2 0	G	B040	556110EAAA1WEN	M529	R	522	H.3/4.1	J5	Z X	259001		W21						05033	01	B	4320	
MS-PT-5	RFW PRESSURE	02	2	P	2 0	G	B040	556	M529	R	522	J.5/7.2	J13	Y X	259001		R41								G	4320	E-IR-P004+
MS-PT-51A	MS PRESSURE - - H22-P026	02B	2	A	1 0	I	B040	556110EAAA1WEN	M529	R	523	K.0/4.5	H12	Y P	259001	F	R52	N	14	00	R404	33+	05153	10	P	4320	E-IR-P026+
MS-PT-51B	MS PRESSURE - - H22-P027	02B	2	A	1 0	I	B040	556110EAAA1WEN	M529	R	523	M.7/6.8	J4	Y P	259001		R53	N	14	00	R404	33+	05153	10	P	4320	E-IR-P027+
MS-PT-80B	H.P. TURB STM FOR RFW SYSTEM	02	2	P	2 0	G	B040	556	M529	R	522	J.5/7.2	H13	Y X	259001		R41								G	4320	E-IR-P004+

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	STATUS S E	QID	A/E ZONE	ZONE	TM	ROOM	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-RE-3A / MS LINE RAD ELEMENT A / 02D17	2	A	1 3	L	G080	237X731G001	R	508	H7/5.9	M502	R J	277002	D2	R42		R310	05153	10	B	.17	
MS-RE-3B / MS LINE RAD ELEMENT B / 02D17	2	A	1 3	L	G080	237X731G001	R	508	H7/5.6	M502	R J	277002	D2	R42		R310	05153	10	B	.17	
MS-RE-3C / MS LINE RAD ELEMENT / 02D17	2	A	1 3	L	G080	237X731G001	R	508	H7/6.4	M502	R D	277002	D1	R41		R310	05153	10	B	.17	
MS-RE-3D / MS LINE RAD ELEMENT D / 02D17	2	A	1 3	L	G080	237X731G001	R	508	H7/6.1	M502	R D	277002	D1	R41		R310	05153	10	B	.17	
MS-SPV-1AC / SPV FOR MS-RV-1A / 02B22	2	P	2 0	G	C710	IMF-2	C	543	25 D AZ R20	M529	R R	315021	K13	C55	Y			00	A	4320	MS-RV-1A+
MS-SPV-1BC / SPV FOR MS-RV-1B / 02	2	P	2 0	G	C710	IMF-2	C	543	30 D AZ R25	M529	R R	315021	F3	C55	Y			00	A	4320	MS-RV-1B+
MS-SPV-1CC / SPV FOR MS-RV-1C / 02B22	2	P	2 0	G	C710	IMF-2	C	543	315 D AZ R25	M529	R R	315021	K13	C54	Y			00	A	4320	MS-RV-1C+
MS-SPV-1DC / SPV FOR MS-RV-1D / 02B22	2	P	2 0	G	C710	IMF-2	C	543	335 D AZ R20	M529	R R	315021	K13	C54	Y			00	A	4320	MS-RV-1D+
MS-SPV-22A2 / MS-V-22A PILOT SOLENOID / 02B22	2	A	1 3	B1	A499	HTX832320V	C	515	5D AZ R27	M529	P P	315011	J3	C45	Y			10	P	.170	MS-V-22A+
MS-SPV-22A3 / MS-V-22A PILOT SOLENOID / 02B22	2	A	1 3	B1	A499	HTX8320A20	C	515	5 D AZ R27	M529	P P	315011	J3	C45	Y			10	P	.17	MS-V-22A+
MS-SPV-22B2 / MS-V-22B PILOT SOLENOID / 02B22	2	A	1 3	B1	A499	HTX832320V	C	515	15 D AZ R27	M529	P P	315011	J3	C45	Y			10	P	.17	MS-V-22B+
MS-SPV-22B3 / MS-V-22B PILOT SOLENOID / 02B22	2	A	1 3	B1	A499	HTX8320A20	C	515	15 D AZ R27	M529	P P	315011	J3	C45	Y			10	P	.17	MS-V-22B+
MS-SPV-22C2 / MS-V-22C PILOT SOLENOID / 02B22	2	A	1 3	B1	A499	HTX832320V	C	515	345 D AZ R27	M529	P P	315011	J3	C44	Y			10	P	.17	MS-V-22C+

EPN	MFG	MODEL	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ	*ENV. (E) PARAMETERS* AGING DBE C HOURS	DESCRIPTION	BLDG ELEV DETAIL ZONE ROOM ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
MS-SPV-22C3	A499	HTX8320A20	P P	315011	Y	10 P .17	MS-V-22C PILOT SOLENOID	C 515 345 D AZ R27 C44	MS-V-22C+	02B22	2	A	1 3	B1	M529	J3
MS-SPV-22D2	A499	HTX832320V	P P	315011	Y	10 P .17	MS-V-22D PILOT SOLENOID	C 515 355 D AZ R27 C44	MS-V-22D+	02B22	2	A	1 3	B1	M529	J3
MS-SPV-22D3	A499	HTX8320A20	P P	315011	Y	10 P .17	MS-V-22D PILOT SOLENOID	C 515 355 D AZ R27 C44	MS-V-22+	02B22	2	A	1 3	B1	M529	J3
MS-SPV-28A2	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28A PILOT SOLENOID	R 513 H3/5.9 R42	MS-V-28A+	02B22	2	A	1 3	B1	M529	F13
MS-SPV-28A3	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28A PILOT SOLENOID	R 513 H.3/5.7 R42	MS-V-28A+	02B22	2	A	1 3	B1	M529	F13
MS-SPV-28B2	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28B PILOT SOLENOID	R 513 H3/5.6 R42	MS-V-28B+	02B22	2	A	1 3	B1	M529	E13
MS-SPV-28B3	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28B PILOT SOLENOID	R 513 H.3/56 R42	MS-V-28B+	02B22	2	A	1 3	B1	M529	E13
MS-SPV-28C2	A499	HTX8320A20	P P	315011		00 P .17	MS-V-28C PILOT SOLENOID	R 513 H3/6.4 R41	MS-V-28C+	02B22	2	A	1 3	B1	M529	F04
MS-SPV-28C3	A499	HTX8320A20	P P	315011		10 P .17	MN STM ISO VLV 28C PILOT SOLENOID	R 513 H.3/6.4 R41	MS-V-28C+	02B22	2	A	1 3	B1	M529	F04
MS-SPV-28D2	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28D PILOT SOLENOID	R 513 H3/6.1 R41	MS-V-28D+	02B22	2	A	1 3	B1	M529	E04
MS-SPV-28D3	A499	HTX8320A20	P P	315011		10 P .17	MS-V-28D PILOT SOLENOID	R 513 H.3/6.1 R41	MS-V-28D+	02B22	2	A	1 3	B1	M529	E04
MS-SPV-2AC	C710	IMF-2	R R	315021	Y	00 A 4320	SPV FOR MS-RV-2A	C 543 30 D AZ R20 C55	MS-RV-2A+	02B22	2	P	2 0	G	M529	K13
MS-SPV-2BC	C710	IMF-2	R R	315021	Y	00 A 4320	SPV FOR MS-RV-2B	C 543 45 D AZ R25 C55	MS-RV-2B+	02B22	2	P	2 0	G	M529	K13

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                                                              STATUS          ***SEISMIC (S) PARAMETERS***     *ENV. (E) PARAMETERS*
            EPN              MFG              MODEL             S E    QID   TH  HL TEST ANL FO C    FREQ     AGING  DBE  C   HOURS
                  DESCRIPTION                           BLDG ELEV DETAIL     ZONE  ROOM     ACCURACY              COMPOSITE EPN
CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION     A/E DRAWING   A/E ZONE

MS-SPV-2CC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-2C                                     C  543 300 D AZ R25   C54                    MS-RV-2C+
 02B22          2      P    2 0   G                M529             K13

MS-SPV-2DC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-2D                                     C  543 320 D AZ R20   C54                    MS-RV-2D+
 02B22          2      P    2 0   G                M529             K13

MS-SPV-3AC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-3A                                     C  543 45 D AZ R20    C55                    MS-RV-3A+
 02B22          2      P    2 0   G                M529             K13

MS-SPV-3BC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-3B                                     C  543 67 D AZ R20    C55                    MS-RV-3B+
 02B22          2      P    2 0   G                M529             K13

MS-SPV-3CC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-3C                                     C  543 290 D AZ R20   C54                    MS-RV-3C+
 02B22          2      P    2 0   G                M529             K13

MS-SPV-3DA                  C710      IMF-2                    R P  315008     Y                                10    A    4320
 ADS PILOT FOR MS-RV-3D                               C  547 310 DEG AZ     C54                    MS-RV-3D+
 02B22          2      A    1 0   C,E              M529             K15

MS-SPV-3DB                  C710      IMF-2                    R P  315008     Y                                10    A    24
 SOLENOID PILOT FOR MS-RV-3D                          C  547 310 DEG AZ     C54                    MS-RV-3D+
 02B22          2      A    1 0   C                M529             K15

MS-SPV-3DC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-3D                                     C  543 310 D AZ R20   C54                    MS-RV-3D+
 02B22          2      P    2 0   G                M529             K15

MS-SPV-4AA                  C710      IMF-2                    R P  315008     Y                                10    A    4320
 ADS PILOT FOR MS-RV-4A                               C  547 62 DEG AZ      C55                    MS-RV-4A+
 02B22          2      A    1 0   C,E              M529             K15

MS-SPV-4AB                  C710      IMF-2                    R P  315008     Y                                10    A    4320
 ADS PILOT FOR MS-RV-4A                               C  547 62 DEG AZ      C55                    MS-RV-4A+
 02B22          2      A    1 0   C,E              M529             K15

MS-SPV-4AC                  C710      IMF-2                    R R  315021     Y                                00    A    4320
 SPV FOR MS-RV-4A                                     C  543 55 D AZ R20    C55                    MS-RV-4A+
 02B22          2      P    2 0   G                M529             K15.

MS-SPV-4BA                  C710      IMF-2                    R P  315008     Y                                10    A    4320
 ADS PILOT FOR MS-RV-4B                               C  547 75 DEG AZ      C55                    MS-RV-4B+
 02B22          2      A    1 0   C,E              M529             K15

MS-SPV-4BB                  C710      IMF-2                    R P  315008     Y                                10    A    4320
 ADS PILOT FOR MS-RV-4B                               C  547 75 DEG AZ      C55                    MS-RV-4B+
 02B22          2      A    1 0   C,E              M529             K15
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EPN	MFG	MODEL	STATUS S E	QID	TM HL	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
MS-SPV-4BC	C710	IMF-2	R R	315021	Y		00	A	4320	SPV FOR MS-RV-4B	C	543	80 D AZ R17	C55	MS-RV-4B+	02B22	2	P	2 0	G	M529	K15
MS-SPV-4CA	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-4C	C	547	285 DEG AZ	C54	MS-RV-4C+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-4CB	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-4C	C	547	285 DEG AZ	C54	MS-RV-4C+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-4CC	C710	IMF-2	R R	315021	Y		00	A	4320	SPV FOR MS-RV-4C	C	543	285 D AZ R25	C54	MS-RV-4C+	02B22	2	P	2 0	G	M529	K15
MS-SPV-4DA	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-4D	C	547	300 DEG AZ	C54	MS-RV-4D+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-4DB	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-4D	C	547	300 DEG AZ	C54	MS-RV-4D+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-4DC	C710	IMF-2	R R	315021	Y		00	A	4320	SPV FOR MS-RV-4D	C	543	300 D AZ R20	C54	MS-RV-4D+	02B22	2	P	2 0	G	M529	K15
MS-SPV-5BA	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-5B	C	547	80 DEG AZ	C55	MS-RV-5B+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-5BB	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-5B	C	547	80 DEG AZ	C55	MS-RV-5B+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-5BC	C710	IMF-2	R R	315021	Y		00	A	4320	SPV FOR MS-RV-5B	C	543	80 D AZ R20	C55	MS-RV-5B+	02B22	2	P	2 0	G	M529	K15
MS-SPV-5CA	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-5C	C	547	275 DEG AZ	C54	MS-RV-5C+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-5CB	C710	IMF-2	R P	315008	Y		10	A	4320	ADS PILOT FOR MS-RV-5C	C	547	275 DEG AZ	C54	MS-RV-5C+	02B22	2	A	1 0	C,E	M529	K15
MS-SPV-5CC	C710	IMF-2	R R	315021	Y		00	A	4320	SPV FOR MS-RV-5C	C	543	280 D AZ R25	C54	MS-RV-5C+	02B22	2	P	2 0	G	M529	K15

Other printed header columns without values on this page: ZONE, ROOM, TEST, ANL, FO C, ACCURACY, FREQ (***SEISMIC (S) PARAMETERS***, *ENV. (E) PARAMETERS*).

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG ELEV DETAIL	A/E ZONE	STATUS S E	QID	ZONE	TM HL ROOM	TEST ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS
MS-TE-4A	TE DWNSTRM OF MS-RV-2A	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 45 D AZ	F10	X X	339020	C45	Y	00	00	05153	10	E	4320
MS-TE-4B	TE DWNSTRM OF MS-RV-2B	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 51 D AZ	F10	X X	339020	C45	Y	00	00	05153	10	E	4320
MS-TE-4C	TE DWNSTRM OF MS-RV-2D	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 306 D AZ	D7	X X	339020	C44	Y	00	00	05153	10	E	4320
MS-TE-4D	TE DWNSTRM OF MS-RV-2C	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 300 D AZ	F6	X X	339020	C44	Y	00	00	05153	10	E	4320
MS-TE-4E	TE DWNSTRM OF MS-RV-1B	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 47 D AZ	D11	X X	339020	C47	Y	00	00	05153	10	E	4320
MS-TE-4F	TE DWNSTRM OF MS-RV-2B	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 60 D AZ	D11	X X	339020	C47	Y	00	00	05153	10	E	4320
MS-TE-4G	TE DWNSTRM OF MS-RV-3C	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 205 D AZ	F7	X X	339020	C46	Y	00	00	05153	10	E	4320
MS-TE-4H	TE DWNSTRM OF MS-RV-3B	02B22	2	P	2 0	G	P427	133D9679P001	M529	C 541 60 D AZ	D10	X X	339020	C47	Y	00	00	05153	10	E	4320
MS-TE-4J	TE DWNSTRM OF MS-RV-1A	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 29 D AZ	F11	X X	339020	C46	Y	00	00	05153	10	E	4320
MS-TE-4K	TE DWNSTRM OF MS-RV-1D	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 330 D AZ	D7	X X	339020	C44	Y	00	00	05153	10	E	4320
MS-TE-4L	TE DWNSTRM OF MS-RV-1C	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 312 D AZ	F6	X X	339020	C44	Y	00	00	05153	10	E	4320
MS-TE-4M	TE DWNSTRM OF MS-RV-4C	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 288 D AZ	F8	X X	339020	C46	Y	00	00	05153	10	E	4320
MS-TE-4N	TE DWNSTRM OF MS-RV-5C	02B	2	P	2 0	G	P427	133D9679P001	M529	C 541 193 D AZ	F8	X X	339020	C46	Y	00	00	05153	10	E	4320

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	ZONE	HL ROOM	TEST ANL	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MS-TE-4P TE DWNSTRM OF MS-RV-4D	02B	2	P	2 0	G	P427	133D9679P001	M529	C	541	303 D AZ	D8	X X	339020	C44	Y	00	00	05153	10	E	4320	
MS-TE-4R TE DWNSTRM OF MS-RV-4B	02B	2	P	2 0	G	P427	133D9679P001	M529	C	541	72 D AZ	D10	X X	339020	C47	Y	00	00	05153	10	E	4320	
MS-TE-4S TE DWNSTRM OF MS-RV-4A	02B	2	P	2 0	G	P427	133D9679P001	M529	C	541	57 D AZ	F9	X X	339020	C47	Y	00	00	05153	10	E	4320	
MS-TE-4U TE DWNSTRM OF MS-RV-5B	02B	2	P	2.0	G	P427	133D9679P001	M529	C	541	88 D AZ	D9	X X	339020	C45	Y	00	00	05153	10	E	4320	
MS-TE-4V TE DWNSTRM OF MS-RV-3D	02B	2	P	2 0	G	P427	133D9679P001	M529	C	541	310 D AZ	D8	X X	339020	C45	Y	00	00	05153	00	E	4320	
MSLC-FT-3A LOOP "A" TO MANIFOLD	215	2	A	1 0	F	R369	1153DB3	M557	R	477	H.4/5.7	C5	X R	156001	R32	R206			04153	00	E	4320	
MSLC-FT-3B LOOP "B" TO MANIFOLD	215	2	A	1 0	F	R369	1153DB3	M557	R	474	H.4/5.7	C5	X R	156001	R32	R206			04153	00	E	4320	
MSLC-FT-3C LOOP "C" TO MANIFOLD	215	2	A	1 0	F	R369	1153DB3	M557	R	477	H.4/5.8	E5	X R	156001	R32	R206			04153	00	E	4320	
MSLC-FT-3D LOOP "D" TO MANIFOLD	215	2	A	1 0	F	R369	1153DB3	M557	R	474	H.4/5.8	E5	X R	156001	R32	R206			04153	00	E	4320	
MSLC-H-A MAIN STM LEAKAGE CONTROL HTR A	215	2	A	1 0	F	C268	14HTV1-CT	M557	R	477	H.4/5.7	C8	Z R	164004	R32	R206			06153	00	E	24	MSLC-H-A+
MSLC-H-A+ MAIN STEAM LEAK CONTROL HT A COMP	215	1	A	1 0	F	C268	14HTV1-CT	M557	R	477	H.4/5.7	C8	Z R	164004					06153	04	E		
MSLC-H-B MAIN STM LEAKAGE CONTROL HTR B	215	2	A	1 0	F	C268	14HTV1-CT	M557	R	474	H.4/5.7	C7	Z R	164004	R32	R206			06153	00	E	24	MSLC-H-B+
MSLC-H-B+ MAIN STEAM LEAK CONTROL HT B COMP	215	1	A	1 0	F	C268	14HTV1-CT	M557	R	477	H.4/5.7	C7	Z R	164004					06153	04	E		

EPN	MFG	MODEL	STATUS S E	QID	TH	HL TEST	ANL FO C	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
HSLC-H-C	C268	14HTV1-CT	Z R	164004					06153	00	E	24	MAIN STM LEAKAGE CONTROL HTR C	R	477	H.4/5.8	R32	R206		HSLC-H-C+	215	2	A	1 0	F	M557	E8
HSLC-H-C+	C268	14HTV1-CT	Z R	164004					06153	04	E		MAIN STEAM LEAK CONTROL HT C COMP	R	477	H.4/5.8					215	1	A	1 0	F	M557	E8
HSLC-H-D	C268	14HTV1-CT	Z R	164004					06153	00	E	24	MAIN STM LEAKAGE CONTROL HTR D	R	474	H.4/5.8	R32	R206		HSLC-H-D+	215	2	A	1 0	F	M557	E7
HSLC-H-D+	C268	14HTV1-CT	Z R	164004					06153	04	E		MAIN STEAM LEAK CONTROL HT D COMP	R	477	H.4/5.8					215	1	A	1 0	F	M557	E7
HSLC-H-FN/1	W120	T8FC/213T	X X	213020								4320	1.5 HP MOTOR FOR HSLC-FN-1	R	473	H.4/6.3	R31	R206		HSLC-FN-1+	28	2	A	1 0	F	M557	E4
HSLC-H-FN/2	W120	T8FC/213T	X X	213020								4320	1.5HP MOTOR FOR HSLC-FN-2	R	512	H.6/7.3	R41	R305		HSLC-FN-2+	28	2	A	1 0	F	M557	H3
HSLC-MO-10	L200	SMB-000-5	D X	221001	P	114		33+				4320	1HP MOTOR OPERATOR HSLC-V-10	R	504	H.4/6.6	R42	R310		HSLC-V-10+	215	2	A	1 0	F	M557	H5
HSLC-MO-1A	L200	SMC-043D9319A	A R	221001						00	C	4320	1HP MOTOR OPERATOR HSLC-V-1A	R	482	H.4/5.6	R42	R310		HSLC-V-1A+	215	2	A	1 0	F	M557	C7
HSLC-MO-1B	L200	SMC-043D9319A	A R	221001	P	114		33+		00		4320	1HP MOTOR OPERATOR HSLC-V-1B	R	477	H.4/5.7	R42	R310		HSLC-V-1B+	215	2	A	1 0	F	M557	C6
HSLC-MO-1C	L200	SMC-04-3/42	A R	221001	P	114		33+		00	C	4320	1HP MOTOR OPERATOR HSLC-V-1C	R	482	H.4/5.7	R41	R310		HSLC-V-1C+	215	2	A	1 0	F	M557	D7
HSLC-MO-1D	L200	SMC-04-3/42	A R	221001	P	114		33+		00	C	4320	1HP MOTOR OPERATOR HSLC-V-1D	R	477	H.4/5.6	R41	R310		HSLC-V-1D+	215	2	A	1 0	F	M557	D6
HSLC-MO-2A	L200	SMB-000-5	A X	221001	P	114		33+				4320	1HP MOTOR OPERATOR HSLC-V-2A	R	505	H.7/5.7	R42	R310		HSLC-V-2A+	215	2	A	1 0	F	M557	C8
HSLC-MO-2B	L200	SMB-000-5	A X	221001	P	114		33+				4320	1HP MOTOR OPERATOR HSLC-V-2B	R	505	H.4/5.3	R42	R310		HSLC-V-2B+	215	2	A	1 0	F	M557	C8

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TH	ZONE	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	COMPOSITE EPN	AGING	DBE	C	HOURS
MSLC-MO-2C	1HP MOTOR OPERATOR MSLC-V-2C	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.7/6.4	E8	A X	221001	P	R41		114	R310		33+	MSLC-V-2C+				4320
MSLC-MO-2D	1HP MOTOR OPERATOR MSLC-V-2D	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.5/6.1	E8	A X	221001	P	R41		114	R310		33+	MSLC-V-2D+		10	C	4320
MSLC-MO-3A	1HP MOTOR OPERATOR MSLC-V-3A	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.3/5.9	C9	A X	221001	P	R42		114	R310		33+	MSLC-V-3A+				4320
MSLC-MO-3B	1HP MOTOR OPERATOR MSLC-V-3B	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.3/5.3	C8	A X	221001	P	R42		114	R310		33+	MSLC-V-3B+				4320
MSLC-MO-3C	1HP MOTOR OPERATOR MSLC-V-3C	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.7/6.4	E9	A X	221001	P	R41		114	R310		33+	MSLC-V-3C+				4320
MSLC-MO-3D	1HP MOTOR OPERATOR MSLC-V-3D	215	2	A	1 0	F	L200	SMB-000-5	M557	R	505	H.3/6.1	E8	A X	221001	P	R41		114	R310		33+	MSLC-V-3D+				4320
MSLC-MO-4	1.0HP MOTOR OPERATOR MSLC-V-4	215	2	A	1 0	F	L200	SMB-000-5	M557	R	504	H.3/6.4	J5	D X	221001	P	R42		114	R310		33+	MSLC-V-4+				4320
MSLC-MO-5	1.0HP MOTOR OPERATOR MSLC-V-5	215	2	A	1 0	F	L200	SMB-000-5	M557	R	504	H.3/6.3	J5	D X	221001	P	R42		114	R310		33+	MSLC-V-5+				4320
MSLC-MO-9	1 HP MOTOR OPERATOR MSLC-V-9	215	2	A	1 0	F	L200	SMB-000-5	M557	R	517	H.3/6.2	H5	D X	221001	P	R42		114	R310		33+	MSLC-V-9+				4320
MSLC-PS-20	REACTOR PRESS INTRLK	58	3	A	1 0	F	B080	288A	M557	R	522	H.4/7.1	K8	X X	256007	R	R51	N	121	R404		09	E-IR-74+				4320
MSLC-PS-24	HEADER PRESS	58	3	A	1 0	F	8080	288A	M557	R	522	H.4/7.1	J8	X X	256007	R	R51	N	121	R404		09	E-IR-74+				4320
MSLC-PS-25	HEADER PRESS	58	3	A	1 0	F	B080	288A	M557	R	522	H.4/7.1	J8	X X	256007	R	R51	N	121	R404		09	E-IR-74+				4320
MSLC-PS-60	HEADER PRESS	58	3	A	1 0	F	B080	288A	M557	R	522	H.4/7.1	J8	X X	256007	R	R51	N	121	R404		09	E-IR-74+				4320

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	TM	ZONE	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	COMPOSITE EPN	HOURS
HSLC-PS-70A LOOP "A" PRESS	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	68	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-70B LOOP "B" PRESS	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	F8	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-70C LOOP "C" PRESS	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	F8	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-70D LOOP "D" PRESS	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	F8	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-7A LOOP "A"	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	G10	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-7B LOOP "B"	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	F9	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-7C LOOP "C"	58	3	A	1 0	F	B080	288A	M557	R	528	H.4/4.2	X X	F10	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-7D LOOP "D"	58	3	A	1 0	F	B080	288A	M557	R	528	H.4/4.2	X X	F10	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-8A REACTOR PRESS INTRLK	58	3	A	1 0	F	B080	288A	M557	R	528	H.4/4.2	X X	G11	256007	P	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-8B REACTOR PRESS INTRLK	58	3	A	1 0	F	B080	288A	M557	R	525	H.4/4.2	X X	G11	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-8C REACTOR PRESS INTRLK	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	G11	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PS-8D REACTOR PRESS INTRLK	58	3	A	1 0	F	B080	288A	M557	R	526	H.4/4.2	X X	F11	256007	R	R52	N	121	R404		09				E-IR-73+	4320
HSLC-PT-10A 0-8PSIG LEAK PRESS XMITER CHL A	220	2	A	1 0	I	R369	1153-GB5	M557	R	528	H.3/3.7	X R	C8	156001								05253	13	E		4320

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	A/E ZONE	STATUS S E	DETAIL	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MSLC-PT-10B	0-8PSIG LEAK PRESS XMITER CHL B	220	2	A	1 0	I	R369	1153-GB5	M557	R	528	F8	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-10C	0-8 PSIG LEAK PRESS XMITER CHL C	220	2	A	1 0	I	R369	1153-GB5	M557	R	528	F8	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-10D	0-8 PSIG LEAK PRESS XMITER CHL D	220	2	A	1 0	I	R369	1153-GB5	M557	R	528	E8	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-11	OTBD. ISO VLV HDR PRESS 0-2 PSIG	220	2	A	1 0	I	R369	1153-GB4	M557	R	529	J7	X X	H.3/6.7	156001	R42							05253	13	E	4320	
MSLC-PT-12A	0-50 PSIG LEAK PRESS XMITER CHL A	220	2	A	1 0	I	R369	1153-GB6	M557	R	526	G7	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-12B	0-50 PSIG LEAK PRESS XMITER CHL B	220	2	A	1 0	I	R369	1153-GB6	M557	R	526	F7	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-12C	0-50 PSIG LEAK PRESS XMITER CHL C	220	2	A	1 0	I	R369	1153-GB6	M557	R	526	F7	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-12D	0-50 PSIG LEAK PRESS XMITER CHL D	220	2	A	1 0	I	R369	1153-GB6	M557	R	526	E7	X R	H.3/3.7	156001								05253	13	E	4320	
MSLC-PT-13	OTBD. ISO VLV HDR PRESS 0-50 PSIG	220	2	A	1 0	I	R369	1153-GB6	M557	R	529	J7	X X	H.3/6.7	156001	R42							05253	13	E	4320	
MSLC-PT-23	HEADER PRESS	59	3	P	2 0	G	R369	1151GP9A22MBGE3	M557	R	524	J8	X X	H.4/7.1	259003	R51	R	N	114			50				4320	E-IR-74*
MSLC-PT-6A	MS LINE A PRESS	59	3	P	2 0	G	R369	1151GP9A22MBGE3	M557	R	524	G10	X X	H.4/4.2	259003	R52	R	N	114	R404		50				4320	E-IR-73*
MSLC-PT-6B	MS LINE B PRESS	59	3	P	2 0	G	R369	1151GP9A22MBGE3	M557	R	524	G10	X X	H.4/4.2	259003	R52	R	N	114	R404		50				4320	E-IR-73*
MSLC-PT-6C	MS LINE C PRESS	59	3	P	2 0	G	R369	1151GP9A22MBGE3	M557	R	525	F10	X X	H.4/4.2	259003	R52	R	N	114	R404		50				4320	E-IR-73*

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	ZONE	TM	HL	TEST	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MSLC-PT-6D	MS LINE D PRESS	59	3	P	2 0	G	P369	1151GP9A22MB6E3	M557	R	525	H.4/4.2	X X	F10	259003	R52	R	N	114	R404	50				4320	E-IR-73+
MSLC-RLY-CR/1	DIV 2, MS-MSLC CONTROL INTRLK	58	3	A	1 0	F	A500	RXMH2	E519/31	R	526	H.4/7.1	X X	J9	283015	R51	R	N	021			06153	10	Z	24	E-IR-74+
MSLC-RLY-CR/10	MSIV CLOSURE INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	X X	E1	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/11	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	X X	E1	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/12	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	X X	E1	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/13	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	X X	D1	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/1A	DIV 1, MS-MSLC CONTROL INTRLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	528	H.4/4.2	X X	K13	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/1B	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	528	H.4/4.2	X X	J13	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/1C	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	A X	F13	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/1D	MS-MSLC CONTROL INTERLK	58	3	A	1 0	F	A500	RXMH2	E519/30	R	527	H.4/4.2	X X	E13	283015	R52	R	N	021			06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/3	DIV 2, ATMOS PRESS CNTRL INTRLK	58	3	A	1 0	F	A500	RXMH2	E519/31	R	526	H.4/7.1	X X	J9	283015	R51	R	N	021			06153	10	Z	4320	E-IR-74+
MSLC-RLY-CR/4	DIV 2, CONTROL SV INTRLK	218	3	A	1 0	F	A500	RXMH2	E519/31	R	522	H.4/7.1	X X		283015	R51	R	N	021			06153	10	Z	4320	E-IR-74+
MSLC-RLY-CR/5	DIV 2, ATMOS PRESS CONTROL INTRLY	218	3	A	1 0	F	S440	219XDXP	E519/31	R	522	H.4/7.1	X X		283041	R51	R	N	149		17+	06153	10	Z	4320	E-IR-74+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	STATUS S E	DETAIL	A/E ZONE	QID	ZONE	TM	HL	TEST	ROOM	ANL	FO	C	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
MSLC-RLY-CR/5A1	MSL PRESSURE INTERLK	58	3	A	1 0	F	A500	RXMH2	R	528	E519/30	X X	H.4/4.2	H13	283015	R52	R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/5A2	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	527	E519/30	X X	H.4/4.2	H13	283011	R52	R	N	021							06153	00		4320	E-IR-73+
MSLC-RLY-CR/5B1	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	527	E519/30	X X	H.4/4.2	G13	283011	R52	R	N	021						02	06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/5B2	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	527	E519/30	X X	H.4/4.2	G13	283011	R52	R	N	021							06153	00		24	E-IR-73+
MSLC-RLY-CR/5C1	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMH2	R	527	E519/30	X X	H.4/4.2	D13	283015	R52	R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/5C2	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	528	E519/30	X X	H.4/4.2	D13	283011		R	N	021							06153	00		4320	E-IR-73+
MSLC-RLY-CR/5D1	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMH2	R	527	E519/30	X X	H.4/4.2	C13	283015		R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/5D2	MSL PRESSURE INTERLK (60 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	528	E519/30	X X	H.4/4.2	C13	283011		R	N	021							06153	00		4320	E-IR-73+
MSLC-RLY-CR/6A1	MSL PRESSURE INTERLK (150 SEC TD)	58	3	A	1 0	F	A500	RXMH2	R	528	E519/30	X X	H.4/4.2	G13	283015	R52	R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/6A2	MSL PRESSURE INTERLK (150 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	528	E519/30	X X	H.4/4.2	G13	283011	R52	R	N	021							06153	00		4320	E-IR-73+
MSLC-RLY-CR/6B1	MSL PRESSURE INTERLK (150 SEC TD)	58	3	A	1 0	F	A500	RXMH2	R	528	E519/30	X X	H.4/4.2	F13	283015	R52	R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/6B2	MSL PRESSURE INTERLK (150 SEC TD)	58	3	A	1 0	F	A500	RXMK1	R	528	E519/30	A X	H.4/4.2	F13	283011	R52	R	N	021							06153	00	Z	4320	E-IR-73+
MSLC-RLY-CR/6C1	MSL PRESSURE INTERLK (150 SEC TD)	58	3	A	1 0	F	A500	RXMH2	R	527	E519/30	X X	H.4/4.2	C13	283015		R	N	021							06153	00	Z	4320	E-IR-73+

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
MSLC-RLY-CR/6C2	A500	RXMK1	X X	283011	R	N	021	06153	00		4320	MSL PRESSURE INTERLK (150 SEC TD)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	C13
MSLC-RLY-CR/6D1	A500	RXMH2	X X	283015	R	N	021	06153	00	Z	4320	MSL PRESSURE INTERLK (150 SEC TD)	R	527	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	B13
MSLC-RLY-CR/6D2	A500	RXMK1	X X	283011	R	N	021	06153	00		4320	MSL PRESSURE INTERLK (150 SEC TD)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	B13
MSLC-RLY-CR/8	A500	RXMH2	X X	283015	R	N	021	06153	00	Z	4320	CONTROL SWITCH INTERLK	R	528	H.4/4.2	R52	E-IR-73+	58	3	A	1 0	F	E519/30	K13
MSLC-RLY-CR/9	A500	RXMH2	X X	283015	R	N	021	06153	00	Z	4320	CONTROL SWITCH INTERLK	R	528	H.4/4.2	R52	E-IR-73+	58	3	A	1 0	F	E519/30	F13
MSLC-TD-TK/2	A109	7012AE	X X	283013				05253	11		4320	DIV 2, TIME DELAY PKUP RLY(60 SEC)	R	526	H.4/7.1		E-IR-74+	58	3	A	1 0	F	E519/31	J9
MSLC-TD-TK/2A	A109	7012AE	X X	283013				05253	01		4320	DIV 1, TIME DELAY PKUP (60 SEC)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	J13
MSLC-TD-TK/2B	A109	7012AE	X X	283013				05253	01		4320	DIV 1, TIME DELAY PKUP (60 SEC)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	J13
MSLC-TD-TK/2C	A109	7012AE	X X	283013				05253	01		4320	DIV 1, TIME DELAY PKUP (60 SEC)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	E13
MSLC-TD-TK/2D	A109	7012AE	X X	283013				05253	01		4320	DIV 1, TIME DELAY PKUP (60 SEC)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	E13
MSLC-TD-TK/3A	A109	7012AE	X X	283013				05253	01		4320	DIV. 1, TIME DELAY PICKUP(60 SEC)	R	528	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	J13
MSLC-TD-TK/3B	A109	7012AE	X X	283013				05253	01		4320	DIV. 1, TIME DELAY PICKUP(60 SEC)	R	527	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	H13
MSLC-TD-TK/3C	A109	7012AE	X X	283013				25253	01		4320	DIV 1 TIME DELAY PICKUP	R	548	H.4/4.2		E-IR-73+	58	3	A	1 0	F	E519/30	E13

Column headings also printed but with no entries on this page: ANL, FO C, FREQ, ROOM, ACCURACY; group headings: ***SEISMIC (S) PARAMETERS***, *ENV. (E) PARAMETERS*.

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                                                                STATUS         ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
          EPN                 MFG                MODEL            S E   OID    TM  HL TEST ANL FO C   FREQ     AGING  DBE  C   HOURS
                    DESCRIPTION                         BLDG ELEV  DETAIL   ZONE   ROOM     ACCURACY                COMPOSITE EPN
CONTRACT  LEVEL  EC  USE   SAFETY FUNCTION   A/E DRAWING  A/E ZONE

MSLC-TD-TK/3D               A109    7012AE                          X X  283013                                    05253   01       4320
 DIV. 1, TIME DELAY PICKUP(120 SEC)                      R  528 H.4/4.2                                        E-IR-73+
 58            3     A    1 0   F                E519/30            D13

MSLC-TD-TK/4A               A109    7012AE                          X X  283013                                    05253   01       4320
 DIV. 1, TIME DELAY PICKUP(150 SEC)                      R  528 H.4/4.2                                        E-IR-73+
 58            3     A    1 0   F                E519/30            J13

MSLC-TD-TK/4B               A109    7012AE                          X X  283013                                    05253   01       4320
 DIV. 1, TIME DELAY PICKUP(150 SEC)                      R  528 H.4/4.2                                        E-IR-73+
 58            3     A    1 0   F                E519/30            H13

MSLC-TD-TK/4C               A109    7012AE                          X X  283013                                    05253   01       4320
 DIV. 1, TIME DELAY PICKUP(150 SEC)                      R  528 H.4/4.2                                        E-IR-73+
 58            3     A    1 0   F                E519/30            E13

MSLC-TD-TK/4D               A109    7012AE                          X X  283013                                    05253   01       4320
 DIV. 1, TIME DELAY PICKUP(150 SEC)                      R  528 H.4/4.2                                        E-IR-73+
 58            3     A    1 0   F                E519/30            D13

MSLC-TE-10A                 H329    TC-2370-C-A-250-TT              X R  339003                                    04293   00   E   24
 LOOP "A" TO MANIFOLD                                    R  477 H.4/5.7         R32   R206                     MSLC-H-A+
 215           3     A    1 0   F                M557               C8

MSLC-TE-10B                 H329    TC-2370-C-A-250-TT              X R  339003                                    04293   00   E   24
 LOOP "B" TO MANIFOLD                                    R  474 H.4/5.7         R32   R206                     MSLC-H-B+
 215           3     A    1 0   F                M557               C7

MSLC-TE-10C                 H329    TC-2370-C-A-250-TT              X R  339003                                    04293   00   E   24
 LOOP "C" TO MANIFOLD                                    R  477 H.4/5.8         R32   R206                     MSLC-H-C+
 215           3     A    1 0   F                M557               E8

MSLC-TE-10D                 H329    TC-2370-C-A-250-TT              X R  339003                                    04293   00   E   24
 LOOP "D" TO MANIFOLD                                    R  474 H.4/5.8         R32   R206                     MSLC-H-D+
 215           3     A    1 0   F                M557               E7

MSLC-TS-12A                 A499    SC11AR/QL11A4R                  Z X  355020                                    06153   02   E   4320
 HEAT TRACE LOW TEMP ALARM LINE A                        R  471 H.3/5.9         R32
 218           3     P    2 0   G                M557               B8

MSLC-TS-12B                 A499    SC11AR/QL11A4R                  Z X  355020                                    06153   02   E   4320
 HEAT TRACE LOW TEMP ALARM LINE B                        R  471 H.3/5.9         R32
 218           3     P    2 0   G                M557               C7

MSLC-TS-12C                 A499    SC11AR/QL11A4R                  Z X  355020                                    06153   02   E   4320
 HEAT TRACE LOW TEMP ALARM LINE C                        R  471 H.3/5.9         R32
 218           3     P    2 0   G                M557               D8

MSLC-TS-12D                 A499    SC11AR/QL11A4R                  Z X  355020                                    06153   02   E   4320
 HEAT TRACE LOW TEMP ALARM LINE D                        R  471 H.3/5.9         R32
 218           3     P    2 0   G                M557               E7
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EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	***SEISMIC (S) PARAMETERS*** TM HL TEST ANL FO C FREQ ZONE ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS	COMPOSITE EPN
PI-V-X250 1" SO GATE RAD-RE-12A 220	2	A	1 0	B1	T020	79TT-001	R	537	H.8/6.3	M543	F13	X	X	324002		05313	11	E	4320	
PI-V-X251 1" SO GATE RAD-RE-12A 220	2	A	1 0	B1	T020	79TT-001	R	537	H.8/6.3	M543	F13	X	X	324002		05313	11	E	4320	
PI-V-X253 1" SO GATE RAD-RE-12A 220	2	A	1 0	B1	T020	79TT-001	R	536	J.0/4.1	M543	F13	X	X	324002		05313	11	E	4320	
PI-V-X256 1" SO GATE RAD-RE-12B 220	2	A	1 0	B1	T020	79TT-001	R	536	J.5/4.8	M543	F7	X	X	324002		05313	11	E	4320	
PI-V-X257 1" SO GATE RAD-RE-12B 220	2	A	1 0	B1	T020	79TT-001	R	536	J.5/4.8	M543	F7	X	X	324002		05313	11	E	4320	
PI-V-X259 1" SO GATE RAD-RE-12B 220	2	A	1 0	B1	T020	79TT-001	R	536	K.0/15.1	M543	F7	X	X	324002		05313	11	E	4320	
PI-V-X262 1" SO GATE CHS-SR-13 INLET#1 X72C 220	2	A	1 0	B1	T020	79TT-001	R	522	H.8/6.3	M543	E13	X	X	324002		05313	11	E	4320	
PI-V-X263 1" SO GATE CHS-SR-13 INLET#2 X72D 220	2	A	1 0	B1	T020	79TT-001	R	522	H.8/6.3	M543	E13	X	X	324002		05313	11	E	4320	
PI-V-X264 1" SO GATE CHS-SR-13 INLET#3 X72F 220	2	A	1 0	B1	T020	79TT-001	R	522	H.8/6.3	M543	E13	X	X	324002		05313	11	E	4320	
PI-V-X265 1" SO GATE CHS-SR-13 INLET#4 X82C 220	2	A	1 0	B1	T020	79TT-001	R	479	J.0/4.7	M543	D14	X	X	324002		05313	11	E	4320	
PI-V-X266 1" SO GATE CHS-SR-14 INLET#1 X85D 220	2	A	1 0	B1	T020	79TT-001	R	522	H.8/6.3	M543	E7	X	X	324002		05313	11	E	4320	
PI-V-X267 1" SO GATE CHS-SR-14 INLET#2 X85E 220	2	A	1 0	B1	T020	79TT-001	R	522	H.8/6.3	M543	E7	X	X	324002		05313	11	E	4320	
PI-V-X268 1" SO GLOBE CHS-SR-14 INLET#3 X73D 220	2	A	1 0	B1	T020	79TT-001	R	522	J.5/4.5	M543	E7	X	X	324002		05313	11	E	4320	

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	AGING	DBE	C	HOURS
PI-V-X269 1" SO GLOBE CMS-SR-14 INLET#4 X73C 220	2	A	1 0	B1	T020	79TT-001	R	471	H.9/4.8	M543	D6	A X	324002	05313	11	E	4320
PSR-V-003/A 3/8" SOL VLV RHR LOOP A SYS BNDRY 220	2	A	1 0	B1	T020	82M-001	R	432	K.9/8.7	M896	E12	X	361015	06153	14	E	4320
PSR-V-003/B 3/8" SOL VLV RHR LOOP B SYS BNDRY 220	2	A	1 0	B1	T020	82M-001	R	431	L.1/8.8	M896	E12	X	361015	06153	14	E	4320
PSR-V-X73/1 CONT ISO SOL VLV PENETRATION X73F 220	2	A	1 0	B1	V030	526-5940	C	522		M896	J13	X X	361014	06153	04	E	4320
PSR-V-X73/2 CONT ISO SOL VLV PENETRATION X73F 220	2	A	1 0	B1	V030	526-5940	R	534	H.5/4.8	M896	J12	X X	361014	06153	14	E	4320
PSR-V-X77A/1 CONT ISO SOL VLV PENETRATION X77AC 220	2	A	1 0	B1	T020	82M-001	C	501		M896	E13	X D	361015	06153	04	E	4320
PSR-V-X77A/2 CONT ISO SOL VLV PENETRATION X77AC 220	2	A	1 0	B1	T020	82M-001	R	503	J.6/8.0	M896	E12	X X	361015	06153	14	E	4320
PSR-V-X77A/3 CONT ISO SOL VLV PENETRATION X77AD 220	2	A	1 0	B1	T020	82M-001	C	501		M896	F13	X D	361015	06153	04	E	4320
PSR-V-X77A/4 CONT ISO SOL VLV PENETRATION X77AD	2	A	1 0	B1	T020	82M-001	R	503	J.6/7.4	M896	F12	X X	361015	06153	14	E	4320
PSR-V-X80/1 CONT ISO SOL VLV PENETRATION X80E 220	2	A	1 0	B1	V030	526-5940	C	522		M896	K13	X X	361014	06153	04	E	4320
PSR-V-X80/2 CONT ISO SOL VLV PENETRATION X80F 220	2	A	1 0	B1	V030	526-5940	R	534	M.2/7.4	M896	K12	X X	361014	06153	14	E	4320
PSR-V-X82/1 CONT ISO SOL VLV PENETRATION X82F 220	2	A	1 0	B1	V030	526-5295	R	476	M.7/7.7	M896	E13	X X	361014	06153	04	E	4320
PSR-V-X82/2 CONT ISO SOL VLV PENETRATION X82F 220	2	A	1 0	B1	V030	526-5295	R	476	M.7/7.7	M896	D11	X X	361014	06153	05	E	4320

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                 EPN            MFG                  MODEL                  STATUS        ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
                    DESCRIPTION                                 BLDG ELEV   S E  QID    TM  HL TEST ANL FO C    FREQ    AGING  DBE  C   HOURS
CONTRACT   LEVEL  EC   USE   SAFETY FUNCTION     A/E DRAWING   DETAIL       ZONE       ROOM       ACCURACY               COMPOSITE EPN
                                                               A/E ZONE

PSR-V-X82/7                   V030    526-5940                  A X  361014                                      06153   04  E   4320
 CONT ISO SOL VLV PENETRATION X82F                     R  476 M.4/7.7
 220           2     A     1 0   B1              M896          F13

PSR-V-X82/8                   V030    526-5940                  X X  361014                                      06153   14  E   4320
 CONT ISO SOL VLV PENETRATION X82F                     R  476 M.6/7.7
 220           2     A     1 0   B1              M896          F12

PSR-V-X83/1                   V030    526-5940                  X X  361014                                      06153   04  E   4320
 CONT ISO SOL VLV PENETRATION X83A                     R  476 M.4/7.7
 220           2     A     1 0   B1              M896          J13

PSR-V-X83/2                   V030    526-5940                  X X  361014                                      06153   15  E   4320
 CONT ISO SOL VLV PENETRATION X83A                     R  476 M.6/7.7
 220           2     A     1 0   B1              M896          J11

PSR-V-X84/1                   V030    526-5940                  X X  361014                                      06153   04  E   4320
 CONT ISO SOL VLV PENETRATION X84F                     R  477 J.0/4.9
 220           2     A     1 0   B1              M896          H12

PSR-V-X84/2                   V030    526-5940                  X X  361014                                      06153   14  E   4320
 CONT ISO SOL VLV PENETRATION X84F                     R  477 J.0/4.9
 220           2     A     1 0   B1              M896          H11

PSR-V-X88/1                   V030    526-5295                  A X  361014                                      06153   04  E   4320
 CONT ISO SOL VLV PENETRATION X88                      R  455 N.2/6.1
 220           2     A     1 0   B1              M896          D13

PSR-V-X88/2                   V030    526-5295                  A X  361014                                      06153   14  E   4320
 CONT DSO VLO PENETRATION X88                          R  455 N.2/6.2
 220           2     A     1 0   B1              M896          D11

RCC-DPIS-10A                  B080    288A                      X X  086001                                      05253   04  E   4320
 RCC TO FUEL POOL HX1A                                 R  522 J.0/6.7          R51                            E-IR-71+
 220           2     P     2 0   G               M525          G5

RCC-DPIS-10B                  B080    288A                      X X  086001                                      05253   04  E   4320
 RCC TO FUEL POOL HX1B                                 R  522 N.0/8.1          R53                            E-IR-69+
 220           2     P     2 0   G               M525          F6

RCC-MO-104                    L200    SMB-0                     A X  221001  P  Y  114               33+                10       4320
 MOTOR OPERATOR FOR RCC-V-104                          R  517 K.0/4.3                                         RCC-V-104+
 215           2     A     1 0   B1              M525          E11

RCC-MO-129                    L200    SMB-00                    C X  221001  P     114               33+                10       4320
 MOTOR OPERATOR FOR RCC-V-129                          R  560 K.5/8.9                                         RCC-V-129+
 41A           2     A     1 0   B2              M525          E5

RCC-MO-130                    L200    SMB                       A X  221001  P     114               33+                10  C    4320
 MOTOR OPERATOR FOR RCC-V-130                          R  559 K.6/9.3                                         RCC-V-130+
 41A           2     A     1 0   B2              M525          F6
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EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL / A/E DRAWING	BLDG	ELEV	STATUS S E	DETAIL	A/E ZONE	QID	ZONE	TM	HL	TEST / ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
RCC-MO-131 MOTOR OPERATOR FOR RCC-V-131 41A	2	A	1 0	B2	L200	SMB M525	R	559	A X	K.5/9.2	E6	221001		P		114		33+		10	C	4320	RCC-V-131+
RCC-MO-21 1HP 2.8A MOTOR OPERATOR RCC-V-21 41A	2	A	1 0	B1	L200	SMB-0-15 M525	R	515	A X	K.7/4.1	D10	221001	R42	P	Y	114 R312		33+				4320	RCC-V-21+
RCC-MO-40 0.7HP 2.3A MOTOR OPERATOR RCC-V-40 41A	2	A	1 0	B1	L200	SMB-0-10 M525	C	517	A X	78 D AZ	D11	221001	C47	P	Y	114		33+				4320	RCC-V-40+
RCC-MO-5 1HP 2.8A MOTOR OPERATOR RCC-V-5 41A	2	A	1 0	B1	L200	SMB-0-15 M525	R	515	A X	K.8/4.1	E10	221001	R42	P	Y	114 R312		33+				4320	RCC-V-5+
RCIC-CNTR-C002 RCIC TRIP CONTACTOR 02	2	A	1 1	L	S345	TYPE HCG-1	R	422	Y R	H.6/7.4		318001							06153	05	E	24	RCIC-DT-1+
RCIC-DPIS-13A RCIC STM SUPPLY HI FLOW H22-P017 02E51	2	A	1 1	B1,L	B080	288A M519	R	471	Y X	L.0/8.0	G7	086001	R33	R	N	121 R206		09				24	E-IR-P017+
RCIC-DPIS-13B RCIC STM SUPPLY HI FLOW H22-P029 02E51	2	A	1 1	B1,L	B080	288A M519	R	471	A X	K9/3.9	F7	086001	R32	R	N	121 R206		09				24	E-IR-P029+
RCIC-DPIS-7A RCIC STM SUPPLY HI FLOW H22-P017 02E51	2	A	1 1	B1,L	B080	288A M519	R	471	Y X	L.0/8.0	G7	086001	R33	R	N	121 R206		09				24	E-IR-P017+
RCIC-DPIS-7B RCIC STM SUPPLY HI FLOW H22-P029 02E51	2	A	1 1	B1,L	B080	288A M519	R	471	Y X	K9/3.9	F7	086001	R32	R	N	121 R206		09				24	E-IR-P029+
RCIC-DPS-14 RCIC LUBE FILTER D PRESS SWITCH 02	2	P	2 1	G	S345	AEW9012 M519	R	422	X D		D12	090006	R11						06153	02	E	24	RCIC-DT-1+
RCIC-EHO-C002 RCIC HYDRAULIC ACT ON TURB 02	2	A	1 1	L	W290	EGR-AB250-133	R	422	A R	H.6/7.4		318001							06153	05	E	24	RCIC-DT-1+
RCIC-FIS-2 RCIP PUMP DISCHARGE FLOW H22-P017 02E	3	A	1 1	B1,L	B080	288A M519	R	471	Y X	L.0/8.0	H7	140001	R33									24	E-IR-P017+
RCIC-FT-3 FLOW TRANSMITTER H22-P017 02E51	2	A	1 1	I,L	R369	1151DP5A22MBX M519	R	474	Y P	L.0/8.0	H8	156005	R33	R	N	114 R206		50				4320	E-IR-P017+

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	A/E DRAWING	STATUS S E / DETAIL / A/E ZONE	QID / ZONE	***SEISMIC (S) PARAMETERS*** TM	HL / ROOM	TEST	ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING / COMPOSITE EPN	DBE	C	HOURS
RCIC-LS-10					M040	5.0-751-1X-MPG-M13HY				X X	207004	W	N	14	00	17	06153	05	E	24
LEVEL SWITCH FOR 8" DRIP POT							R	426	J7/7.3		R11		R6							
02E51	2	A	1 1	L					M519	F9										
RCIC-LS-11					S345	9038-AG1-S4				X	090006						06153	05	E	24
RCIC BAR COND VACUUM TANK LEVEL							R	422	H.6/7.1		R11									
02	2	P	2.0	L					M519	C9										
RCIC-LS-15A					M040	3.5-751-1X-MPG-M14HY				X X	207002						06153	02	E	24
RCIC-P-1 EMERGENCY SWITCHOVER							R	446	H.4/5.0		R									
215	2	A	1 1	L					M527	J8										
RCIC-LS-15B					M040	3.5-751-1X-MPG-M14HY				X X	207002						06153	02	E	24
RCIC-P-1 EMERGENCY SWITCHOVER							R	446	H.4/5.0		R									
215	2	A	1 1	L					M527	J7										
RCIC-LS-3					M040	751-SPX-M14				X X	207011		Y	21	00	17	06153	05	E	24
LEVEL SW. TURB EXH DRIP LEG LEVEL							R	426	H.4/7.4		R11									
215	2	P	2 1	L					M519	D12										
RCIC-LS-4					M040	402-XXS-SP-M14				X X	207020		Y	21	00	17	06153	01	E	24
RCIC STM TRAP 4 TO RHR HX DRP LEG							R	565	J.0/9.0		R61									
215	2	P	2 1	L					M519	H14										
RCIC-LS-5					M040	402-XXS-SP-M14				X X	207020		Y	21	00	17	06153	01	E	24
RCIC STM TRAP 5 TO RHR HX DRP LEG							R	563	N.0/9.0		R63									
215	2	P	2 1	L					M519	H14										
RCIC-LS-6					M040	402-XXS-S1-M14				X X	207011		Y	21	10	17	06153	05	E	24
RCIC STM TRAP 6 TO RHR HX DRP LEG							R	550	L.8/4.3		R63									
215	2	P	2 1	L					M519	G14										
RCIC-M-P/3					W120	TBDP/256T				X R	213016						06153	05	E	24
15HP MTR FOR RCIC-P-3							R	422	J.0/8.3		R11		R15				RCIC-P-3*			
35A	2	A	1 1	L					M519	B14										
RCIC-MO-1					L200	SMB-000-2				D X	221001	P	N	114		33*			C	24
MOTOR OPERATOR RCIC-V-1							R	430	H.6/7.2		R11		R15				RCIC-V-1*			
02E51	2	A	1 1	L					M519	E11										
RCIC-MO-10					L200	SMB-00-15				A X	221001	P	N	114		33*		00		24
1.08HP RA MOTOR OPER. RCIC-V-10							R	430	H.4/6.6		R11		R15				RCIC-V-10*			
41A	2	A	1 1	L					M519	B14										
RCIC-MO-13					L200	SMB-0-40				A X	221001	P	Y	114		33*				4320
2.9HP MOTOR OPERATOR RCIC-V-13							R	552	5.5/M.6		R63		R511				RCIC-V-13*			
41A	2	A	1 1	B1.L					M519	H7										
RCIC-MO-19					L200	SMB-000-5				C X	221001	P	Y	114		33*	06153	10		4320
2.0HP MOTOR OPERATOR RCIC-V-19							R	467	J.4/7.7		R21		R116				RCIC-V-19*			
215	2	A	1 1	B1.L					M519	E7										

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                                                            STATUS          ***SEISMIC (S) PARAMETERS***    *ENV. (E) PARAMETERS*
          EPN                  MFG                 MODEL    S E   QID  TM  HL TEST ANL FO C     FREQ     AGING  DBE  C   HOURS
                DESCRIPTION                    BLDG ELEV    DETAIL     ZONE   ROOM    ACCURACY             COMPOSITE EPN
CONTRACT  LEVEL  EC  USE  SAFETY FUNCTION  A/E DRAWING   A/E ZONE

RCIC-MO-22                     L200    SMB-2-60               A X  221001  P  N  114              33+     06153  05  E    24
 MOTOR OPERATOR RCIC-V-22                           R  441 H.4/8.2        R21   R112                     RCIC-V-22+
 41B            2     A   1 1   L           M519            J8

RCIC-MO-31                     L200    SMB-00-15              A X  221001  P  Y  114              33+            10  C  4320
 1HP 9.6A MOTOR OPERATOR RCIC-V-31                  R  450 H.8/7.0        R21   R112                     RCIC-V-31+
 41A            2     A   1 1   B1,L        M519            D7

RCIC-MO-45                     L200    SMB-0-15               A X  221001  P  N  114              33+            00  C    24
 1.1HP MOTOR OPERATOR RCIC-V-45                     R  430 H.6/7.7        R11   R15                      RCIC-V-45
 41B            2     A   1 1   L           M519            E11

RCIC-MO-46                     L200    SMB-000-5              B X  221001  P     114              33+     06153  05       24
 2.9HP 11A MOTOR OPER. RCIC-V-46                    R  430 H.3/7.2        R11   R15                      RCIC-V-46+
 215            2     A   1 1   L           M519            F11

RCIC-MO-59                     L200    SMB-0-40               A X  221001  P  N  114              33+                     24
 2.9HP MOTOR OPERATOR RCIC-V-59                     R  446 H.5/8.2        R21   R112                     RCIC-V-59+
 41A            2     A   1 1   L           M519            J8

RCIC-MO-63                     L200    SMB-2-60               A X  221001  P  Y  114              33+                   4320
 7HP 10.7A MOTOR OPER. RCIC-V-63                    C  555 131 D AZ R19   C67                            RCIC-V-63+
 41A            2     A   1 1   B1,L        M519            H5

RCIC-MO-64                     L200    SMB-2-80               A X  221001  P  Y  114              33+                   4320
 5.8HP 20A MOTOR OPER. RCIC-V-64                    R  556 L.9/4.6        R63   R510                     RCIC-V-64+
 41A            2     A   1 1   B1,L        M519            G6

RCIC-MO-68                     L200    SMB-0-15               A X  221001  P  Y  114              33+                   4320
 1.08HP MOTOR OPERATOR RCIC-V-68                    R  474 J.1/7.5        C34                            RCIC-V-68+
 41A            2     A   1 1   B1,L        M519            E7

RCIC-MO-69                     L200    SMB-000-5              A X  221001  P  Y  114              33+            10  C  4320
 2.0HP MOTOR OPERATOR RCIC-V-69                     R  466 H6/6.6         R21   R112                     RCIC-V-69+
 215            2     A   1 1   B1,L        M519            E7

RCIC-MO-76                     L200    SMB-000-5              A X  221001  P  Y  114              33+                   4320
 RHR-LAS-605B                                       C  556 125 D AZ       C67                            RCIC-V-76+
 215            2     A   1 1   B1,L        M519            H6

RCIC-MO-8                      L200    SMB-00-7.5             A X  221001  P  N  114              33+                   4320
 .54HP/5.5A MOTOR OPER FOR RCIC-V-8                 R  515 J.0/5.0        R42   R308                     RCIC-V-8+
 41A            2     A   1 1   B1,L        M519            F6

RCIC-MO-80                     L200    SMB-000-5              A X  221001                                        10  C  4320
 MOTOR OPER FOR RCIC-V-110                          R  476 J.2/7.2        C34                            RCIC-V-110+
 215            2     A   1 1   B1,L        M519            F7

RCIC-MO-86                     L200    SMB-000-5              B X  221001                                        10  C  4320
 MOTOR OPER FOR RCIC-V-113                          R  476 J.2/7.2        C34                            RCIC-V-113+
 215            2     A   1 1   B1,L        M519            E7
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                                                                 STATUS       ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
         EPN                 MFG                   MODEL          S E    QID   TH  HL TEST ANL FO C     FREQ     AGING  OBE  C   HOURS
              DESCRIPTION                                 BLDG ELEV  DETAIL     ZONE   ROOM       ACCURACY              COMPOSITE EPN
CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION   A/E DRAWING    A/E ZONE

RCIC-POS-V/1                 N007         D1200G                    R                                                  05253   01  C    24
 TURB TRIP THROTTLE VALVE POSIT SW                        R  427 H.6/7.4                                          RCIC-V-1+
 02            2     A   1 1   L                   M519              E11

RCIC-POS-V/25                N007    18031302                      R X  200006                                             00  C    24
 LIMIT SWITCH RCIC-V-25                                   R  423 H.5/7.0                                          RCIC-V-25+
 58            2     P   2 1   L                   M519              E9

RCIC-POS-V/26                N007    18031302                      R X  200006                                             00  C    24
 LIMIT SWITCH RCIC-V-26                                   R  423 H.5/7.0                                          RCIC-V-26+
               2.    P   2 1   L                   M519              E9

RCIC-POS-V/4                 N007    18031302                        X  200006                                             00  C    24
 LIMIT SWITCH RCIC-V-4                                    R  423 N.5/6.8                                          RCIC-V-4+
 58            2     P   2 1   L                   M519              B10

RCIC-POS-V/5                 N007    18031302                      R X  200006                                             00  C    24
 LIMIT SWITCH RCIC-V-5                                    R  423 H.3/6.8                                          RCIC-V-5+
 02            2     P   2 1   L                   M519              B10

RCIC-POS-V/54                N007    18031302                      R X  200006                                             00  C    24
 LIMIT SWITCH RCIC-V-54                                   R  423 H.7/7.0        R11                               RCIC-V-54+
 02            2     P   2 1   L                   M519              F9

RCIC-PS-1                    A499    SC11AR                        X R  256001  R   N  114              50     06153   05  E    24
 AUX. COOLING SUPPLY - -                                  R  424 H.6/7.3        R11
 220           2     P   2 0   L                   M519              G9

RCIC-PS-12A                  B069    P1H-M85SS-V                   Y R  256005  R   N                                                24
 PS 12A FOR TURBINE DISCH H22-P017                        R  475 L.0/8.0        R33   R206                        E-IR-P017+
 02E           2     A   1 1   L                   M519              C11

RCIC-PS-12B                  B069    P1H-M85SS-V                   Y R  256005  R   N                                                24
 EXHAUST DIAPHRAGM         H22-P029                       R  475 L.0/4.0        R32   R206                        E-IR-P029+
 02E           2     A   1 1   L                   M519              C11

RCIC-PS-12C                  B069    P1H-M85SS-V                   Y R  256005  R   N                                                24
 PS 12C FOR TURBINE DISC H22-P017                         R  473 L.0/8.0        R33   R206                        E-IR-P017+
 02E           2     A   1 1   L                   M519              C11

RCIC-PS-12D                  B069    P1H-M85SS-V                   Y R  256005  R   N                                                24
 EXHAUST DIAPHRAGM         H22-P029                       R  473 L.0/4.0        R32   R206                        E-IR-P029+
 02E           2     A   1 1   L                   M519              C11

RCIC-PS-20                   B069    P1H-M340SS-V                  Y R  256005  R   N                                                24
 RCIC PUMP DISCH H22-P017                                 R  474 L.0/8.0        R33   R206                        E-IR-P017+
 02E           2     A   1 1   L                   M519              J8

RCIC-PS-21                   B069    P1H-M85SS-V                   Y R  256005  R   N                                                24
 RCIC-P-1 SUCT AL HIGH H22-P017                           R  473 L.1/8.2        C34                               E-IR-P017+
 02H           2     P   2 1   L                   M519              D13
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TH	ZONE	HL	ROOM	TEST	ANL	FO C	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
RCIC-PS-22A	STM LINE PRESSURE H22-P017	02E	2	A	1 1	B1,L	B069	P1H-M34SS-V	M519	R	474	L.0/8.0	G8	A X	256005	R	R33	N	R206									24	E-IR-P017+
RCIC-PS-22B	PENETRATION MONITORING H22-P029	02E	2	A	1 1	B1,L	B069	P1H-M34SS-V	M519	R	473	L.0/4.0	F8	A X	256005	R	R32	N	R206									24	E-IR-P029+
RCIC-PS-22C	STM LINE PRESSURE H22-P017	02E	2	A	1 1	B1,L	B069	P1H-M34SS-V	M519	R	475	L.0/8.0	G8	Y X	256005	R	R33	N	R206									24	E-IR-P017+
RCIC-PS-22D	PENETRATION MONITORING H22-P029	02E31	2	A	1 1	B1,L	B069	P1H-M344S-V	M519	R	473	L.0/4.0	F8	A X	256005	R	R32	N	R206									24	E-IR-P029+
RCIC-PS-34	RCIC-P-1 SUCTION PRESSURE	02E51	2	P	2 0	L	R290	613	M519	R	437	H.7/7.3	C13	X R	256014	W	R11	N			03				06303	06	E	24	
RCIC-PS-6	RCIC PUMP SUCTION PRESS H22-P017	02E51	2	A	1 1	L	S382	6N-AA21-(X10)-VS1TT	M519	R	471	L.0/8.0	D13	X R	256016	R	R33	N	R206	114				33+				24	E-IR-P017+
RCIC-PS-7	RCIC LUBE OIL LOW PRESS SWITCH	02	2	P	2 1	L	S345	9012ACW	M519	R	422		D11	X R	256015										06153	02	E	24	RCIC-DT-1+
RCIC-PS-9A	RCIC TURBINE DISC PS-9A	220	2	A	1 1	L	B069	P1H-M85SS-V	M519	R	427	H.4/8.5	F12	A R	256005	R	R33	N	R206				V					24	
RCIC-PS-9B	RCIC TURBINE DISC PS-9B	220	2	A	1 1	L	B069	P1H-M85SS-V	M519	R	427	H.4/8.5	E12	A R	256005	R	R33	N	R206				V					24	
RCIC-PT-4	TURB STM DISC PRESS 0-200 H22-P017	02	2	P	2 1	L	B040	556	M519	R	473	K.9/8.2	J8	Y R	259001		R33								03153	10	E	24	E-IR-P017+
RCIC-PT-5	RCIC PUMP SUCTION H22-P017	02	2	P	2 1	L	B040	556	M519	R	473	L.1/8.2	C12	Y R	259001	R	R33	N			04					05	S	24	E-IR-P017+
RCIC-PT-7	TB STEAM INLET H22-P017	02	2	P	2 1	L	B040	556	M519	R	473	K.9/8.2	F8	Y R	259001		R33								03153	10	E	24	E-IR-P017+
RCIC-PT-8	TURBINE EXHAUST PRESSURE H22-P017	02	2	P	2 1	L	B040	556	M519	R	473	L.0/8.2	D12	A R	259001	R	R33	N			04					05	S	24	E-IR-P017+

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                                                                      STATUS          ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
              EPN                     MFG               MODEL           S E    QID   TM  HL TEST ANL FO C      FREQ   AGING  DBE  C    HOURS
                        DESCRIPTION                           BLDG ELEV  DETAIL       ZONE  ROOM      ACCURACY              COMPOSITE EPN
CONTRACT    LEVEL   EC   USE   SAFETY FUNCTION  A/E DRAWING   A/E ZONE

RCIC-RLY-CR1                    S440    219BBXP-DC                  R  283041                                       06153   05   E   4320
 RCIC-V-45 POS IND RLY                                    R  422 H.4/7.1                                         E-JB-TB/R435+
 218            3     A    1 1   G1,L              E546/15

RCIC-RLY-CR2                    S440    219BBXP-DC                  R  283041                                       06153   05   E   24
 RCIC-V-45 POS IND RLY                                    R  422 H.4/7.1                                         E-JB-TB/R435+
 218            3     A    1 1   L                 E546/15

RCIC-SE-C002                    W290    1680-622                  X R  318001                                       06153   05   G   24
 RCIC MAGNETIC PICKUP SENSOR                              R  422 H.6/7.4                                         RCIC-DT-1+
 02             2     A    1 1   L

RCIC-SPV-25                     A499    NP831654E                 X X  315006  R  N  114  03          33+                             24
 SPV-RCIC-V-25 STM SPLY LNE IR-62                         R  478 H.4/6.8       R31   R206                        E-IR-62+
 58             2     A    1 1   L                 M519           D9

RCIC-SPV-26                     A499    NP831654E                 X X  315006  R  N  114  03          33+                             24
 SPV-RCIC-V-26 STM SPLY LNE DR                            R  504 L.4/9.3       R43   R306                        E-IR-63+
 58             2     A    1 1   L                 M519           D9

RCIC-SPV-4                      A499    NP831654E                 X X  315006  R  N  114  03          33+                             24
 PILOT VALVE FOR AO RCIC-V-4  IR-62                       R  478 H.4/6.8       R31   R206                        E-IR-62+
 58             2     A    1 1   L                 M519           B10

RCIC-SPV-5                      A499    NP831654E                 X X  315006  R  N  114  03          33+                             24
 PILOT VALVE FOR AO RCIC-V-5                              R  506 L.4/9.3       R43   R306                        E-IR-63+
 58             2     A    1 1   L                 M519           B10

RCIC-SPV-54                     A499    NP831654E                 X X  315006  R  N  114  03          33+                             24
 SPV FOR RCIC-V-54 IR-62                                  R  477 H.4/6.8       R31   R206                        E-IR-62+
 58             2     A    1 1   L                 M519           E9

RCIC-SS-1                       P302    BZLN2                     X R  318001  R  N       03                                      G   24
 RCIC TURB MECH OVER SPEED TRIP                           R  427 H.7/6.9                                         RCIC-DT-1+
 02             3     P    1 1   L                 807E173TC/     6

RCIC-SV-C002                    G080    CR9503                    X R  318001  R  N       03                                      G   24
 TURB TRIP THROT VALVE                                    R  423 H.3/7.1                                         RCIC-DT-1+
                3     P    1 1   L                 807E173TC/     6C8

RCIC-TIS-10A                    A502    1165                      X X  318001                                       06153   02   E   24
 RCIC BRG TEMP IND SW (GOVERNER)                          R  422               R11                               RCIC-DT-1+
 02             2     P    2 1   L                 M519           D12

RCIC-TIS-10B                    A502    1165                      X X  318001                                       06153   02   E   24
 RCIC BRG TEMP IND SW (COUPLING)                          R  422               R11                               RCIC-DT-1+
 02             2     P    2 1   L                 M519           D12

REA-DPT-1A1                     R369    1151DP3022MBGE01          X X  091001  W  N  114                  50                          4320
 SECONDARY CONTAINMNTPRESS.CONTROL                        R  576 H.3/8.2       R72   R608
 59             2     A    1 3   F                 M545           E2
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EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	TM	HL	TEST	ZONE	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
REA-DPT-1A2 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	M.7/3.5	X X	E1	091001	W	N	114	R73	R604		50				4320	
REA-DPT-1A3 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	M.8/3.9	X X	E1	091001	W	N	114	R73	R604		50				4320	
REA-DPT-1A4 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	M.8/9.4	X X	E1	091001	W	N	114	R71	R507		50				4320	
REA-DPT-1B1 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	M.3/5.3	X X	D2	091001	W	N	114	R71	R504		50				4320	
REA-DPT-1B2 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	N.7/3.5	X X	D2	091001	W	N	114	R73	R605		50				4320	
REA-DPT-1B3 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	N.8/7.6	X X	D1	091001	W	N	114	R73	R604		50				4320	
REA-DPT-1B4 SECONDARY CONTAINMNTPRESS.CONTROL 59	2	A	1 3	F	R369	1151DP3022MBGE01	M545	R	576	N.1/9.4	X X	D1	091001	W	N	114	R73	R605		50				4320	
REA-M-AD/8 MOTOR FOR REA-AD-8	2	A	1 0	J	B066	MA418	M545	R	559	L.0/8.1	R	F10	221002								06153	03	E	4320	REA-AD-8+
REA-POS-AD/8 POS FOR REA-AD-8	2	A	1 0	J	N007	EA70050100	M545	R		L.0/8.1	Z R	F10	200014								05123	.04	S	4320	REA-AD-8+
REA-POS-V/1 POS SWITCH FOR REA-V-1 68	2	A	1 3	FI	N007	EA740	M545	R	593	M.5/6.0	A X	J3	200015				R73					00		4320	REA-V-1+
REA-POS-V/2 POS SWITCH FOR REA-V-2 68	2	A	1 3	I	N007	EA740	M545	R	593	M.5/6.2	A X	J3	200015									00		4320	REA-V-2+
REA-RE-9A R BLDG VENT RAD ELEMENT 02D17	2	A	1 3	F,M2	G080	TYPE 194X927G11	M545	R	591	M.1/4.3	R X	K6	277001				R73				06153	10	F	4320	
REA-RE-9B EXH AIR PLENUM RAD DETECTOR 02D17	2	A	1 3	B2,F	G080	TYPE 194X927G11	M545	R	591	M.5/4.3	R X	F1	277001				R73				06153	00	E	4320	

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                                                      STATUS      ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
          EPN              MFG          MODEL          S E    QID    TM  HL TEST ANL FO C    FREQ    AGING  DBE  C   HOURS
                 DESCRIPTION                 BLDG ELEV DETAIL     ZONE.  ROOM      ACCURACY             COMPOSITE EPN
CONTRACT  LEVEL  EC  USE  SAFETY FUNCTION  A/E DRAWING A/E ZONE

REA-RE-9C                  G080    TYPE 194X927G11      R X  277001                                  06153  00  E   4320
 R BLDG VENT RAD ELEMENT                       R 591 M.5/4.3      R73
 02D17       2    A    1 3   F,B2         M545          K6

REA-RE-9D                  G080    TYPE 194X927G11      R X  277001                                  06153  00  E   4320
 EXH AIR PLENUM RAD DETECTOR                   R 591 M.5/4.3      R73
 02D17       2    A    1 3   B2,F         M545          F1

REA-RLY-CR1                A500    RXMK1                X X  283011  R  N  021                       06153  14      4320
 CONTROL RELAY FOR ISOLATION VALVES            R 527 J.0/6.9                                       E-IR-71+
 59          3    P    2 3   G1           E519-12

REA-RLY-CR2                A500    RXMK1                X X  283011  R  N  021                       06153  04      4320
 CONTROL RELAY FOR ISOLATION VALVES            R 554 H.7/8.2                                       E-IR-68+
 59          3    P    2 3   G1           E519-12

REA-SPV-V/1                A499    WJHT8316E35          X X  315004  R  N  114  03        33+                       4320
 REACTOR BLDG NORMAL EXHAUST PILOT             R 522 J.0/6.9      R73  R604                        E-IR-71+
 58          2    A    1 3   B2,F         M545          K3

REA-SPV-V/2                A499    WJHT8316E35          X X  315004  R  N  114  03        33+                       4320
 REACTOR BLDG NORMAL EXHAUST PILOT             R 551 H.7/8.2      R73  R604                        E-IR-68+
 58          2    A    1 3   B2,F         M545          K3

RFW-DPT-17                 G080    555                  Y X  156003                                  05253  04  G   4320
 RFW LEVEL WIDE RANGE                          R 522 M.8/6.6                                       E-IR-P027+
 02          2    P    2 0   G            M529          J5

RFW-DPT-4A                 F130    546                  Y X  182001                                  06153  04  G   4320
 RFW LEVEL CONTROL                             R 522 J.5/7.2      R51                              E-IR-P004+
 02          2    P    2 0   G            M529          H12

RFW-DPT-4B                 F130    546                  Y X  182001                                  06153  04  G   4320
 RFW LEVEL CONTROL                             R 522 M.8/6.6      R51                              E-IR-P027+
 02          2    P    2 0   G            M529          J5

RFW-DPT-4C                 F130    546                  Y X  182001                                  06153  04  G   4320
 RFW LEVEL CONTROL                             R 522 N.7/5.6      R51                              E-IR-P005+
 02          2    P    2 0   G            M529          J5

RFW-MO-65A                 L200    SMB-4-250            A X  221001  P  Y  114            33+                       4320
 32.4HP MOTOR OPERATOR RFW-V-65A               R 505 H4/5.7       R41  R310                        RFW-V-65A+
 41A         2    A    1 3   B1           M529          G13

RFW-MO-65B                 L200    SMB-4-250            A X  221001  P  Y  114            33+                       4320
 32.4HP MOTOR OPERATOR RFW-V-65B               R 505 H4/6.3       R41  R310                        RFW-V-65B+
 41A         2    A    1 3   B1           M529          G4

RFW-SPV-32A1               A499    WJHT831654           X X  315004  R  N  114  03        33+                       4320
 SOLENOID PILOT FOR RFW-V-32A IR-62            R 506 N.0/4.9      R31  R206                        E-IR-64+
 58          2    A    1 3   B1           M529          G12
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EPN	MFG	MODEL	STATUS S E	QID	TH	HL	TEST	ANL FO C	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	A/E ZONE
RFW-SPV-32A2	A499	WJHT831654	X X	315004	R	N	114	03	33+				4320	SOLENOID PILOT FOR RFW-V-32A IR-62	R	505	N.0/4.9	R31	R206	E-IR-64+	58	2	A	1 3	B1	M529	G12
RFW-SPV-32B1	A499	WJHT831654	X X	315004		N	21	00	33+				4320	SOLENOID PILOT FOR RFW-V-32B IR-62	R	506	N.0/4.9	R31	R206	E-IR-64+	58	2	A	1 3	B1	M529	G5
RFW-SPV-32B2	A499	WJHT831654	X X	315004		N	21	00	33+				4320	SOLENOID PILOT FOR RFW-V-32B IR-62	R	505	N.0/4.9	R31	R206	E-IR-64+	58	2	A	1 3	B1	M529	G5
RHR-CE-1A	B135	CEL-IT(SS)X3-002-KGX35-Y69X2-Y	X X	038001						05253	00	E	4320	CONDUCTIVITY ELEMENT FOR RHR-HX-1A	R	559	J.8/8.9	R61			02E12	2	P	2 0	G	M521/1	G12
RHR-CE-1B	B135	CEL-IT(SS)X3-002-KGX35-Y69X2-Y	X X	038001						05253	00	E	4320	RHR CONDUCTIVITY - -	R	559	M.1/9.0	R63			02E12	2	P	2 0	G	M521/2	G7
RHR-DPIS-12A	B080	288A	Y X	086001		N	14	00	33+				4320	RHR HIGH FLOW LEAK DETECTION	R	501	J.6/3.6	R42	R305	E-IR-P018+	02E12	2	A	1 0	B1	M530	G12
RHR-DPIS-12B	B080	288A	Y X	086001		N	14	00	33+				4320	RHR HIGH FLOW LEAK DETECTION	R	505	H.9/9.3	R41	R305	E-IR-P021+	02E12	2	A	1 0	B1	M521/1	D7
RHR-FIS-10A	B080	288	A X	140001	R	N	121		10				4320	SHUTDOWN COOLING LOOP "A"FLOW	R	505	J.6/3.6	R42		E-IR-P018+	02E12	3	A	1 0	C,F	M521/1	H12
RHR-FIS-10B	B080	288	A X	140001	R	N	121		10				4320	SHUTDOWN COOLING LOOP "B" FLOW	R	503	H.9/9.3	R43		E-IR-P021+	02E12	3	A	1 0	C,F	M521/2	H4
RHR-FIS-10C	B080	288	A X	140001	R	N	121		10				4320	LOOP "C" FLOW TO VESSEL	R	505	H.7/9.3	R42		E-IR-P021+	02E12	3	A	1 0	C,F	M521/2	E6
RHR-FT-1	B040	50-555111BMANCG	X X	156003						05253	01	E	4320	HEAT EXCH B-REMOTE SHUTDOWN	R	503	J.3/9.4	W21			02C61	2	P	2 0	G	M521/2	H10
RHR-FT-13	G080	555-111BMAA4WCF	X X	156003	W								4320	FLOW TRANSMIT TO REACTOR HD SPRAY(RM 11)	R	552	M.6/5.3	R63		E-IR-P021+	02E12	3	P	2 3	G	M521/2	J12
RHR-FT-15A	R369	1151DP5E22	Y X	156005		N	14	00	33+		10	P	4320	FLOW TRANSMIT TO COOLING LOOP A	R	503	J.6/3.6	R42		E-IR-P018+	02	3	A	1 3	I	M521/1	G10

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TH	HL	TEST	ANL	FO C	FREQ	ROOM	ACCURACY	AGING	DBE	C	HOURS	COMPOSITE EPN
RHR-FT-15B	FLOW TRANSMIT TO COOLING LOOP B	02E12	3	A	1 3	I	B040	555111BMAA4WCF	R	503	H.8/9.3	M521/2	H10	P P	156003	R41									05153	00	P	4320	E-IR-P021+
RHR-FT-15C	FLOW TRANSMITTER TO LOOP C	02E12	3	A	1 0	I	B040	555111BMAA4WCF	R	501	H.9/9.3	M521/2	E7	P P	156003	R41									05153	00	P	4320	E-IR-P021+
RHR-LS-10A	RHR DRAIN POT LOOP B	215	2	P	2 1	C	M040	751-SPX-M14	R	475	M.4/8.0	M521/2	E4	Y X	207011	R33												4320	
RHR-LS-10B	RHR DRAIN POT LOOP B	215	2	P	2 1	C	M040	751-SPX-M14	R	475	M.4/8.0	M521/2	E4	Y X	207011	R33												4320	
RHR-LS-10C	RHR DRAIN POT LOOP B	215	2	P	2 1	C	M040	751-SPX-M14	R	475	M.3/8.0	M521/2	E5	Y X	207011	R33												4320	
RHR-LS-10D	RHR DRAIN POT LOOP B	215	2	P	2 1	C	M040	751-SPX-M14	R	475	M.3/8.6	M521/2	E3	X X	207011	R33												4320	
RHR-LS-11A	RHR DRAIN POT LOOP A	215	2	P	2 1	C	M040	751-SPX-M14	R	475	K.3/8.0	M521/1	C14	X X	207011	R31												4320	
RHR-LS-11B	RHR DRAIN POT LOOP A	215	2	P	2 1	C	M040	751-SPX-M14	R	475	K.3/8.0	M521/1	C13	X X	207011	R31												4320	
RHR-LS-11C	RHR DRAIN POT LOOP A	215	2	P	2 1	C	M040	751-SPX-M14	R	475	K.1/7.9	M521/1	C13	X X	207011	R31												4320	
RHR-LS-11D	RHR DRAIN POT LOOP A	215	2	P	2 1	C	M040	751-SPX-M14	R	475	K.1/7.9	M521/1	C12	X X	207011	R31												4320	
RHR-LT-8A	LEVEL TRANSMITTER HX-A	220	2	P	2 1	G	B080	352/368	R	548	J.0/8.6	M521/1	G13	X X	209001	R61		N	21	00		00			06153	00	P	4320	RHR-HX-1A+
RHR-LT-8B	LEVEL TRANSMITTER HX-B	220	2	P	2 1	G	B080	352/368	R	548		M521/2	G5	X X	209001	R63		N	21	00		00			06153	00	P	4320	RHR-HX-1B+
RHR-M-P/2A	MOTOR FOR RHR-P-2A	02E12	2	A	1 3	C,F	C080	5K6339XC122A/P236	R	429	K.2/6.6	M521/1	D12	R X	213032	R11		N					R6		05153	10	E	4320	RHR-P-2A+

EPN	MFG	MODEL	STATUS S E	QID	TH	HL	TEST	ANL	FREQ	AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
RHR-M-P/2B	G080	5K6339XC122A/PZ36	R X	213032		N				05153	00	E	4320	MOTOR FOR RHR-P-2B	R	429	L.8/8.5	R13	R7	RHR-P-2B+	02E12	2	A	1 3	C,E	M521/2	D5
RHR-M-P/2C	G080	5K6339XC122A/PZ36	R X	213032		N				05153	00	E	4320	MOTOR FOR RHR-P-2C	R	429	H.7/4.6	R12	R14	RHR-P-2C+	02E12	2	A	1 0	C,F	M521/2	D6
RHR-M-P/3	W120	75D40786	X X	213016									4320	MOTOR FOR RHR-P-3	R	422	H.4/4.9	R12	R14	RHR-P-3+	35A	2	A	1 3	C,E	M521/2	C8
RHR-MO-11A	L200	SMB-000-5	A X	221001	P	Y	114		33+				24	.33HP .95A MOTOR OPER. RHR-V-11A	R	475	K.2/8.1	R31	R213	RHR-V-11A+	41A	2	A	1 1	B1	M521/1	E11
RHR-MO-11B	L200	SMB-000-5	A X	221001	P	Y	114		33+				24	.333HP MOTOR OPERATOR RHR-V-11B	R	475	L.8/8.1	R33	R214	RHR-V-11B+	41A	2	A	1 1	B1	M521/2	C12
RHR-MO-124A	L200	SMC-043D0583A	A X	221001		N	14	00	33		10	C	24	1HP MOTOR OPERATOR RHR-V-124A	R	473	K.7/6.1	R31	R213	RHR-V-124A+	215	2	A	1 1	B1	M521/1	E14
RHR-MO-124B	L200	SMC-043D0583A	A X	221001		N	14	00	33		10	C	24	5.3HP/16.8-8.4A MO FOR RHR-V-124B	R	473	K.9/8.1	R31	R213	RHR-V-124B+	215	2	A	1 1	B1	M521/1	C13
RHR-MO-125A	L200	SMC-043D0583A	A X	221001							10	C	24	.33HP MOTOR OPERATOR RHR-V-125A	R	473	L.7/8.0	R33	R214	RHR-V-125A+	215	2	A	1 1	C	M521/2	D4
RHR-MO-125B	L200	SMC-043D0583A	A X	221001		N	14	00	33		10	C	24	.33 HP MOTOR OPERATOR RHR-V-125B	R	473	L.6/8.0	R33	R214	RHR-V-125B+	215	2	A	1 1	C	M521/2	D4
RHR-MO-134A	L200	SMC-04-5	A X	221001	P		114		33+		10	C	4320	MOTOR OPERATOR RHR-V-134A	R	548	K.1/9.0	R61	R504	RHR-V-134A+	215	2	A	1 0	D	M521/1	E14
RHR-MO-134B	L200	SMC-04-5	A X	221001	P		114		33+		10	C	4320	MOTOR OPERATOR RHR-V-134B	R	551	L5/9.2	R63	R506	RHR-V-134B+	215	2	A	1 0	D	M521/2	E5
RHR-MO-16A	L200	SB-2-80	A X	221001	P	Y	114		33+				24	10.6HP 13.8A MOTOR OPER. RHR-V-16A	R	556	L.0/4.4	R63	R510	RHR-V-16A+	41A	2	A	1 0	B1	M521/1	H7
RHR-MO-16B	L200	SB-2-80	A X	221001	P	Y	114		33+				24	10.6HP 13.8A MOTOR OPER. RHR-V-16B	R	516	K.7/8.1	R41	R305	RHR-V-16B+	41A	2	A	1 0	B1	M521/2	D10

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

EPN	MFG	MODEL	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	BLDG	ELEV	STATUS DETAIL	A/E ZONE	S E	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
RHR-MO-17A	L200	SB-2-80	10.6HP 13.8A MOTOR OPER. RHP-V-17A	41A	2	A	1 0	B1	M521/1	R	556	L.0/4.4	H6	A X	221001	R63	P	Y	114	R510		33+				24	RHR-V-17A+
RHR-MO-17B	L200	SB-2-80	10.6HP 13.8A MOTOR OPER. RHR-V-17B	41A	2	A	1 0	B1	M521/2	R	516	K.5/8.0	D12	A X	221001	R41		N	14	R310	00	33				24	RHR-V-17B+
RHR-MO-21	L200	SMB-3-80	5.3HP 8.4A MOTOR OPER. RHR-V-21	41B	2	A	1 0	B1,C,E	M521/2	R	455	H.4/5.2	E8	A X	221001	R22	P	Y	114	R113		33+				24	RHR-V-21+
RHR-MO-23	L200	SMB-0-15	1.08HP 4.7A MOTOR OPER. RHR-V-23	41B	2	A	1 3	B1	M521/2	R	552	M.6/5.4	J13	A X	221001	R63	P	N	114	R511		33+				24	RHR-V-23+
RHR-MO-24A	L200	SMB-3-80	5.3HP 8.3A MOTOR OPER. RHR-V-24A	41B	2	A	1 3	B1,C,E	M521/1	R	476	K.0/8.1	E10	A X	221001	R31	P	Y	114	R213		33+				4320	RHR-V-24A+
RHR-MO-24B	L200	SMB-3-80	5.3HP MOTOR OPERATOR RHR-V-24B	41B	2	A	1 3	B1,C,E	M521/2	R	476	M.2/8.1	C11	A X	221001	R33	P	Y	114	R214		33+				4320	RHR-V-24B+
RHR-MO-26A	L200	SMB-000-5	0.333HP MOTOR OPERATOR RHR-V-26A	41A	2	A	1 0	C,F	M521/1	R	476	K.5/8.2	F12	A X	221001	R31		Y	14	R213	00	35				24	RHR-V-26A+
RHR-MO-26B	L200	SMB-000-5	0.333HP MOTOR OPERATOR RHR-V-26B	41A	2	A	1 0	C,F	M521/2	R	474	L.2/8.1	E8	A X	221001	R33	P	Y	114	R214		33+				24	RHR-V-26B+
RHR-MO-27A	L200	SMB-00-7.5	0.5HP MOTOR OPERATOR RHR-V-27A	41A	2	A	1 0	B1,C,E	M521/1	R	495	K.3/4.1	D7	A X	221001	R32		Y	114	R206		33+				24	RHR-V-27A+
RHR-MO-27B	L200	SMB-00-7.5	0.5HP MOTOR OPERATOR RHR-V-27B	41A	2	A	1 0	B1,C,E	M521/2	R	493	M.2/7.9	C11	N X	221001	R33	P	Y	114	R206		33+				24	RHR-V-27B+
RHR-MO-3A	L200	SMB-1-40	2.6HP MOTOR OPERATOR RHR-V-3A	41A	2	A	1 3	C,E	M521/1	R	562	J.9/8.5	H11	A X	221001	R61	P	N	114	R507		33+				24	RHR-V-3A+
RHR-MO-3B	L200	SMB-1-40	2.6HP MOTOR OPERATOR RHR-V-3B	41A	2	A	1 3	C,F	M521/2	R	560	M.2/8.4	J9	A X	221001	R63	P	N	114	R505		33+				24	RHR-V-3B+
RHR-MO-40	L200	SMB-000-2	.3HP 1.9A MOTOR OPER. RHR-V-40	41B	2	A	1 0	[illegible]	M521/2	R	553	M.6/8.4	G4	A Y	221001	R63	P	N	114	R505		33+		10	C	4320	RHR-V-40+

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST	FREQ	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
RHR-MO-42A	L200	SB-3-150	A X	221001	P	Y	114	33+	4320	19.5HP/25.2A MTR OP FOR RHR-V-42A	R	528	J.0/6.0	R52	R408	RHR-V-42A+	41A	2	A	1 0	B1,C,E	M521/1	G7
RHR-MO-42B	L200	SB-3-150	A X	221001	P	Y	114	33+	4320	19.5HP 25.2A MOTOR OPER. RHR-V-42B	R	528	N.0/5.8	R53	R405	RHR-V-42B+	41A	2	A	1 0	B1,C,E	M521/2	G12
RHR-MO-42C	L200	SB-3-150	A X	221001	P	Y	114	33+	4320	19.5HP 25.2A MOTOR OPER. RHR-V-42C	R	528	J.0/6.0	R51	R408	RHR-V-42C+	41A	2	A	1 0	B1,C,E	M521/2	E12
RHR-MO-47A	L200	SMB-1-40	A X	221001	P	N	114	33+	4320	2.6HP/11.5-5.75A MO FOR RHR-V-47A	R	582	M.3/8.4	R71	R606	RHR-V-47A+	41A	2	A	1 3	C,E	M521/1	J14
RHR-MO-47B	L200	SMB-1-40	A X	221001	P	N	114	33+	4320	2.6HP/11.5-5.75A MO FOR RHR-V-47B	R	582	M.3/8.6	R73	R605	RHR-V-47B+	41A	2	A	1 3	C,E	M521/2	J3
RHR-MO-48A	L200	SMB-3-80	A X	221001	P	N	114	33+	4320	5.3HP 8.4A MOTOR OPER. RHR-V-48A	R	555	8.6/J.2	R61	R507	RHR-V-48A+	41B	2	A	1 3	C,E	M521/1	H11
RHR-MO-48B	L200	SMB-3-80	A X	221001	P	N	114	33+	4320	5.3HP 8.4A MOTOR OPER. RHR-V-48B	R	555	M.8/8.7	R63	R505	RHR-V-48B+	41B	2	A	1 3	C,E	M521/2	J8
RHR-MO-49	L200	SMB-000-5	A X	221001	P	N	114	33+	4320	0.333HP MOTOR OPERATOR RHR-V-49	R	553	M.5/8.5	R63	R505	RHR-V-49+	41A	2	A	1 1	B2	M521/2	G4
RHR-MO-4A	L200	SMB-0-40	A X	221001	P	Y	114	33+	4320	2.66HP MOTOR OPERATOR RHR-V-4A	R	460	K.0/8.3	R23	R115	RHR-V-4A+	41A	2	A	1 0	B1,C,E	M521/1	C7
RHR-MO-4B	L200	SMB-0-40	A X	221001	P	Y	114	33+	4320	2.66HP MOTOR OPERATOR RHR-V-4B	R	461	L.2/8.2	R23	R115	RHR-V-4B+	41A	2	A	1 0	B1,C,E	M521/2	B11
RHR-MO-4C	L200	SMB-0-40	A X	221001	P	Y	114	33+	4320	2.66HP MOTOR OPERATOR RHR-V-4C	R	450	J.7/4.3	R22	R113	RHR-V-4C+	41A	2	A	1 0	B1,C,E	M521/2	B12
RHR-MO-52A	L200	SMB-00-10	A X	221001	P	N	114	33+	24	5.2HP MOTOR OPERATOR RHR-V-52A	R	578	H.6/9.2	R71	R608	RHR-V-52A+	42A	2	A	1 1	C,E	M521/1	J10
RHR-MO-52B	L200	SMB-00-10	A X	221001	P	N	114	33+	24	5.2HP MOTOR OPERATOR RHR-V-52B	R	578	N.1/8.6	R73	R605	RHR-V-52B+	42A	2	A	1 3	C,E	M521/2	J6

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	DETAIL A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL	FO	C	ACCURACY	FREQ	COMPOSITE EPN	AGING	DBE	C	HOURS
RHR-MO-53A	8.2HP MOTOR OPERATOR RHR-V-53A	41B	2	A	1 3	C,E,B1	L200	SMB-2-60	M521/1	R	515	K.9/4.1	F6	A X	221001	R42	P	Y	114	R312					33+	RHR-V-53A+		10	C	4320
RHR-MO-53B	7.9HP 10A MOTOR OPER. RHR-V-53B	41B	2	A	1 3	C,E,B1	L200	SMB-2-60	M521/2	R	515	L.2/8.0	F12	A X	221001	R43	P	Y	114	R316					33+	RHR-V-53B+		10	C	4320
RHR-MO-64A	2.66HP MOTOR OPERATOR RHR-FCV-64A	42A	2	A	1 3	B1,C,E	L200	SMB-000-5	M521/1	R	446	K.2/9.2	B12	A X	221001	R21	P	N	114	R116					33+	RHR-FCV-64A+				4320
RHR-MO-64B	MOTOR OPERATOR RHR-FCV-64B	42A	2	A	1 3	B1,C,E	L200	SMB-000-5	M521/2	R	448	M.0/9.2	B7	A X	221001	R23	P	N	114	R115					33+	RHR-FCV-64B+				4320
RHR-MO-64C	MOTOR OPERATOR RHR-FCV-64C	42A	2	A	1 0	B1,C,E	L200	SMB-000-5	M521/2	R	450	J.0/4.9	F7	A X	221001	R22	P	N	114	R113					33+	RHR-FCV-64C+				4320
RHR-MO-68A	2.6HP 5.75A MOTOR OPER. RHR-V-68A	41A	2	A	1 3	C,E,F	L200	SMB-0-40	M524/1	R	558	J.1/9.3	D13	B X	221001	R61	P	N	114	R507					33+	RHR-V-68A+				4320
RHR-MO-68B	2.6HP 5.75A MOTOR OPER. RHR-V-68B	41A	2	A	1 3	C,E,F	L200	SMB-0-40	M524/2	R	555	M.8/9.3	F14	B X	221001	R63	P	N	114	R505					33+	RHR-V-68B+				4320
RHR-MO-6A	2.66HP MOTOR OPERATOR RHR-V-6A	41A	2	A	1 3	C,E	L200	SMB-0-25	M521/1	R	430	K.8/8.3	B8	A X	221001	R11	P	N	114	R6					33+	RHR-V-6A+				4320
RHR-MO-6B	2.66HP MOTOR OPERATOR RHR-V-6B	41A	2	A	1 3	C,E	L200	SMB-0-25	M521/1	R	430	L.8/8.5	B7	A X	221001	R13	P	N	114	R7					33+	RHR-V-6B+				4320
RHR-MO-73A	2.0HP MOTOR OPERATOR RHR-V-73A	215	2	A	1 3	C,E	L200	SMC-04-5	M521/1	R	590	J.9/9.2.	H13	A X	221001	R71	P	N	114	R606					33+	RHR-V-73A+		10	C	4320
RHR-MO-73B	2.0HP MOTOR OPERATOR RHR-V-73B	215	2	A	1 3	C,E	L200	SMC-04-5	M521/2	R	590	M.2/9.1	H4	A Y	221001	R73	F		114						33+	RHR-V-73B+		10	C	4320
RHR-MO-74A	2.0HP MOTOR OPERATOR RHR-V-74A	215	2	A	1 3	C,E	L200	SMC-04-5	M521/1	R	590	J.9/9.1	H13	A X	221001	R71	P	N	114						33+	RHR-V-74A+		10	C	4320
RHR-MO-74B	2.6HP MOTOR OPERATOR RHR-V-74B	215	2	A	1 3	C,E	L200	SMC-04-5	M521/2	R	590	M.3/9.1	J5	A Y	221001	R73	F		114	R605					33+	RHR-V-74B+		10	C	4320

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                                                                STATUS      ***SEISMIC (S) PARAMETERS***     *ENV. (E) PARAMETERS*
             EPN                 MFG                  MODEL      S E    QID   TH  HL TEST ANL FO C    FREQ    AGING  DBE  C   HOURS
                        DESCRIPTION                        BLDG ELEV  DETAIL   ZONE  ROOM      ACCURACY              COMPOSITE EPN
  CONTRACT    LEVEL    EC   USE   SAFETY FUNCTION   A/E DRAWING  A/E ZONE

RHR-MO-8                         L200     SMB-2-80                      A X  221001  P  Y  114                33+                        4320
 5.8HP MOTOR OPERATOR RHR-V-8                                 R  512 K.3/7.3     R43    R315                       RHR-V-8+
 41A           2      A    1 3    B1,C,E               M521/1             E7

RHR-MO-87A                       L200     SMB-00-10                     A X  221001  P  N  114                33+                        24
 3.89HP MOTOR OPERATOR RHR-V-87A                              R  578 J/9.3       R71    R606                       RHR-V-87A+
 42A           2      A    1 1    C,E                  M521/1             J10

RHR-MO-87B                       L200     SMB-00-10                     A X  221001  P  N  114                33+                        24
 MOTOR OPERATOR RHR-V-87B                                     R  578 M.8/8.6     R73    R604                       RHR-V-87B+
 42A           2      A    1 1    C,E                  M521/2             J6

RHR-MO-9                         L200     SMB-2-60                      A X  221001  P  Y  114                33+                        4320
 10.6HP MOTOR OPERATOR RHR-V-9                                C  511 160 D AZ R23   C47                          RHR-V-9+
 41A           2      A    1 3    B1,C,E               M521/1             F6

RHR-MO-93                        L200     SMB-0-40/T56                  A X  221001                                       17         4320
 2.6HP 5.75A MOTOR OPER. RHR-V-116                            R  548 N.0/8.6     R63                               RHR-V-116+
 02G11         2      A    1 0   B2,C,F                M521/2             J9

RHR-MO-94                        L200     SMB-0-40/T56                  A X  221001                                       07         4320
 2.6HP 5A MOTOR OPER. RHR-V-115                               R  548 N.0/9.0     R63                               RHR-V-115+
 02G11         2      A    1 0   B2,C,F                M521/2             J9

RHR-MO-99A                       L200     SMB-000-5                     D X  221001  P  Y  114                33+         10    C      4320
 MOTOR OPERATOR FOR RHR-V-123A                                C  514 95 D AZ R28    C47                          RHR-V-123A+
 215           2      A    1 3    B1,C,E               M521/1             E5

RHR-MO-99B                       L200     SMB-000-5                     D X  221001  P  Y  114                33+         10    C      .017
 MOTOR OPERATOR FOR RHR-V-123B                                C  510 270D AZ R27    C44                          RHR-V-123B
 215           2      A    1 0    B1                   M521/2             E13

RHR-PIS-22A                      B080     288A                          Y X  245002                                                  4320
 PRESSURE INDICATING SWITCHH22-P018                           R  505 J.7/3.7     R42                               E-IR-P018+
 02            2      P    2 3    G                    M521/1             E14

RHR-PIS-22B                      P080     288A                          Y X  245002  R  N  114                33+                        4320
 PRESSURE INDICATING SWITCHH22-P021                           R  505 H.6/9.3     R41                               E-IR-P021+
 02E12         2      P    2 3    G                    M521/2             D3

RHR-PIS-22C                      B080     288A                          Y X  245002                                                  4320
 PRESSURE INDICATING SWITCHH22-P021                           R  503 H.6/9.3     R41                               E-IR-P021+
 02            2      P    2 0    G                    M521/2             F5

RHR-PS-16A                       S382     5N-AA3-(X10)-STT              X X  256016  R  N  114                33+                        24
 ADS PERMISSIVE (10-240.PSIG)                                 R  503 J.6/3.6     R42    R305                       E-IR-P018+
 02E12         2      A    1 0    C,E                  M521/1             C15

RHR-PS-16B                       S382     5N-AA3-(X10)-STT              X X  256016  R  N  114                33+                        24
 ADS PERMISSIVE (10-240 PSIG)                                 R  503 H.6/9.3     R41    R305                       E-IR-P021+
 02E12         2      A    1 0    C,E                  M521/2             C3
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	ZONE	TH	HL	ROOM	TEST	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
RHR-PS-16C	ADS PERMISSIVE (10-240 PSIG)	02E12	2	A	1 0	C,E	S382	5N-AA3-(X10)-STT	M521/2	R	503	H.8/9.3	X X	D5	256016	R41	R	N	R305	114		33+				24	E-IR-P021+
RHR-PS-18	PRESS SWITCH SHUTDOWN COOL SUCT.	02E12	2	P	2 0	G	S382	6N6-E45-NX/CIATTX5	M521/1	R	507	N.1/7.7	X X	D8	256016		R	N		114		33+				4320	
RHR-PS-19A	ADS PERMISSIVE (10-240 PSIG) PUMP	02	2	A	1 0	C,E	S382	5N-AA3-(X10)-STT	M521/1	R	503	J.6/3.8	X X	C14	256016	R42	R	N		114		33+				24	E-IR-P018+
RHR-PS-19B	ADS PERMISSIVE (10-240 PSIG) PUMP	02	2	A	1 0	C,E	S382	5N-AA3-(X10)-STT	M521/2	R	503	H.8/9.3	X X	C3	256016	R41	R	N		114		33+				24	E-IR-P021+
RHR-PS-19C	ADS PERMISSIVE (10-240 PSIG) PUMPC	02	2	A	1 0	C,E	S382	5N-AA3-(X10)-STT	M521/2	R	505	H.8/9.3	X X	D5	256016	R41	R	N		114		33+				24	E-IR-P021+
RHR-TE-27A	TEMPERATURE ELEMENT (PRIMARY)	2	2	P	2 3	G	P427	117C3485P022	M521/1	R	565	J.2/8.0	X X	H10	339023	R61		N			01	99+	06153	10	E	4320	
RHR-TE-27B	TEMPERATURE ELEMENT (PRIMARY)	2	2	P	2 3	G	P427	117C3485P022	M521/2	R	565	M.6/8.0	X X	J10	339023	R63		N			01	99+	06153	10	E	4320	
RHR-TE-4A	TEMPERATURE ELEMENT (PRIMARY)	02E12	2	P	2 3	G	P427	117C3485P022	M521/1	R	588	J.8/9.0	X X	H10	339023	R71		N			01	99+	06153	10	E	4320	
RHR-TE-4B	TEMPERATURE ELEMENT (PRIMARY)	02E12	2	P	2 3	G	P427	117C3485P022	M521/2	R	588	M.4/9.0	X X	J7	339023	R73		N			01	99+	06153	10	E	4320	
RHR-TE-5A	RHR-HX-2A SSW OUTLET TEMP	02E	2	P	2 3	G	P427	117C3485P022	M524/1	R	560	J.3/8.5	X X	C13	339023	R61		N			01	99+	06153	10	E	4320	
RHR-TE-5B	RHR-HX-2B SSW OUTLET TEMP	02E	2	P	2 3	G	P427	117C3485P022	M524/2	R	560	M.7/8.5	X X	F13	339023	R61		N			01	99+	06153	10	E	4320	
RHR-V-60A	SOLENOID VALVE, SAMPLE ISO	215	2	A	1 0	P2	M095	MV36RP-H3	M521	R	560	J.8/8.5	X T	J12	324006	R61	W	N		200	01	99+	01014	10		4320	
RHR-V-60B	SOLENOID VLV. SAMPLE ISO	215	2	A	1 0	B2	M095	MV36RP-H3	M521	R	560	M.4/8.4	X T	J5	324006	R63	W	N		200	01	99+	01014	00		4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	STATUS S E	A/E ZONE	QID	ZONE	TM	HL	ROOM	TEST	ANL	FO C ACCURACY	FREQ	AGING	COMPOSITE EPN	DBE	C	HOURS
RHR-V-75A	SOLENOID VLV, SAMPLE ISO.	215	2	A	1 0	B2	M095	MV36RP-H3	R	561	J.8/8.5	M521	X J	J12	324006	R61	W	N		200	01		99+	01014		10		4320
RHR-V-75B	SOLENOID VLV, SAMPLE ISO	215	2	A	1 0	B2	M095	MV36RP-H3	R	561	M.4/8.5	M521	X J	J5	324006	R63	W	N		200	01		99+	01014		10		4320
ROA-M-AD/19	MOTOR FOR ROA-AD-19	64	2	A	1 0	J	B066	MA418	R	560	L.9/8.2	M545	R	F8	221002									06153		14	E	4320
ROA-POS-V/1	POS FOR ROA-V-1		2	A	1 3	B2,F	N007	70050100	R	578	N.7/5.7	E519/12	Y J	D8	200014									05033	ROA-V-1+	11	S	4320
ROA-POS-V/2	POS FOR ROA-V-2		2	A	1 3	B2,F	N007	70050100	R	578	N.7/5.0	E519/12	Y P	D8	200014									05033	ROA-V-2+	11	S	4320
ROA-RLY-CR1A	CONTROL ISOLATION VALVE ROA-V-1		3	P	2 3	G1	A500	RXMK1	R	556	N.0/6.0	E519/12	X X	D7	283011									06153	E-IR-67+	00		4320
ROA-RLY-CR200	CONTROL ISOLATION VALVE ROA-V-2		3	P	2 3	G1	A500	RXMK1	R	528	N.0/8.3	E519/12	X X	D7	283011		F							06153	E-IR-69+	00		4320
ROA-SPV-10	DIV II MCC ROOM DAMPER SOL PILOT -	216	2	P	2 0	G1	A499	HBX8320A-1	R	524	H.5/3.9.	M545	X X	E15	315002	R32	D	N	R410	114	03		33+					4320
ROA-SPV-100	ROA-V-1 SOL PILOT VA - -	216	2	A	1 3	B2,F	A499	WJHT831654	R	553	M.8/5.7	M545	X X	F3	315004	R63	P	N	R504	114	03		33+		E-IR-67+			4320
ROA-SPV-11	DIV 1 MCC ROOM DAMPER SOL PILOT -	216	2	P	2 0	G1	A499	HBX8320B-1	R	524	H.7/8.1	M545	X X	D7	315002	R31	D	N	R212	114	03		33+					4320
ROA-SPV-12	DC MCC ROOM DAMPER SOL PILOT - -	216	2	P	2 0	G1	A499	HBY8320B-1	R	480	H.8/8.1	M545	X X	C7	315002	R31	D	N	R212	114	03		33+					4320
ROA-SPV-13	H2 RECOMB MCC RM (DIV I) DAMPER SO	216	2	P	2 0	G1	A499	HBX8320A-1	R	596	H.3/5.9	M545	X X	G15	315002	R73	D	N	R611	114	03		33+					4320
ROA-SPV-14	H2 RECOMB MCC RM (DIV II) DAMPER S	216	2	P	2 0	G1	A499	HBX8320A-1	R	592	H.4/8.1	M545	X X	G14	315002	R73	D	N	R612	114	03		33+					4320

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM	ZONE	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
ROA-SPV-15	SOLENOID PILOT VALVE	216	2	P	2 0	G1	A499	MBX8320A-1	M545	R	563	M.8/4.4	G13	X X	315002	D	R63	N	114	R516	03	33+				4320	
ROA-SPV-17	ANALYZER RM 1B DAMPER SOL PILOT LO	216	2	P	2 0	G1	A499	MBX8320A-1	M545	R	563	M.8/4.4	G14	X X	315002	D	R63	N	114	R512	03	33+				4320	
ROA-SPV-200	ROA-V-2 SOL PILOT VA - -	216	2	A	1 3	B2,F	A499	WJHT8316E35	M545	R	529	N.0/8.2	F3	X R	315004	P	C54	N	114	R404	03	33+				4320	E-IR-69+
RPS-PS-2A	HIGH DRYWELL PRESSURE 0.2-6 PSIM22-P004	02C72	2	A	1 0	A	S382	12N-AA4-X10TT	807E178TC/	R	525	J.5/7.1	C3	Y X	256016	R	R51	N	114	R404		33+				.17	E-IR-P004+
RPS-PS-2B	HIGH DRYWELL PRESSURE 0.2-6 PSI	02C72	2	A	1 0	A	S382	12N-AA4-X10TT	807E178TC/	R	525	M.8/6.6	7C3	A X	256016	R	R53	N	114	R404		33+				.17	E-IR-P027+
RPS-PS-2C	HIGH DRYWELL PRESSURE 0.2-6 PSI	02C72	2	A	1 0	A	S382	12N-AA5-X10TT	807E178TC/	R	524	N.8/5.8	6J3	Y X	256016	R	R53	N	114	R404		33+				.17	E-IR-P005+
RPS-PS-2D	HIGH DRYWELL PRESSURE 0.2-6 PSI	02C72	2	A	1 0	A	S382	12N-AA5-X10TT	807E178TC/	R	529	M.4/4.2	7J3	X X	256016	R	R52	N	114	R404	03	10				.17	E-IR-P026+
RPS-PS-4	PRIM. CONT HIGH PRESS - -	02C72	2	P	2 0	G	8080	288A	M529	R	522	J5/7.2	H13	A X	256007	R	R51	N	121	R404		09				4320	E-IR-P004+
RRA-M-FN/1	3HP/4.7A MOTOR FOR RRA-FN-1	67	2	A	1 3	J	W120	SBFC/182T	M545	R	445	M.7/4.3	B14	X X	213012		R22			R113						4320	RRA-FC-1+
RRA-M-FN/10	3HP/4.65A MOTOR FOR RRA-FN-10	67	2	A	1 0	J	W120	SBFC	M545	R	522	N.3/3.8	E15	X X	213023		R53			R410			05153	00		4320	RRA-FC-10+
RRA-M-FN/11	3HP/4.65A MOTOR FOR RRA-FN-11	67	2	A	1 0	J	W120	SBFC	M545	R	522	M.5/8.0	E7	X X	213023		R51			R411			05153	00		4320	RRA-FC-11+
RRA-M-FN/12	5HP/5.5A MOTOR FOR RRA-FN-12	216	2	A	1 0	J	W120	TBAN	M545	R	[illegible]	[illegible]	C7	X X	213015		R31			R212			05253	01		4320	RRA-FC-12+
RRA-M-FN/13	3HP/7A MOTOR FOR RRA-FN-13	216	2	A	1 0	J	W120	TBAN	M545	R	585	M.3/6.1	H15	X X	213015	F	R73			R611			05253	01		4320	RRA-FC-13+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	TM	ZONE	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
RRA-M-FN/14	3HP/5.5A MOTOR FOR RRA-FN-14	216	2	A	1 0	J	W120	TBAN	R	585	H.7/9.0	M545	H13	X X	213015	F	R73	R612		05253	01		4320	RRA-FC-14*
RRA-M-FN/15	3HP/5.4A MOTOR FOR RRA-FN-15	216	2	A	1 0	J	W120	TBAN	R	560	H.5/4.5	M545	G14	X X	213015		R63	R516		05253	01		4320	RRA-FC-15*
RRA-M-FN/17	3HP/5.7A MOTOR FOR RRA-FN-17	216	2	A	1 0	J	W120	TBAN	R	548	H.5/4.7	M545	G14	X X	213015		R63	R512		05253	01		4320	RRA-FC-17*
RRA-M-FN/19	3HP MOTOR FOR RRA-FN-19	215	2	A	1 3	J	W120	SBFC	R	548	L.10/8.4	M545	G9	Z R	213011		R63		33*	05153	00	E	4320	RRA-FC-19*
RRA-M-FN/2	3HP/7A MOTOR FOR RRA-FN-2	67	2	A	1 3	J	W120	SBFC/182T	R	445	L.0/8.3	M545	B8	X X	213012		R21	R116					4320	RRA-FC-2*
RRA-M-FN/20	3HP MOTOR FOR RRA-FN-2	215	2	A	1 3	J	W120	TBFC	R	548	L.8/8.4	M545	G8	Z R	213011		R63			05153	00	E	4320	RRA-FC-20*
RRA-M-FN/3	3HP/4.65A MOTOR FOR RRA-FN-3	67	2	A	1 3	J	W120	SBFC/182T	R	445	M.0/8.3	M545	B10	X X	213012		R23	R115					4320	RRA-FC-3*
RRA-M-FN/4	10HP/7A MOTOR FOR RRA-FN-4	67	2	A	1 0	J	W120	TBFC/256T	R	441	H.4/4.1	M545	B12	X X	213025		R23	R106		05153	00	E	4320	RRA-FC-4*
RRA-M-FN/5	5HP/6.8A MOTOR FOR RRA-FN-5	67	2	A	1 0	J	W120	SBFC	R	441	K.7/3.8	M545	F13	X X	213013		R22	R114					4320	RRA-FC-5*
RRA-M-FN/6	2HP/3A MOTOR FOR RRA-FN-6	67	2	A	1 1	L	W120	TBFC/145T	R	441	H.6/7.7	M545	E7	X X	213021		R21	R112		05153	00		24	RRA-FC-6*
RRA-RMS-FN/1	CONTROL SWITCH FOR RRA-FN-1		3	P	2 3	J	S345	KYC-1	R	444	H.8/4.3	M545	B14	X R	285002					05253	01	E	4320	
RRA-RMS-FN/2	CONTROL SWITCH FOR RRA-FN-2		3	P	2 3	J	S345	KYC-1	R	444	K.2/8.2	M545	B8	X J	285002					05253	11		4320	
RRA-RMS-FN/3	CONTROL SWITCH FOR RRA-FN-3		3	P	2 3	J	S345	KYC-1	R	444	L.8/8.2	M545	G9	X R	285002					05253	01		4320	

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                                                            STATUS      ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
          EPN                MFG               MODEL          S E   QID   TH  HL TEST ANL FO C     FREQ   AGING  DBE  C   HOURS
                   DESCRIPTION                       BLDG ELEV  DETAIL      ZONE  ROOM      ACCURACY           COMPOSITE EPN
 CONTRACT   LEVEL  EC   USE   SAFETY FUNCTION    A/E DRAWING.  A/E ZONE

RRA-RMS-FN/4                 S345    KYC-1                      X X  285002                                   05253   11       4320
 CONTROL SWITCH FOR RRA-FN-4                              R  444 M.4/4.7
             3     P    2 3   J                  M545             B12

RRA-RMS-FN/5                 S345    KYC-1                      X X  285002                                   05253   01       4320
 CONTROL SWITCH FOR RRA-FN-5                              R  444 K.7/3.8
             3     P    2 0   J                  M545             B13

RRA-RMS-FN/6                 S345    KYC-1                      X X  285002                                   05253   01       24
 CONTROL SWITCH FOR RRA-FN-6                              R  444 H.6/8.0
             3     P    2 1   L                  M545             B7

RRC-FT-11A                   R369    1151DP8A22MB               Y X  259003                                           05   G   .17
 FLOW TRANSMITTER                                         R  473 L.6/4.0      R33                           E-IR-P006+
 02B35       3     P    2 0   G                  M530             G13

RRC-FT-11B                   R369    1151DP8A22MB               B X  259003                                           05   G   .17
 FLOW TRANSMITTER                                         R  473 M.6/8.1      R33                           E-IR-P022+
 02B35       3     P    2 0   G                  M530             G5

RRC-MO-16A                   L200    SMC-04                     A X  221001                                           10       24
 2HP MOTOR OPERATOR FOR RRC-V-16A                         R  506 M.5/4.4      R43   R307                    RRC-V-16A+
 215         2     A    1 0   B1                 M530             C14

RRC-MO-16B                   L200    SMC-04                     D X  221001                                           10   C   24
 2 HP MOTOR OPERATOR FOR RRC-V-16B                        R  506 J.5/7.6      R41   R305                    RRC-V-16B+
 215         2     A    1 0   B1                 M530             R14

RRC-PS-18A                   S382    SNAA3X105TT                Y X  256016  R   N  114   03         10                     4320
 PRESSURE SWITCH NON IND H22-P006                         R  475 L.6/4.0      R33   R206                    E-IR-P006+
 02B35       2     A    1 0   B1                 M530             G12

RRC-PS-18B                   P069    B1T-M12SS-GE               Y X  256002  R   N   14   00         33+                    4320
 PRESSURE SWITCH NON IND H22-P022                         R  475 M.6/8.1      R33   R206                    E-IR-P022+
 02B         2     A    1 0   B1                 M530             F5

RRC-PS-36A                   S382    12N-K4                     X X  256016                                   06153   11   E   4320
 INHIBITOR SWITCH FOR RRC-V-67A                           R  548 N.8/5.7      R33                           E-IR-67+
 220         2     P    2 0   G                  M530             E10

RRC-PS-36B                   S382    12N-K4                     X X  256016                                   06153   11   E   4320
 INHIBITOR SWITCH FOR RRC-V-67B                           R  548 H.7/8.1      R33                           E-IR-68+
 220         2     P    2 0   G                  M530             E7

RRC-PT-38A                   R369    1152GP9E22T0280PB            X  259003                                   06153   02   G   4320
 VESSEL DOME PRESSURE                                     R  522 J.5/7.2                                    E-IR-P004+
 02          2     P    2 0   G                  M529             J14

RRC-PT-38B                   R369    1152GP9E22T0280PB            X  259003                                   06153   02   G   4320
 VESSEL DOME PRESSURE                                     R  522 M.8/6.6                                    E-IR-P027+
 02          2     P    2 0   G                  M529             H5
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                                                                 STATUS      ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
             EPN                 MFG                MODEL          S E   QID   TM  HL TEST ANL FO C    FREQ    AGING  DBE  C   HOURS
                       DESCRIPTION                        BLDG ELEV  DETAIL  ZONE ROOM      ACCURACY               COMPOSITE EPN
 CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION        A/E DRAWING  A/E ZONE

RRC-TE-21                        N275    117C3485P083                 X X  339023                                 06303   06  E   4320
 RRC TEMP. ELEM.                                             C  501            C45
 02             2     P    2 3   G                   M523           F13

RRC-TE-23A                       G080    159C4520F004                 X X  339023                                 06153   05      4320
 RRC TEMP ELEM.                                              C  506 148 D AZ   C47
 02B35          2     P    2 3   G                   M530           C12

RRC-TE-23B                       G080    159C4520F004                 X X  339023                                 06153   05      4320
 RRC TEMP ELEM                                               C  506 235 D AZ   C44
 02B35          2     P    2 3   G                   M530           C5

RRC-TE-28A                       R369    177-443-4                    X X  339027                                 06153   05  E   4320
 RRC TEMP ELEM                                               C  506 148 D AZ   C47
 02B35          2     P    2 3   G                   M530           C12

RRC-TE-28B                       R369    177-443-4                    X X  339027                                 06153   05  E   4320
 RRC TEMP ELEM                                               C  506 235 D AZ   C44
 02B35          2     P    2 3   G                   M530           C5

RRC-V-19                         T020    82M-001                      X X  361015      Y                          06153   10  E   24
 1.0" SOLENOID SAMP VLV                                      C  509 319 D AZ R35 C44                          RRC-V-19+
 220            2     A    1 0   B1                  M530           F11

RRC-V-20                         M095    MV36RP-M3                    X X  361009                                 01014   10      24
 1.0" SOLENOID SAMP VLV                                      R  506 J.0/6.9    R41                            RRC-V-20+
 215            2     A    1 0   B1                  M530           F12

RWCU-DPIS-25                     B040    289                          Y X  086001                                 05253   13  G   4320
 DPIS PRESS.BOUNT.FOR FE-35                                  R  522 N.8/5.0    R53                            E-IR-P002+
                3     P    2 0   G                   M523           F15

RWCU-FT-15                       B040    50-555111BLAA4WCJ            Y X  156003                                 05033   11  P   24
 LD RWCU ISOL FLOW                                           R  522 N.8/5.0    R53                            E-IR-P002+
 02E31          3     A    1 0   B1,F                M523           B11

RWCU-FT-36                       B040    555111BMAA4WBP               Y X  156003  R   N                   33+    05153   10  P   24
 FLOW ELEMENT 35 PRESSURE BOUNDARY                           R  524 N.8/5.0    R53                            E-IR-P002+
 02E31          3     A    1 0   B1,F                M523           F15

RWCU-FT-41                       B040    555111BMAA4WBM               Y X  156003  R   N                          05153   10  P   24
 FLOW TRANSMITTER                                            P  524 N.8/5.0    R53                            E-IR-P002+
 02E31          3     A    1 0   B1,F                M523           H11

RWCU-MO-1                        L200    SMB-0-25                     M X  221001  P   Y  114              33+                    24
 1.6HP 4.0A MOTOR OPER. RWCU-V-1                             C  540 150 DEG    C57                            RWCU-V-1+
 41A            2     A    1 0   B1                  M523           F15

RWCU-MO-4                        L200    SMB-0-25                     A X  221001  P   Y  114              33+                    24
 1.8HP 7.5A MOTOR OPER. RWCU-V-4                             R  530 M.7/5.0    R53  R406                      RWCU-V-4+
 41A            2     A    1 0   B1                  M523           F15
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EPN / MFG / MODEL / STATUS S E / QID / ***SEISMIC (S) PARAMETERS*** / *ENV. (E) PARAMETERS*
DESCRIPTION / BLDG ELEV / DETAIL / TH / HL TEST / ANL FO C / FREQ / AGING DBE C HOURS
CONTRACT LEVEL EC USE SAFETY FUNCTION A/E DRAWING A/E ZONE / ZONE / ROOM / ACCURACY / COMPOSITE EPN

RWCU-MO-40 L200 SMB-0-25 A X 221001 P Y 114 33+ 24
1.6 HP MOTOR OPER. RWCU-V-40+ R 515 H.6/5.1 R42 RWCU-V-40+
41A 2 A 1 0 B1 M523 H11

SGT-DPIS-1A D295 3002LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSS SGT-MS-1A LOC R 572 H.8/6.4 R72 SGT-FU-1A+
18 2 P 2 0 G M544 J13

SGT-DPIS-1B D295 3002LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSS SGT-MS-1B LOC R 579 J.4/6.3 R72 SGT-FU-1B+
18 2 P 2 0 G M544 E13

SGT-DPIS-2A D295 3002LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSSSGT-FL-1A-1 LOC R 572 H.8/6.4 R71 SGT-FU-1A+
18 2 P 2 0 G M544 J12

SGT-DPIS-2B D295 3002LT X X 086004 R N 04 06153 04 4320
SGT-FU-1B AP ACROSSSGT-HF-1B-1 LOC R 579 J.4/6.3 R72 SGT-FU-1B+
18 2 P 2 0 G M544 E12

SGT-DPIS-3A D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSSSGT-HF-1A-1 LOC R 572 H.8/6.4 R71 SGT-FU-1A+
18 2 P 2 0 G M544 J12

SGT-DPIS-3B D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1B AP ACROSSSGT-CF-1B-1 LOC R 579 J.4/6.3 R72 SGT-FU-1B+
18 2 P 2 0 G M544 E12

SGT-DPIS-4A D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSSSGT-CF-1A-2 LOC R 572 H.8/6.4 R72 SGT-FU-1A+
18 2 P 2 0 G M544 J11

SGT-DPIS-4B D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1B AP ACROSSSGT-CF-1B-2 LOC R 579 J.4/6.3 R71 SGT-FU-1B+
18 2 P 2 0 G M544 E11

SGT-DPIS-5A D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSSSGT-CF-1A-2 LOC R 572 H.8/6.4 R71 SGT-FU-1A+
18 2 P 2 0 G M544 J9

SGT-DPIS-5B D295 3010LT X X 086004 R N 04 06153 04 4320
SGT-FU-1B AP ACROSSSGT-HF-1B-2 LOC P 579 J.4/6.3 R71 SGT-FU-1B+
18 2 P 2 0 G M544 E9

SGT-DPIS-6A D295 3004LT X X 086004 R N 04 06153 04 4320
SGT-FU-1A AP ACROSSSGT-HF-1A-2 LOC R 572 H.8/6.4 R71 SGT-FU-1A+
18 2 P 2 0 G M544 J8

SGT-DPIS-6B D295 3004LT X X 086004 R N 04 06153 04 4320
SGT-FU-1B AP ACROSSSGT-HF-1B-2 LOC R 579 J.4/6.3 R71 SGT-FU-1B+
18 2 P 2 0 G M544 E8

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DRAWING	A/E	STATUS S	STATUS E	DETAIL A/E ZONE	QID	ZONE	TH	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS	COMPOSITE EPN
SGT-EHC-1A1	22.5 KW ELECTRIC HEATING COIL	18	2	A	1 0	D,F	C332	2747499	R	576	H.7/5.6	M544	X	X	H13	109008	R72	D	N	200	R608	03	11				4320	SGT-FU-1A*
SGT-EHC-1A2	ELECTRIC HEATING COIL	18	2	A	1 C	D,F	C332	2747499	R	576	H.7/5.6	M544	X	X	H13	109008	R72	D	N	200	R608	03	11				4320	SGT-FU-1A*
SGT-EHC-1B1	22.5 KW ELECTRIC HEATING COIL	18	2	A	1 0	D,F	C332	27-47499	R	576	J.3/5.6	M544	X	X	D13	109008	R72	D	N	200	R607	03	11				4320	SGT-FU-1B*
SGT-EHC-1B2	ELECTRIC HEATING COIL	18	2	A	1 0	D,F	C332	27-47499	R	576	J.3/5.6	M544	X	X	D13	109008	R72	D	N	200	R607	03	11				4320	SGT-FU-1B*
SGT-EHO-1A1	SGT-FN-1A1 INLET VANES OPER	28	2	A	1 0	D,F	I206	NH91GZ073E1F-ZN20	R	575	H.5/7.7	M544	A	X	J7	110004	R71	P	N	121	R608	03	33*	10143	10	S	4320	SGT-FN-1A1*
SGT-EHO-1A2	SGT-FN-1A2 INLET VANES OPER	28	2	A	1 0	D,F	I206	NH91GZ073E1F-ZN20	R	575	H.8/7.7	M544	A	X	G7	110004	R71	P	N	121	R608	03	33*	10143	10	S	4320	SGT-FN-1A2*
SGT-EHO-1B1	SGT-FN-1B1 INLET VANES OPER	28	2	A	1 0	D,F	I206	NH91GZ073E1F-ZN20	R	575	J.1/7.7	M544	A	X	C7	110004	R71	P	N	121	R607	03	33*	10143	00	S	4320	SGT-FN-1B1*
SGT-EHO-1B2	SGT-FN-1B2 INLET VANES OPER	28	2	A	1 0	D,F	I206	NH91GZ073E1F-ZN20	R	575	J.4/7.7	M544	A	X	E7	110004	R71	P	N	121	R607	03	33*	10143	00	S	4320	SGT-FN-1B2*
SGT-FS-2A2	SGT-FN-1A-1 DISCH. LOC-AL-	220	2	A	1 0	D,F	B080	289A	R	572	H.9/7.8	M544	Z	X	J6	154005	R71	F						06153	10	E	4320	
SGT-FS-2B1	SGT-FN-1B-2 DISCH. LOC-AL-	220	2	A	1 0	D,F	B080	289A	R	572	J.2/8.0	M544	Z	X	E6	154005	R71	F						06153	00	E	4320	
SGT-FT-1A1	FLOW AFTER SGT-FN-1A-1 LOC-AL-	SS	3	A	1 0	F,I	T363	PBC(S)-4	R	585	H8/7.1	M544	X	X	J6	156010	R71				R608			06303	16	E	4320	SGT-FN-1A1*
SGT-FT-1A2	FLOW AFTER SGT-FN-1A-2 LOC-AL-	SS	3	A	1 0	F,I	T363	PBC(S)-4	R	585	H8/7.1	M544	X	X	C6	156010	R71				R608			06303	16	E	4320	SGT-FN-1A2*
SGT-FT-1B1	FLOW AFTER SGT-FN-1B-1 LOC-AL-	SS	3	A	1 0	F,I	T363	PBC(S)-4	R	585	H8/7.1	M544	X	X	C6	156010	R71				R608			06303	06	E	4320	SGT-FN-1B1*

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	ENV. AGING	DBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DRAWING	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	DETAIL A/E ZONE
SGT-FT-1B2	T363	PBC(S)-4	X X	156010			06303	06	E	4320	FLOW AFTER SGT-FN-1B-2 LOC-AL-	R	585	H8/7.1	R71	R608	SGT-FN-1B2+	SS	3	A	1 0	F,I	M544	E6
SGT-M-FN/1A1	W120	TBDP/286T	X X	213017	F					4320	25HP/61-30.5A MOTOR FOR SGT-FN-1A1	R	576	H.5/7.6	R71	R608	SGT-FN-1A1+	28	2	A	1 0	D,F	M544	J7
SGT-M-FN/1A2	W120	TBDP/286T	X X	213017	F					4320	25HP/61-30.5A MOTOR FOR SGT-FN-1A2	R	576	H.9/7.6	R71	R608	SGT-FN-1A2+	28	2	A	1 0	D,F	M544	G6
SGT-M-FN/1B1	W120	TBDP/286T	X X	213017	F					4320	25HP/61-30.5A MOTOR FOR SGT-FN-1B1	R	576	J.2/7.6	R71	R607	SGT-FN-1B1+	28	2	A	1 0	D,F	M544	C6
SGT-M-FN/1B2	W120	TBDP/286T	X X	213017	F					4320	25HP/61-30.5A MOTOR FOR SGT-FN-1B2	R	576	J.5/7.6	R71	R607	SGT-FN-1B2+	28	2	A	1 0	D,F	M544	E6
SGT-ME-16A	H349	XNAM10205	Y X	217001	D	N 021	06153	04	E	4320	MOISTURE ELEMENT AFTER SGT-MS-1A	R	572	H.7/5.5	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	J13
SGT-ME-16B	H349	XNAM10205	Y X	217001	D	N 021	06153	04	E	4320	MOISTURE ELEMENT AFTER SGT-MS-1B	R	572	J.3/5.5	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	E13
SGT-ME-17A	H349	XNAM10205	Y X	217001	D	N 021	06153	04	E	4320	MOISTURE ELEMENT AFTER SGT-MS-1A	R	572	H.7/5.5	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	H13
SGT-ME-17B	H349	XNAM10205	Y X	217001	D	N 021	06153	04	E	4320	MOISTURE ELEMENT AFTER SGT-MS-1B	R	572	J.3/5.5	R72		SGT-FU-1B+	18	2	P	2 0	G	M544	C13
SGT-ME-4A	H349	XNAM10205	X X	217001	D	N 021	06153	04	E	4320	SGT-FU-1A MOIST. AFTER SGT-FN-1A-1	R	582	H.7/6.2	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	H11
SGT-ME-4B	H349	XNAM10205	X X	217001	D	N 021	06153	04	E	4320	SGT-FU-1B MOIST. AFTER SGT-HF-1B-1	R	582	J.3/6.2	R72		SGT-FU-1B+	18	2	P	2 0	G	M544	C11
SGT-ME-6A1	H349	XMS-7AP	X X	217001	D	N 021				4320	MOISTURE AFTER SGT-MS-1A	R	572	H.6/5.5	R72	R608	SGT-FU-1A+	18	2	A	1 0	D,F	M544	J13
SGT-ME-6A2	H349	XMS-7AP	X X	217001			06153	14	E	4320	MOISTURE AFTER SGT-MS-1A	R	572	H.8/5.5			SGT-FU-1A+	18	2	A	1 0	D,F	M544	J13

EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	TM	ZONE	HL	ROOM	TEST	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SGT-ME-6A3 MOISTURE AFTER SGT-MS-1A	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	H.8/5.5	X X	J13	217001							06153	14	E	4320	SGT-FU-1A+
SGT-ME-6B1 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AD	M544	R	572	J.4/5.5	X X	E13	217001	D	R72	N	R607	021					4320	SGT-FU-1B+
SGT-ME-6B2 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	J.4/5.5	X X	E13	217001							06153	04	E	4320	SGT-FU-1B+
SGT-ME-6B3 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	J.4/5.5	X X	E13	217001							06153	04	E	4320	SGT-FU-1B+
SGT-ME-7A1 MOISTURE AFTER SGT-MS-1A	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	H.8/5.5	X X	H13	217001	D	R72	N	R608	021					4320	SGT-FU-1A+
SGT-ME-7A2 MOISTURE AFTER SGT-MS-1A	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	H.8/5.5	X X	H13	217001							06153	14	E	4320	SGT-FU-1A+
SGT-ME-7A3 MOISTURE AFTER SGT-MS-1A	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	H.8/5.5	X X	H13	217001							06153	14	E	4320	SGT-FU-1A+
SGT-ME-7B1 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	J.4/5.5	X X	C13	217001	D	R72	N	R607	021					4320	SGT-FU-1B+
SGT-ME-7B2 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AP	M544	R	572	J.4/5.5	X X	C13	217001							06153	04	E	4320	SGT-FU-1B+
SGT-ME-7B3 MOISTURE AFTER SGT-MS-1B	18	2	A	1 0	D,F	M349	XMS-7AD	M544	R	572	J.4/5.5	X X	C13	217001							06153	04	E	4320	SGT-FU-1B+
SGT-MO-1A 1.3HP/4.8-2.4A MOTOR OPER SGT-V-1A	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	582	H.8/5.2	A X	H15	221001	P	R72	N	R608	114	33+				4320	SGT-V-1A+
SGT-MO-1B 1.3HP/4.8-2.4A MOTOR OPER SGT-V-1B	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	582	J.3/5.5	A X	E15	221001	P	R72	N	R607	114	33+				4320	SGT-V-1B+
SGT-MO-3A1 1.3HP 2.4A MOTOR OPER. SGT-V-3A1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	578	H.7/7.7	A X	G7	221001	P	R71	N	R608	114	33+				4320	SGT-V-3A1+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DRAWING	STATUS S E	DETAIL A/E ZONE	QID	TH	HL	TEST	ZONE	ROOM	FREQ	DBE C	COMPOSITE EPN	HOURS
SGT-MO-3A2	1.33HP 2.4A MOTOR OPER. SGT-V-3A2	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	578	H.8/7.7	A X	J7	221001	P	N	114	R71	R608	33+		SGT-V-3A2+	4320
SGT-MO-3B1	1.33HP 2.4A MOTOR OPER. SGT-V-3B1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	578	J.3/7.7	A X	E7	221001	P	N	114	R72	R607	33+		SGT-V-3B1+	4320
SGT-MO-3B2	1.33HP 2.4A MOTOR OPER. SGT-V-3B2	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	578	J.6/7.7	A X	C7	221001	P	N	114	R71	R607	33+		SGT-V-3B2+	4320
SGT-MO-4A1	1.3HP 2.4A MOTOR OPER. SGT-V-4A1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	588	H.4/7.0	A X	H5	221001	P	N	114	R71	R608	33+		SGT-V-4A1+	4320
SGT-MO-4A2	1.3HP 2.4A MOTOR OPER. SGT-V-4A2	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	585	J.0/7.0	A X	C5	221001	P	N	114	R71	R608	33+		SGT-V-4A2+	4320
SGT-MO-4B1	1.33HP 2.4A MOTOR OPER. SGT-V-4B1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	587	J.0/7.0	A X	C5	221001	P	N	114	R71	R608	33+		SGT-V-4B1+	4320
SGT-MO-4B2	1.33HP 2.4A MOTOR OPER. SGT-V-4B2	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	587	J.8/7.0	A X	E5	221001	P	N	114	R71	R607	33+		SGT-V-4B2+	4320
SGT-MO-5A1	1.33HP 2.4A MOTOR OPER. SGT-V-5A1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	588	H.4/7.0	A X	J5	221001	P	N	114	R71	R608	33+		SGT-V-5A1+	4320
SGT-MO-5A2	1.33HP 2.4A MOTOR OPER. SGT-V-5A2	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	588	H.9/7.0	A X	J5	221001	P	N	114	R71	R608	33+		SGT-V-5A2+	4320
SGT-MO-5B1	1.33HP 2.4A MOTOR OPER. SGT-V-5B1	68	2	A	1 0	D,F	L200	SMB-00-10	M544	R	585	J.1/7.0	A X	C5	221001	P	N	114	R71	R608	33+		SGT-V-5B1+	4320
SGT-MO-5B2	1.33HP 2.4A MOTOR OPER. SGT-V-5B2	68	2	A	1 0	D	L200	SMB-00-10	M544	R	587	J.6/7.0	A X	F5	221001	P	N	114	R71	R607	33+		SGT-V-5B2+	4320
SGT-POS-V/2A	POS FOR SGT-V-2A	68	2	A	1 0	I	N007	EA740	M544	R	583	J.3/5.5	A X	H15	200015							00	SGT-V-2A+	4320
SGT-POS-V/2B	POS FOR SGT-V-2B	68	2	A	1 0	I	N007	EA740	M544	R	580	J.4/5.2	A X	B15	200015	P	N	114			33+		SGT-V-2B+	4320

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                                                                STATUS        ***SEISMIC (S) PARAMETERS***      *ENV. (E) PARAMETERS*
              EPN            MFG              MODEL              S E    QID   TM  HL TEST ANL FO C    FREQ     AGING  DBE  C   HOURS
                      DESCRIPTION                     BLDG ELEV DETAIL     ZONE   ROOM     ACCURACY             COMPOSITE EPN
CONTRACT    LEVEL   EC   USE   SAFETY FUNCTION   A/E DRAWING  A/E ZONE

SGT-SPV-2A                 A499    WJNP831664E                  X X  315006  P  N  114  03          33+     05153   10  P   4320
 SOL. PILOT VLV FOR SGT-V-2A                            R  576 H.9/5.2    R72   R608
 220          2     A    1 0   F               M539           J15

SGT-SPV-2B                 A499    WJNP83164E                   X X  315006  P  N  114  03          33+     05153  .00  P   4320
 SOL. PILOT VLV. FOR SGT-V-2B                           R  577 J.1/5.2    R72   R607
 220          2     A    1 0   F               M539           D15

SGT-SPV-F1                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1A-                    R  578 H.6/3.7    R72   R602                SGT-DV-1A1+
 18           2     P    2 0   F               M544           G12

SGT-SPV-F2                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1A-                    R  578 H.6/3.7    R72   R602                SGT-DV-1A2+
 18           2     P    2 0   F               M544           G11

SGT-SPV-F3                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1A-                    R  578 H.6/3.6    R72   R602                SGT-DV-1A3+
 18           2     P    2 0   F               M544           G9

SGT-SPV-F4                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1B-                    R  578 H.6/3.6    R72   R602                SGT-DV-1B1+
 18           2     P    2 0   F               M544           B12

SGT-SPV-F5                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1B-                    R  578 H.6/3.6    R72   R602                SGT-DV-1B2+
 18           2     P    2 0   F               M544           B11

SGT-SPV-F6                 A499    8211D2M0                     X X  315007  P  N  114  03          33+                     4320
   1/2 S.O DELUGE VA ASSY SGT-DV-1B-                    R  578 H.6/3.6    R72   R602                SGT-DV-1B3+
 18           2     P    2 0   F               M544           B9

SGT-TC-1A1                 A160    837-A4J                      X X  334001  R  N       04                  05253   04  E   4320
 SGT-FU-1A TEMP. AFTER SGT-ESH-1A -                     R  579 H.7/6.4    R72   R608                SGT-FU-1A+
 18           3     P    2 0   G               M544           J11

SGT-TC-1A2                 A160    837-A4J                      X X  334001  R  N       04                  05253   04  E   4320
 SGT-FU-1A TEMP. AFTER SGT-CF-1A-1                      R  579 H.7/6.4    R72   R608                SGT-FU-1A+
 18           2     P    2 0   G               M544           J10

SGT-TC-1B1                 A160    837-A4J                      X X  334001  R  N       04                  05253   04  E   4320
 SGT-FU-1B TEMP. AFTER SGT-ESH-1B -                     R  579 J.3/6.4    R71   R607                SGT-FU-1B+
 18           2     P    2 0   G               M544           F11

SGT-TC-1B2                 A160    837-A4J                      X X  334001  R  N       04                  05253   04  E   4320
 SGT-FU-1B TEMP. AFTER SGT-CF-1B-1                      R  579 J.3/6.4    R71   R607                SGT-FU-1B+
 18           2     P    2 0   G               M544           E10

SGT-TC-2A1                 A160    837-A4J                      X X  334001  R  N       04                  05253   04  E   4320
 SGT-FU-1A TEMP. AFTER SGT-ESH-2A L                     R  579 H.9/6.7    R71   R608                SGT-FU-1A+
 18           2     P    2 0   G               M544           J10
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM	ZONE	HL	ROOM	TEST	ANL	FO C	ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SGT-TC-2A2	SGT-FU-1A TEMP. AFTER SGT-CF-1A-2	18	2	P	2 0	G	A160	837-A4J	M544	R	579	H.9/6.7	J9	X X	334001	R	R71	N	R608		04				05253	04	E	4320	SGT-FU-1A+
SGT-TC-2B1	SGT-FU-1B TEMP. BEFORE SGT-CF-1B-2	18	2	P	2 0	G	A160	837-A4J	M544	R	579	J.3/6.7	E9	X X	334001	R	R71	N	R607		04				05253	04	E	4320	SGT-FU-1B+
SGT-TC-2B2	SGT-FU-1B TEMP. AFTER SGT-CF-1B-2	18	2	P	2 0	G	A160	837-A4J	M544	R	579	J.3/6.7	E9	X X	334001	R	R71	N	R607		04				05253	04	E	4320	SGT-FU-1B+
SGT-TE-1A	SGT-FU-1A TEMP. BEFORE SGT-EHC-1A-	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	582	H.7/5.5	J13	R X	339009	F	R72								06153	00	E	4320	SGT-FU-1A+
SGT-TE-1B	SGT-FU-1B TEMP. BEFORE SGT-EHC-1B-	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	582	J.3/5.5	D13	X	339009	F	R71								06153	00	E	4320	SGT-FU-1B+
SGT-TE-6A	SGT-FU-1A TEMP. AFTER SGT-CF-1A-1	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	577	H.6/6.0	H11	Z X	339009		R71								05273	00	E	4320	SGT-FU-1A+
SGT-TE-6B	SGT-FU-1B TEMP. AFTER SGT-CF-1B-1	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	576	J.5/6.0	C10	Z X	339009		R71	N							05273	04	E	4320	SGT-FU-1B+
SGT-TE-7A	SGT-FU-1A TEMP. AFTER SGT-CF-1A-2	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	577	H.6/7.2	H9	Z X	339009		R71	N							05273	04	E	4320	SGT-FU-1A+
SGT-TE-7B	SGT-FU-1B TEMP. AFTER SGT-CF-1B-2	18	2	P	2 0	G	T361	TA-20(JD)-TW157-18	M544	R	577	J.5/7.2	C9	Z X	339009		R71	N							05273	04	E	4320	SGT-FU-1B+
SGT-TE-8A	SGT FAN DISCH HEADER	215	2	P	2 0	G	H329	A-10402	M544	R	572		F4	X X	339009		R72								06153	05		4320	
SGT-TE-8B	SGT FAN DISCH HEADER	215	2	P	2 0	G	H329	A-10402	M544	R	572		F4	X X	339009		R72								06153	05		4320	
SGT-TS-1A1	SGT-ESH-1A UPSTREAM LO TEMP AL	18	2	P	2 0	G	F081	21110-0	M544	R	579	H.8/6.4	J11	X X	355014	D	R72	N							05273	04	E	4320	SGT-FU-1A+
SGT-TS-1A11	SGT-ESH-1A UPSTREAM HI TEMP	18	2	P	2 0	G	F081	18000-0	M544	R	579	H.8/6.3	J11	X X	355003	D	R72	N	R608	221				33+				4320	SGT-FU-1A+

EPN	MFG	MODEL	STATUS S	STATUS E	OID	TM	HL	TEST	FREQ	AGING	OBE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
SGT-TS-1A2	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1A UPSTREAM HI TEMP AL	R	579	H.8/6.7	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	J11
SGT-TS-1A21	F081	18000-0	X	X	355003	D	N	221	33+				4320	SGT-ESH-1A UPSTREAM HI TEMP C/O	R	579	H.7/6.2	R72	R608	SGT-FU-1A+	18	2	P	2 0	G	M544	J11
SGT-TS-1A3	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1A DOWNSTREAM LOW TEMP AL	R	572		R72		SGT-FU-1A+	18	2	P	2 0	G	M544	J10
SGT-TS-1A31	F081	18000-00	X	X	355003	D	N	221	33+				4320	SGT-ESH-1A DWNSTM HI TEMP	R	579	H.9/6.2	R72	R608	SGT-FU-1A+	18	2	P	2 0	G	M544	J10
SGT-TS-1A4	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1A DWNSTM HI TEMP AL	R	579	H.8/6.6	R72		SGT-FU-1A+	18	2	P	2 0	G	M544	J10
SGT-TS-1A41	F081	18000-00	X	X	355003	D	N	221	33+				4320	SGT-ESH-1A DWNSTM HI TEMP C/O	R	579	H.8/6.4	R72	R608	SGT-FU-1A+	18	2	P	2 0	G	M544	J10
SGT-TS-1B1	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1B UPSTREAM LO TEMP AL	R	579	J.2/6.4	R71		SGT-FU-1B+	18	2	P	2 0	G	M544	E11
SGT-TS-1B11	F080	18000-0	X	X	355003	D	N	221	33+				4320	SGT-ESH-1B UPSTM HI TEMP	R	579	J.1/6.2	R71	R607	SGT-FU-1B+	18	2	P	2 0	G	M544	E11
SGT-TS-1B2	F081	21110-0		X	355014	D	N			05273	04	E	4320	SGT-ESH-1B UPSTM HI TEMP AL	R	579	J.3/6.9	R71		SGT-FU-1B+	18	2	P	2 0	G	M544	E11
SGT-TS-1B21	F081	18000-0	X	X	355003	D	N	221	33+				4320	SGT-ESH-1B UPSTRM HI TEMP C/O	R	582	J.3/6.3	R71	R607	SGT-FU-1B+	18	2	P	2 0	G	M544	E11
SGT-TS-1B3	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1B DWNSTRM LO TEMP AL	R	579	J.2/6.6	R71		SGT-FU-1B+	18	2	P	2 0	G	M544	E10
SGT-TS-1B31	F081	18000-0	X	X	355003	D	N	221	33+				4320	SGT-ESH-1B DWNSTRM HI TEMP	R	579	J.2/6.4	R71	R607	SGT-FU-1B+	18	2	P	2 0	G	M544	F10
SGT-TS-1B4	F081	21110-0	X	X	355014	D	N			05273	04	E	4320	SGT-ESH-1B DWNSTM HI TEMP AL	R	579	J.2/6.6	R71		SGT-FU-1B+	18	2	P	2 0	G	M544	F10

EPN	EPN (line 2)	DESCRIPTION	MFG	MODEL	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S	STATUS E	QID	ZONE	TH	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SGT-TS-1B41	SGT-ESH-1B	DWNSTRM HI TEMP C/O	F081	18000-0	18	2	P	2 0	G	M544	R	579	J.2/6.4	E10	X	X	355003	R71	D	N	221	R607		33+				4320	SGT-FU-1B+
SGT-TS-2A1	SGT-ESH-2A	UPSTM LO TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	579	H.8/6.7	J10	X	X	355014	R72	D	N					05273	04	E	4320	SGT-FU-1A+
SGT-TS-2A11	SGT-ESH-2A	UPSTM HI TEMP	F081	18000-00	18	2	P	2 0	G	M544	R	579	H.7/7.0	J10	X	X	355003	R72	D	N	221	R608		33+				4320	SGT-FU-1A+
SGT-TS-2A2	SGT-ESH-2A	UPSTM HI TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	579	H.7/6.8	J10	X	X	355014	R71	D	N					05273	04	E	4320	SGT-FU-1A+
SGT-TS-2A21	SGT-ESH-2A	UPSTM HI TEMP C/O	F081	18000-00	18	2	P	2 0	G	M544	R	579	H.9/7.0	J11	X	X	355003	R71	D	N	221	R608		33+				4320	SGT-FU-1A+
SGT-TS-2A3	SGT-ESH-2A	DWNSTM LO TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	579	H.8/6.8	J9	X	X	355014	R71	D	N					05273	04	E	4320	SGT-FU-1A+
SGT-TS-2A31	SGT-ESH-2A	DWNSTM HI TEMP	F081	18000-00	18	2	P	2 0	G	M544	R	579	H.8/6.9	J9	X	X	355003	R71	D	N	221	R608		33+				4320	SGT-FU-1A+
SGT-TS-2A4	SGT-ESH-2A	DWNSTM HI TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	572	H.8/6.8	J9		X	355014	R71	D	N					05273	04	E	4320	SGT-FU-1A+
SGT-TS-2A41	SGT-ESH-2A	DWNSTM HI TEMP C/O	F081	18000-00	18	2	P	2 0	G	M544	R	579	H.8/6.9	E9	X	X	355003	R71	D	N	221	R608		33+				4320	SGT-FU-1A+
SGT-TS-2B1	SGT-ESH-2B	UPSTRM LO TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	579	J.1/6.7	E10	X	X	355014	R71	D	N					05273	04	E	4320	SGT-FU-1B+
SGT-TS-2B11	SGT-ESH-2B	UPSTRM HI TEMP	F081	18000-0	18	2	P	2 0	G	M544	R	579	J.3/7.0	E10	X	X	355003	R71	D	N	221	R607		33+				4320	SGT-FU-1B+
SGT-TS-2B2	SGT-ESH-2B	UPSTRM HI TEMP AL	F081	21110-0	18	2	P	2 0	G	M544	R	579	J.3/6.8	E10		X	355014	R71	D						05273	04	E	4320	SGT-FU-1B+
SGT-TS-2B21	SGT-ESH-2B	UPSTRM HI TEMP C/O	F081	18000-0	18	2	P	2 0	G	M544	R	579	J.1/7.0	E10	X	X	355003	R71	D	N	221	R607		33+				4320	SGT-FU-1B+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	TM	HL	TEST	ZONE	ROOM	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SGT-TS-2B3	SGT-ESH-2B DWNSTM LO TEMP AL	18	2	P	2 0	G	F081	21110-0	M544	R	579	J.2/6.8	X X	E9	355014	D	N		R71			05273	04	E	4320	SGT-FU-1B+
SGT-TS-2B31	SGT-ESH-2B DWNSTM HI TEMP	18	2	P	2 0	G	F081	18000-0	M544	R	579	J.2/6.9	X X	E9	355003	D	N	221	R71	R607	33+				4320	SGT-FU-1B+
SGT-TS-2B4	SGT-ESH-2B DWNSTM HI TEMP AL	18	2	P	2 0	G	F081	21110-0	M544	R	579	J.2/6.8	X X	E9	355014	D	N		R71			05273	04	E	4320	SGT-FU-1B+
SGT-TS-2B41	SGT-ESH-2B DWNSTM HI TEMP C/O	18	2	P	2 0	G	F081	18000-0	M544	R	579	J.2/6.9	X X	J9	355003	D	N	221	R71	R607	33+				4320	SGT-FU-1B+
SGT-TS-EH1A11	CONTROL OF STAGE 1 OF SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	M544	R	572	H.4/5.9	X X	J11	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A110	CONTROL OF SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	E686	R	572	H.4/5.9	X X		355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A111	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C7	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A112	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	E686	R	572	H.4/5.9	X X		355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A113	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C7	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A114	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C6	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A115	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C6	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A116	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C6	355003	D	N	221			33+				4320	SGT-FU-1A+
SGT-TS-EH1A117	CONTROL OF HEATER SGT-EHC-1A1	18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R	572	H.4/5.9	X X	C6	355003	D	N	221			33+				4320	SGT-FU-1A+

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG ELEV	DETAIL	A/E ZONE	STATUS S E	QID	TM	HL	TEST ROOM	FREQ	COMPOSITE EPN	HOURS
SGT-TS-EH1A118 CONTROL OF HEATER SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R 572	H.4/5.9	C6	X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A12 CONTROL OF STAGE 1 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R 572	H.4/5.9	E6	X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A13 CONTROL OF STAGE 1 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0	18-00-0092	R 572	H.4/5.9	E6	X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A14 CONTROL OF STAGE 2 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A15 CONTROL OF STAGE 2 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D		221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A16 CONTROL OF STAGE 2 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A17 CONTROL OF STAGE OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A18 CONTROL OF STAGE 3 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A19 CONTROL OF STAGE 3 OF SGT-EHC-1A1 18	2	A	1 0	D,F	F081	18000-0		R 572	H.4/5.9		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A21 CONTROL OF STAGE 1 OF SGT-EHC-1A2 18	2	A	1 0	D,F	F081	18000-0		R 572	H.8/6.0		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A210 CONTROL OF HEATER SGT-EHC-1A2 18	2	A	1 0	D,F	F081	18000-0		R 572	H.8/6.0		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A211 CONTROL OF HEATER SGT-EHC-1A2 18	2	A	1 0	D,F	F081	18000-0		R 572	H.8/6.0		X X	355003	D	N	221	33+	SGT-FU-1A+	4320
SGT-TS-EH1A212 CONTROL OF HEATER SGT-EHC-1A2 18	2	A	1 0	D,F	F081	18000-0		R 572	H.8/6.0		X X	355003	D	N	221	33+	SGT-FU-1A+	4320

EPN	MFG	MODEL	STATUS S E	QID	TM	HL	TEST ROOM	FREQ	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
SGT-TS-EH1A213	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF HEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F		
SGT-TS-EH1A214	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF AHEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F		
SGT-TS-EH1A215	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF HEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F		
SGT-TS-EH1A216	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF HEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F		
SGT-TS-EH1A217	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF HEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1A218	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF HEATER SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1A22	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 1 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E6
SGT-TS-EH1A23	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 1 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E6
SGT-TS-EH1A24	F081	18000-0	X X	355003	D	N	221		4320	CONTROL OF STAGE 2 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E7
SGT-TS-EH1A25	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 2 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E7
SGT-TS-EH1A26	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 2 SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E7
SGT-TS-EH1A27	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 3 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E7
SGT-TS-EH1A28	F081	18000-0	X X	355003	D	N	221	33+	4320	CONTROL OF STAGE 3 OF SGT-EHC-1A2	R	572	H.8/6.0	SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E7

Header columns as printed: EPN; MFG; MODEL; STATUS S E DETAIL; QID; ***SEISMIC (S) PARAMETERS*** TM ZONE, HL ROOM, TEST, ANL, FO C ACCURACY, FREQ; *ENV. (E) PARAMETERS* AGING, DBE, C, HOURS, COMPOSITE EPN; CONTRACT; LEVEL; DESCRIPTION EC USE; SAFETY FUNCTION; BLDG ELEV; A/E DRAWING; A/E ZONE.

EPN	MFG	MODEL	STATUS S E	QID	***SEISMIC (S) PARAMETERS*** TM	HL	TEST ANL FO C	FREQ	*ENV. (E) PARAMETERS* AGING	DDE	C	HOURS	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	ROOM	ACCURACY	COMPOSITE EPN	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE
SGT-TS-EH1A29	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF STAGE 3 OF SGT-EHC-1A2	R	572	H.8/6.0				SGT-FU-1A+	18	2	A	1 0	D,F	18-00-0092	E6
SGT-TS-EH1B11	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF STAGE 1 OF SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C7
SGT-TS-EH1B110	F081	18000-0	Y X	355003					05253	01	E	4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F		
SGT-TS-EH1B111	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C7
SGT-TS-EH1B112	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC 1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C7
SGT-TS-EH1B113	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C7
SGT-TS-EH1B114	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1B115	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1B116	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1B117	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1B118	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF HEATER SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6
SGT-TS-EH1B12	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF STAGE 1 OF SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	F6
SGT-TS-EH1B13	F081	18000-0	X X	355003	D	N	221	33+				4320	CONTROL OF STAGE 1 OF SGT-EHC-1B1	R	572	J.5/6.0				SGT-FU-1B+	18	2	A	1 0	D,F	18-00-0092	C6

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	TH	HL	ROOM	FREQ	COMPOSITE EPN	HOURS
SGT-TS-EH1B14	CONTROL OF STAGE 2 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B15	CONTROL OF STAGE 2 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B16	CONTROL OF STAGE 2 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B17	CONTROL OF STAGE 3 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B18	CONTROL OF STAGE 3 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B19	CONTROL OF STAGE 3 OF SGT-EHC-1B1	18	2	A	1 0	D,F	F081	18000-0	R	572	J.5/6.0	18-00-0092	E6	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B21	CONTROL OF STAGE 1 OF SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	18-00-0092	C7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B210	CONTROL OF STAGE 1 OF SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	18-00-0092	C7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B211	CONTROL OF HEATER SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	18-00-0092	C7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B212	CONTROL OF HEATER SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	E686		X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B213	CONTROL OF HEATER SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	18-00-0092	C7	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B214	CONTROL OF HEATER SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0	18-00-0092	C6	X X	355003	D	N	221	33+	SGT-FU-1B+	4320
SGT-TS-EH1B215	CONTROL OF HEATER SGT-EHC-1B2	18	2	A	1 0	D,F	F081	18000-0	R	572	J.2/6.0			X X	355003	D	N	221	33+	SGT-FU-1B+	4320

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                                                                STATUS          ***SEISMIC (S) PARAMETERS***    *ENV. (E) PARAMETERS*
         EPN                 MFG                MODEL            S E     QID    TM  HL TEST  ANL FO C    FREQ    AGING  DBE  C    HOURS
                  DESCRIPTION                          BLDG ELEV DETAIL     ZONE     ROOM     ACCURACY               COMPOSITE EPN
CONTRACT    LEVEL  EC   USE   SAFETY FUNCTION   A/E DRAWING  A/E ZONE

SGT-TS-EH1B216              F081     18000-0                    X X  355003  D       221                  33+                         4320
 CONTROL OF HEATER SGT-EHC-1B2                          R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      C6

SGT-TS-EH1B217              F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF HEATER SGT-EHC-1B2                          R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      C6

SGT-TS-EH1B218              F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF HEATER SGT-EHC-1B2                          R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      C6

SGT-TS-EH1B22               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 1 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SGT-TS-EH1B23               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 1 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SGT-TS-EH1B24               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 2 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E7

SGT-TS-EH1B25               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 2 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E7

SGT-TS-EH1B26               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 2 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SGT-TS-EH1B27               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 3 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SGT-TS-EH1B28               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 3 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SGT-TS-EH1B29               F081     18000-0                    X X  355003  D   N   221                  33+                         4320
 CONTROL OF STAGE 3 OF SGT-EHC-1B2                      R  572 J.2/6.0                                          SGT-FU-1B+
 18            2     A     1 0    D,F              18-00-0092      E6

SLC-V-4A                    C515     1832159                    X X  361003          114                  33+                         4320
 1.5" EXPLO SLC INLET TO PRIMARY                        R  548 M.2/3.7        R63                               SLC-V-4A+
 02C41         2     P     2 0    B1,G             M522            F8

SLC-V-4B                    C515     1832159                    X X  361003          114                  33+                         4320
 1.5" EXPLO SLC INLET TO PRIMARY                        R  548 M.2/3.8        R63                               SLC-V-4B+
 02C41         2     P     2 0    B1,G             M522            D8
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EPN / DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E	BLDG	ELEV	DETAIL	A/E ZONE	STATUS S E	QID	HL	ANL	FREQ	AGING	DBE	C	HOURS
SPTM-TE-10 SUPPRESSION POOL TEMP,OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	448	45D AZ	B5	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-11 SUPPRESSION POOL TEMP,OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	448	90D AZ	B5	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-12 SUPRESSION POOL TEMP, OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	135D AZ	B4	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-13 SUPPRESSION POOL TEMP, OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	180D AZ	B4	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-14 SUPPRESSION POOL TEMP, OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	225D AZ	B3	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-15 SUPPRESSION POOL TEMP, OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	270D AZ	B3	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-16 SUPPRESSION POOL TEMP, OPER INFO	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	315D AZ	B2	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-1A SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A24-3	M519	C	466	0D AZ	D6	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-1B SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	0D AZ	D6	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-2A SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	45D AZ	D5	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-2B SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	45D AZ	D5	B X	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-3A SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	90D AZ	D3	B X	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-3B SUPPRESSION POOL TEMP	218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	90D AZ	D3	B X	339002	Y	02	33+	04293	00	E	4320

EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	DETAIL	STATUS S E	A/E ZONE	QID	HL	ANL	FREQ	AGING	DBE	C	HOURS
SPTM-TE-4A SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	135D AZ	B X	D4	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-4B SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	135 D AZ	B X	D4	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-5A SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	180 D AZ	B X	D5	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-5B SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	180 D AZ	B X	D5	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-6A SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	225D AZ	B X	D4	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-6B SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	225D AZ	B X	D4	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-7A SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	270D AZ	B X	D2	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-7B SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	270D AZ	B X	D2	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-8A SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	315D AZ	B X	D4	339002	Y	02	33+	04293	10	E	4320
SPTM-TE-8B SUPPRESSION POOL TEMP 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	466	31D AZ	B X	D4	339002	Y	02	33+	04293	00	E	4320
SPTM-TE-9 SUPPRESSION POOL TEMP, OPER INFO 218	2	A	1 0	I	M329	TC-113X-T-A-24-3	M519	C	447	0D AZ	B X	B5	339002	Y	02	33+	04293	10	E	4320
SRM-CONN-01 CONNECTOR FOR SRM-DET-1A 02C51	3	P	2 3	I	GC80	114B5388G004	807E162TC	C		BENEATH RPV	D		049009					10	G	4320
SRM-CONN-02 CONNECTOR FOR SRM-DET-1B 02C51	3	P	2 3	I	GC80	114B5388G004	807E162TC	C		BENEATH RPV	D		049009					10	G	4320

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                                                             STATUS          ***SEISMIC (S) PARAMETERS***    *ENV. (E) PARAMETERS*
          EPN                MFG               MODEL          S E    QID   TH  HL TEST ANL FO C    FREQ   AGING  DBE   C   HOURS
                  DESCRIPTION                    .  BLDG ELEV  DETAIL      ZONE  ROOM       ACCURACY            COMPOSITE EPN
CONTRACT   LEVEL   EC   USE   SAFETY FUNCTION   A/E DRAWING   A/E ZONE

SRM-CONN-03                  G080    114B5388G004                 D   049009                                     10   G    4320
 CONNECTOR FOR SRM-DET-1C                               C       BENEATH RPV
 02C51        3     P    2 3   I                     807E162TC

SRM-CONN-04                  G080    114B5388G004                 J   049009                                     10   G    4320
 CONNECTOR FOR SRM-DET-1D                               C       BENEATH RPV
 02C51        3     P    2 3   I                     807E162TC

SRM-DET-1A                   G080    112C3144G7                 X D   067003      Y                              10   G    4320
 SOURCE RANGE DETECTOR                                  C        IN RPV                               MS-RPV-3+
 02C51        2     A    1 3   I

SRM-DET-1B                   G080    112C3144G7                 X D   067003      Y                              10   G    4320
 SOURCE RANGE DETECTOR                                  C        IN RPV                               MS-RPV-3+
 02C51        2     A    1 3   I

SRM-DET-1C                   G080    112C3144G7                 X D   067003      Y                              10   G    4320
 SOURCE RANGE DETECTOR                                  C        IN RPV                               MS-RPV-3+
 02C51        2     A    1 3   I

SRM-DET-1D                   G080    112C3144G7                 X J   067003      Y                              10   G    4320
 SOURCE RANGE DETECTOR                                  C        IN RPV                               MS-RPV-3+
 02C51        2     A    1 3   I

SRM-EAMP-1A                  G080    112C2276G001               R D   106002                              05153  10   G    4320
 PULSEPREAMPLIFIER FOR SRM-DET-1A                       R   501 L.6/3.5                               E-IR-P030+
 02C51        3     A    1 3   I

SRM-EAMP-1B                  G080    112C2276G001               R D   106002                              05153  10   G    4320
 PULSE PREAMPLIFIER FOR SRM-DET-1A                      R   501 H.4/7.7                               E-IR-P031+
 02C51        3     A    1 3   I

SRM-EAMP-1C                  G080    112C2276G001               R D   106002                              05153  10   G    4320
 PULSE PREAMPLIFIER FOR SRM-DET-1C                      R   501 L.5/3.5                               E-IR-P032+
 02C51        3     A    1 3   I

SRM-EAMP-1D                  G080    112C2276G001               R J   106002                              05153  10   G    4320
 PULSE PREAMPLIFIER FOR SRM-DET-1D                      R   501 H.8/8.3                               E-IR-P033+
 02C51        3     A    1 3   I

SW-FS-17A2                   S254    7PS11D0W                   X X   090001                              06153  02        4320
 FLOW SW RHR-P-2A COOL WTR                              R   426 K.0/8.3        R11
 220          3     P    2 0   G                     M524/1        F9

SW-FS-17B2                   S254    7PS11D0W                   X X   090001                              06153  02        4320
 FLOW SWITCH RHR-P-2B COOL WTR                          R   422 L.0/8.3        R12
 220          3     P    2 0   G                     M524/2        D10

SW-FS-17C2                   S254    7PS11D0W                   X X   090001                              06153  02        4320
 FLOW SW RHR-P-2C COOL WTR                              R   426 H.7/4.3        R12
 220          3     P    2 0   G                     M524/2        G10
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EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S	STATUS E	QID	QID ZONE	AGING	DBE	C	HOURS
SW-FS-19	FLOW SW LPCS-P-1 COOL WTR	220	3	P	2 0	G	S254	7PS11D0W	R	426	K.2/3.5	M524/1	C9	X	X	090001	R22	06153	02		4320
SW-FS-23A	FLOW SW RRA-CC-2 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	444	K.7/8.1	M524/1	G9	X	X	090001	R13	06153	02		4320
SW-FS-23B	FLOW SW RRA-CC-3 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	448	L.3/8.0	M524/2	E10	X	X	090001	R23	06153	02		4320
SW-FS-23C	FLOW SW RRA-CC-1 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	448	H.7/4.2	M524/2	J10	X	X	090001	R22	06153	02		4320
SW-FS-25	FLOW SW RRA-CC-5 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	449	K.9/4.0	M524/1	D9	X	X	090001	R21	06153	02		4320
SW-FS-29	FLOW SW RRA-CC-6 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	445	J.0/7.7	M524/2	C11	X	X	090001	R21	06153	02		4320
SW-FS-39	FLOW SW RRA-CC-10 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	526	N.1/4.1	M524/2	F13	X	X	090001	R53	06153	02		4320
SW-FS-40	FLOW SW RRA-CC-11 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	526	H.6/7.6	M524/1	D11	X	X	090001	R51	06153	02		4320
SW-FS-41	FLOW SW RRA-CC-12 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	471	H.3/8.4	M524/1	B11	X	X	090001	R31	06153	02		4320
SW-FS-43	FLOW SW RRA-CC-15 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	553	M.7/4.4	M524/1	D12	X	X	090001	R63	06153	02		4320
SW-FS-44	FLOW SWITCH RRA-CC-17 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	552	M.7/5.4	M524/2	J13	X	X	090001	R63	06153	02		4320
SW-FS-60	FLOW SW RRA-CC-13 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	577	M.3/6.1	M524/1	H12	X	X	090001	R73	06153	02		4320
SW-FS-61	FLOW SW RRA-CC-14 OUTLET	220	3	P	2 0	G	S254	7PS11D0W	R	577	M.7/7.9	M524/2	E11	X	X	090001	R73	06153	07	E	4320

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	ROOM	TEST	ANL	FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SW-FS-69A	FLOW SW CAC-HR-1A OUTLET	220	3	P	2 0	G	S254	7PS11DOW	R	576	M.5/6.9	M524/1	F12	X X	090001	R73								06153	02		4320	
SW-FS-69B	FLOW SW CAC-HR-1B OUTLET	220	3	P	2 0	G	S254	7PS11DOW	R	577	M.6/7.8	M524/2	H11	X X	090001	R73								06153	02	E	4320	
SW-FS-71A	FLOW SWITCH FROM RRA-CC-20	220	3	P	2 0	G	S254	7PS11DOW	R	548		M524/1	G14	X X	090001									06153	02	E	4320	
SW-FS-71B	FLOW SWITCH FROM RRC-CC-19	220	3	P	2 0	G	S254	7PS11DOW	R	548		M524/2	C13	X X	090001									06153	02	E	4320	
SW-FT-7A	SW FLOW TO RHR-HX-1A XMITER	02E12	3	P	2 3	G	R369	1151	R	503	J.6/3.6	M524/1	B15	Y X	259003	R73		N		14	00		33+				4320	E-IR-P018+
SW-FT-7B	SW FLOW TO RHR-HX-1B XMITER	02E12	3	P	2 3	G	R369	1151	R	503	H.9/9.3	M524/2	E15	Y X	259003	R73		N		14	00		33+				4320	E-IR-P021+
SW-MO-187A	MO FOR SW-V-187A INTO FPC-HX-1A	41A	2	A	1 0	F	L200	SMB00	R	554	K.6/8.4	M524/1	G14	G J	221001										10	C	4320	SW-V-187A+
SW-MO-187B	SW-V-187B MO SW INTO FPC-HX-1B	41A	2	A	1 0	F	L200	SMB-00	R	560	L.4/9.1	M524/2	C14	G M	221001										00	C	4320	SW-V-187B+
SW-MO-188A	SW-V-188A MO SW OUT OF FPC-HX-1A	41A	2	A	1 0	F	L200	SMB-00	R	552	K.6/9.1	M524/1	H14	G J	221001										10	C	4320	SW-V-188A+
SW-MO-188B	SW-V-188B MO SW OUT OF FPC-HX-1B	41A	2	A	1 0	F	L200	SMB-00	R	552	L.4/9.1	M524/2	D12	G M	221001										00	C	4320	SW-V-188B+
SW-MO-24A	0.32HP MOTOR OPERATOR SW-V-24A	215	2	A	1 3	C,E,J	L200	SMC-04-5/42	R	448	K.6/8.0	M524/1	G9	A X	221001	R21		N	R116	14	00		33		10	C	4320	SW-V-24A+
SW-MO-24B	0.32HP MOTOR OPERATOR SW-V-24B	215	2	A	1 3	C,E,J	L200	SMC-04-5/42	R	450	L8/8.3	M524/2	F10	A X	221001	R23		N	R115	14	00		33		10		4320	SW-V-24B+
SW-MO-24C	0.32HP MOTOR OPERATOR SW-V-24C	215	2	A	1 3	C,E,J	L200	SMC-04-5/42	R	444	H.7/4.3	M524/2	K10	A X	221001	R22		N	R113	14	00		33		10	C	4320	SW-V-24C+

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM	HL	TEST	ROOM	ANL	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SW-MO-44	0.5HP MOTOR OPERATOR SW-V-44	215	2	A	1 0	C,J	L200	SMC-04	R	449	K.9/3.9	M524/1	D9	A X	221001	R22		N	14	R114	00	33		10	C	4320	SW-V-44+
SW-MO-54	0.5HP MOTOR OPERATOR SW-V-54	215	2	A	1 0	J	L200	SMC-04-5/42	R	450	M9/4.0	M524/1	F7	A X	221001	R23	P	Y	114	R106		33+		10		24	SW-V-54+
SW-MO-75A	MOTOR OPERATOR FOR SW-V-75A	215	2	A	1 0	F	L200	SMB-00	R	534	K.2/9.2	M524/1	B13	A X	221001	R61								10		4320	SW-V-75A+
SW-MO-75B	MOTOR OPERATOR FOR SW-V-75B	215	2	A	1 0	F	L200	SMB-00	R	531	M.2/9.2	M524/2	B14	A X	221001	R61	P							00		4320	SW-V-75B+
SW-PS-1014	SUPPLY TO H2-O2 ANALY SW-V-754	220	2	A	1 3	F	A499	SC11AR/GT10A44R	R	554	M.7/4.5	M607/2	C14	X J	256001	R63	R	N	114			50				4320	
SW-PS-1015	SUPPLY TO H2-O2-ANALY SW-V-755	220	2	A	1 3	F	A499	SC11AR/GT10A44R	R	554	M.6/4.9	M607/2	B15	X R	256001	R63	R	N	114			50				4320	
SW-PT-38A	PRESS TRANS	59	2	P	2 0	G	R369	1151GP7A22T003PB	R	522	J.0/6.7	M524/1	C14	X X	259003	R51							06153	02	E	4320	E-IR-71+
SW-PT-38B	PRESS TRANS	59	2	P	2 0	G	R369	1151GP7A22T0003PB	R	525	N.0/8.2	M524/2	E14	X X	259003	C54							06153	02	E	4320	E-IR-69+
SW-RE-4	RHR HX 1A RADIATION ELEMENT	02D17	2	P	2 0	G	G080	117B1681G001	R	522	K.6/9.0	M524/1	A5	X D	277004	R51							05153	10	E	4320	S-SR-42+
SW-RE-5	RHR HX1B RADIATION ELEMENT	02D17	2	P	2 0	G	G080	117B1681G001	R	522	N.1/9.0	M524/2	J15	X D	277004	R53							05153	10	E	4320	S-SR-43+
SW-TS-17A	TEMP SW	220	2	P	2 0	G	U075	6BS	R	427	K.1/7.8	M524/1	F9	X X	355021	R11							06153	02		4320	
SW-TS-17B	TEMP SW	220	2	P	2 0	G	U075	F3026BS	R	422		M524/2	E10	X X	355021	R13							06153	02		4320	
SW-TS-17C	TEMP SW	220	2	P	2 0	G	U075	6BS	R	426	H.6/5.0	M524/2	H10	X X	355021	R12							06153	02		4320	

EPN	DESCRIPTION	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	BLDG	ELEV	DETAIL	A/E DRAWING	A/E ZONE	STATUS S E	QID	ZONE	TM	HL TEST ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS
SW-TS-19	TEMP SW	220	2	P	2 0	G	U075	6BS	R	443	J.9/3.6	M524/1	C9	X X	355021	R12					06153	02		4320
SW-TS-23A	TEMP SW	220	2	P	2 0	G	U075	6BS	R	449	K.2/8.4	M524/1	G9	X X	355021	R21					06153	02		4320
SW-TS-23B	TEMP SW	220	2	P	2 0	G	U075	6BS	R	448	M.0/8.3	M524/2	E10	X X	355021	R23					06153	02		4320
SW-TS-23C	TEMP SW	220	2	P	2 0	G	U075	F3026BS	R	441		M524/2	J10	X X	355021	R22					06153	02		4320
SW-TS-25	TEMP SW	220	2	P	2 0	G	U075	6BS	R	450	K.9/4.0	M524/1	D10	X X	355021	R22					06153	02		4320
SW-TS-29	TEMP SW	215	2	P	2 0	G	U075	F3026BS	R	549	H.8/8.0	M524/2	C11	X X	355021	R21					06153	02		4320
SW-TS-38A	TEMP SW	215	2	P	2 0	G	U075	F-302	R	548		M524/1	G14	X X	341003						06153	02		4320
SW-TS-38B	TEMP SW	215	2	P	2 0	G	U075	F-302	R	548		M524/2	C13	A X	341003						06153	02		4320
SW-V-201	0.5" SOLENOID LOOP A SMPLE TO SR13	220	2	A	1 0	F	M095	MV229MO-L2	R	558	M.6/4.3	M607/2	C15	X J	324004						01014	16	Z	4320
SW-V-204	0.5" SOLENOID TSW INLET TO SR-13	220	2	A	1 0	F	M095	MV229MO-L2	R	558	M.6/4.3	M607/2	C15	X J	324004						01014	16	Z	4320
SW-V-206	0.5" SOLENOID LP.B SMPLE TO SR-14	220	2	A	1 0	F	M095	MV229MO-L2	R	558	M.6/5.0	M607/2	B15	X X	324004						01014	06	Z	4320
SW-V-209	0.5" SOLENOID TSW INLET TO SR-14	220	2	A	1 0	F	M095	MV229MO-L2	R	565	M.6/5.0	M607/2	B15	X X	324004						01014	06	Z	4320
SW-V-210	0.5" SOLENOID TSW RTN FRM SR14	220	2	A	1 0	F	M095	MV229MO-L2	R	558	M.6/5.0	M607/2	A11	X T	324004	R63		N			01014	00	Z	4320

PROGRAM C1E-STD

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WNP-2 CLASS 1E EQUIPMENT LIST

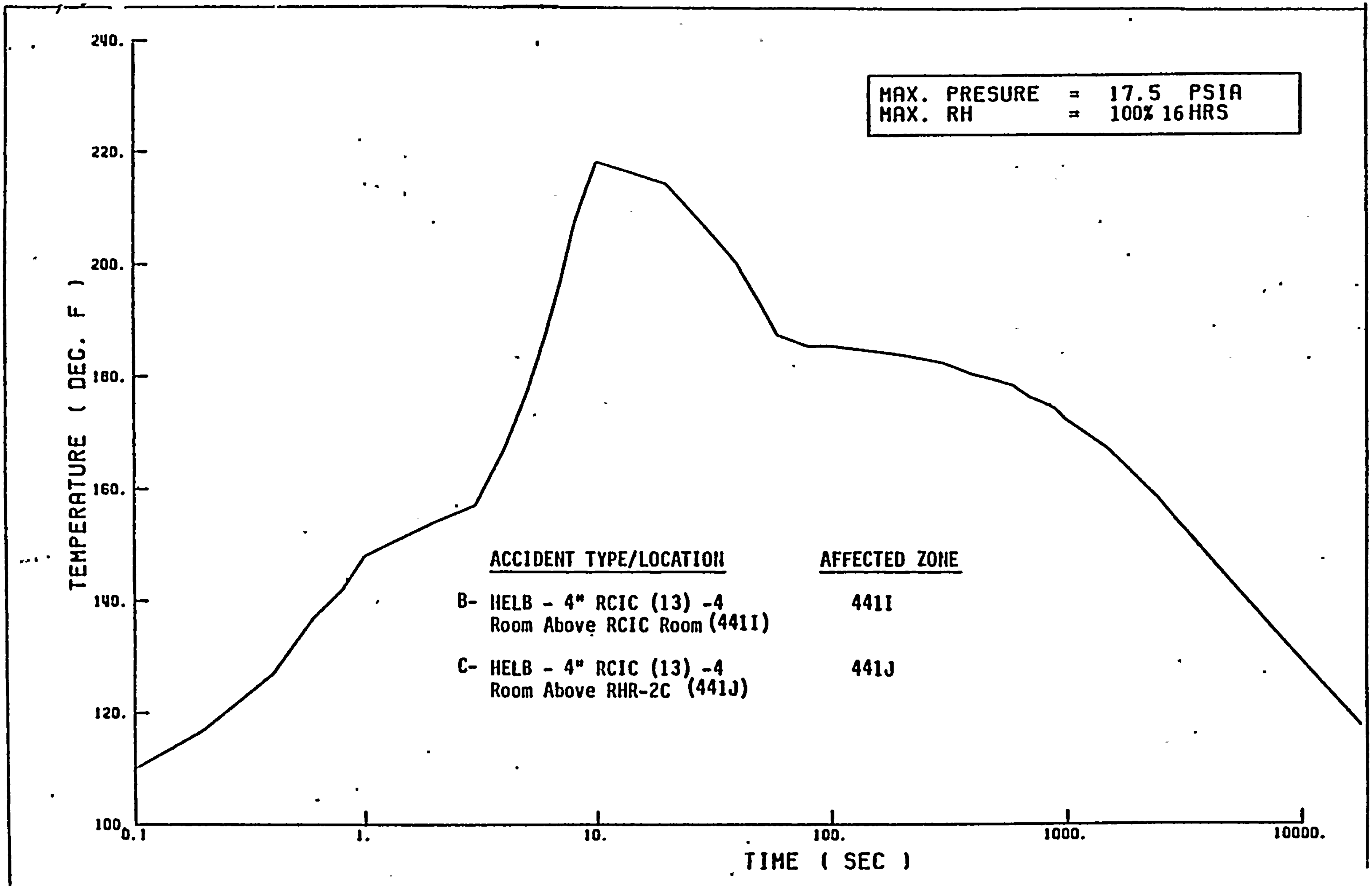
EPN / DESCRIPTION / CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	MFG	MODEL	A/E DRAWING	BLDG	ELEV	STATUS S E	DETAIL / A/E ZONE	QID	ZONE	TM	HL	TEST	ROOM	ANL FO C ACCURACY	FREQ	AGING	DBE	C	HOURS	COMPOSITE EPN
SW-V-211 0.5" SOLENOID SR-14 DISCHARGE 220	2	A	1 0	F	M095	MV229MS-L2	M607/2	R	565 M.6/5.0	X T	B11	324004								01014	01	Z	4320	
SW-V-212 0.5" SOLENOID TSW RTN FRM SR13 220	2	A	1 0	F	M095	MV229MO-L2	M607/2	R	558 M.6/4.3	Y J	A13	324004	R63	W	N					01014	10	Z	4320	
SW-V-213 0.5" SOLENOID SW*A* RTN FROM SR13 220	2	A	1 0	F	M095	MV229MS-L2	M607/2	R	558 M.6/4.3	X J	B13	324004	R63							01014	10	Z	4320	
SW-V-34 SOL. OPERATE V-34 RCIC PMP RM RTN 215	2	A	1 1	L	M095	MV252-1	M524/2	R	452 H.7/8.0	X T	C11	361009	R21							01014	00	Z	24	
SW-V-840 3/4" SOL LOOP A SW SYS BOUNDARY 220	2	A	1 0	E	V030	V526-5683	M524/1	R	479 L.9/9.2	Z X	C3	361014								05313	11	E	4320	
SW-V-842 3/4" SOL LOOP B SW SYS BOUNDARY 220	2	A	1 0	E	V030	V526-5683	M524/1	R	479 L.9/9.2	Z X	C3	361014								05313	11	E	4320	
SW-V-844 3/4" SOL LOOP A SW SYS BOUNDARY 220	2	A	1 0	E	V030	V526-5683	M524/1	R	479 L.9/9.2	Z X	C3	361014								05313	11	E	4320	
SW-V-846 3/4" SOL LOOP B SW SYS BOUNDARY 220	2	A	1 0	E	V030	V526-5683	M524/1	R	479 L.9/9.2	Z X	C3	361014								05313	11	E	4320	
TIP-SV-1 TIP BALL ISO VLV 1	2	A	1 0	B1	C560	73110-2		R	504 J.3/4.8	X R		324008								06153	04	E	.17	TIP-SV-1+
TIP-SV-2 TIP BALL ISO VLV 2	2	A	1 0	B1	C560	73110-2		R	504 J.3/4.8	X R		324008								06153	04	E	.17	TIP-SV-2+
TIP-SV-3 TIP BALL ISO VLV 3	2	A	1 0	B1	C560	73110-2		R	504 J.5/4.5	X R		324008								06153	04	E	.17	TIP-SV-3+
TIP-SV-4 TIP BALL ISO VLV 4	2	A	1 0	B1	C560	73110-2		R	501 J.6/4.6	X R		324008								06153	04	E	.17	TIP-SV-4+
TIP-SV-5 TIP BALL ISO VLV 5	2	A	1 0	B1	C560	73110-2		R	501 J.5/4.6	X R		324008								06153	04	E	.17	TIP-SV-5+

EPN	MFG	MODEL	STATUS S E	QID	DESCRIPTION	BLDG	ELEV	DETAIL	ZONE	CONTRACT	LEVEL	EC	USE	SAFETY FUNCTION	A/E DRAWING	A/E ZONE	***SEISMIC (S) PARAMETERS*** TH HL TEST ANL FO C FREQ ROOM ACCURACY	*ENV. (E) PARAMETERS* AGING	DBE	C	HOURS
TIP-SV-6	T268	S90A380E	R	324008	TIP AIR SUPPLY ISO VLV	R	504	J.0/4.0		02	2	A	1 0	B1				06153	05	E	.17
TIP-V-1	G080	P P136B1302G002	X J	324008	TIP EXPLOSIVE ACT ISOL SHEAR VLV	R	501	J.0/4.5	R42	02C51	2	A	1 0	B1	807E165TC/	2J1		06153	10	E	4320
TIP-V-2	G080	P P136B1302G002	X J	324008	TIP EXPLOSIVE ACT ISOL SHEAR VLV	R	501	J.0/4.5		02C51	2	A	1 0	B1	807E165TC/	2J1		06153	10	E	4320
TIP-V-3	G080	P P136B1302G002	X J	324008	TIP EXPLOSIVE ACT ISOL SHEAR VLV	R	501	J.0/4.5		02C51	2	A	1 0	B1	807E165TC/	2J1		06153	15	E	4320
TIP-V-4	G080	P P136B1302G002	X J	324008	TIP EXPLOSIVE ACT ISOL SHEAR VLV	R	501	J.0/4.5		02C51	2	A	1 0	B1	807E165TC/	2J1		06153	15	E	4320
TIP-V-5	G080	P P136B1302G002	X J	324008	TIP EXPLOSIVE ACT ISOL SHEAR VLV	R	501	J.0/4.5		02C51	2	A	1 0	B1	807E165TC/	2J1		06153	10	E	4320

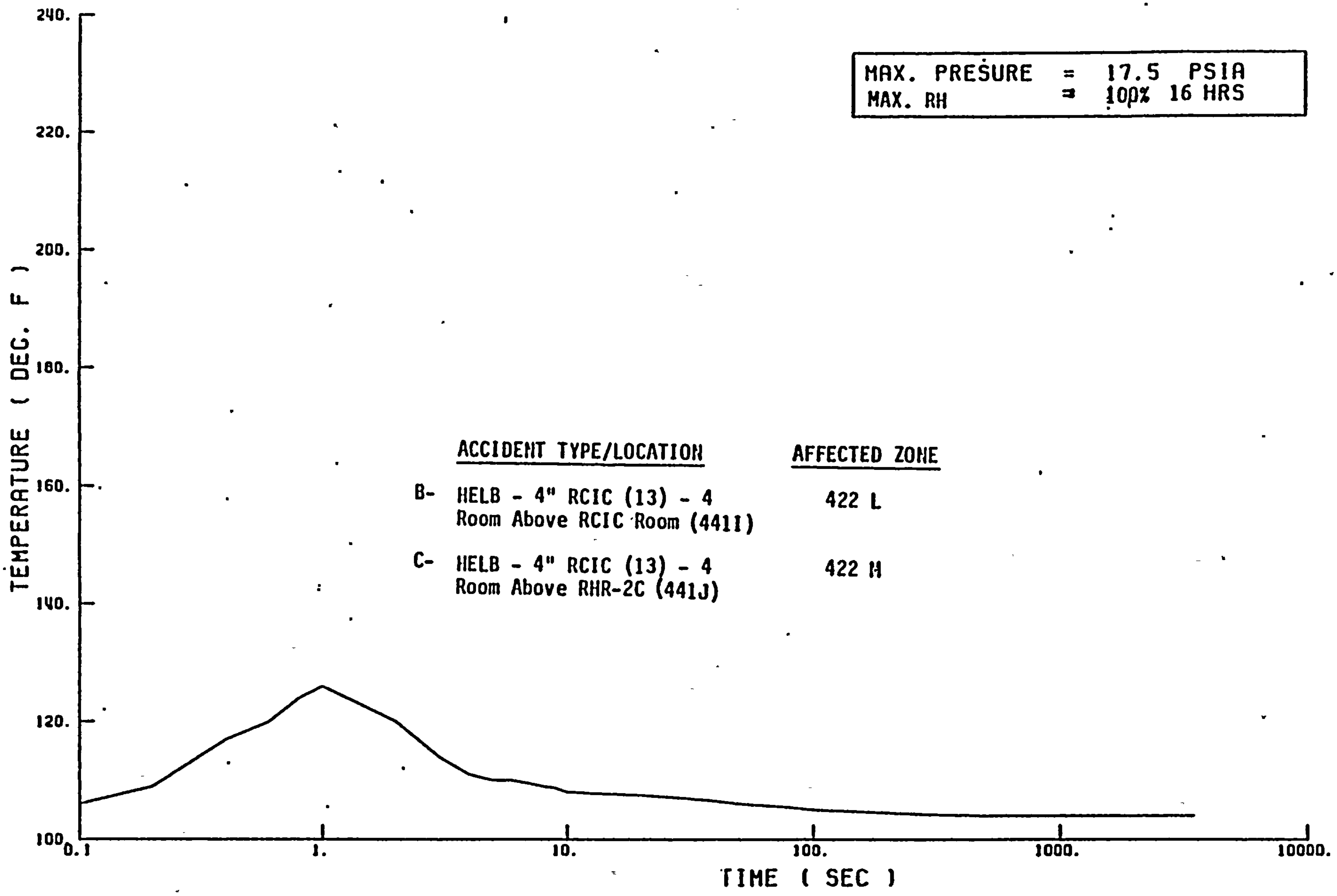
Appendix B contains the following information:

- o Normal and Abnormal Service Conditions: the normal and abnormal temperature, pressure and humidity for harsh environment areas. B.1
- o Primary Containment Service Conditions Due to a LOCA/HELB in Primary Containment. B.2
- o Reactor Building Service Conditions Due to a LOCA/HELB in Primary Containment: the temperature, pressure, humidity and radiation service conditions. B.3
- o Pressure/Temperature Profiles: the accident profiles due to a LOCA/HELB in containment and HELB's in the reactor building.* B.4
- o Radiation Zone Maps: the zone maps of the Reactor Building locating the Class 1E equipment and defining the 6-month accident plus 40-year normal radiation dose. B.34

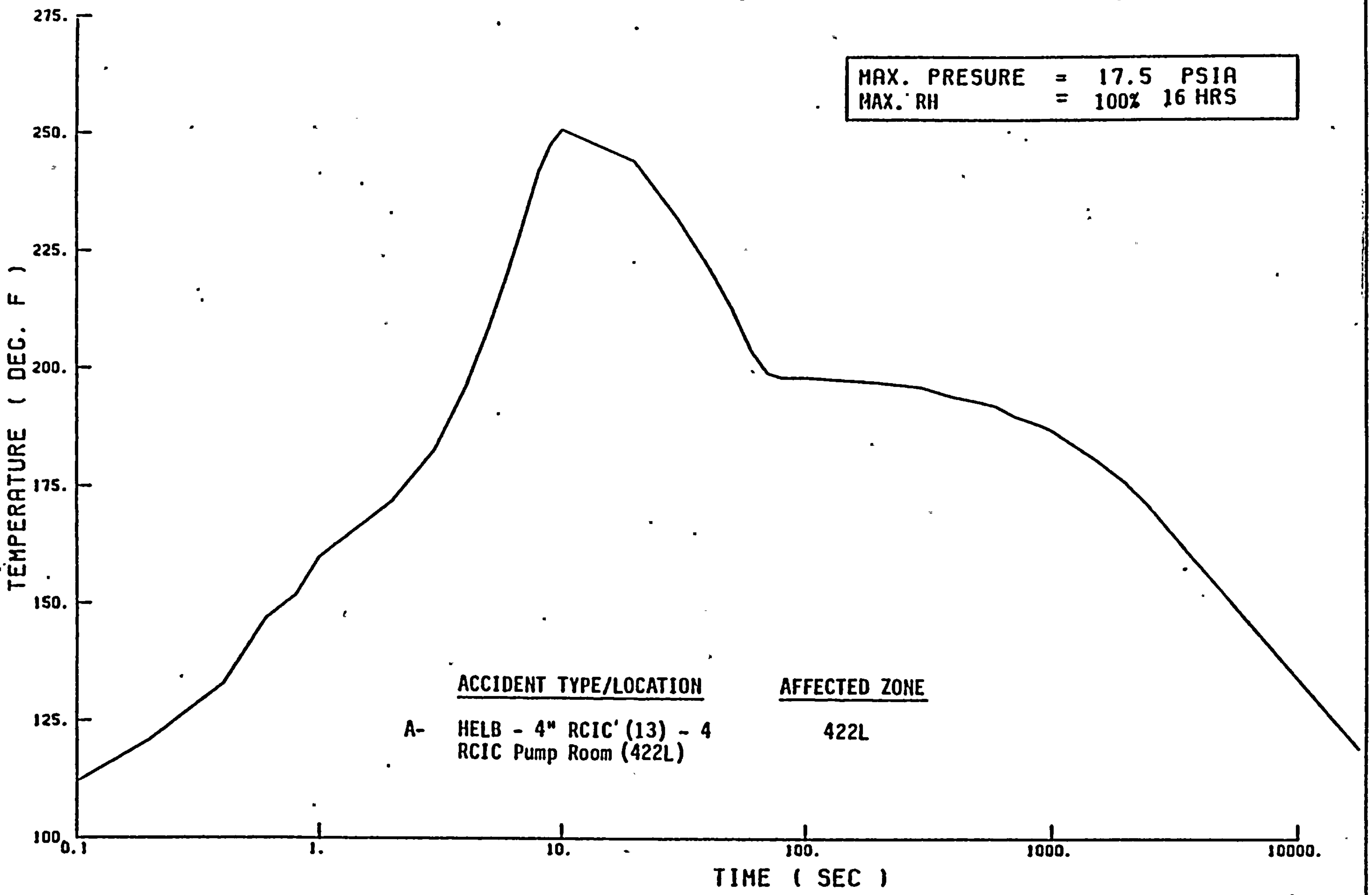
NOTE: The auxiliary steam line break profiles (Profiles 9-11, 31 and 32) have not been revised. A design modification has been initiated to install isolation valves. Justification for operation prior to completion of this change has been addressed in separate correspondence with the NRC. The modification will bring the final profiles below the above profiles.



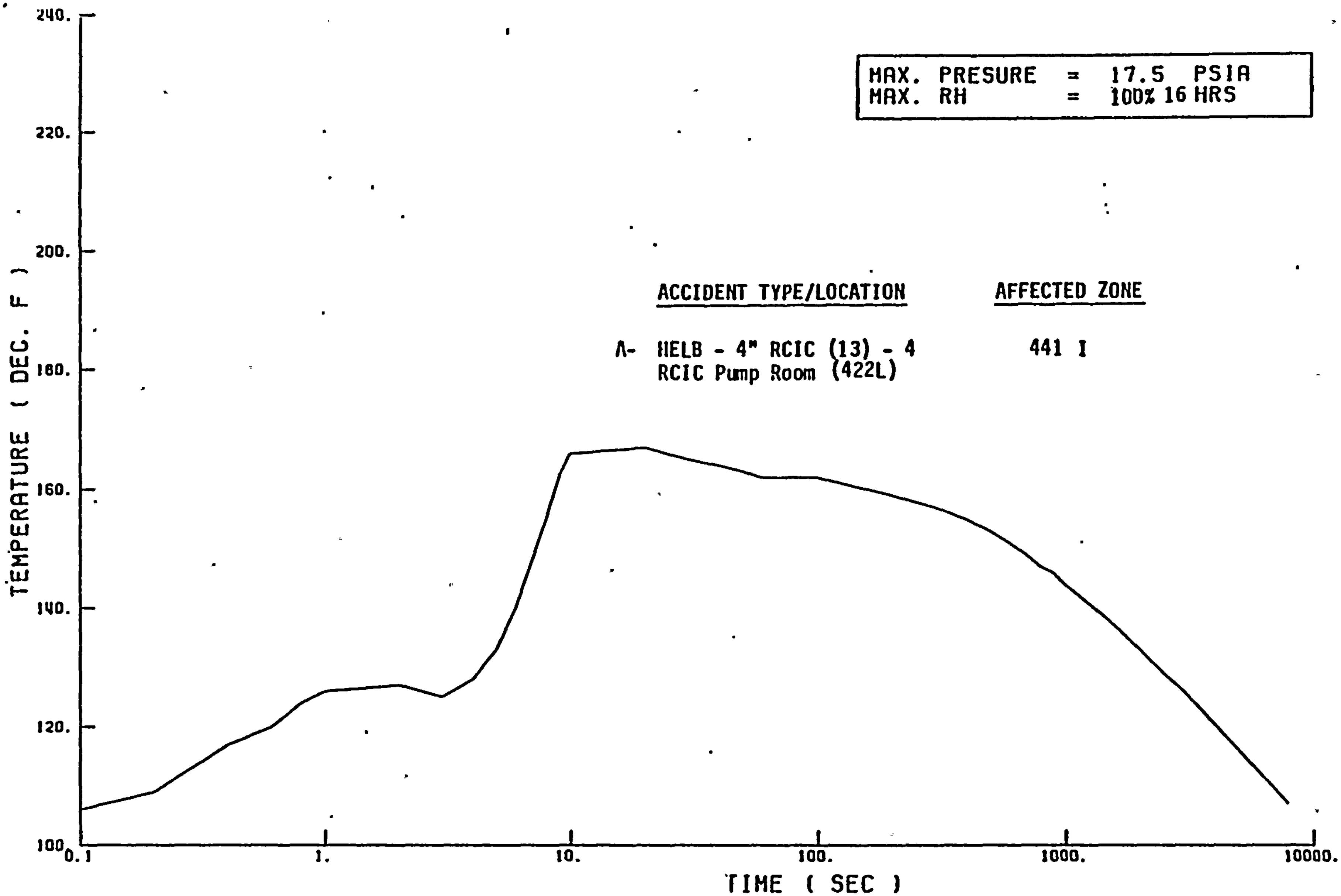
Profile 1X - 4" RCIC Line Break In Room Above RCIC (or RHR) Pump Room



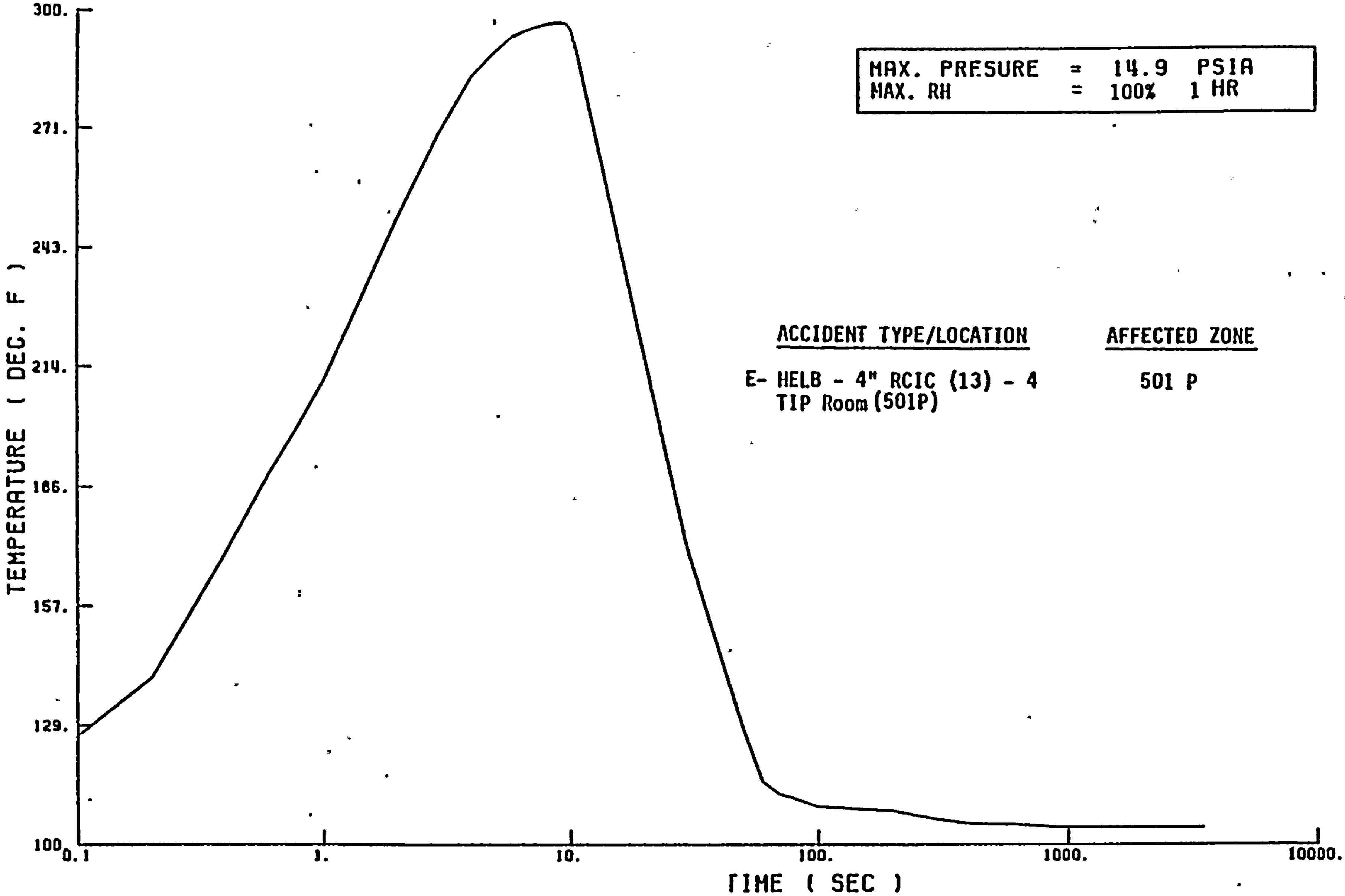
Profile 2X - 4" RCIC Line Break In Room Above RCIC (or RHR) Pump Room



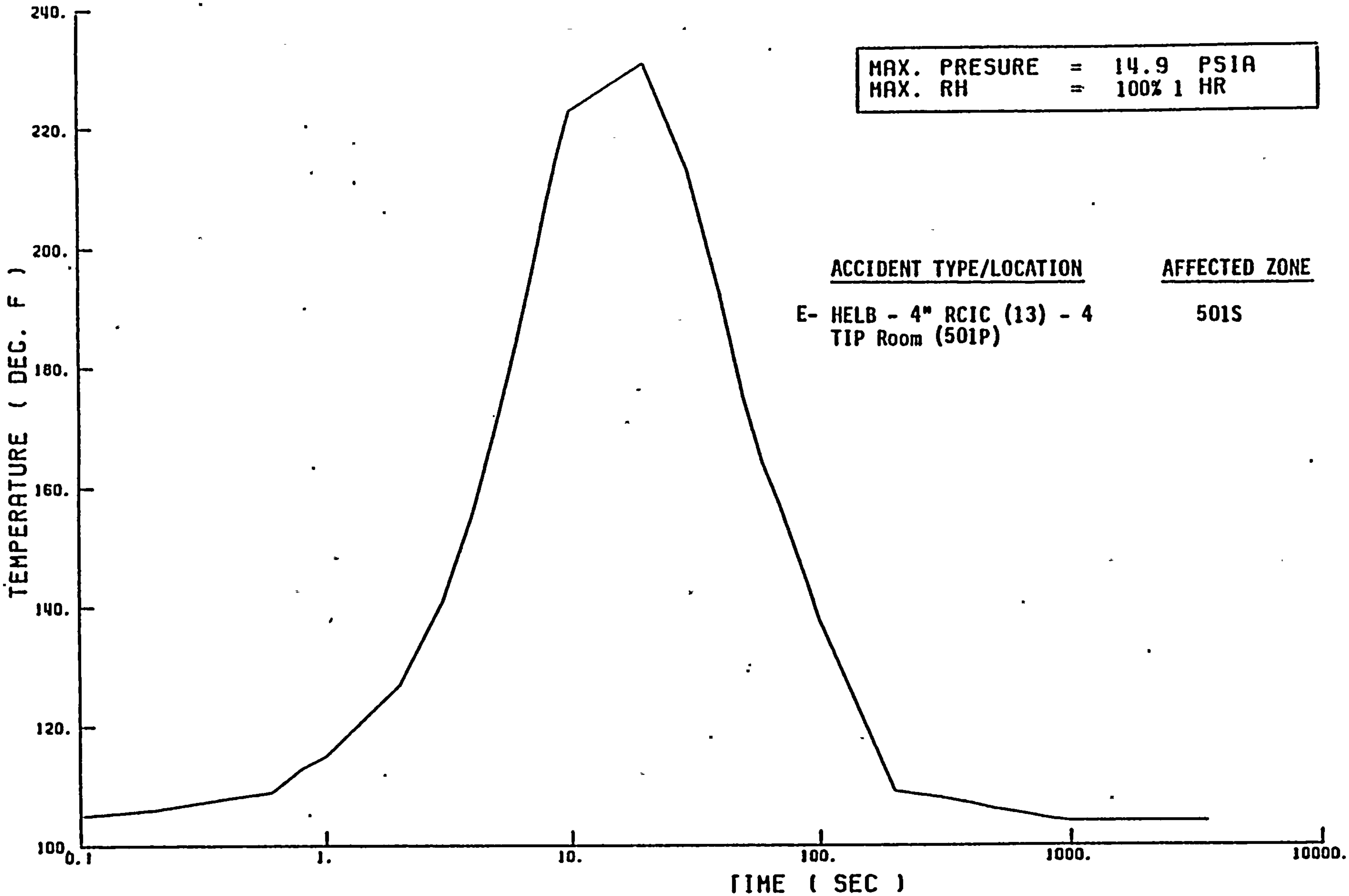
Profile 3X - 4" RCIC Line Break in RCIC Pump Room



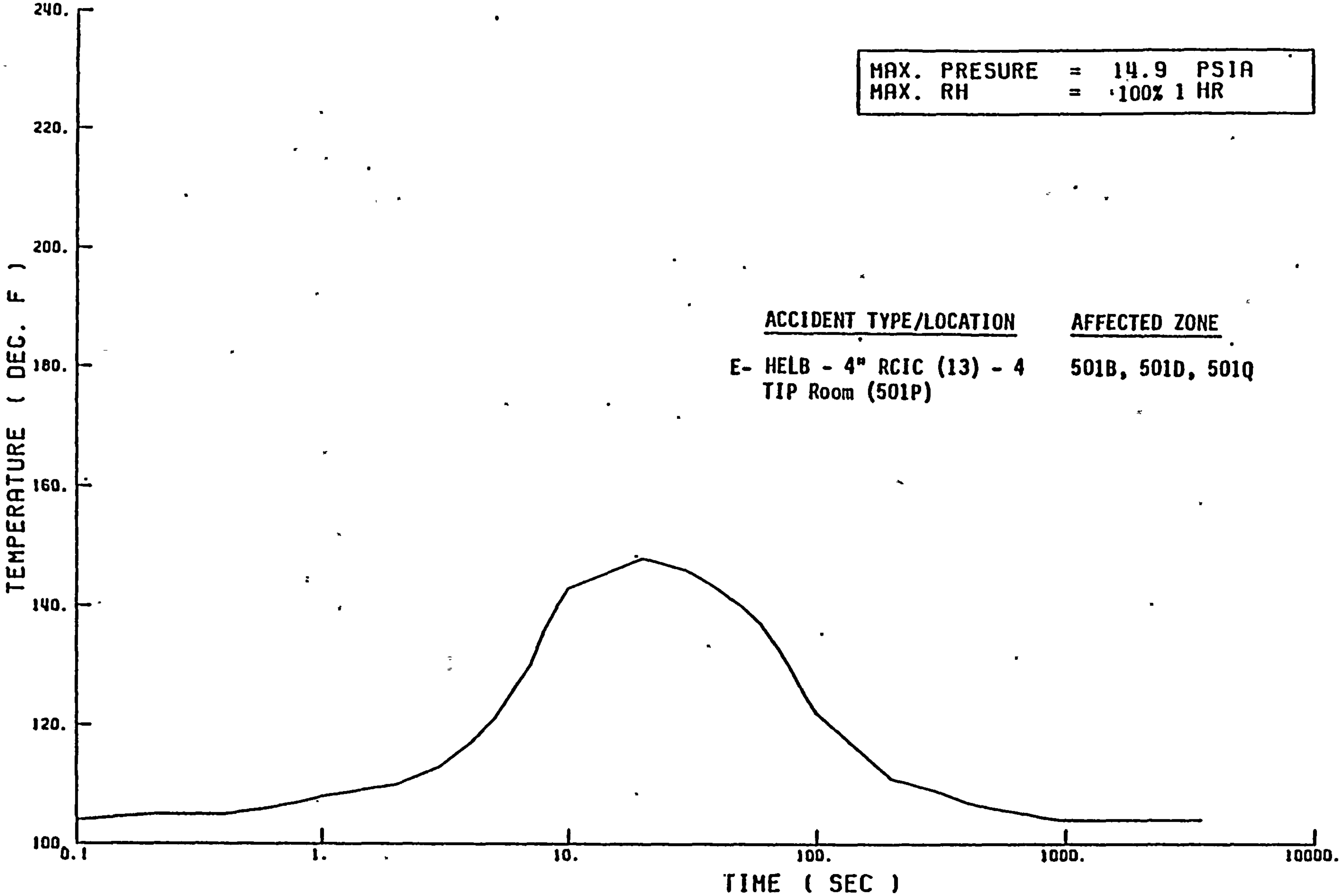
Profile 4X - 4" Line Break in RCIC Pump Room



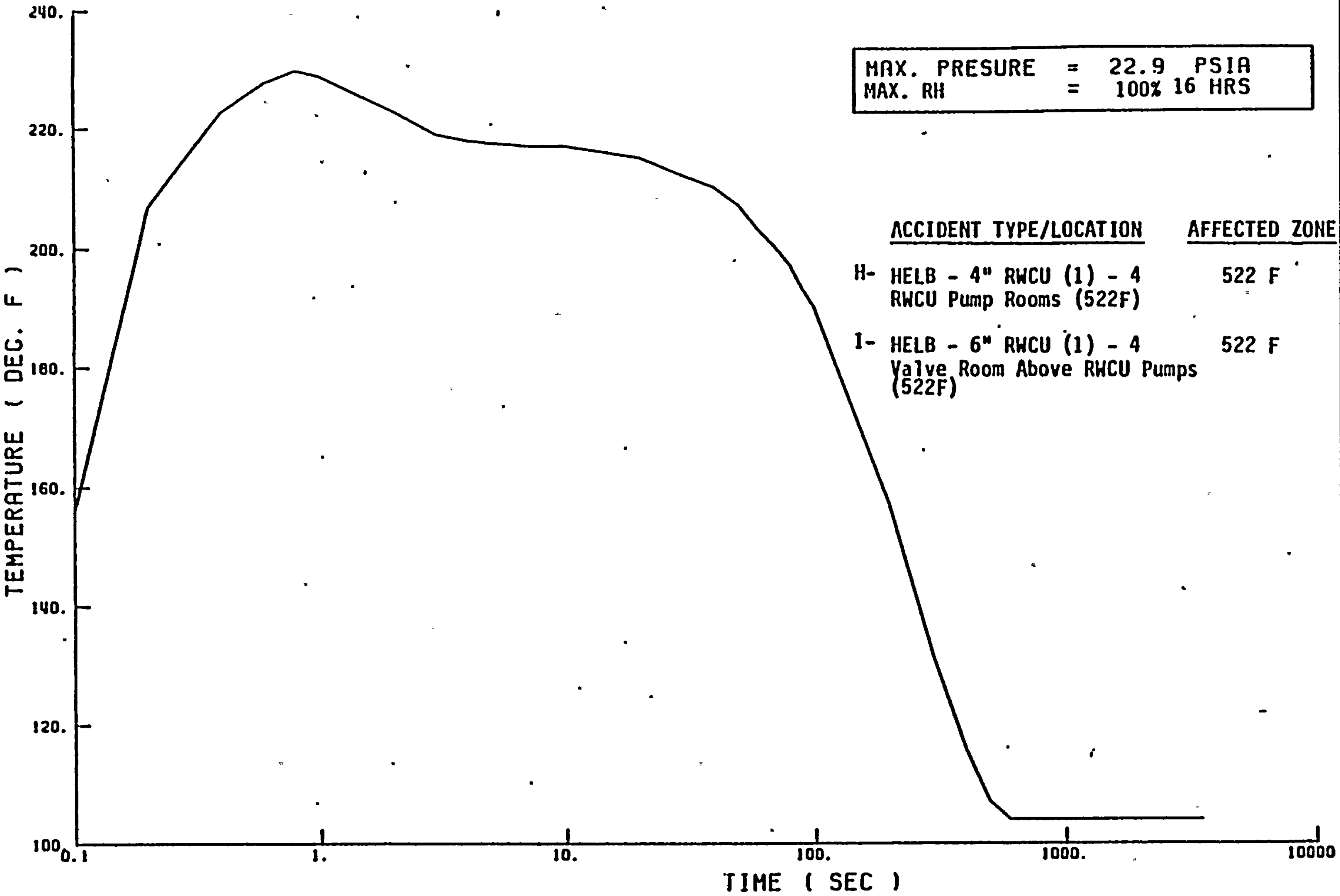
Profile 5X - 4" RCIC Line Break in TIP Room



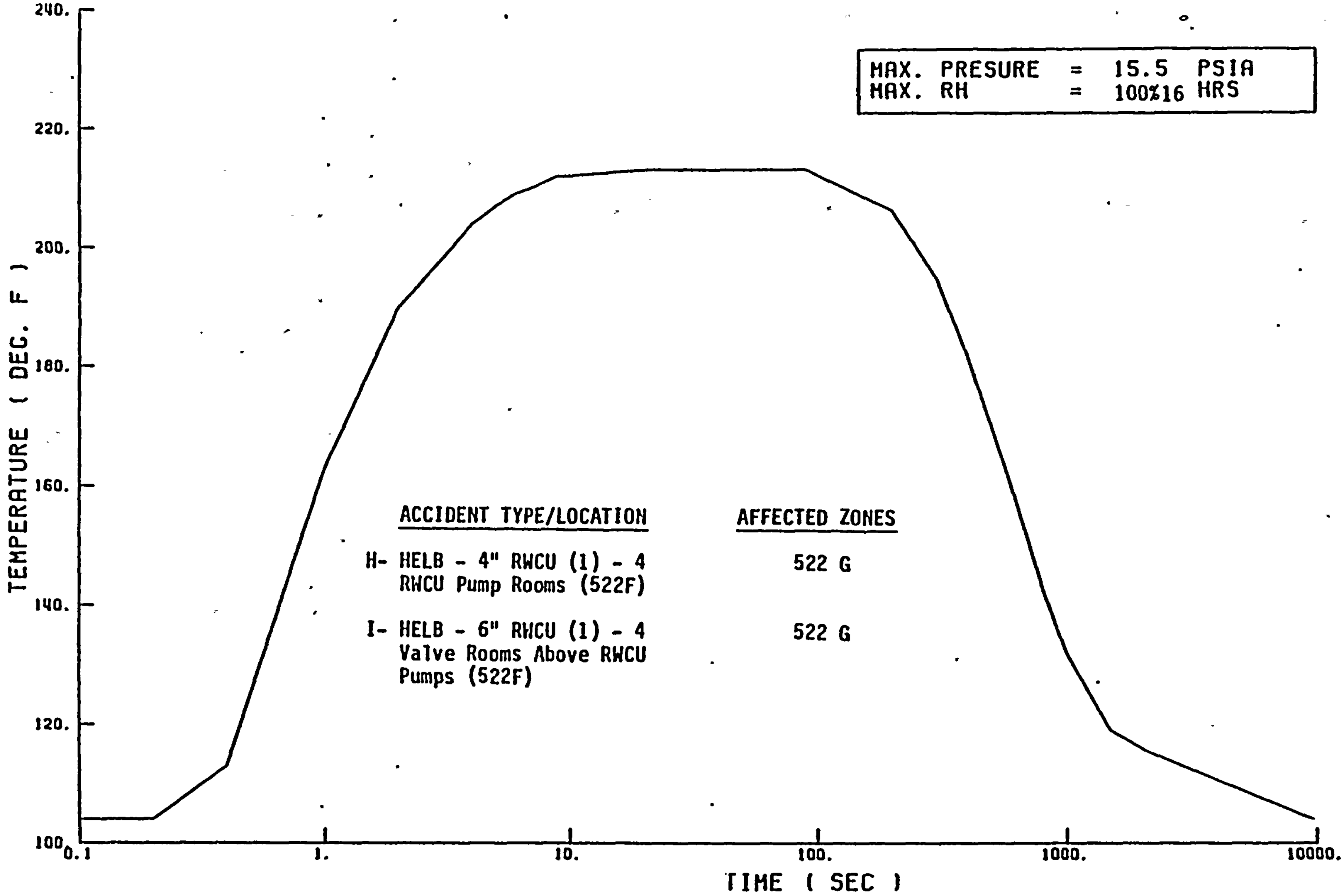
Profile 6X - 4" RCIC Line Break in TIP Room



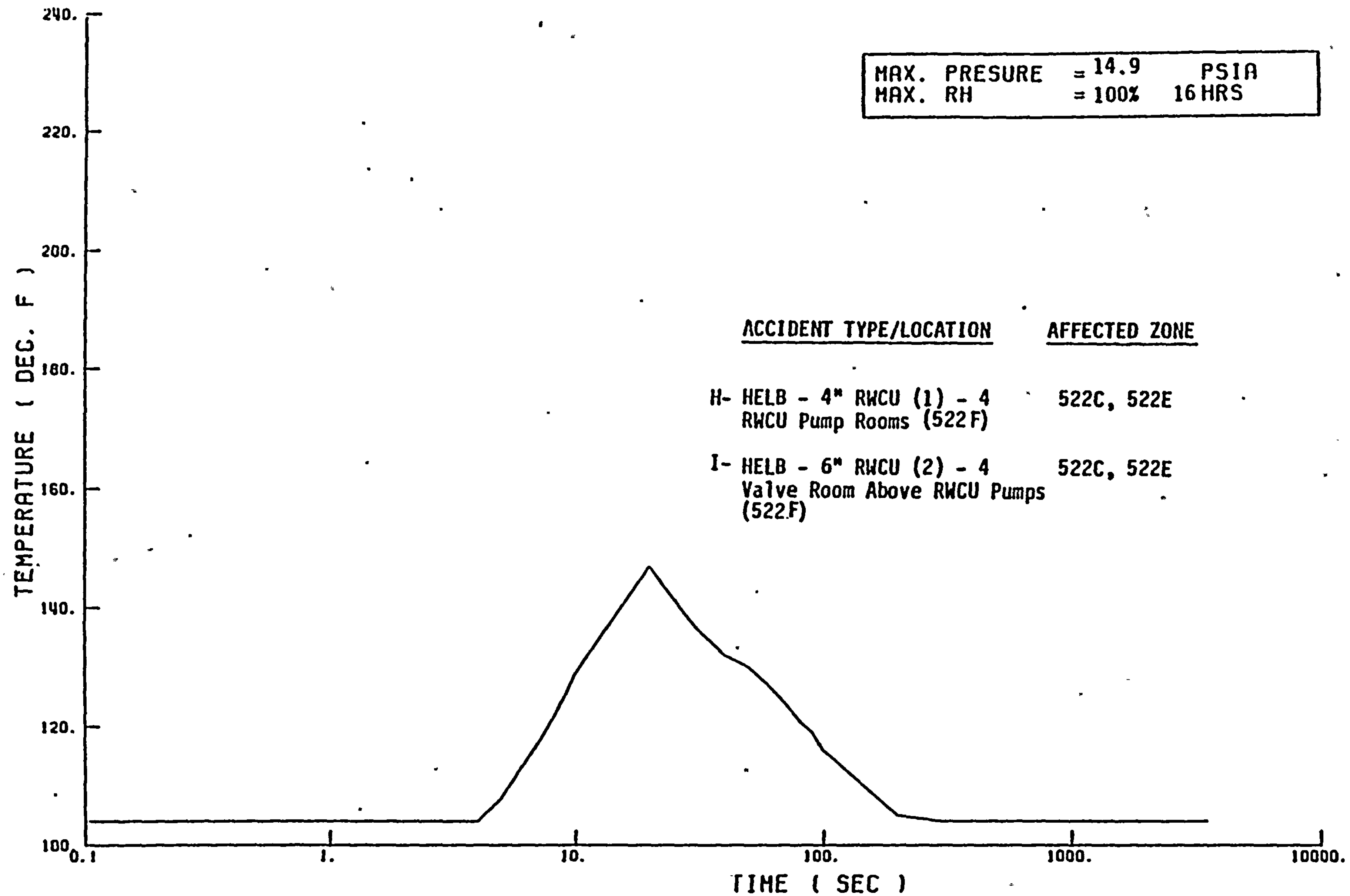
Profile 7X - 4" RCIC Line Break in TIP Room



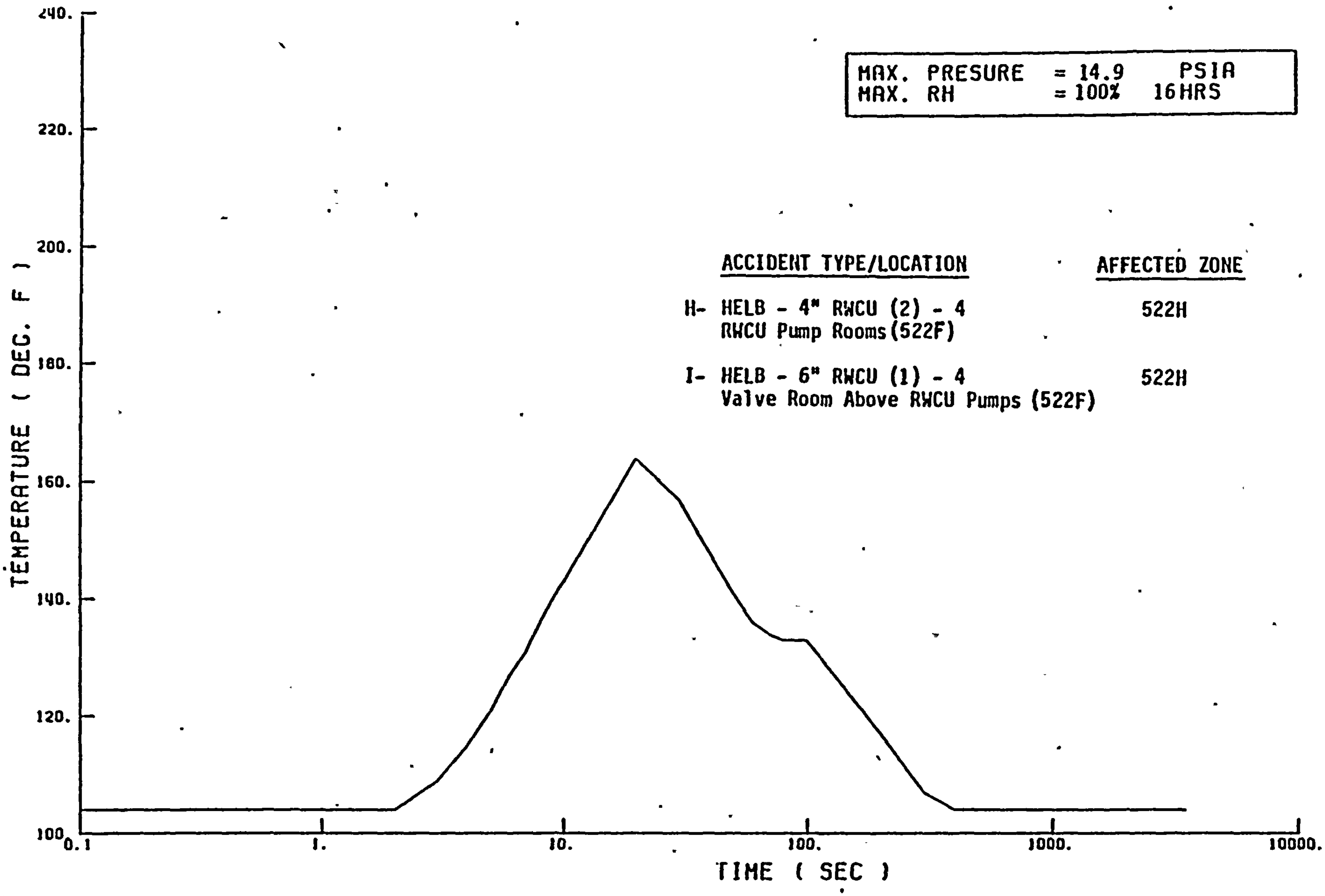
Profile 8X - RWCU Line Breaks in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



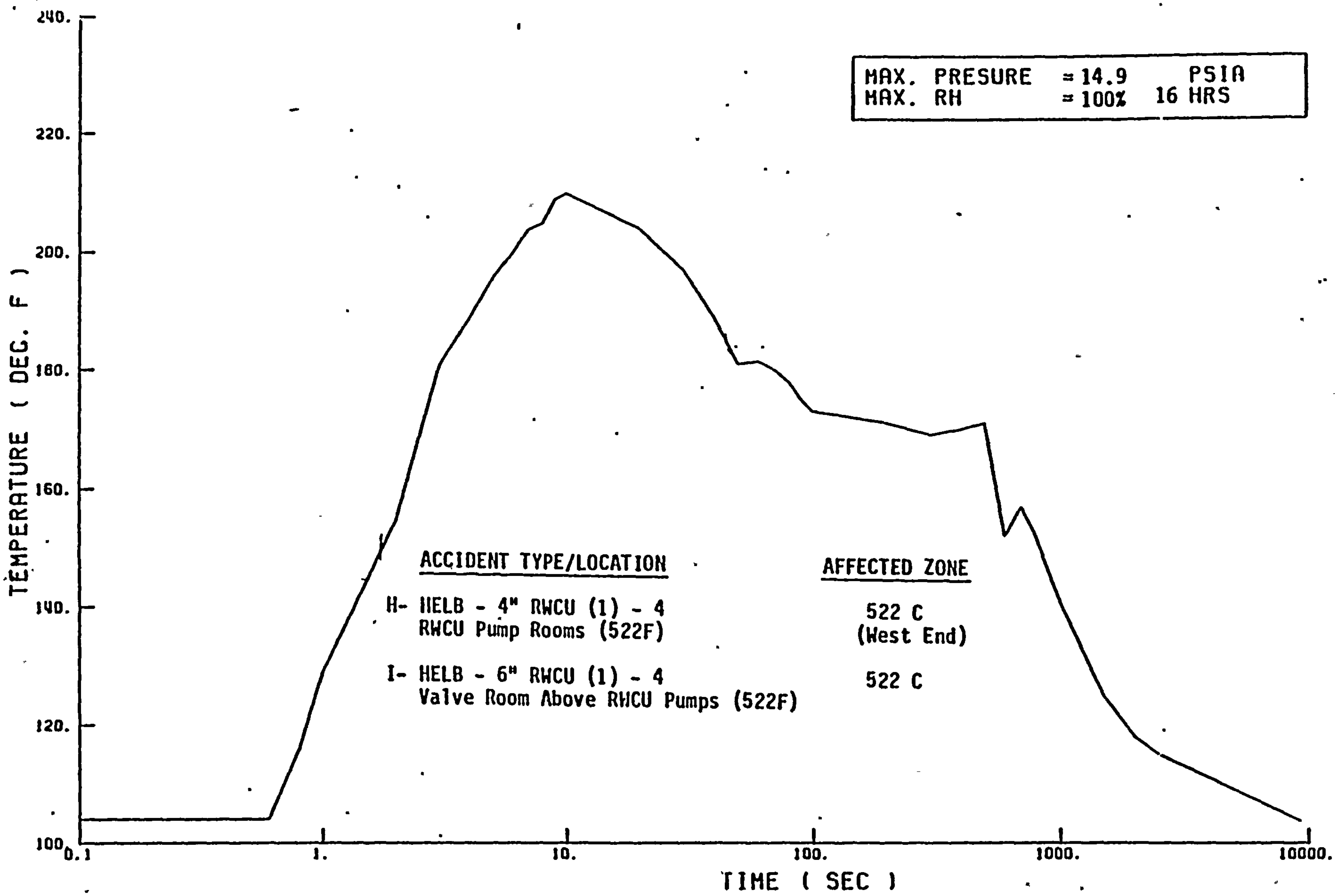
Profile 9X - RWCU Line Breaks in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



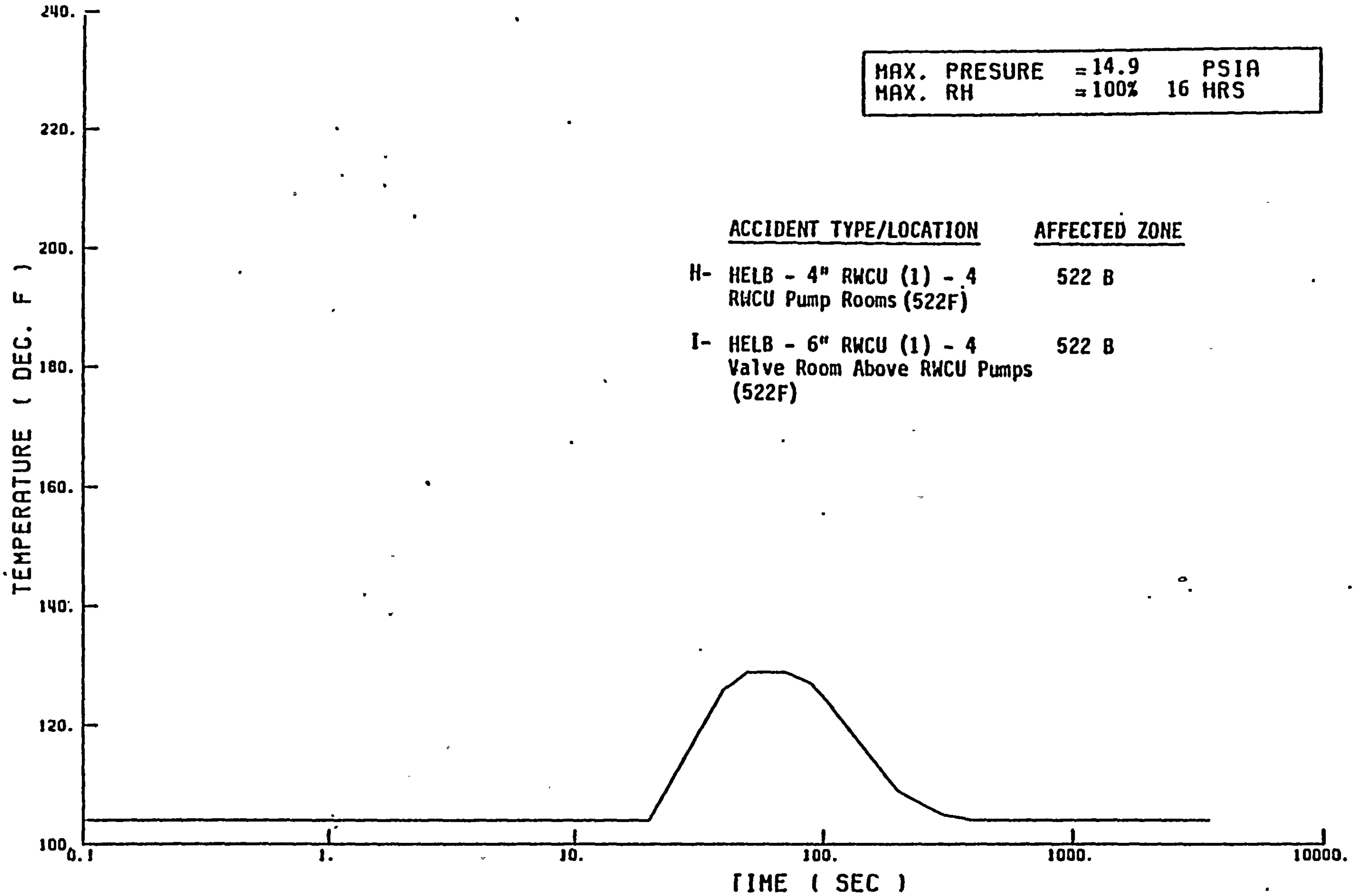
Profile 10X - RWCU Line Breaks in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



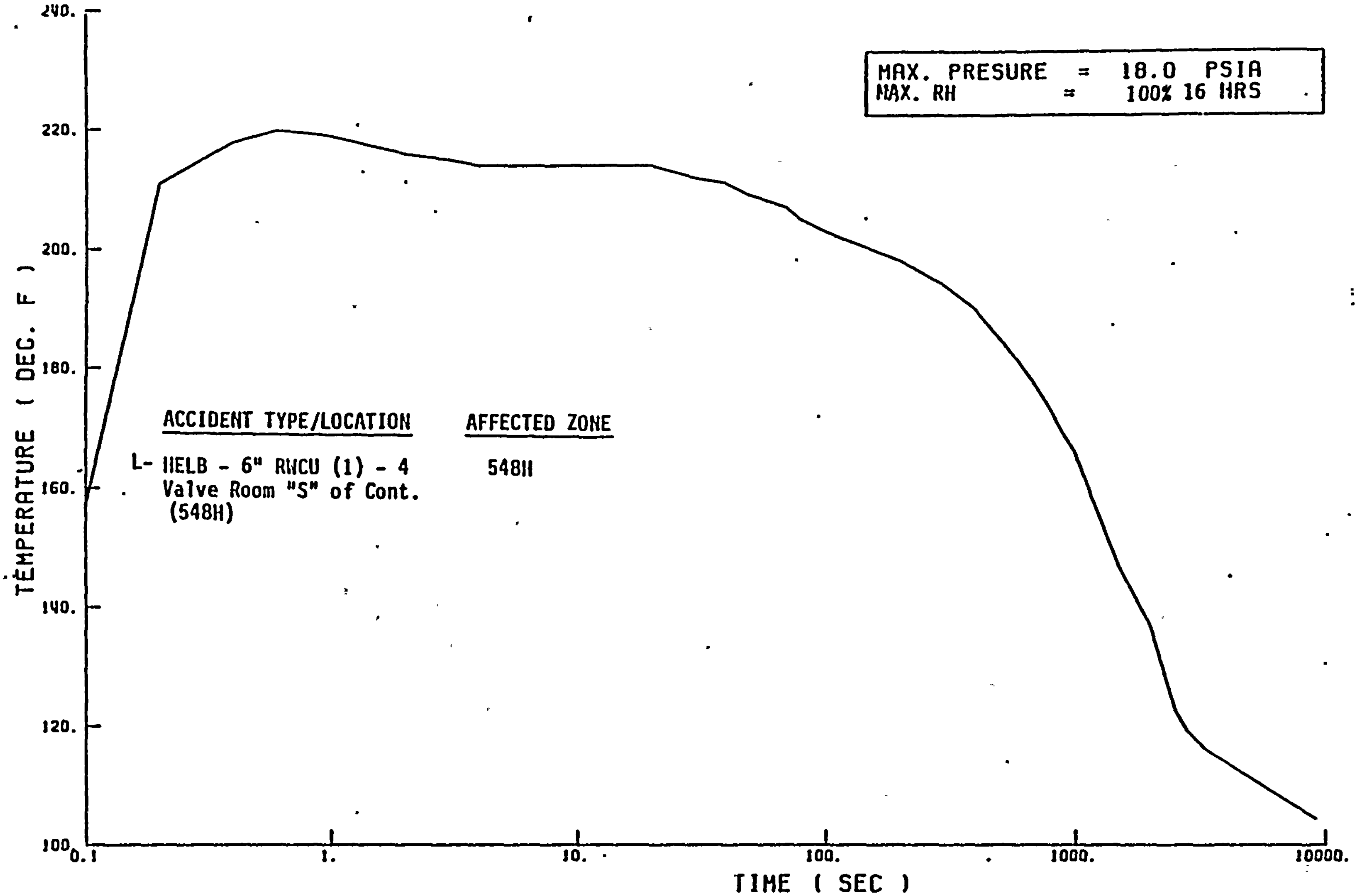
Profile 11X - RWCU Line Break in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



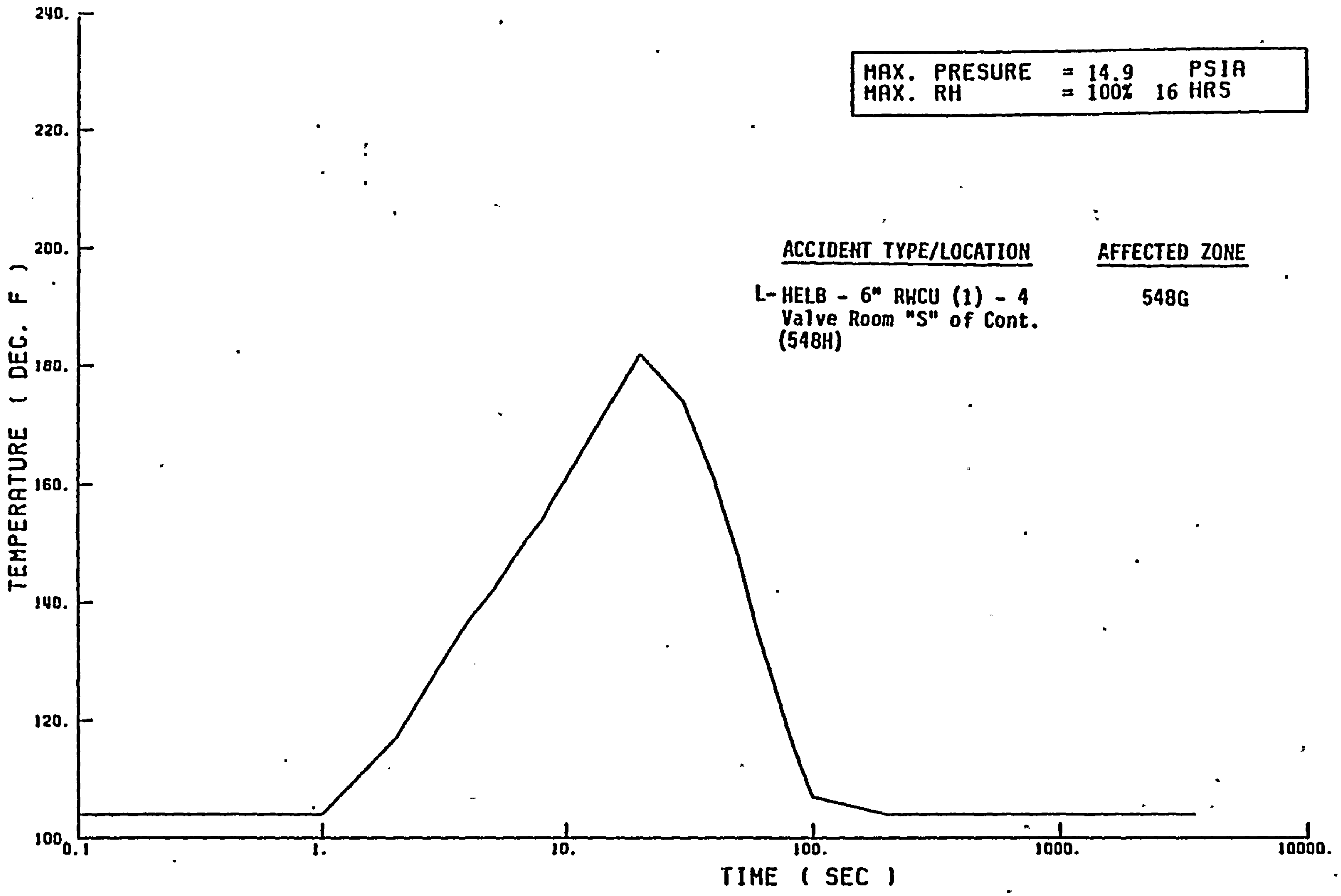
Profile 12X - RWCU Line Break in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



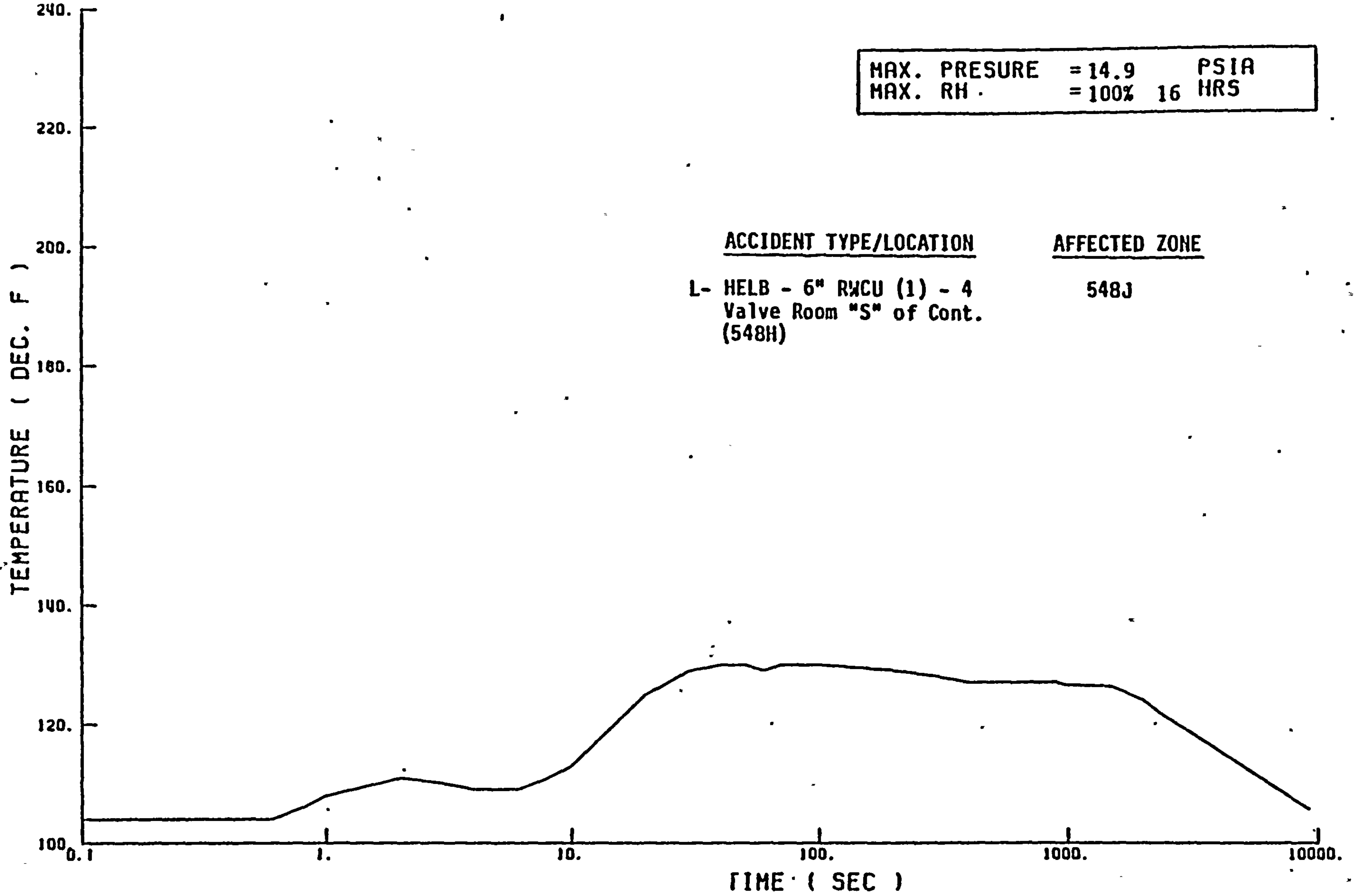
Profile 13X - RWCU Line Breaks in RWCU Pump Rooms or Valve Room Above RWCU Pump Rooms



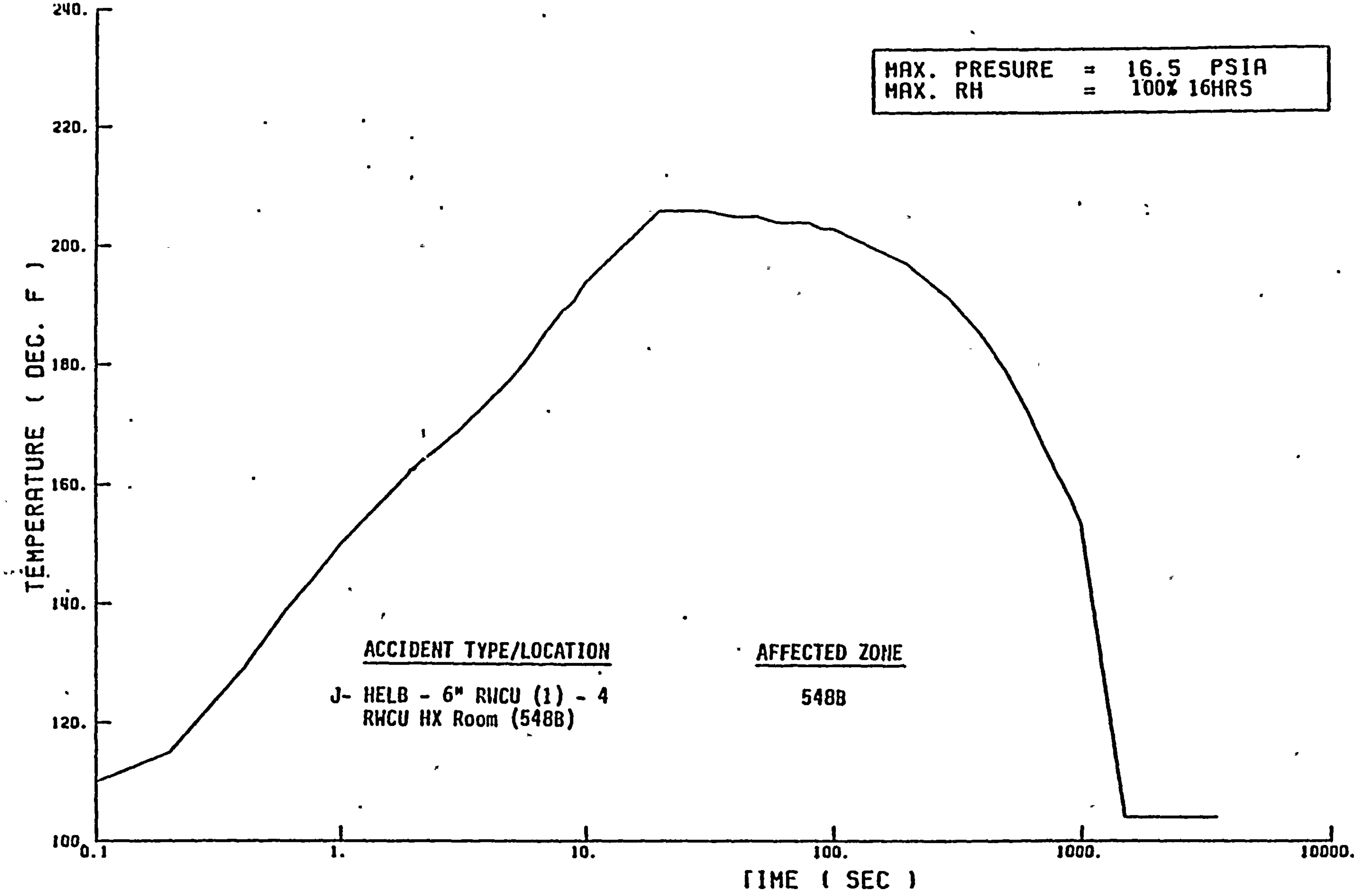
Profile 14X - 6" RWCU Line Break in Valve Room South of Containment



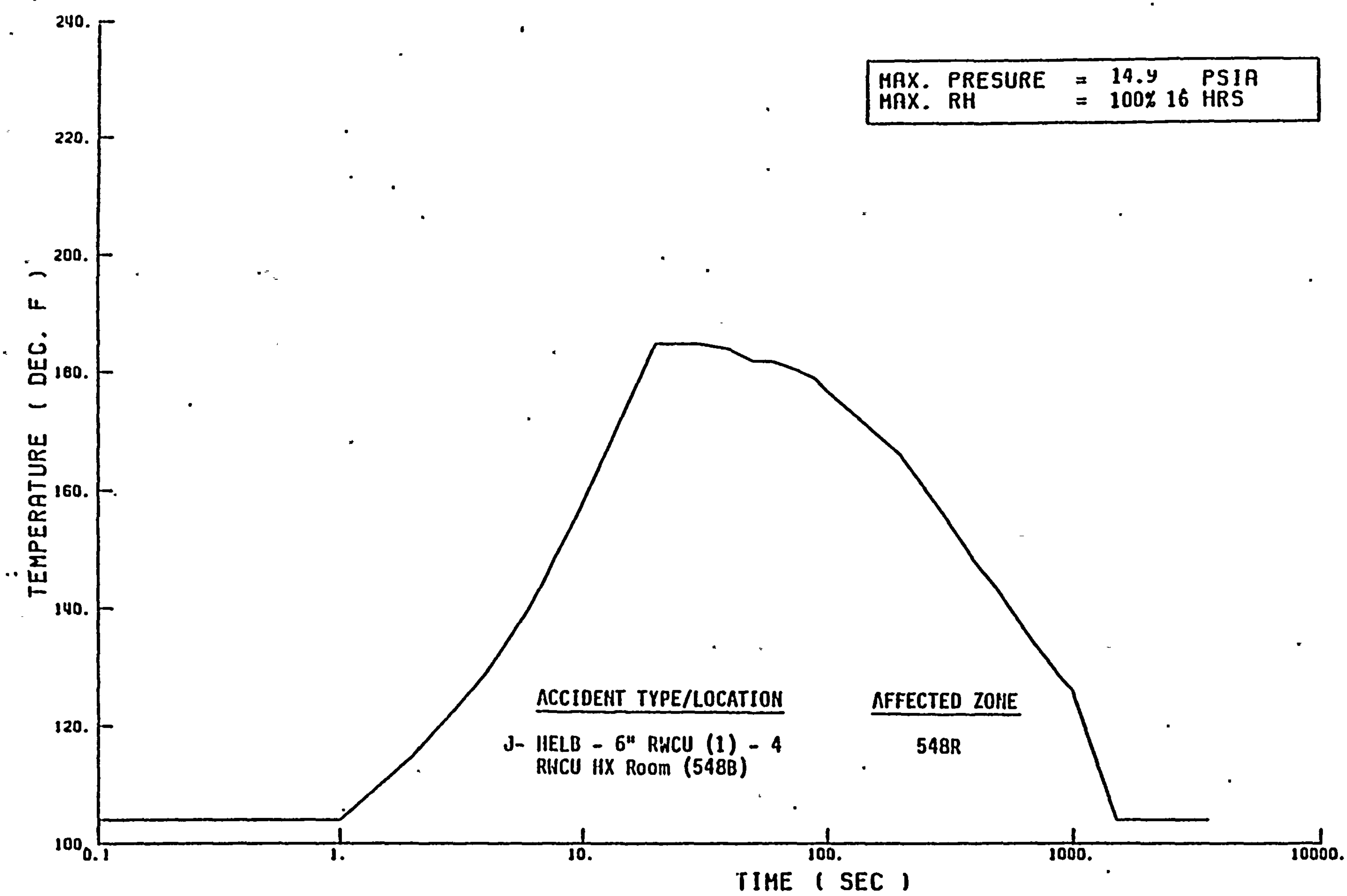
Profil 15X - 6" RWCU Line Break in Valve Room South of Containment



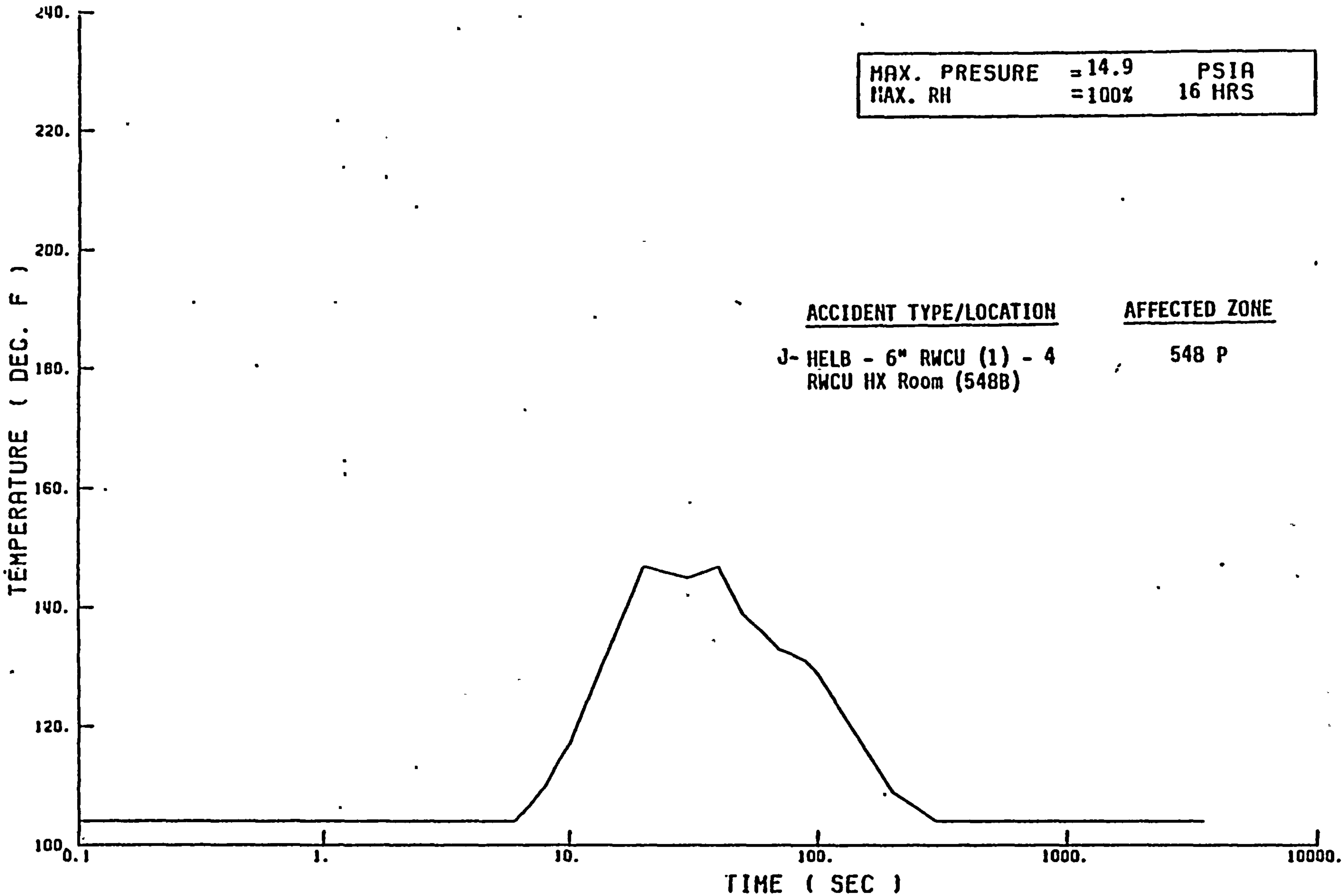
Profile 16X - 6" RWCU Line Break in Valve Room South of Containment



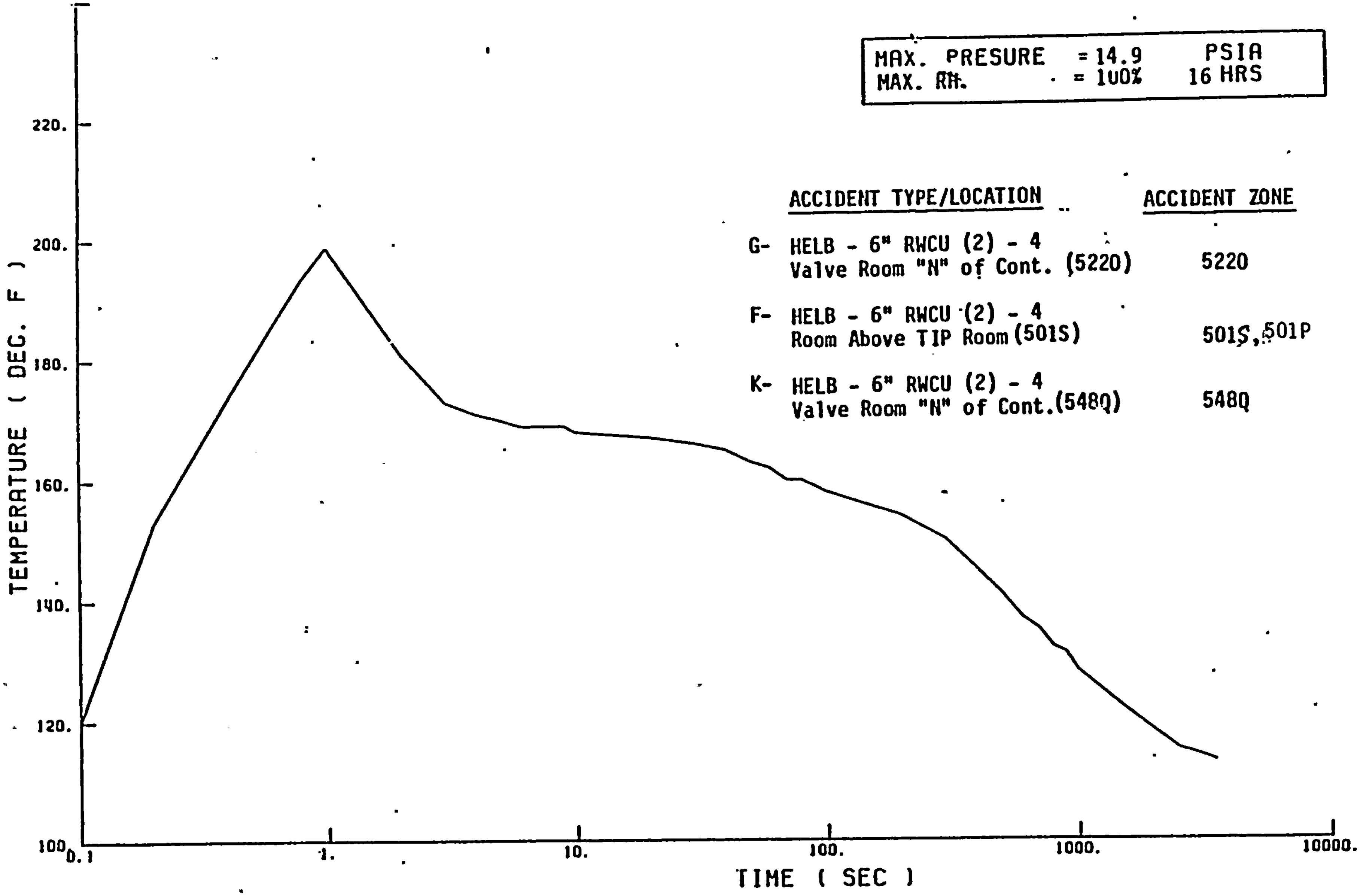
Profile 17X - 6" RWCU Line Break in RWCU Heat Exchanger Room



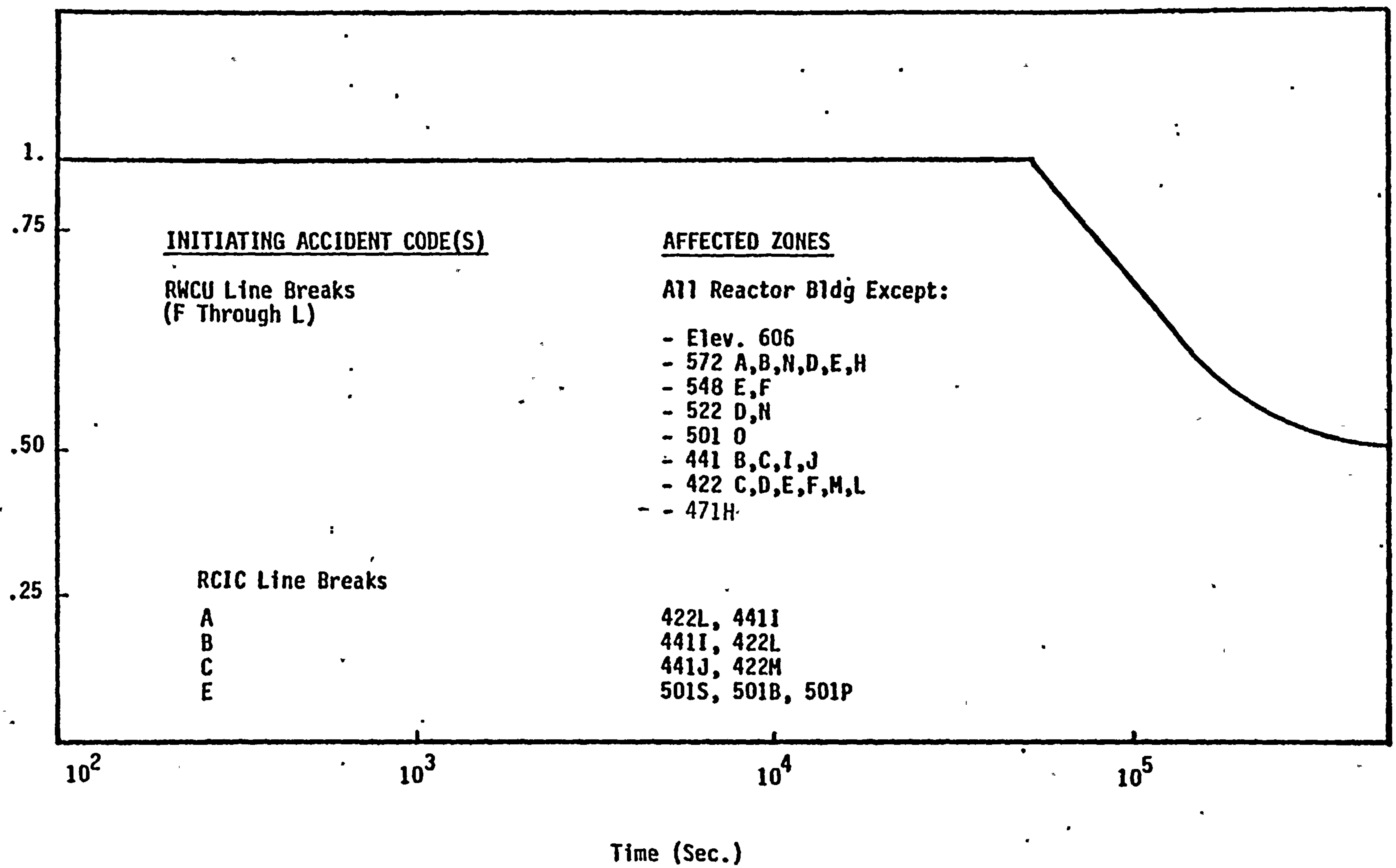
Profile 18X - 6" RWCU Line Break in RWCU Heat Exchanger Room



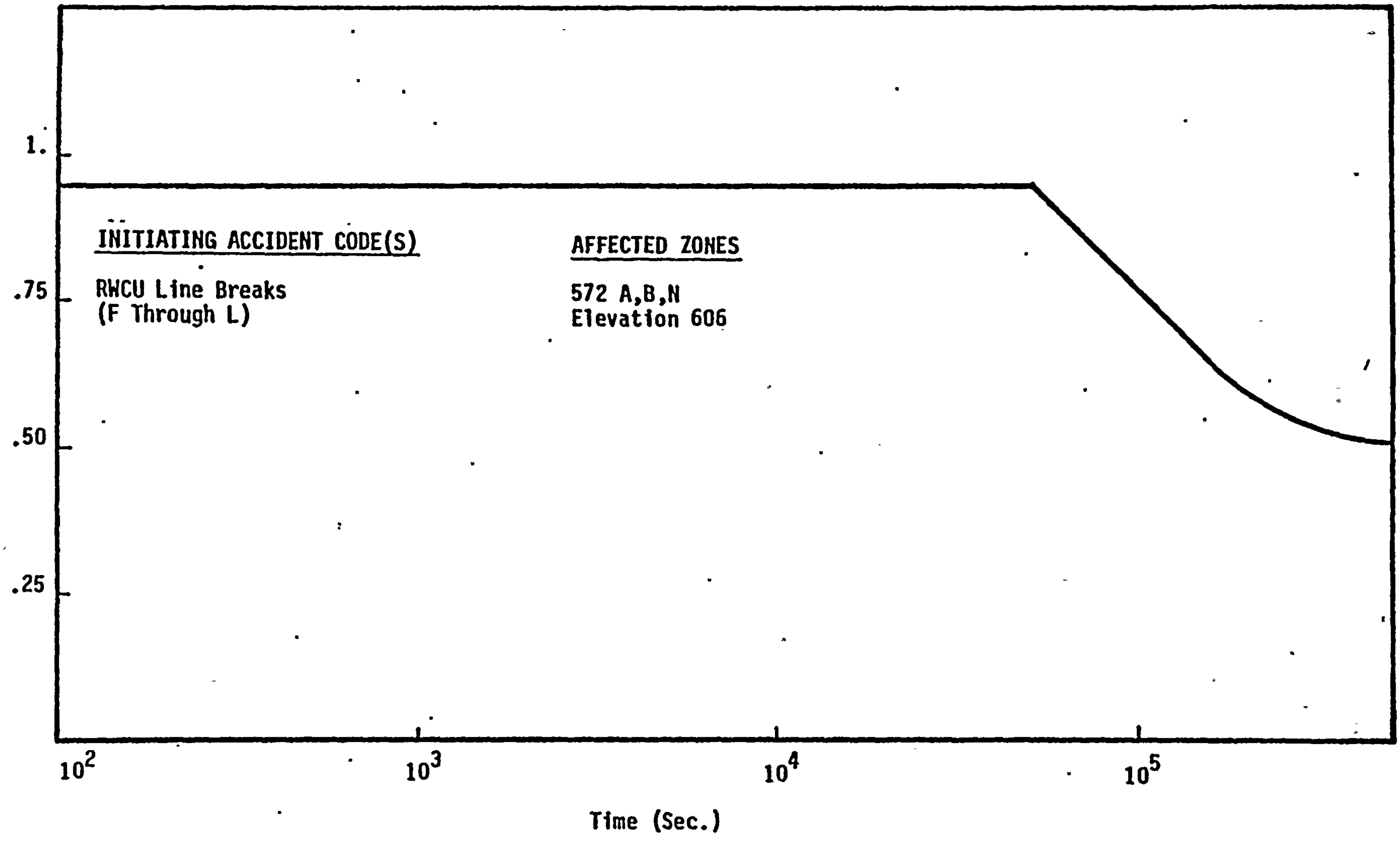
Profile 19X - 6" RWCU Line Break in RWCU Heat Exchanger Room



Profile 20X - 6" RWCU Line Break in Valve Rooms North of Containment or in Room Above TIP Room



Profile 21X - Relative Humidity Profile for Zones which reach Saturated Conditions (Accident Code "X")



Profile 22X - Relative Humidity Profile for Zones which do not reach Saturated Conditions during RWCU Line Breaks (Accident Code "Y")