ENCLOSURE to W3F1-2012-0100

WATERFORD 3 SEISMIC WALKDOWN REPORT

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Waterford Steam Electric Station Unit 3 Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic

TABLE OF CONTENTS

Section Section	on <u>Title</u>	Page
1.0	SCOPE AND OBJECTIVE	3
2.0	SEISMIC LICENSING BASIS SUMMARY	4
2.1	SAFE SHUTDOWN EARTHQUAKE (SSE)	
2.2	DESIGN CODES, STANDARDS, AND METHODS	
3.0	SEISMIC WALKDOWN PROGRAM IMPLEMENTATION APPROACH	
4.0	PERSONNEL QUALIFICATIONS	9
4.1	EQUIPMENT SELECTION PERSONNEL	
4.2	SEISMIC WALKDOWN ENGINEERS	12
4.3	LICENSING BASIS REVIEWERS	
4.4	IPEEE REVIEWERS	
4.5	PEER REVIEW TEAM	13
5.0	IPEEE VULNERABILITIES REPORTING	
6.0	SEISMIC WALKDOWN EQUIPMENT LIST DEVELOPMENT	
6.1	SAMPLE OF REQUIRED ITEMS FOR THE FIVE SAFETY FUNCTIONS	
6.2	SPENT FUEL POOL ITEMS	
6.3	DEFERRED INACCESSIBLE ITEMS on SWEL	
7.0	SEISMIC WALKDOWNS AND AREA WALK-BYS	
7.1	SEISMIC WALKDOWNS	23
7.2	AREA WALK-BYS	24
8.0	LICENSING BASIS EVALUATIONS	
CON	NDITON IDENTIFICATION	
CON	NDITION RESOLUTION	
8.1	Licensing Basis Evaluation	27
8.2	Corrective Action Program Entries	27
8.3	Plant Changes	
9.0	PEER REVIEW	
9.1	PEER REVIEW PROCESS	
9.2	PEER REVIEW RESULTS SUMMARY	
10.0	REFERENCES	
11.0	ATTACHMENTS	
ATT	ACHMENT A – IPEEE VULNERABILITIES TABLE	
ATT	ACHMENT B – SEISMIC WALKDOWN EQUIPMENT LISTS	
ATT	ACHMENT C – SEISMIC WALKDOWN CHECKLISTS (SWCs)	76
ATT	ACHMENT D – AREA WALK-BY CHECKLISTS (AWCs)	
ATT	ACHMENT E – POTENTIALLY ADVERSE SEISMIC CONDITIONS	802
ATT	ACHMENT F – LICENSING BASIS EVALUATION FORMS	809
ATT	ACHMENT G – PEER REVIEW CHECKLIST FOR SWEL	817
ATT	ACHMENT H – PEER REVIEW COMMENT FORM	
ATT	ACHMENT J – SEISMIC WALKDOWN ENGINEER TRAINING CERTIFICATES	

1.0 SCOPE AND OBJECTIVE

The Great Tohoku Earthquake of March 11, 2011 and the resulting tsunami caused an accident at the Fukushima Dai-ichi nuclear power plant in Japan. In response to this accident, the Nuclear Regulatory Commission (NRC) established the Near-Term Task Force (NTTF). The NTTF was tasked with conducting a systematic and methodical review of NRC processes and regulations and determining if the agency should make additional improvements to its regulatory system. On March 12, 2012 the NRC issued a 10CFR50.54(f) Letter [Ref. 1], which requested information from all licensees to support the NRC staff's evaluation of several of the NTTF recommendations. To support NTTF Recommendation 2.3, Enclosure 3 to the 50.54(f) Letter requested that all licensees perform seismic walkdowns to gather and report information from the plant related to degraded, non-conforming, or unanalyzed conditions with respect to its current seismic licensing basis.

The Electric Power Research Institute (EPRI), with support and direction from the Nuclear Energy Institute (NEI), published industry guidance for conducting and documenting the seismic walkdowns which represented the results of extensive interaction between NRC, NEI, and other stakeholders. This industry guidance document, EPRI Report 1025286 [Ref. 2], hereafter referred to as "the Guidance," was formally endorsed by the NRC on May 31, 2012. Entergy Waterford Steam Electric Station Unit 3 has committed to using this NRC-endorsed guidance as the basis for conducting and documenting seismic walkdowns for resolution of NTTF Recommendation 2.3: Seismic.

The objective of this report is to document the results of the seismic walkdown effort undertaken for resolution of NTTF Recommendation 2.3: Seismic in accordance with the Guidance, and provide the information necessary for responding to Enclosure 3 to the 50.54(f).

2.0 SEISMIC LICENSING BASIS SUMMARY

Waterford Steam Electric Station Unit 3 (WSES-3) is located on the west (right descending) bank of the Mississippi River in St. Charles Parish, near the town of Taft, Louisiana. The Nuclear Steam Supply System (NSSS) is a pressurized water reactor (PWR) designed by Combustion Engineering Incorporated. The WSES-3 Facility Operating License was issued on March 16, 1985, and is currently rated at 3716 MWt power [Ref. 3]. This section summarizes the seismic licensing basis of structures, systems and components (SSCs) at WSES-3 which bound the context of the NTTF 2.3 Seismic Walkdown program.

2.1 SAFE SHUTDOWN EARTHQUAKE (SSE)

The selection of the SSE is based on a hypothetical earthquake with an epicentral intensity of VI MM occurring adjacent to the site. According to the most recent and acceptable intensityacceleration relationship by Trifunac-Brady the intensity VI MM corresponds to a horizontal surface acceleration of 0.06g. In order to comply with the minimum accepted acceleration as stipulated by 10CFR100, Appendix A, WSES-3 was designed for a maximum horizontal ground surface acceleration of 0.10g. This very conservative surface acceleration is double the maximum acceleration appropriate for the maximum earthquake which has occurred in the site's tectonic province during the past 250 years. The peak vertical acceleration for the postulated SSE is 2/3 peak horizontal acceleration or 0.067g.

2.2 DESIGN CODES, STANDARDS, AND METHODS

Principle structures, systems, and components (SSCs) which may either serve to prevent accidents or to mitigate their consequences are designed and are erected in accordance with applicable codes to withstand any deleterious natural phenomena which could be reasonably assumed to occur at the site during the lifetime of the plant. Redundancy is provided in the reactor protective and safety feature systems so that no single failure of an active component of the system would prevent action necessary to avoid an unsafe condition.

Seismic Category I defines SSCs as those components (1) whose failure could cause uncontrolled release of radioactivity, (2) that are essential for safe reactor shutdown and the immediate and long-term operation following a Design Basis Accident, or (3) that are essential for a safe and orderly shutdown of the Nuclear Steam Supply System.

Response Spectra

The design response spectra used in the plant design differ from the design response spectra recommended in NRC Regulatory Guide 1.60, Design Response Spectra for Seismic Design of Nuclear Power Plants, Revision 1 December 1973. The regulatory guide response spectra have slightly higher values in general. Use of Regulatory Guide 1.60 permits utilization of

damping values indicated in Regulatory Guide 1.61, Damping Values for Seismic Design of Nuclear Power Plants, October 1973. These damping values are equal or greater than the values utilized for WSES-3 plant design. By utilizing lower damping values in the WSES-3 design, as compared to the damping values of Regulatory Guide 1.61, the analysis and design of WSES-3 compensates for any differences.

Structures

The seismic Category I structures consist of the following:

a) Reactor Building (comprising a free standing steel containment vessel, a containment internal structure and a reinforced concrete Shield).

- b) Reactor Auxiliary Building
- c) Fuel Handling Building
- d) Component Cooling Water System Structure

Subsystems and Their Supports

The following list comes from WSES-FSAR-UNIT-3 Table 3.2-1. All systems that have components classified as Seismic Category I will be listed here. For a more detailed version of specific components classified as Seismic Category I, see Table 3.2-1.

- Reactor Coolant System
- Safety Injection System
- Shutdown Cooling System
- Refueling Water Level Indicating System
- Chemical and Volume Control System
- Containment Spray System
- Waste Management System
- Component Cooling Water System
- Sampling System
- Containment Cooling System
- Essential Services Chilled Water System
- Fuel Handling System
- Spent Fuel Pool System
- Main Steam and Feedwater System
- Emergency Feedwater System
- Compressed Air Systems
- Containment Isolation System
- Emergency Diesel Generator System
- Control Room Air Conditioning System
- RAB Cable Vault and Switchgear Areas Ventilation System

- RAB H&V Equipment Room Ventilation System
- FHB Ventilation System
- Containment Atmospheric Release System
- Shield Building Ventilation System
- Controlled Ventilation Area System
- Reactor Cavity Cooling System
- Miscellaneous HVAC Equipment
- Combustible Gas Control
- Containment Vacuum Relief Actuation System
- Containment Pressure Indication System
- Containment Water Level Indication System
- Electrical Systems and Equipment
- Radiation Monitoring
- Accident Radiation Monitors
- Inadequate Core Cooling Instrumentation
- Miscellaneous

Codes and Industry Standards

Seismic Class I structures are generally proportioned to maintain elastic behavior when subjected to various combinations of dead loads, thermal loads, accident loads, seismic and tornado loads.

Safety-related structural steel is designed in accordance with American Institute of Steel Construction (AISC), Manual of Steel Construction, 7th Edition.

Safety-related concrete is designed in accordance with American Concrete Institute (ACI-308-63), Building Code Requirements for Reinforced Concrete with the exception that ACI 318-71 is used for design of reinforcing steel splices.

Safety-related welds are designed in accordance with American Welding Society (AWS) D1.1-72, AWS Structural Welding Steel.

IEEE-323-1971, General Guide for Type Test of Class I Electric Equipment for Nuclear Power Generating Stations.

IEEE Standard 344-1971, IEEE Recommended Practice for Seismic Qualification of Class IE Equipment for Nuclear Power Generating Stations, was used in qualifying electrical equipment. Some equipment was qualified in accordance with IEEE 344-1975.

Piping systems, pumps, valves, heat exchangers and pressure vessels are designed to the following codes and industrial standards. Note that various pieces of equipment were

designed by different code years at WSES-3. Items were purchased to code years and addenda as specified in WSES-3 specifications

- ASME Boiler and Pressure Vessel Code, Section II, "Material Specifications," including the latest published addenda in force on the date of purchase and /or design.
- ASME Boiler and Pressure Vessel Code, Section III, "Nuclear Vessels," including the latest published addenda in force on the date of purchase and/or design.
- ASME Boiler and Pressure Vessel Code, Section VIII, "Unfired Pressure Vessels," including the latest published addenda in force on the date of purchase and/or design.
- ASME Boiler and Pressure Vessel Code, Section IX, "Welding Qualifications"
- ANSI B31.1.0-1967, "Power Piping Code"
- ANSI B31.7-1969, "Nuclear Piping Code"
- ASTM A36, "Structural Steel"

3.0 SEISMIC WALKDOWN PROGRAM IMPLEMENTATION APPROACH

Entergy WSES-3 has committed to conduct and document seismic walkdowns for resolution of NTTF Recommendation 2.3: Seismic in accordance with the EPRI Seismic Walkdown Guidance [Ref. 2]. The approach provided in the Guidance for addressing the actions and information requested in Enclosure 3 to the 50.54(f) Letter includes the following activities, the results of which are presented in the sections shown in parenthesis:

- Assignment of appropriately qualified personnel (Section 4.0)
- Reporting of actions taken to reduce or eliminate the seismic vulnerabilities identified by the Individual Plant Examination of External Events (IPEEE) program (Section 5.0)
- Selection of SSCs to be evaluated (Section 6.0)
- Performance of the seismic walkdowns and area walk-bys (Section 7.0)
- Evaluation and treatment of potentially adverse seismic conditions with respect to the seismic licensing basis of the plant (Section 8.0)
- Performance of peer reviews (Section 9.0)

The coordination and conduct of these activities was initiated and tracked by Entergy corporate leadership, which provided guidance to each Entergy site throughout the seismic walkdown program, including WSES-3. Entergy contracted with an outside nuclear services company to provide engineering and project management resources to supplement and assist each individual site. Each site had dedicated engineering contractors, supported by their own project management and technical oversight, who worked closely with plant personnel.

4.0 PERSONNEL QUALIFICATIONS

The NTTF 2.3 Seismic Walkdown program involved the participation of numerous personnel with various responsibilities. This section identifies the project team members and their project responsibilities, and provides brief experience summaries for each. For organizational purposes, personnel are presented as being primarily involved with either the walkdown effort or the peer review. Training certificates of those qualified as Seismic Walkdown Engineers are included in Attachment H.

Table 4-1 summarizes the names and responsibilities of personnel used to conduct the seismic walkdowns. Experience summaries of each person follow.

Name	Equipment Selection Personnel	Seismic Walkdown Engineer	Licensing Basis Reviewer	IPEEE Reviewer
Greg Ferguson, DE-Civil	Х	Х	Х	Х
Marc McCloskey, DE-Mechanical	Х			
David Constance, Operations	X ²			
Ricky Tran, DE-Electrical	Х			
John Meibaum, SE-Electrical	Х			
James Jamison, SE-Mechanical	Х			
Bill Hardin, Licensing	Х			
Stephen Picard, DE-Civil	Х	Х		
J. McDonald, PSA Engineer	Х			
Dinesh Patel (ENERCON)		X ¹	Х	Х
Brian Pace (ENERCON)		Х	Х	
Natalie George (ENERCON)		Х		
Chu-Chieh "Jay" Lin (SC Solutions)		Х		

Table 4-1

Notes:

1. Designated lead SWE

2. Plant operations representative

<u>Greg Ferguson, P.E</u>

Mr. Ferguson is a Registered Professional Engineer with over 35 years of experience currently assigned to Design Engineering Group (Civil) at Waterford 3. Mr. Ferguson has significant experience dealing with design and modification of seismic structures. Mr. Ferguson was involved with the Waterford 3 IPEEE seismic walkdowns. Mr. Ferguson completed the NTTF 2.3 Seismic Walkdown Training Course in June of 2012.

Marc McCloskey

Mr. McCloskey is a Mechanical engineer with over five years of experience currently assigned to Design Engineering Group (Mechanical) at Waterford 3

David Constance

Mr. Constance is an Operations training instructor with over 30 years of experience currently assigned to Operations group at Waterford 3. He was also involved in operations group at Waterford 3. Mr. Constance also held a Senior Reactor Operator License from 2000 to 2008 and is also a Certified Shift Technical Advisor

<u>Ricky Tran</u>

Mr. Tran is an Electrical engineer with over 20 years of experience currently assigned to Design Engineering Group (Electrical) at Waterford 3. Mr. Tran was also involved with Procurement Engineering Group at Waterford 3 from 1992 to 1996

<u>John Meibaum</u>

Mr. Meibaum is an Electrical engineer with over 23 years of experience currently assigned to Systems Engineering Group (Electrical) at Waterford 3

James Jamison

Mr. Jamison is a Mechanical Engineer with over four years of experience currently assigned to Systems Engineering Group (Mechanical) at Waterford 3

<u>William Hardin</u>

Mr. Hardin is a Senior Licensing Specialist with over 40 years of experience currently assigned to Licensing group at Waterford 3. Prior to this Mr. Hardin was a Senior Reactor Operator working as Control Room Supervisor and Senior Operations Training Instructor.

Stephen Picard

Mr. Picard is a Civil Engineer with three years of experience in Design Engineering (Civil). Mr. Picard completed the NTTF 2.3 Seismic Walkdown Training Course in July of 2012.

<u>J McDonald</u>

Mr. McDonald is an Electrical Engineer with ten years of experience in electrical, I&C, and PRA Design Engineering.

<u>Dinesh Patel</u>

Mr. Patel is a Lead Engineer in ENERCON Services Kennesaw, GA Office in the Civil/Structural Engineering department. Mr. Patel has a BS degree in Civil/Architectural Engineering with over 30 years of experience. Mr. Patel has extensive concrete, building design, piping and pipe support design experience. Mr. Patel was also Lead/Responsible Engineer for Main and Auxiliary Transformer Replacements, Vacuum Pump Replacement, Diesel Governor Replacement, Power Uprate related modifications and Emergency Sump Strainers design and installations at various nuclear sites. Mr. Patel has significant seismic experience including the design and modification of nuclear structures and distribution system, selecting equipment, developing specifications, witnessing seismic testing, and equipment supports. Mr. Patel also has extensive experience performing security upgrades at Entergy Sites including Grand Gulf Nuclear Station, River Bend Station, Arkansas Nuclear One and Waterford 3 as well as at the Progress Energy sites (Crystal River, Brunswick, Harris, Robinson), Florida Power Sites (St. Lucie and Turkey Point) and the Southern Company Sites (Farley, Hatch and Vogtle). These upgrades included modifications to security buildings, ISFSI installations, VBS installations as well as protected area changes. For the Entergy Sites, Mr. Patel supported the 2002 ICM Security upgrades, the 2004 Revised DBT Security upgrades, and the PA expansion associated with the ISFSI installation at GGNS. Mr. Patel completed the NTTF 2.3 Seismic Walkdown Training Course in July of 2012.

<u>Brian Pace</u>

Mr. Pace is assigned to the Civil/Structural Engineering Group in ENERCON's office in Baton Rouge, LA. He is a degreed civil engineer from Louisiana State University with experience in several nuclear projects for Entergy. Mr. Pace was involved with Service Water System Modifications at Arkansas Nuclear One (ANO), where he helped design safety related tieback restraints for Service Water piping at ANO. Mr. Pace has experience with Entergy's Engineering Change and Work Management process. He has design experience for River Bend Station as well as ANO. Mr. Pace completed the NTTF 2.3 Seismic Walkdown Training Course in August of 2012.

Natalie George

Ms. George is a Structural Engineer in ENERCON's Kennesaw, GA office. She is responsible for piping design and analysis, support qualification, modification development, and various other mechanical/piping design tasks. Ms. George has approximately two years of support qualification and pipe stress analysis experience. She has performed ANSI B31.1 and ASME pipe stress analysis for safety related piping at several plants including Wolf Creek, Turkey Point, and Brunswick while assigned to the Kennesaw office. Her computer analysis code experience includes ME101, AUTOPIPE, and PipeStress2000. Ms. George completed the NTTF 2.3 Seismic Walkdown Training Course in August of 2012.

Chu-Chieh "Jay" Lin

Dr. Lin is a Senior Engineer in SC Solutions' Walnut Creek, CA office. He has over 15 years of experience in Seismic and Safety assessment of various structures, soil structural integration analyses and design evaluation, finite/discrete element simulation of different types of structures and materials, analyzing and designing industrial and urban steel and reinforced concrete structures, structural evaluation, field investigation, data acquisition, structural health monitoring of bridges and experimental modal analysis, performance analysis of vibration, and seismic design. Dr. Lin completed the NTTF 2.3 Seismic Walkdown Training Course in July of 2012.

4.1 EQUIPMENT SELECTION PERSONNEL

A total of nine individuals served as Equipment Selection Personnel – see Table 4-1.

4.2 SEISMIC WALKDOWN ENGINEERS

A total of six individuals served as Seismic Walkdown Engineers – see Table 4-1.

4.3 LICENSING BASIS REVIEWERS

A total of three individuals served as Licensing Basis Reviewers – see Table 4-1.

4.4 IPEEE REVIEWERS

A total of two individuals served as IPEEE Reviewers – see Table 4-1.

4.5 PEER REVIEW TEAM

Table 4-2 summarizes the names and responsibilities of personnel who conducted peer reviews of the seismic walkdown program. Experience summaries of each person follow.

Table 4-2: Peer	Review	Team
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Name	SWEL Peer Reviewer	Walkdown Peer Reviewer	Licensing Basis Peer Reviewer	Submittal Report Peer Reviewer
Benjamin Kosbab (ENERCON)		X ²	X ²	X ^{1,2}
Heidi Graf (ENERCON)	X ²			
Sada Dhingra (ENERCON)	Х			
Matthew Wilkinson (ENERCON)		Х		
Greg Ferguson			Х	Х

Notes:

- 1. Peer Review Team Leader
- 2. Lead peer reviewer of particular activity

Benjamin Kosbab

Dr. Kosbab is a civil/structural engineer with ENERCON specializing in seismic engineering of nuclear power plant structures, systems, and components. He has earned Master of Science and Ph.D. degrees in civil/structural engineering from the Georgia Institute of Technology with a focus on probabilistic seismic response and fragility analysis of industrial structures. In the nuclear industry, Dr. Kosbab has been involved with seismic time-history and response spectra development, seismic equipment qualification, design of seismic supports, walkdowns, seismic fragility screening, dynamic structural analysis, seismic instrumentation analysis, and soil-structure interaction analysis for plant modifications at numerous nuclear facilities. Dr. Kosbab maintains active involvement with the Nuclear Energy Institute (NEI) Seismic Task Force, and completed the EPRI NTTF 2.3: Seismic Walkdown Training in July, 2012.

<u>Heidi Graf</u>

Ms. Graf is a mechanical engineer in the Power Generation Group out of the Kennesaw, Georgia office of ENERCON. Ms. Graf has over 17 years of commercial nuclear power engineering experience including 7 years in Nuclear Plant Design and Support with the Southern Nuclear Company (SNC) Farley Nuclear Plant. Ms. Graf has completed multiple modification projects for various nuclear plants on numerous systems. She has knowledge of

plant documentation. Ms. Graf has completed several training courses on plant operations and has an understanding on many systems. She has spent many hours studying the IPEEE and the USI A-46 programs and their impacts on the industry

Matthew Wilkinson

Mr. Wilkinson is a Civil Engineer with over 5 years of experience. He has a B.S. in Civil Engineering. Mr. Wilkinson is currently assigned to the Civil/Structural Group at ENERCON's office in Kennesaw, GA. As a civil engineer, he is responsible for the development of engineering packages, calculations, analyses, drawings, and reports. Mr. Wilkinson has significant design experience with Florida Power and Light, primarily providing his services for Turkey Point Nuclear Station (PTN) on several modification packages and calculations. Mr. Wilkinson has significant site support experience at PTN, McGuire Nuclear Station and River Bend Nuclear Station. Moreover, Mr. Wilkinson worked directly at PTN for the majority of 2010 to support the Independent Spent Fuel Storage Installation (ISFSI) construction and 2011 to 2012 to support the Extended Power Uprate (EPU) project design phase. Mr. Wilkinson performed seismic walkdowns at Vogtle Nuclear Station.

Sada Dhingra

Mr. Dhingra is currently assigned as an Engineer in ENERCON's Mechanical group. He has over 30 years of experience in the design, construction, start up and operation of HVAC and Mechanical Systems for nuclear power plants. Prior to joining ENERCON, Mr. Dhingra was a Senior Lead Consultant for D.P. Engineering and Senior Mechanical Engineer for Entergy Operations, Inc. providing engineering services to Entergy Nuclear's Waterford and River Bend stations.

5.0 IPEEE VULNERABILITIES REPORTING

During the IPEEE program in response to NRC Generic Letter 88-20 [Ref. 4], plant-specific seismic vulnerabilities were identified at many plants. In this context, "vulnerabilities" refer to conditions found during the IPEEE program related to seismic anomalies, outliers, or other findings.

IPEEE Reviewers (see Section 4.4) reviewed the IPEEE final report [Ref. 5] and supporting documentation to identify items determined to present a seismic vulnerability by the IPEEE program. IPEEE Reviewers then reviewed additional plant documentation to identify the eventual resolutions to those seismic vulnerabilities not resolved via the completion of the IPEEE program.

The seismic vulnerabilities identified for WSES-3 during the IPEEE program are reported in Attachment A. A total of 2 seismic vulnerabilities were identified by the WSES-3 IPEEE program. For each identified seismic vulnerability, the table in Attachment A includes three pieces of information requested by Enclosure 3 of the 50.54(f) Letter:

- a description of the action taken to eliminate or reduce the seismic vulnerability;
- whether the configuration management program has maintained the IPEEE action (including procedural changes) such that the vulnerability continues to be addressed;
- when the resolution actions were completed.

The list of IPEEE vulnerabilities provided in Attachment A was used to ensure that some equipment enhanced as a result of the IPEEE program were included in SWEL1 (see Section 6.1.2). Documents describing these equipment enhancements and other modifications initiated by identification of IPEEE vulnerabilities were available and provided to the Seismic Walkdown Engineers (SWEs) during the NTTF 2.3 Seismic Walkdowns.

6.0 SEISMIC WALKDOWN EQUIPMENT LIST DEVELOPMENT

This section summarizes the process used to select the SSCs that were included in the Seismic Walkdown Equipment List (SWEL) in accordance with Section 3 of the Guidance. A team of equipment selection personnel with extensive knowledge of plant systems and components was selected to develop the SWEL. The SWEL is comprised of two groups of items:

- SWEL 1 consists of a sample of equipment required for safe shutdown of the reactor and to maintain containment integrity (i.e. supporting the five safety functions)
- SWEL 2 consists of items related to the spent fuel pool

The final SWEL is the combination of SWEL1 and SWEL2. The development of these two groups is described in the following sections.

6.1 SAMPLE OF REQUIRED ITEMS FOR THE FIVE SAFETY FUNCTIONS

Safe shutdown of the reactor involves four safety functions:

- Reactor reactivity control (RRC)
- Reactor coolant pressure control (RCPC)
- Reactor coolant inventory control (RCIC)
- Decay heat removal (DHR)

Maintaining containment integrity is the fifth safety function:

• Containment function (CF)

The overall process for developing a sample of equipment to support these five safety functions is summarized in Figure 1-1 of the Guidance. Figure 1-1 of the Guidance provides a screening method for selecting SSCs, starting with all of the SSCs for the plant and reducing the number based on certain screening criteria referenced in Section 3 of the Guidance. The list of equipment coming out of Screen #3 and entering Screen #4 is defined as Base List 1. The list of equipment coming out of Screen #4 is the first Seismic Walkdown Equipment List, or SWEL 1. Development of these lists is described separately in the following sections.

6.1.1 Base List 1

Based on Figure 1-1 and Section 3 of the Guidance, Base List 1 should represent a set of Seismic Category (SC) I equipment or systems that support the five safety functions. The IPEEE program was intended to address the seismic margin of SSCs associated with each of the five safety functions. At WSES-3, the EPRI Seismic Margin Assessment (EPRI SMA) method was used to complete the seismic IPEEE program, based on EPRI Report NP-6041 titled "A Methodology for Assessment of Nuclear Power Plant Seismic Margin" (Ref. 6). As described in Section 3 of the WSES-3 IPEEE report [Ref. 5], an equipment list was developed representing the SSCs necessary for one preferred and one alternate "success path" capable of achieving and maintaining a safe shutdown condition for at least 8 hours following a SSE event. This equipment list of SSCs on the success paths is consistent with the requirements of Screens #1 through #3 of the Guidance. Therefore, the IPEEE equipment list of SSCs on the success paths is used as the starting point for the NTTF 2.3 Seismic Walkdown Base List 1. Each component was then checked in the Entergy Electronic Database to verify its safety classification, preventative maintenance, environment, etc. Plant personnel were consulted to find any additional components that were added or replaced in the past 15 years (since the IPEEE report). The resulting list represents Base List 1.

Base List 1 is presented as Table 1 in Attachment B, and has 624 total items.

6.1.2 SWEL 1

Based on Figure 1-1 and Section 3 of the Guidance, SWEL 1 should represent a diverse population of items on Base List 1 including representative items from some of the variations within each of five sample selection attributes. Additionally, the selection of SWEL 1 items includes consideration of the importance of the contribution to risk for the SSCs. Equipment Selection Personnel (see Section 4.1) developed SWEL 1 using an iterative process. The following paragraphs describe how the equipment selected for inclusion on the final SWEL 1 are representative with respect to each of the five sample selection attributes while also considering risk significance. In general, preference for inclusion on SWEL 1 was given to items that are accessible and have visible anchorage while still maintaining the sample selection attributes.

SWEL 1 is presented as Table 2 in Attachment B, and has 97 total items.

Variety of Types of Systems

Items were selected from Base List 1 ensuring that each of the five safety functions was well represented. Additionally, components from a variety of frontline and support

systems, as listed in Appendix E of the Guidance, were selected. The system type of each item on SWEL 1 is listed on Table 2 of Attachment B.

Major New and Replacement Equipment

With assistance from plant Operations and Engineering, Equipment Selection Personnel identified items on Base List 1 which are either major new or replacement equipment installed within the past 15 years or have been modified or upgraded recently. These items are designated as such on Base List 1 on Table 1 of Attachment B. A robust sampling of these items is represented on SWEL 1.

Variety of Equipment Types

According to Appendix B of the Guidance, there are 22 classes of mechanical and electrical equipment. The items on Base List 1 were classified accordingly and the total number of items from each class was determined. Items were then selected from Base List 1 ensuring that each of the equipment classes there was also represented on SWEL 1 in approximately the same ratios. The equipment class of each item on SWEL 1 is listed in Table 2 of Attachment B. Note that SWEL 1 does not include components from Class 13. WSES-3 has no Seismic Class I components that are Class 13, and therefore would not be represented on Base List 1 or SWEL 1.

Variety of Environments

Items were selected from Base List 1 located in a variety of buildings, rooms, and elevations. These item locations included environments that were both inside and outside, as well as having high temperature and/or elevated humidity and also within the containment building. Items that were part of borated systems were included as well. The location and environment of each item on SWEL 1 is listed on Table 2 of Attachment B.

IPEEE Enhancements

With assistance from IPEEE Reviewers, Equipment Selection Personnel identified items on Base List 1 which were enhanced as a result of seismic vulnerabilities identified during the IPEEE program (see Section 5.0). These items are designated as such on Base List 1 on Table 1 of Attachment B. These items are represented on SWEL 1.

Risk Significance

Information from the plant Probabilistic Risk Analysis (PRA) model was used to determine whether items were risk significant. Where otherwise comparable items could be chosen relative to the sample selection attributes, the item with higher risk significance was chosen.

6.2 SPENT FUEL POOL ITEMS

The overall process for developing a sample of SSCs associated with the spent fuel pool (SFP) is similar to that of the screening process for SWEL1 and is summarized in Figure 1-2 of the Guidance. The equipment coming out of Screen #2 and entering Screen #3 is defined as Base List 2. The equipment coming out of Screen #4 are the items that could potentially cause the SFP to drain rapidly. The items coming out of either Screen #3 or Screen #4 are the second Seismic Walkdown Equipment List, or SWEL 2. Development of these lists is described separately in the following sections.

6.2.1 Base List 2

Based on Figure 1-2 and Section 3 of the Guidance, Base List 2 should represent the Seismic Category I equipment or systems associated with the SFP. To develop Base List 2, Equipment Selection Personnel (see Section 4.1) reviewed plant design and licensing basis documentation and plant drawings for the SFP and its associated cooling system. Base List 2 is presented as Table 3 in Attachment B, and has 75 total items.

6.2.2 Rapid Drain-Down

Rapid drain-down is defined as unintentionally lowering the water level to the top of the fuel assemblies within 72 hours after an earthquake. Consistent with the Guidance, the Equipment Selection Personnel (see Section 4.1) identified SSCs that could cause the SFP to drain rapidly by first reviewing the SFP documentation to identify penetrations below about 10 ft. above the top of the fuel assemblies.

This review assessed the hydraulic lines and connected equipment of each such penetration for potentially seismically-induced failure modes that could lead to rapid drain down. The list of SSCs that could cause rapid drain-down is presented as Table 4 in Attachment B which includes the specific basis for determining which SSCs could or could not cause rapid drain-down.

The rapid drain-down list is presented as Table 4 in Attachment B, and has a total of 5 items that could potentially cause rapid drain down.

6.2.3 SWEL 2

Based on Figure 1-2 and Section 3 of the Guidance, SWEL 2 is a broad population of items on Base List 2 including representative items from some of the variations within each of the four sample selection attributes (using a sample process similar to SWEL 1), as well as each item that could potentially cause rapid-drain down of the SFP. Due

to the population of items on Base List 2 being much smaller than Base List 1, the sampling attributes are satisfied differently for SWEL 2 than for SWEL 1. The following paragraphs describe how the equipment selected from Base List 2 for inclusion on SWEL 2 are representative with respect to each of the four sample selection attributes. SWEL 2 is presented as Table 5 in Attachment B, and has 26 total items; of these, 21 items are selected from Base List 2, and 5 are from the rapid drain-down list.

Variety of Types of Systems

There are two systems associated with SFP cooling. Both of these systems are well-represented on SWEL 2.

Major New and Replacement Equipment

There have been no major new or replacement equipment installations within the past 15 years associated with the SFP. Therefore, this sampling attribute is not applicable.

Variety of Equipment Types

There are 6 different equipment classes represented on Base List 2: 0, 2, 5, 7, 8, 14, and 21. Each of these equipment classes is represented on SWEL 2.

Variety of Environments

All SFP components are located nearby each other, but are in two different environments. The SFP equipment is inside, but some equipment is part of a borated system while the remainder is not. The location and environment of each item on SWEL 2 is listed on Table 5 of Attachment B.

6.3 DEFERRED INACCESSIBLE ITEMS on SWEL

Each item on the SWEL shall be walked down as part of the NTTF 2.3 Seismic Walkdown program. In order to perform the seismic walkdowns of these items, it is necessary to have access to them and to be able to view their anchorage. In some cases, it was not feasible to gain access to the equipment or view its anchorage because WSES-3 was at power until October 17, 2012. For these cases, walkdowns of these items have been deferred until the next available refueling outage (RFO) and/or specific equipment outages. The inaccessible items and some items within cabinets that are available will be walked down during the current outage (RFO 18). The results of these walkdowns will be incorporated into the first updated submittal of the report. The walkdown of the remaining items will be completed during specific system outage windows or during the next scheduled RFO (19). A second update to the report will be submitted after RFO 19. WSES-3 will provide two updated submittal reports incorporating these deferred walkdowns. The first update will be provided two months after the end of Refuel Outage 18, and the second update will be provided two months after the end of Refuel Outage 19, tentatively scheduled for the Spring of 2014.

Deferred items are summarized in the table below. The reason for deferral is identified as either ACC (indicating that the item is in an inaccessible item while the plant is at power or other work must be done for access), CAB (indicating that the item requires opening cabinet/panel doors which was not permitted by plant Operations personnel during the walkdown period, due to being energized or otherwise), or INS (indicated that insulation must be removed in order to complete the walkdown of that component). A total of 26 items are deferred. Of these, 12 were inaccessible at the time of the initial walkdowns, 13 are in cabinets/panels that have to be opened, and one needs insulation removed.

SWEL#	Equipment ID	Description	Location	Reason
SWEL1-002 (AWC-018*)	SSDEMCC311B	Motor Control Center 311B	RAB +21, Switchgear B Room	САВ
SWEL1-004 (AWC-019)	CEDEBKR3918-B	Reactor Trip Switchgear Breaker TCB-2 Compartment 2C	RAB +21, Switchgear B Room	САВ
SWEL1-005 (AWC-026)	SSDESWGR31AB	Switchgear 31AB	RAB +21, Switchgear AB Room	CAB
SWEL1-006 (AWC-016*)	4KVESWGR3A	Switchgear 3A	RAB +21, Switchgear A Room	CAB
SWEL1-018 (AWC NOT ASSIGNED)	BM MVAAA109	Reactor Drain Tank Outlet Inside Containment Isolation	RCB -11, COL. 14	ACC
SWEL1-019 (AWC NOT ASSIGNED)	CAPMVAAA103	Containment Purge Inlet Inside Annulus	ANN +21, PEN. P-10	ACC
SWEL1-026 (AWC-031)	CVCMVAAA209	Charging Header Isolation	RB +21	ACC
SWEL1-029 (AWC-038*)	HVCMVAAA205-A	Control Room Emergency Filtration A Inlet Damper	RAB +46, 8A-L	INS
SWEL1-037 (AWC NOT ASSIGNED)	SI MVAAA307-A	Safety Injection Tank 1A Fill/Drain	RCB +35, COL. 17	ACC
SWEL1-038 (AWC NOT ASSIGNED)	SI MVAAA405-B	RC Loop 1 SDC Suction Inside Containment Isolation	RCB +21, COL. 17	ACC
SWEL1-047 (AWC NOT ASSIGNED)	RC ISV1014	Reactor Vessel Vent to Quench Tank Isolation	RCB +46, AZM 196	ACC
SWEL1-048 (AWC NOT ASSIGNED)	RC ISV3184	Pressurizer Vent to Quench Tank	RCB +46, AZM 196	ACC

SWEL#	Equipment ID	Description	Location	Reason
SWEL1-059 (AWC NOT ASSIGNED)	ACCMFAN0002-B	Wet Cooling Tower B Fan 2-SB	CTB -35, 12A-Q1	ACC
SWEL1-075 (AWC NOT ASSIGNED)	IC ICDC1-C	Instrument Cabinet C-1C	RCB +21, COL. 16	ACC
SWEL1-077 (AWC NOT ASSIGNED)	IC ICDC9	Instrument Cabinet C-9	RCB +21, COL. 6	ACC
SWEL1-079 (AWC NOT ASSIGNED)	SG ILT1115-A	Steam Generator 1 Level IXMITR (Wide Range)	RCB -4, COL. 18	ACC
SWEL1-080 (AWC NOT ASSIGNED)	RC ITE0122-HA1	Reactor Coolant Loop 2 Hot Leg Temperature	RCB -4	ACC
SWEL1-084 (AWC-032*)	IC ECP08	Engineered Safeguard Control Panel CP8	RAB +46, Control Room	САВ
SWEL1-097 (AWC-018*)	4KVESWGR3B	Switchgear 3B	RAB +21, Switchgear B Room	САВ
SWEL2-001 (AWC-054)	FS EBKR314A-5D	Fuel Pool Purification Pump Circuit Breaker	FHB +1, 1FH-V	САВ
SWEL2-002 (AWC-054)	FS EBKR314A-5M	Fuel Pool Pump A Circuit Breaker	FHB +1, 1FH-V	САВ
SWEL2-003 (AWC-054)	FS EBKR314B-6F	Refueling Canal Drain Pump Circuit Breaker	FHB +1, 2FH-W	САВ
SWEL2-006 (AWC-054)	FS EBKR314B-5M	Fuel Pool Pump B Circuit Breaker	FHB +1, 2FH-W	САВ
SWEL2-007 (AWC-054)	FS EOL314A-5M	Fuel Pool Pump A TOL	FHB +1, 1FH-V	САВ
SWEL2-008 (AWC-054)	FS EOL314B-5M	Fuel Pool Pump B TOL	FHB +1, 2FH-W	САВ
SWEL2-009 (AWC-054)	FS EOL314B-6F	Refueling Canal Drain Pump TOL	FHB +1, 2FH-W	САВ
* Denotes that the AWC is submitted with this Final Report. Although its associated SWEL item has been deferred, the AWC was conducted due to other SWEL items being in the surrounding area.				

7.0 SEISMIC WALKDOWNS AND AREA WALK-BYS

The NTTF 2.3 Seismic Walkdown program conducted in accordance with the Guidance involves two primary walkdown activities: Seismic Walkdowns and Area Walk-Bys. These activities were conducted at WSES-3 by teams of two trained and qualified Seismic Walkdown Engineers (SWEs) (see Section 4.2). Each team included one engineer with several years of experience in seismic design and the qualification of nuclear power plant SSCs. The second engineer had less experience, but sufficient experience to properly perform the tasks. A total of two SWE teams were used. In certain instances, the teams periodically "shuffled" personnel to cross-check consistency between the SWES and to ensure that lessons learned were being shared. SWE teams were periodically accompanied into the field by WSES-3 design engineering and operations personnel to open cabinets and answer questions.

The seismic walkdowns and area walk-bys were conducted over the course of 3 weeks during October of 2012. Each morning, a pre-job brief with all personnel involved was conducted. This pre-job brief was used to outline the components and areas that would be walked down that day, to ensure consistency between the teams, to reinforce expectations to identifying potential personal safety issues specific to that day, and to allow team members to ask questions and share lessons learned in the field. The SWE teams brought cameras (regular and pole mounted with remote monitor), tape measures, and flash lights into the field to assist with the seismic walkdowns and area walk-bys.

7.1 SEISMIC WALKDOWNS

Seismic walkdowns were performed in accordance with Section 4 of the Guidance for all items on the SWEL (SWEL 1 plus SWEL 2), except for those determined to be inaccessible and deferred (see Section 6.3). To document the results of the walkdown, a separate Seismic Walkdown Checklist (SWC) with the same content as that included in Appendix C of the Guidance was created for each item. Additionally, photographs were taken of each item, and included on the corresponding SWC.

Prior to performance of the walkdowns, documentation packages were developed that contained the pre-filled SWC and other pertinent information including the location drawings, equipment drawings, response spectra information, previous IPEEE seismic walkdown documentation, current operability evaluations, and anchorage drawings where applicable. These documentation packages were brought with the SWE teams into the plant during the seismic walkdowns.

Walkdown inspections focused not only on anchorage conditions and seismic spatial interactions, but also included inspections for other potentially adverse seismic conditions.

Anchorage, in all cases, was considered to specifically mean anchorage of the component to the structure. This included anchor bolts to concrete walls or floors, structural bolts to structural steel and welds to structural steel or embedded plates. For welds, the walkdown team looked for cracks and corrosion in the weld and base metal. Other bolts or connections, such as flange bolts on in-line components were not considered as equipment anchorage. These bolts and connections were evaluated by the SWEs and any potential adverse seismic concerns were documented under "other adverse seismic conditions" rather than under "anchorage". Thus, components with no attachments to the structure are considered as not having anchorage. Nevertheless, the attachment of these components to other equipment was evaluated and inspected for potentially adverse seismic conditions.

Cabinets/panels on the SWEL that could be reasonably opened without presenting safety or operational hazards were opened during the walkdown. This allowed visual observation of internal anchorage to the structure (where present), as well as inspection for "other adverse seismic conditions" related to internal components (if it could be observed without breaking the plane of the equipment opening). Where opening the cabinet/panel exhibited undue safety or operational hazards, it was considered inaccessible and the completion of the walkdown of that item was deferred to a later time (see Section 6.3).

In addition to the general inspection requirements, at least 50% of the SWEL items having anchorage required confirmation that the anchorage configuration was consistent with plant documentation. Not considering deferred items, there were a total of 97 SWEL1 and SWEL2 items. Of the 97 SWEL items, 56 were considered to have anchorage (i.e., removing inline/line-mounted components). Of these 56 anchored components, the walkdowns of 31 SWEL items included anchorage configuration verification, which is greater than 50%. When an anchorage configuration verification was conducted, the specific plant documentation used for comparison to the as-found conditions was referenced on the SWC.

All SWCs, whether status has been checked "Y" or "N", have been included in Attachment C. A total of 123 SWCs are attached, 97 with completion status marked "Y" and 26 with completion status marked "N". SWCs considered and marked incomplete are those where a walkdown was initiated, but whose completion was ultimately deferred because the cabinet/panel could not be opened during the walkdown period. Therefore, the 97 completed SWCs represent the completed walkdowns of each SWEL item accessible during the walkdown period.

7.2 AREA WALK-BYS

Seismic area walk-bys were performed in accordance with Section 4 of the Guidance for all plant areas containing items on the SWEL (SWEL 1 plus SWEL 2); except for those SWEL items located in plant areas inaccessible during the walkdown period (see Section 6.3). Area

walk-bys were not deferred where components were deferred simply to open cabinets/panels. A separate Area Walk-By Checklist (AWC) with the same content as that included in Appendix C of the Guidance was used to document the results of each area walk-by performed. Photographs were taken of each area, and included on the corresponding AWC.

Where possible, area walk-bys were conducted once for plant areas containing more than one SWEL item. In cases where the room or area containing a component was very large, the extent of the area encompassed by the area walk-by was limited to a radius of approximately 35 ft. around the subject equipment. The extent of the areas included in the area walk-bys is described on the AWC for that area. Because certain areas contained more than one SWEL item, there are fewer total area walk-bys conducted than seismic walkdowns. A total of 46 area walk-bys was necessary to cover all plant areas containing at least one accessible SWEL item.

The AWC for each area walk-by completed is included in Attachment D. A total of 46 AWCs are attached, which represent all of the areas containing a SWEL item that were accessible during the walkdown period. Note that the AWCs number up to AWC-053, but some numbers were not used. These unused numbers may be used for AWCs for deferred items. The walkdown team will select additional AWCs for walkdowns of SWEL items inside containment as well as other deferred items (see Section 6.3).

8.0 LICENSING BASIS EVALUATIONS

During the course of the seismic walkdowns and area walk-bys, the objective of the SWE teams was to identify existing degraded, non-conforming, or unanalyzed plant conditions with respect to its current seismic licensing basis. This section summarizes the process used to handle conditions identified, what conditions were found, and how they were treated for eventual resolution.

CONDITON IDENTIFICATION

When an unusual condition was observed by a SWE team in the field, the condition was noted on the SWC or AWC form and briefly discussed between the two SWEs to agree upon whether it was a potentially adverse seismic condition. These initial conclusions were based on conservative engineering judgment and the training required for SWE qualification.

For conditions that were reasonably judged as insignificant to seismic response, the disposition was included on the SWC or AWC checklist and the appropriate question was marked "Y", indicating that no associated potentially adverse seismic condition was observed. However, some unusual or uncertain conditions (i.e. mild surface corrosion) were reported to site personnel through the Corrective Action Program (CAP) for tracking purposes (see Section 8.2). Not all observations were reported through the CAP. Often times, only a Work Request (WR) was written, or the observation was deemed too insignificant to write a WR or report through the CAP. A total of 72 seismically insignificant conditions were identified and were either reported through the CAP or had a Work Request written for them. These conditions were generally related to either housekeeping (5), missing bolts or screws that posed no seismic concern (7) or mild surface corrosion (60).

For conditions that were judged as potentially significant to seismic response, then the condition was photographed and the appropriate question on the SWC or AWC was marked "N" indicating that a potentially adverse seismic condition was observed. The condition was then immediately reported to site personnel for further resolution (see Section 8.2) and documented for reporting in Attachment E. A total of 19 potentially adverse seismic conditions were identified. These conditions were generally related to missing or loose anchorage (5), seismically significant housekeeping issues (5), seismically significant corrosion (7), or concrete cracks (2).

CONDITION RESOLUTION

Conditions observed during the seismic walkdowns and area walk-bys determined to be potentially adverse seismic conditions are summarized in Attachment E, including how each condition has been addressed and its current status. Each potentially adverse seismic condition is addressed either with a Licensing Basis Evaluation (LBE) to determine whether it requires entry into the CAP, or by entering it into the CAP directly. The decision to conduct a LBE or enter the condition directly into the CAP was made on a case-by-case basis, based on the perceived efficiency of each process for eventual resolution of each specific condition.

Some unusual conditions that were not seismically significant were entered into the CAP directly. Other unusual observed conditions either had a WR written for them or were deemed insignificant to report. Further resolution of these conditions is not tracked or reported as part of the NTTF 2.3 Seismic Walkdown program, except by noting the CR and / or Work Request (WR) numbers generated on the applicable SWCs and AWCs.

8.1 Licensing Basis Evaluation

Potentially adverse seismic conditions identified as part of the NTTF 2.3 Seismic Walkdown program may be evaluated by comparison to the current licensing basis of the plant as it relates to the seismic adequacy of the equipment in question, as is described in Section 5 of the Guidance. If the identified condition is consistent with existing seismic documentation associated with that item, then no further action is required. If the identified condition cannot easily be shown to be consistent with existing seismic documentation, or no seismic documentation exists, then the condition is entered into the CAP.

Of the 19 identified potentially adverse seismic conditions, 7 LBEs were performed. Each LBE performed is documented consistently, and included in Attachment F. The results of these LBEs with respect to the associated potentially adverse seismic conditions are summarized in Attachment E. A total of 7 potentially adverse seismic conditions evaluated using a LBE were dispositioned and required no further action, whereas 0 required CAP entry.

8.2 Corrective Action Program Entries

Conditions identified during the seismic walkdowns and area walk-bys that required further resolution were entered into the plant's Corrective Action Program (CAP) in accordance with the plant's existing processes and procedures for an eventual disposition. Conditions entered into the CAP included three types of unusual conditions identified:

- Seismically insignificant unusual conditions
- Potentially adverse seismic condition that does not pass a LBE
- Potentially adverse seismic condition that bypasses a LBE

A total of 34 Condition Reports (CRs) were generated in the CAP as a result of the NTTF 2.3 Seismic Walkdown program. A total of 14 identified conditions already had

CRs written for them. Of these, the majority (36) were from seismically insignificant unusual conditions. A total of 12 CRs were written relative to potentially adverse seismic conditions. The CR numbers, current status, and resolution (where applicable and available) are summarized for these potentially adverse seismic conditions in Attachment E.

8.3 Plant Changes

The CAP entries (CRs) generated by the NTTF 2.3 Seismic Walkdown program are being resolved in accordance with the plant CAP process, including operability evaluations, extent of condition evaluations, and root cause analysis (where applicable).

There was one item that required immediate field work as a result of the NTTF 2.3 Seismic Walkdown program. A temporary enclosure was found to be installed in the "B" Switchgear room. This enclosure is used to provide a contamination barrier when the floor plug is removed from a contaminated pipe chase below the floor.

No calculation or drawings could be found for the enclosure. Since the enclosure is unanchored, there is a distinct possibility that it could move across the floor and strike two different safety related panels during a seismic event. One Local Control Panel (PAC LCP-63), and the Instrument Cabinet (C-3B).

CR-WF3-2012-05172 was initiated. As a result, the enclosure was braced at the top and bottom to existing structural members to ensure the rigidity of the enclosure. This bracing was installed using existing site procedures.

EC40448 was issued to document the acceptability of the modified enclosure.

Final and complete resolutions of the CRs for seismically insignificant unusual conditions and potentially adverse seismic conditions will determine if future modifications to the plant are required. Current status and resolutions (where applicable and available) for CRs related to potentially adverse seismic conditions are provided in Attachment E.

9.0 PEER REVIEW

9.1 PEER REVIEW PROCESS

The peer review for the Near Term Task Force (NTTF) Recommendation 2.3 Seismic Walkdowns was performed in accordance with Section 6 of the Guidance. The peer review included an evaluation of the following activities:

- review of the selection of the structures, systems, and components (SSCs) that are included in the Seismic Walkdown Equipment List (SWEL);
- review of a 25% sample of the checklists prepared for the Seismic Walkdowns and area walk-bys;
- review of licensing basis evaluations and decisions for entering the potentially adverse conditions into the plant's Corrective Action Plan (CAP); and
- review of the final submittal report.

At least two members of the peer review team (see Section 4.5) were involved in the peer review of each activity. The team member with the most relevant knowledge and experience took the lead for that particular peer review activity. A designated overall Peer Review Team Leader provided oversight related to the process and technical aspects of the peer review, paying special attention to the interface between peer review activities involving different members of the peer review team.

9.2 PEER REVIEW RESULTS SUMMARY

The following sections summarize the process and results of each peer review activity.

9.2.1 Seismic Walkdown Equipment List Development

Peer review of the selection of SSCs for SWEL development was conducted by two peer reviewers. These peer reviewers both have extensive knowledge and experience related to nuclear power plant design, operations, documentation, and SSCs. The peer review was conducted prior to the seismic walkdowns occurring, and was performed as follows:

 The draft of SWEL 1 and SWEL 2 were provided to the peer reviewers, along with the corresponding base lists (Base List 1, Base List 2, and SFP rapid draindown list). the peer reviewers were also provided a written description from the equipment selection personnel of how the SWEL 1 and SWEL 2 were developed.

- Each peer reviewer independently reviewed the equipment selection process and the resulting SWEL in terms of the equipment selection process presented in Section 3 of the Guidance.
- The peer reviewers discussed their findings and generated consolidated comments. General comments on the overall list and how it represents adequate diversity were documented on a peer review checklist based on Appendix F of the Guidance. Specific comments on documentation of the various lists and individual item selection decisions were documented on formal comment forms following utility procedure.
- Comments were provided to the Equipment Selection Personnel (see Section 4.1).
- Comment resolutions were provided to the peer reviewers to confirm acceptable resolution of all comments.

The peer review team reviewed the initial SWEL 1 and SWEL 2 and provided comments and suggestions for modification of the SWEL. Comments included suggesting to add components associated with IPEEE vulnerabilities identified at WSES-3 to SWEL1. All of the peer review comments were addressed by the Equipment Selection Personnel. The resolutions were reviewed by the peer review team and it was determined that all comments were adequately addressed.

Based on completion of the SWEL peer review activities described, the peer review team concludes that the Equipment Selection Personnel developed a SWEL that adequately reflects the selection and screening process outlined in the Guidance. The peer reviewers confirmed that all SSCs in the SWEL1 and SWEL2 are Seismic Category I components that do not undergo regular inspections and represent a diverse blend of different component types from critical systems and safety-related functions. The list contains major new and replacement items. Risk significance was considered in the component selection. Additionally, SFP items were appropriately addressed. Specific considerations for how the SWEL adequately represents the sample selection attributes described in Section 3 of the Guidance are provided on the peer review checklist of the SWEL.

The peer review checklist of the SWEL is provided in Attachment G.

9.2.2 Seismic Walkdowns and Area Walk-Bys

Peer review of the seismic walkdowns and area walk-bys was conducted by two peer reviewers, each of whom is a qualified SWE and has broad knowledge of seismic engineering applied to nuclear power plants. One of the peer reviewers participated in the seismic walkdown program for a different utility, and the other is engaged with the industry team which developed the Guidance (see Section 4.2). The peer reviews were conducted at the WSES-3 site concurrent with the walkdowns at approximately 50% completion. The peer review was performed as follows:

- The peer review team reviewed the walkdown packages (including checklists, photos, drawings, etc.) for SWEL items already completed to ensure that the checklists were completed in accordance with the Guidance. A total of 27 SWC and 14 AWC forms were reviewed, each representing approximately 25% of their respective totals. In the context of the Guidance, the peer review team considered the number of walkdown packages reviewed to be appropriate. The packages reviewed represent a variety of equipment types in various plant areas. Specific SWC forms reviewed were SWEL1-003, 006, 007, 008, 010, 011, 012, 013, 016, 043, 044, 046, 051, 054, 056, 060, 066, 069, 070, 071, 072, 082, 087, 089, 090, 092, and 094. Specific AWC forms reviewed were AWC-001, 002, 004, 005, 006, 007, 010, 014, 016, 021, 023, 025, 028, and 042.
- While reviewing the walkdown packages, the peer reviewers conducted informal interviews of the SWEs and asked clarifying questions to verify that they were conducting walkdowns and area walk-bys in accordance with the Guidance.
- The peer review team held a meeting with the SWE teams to provide feedback on the walkdown and walk-by packages reviewed and the informal interviews, and discuss potential modifications to the documentation packages in the context of the Guidance.
- Each peer reviewer accompanied each SWE team into the field and observed them perform a walkdown of a SWEL component and its associated area walkby. During these observations, the peer reviewers asked clarifying questions to verify the walkdown and walk-by process being followed was in accordance with the Guidance. The items walked down under the observation of a peer reviewer were SWEL1-042, 061, 062, and 064. The associated area walk-bys performed under the observation of a peer reviewer are AWC-038 and -039.
- The peer review team held a meeting with the SWE teams to provide feedback on the walkdown and walk-by observations, and discuss how lessons learned

from review of the walkdown packages had been incorporated into the walkdown process.

As a result of the peer review activities, the SWE teams modified their documentation process to include additional clarifying details, particularly related to checklist questions marked "N/A" and where conditions were observed but judged as insignificant. The peer review team felt these modifications would be of benefit for future reviews of checklists incorporated into the final report. These modifications were recommended following review of the walkdown and area walk-by packages, and the observation walkdowns and area walk-bys demonstrated that the SWEs understood the recommendations and were incorporating them into the walkdown and area walk-by process. Previously completed checklists were revised to reflect lessons learned from the peer review process.

Based on completion of the walkdown and walk-by peer review activities described, the peer review team concluded that the SWE teams are familiar with and followed the process for conducting seismic walkdowns and area walk-bys in accordance with the Guidance. The SWE teams adequately demonstrated their ability to identify potentially adverse seismic conditions such as adverse anchorage, adverse spatial interaction, and other adverse conditions related to anchorage, and perform anchorage configuration verifications, where applicable. The SWEs also demonstrated the ability to identify seismically-induced flooding interactions and seismically-induced fire interactions such as the examples described in Section 4 of the Guidance. The SWEs demonstrated appropriate use of self checks and peer checks. They discussed their observations with questioning attitude, and documented the results of the seismic walkdowns and area walk-bys on the appropriate checklists.

9.2.3 Licensing Basis Evaluations

Licensing Basis Evaluations (LBEs) were developed by members of the walkdown engineering team to document the disposition of those potentially adverse seismic conditions identified which did not require entry into the CAP. Each LBE was independently reviewed for technical content and CAP entry decisions by the lead LBE peer reviewer. A second peer reviewer reviewed the set of all LBEs to ensure the process and decisions made were in compliance with Section 5 of the Guidance. Based on these reviews, the peer review team concludes that the LBEs properly evaluate field conditions relative to the specific plant licensing basis documents and make appropriate decisions for entering the potentially adverse seismic conditions into the plant's CAP. High-level peer review comments are documented in Attachment H.

9.2.4 Submittal Report

The peer review team was provided with an early draft of this submittal report for peer review. The peer review team verified that the submittal report met the objectives and requirements of Enclosure 3 to the 50.54(f) Letter, and documented the NTTF 2.3 Seismic Walkdown program performed was in accordance with the Guidance. The peer review team provided the results of review activities to the SWE team for consideration. The SWE team satisfactorily addressed all peer review comments in the final version of the submittal report. The signature of the Peer Review Team Leader provides documentation that all elements of the peer review as described in Section 6 of the Guidance were completed.

10.0 REFERENCES

- 1. 10CFR50.54(f) Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3 and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident, dated March 12, 2012
- 2. EPRI 1025286, Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic, June 2012
- 3. Waterford Steam Electric Station Unit 3, Final Safety Analysis Report (FSAR), Revision 306
- 4. Generic Letter No. 88-20, Supplement 4, Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities
- Waterford 3 Individual Plant Examination of External Events (IPEEE) Reduced Scope Seismic Margin Assessment (SMA). Report No. WF3-CS-12-00001, 02-07-2012/Revision, 0
- 6. EPRI Report NP-6041-SLR1, "A Methodology for Assessment of Nuclear Power Plant Seismic Margin (Revision 1)"

11.0 ATTACHMENTS

ATTACHMENT A – IPEEE VULNERABILITIES TABLE

ATTACHMENT B – SEISMIC WALKDOWN EQUIPMENT LISTS

ATTACHMENT C – SEISMIC WALKDOWN CHECKLISTS (SWCs)

ATTACHMENT D – AREA WALK-BY CHECKLISTS (AWCs)

ATTACHMENT E – POTENTIALLY ADVERSE SEISMIC CONDITIONS

ATTACHMENT F – LICENSING BASIS EVALUATION FORMS

ATTACHMENT G – PEER REVIEW CHECKLIST FOR SWEL

ATTACHMENT H – PEER REVIEW COMMENT FORM

ATTACHMENT J – SEISMIC WALKDOWN ENGINEER TRAINING CERTIFICATES
Engineering Report No. WF3-CS-12-00003 Attachment A Rev. 0 Page 1 of 2

Attachment A

IPEEE Vulnerability List

#	IPEEE VULNERABILITY	COMMITMENT	RESOLUTION	СМР	RESOLVED
V01	 Several Seismic interaction issues were found during IPEEE walkdown in the Control Room. Panels not bolted together Personal storage lockers book cases, storage cabinets, lockers, copy machine were behind the panels and were not secured Breathing air cabinet can interact with CP-08 	Resolve the Seismic interaction issue in the Control Room	CR-94-1019 was issued to document loose items in the Control Room Modifications were implemented and all issues were resolved -Panels were bolted together -Personal storage lockers, book cases and storage cabinets were either bolted or relocated -Breathing air cabinet was secured such that it would not interact with CP-08	Y	02-15-1995
V02	Station Air Pipe is close to Switchgear 4KVESWGR3B and can interact with the Switchgear	Resolve the Seismic interaction issue with the Switchgear	CR-94-1111 was issued to document the station air pipe which is adjacent to 4KVESWGR3B Station Air pipe was rerouted to provide adequate clearance between the switchgear and pipe.	Y Note 1	03-30-1995

Prepared by:

Dinesh Patel

Note 1: Plant documents were modified to incorporate vulnerability resolution.

Date: 10/27/2012

Attachment B

Seismic Walkdown Equipment Lists

Table 1 – Base List 1

Table 2 – SWEL 1

Table 3 – Base List 2

Table 4 - Rapid Drain Down List

Table 5 – SWEL 2

	ocisinio Haikdown Edupinent Eist Approvat	
Prepared by:	GREEDRY N. FERGULON Theory M. Flym Equipment Selection Personnel	Date: <u>11/13/12</u>
Prepared by:	STEPHEN PICARD Stephen Pica. D Equipment Selection Personnel	Date: 11/13/12
Prepared by:	Marc McClosky Equipment Selection Personnel	Date: <u>1/13/12</u>
Prepared by:	Dilliam Havdin Mailon	Date: 11/13/12
Prepared by:	RICKY TRAN RUIG- Equipment Selection Personnel	Date: 11/13/12
Prepared by:	JAMES JAMIOONI TONO TRANS Equipment Selection Personniel	Date: 11 14/12
Prepared by:	John Meibaum Mul- Equipment Selection Personnel	Date: 1/14/12
Prepared by:	Equipment Selection Personnel	Date:
Prepared by:	Equipment Selection Personnel	Date:
Reviewed by:	Juidi AN HEIDI GRAF	Date: 11/16/12
Reviewed by:	NA Peer Beviewer	Date:
Concurrence by:	Operations Personnel	Date: <u>//-/6-/2</u>

Seismic Walkdown Equipment List Approval

						Screen 1	Screen 2	Screen 3	en 3 Screen 4						Five	e Safety Fund	ctions	
												Environment	?					
Unit	SQUG Equip Type	Current Equi	pment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	3	4KVESWGR3A	PANEL		SWITCHGEAR 3A	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	3	4KVESWGR3AB	PANEL		SWITCHGEAR 3AB	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	3	4KVESWGR3B	PANEL		SWITCHGEAR 3B	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
					WET COOLING TOWER B		-											
WF3	9	ACCMFAN0001	B BLOWER		FAN 1-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
					WET COOLING TOWER A													
WF3	9	ACCMFAN0001	A BLOWER		FAN 1-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
					WET COOLING TOWER													
WF3	9	ACCMFAN0002	B BLOWER		B FAN 2-SB	Yes	No	Yes	No	Yes	0	Н	No				Yes	
	0				WEI COOLING TOWER A	Vaa	Na	Vee	Nia	Vee	0		Nie				Vaa	
VVFS	9	ACCIVIFAINUUUZ	A BLOWER			res	INU	res	INO	res	0	п	INO				res	
W/F3	q		B BLOWER		FAN 3-SB	Ves	No	Ves	No	Ves	0	н	No				Ves	
	<u> </u>	7100000 71100000	B BEOWEI		WET COOLING TOWER A	100	110	100	110	100	<u> </u>						100	
WF3	9	ACCMFAN0003	A BLOWER		FAN 3-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
					WET COOLING TOWER B													
WF3	9	ACCMFAN0004	B BLOWER		FAN 4-SB	Yes	No	Yes	No	Yes	0	Н	No				Yes	
					WET COOLING TOWER A													
WF3	9	ACCMFAN0004	A BLOWER		FAN 4-SA	Yes	No	Yes	No	Yes	0	H	No				Yes	
	0				WEI COOLING TOWER B	Vaa	Na	Vee	Nia	Vee	0		Nie				Vee	
VVF3	9	ACCMFAN0005	B BLOWER		FAN 5-SB	Yes	NO	Yes	NO	res	0	Н	NO				res	
WF3	q	ACCMEAN0005			FAN 5-SA	Ves	No	Ves	No	Ves	0	н	No				Ves	
VVI 5	5		A DEGWER		WET COOLING TOWER B	103	110	103	NO	103							103	
WF3	9	ACCMFAN0006	B BLOWER		FAN 6-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
			-		WET COOLING TOWER A				-				-					
WF3	9	ACCMFAN0006	A BLOWER		FAN 6-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
					WET COOLING TOWER B													
WF3	9	ACCMFAN0007	B BLOWER		FAN 7-SB	Yes	No	Yes	No	Yes	0	Н	No				Yes	
	0				WEI COOLING TOWER A	Vaa	No	Vaa	No	Vaa	0		No				Vaa	
VVF3	9	ACCIVIFAINUUUI	A BLOWER			165	INU	165	INU	165	0	п	NO				165	
WF3	9	ACCMFAN0008	B BLOWER		FAN 8-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
					WET COOLING TOWER A						-							
WF3	9	ACCMFAN0008	A BLOWER		FAN 8-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
					AUXILIARY COMPONENT													
					COOLING WATER PUMP													
WF3	5	ACCMPMP0001	в PUMP			Yes	No	Yes	No	Yes			No				Yes	
WF3	5	ACCMPMP0001	A PLIMP			Yes	No	Yes	No	Yes	1		No				Yes	
					ACC HEADER B TO	100		100		100		1		1			100	
					ESSENTIAL CHILLERS							1						
WF3	7	ACCMVAAA112	B VALVE		ISOL	Yes	No	Yes	No	Yes	I	l	No	<u> </u>			Yes	
					ACC HEADER A TO													
	-				ESSENTIAL CHILLERS	Vaa	Nia	Vaa	Nia	Vee			Nia				Vaa	
VVF3	/	ACCIVIVAAATTZ	A VALVE			res	INO	res	INO	res			INO				res	
WF3	7	ACCMVAAA126	B VALVE		CONTROL VALVE	Yes	No	Yes	No	Yes	1		No				Yes	
_		-			ACC HEADER A CCW HX		-		-			1	-					
					OUTL TEMPERATURE													
WF3	7	ACCMVAAA126	A VALVE		CONTROL	Yes	No	Yes	No	Yes			No				Yes	
					ACC WET COOLING													
	7					Vee	No	Vaa	No	Vaa	0	Ц	No				Vaa	
VVFS	1		D VALVE			165		162	INU	162	0		INU				162	
					TOWER A CROSS-													
WF3	7	ACCMVAAA138	A VALVE		CONNECT ISOLATION	Yes	No	Yes	No	Yes	0	н	No				Yes	

				Screen 1	Screen 2	Screen 3	een 3 Screen 4						Fiv	e Safety Fund	ctions	
						Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipmer Equipment Descriptio	nt Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/0)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
			ACC HEADER B R	ETURN												
			FROM ESSENTIAI	L												
WF3	7	ACCMVAAA139 B VALVE		Yes	No	Yes	No	Yes	I		No				Yes	
			FROM ESSENTIAL													
WF3	7	ACCMVAAA139 A VALVE	CHILLERS ISOL	Yes	No	Yes	No	Yes	I		No				Yes	
			CNTMT ATMOS R	AD												
WF3	8	ARMISV0109 VALVE	INSIDE ISOL	Yes	No	Yes	No	Yes	1	T/H	No					Yes
WF3	5	BAMMPMP0001 B PUMP	BORIC ACID PUM	P B Yes	No	Yes	No	Yes	1		Yes	Yes				
WF3	5	BAMMPMP0001 A PUMP	BORIC ACID PUM	P A Yes	No	Yes	No	Yes	1		Yes	Yes				
			BORIC ACID MAK	EUP												
WF3	21	BAMMTNK0001 B ACCUMU	TANK B	Yes	No	Yes	No	Yes	I		Yes	Yes				
	24		BORIC ACID MAK	EUP	No	Vaa	No	Vee			Vaa	Vaa				
VVF3	21	BAMMINKUUU1 A ACCUMU		FUD	NO	res	NO	res			res	res				
			TANK B GRAVITY	FFFD												
WF3	8	BAMMVAAA113 B VALVE	VALVE	Yes	No	Yes	No	Yes	1		Yes	Yes				
			BORIC ACID MAK	EUP												
			TANK A GRAVITY	FEED												
WF3	8	BAMMVAAA113 A VALVE	VALVE	Yes	No	Yes	No	Yes	I		Yes	Yes				
W/E2	7				No	Voo	No	Voo			Voo	Vaa				
VVF3	1	BAIMINIVAAA 120 B VALVE			INU	165	INU	165	- '		Tes	Tes				
WF3	7	BAMMVAAA126 A VALVE	PUMP A RECIRC	VALVE Yes	No	Yes	No	Yes	1		Yes	Yes				
			EMERGENCY BO	RATION												
WF3	8	BAMMVAAA133 VALVE	VALVE	Yes	No	Yes	No	Yes	I		Yes	Yes				
			BORIC ACID MAK	EUP												
	7			OW	No	Vee	Nia	Vaa			Vee	Maa				
VVF3	1	BAIMINIVAAA 141 VALVE		N Yes	INO	res	INO	res			res	res				
			INSIDE CONTAIN	MENT												
WF3	7	BD MVAAA102 B VALVE	ISOLATION	Yes	No	Yes	No	Yes	I	T/H	No					Yes
			S/G 1 BLOWDOW	N												
			INSIDE CONTAIN	MENT												
WF3	7	BD MVAAA102 A VALVE	ISOLATION	Yes	No	Yes	No	Yes		T/H	No					Yes
WF3	7	BD MVAAA103 B VALVE	ISOLATION	Yes	No	Yes	No	Yes			No					Yes
			S/G 1 BLOWDOW	N												
			OUTSIDE CONTA	INMENT												
WF3	7	BD MVAAA103 A VALVE	ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
				TANK												
WF3	7				No	Ves	No	Vos	l 1	т/н	Vas					Vas
VVI 5			SOUTH OF WALL	IN CCW	NO	163		163	· ·	1711	163					163
WF3	20	CABINET C-90B	PUMP B	Yes	No	Yes	No	Yes	I		No				Yes	
			CONTAINMENT P	URGE												
WF3	7	CAPMVAAA103 VALVE	INLET INSIDE ANI	NULUS Yes	No	Yes	No	Yes	1	T/H	No					Yes
			CONTAINMENT P	URGE												
W/E2	7			Voc	No	Voc	No	Voc		т/ц	No					Voc
VVFJ	í			URGE	INU	165	INU	162		1/П	NU					162
			EXHAUST INSIDE			1	1			1						
WF3	7	CAPMVAAA203 VALVE	CONTAINMENT	Yes	No	Yes	No	Yes	1	<u>T / H</u>	No					Yes
			CONTAINMENT P	URGE												
	-		EXHAUST INSIDE	¥	N1-	N	NIE	¥		T / 11	N1-					V
vv⊦3	1	CAPINIVAAA204 VALVE			NO	res	INO	res		1/H	INO					res
WF3	8	CARMVAAA201 B VALVE	BINLET	Yes	No	Yes	No	Yes	1	T/H	No					Yes

					Screen 1	Screen 2	Screen 3	en 3 Screen 4						Fiv	e Safety Fund	ctions	
							Maintains				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	8	CARMVAAA201 A VALVE		CAR EXHAUST HEADER	Yes	No	Yes	No	Yes		т/н	No					Yes
	0			CAR EXHAUST HEADER	100	110	100	110	100		1,11						100
WF3	8	CARMVAAA204 B VALVE		B DISCHARGE	Yes	No	Yes	No	Yes	l		No					Yes
WF3	8	CARMVAAA204 A VALVE		A DISCHARGE	Yes	No	Yes	No	Yes	I		No					Yes
WF3	18	CC ILS7011 B IBISSW		SIDE LO/LO LEVEL	Yes	No	Yes	No	Yes	ı		No				Yes	
WF3	18	CC ILS7011 A IBISSW		CCW SURGE TANK A SIDE LO/LO LEVEL SWITCH	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	8	CC ISV0835 B1 ICNTRL		CNTMT FAN COOLERS HDR B CCW RTN TCV SOLENOID VLV	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	9	CC MFAN0001 B BLOWER		DRY COOLING TOWER B	Yes	No	Yes	No	Yes	0	н	No				Yes	
	0			DRY COOLING TOWER A	Vee	No	Vee	No	Vee	0		No				Vee	
VVFS	9	CC MFAN0001 A BLOWER		DRY COOLING TOWER B	res	INO	res	INU	res	0		INO				res	
WF3	9	CC MFAN0002 B BLOWER		FAN 2-SB	Yes	No	Yes	No	Yes	0	Н	No				Yes	
WF3	9	CC MFAN0002 A BLOWER		FAN 2-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0003 B BLOWER		FAN 3-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0003 A BLOWER		FAN 3-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0004 B BLOWER		DRY COOLING TOWER B FAN 4-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0004 A BLOWER		FAN 4-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0005 B BLOWER		DRY COOLING TOWER B FAN 5-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
\//E3	0			DRY COOLING TOWER A	Vos	No	Voc	No	Voc	0		No				Voc	
VVI 5	9	CC MI ANOUS A BLOWER		DRY COOLING TOWER B	165	NO	165	INU	165	0		INO				165	
WF3	9	CC MFAN0006 B BLOWER		FAN 6-SB	Yes	No	Yes	No	Yes	0	H	No				Yes	
WF3	9	CC MFAN0006 A BLOWER		FAN 6-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
WF3	9	CC MFAN0007 B BLOWER		FAN 7-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0007 A BLOWER		DRY COOLING TOWER A FAN 7-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0008 B BLOWER		DRY COOLING TOWER B FAN 8-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0008 A BLOWER		DRY COOLING TOWER A FAN 8-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0009 B BLOWER		DRY COOLING TOWER B FAN 9-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0009 A BLOWER		DRY COOLING TOWER A FAN 9-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	9	CC MFAN0010 B BLOWER		DRY COOLING TOWER B FAN 10-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
	0			DRY COOLING TOWER A	Vaa	No	Vac	No	Vac	0	ц	No				Vaa	
	9			DRY COOLING TOWER B	res		res		res	0	 					res	
VVF3	9	CC MFANUU11 B BLOWER		DRY COOLING TOWER A	Yes	NO	Yes	NO	Yes	0	Н	NO				Yes	
WF3	9	CC MFAN0011 A BLOWER		FAN 11-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	

					Screen 1	Screen 2	Screen 3	n 3 Screen 4						Five	e Safety Fund	ctions	
							Maintaine				Environment	?					
	SQUG		SSEL	Equipment		Undergoes	at least			Incido	High Tomp		Reactor	Reactor	Reactor	Decay	
Unit	Equip	Current Equipment ID	Equipment	Description	Seismic	Regular	one of the	Replaced?	IPEEE		/	Borated	Reactivity	Coolant	Coolant	Heat	Containment
	i ype		U			Configuration	5 Safety	•		Outside	Humidity?	System?	Control	Pressure	Inventory	Removal	Function
						inspections?	Functions			(1/0)	(T/H)	-		Control	Control		
				DRY COOLING TOWER B													
WF3	9	CC MFAN0012 B BLOWER		FAN 12-SB	Yes	No	Yes	No	Yes	0	Н	No				Yes	
				DRY COOLING TOWER A													
WF3	9	CC MFAN0012 A BLOWER		FAN 12-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
WF3	9	CC MEAN0013 B BLOWER		FAN 13-SB	Yes	No	Yes	No	Yes	0	н	No				Yes	
	-			DRY COOLING TOWER A						-							
WF3	9	CC MFAN0013 A BLOWER		FAN 13-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
W/E2	0			DRY COOLING TOWER B	Vaa	No	Voo	No	Voo	0	ц	No				Voo	
VVI 3	9	CC MI ANOUTA B BLOWER		DRY COOLING TOWER A	165	INU	165	INU	165	0		NO				165	
WF3	9	CC MFAN0014 A BLOWER		FAN 14-SA	Yes	No	Yes	No	Yes	0	Н	No				Yes	
				DRY COOLING TOWER B													
WF3	9	CC MFAN0015 B BLOWER		FAN 15-SB	Yes	NO	Yes	No	Yes	0	H	NO				Yes	
WF3	9	CC MFAN0015 A BLOWER		FAN 15-SA	Yes	No	Yes	No	Yes	0	н	No				Yes	
				COMPONENT COOLING													
	04				Mar	Nie	N/s s	N	N/s s			Ne				Maa	
VVF3	21	CC MHX0001 B HTEXCH			res	INO	res	NO	res			NO				res	
				WATER HEAT													
WF3	21	CC MHX0001 A HTEXCH		EXCHANGER A	Yes	No	Yes	No	Yes	I		No				Yes	
WE2	F				Vac	No	Vaa	No	Vac			No				Vac	
VVFS	5			COMPONENT COOLING	165	NO	165	NO	162			NO				165	
WF3	5	CC MPMP0001 A PUMP		WATER PUMP A	Yes	No	Yes	No	Yes	I		No				Yes	
WE2	24			COMPONENT COOLING	Vac	No	Vac	No	Vac	0		No				Vac	
VVFS	21	CC MINKOUT C ACCOMO		CCW PUMP B TO AB	Tes	NO	Tes	NO	Tes	0	п	NO				Tes	
				SUCTION													
WF3	7	CC MVAAA114 B VALVE			Yes	No	Yes	No	Yes			No				Yes	
				SUCTION													
WF3	7	CC MVAAA114 A VALVE		CROSSCONNECT	Yes	No	Yes	No	Yes	1		No				Yes	
				CCW PUMP AB TO B													
WF3	7	CC MVAAA115 B VALVE		CROSSCONNECT	Yes	No	Yes	No	Yes	1		No				Yes	
				CCW PUMP AB TO A	100	110	100		100			110				100	
				SUCTION													
WF3	(CC MVAAA115 A VALVE			Yes	No	Yes	No	Yes		+	NO		<u> </u>		Yes	
				DISCHARGE													
WF3	7	CC MVAAA126 B VALVE		CROSSCONNECT	Yes	No	Yes	No	Yes			No				Yes	
				CCW PUMP A TO AB							1						
WF3	7	CC MVAAA126 A VALVE		CROSSCONNECT	Yes	No	Yes	No	Yes	1		No				Yes	
				CCW PUMP AB TO B					1		1						
W/E3	7				Voc	No	Voc	No	Voc			No				Voc	
1113	1			CCW PUMP AB TO A	163		163		163		1				1	163	
				DISCHARGE													
WF3	7	CC MVAAA127 A VALVE			Yes	No	Yes	No	Yes			No				Yes	
WF3	7	CC MVAAA134 B VALVE		CCW BYPASS	Yes	No	Yes	No	Yes	0	н	No				Yes	
				DRY COOLING TOWER A						_							
WF3	7	CC MVAAA134 A VALVE			Yes	No	Yes	No	Yes	0	H	No				Yes	
WF3	7	CC MVAAA135 B VALVE		CCW INLET ISOLATION	Yes	No	Yes	No	Yes	о	н	No				Yes	
				DRY COOLING TOWER A						_							
WF3	7	CC MVAAA135 A VALVE		CCW INLET ISOLATION	Yes	No	Yes	No	Yes	0	H	No				Yes	

					Screen 1	Screen 2	Screen 3	reen 3 Screen 4						Five	e Safety Fund	ctions	
							Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	7	CC MVAAA200 B VALVE		CCW HEADER B TO AB SUPPLY ISOLATION	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	7	CC MVAAA200 A VALVE		CCW HEADER A TO AB	Yes	No	Yes	No	Yes			No				Yes	
WE3	7			CCW HEADER B SUPPLY TO ESSENTIAL CHILLERS ISOL	Yes	No	Yes	No	Yes			No				Yes	
				CCW HEADER A SUPPLY TO ESSENTIAL	Vee	Ne	No.		No.			No				No.	
VVF3	1	CC MVAAA301 A VALVE		CHILLERS ISOL CCW HEADER B RETURN FROM ESSENTIAL CHILLERS	Yes		Yes		Yes			INO				Yes	
WF3	7	CC MVAAA322 B VALVE		ISOL	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	7	CC MVAAA322 A VALVE		CCW HEADER A RETURN FROM ESSENTIAL CHILLERS ISOL	Yes	No	Yes	No	Yes			No				Yes	
W/E2	0			CCW Header B Return from Essential Chillers	Vos	No	Voc	No	Vos			No				Vos	
VVI 5	-			CCW NON SAFETY			165	NO								165	
WF3	1	CC MVAAA501 VALVE		CCW NON SAFETY	Yes	NO	Yes	No	Yes	I		NO				Yes	
WF3	7	CC MVAAA562 VALVE		RETURN HDR ISOLATION CCW HEADER AB TO B	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	7	CC MVAAA563 VALVE		RETURN ISOLATION	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	7			CCW TO CONTAINMENT OUTSIDE CONTAINMENT	Yes	No	Yes	No	Yes			No					Yes
				CNTMT CCW RETURN HEADER OUTSIDE	100		100	110	100								100
WF3	7	CC MVAAA713 VALVE		CNTMT ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	CC MVAAA727 VALVE		RETURN ISOLATION	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	7	CC MVAAA807 B VALVE		COOLER B CCW INLET ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	CC MVAAA807 A VALVE		CONTAINMENT FAN COOLER C CCW INLET ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	CC MVAAA808 B VALVE		CONTAINMENT FAN COOLER D CCW INLET ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	CC MVAAA808 A VALVE		CONTAINMENT FAN COOLER A CCW INLET ISOLATION	Yes	No	Yes	No	Yes	1		No					Yes
\\/E2	7			CONTAINMENT FAN COOLER D CCW OUTLET	Var	No	Vec	No	Vac	1		No					Vac
VIES		CO WIVAAAOZZ D VALVE		CONTAINMENT FAN COOLER A CCW OUTLET	162		165		165								1 05
WF3	7	CC MVAAA822 A VALVE		ISOLATION CONTAINMENT FAN	Yes	No	Yes	No	Yes	I		No					Yes
	7			COOLER B CCW OUTLET	Vac	No	Vac	No	Var			No					Vaa
VVF3	/	UU IVIVAAA623 B VALVE		CONTAINMENT FAN	res		res	INO	res			NO					res
WF3	7	CC MVAAA823 A VALVE		COOLER C CCW OUTLET ISOLATION	Yes	No	Yes	No	Yes	1		No					Yes

						Screen 1	Screen 2	Screen 3	een 3 Screen 4						Fiv	e Safety Fund	ctions	
								Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equip	oment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
					CNTMT FAN COOLERS													
WF3	7	CC MVAAA835	B VALVE		CONTROL	Yes	No	Yes	No	Yes	I		No					Yes
					CNTMT FAN COOLERS													
WF3	7	CC MVAAA835	A VALVE		CONTROL	Yes	No	Yes	No	Yes	1		No					Yes
					SHUTDOWN HEAT						_							
WE3	7				EXCHANGER B CCW	Vec	No	Ves	No	Ves	1		No				Ves	
W15	1	00 1017			SHUTDOWN HEAT	163	110	163		163	1		NO				103	
	-	00 141/4 4 4000	A \/AL\/ F		EXCHANGER A CCW	Vee	Na	Nee	Na	Vee			Ne				Vee	
VVF3	1	CC MVAAA963	A VALVE		CONTAINMENT	tes	NO	res	NO	tes	I		NO				tes	
	_				COOLING HVAC AH-													
WF3	9	CCSMFAN0003	D BLOWER		1(3D-SB) FAN	Yes	No	Yes	No	Yes	I	Т/Н	No					Yes
					COOLING HVAC AH-1(3A-													
WF3	9	CCSMFAN0003	A BLOWER		SA) FAN	Yes	No	Yes	No	Yes	I	T/H	No					Yes
					CONTAINMENT COOLING HVAC SAFETY													
WF3	7	CCSMVAAA102	B VALVE		DISCHARGE DAMPER B	Yes	No	Yes	No	Yes	1	T/H	No					Yes
					CONTAINMENT													
WF3	7	CCSMVAAA102	A VALVE		DISCHARGE DAMPER A	Yes	No	Yes	No	Yes	I	T/H	No					Yes
					REACTOR TRIP SWGR													
WF3	2	CEDEBKR3917	B CKTBRK		COMPARTMENT 1D	Yes	No	Yes	No	Yes	I		No	Yes				
					REACTOR TRIP SWGR													
WF3	2	CEDEBKR3917	A CKTBRK		COMPARTMENT 1B	Yes	No	Yes	No	Yes	I		No	Yes				
					REACTOR TRIP SWGR													
WF3	2	CEDEBKR3918	B CKTBRK		COMPARTMENT 2C	Yes	No	Yes	No	Yes	1		No	Yes				
					REACTOR TRIP SWGR						_							
WF3	2	CEDEBKR3918	A CKTBRK		BREAKER TCB-6 COMPARTMENT 2B	Yes	No	Yes	No	Yes	1		No	Yes				
	_	OLDEDI (100 10			REACTOR TRIP SWGR	100	110	100		100				100				
WE3	2		CKTERK		BREAKER TCB-9	Voc	No	Vos	No	Voc	1		No	Voc				
VVI 3	2	CEDEBRK3919	CRIBRA		REACTOR TRIP SWGR	165	INU	165	NO	165	1		INU	165				
	0				BREAKER TCB-7	Vaa	Na	Vaa	Na	Vee			Nie	Xee				
VVFS	2	CEDEBKR3920	D UNIDRN		REACTOR TRIP SWGR	res	INU	res	INU	res	1		INO	res				
					BREAKER TCB-3													
WF3	2	CEDEBKR3920	A CKIBRK		REACTOR TRIP SWGR	Yes	NO	Yes	NO	Yes	I		NO	Yes				
					BREAKER TCB-8													
WF3	2	CEDEBKR3921	B CKTBRK		COMPARTMENT 5D	Yes	No	Yes	No	Yes	I		No	Yes				
					BREAKER TCB-4													
WF3	2	CEDEBKR3921	A CKTBRK		COMPARTMENT 5B	Yes	No	Yes	No	Yes			No	Yes				
WF3	5	CHWMPMP0001	B PUMP			Yes	No	Yes	No	Yes	I		No				Yes	
	_				CHILLED WATER PUMP	Me .	N1-	V	NI	N-			N1-				M-	
VVF3	5				A SWGR AUX	res	NO	res	NO	res			NO				res	
					SVSMAHU0002-A CHW													
WF3	7	CHWMVAAA578	VALVE		OUTLET FCV	Yes	No	Yes	No	Yes	I		No				Yes	
					SVSMAHU0001-A CHW													
WF3	7	CHWMVAAA591	VALVE		OUTLET FCV	Yes	No	Yes	No	Yes	I		No				Yes	

					Screen 1	Screen 2	Screen 3	reen 3 Screen 4						Five	e Safety Fund	ctions	
							Maintaine				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety	Replaced?	IPEEE	Inside / Outside	High Temp / Humidity?	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
							Functions			(170)	(.,,						
WF3	7	CHWMVAAA603 VALVE		OUTLET FCV	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				SWGR MAIN													
				SVSMAHU0001-B CHW	Vaa	No	Vee	Na	Vaa			No				Vaa	
VVFS	0				res	NO	Tes	NO	res	I		NO				res	
				HVCMAHU0001-B CHW													
WF3	7	CHWMVAAA919 VALVE		OUTLET FCV	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	/ 8	CMUISV0407 B ICNTRL		SV FOR CMU-4078	Yes	NO	Yes	No	Yes	0	<u>н</u>	NO				Yes	
WIS	0			EGD B JACKET WATER	103	110	103	110	103	0						103	
WF3	8	CMUISV0524 B VALVE		AUTO MAKEUP VALVE	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
\//E3	Q				Voc	No	Voc	No	Voc			No	Voc	Voc	Voc	Voc	Voc
VVF3	0	CM0I3V0524 A VALVE		COMPONENT COOLING	165	INU	165	INU	165	I		INU	Tes	165	Tes	Tes	Tes
				WATER MAKEUP PUMP													
WF3	5	CMUMPMP0004 B PUMP			Yes	No	Yes	No	Yes			No				Yes	
				WATER MAKEUP PUMP													
WF3	5	CMUMPMP0004 A PUMP		A	Yes	No	Yes	No	Yes	I		No				Yes	
	01			CONDENSATE STORAGE	No.	Vee	Vee	Nia	Vee			Nia				Vaa	
VVF3	21	CMUMPOLOUUI ACCUMU		CCW RETURN HEADER	Yes	Yes	Yes	NO	Yes	I		NO				Yes	
				B MAKEUP CONTROL													
WF3	7	CMUMVAAA538 B VALVE		VALVE	Yes	No	Yes	No	Yes	I		No				Yes	
				A MAKEUP CONTROL													
WF3	7	CMUMVAAA538 A VALVE		VALVE	Yes	No	Yes	No	Yes	I		No				Yes	
				SHUTDOWN COOLING													
WF3	21	CS MHX0001 B HTEXCH			Yes	No	Yes	No	Yes			Yes				Yes	
WF3	21	CS MHX0001 A HTEXCH		HEAT EXCHANGER A	Yes	No	Yes	No	Yes	I		Yes				Yes	
	_			COMPONENT COOLING						_							
WF3	5	CS MPMP0001 B PUMP		WATER PUMP B	Yes	No	Yes	Y	Yes			Yes				Yes	Yes
WF3	5	CS MPMP0001 A PUMP		WATER PUMP AB	Yes	No	Yes	Y	Yes	1		Yes				Yes	Yes
				CONTAINMENT SPRAY				-									
WF3	7	CS MVAAA125 B VALVE		HDR B ISOLATION	Yes	No	Yes	No	Yes	I		Yes					Yes
WF3	7	CS MVAAA125 A VALVE		HDR A ISOLATION	Yes	No	Yes	No	Yes	1		Yes					Yes
				PRESSURIZER AUX						•							
WF3	8	CVCISV0216 B VALVE		SPRAY VALVE B	Yes	No	Yes	Y	Yes	I	T/H	Yes	Yes		Yes		
WF3	8			SPRAY VALVE A	Yes	No	Yes	Y	Yes		т/н	Yes	Yes		Yes		
				CHARGING LINE TO RCS	100	110	100		100	•		100	100		100		
WF3	8	CVCISV0218 B VALVE		LOOP 2A ISOLATION	Yes	No	Yes	Y	Yes	I	T/H	Yes	Yes		Yes		
W/F3	8			CHARGING LINE TO RCS	Yee	No	Yee	×	Yee	1	т/н	Yee	Yes		Yes		
110	0			REGENATIVE HEAT	103	110	103	1	103	I	1711	103	103		103		
WF3	21	CVCMHX0001 HTEXCH		EXCHANGER	Yes	No	Yes	No	Yes	I	T/H	Yes	Yes		Yes		
WF3	5	CVCMPMP0001 B PUMP		PUMP B	Yes	No	Yes	No	Yes	1		Yes	Yes		Yes		
				CHEMICAL VOLUME													
	F			CONTROL CHARGING	Vaa	No	Vaa	No	Vaa			Vee	Vaa		Vaa		
VVFS	5				res		165	INU	res			165	165		165		
WF3	21	CVCMTNK0002 ACCUMU		TANK	Yes	No	Yes	No	Yes	1		Yes	Yes		Yes		
WF3	7	CVCMVAAA101 VALVE		LETDOWN STOP VALVE	Yes	No	Yes	No	Yes		T/H	Yes	Yes		Yes		

					Screen 1	Screen 2	Screen 3	een 3 Screen 4						Five	e Safety Fund	ctions	
							Maintaina				Environment	?					
	SQUG		SSEL	Equipment		Undergoes	Maintains						Pagator	Reactor	Reactor	Decay	
Unit	Equip	Current Equipment	ID Equipment	Equipment	Saiamia	Regular	at least	Baplaced2	IDEEE	Inside	High Temp		Reactor	Coolant	Coolant	Decay	Containment
	Туре		ID	Description	Seisinic	Configuration	5 Sefety	Replaceur	IFEEE	/ Outoido	/ Humiditu?	Borated	Control	Pressure	Inventory	Bomoval	Function
						Inspections?	5 Salety				(T/H)	System?	Control	Control	Control	Removal	
						-	Functions			(170)	(1711)						
				LETDOWN INSIDE													
	_			CONTAINMENT													
WF3	1	CVCMVAAA103	VALVE		Yes	No	Yes	No	Yes		I/H	Yes	Yes		Yes		Yes
WF3	7			ISOLATION	Yes	No	Yes	No	Yes	1		Yes	Yes		Yes		Yes
	· '	010111100		LETDOWN TO HEAT	100	110	100		100			100	100		100		100
				EXCHANGERS													
WF3	7	CVCMVAAA140	VALVE	INLET/BYPASS	Yes	No	Yes	No	Yes	I		Yes	Yes		Yes		
				VOLUME CONTROL													
				TANK OUTLET													
WF3	8	CVCMVAAA183	VALVE		Yes	No	Yes	No	Yes			Yes	Yes		Yes		
WE2	7				Vac	No	Voc	No	Voc			Voc	Voc		Voc		
WFJ	'	CVCINIVAAA209	VALVE		165	NO	165	NO	163	-		165	163		163		
WF3	7	CVCMVAAA401	VALVE	BLEEDOFF ISOLATION	Yes	No	Yes	No	Yes	1		Yes	Yes		Yes		
				RWSP TO CHARGING													
				PUMPS SUCTION													
WF3	8	CVCMVAAA507	VALVE	ISOLATION	Yes	No	Yes	No	Yes	I		Yes	Yes		Yes		
				CVR INST UPSTREAM													
	0			CNTMT ISOL VLV - PEN	Vee	Nia	Vee	V	Vaa			Nia					Vee
VVF3	ð	CVRISV0400	VALVE		res	INO	res	ř	res	1		NO					res
WF3	8	CVRISV0401	VALVE	ISOL VLV - PEN 53	Yes	No	Yes	Y	Yes	1		No					Yes
				125V BAT & RACK													
				125VDC BATTERY A-S 60													
WF3	15	DC EBATA E	BATTRY	CELLS	Yes	No	Yes	Y		1		No	Yes	Yes	Yes	Yes	Yes
				125V BAT & RACK													
	4.5			125VDC BATTERY AB-S	N/s s	Nie	Mar	N/				Nie	N	N/s s	N/	Maa	N/s s
VVF3	15	DC EBATAB E	BATTRY	62 CELLS	res	INO	res	ř		1		NO	res	res	res	res	res
				125V BAT & RACK													
WF3	15	DC EBATB E	BATTRY	60 CELLS	Yes	No	Yes	Y		1		No	Yes	Yes	Yes	Yes	Yes
WF3	16	DC EBC1A E	BATTRY	BATTERY CHARGER A1	Yes	No	Yes	No	Yes	i		No	Yes	Yes	Yes	Yes	Yes
WF3	16	DC EBC1B E	BATTRY	BATTERY CHARGER B1	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	16	DC EBC2A E	BATTRY	BATTERY CHARGER A2	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	16	DC EBC2B E	BATTRY	BATTERY CHARGER B2	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	14	DC EPDP1A DC	PANEL	PDP A1-DC	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	14	DC EPDP1B DC	PANEL	PDP B1-DC	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	14	DC EPDPA DC	PANEL	PDP A-DC	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
	14	DC EPDPAB DC	PANEL		Yes	NO	Yes	NO	Yes			NO	Yes	Yes	Yes	Yes	Yes
VVF3	14	EDGB RTGB	PANEL	EDGB RTGB ISOLATION	Tes	NO	res	NO	res	I		NO	res	res	res	res	res
WF3	20	ISOL PNI		PANEI	Yes	No	Yes		Yes	1		No	Yes	Yes	Yes	Yes	Yes
				EMERGENCY													
				FEEDWATER HDR B TO													
				STEAM GENERATOR 2													
WF3	18	EFWIFIS8330 B	IBISSW	FIS	Yes	No	Yes	No	Yes			No				Yes	
				EMERGENCY													
				FEEDWATER HUR A TO													
WF3	18	EEWIEIS8330 A	IBISSW	FIS	Yes	No	Yes	No	Yes	1		No				Yes	
	10			EMERGENCY	103	140	100		100			110				103	
				FEEDWATER HDR A TO													
				STEAM GENERATOR 1													
WF3	18	EFWIFIS8331 B	IBISSW	FIS	Yes	No	Yes	No	Yes	I		No				Yes	
				EMERGENCY													
				FEEDWAIER HDR B TO													
\ \ /⊏2	19		IBISSW	STEAM GENERATOR 2	Voc	No	Voc	No	Voc	1		No				Voc	
VVI-3	10			110	1 105	INU	103	INU	163		1			1	1	105	1

					Screen 1	Screen 2	Screen 3	en 3 Screen 4						Five	e Safety Fund	ctions	
							Maintains			I	Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/0)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
				EMERGENCY													
WF3	5	EFWMPMP0001 B P	UMP	FEEDWATER PMP B	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	5	EFWMPMP0001 AB P	UMP	FEEDWATER PUMP AB	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	5	EFWMPMP0001 A P	UMP	EMERGENCY FEEDWATER PMP A	Yes	No	Yes	No	Yes	I		No				Yes	
				EMERGENCY FEEDWATER HDR B TO SG2 BACKUP FLOW													
WF3	7	EFWMVAAA223 B V	ALVE	CNTRL	Yes	No	Yes	No	Yes	0	н	No				Yes	
14/50	-			EMERGENCY FEEDWATER HDR A TO SG1 BACKUP FLOW	Nee	Ne	No	Ne	No.			NI-				No	
WF3	/	EFWMVAAA223 A V	ALVE	EMERGENCY	Yes	NO	Yes	No	Yes	0	н	No				Yes	
WF3	7	EFWMVAAA224 B V	ALVE	FEEDWATER HDR B TO SG2 PRIMARY FLOW CNTRL	Yes	No	Yes	No	Yes	Ο	Н	No				Yes	
				EMERGENCY FEEDWATER HDR A TO SG1 PRIMARY FLOW													
WF3	7	EFWMVAAA224 A V	ALVE	CNTRL	Yes	No	Yes	No	Yes	0	Н	No				Yes	
WF3	7	EFWMVAAA228 B V	ALVE	EMERGENCY FEEDWATER TO SG2 PRIMARY ISOLATION	Yes	No	Yes	No	Yes	0	Н	No				Yes	
WE3	7			EMERGENCY FEEDWATER TO SG1 PRIMARY ISOLATION	Yes	No	Yes	No	Yes	0	н	No				Yes	
				EMERGENCY	100		100	110	100							100	
WF3	7	EFWMVAAA229 B V	ALVE	FEEDWATER TO SG2 BACKUP ISOLATION	Yes	No	Yes	No	Yes	о	н	No				Yes	
WF3	7	EFWMVAAA229 A V	ALVE	EMERGENCY FEEDWATER TO SG1 BACKUP ISOLATION	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	20	EG ECP6850 B PA	ANEL	CONTROL PANEL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	20	EG ECP6850 A P/	ANEL	DIESEL GEN A ENGINE CONTROL PANEL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	20	EG ECP6852 B P/	ANEL	DIESEL GEN B CONTROL PANEL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	20	EG ECP6852 A P/	ANEL	DIESEL GEN A CONTROL PANEL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	17	EG MDSG0001 B GE	NERA	EMERGENCY DIESEL GENERATOR B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	17	EG MDSG0001 A GE	NERA	EMERGENCY DIESEL GENERATOR A	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				EG B EMERGENCY MODE FUEL CONTROL													
WF3	8	EGAISV0411 B V	ALVE	#2	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	EGAISV0412 B V	ALVE	MODE FUEL CONTROL #1	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	12	EGAMCMP0001 B BL	OWER	EG B AIR COMPRESSOR B1	Yes	No	Yes	No		I		No	Yes	Yes	Yes	Yes	Yes
WES	12		OWER	EG A AIR COMPRESSOR	Vas	No	Ves	No		1		No	Vee	Vee	Vee	Ves	Ves
WF3	12	EGAMCMP0002 B BL	OWER	EG B AIR COMPRESSOR	Yes	No	Yes	No				No	Yes	Yes	Yes	Yes	Yes
				EG A AIR COMPRESSOR													
WF3	12	EGAMCMP0002 A BL	OWER	AZ	Yes	No	Yes	No				No	Yes	Yes	Yes	Yes	Yes

					Screen 1	Screen 2	Screen 3	n 3 Screen 4						Five	e Safety Fun	ctions	
							Maintaine				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T / H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	21	EGAMRCR0001 B ACCUMU		(AIR RECEIVER) EGA AIR RECEIVER B1	Yes	No	Yes	No		I		No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGAMRCR0001 A ACCUMU		(AIRECEIVER) EGA AIR RCVR A1	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGAMRCR0001 A ACCUMU		(AIRECEIVER) EGA AIR RCVR A1	Yes	No	Yes	No		I		No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGAMRCR0002 B ACCUMU		(AIR RECEIVER) EGA AIR RECEIVER B2	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGAMRCR0002 A ACCUMU		AIR RECEIVER) EGA	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	18	EGCILS1980 B IBISSW		STANDPIPE LEVEL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	18	EGFILT6903 B IXMITR			Yes	No	Yes	No	Yes	0	н	No	Yes	Yes	Yes	Yes	Yes
WF3	18	EGFILT6903 A IXMITR		LVL TRANSMITTER	Yes	No	Yes	No	Yes	0	н	No	Yes	Yes	Yes	Yes	Yes
WF3	5	EGFMPMP0001 B PUMP		PUMP B	Yes	No	Yes	No	Yes	0	Н	No	Yes	Yes	Yes	Yes	Yes
WF3	5	EGFMPMP0001 A PUMP		PUMP A FUEL OIL STORAGE	Yes	No	Yes	No	Yes	0	н	No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGFMTNK0001 B ACCUMU		TANK B FUEL OIL STORAGE	Yes	No	Yes	No	Yes	0	Н	No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGFMTNK0001 A ACCUMU		TANK A EDG B FUEL OIL FEED	Yes	No	Yes	No	Yes	0	н	No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGFMTNK0002 B ACCUMU		TANK EDG A FUEL OIL FEED	Yes	No	Yes	No	Yes	0	Н	No	Yes	Yes	Yes	Yes	Yes
WF3	21	EGFMTNK0002 A ACCUMU			Yes	No	Yes	No	Yes	0	Н	No	Yes	Yes	Yes	Yes	Yes
WE2	20	ESFECTION B PANEL			Yes	NO	Yes	NO	Yes	1		NO No				Yes	
WIS	20			FEEDWATER TO EFW HEADER B PRESSURIZING CHECK	163		165		105							163	
WF3	0	FW MVAAA1763 B VALVE		VALVE	Yes	No	Yes	No	Yes	0	Н	No		Yes			
WF3	8	FW MVAAA179 B VALVE		BLOWDOWN ISOLATION	Yes	No	Yes	No	Yes	0	н	No		Yes			
WF3	8	FW MVAAA179 A VALVE		BLOWDOWN ISOLATION	Yes	No	Yes	No	Yes	0	н	No		Yes			
WF3	7	FW MVAAA184 B VALVE		ISOLATION	Yes	No	Yes	Y	Yes	0	н	No					Yes
WF3	7	FW MVAAA184 A VALVE		SG 1 MAIN FEEDWATER ISOLATION	Yes	No	Yes	Y	Yes	0	н	No					Yes
WF3	7	GWMMVAAA104 VALVE		CONTAINMENT VENT HEADER INSIDE CONTAINMENT ISOL	Yes	No	Yes	No	Yes	I	Т/Н	No					Yes
WF3	8	HRAISV0101 B VALVE		AREA HRA B SAMPLE ISOLATION	Yes	No	Yes	No	Yes	I	T/H	No					Yes
\//E2	Ω			AREA HRA A SAMPLE	Voc	No	Voc	No	Vac	1	т/Ц	No					Voc
VVF3	0				165		165		165		1/11						105
WF3	8	HRAISV0109 B VALVE			Yes	No	Yes	No	Yes	1	T/H	No					Yes
\A/E2	0			HEADER A INSIDE	Vac	No	Vaa	No	Vaa		т/Ц	No					Vee
VVF3	0			HRA CNTMT SAMPLE	165		165		165		1/11						105
WF3	8	HRAISV0110 B VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	1		No					Yes

					Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fun	ctions	
							Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
				HRA CNTMT SAMPLE													
WF3	8	HRAISVO110 A VALVE		CONTAINMENT	Yes	No	Yes	No	Yes			No					Yes
	Ŭ			HRA CONTAINMENT	100	110	100		100								100
14/50				SAMPLE RETURN													
WF3	8	HRAISVU126 B VALVE		HEADER BISOLATION HRA CONTAINMENT	Yes	NO	Yes	NO	Yes	I		NO					Yes
				SAMPLE RETURN													
WF3	8	HRAISV0126 A VALVE		HEADER A ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
				ANNULUS DOME AREA													
WF3	8	HRAISV0201 B VALVE		ISOLATION	Yes	No	Yes	No	Yes	I		No					Yes
				ANNULUS DOME AREA													
WF3	8	HRAISV0201 A VALVE		HRA A SAMPLE	Yes	No	Yes	No	Yes	1		No					Yes
	0			HRA ANNULUS SAMPLE	100	110	100		100								100
14/50				RETURN HEADER B													
WF3	8	HRAISV0202 B VALVE		HRA ANNULUS SAMPLE	Yes	NO	Yes	NO	Yes	I		NO					Yes
				RETURN HEADER A													
WF3	8	HRAISV0202 A VALVE		ISOLATION	Yes	No	Yes	No	Yes	1		No					Yes
				CNIMI AIMOS GRAB													
WF3	8	HRAISV2011 VALVE		SAMPLE HDR B STOP	Yes	No	Yes	No	Yes	I		No					Yes
				HRA SAMPLE HDR B TO													
WF3	8	HRAISV20121 VALVE		SAMPLER STOP	Yes	No	Yes	No	Yes	1		No					Yes
	0			CONTROL ROOM AIR	100	110	100		100								100
WF3	9	HVCMAHU0001 A BLOWER		HANDLING UNIT AH-12A	Yes	No	Yes		Yes	I		No	Yes	Yes	Yes	Yes	Yes
WE3	10			FILTRATION UNIT A	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
				CONTROL ROOM HVAC			100			•					100		
	10			ROOM AIR HANDLING	Vaa	Na	Vee	Na	Vee			Nia	Maa	N	Maa	Vaa	Vaa
VVF3	10	HVCMAHU0013 B BLOWER			Yes	NO	Yes	NO	Yes	I		NO	Yes	res	Yes	Yes	Yes
				ROOM AIR HANDLING													
WF3	10	HVCMAHU0013 A BLOWER		UNIT AH-26A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	9	HVCMFAN0002 B BLOWER		HANDLING UNIT B	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
	Ŭ			CONTROL ROOM EMER													
WF3	9	HVCMFAN0010 B BLOWER		FILTRATION UNIT B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				NORMAL OAL													
				DOWNSTREAM													
WF3	7	HVCMVAAA101 VALVE		ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	HVCMVAAA102 VALVE		ISOLATION	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	7	HVCMVAAA103 B VALVF		ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
			1	CONTROL ROOM AIR							1						
	-			HANDLING UNIT A INLET	Vaa	No	Vaa	No	Vaa			No	Vac	Vee	Vac	Vaa	Vaa
VVF3	/			CONTROL ROOM AIR	res		res	INO	res			INO	res	res	res	res	res
				HANDLING UNIT B													
WF3	7	HVCMVAAA105 B VALVE			Yes	No	Yes	No	Yes	l		No	Yes	Yes	Yes	Yes	Yes
				HANDLING UNIT A													
WF3	7	HVCMVAAA105 A VALVE		RECIRC DAMPER	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes

					Screen 1	Screen 2	Screen 3 Screen 4				Five	e Safety Fund	ctions				
							Maintaina				Environment	?					
	SQUG		SSEL	Equipment		Undergoes	waintains				I		Beester	Reactor	Reactor	Deserv	
Unit	Equip	Current Equipment ID	Equipment	Equipment	Seiemie	Regular	at least	Banlaged 2	IDEEE	Inside	High Temp		Reactor	Coolant	Coolant	Decay	Containment
	Type		ÍD	Description	Seismic	Configuration	one of the	Replaced?	IPEEE			Borated	Reactivity	Pressure	Inventory	Heat	Function
						Inspections?	5 Safety			Outside	Humidity?	System?	Control	Control	Control	Removal	
							Functions			(1/0)	(1/H)						
				CR EMERG FLTR UNIT													
				NORTH OAI UPSTREAM													
WF3	8	HVCMVAAA201 B VA	ALVE	ISOLATION	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				CR EMERG FLTR UNIT													
				NORTH OAI UPSTREAM													
WF3	8	HVCMVAAA201 A VA	ALVE	ISOLATION	Yes	No	Yes	No	Yes		-	No	Yes	Yes	Yes	Yes	Yes
WF3	8			ISOLATION	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
	0			CR EMERG ELTR UNIT	100	110	100	110	100				100	100	100	100	100
				NORTH OAI													
				DOWNSTREAM													
WF3	8	HVCMVAAA202 A VA	ALVE	ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				CR EMERG FLTR UNIT													
				SOUTH OAI UPSTREAM													
WF3	8	HVCMVAAA203 A VA	ALVE	ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				CR EMERG FLTR UNIT													
				SOUTH OAT													
W/E2	0				Voo	No	Vaa	No	Vaa			No	Voo	Vee	Voo	Vee	Voo
VVI 3	0				165	INU	165	INU	165			NO	165	165	165	165	165
				EMERG ELTR B INI ET													
WF3	7	HVCMVAAA205 B VA	ALVE	DAMPER	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				CONTROL ROOM													
				EMERG FLTR A INLET													
WF3	7	HVCMVAAA205 A VA	ALVE	DAMPER	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
				CONTROL RM TOILET													
	-			EXH FAN BYPASS	N/								N/				
WF3	1	HVCMVAAA304 B VA	ALVE		Yes	NO	Yes	NO	Yes			NO	Yes	Yes	Yes	Yes	Yes
WF3	7			DAMPER	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
1110					103		103	110	103				103	103	103	103	103
				EXH FAN UPSTREAM													
WF3	7	HVCMVAAA306 VA	ALVE	EXHAUST DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				CONTROL RM TOILET													
				EXH FAN DNSTREAM													
WF3	7	HVCMVAAA307 VA	ALVE	EXHAUST DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				KITCHEN/CONFERENCE													
	-			KM EXH FAN UPSTREAM	V	Nia	Vee	Nie	V			NIE	Ver	Ver	Vaa	Vaa	Vaa
VVF3	1				res	INO	res	INO	res			INO	res	res	res	res	res
WF3	7	HVCMVAAA314	ALVE	DOWNSTREAM ISOL	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
	· ·	······································		DIESEL GENERATOR							1		. 55	. 35			
				ROOM B INTK DAMPER	1						1						
WF3	8	HVRISV0501 B ICI	NTRL	SOLENOID VLV	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	8	HVRISV0501 A4 ICI	NTRL	SV FOR HVR-501A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	HVRISV0501 A3 ICI	NTRL	SV FOR HVR-501A	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	8	HVRISV0501 A2 ICI	NTRL	SV FOR HVR-501A	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	8	HVRISV0501 A1 ICI	NTRL	SV FOR HVR-501A	Yes	No	Yes	No	Yes		l	No	Yes	Yes	Yes	Yes	Yes
	40			CONTROLLED VENT	Vac	Nia	Vee	Nia	Var			Nia					Vaa
VVF3	10		JWER		res	INO	res	INO	res			INO					res
\ \ /⊑2	10		WER		Vac	No	Vac	No	Var	1		No	Vec	Vec	Vac	Vec	Vee
VVFJ	10				165	UVI	162	UVI	162		1	NU	1 65	162	165	162	165
WF3	10	HVRMAHU0022 A BLC	OWER	HNDLG UNIT AH-13A	Yes	No	Yes	No	Yes	1	1	No	Yes	Yes	Yes	Yes	Yes
				CCW HX ROOM B AIR							1						
WF3	10	HVRMAHU0026 B BLC	OWER	HANDLING UNIT AH-24B	Yes	No	Yes	No	Yes	1		No				Yes	

					Screen 1	Screen 2	Screen 3		Screen 4					Fiv	e Safety Fun	ctions	
							Malutalua				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	10			CCW HX ROOM A AIR	Ves	No	Ves	No	Ves			No				Ves	
WF0	10			CCW PUMP ROOM B AIR	Vee	No	Vee	Ne	Yee			No				Vee	
VVF3	10	HVRMAHUUU28 B BEOWER		CCW PUMP ROOM A AIR	res	NO	Yes	INO	res	1		INO				res	
WF3	10	HVRMAHU0028 A BLOWER		HANDLING UNIT AH-10A SHUTDOWN COOLING	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	10	HVRMAHU0032 B BLOWER		HX B AIR HANDLING UNIT AH-3B	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	10	HVRMAHU0032 A BLOWER		HX A AIR HANDLING UNIT AH-3A	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	10	HVRMAHU0034 B BLOWER		SAFEGUARDS ROOM B AIR HANDLING UNIT AH- 2B	Yes	No	Yes	No	Yes			No				Yes	
	10			SAFEGUARDS ROOM A AIR HANDLING UNIT AH-													
WF3	10	HVRMAHU0034 A BLOWER		2A SAFEGUARDS ROOM B	Yes	No	Yes	NO	Yes			No				Yes	
WF3	10	HVRMAHU0036 B BLOWER		AIR HANDLING UNIT AH- 2D	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	10	HVRMAHU0036 A BLOWER		AIR HANDLING UNIT AH- 2C	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	10	HVRMAHU0038 B BLOWER		EFW PUMP ROOM B AIR HANDLING UNIT AH-17B	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	10	HVRMAHU0038 A BLOWER		EFW PUMP ROOM A AIR HANDLING UNIT AH-17A	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	10			CHARGING PUMP ROOM B AIR HANDLING UNIT	Yes	No	Yes	No	Yes			No				Yes	
				CHARGING PUMP ROOM A AIR HANDLING UNIT													
WF3	10	HVRMAHU0040 A BLOWER		AH-18A CONTROLLED VENT	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	9	HVRMFAN0021 B BLOWER		AREA SYS B EXHAUST FAN E-23(3B-SB)	Yes	No	Yes	No	Yes	I		No					Yes
WF3	9	HVRMFAN0024 B BLOWER		RAB+46 HVAC ROOM EXHAUST FAN E-41B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	9	HVRMFAN0024 A BLOWER		RAB+46 HVAC ROOM EXHAUST FAN E-41A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	9	HVRMFAN0025 B BLOWER		FAN E-28B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	9	HVRMFAN0025 A BLOWER		EDG ROOM A EXHAUST FAN E-28A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	HVRMVAAA104 VALVE		TO RB-4 UPSTREAM	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7			RAB NORMAL SUPPLY TO RB-4 DOWNSTREAM	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
101.0	,			RAB NORMAL SUPPLY TO CVAS UPSTREAM	163		103		165				163	163	163	163	100
WF3	7	HVRMVAAA106 VALVE		ISOLATION RAB NORMAL SUPPLY	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	HVRMVAAA107 VALVE		TO CVAS DOWNSTREAM	Yes	No	Yes	No	Yes	I		No					Yes
				CVAS AREAS TO RAB NORMAL EXHAUST													
WF3	7	HVRMVAAA108 VALVE		UPSTREAM ISOL	Yes	No	Yes	No	Yes	I		No					Yes

					Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fun	ctions	
							Maintains				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
				CVAS AREAS TO RAB													
WF3	7	HVRMVAAA109 VALV	/E	DOWNSTREAM ISOL	Yes	No	Yes	No	Yes	I		No					Yes
				CCW HX RM A PIPE													
WF3	7	HVRMVAAA110 VALV	/E	EXH UPSTRM ISOL	Yes	No	Yes	No	Yes	1		No				Yes	
			-	CCW HX RM A PIPE													
WF3	7	HVRMVAAA111 VAL	/F	EXH DNSTRM ISOI	Yes	No	Yes	No	Yes	1		No				Yes	
				CVAS AREAS EXHAUST													
WE3	7		/E	TO CVAS FILTER TRAIN	Ves	No	Ves	No	Ves			No					Ves
	,			CVAS AREAS EXHAUST	100	110	100		100			110					100
W/E3	7		/=	TO CVAS FILTER TRAIN	Ves	No	Ves	No	Ves	1		No					Vec
W13	/			CVAS FILTER TRAIN B	163	110	163	NO	163	1		NO					163
WF3	7	HVRMVAAA303 B VALV	/E	MINIMUM FLOW INLET	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	HVRMVAAA303 A VALV	/E	MINIMUM FLOW INLET	Yes	No	Yes	No	Yes	I		No					Yes
WE3	8		/=	CVAS FILTER TRAIN B	Ves	No	Yes	No	Ves	1		No					Ves
	0			CVAS FILTER TRAIN A	103	110	103		103			NO					103
WF3	8	HVRMVAAA304 A VALV	/E	INLET CVAS FXHAUST FAN B	Yes	No	Yes	No	Yes	l		No					Yes
WF3	8	HVRMVAAA313 B VALV	/E		Yes	No	Yes	No	Yes	I		No					Yes
WF3	8	HVRMVAAA313 A VALV	/E	SUCTION	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	HVRMVAAA403 B VALV	/E	RCA HVAC ROOM AHU B	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
\W/E3	7			RCA HVAC ROOM AHU A	Ves	No	Ves	No	Ves	1		No	Ves	Vec	Vec	Ves	Ves
	,			EG B ROOM OUTSIDE	103	110	103		103			NO	103	103	103	103	163
WF3	7	HVRMVAAA501 B VALV	/E	AIR INTAKE DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	HVRMVAAA501 A VALV	/E	AIR INTAKE DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				FAN VARIABLE PITCH													
WF3	7	HVRMVAAA502 B VALV	/E	BLADE	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				FAN VARIABLE PITCH													
WF3	7	HVRMVAAA502 A VALV	/E	BLADE	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				CONTAINMENT @ PEN													
WF3	7	IA MVAAA909 VAL	/E		Yes	No	Yes	No	Yes	1		No	Voc	Vos	Voc	Voc	Yes
WF3	20	IC EAUX2 PAN	EL	AUXILIARY PANEL 2(SB)	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	20	IC ECP01 PAN	=1	TURBINE CONTROL	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
				REACTOR CONTROL		1.0					1						100
WF3	20	IC ECP02 PAN		PANEL CP2	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes		
WF3	20	IC ECP04 PAN			Yes	No	Yes	No	Yes	I		No	Yes		Yes		
WF3	20	IC ECP06 PAN	EL	PANEL	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				REACTOR PROTECTION													
WF3	20	IC ECP07 PAN	EL	FEATURE	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	
WF3	20	IC ECP08 PAN	EL	PANEL CP8	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	

						Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fund	ctions	
								Maintaine				Environment	?					
Unit	SQUG Fauin	Current Ec	uinment ID	SSEL	Equipment		Undergoes Regular	at least			Inside	High Temp		Reactor	Reactor Coolant	Reactor Coolant	Decay	Containment
•	Type			ID	Description	Seismic	Configuration	one of the	Replaced?	IPEEE	/ Outside	/	Borated	Reactivity	Pressure	Inventory	Heat	Function
							Inspections?	5 Safety			(I/O)	(T/H)	System?	Control	Control	Control	Removal	
								Tunctions			(()						
					PLANT PROTECTION													
WF3	20	IC ECP10	PANEL		PANEL	Yes	No	Yes	No	Yes	I		No	Yes				
					HVAC, CONTAINMENT													
W/E3	20	IC ECP18	ΡΔΝΕΙ		ISOLATION CONTROL	Ves	No	Yes	No	Ves			No					Ves
	20	10 201 10			CORE PROTECTION	100	110	100		100			110					100
WF3	20	IC ECP22	PANEL		CALCULATORS	Yes	No	Yes	No	Yes	I		No	Yes				
					CONTROL PROTECTIVE													
WF3	20	IC ECP25	PANEL		CHANNEL A	Yes	No	Yes	No	Yes	1		No	Yes				
					PROCESS ANALOG													
WF3	20	IC ECP26	PANEL		CHANNEL B	Yes	No	Yes	No	Yes	I		No	Yes				
					PROCESS ANALOG													
W/E3	20		DANEI		CONTROL PROTECTIVE	Ves	No	Ves	No	Ves			No	Ves				
VVI 5	20	10 201 21	TANEL		PROCESS ANALOG	163	NO	163	NO	163	1		NO	163				
					CONTROL PROTECTIVE			Ň										
WF3	20	IC ECP28	PANEL		CHANNEL D COOLING TOWERS	Yes	NO	Yes	NO	Yes	I		NO	Yes				
WF3	20	IC ECP33	PANEL		CONTROL PANEL	Yes	No	Yes	No	Yes	I		No				Yes	
	20				PROCESS ANALOG	Maa	Na	Vee	Na	Vee			Na	Vee	Maa	Vaa	Vaa	Vaa
VVF3	20	IC ECP41	PANEL		PROCESS ANALOG	res	INO	res	NO	res	I		NO	res	res	res	res	res
WF3	20	IC ECP42	PANEL		CONTROL TRAIN A BOP	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
					PROCESS ANALOG													
WF3	20	IC ECP43	PANEL		BOP	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
					PROCESS ANALOG													X
WF3	20	IC ECP44	PANEL		CONTROL TRAIN B BOP	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	20	IC ECP45	PANEL		CONTROL TRAIN B BOP	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
	00				PROCESS ANALOG	N/s s	Nia	N/s s	Nia	Maa			NI	N/s s	Ma a	N	N/s s	No.
WF3	20	IC ECP48	PANEL		PROCESS ANALOG	Yes	NO	Yes	NO	Yes	I		NO	Yes	Yes	Yes	Yes	Yes
WF3	20	IC ECP49	PANEL		CONTROL TRAIN B BOP	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WE2	20		DANEL			Vaa	No	Vaa	Na	Vaa			No	Yee	Vee	Vaa	Vaa	Vaa
WF3	20	IC ELCP61	PANEL		LOCAL CONTROL PANEL	tes	NO	tes	NO	res	I		NO	res	tes	res	res	res
WF3	20	IC ELCP62	PANEL		PAC LCP-62	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	20	IC EPNLISOL	1 PANEL		ISOLATION PANEL	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	18	IC ICDC1	D PANEL		C-1D	Yes	No	Yes	No	Yes	I	T/H	No		Yes		Yes	
					INSTRUMENT CABINET						_							
WF3	18	IC ICDC1	C PANEL		C-1C	Yes	No	Yes	No	Yes	I	Т/Н	No		Yes		Yes	
WF3	18	IC ICDC10	PANEL		C-10	Yes	No	Yes	No	Yes	I	T/H	No				Yes	
14/50	40				INSTRUMENT CABINET													X
WF3	18	IC ICDC11	B PANEL		C-11B	Yes	No	Yes	NO	Yes	I		NO					Yes
WF3	20	IC ICDC11	A PANEL		C-11A	Yes	No	Yes	No	Yes	1		No			Yes		Yes
WE2	10		DANE		INSTRUMENT CABINET	Vac	No	Vee	No	Vee			No					Vcc
VVF3	10		PANEL		INSTRUMENT CABINET	Tes	INO	Tes	INO	Tes			INO					Tes
WF3	18	IC ICDC2	B PANEL		C-2B	Yes	No	Yes	No	Yes	I	T/H	No					Yes
\ \ /⊑2	18					Voc	No	Voc	No	Voc		Т/Ц	No					Vos
VVI'3	10	10 10002			INSTRUMENT CABINET	100		163		105			NU					100
WF3	18	IC ICDC23	PANEL		C-23	Yes	No	Yes	No	Yes	I		No				Yes	

						Screen 1	Screen 2	Screen 3			Screen 4				Fiv	e Safety Fund	ctions	
												Environment	?					
Unit	SQUG Equip Type	Current Equipm	nent ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/ O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	18	IC ICDC26 B	PANEL		INSTRUMENT CABINET C-26B	Yes	No	Yes	No	Yes	I		No				Yes	Yes
WF3	20		PANEI		INSTRUMENT CABINET	Yes	No	Yes	No	Yes	1		No				Yes	Yes
WE2	10		DANEL		INSTRUMENT CABINET	Voo	Na	Voo	No	Voo			No				Voo	100
	10				INSTRUMENT CABINET	Yes	No	Yee	No.	Yes			No				165	No.
VVF3	20	ICICDC35 A	PANEL		INSTRUMENT CABINET	Yes	NO	Yes	NO	Yes	I		NO					Yes
WF3	18	IC ICDC39	PANEL		C-39 INSTRUMENT CABINET	Yes	No	Yes	No	Yes			No				Yes	
WF3	18	IC ICDC40	PANEL		C-40 INSTRUMENT CABINET	Yes	No	Yes	No	Yes	I		No				Yes	
WF3	18	IC ICDC7	PANEL		C-7	Yes	No	Yes	No	Yes	I	T/H	No				Yes	
WF3	18	IC ICDC8	PANEL		C-8	Yes	No	Yes	No	Yes	I	T/H	No				Yes	
WF3	18	IC ICDC9	PANEL		C-9	Yes	No	Yes	No	Yes	I	T/H	No				Yes	
WF3	4	ID EMTA	TRANSF		ISOLIMITER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	4	ID EMTB	TRANSF		BYPASS TRANSFORMER ISOLIMITER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	4	ID EMTMA B	TRANSF		SUPS INVERTER MA AC INPUT MAIN TRANSFORMER	Yes	No	Yes	No	Yes	1		No	Yes				
WF3	4	ID EMTMB B	TRANSF		SUPS INVERTER MB AC INPUT MAIN TRANSFORMER	Yes	No	Yes	No	Yes	I		No	Yes				
			75 1105		SUPS INVERTER MC AC													
WF3	4	ID EMTMC B	TRANSF		SUPS INVERTER MD AC	Yes	No	Yes	No	Yes	1		No	Yes				
WF3	4	ID EMTMD B	TRANSF		TRANSFORMER	Yes	No	Yes	No	Yes	1		No	Yes				
WF3	14	ID EPDP90A	PANEL		PDP 90A SUPS A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	14	ID EPDP91B	PANEL		PDP 91B SUPS B	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
W/E2	14				PDP MA NUCLEAR INST	Voo	No	Voo	No	Voo			No	Vee				
WE3	14				PDP MB NUCLEAR INST	Vos	No	Vos	No	Voc			No	Voc				
WE2	14				PDP MC NUCLEAR INST	Vac	No	Vac	No	Vac			No	Vac				
VVF3	14		PANEL		PDP MD NUCLEAR INST	Tes No.	No	Tes Na a	No	Tes No. 4			No	Tes No.				
WF3	14		PANEL		FOR 2MS-V602A, MS	Yes	NO	Yes	NO	Yes	I		NO	Yes				
WF3	20	LCP-82A			ISOL VALVE	Yes	No	Yes		Yes	0	H	No	l	Yes	l		Yes
	20				LCP-83A FOR 2MS-V604B	Yes	NO	Yes		Yes	0	H	NO		Yes			Yes
WES	20	LOS L-4 ((3A-3A)			LCS E-41(3R-SR)	Yee	No	T CS Yee	+	Yee	0	н	No					
1113	20	LOC CNTL STA			LOC CNTL STA for AH-	103	UVI	100	+	163								
WF3	20	for AH-25(3B-SB)			25(3B-SB)	Yes	No	Yes		Yes	I		No					
WF3	20	2MS-V604B			V604B	Yes	No	Yes		Yes	0	н	No		Yes			Yes
WF3	14	LVDEPDP94A	PANEL		PDP 94A	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	14	LVDEPDP95B	PANEL		PDP 95B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	0	MS MVAAA106 B	VALVE		SAFETY #1	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	0	MS MVAAA106 A	VALVE		MAIN STEAM LINE 1 SAFETY #1	Yes	No	Yes	No	Yes	о	н	No				Yes	

					Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fund	ctions	
							Maintaine				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	0	MS MVAAA108 B VALVE		MAIN STEAM LINE 2 SAFETY #2	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	0	MS MVAAA108 A VALVE		MAIN STEAM LINE 1 SAFETY #2	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA110 B VALVE		MAIN STEAM LINE 2 SAFETY #3	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA110 A VALVE		MAIN STEAM LINE 1 SAFETY #3	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA112 B VALVE		MAIN STEAM LINE 2 SAFETY #4	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA112 A VALVE		MAIN STEAM LINE 1 SAFETY #4	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA113 B VALVE		MAIN STEAM LINE 2 SAFETY #5	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA113 A VALVE		MAIN STEAM LINE 1 SAFETY #5	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA114 B VALVE		MAIN STEAM LINE 2 SAFETY #6	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA114 A VALVE		MAIN STEAM LINE 1 SAFETY #6	Yes	No	Yes	No	Yes	0	н	No				Yes	
WF3	7	MS MVAAA116 B VALVE		STEAM GENERATOR 2 ATMOSPHERE DUMP VALVE	Yes	No	Yes	Yes	Yes	0	н	No				Yes	
WF3	7	MS MVAAA116 A VALVE		STEAM GENERATOR 1 ATMOSPHERE DUMP VALVE	Yes	No	Yes	Yes	Yes	ο	н	No				Yes	
WF3	8	MS MVAAA119 B VALVE		MSIV 2 UPSTREAM DRIP POT STARTUP DRAIN	Yes	No	Yes	No	Yes	0	н	No					Yes
WF3	8	MS MVAAA119 A VALVE		MSIV 1 UPSTREAM DRIP POT STARTUP DRAIN	Yes	No	Yes	No	Yes	0	Н	No					Yes
WF3	8	MS MVAAA120 B VALVE		MSIV 2 UPSTREAM DRIP POT NORMAL DRAIN	Yes	No	Yes	No	Yes	ο	н	No					Yes
WF3	8	MS MVAAA120 A VALVE		MSIV 1 UPSTREAM DRIP POT NORMAL DRAIN	Yes	No	Yes	No	Yes	o	н	No					Yes
WF3	7	MS MVAAA124 B VALVE		MAIN STEAM ISOLATION VALVE 2	Yes	No	Yes	No	Yes	o	н	No		Yes			Yes
WF3	7	MS MVAAA124 A VALVE		MAIN STEAM ISOLATION VALVE 1	Yes	No	Yes	No	Yes	0	н	No		Yes			Yes
	•			EFW PUMP AB TURBINE STEAM SUPPLY FROM													
WF3	8	MS MVAAA401 B VALVE		S/G 2 EFW PUMP AB TURBINE	Yes	No	Yes	No	Yes	0	H	No		Yes		Yes	Yes
WF3	8	MS MVAAA401 A VALVE		STEAM SUPPLY FROM S/G 1	Yes	No	Yes	No	Yes	o	н	No		Yes		Yes	Yes
	10			NITROGEN HEADER 1 PRESS INDICATING	Vaa	Na	Vee	No	Vee			Na					Vec
VVF3	٦ð	ING IPISU94U A IBISSW		NITROGEN HEADER 2	res	INO	res	INO	res			NO					Yes
WF3	18	NG IPIS0941 B IBISSW		SWITCH	Yes	No	Yes	No	Yes	1		No					Yes
\\/E2	10			PRESS INDICATING	Vac	No	Vaa	No	Voo			No					Vee
	10			NITROGEN HEADER 4	165	UVI	165		162								165
WF3	18	NG IPIS0943 B IBISSW		SWITCH	Yes	No	Yes	No	Yes	1		No					Yes
W/F3	18			PRESS INDICATING	Yes	No	Yes	No	Yee	0	н	No					Yes
1110	10			0001001	103		163	110	100		1 1 1	110					100

						Screen 1	Screen 2	Screen 3		Screen 4					Fiv	e Safety Fun	ctions	
								Maintaine				Environment	?					
Unit	SQUG Equip Type	Current Equi	pment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
					NITROGEN HEADER 6													
WF3	18	NG IPIS0945	B IBISSW		SWITCH	Yes	No	Yes	No	Yes	о	н	No					Yes
					NITROGEN HEADER 8 PRESS INDICATING													
WF3	18	NG IPIS0947	B IBISSW		SWITCH	Yes	No	Yes	No	Yes	0	Н	No					Yes
					ACCUMULATOR #1													
WF3	8	NG ISV0609	VALVE		OUTLET STOP	Yes	No	Yes	No	Yes	1		No					Yes
					NITROGEN													
WF3	8	NG ISV0610	VALVE		OUTLET STOP	Yes	No	Yes	No	Yes	I		No					Yes
					NITROGEN													
WF3	8	NG ISV0709	VALVE		OUTLET STOP	Yes	No	Yes	No	Yes	1		No					Yes
					NITROGEN													
WF3	8	NG ISV0710	VAI VE		ACCUMULATOR #4	Yes	No	Yes	No	Yes	1		No					Yes
					NITROGEN													
WE3	8	NG ISV0809			ACCUMULATOR #5	Vas	No	Ves	No	Vos	0	ц	No					Ves
	0	10100000			NITROGEN	103		103		103	Ŭ							103
WF3	8	NG ISV0810	VALVE		ACCUMULATOR #6 OUTLET STOP	Yes	No	Yes	No	Yes	0	н	No					Yes
					NITROGEN													
WF3	8	NG ISV0909	VALVE		OUTLET STOP	Yes	No	Yes	No	Yes	0	Н	No					Yes
WF3	8	NG ISV0910	VALVE		OUTLET STOP	Yes	No	Yes	No	Yes	0	н	No					Yes
					NITROGEN													
WF3	21	NG MACC0001	ACCUMU		ACCUMULATOR #1	Yes	No	Yes	NO	Yes			No					Yes
WF3	21	NG MACC0002	ACCUMU		ACCUMULATOR #2	Yes	No	Yes	No	Yes	I		No					Yes
WF3	21	NG MACC0003	ACCUMU		NITROGEN ACCUMULATOR #3	Yes	No	Yes	No	Yes	- I		No					Yes
			Account		NITROGEN	100		100		100								100
WF3	21	NG MACC0004	ACCUMU		ACCUMULATOR #4	Yes	No	Yes	No	Yes			No					Yes
WF3	21	NG MACC0005	ACCUMU		ACCUMULATOR #5	Yes	No	Yes	No	Yes	0	н	No					Yes
	24					Vaa	No	Vaa	No	Vaa	0	Ц	No					Vac
VVF3	21	NG MACCUUU6	ACCUMU		NITROGEN	res	INO	res	INO	res	0	н	INO					res
WF3	21	NG MACC0007	ACCUMU		ACCUMULATOR #7	Yes	No	Yes	No	Yes	0	Н	No					Yes
WF3	21	NG MACC0008	ACCUMU		NITROGEN ACCUMULATOR #8	Yes	No	Yes	No	Yes	0	н	No					Yes
					CONTAINMENT NG						Ť							
\ \ /⊑2	7		\/AL\/E		SUPPLY OUTSIDE	Voc	No	Voc	No	Voc			No					Voc
VVF3	(NG WIVAAA 197	VALVE		PROCESS ANALOG	162		162	INU	162			INU					165
	22				CONTROL POWER	V	N -	N	N	N			N -	V	¥	V	V	No.
VVF3	20	PACEPNL	C PANEL		RCS HOT LEG #1	Yes	NO	Yes	NO	Yes			NO	Yes	Yes	Yes	Yes	Yes
					SAMPLE INSIDE													
WF3	7	PSLMVAAA105	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes		T/H	Yes					Yes
					SAMPLE OUTSIDE													
WF3	7	PSLMVAAA107	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	I		Yes					Yes
					SAMPLE INSIDE													
WF3	7	PSLMVAAA203	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	1	T/H	Yes					Yes

						Screen 1	Screen 2	Screen 3			Screen 4				Fiv	e Safety Fund	ctions	
								Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipmen	it ID E	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/ O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
					PZR SURGE LINE													
					SAMPLE OUTSIDE													
WF3	7	PSLMVAAA204	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	I		Yes					Yes
					SAMPLE INSIDE													
WF3	7	PSLMVAAA303	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	1	T/H	Yes					Yes
					PZR STEAM SPACE													
WF3	7	PSLMVAAA304	VALVE		CONTAINMENT ISOL	Yes	No	Yes	No	Yes	I		Yes					Yes
					REACTOR COOLANT													
W/E3	18				LOOP 2 HOT LEG	Ves	No	Ves	No	Ves		т/н	No		Ves			
VVI 5	10				REACTOR COOLANT	163	110	163	NO	163	I	1711	NO		163			
					LOOP 1 HOT LEG													
WF3	18	RC IPT0106 A	IXMITR			Yes	No	Yes	No	Yes	I	T/H	No		Yes			
					PRESSURE WIDE													
WF3	18	RC IPT9120 B	IXMITR		RANGE RCS PRESSURE	Yes	No	Yes	No	Yes	I	T/H	No		Yes			
WF3	18	RC IPT9120 A	IXMITR		RANGE RCS PRESSURE	Yes	No	Yes	No	Yes	I	T/H	No		Yes			
					REACTOR VESSEL VENT													
WE3	8	RC ISV1014			TO QUENCH TANK	Vas	No	Vas	No	Yes		т/н	Ves				Ves	
1110	0		VALVE		REACTOR VESSEL VENT	103	No	163	No	163	•	.,	103				163	
	•	DO 101/1015			TO QUENCH TANK			N/				- / 1 1					Ň	
WF3	8	RC ISV1015	VALVE		ISOLATION REACTOR/PRESSURIZE	Yes	No	Yes	No	Yes	I	I/H	Yes				Yes	
					R VENTS TO QUENCH													
WF3	8	RC ISV1017	VALVE		TANK HDR ISOL	Yes	No	Yes	No	Yes	I	T/H	Yes				Yes	
WF3	8	RC ISV3183			OUENCH TANK	Yes	No	Yes	No	Yes	1	т/н	Yes		Yes			
	0				PRESSURIZER VENT TO	100	110	100	110	100			100		100			
WF3	8	RC ISV3184	VALVE			Yes	No	Yes	No	Yes	I	T/H	Yes		Yes			
					R VENT TO QUENCH													
WF3	8	RC ISV3186	VALVE		TANK ISOLATION	Yes	No	Yes	No	Yes	I	T/H	Yes		Yes			
					REACTOR COOLANT													
WF3	19	RC ITE0112 HB1	IXMITR		TEMPERATURE	Yes	No	Yes	No	Yes	I	T/H	No		Yes			
					REACTOR COOLANT													
WF3	19	RC ITE0112 HA1	IXMITR		LOOP 1 HOT LEG	Yes	No	Yes	No	Yes	1	т/н	No		Yes			
	10				REACTOR COOLANT	100	110	100	110	100		1711	110		100			
	10				LOOP 1B COLD LEG	Vee	No	Vee	No	Vee		T / 11	Na		Vaa			
VVF3	18	RUTTEUT1Z CB1	IXMITR		REACTOR COOLANT	Yes	NO	Yes	NO	res	I	I/H	NO		Yes			
					LOOP 2 HOT LEG													
WF3	19	RC ITE0122 HB1	IXMITR		TEMPERATURE	Yes	No	Yes	Yes	Yes	I	T/H	No		Yes			
					LOOP 2 HOT LEG													
WF3	19	RC ITE0122 HA1	IXMITR		TEMPERATURE	Yes	No	Yes	Yes	Yes	I	T/H	No		Yes			
					REACTOR COOLANT													
WF3	19	RC ITE0122 CA1	IXMITR		TEMPERATURE	Yes	No	Yes	No	Yes	1	Т/Н	No		Yes			
					RCP CONTROL													
\\/E2	7				BLEEDOFF INSIDE	Vaa	No	Vac	Vac	Voo		Т/Ц	Vee					Vee
VVFS	1		VALVE		WATER CHILLER	res	UVI	res	res	res		1/П	165					res
			-		COMPRESSOR													
WF3	20	RFRECP3311 3B	PANEL		CONTROL PANEL 3B	Yes	No	Yes	No	Yes			No				Yes	

						Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fund	ctions	
						-		Malutalua				Environment [*]	?			[
Unit	SQUG Equip Type	Current Eq	uipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T / H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
					WATER CHILLER													
WF3	20	RERECP3311	3A PANEI		COMPRESSOR	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	11	RFRMCHL0001	B HTEXCH		ESSENTIAL CHILLER B	Yes	No	Yes	No	Yes	1		No				Yes	
WF3	11	RFRMCHL0001	A HTEXCH		ESSENTIAL CHILLER A	Yes	No	Yes	No	Yes	I		No				Yes	
					SBV FILTER TRAIN B ELECTRIC HEATING													
WF3	20	SBVEEHC313B	5BL HEATER			Yes	No	Yes	Nia	Yes			No	Yes	Yes	Yes	Yes	Yes
	9	SBVIMFAN0001	B BLOWER			Yes	NO No	Yes	NO No	Yes	1		NO	Yes	Yes	Yes	Yes	Yes
VVFS	9	SEVIVIFAINUUUI	A BLOWER			res	INO	res	INO	res	I		INO	res	res	res	res	res
WF3	8	SBVMVAAA101	B VALVE		INLET ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	SBVMVAAA101	A VALVE		INLET ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
					SBV EXHAUST FAN B													
WF3	8	SBVMVAAA110	B VALVE		SUCTION ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	SBVMVAAA110	A VALVE		SUCTION ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	SBVMVAAA113	B VALVE		SBV EXHAUST FAN B RECIRC ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	SBVMVAAA113	A VALVE		SBV EXHAUST FAN A RECIRC ISOLATION	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
W/F2	0				SBV EXHAUST FAN B EXHAUST TO PLANT	Vee	Na	Yee	Na	Vee			Na	Vee	Vee	Vac	Maa	Vac
VVF3	ð	SBVIVIVAAAT14	B VALVE		STACK SBV EXHAUST FAN A	res	INO	res	INO	res			INO	res	res	res	res	res
WF3	8	SBVMVAAA114	A VALVE		STACK	Yes	No	Yes	No	No	I		No	Yes	Yes	Yes	Yes	Yes
					STEAM GENERATOR 1 LEVEL IXMITR (WIDE													
WF3	18	SG ILT1115	B IXMITR		RANGE) STEAM GENERATOR 1	Yes	No	Yes	No	Yes		T/H	No					Yes
WE3	18	SG II T1115			LEVEL IXMITR (WIDE	Vos	No	Vos	No	Vos		т/н	No					Vos
WI 5	10	301211113			STEAM GENERATOR 2	163	NO	163	NO	163	•	1711	NO					163
WF3	18	SG ILT1125	B IXMITR		LEVEL IXMITR (WIDE RANGE)	Yes	No	Yes	No	Yes	I	т/н	No					Yes
					STEAM GENERATOR 2													
WF3	18	SG ILT1125	A IXMITR		LEVEL IXMITR (WIDE RANGE)	Yes	No	Yes	No	Yes	I	T/H	No					Yes
					STEAM GENERATOR 1													
WF3	18	SG IPT1115	A IXMITR		PRESSURE	Yes	No	Yes	No	Yes		т/н	No					Yes
	10				STEAM GENERATOR 2	100	110	100	110	100			110					100
WF3	18	SG IPT1125	B IXMITR		TRANSMITTER	Yes	No	Yes	No	Yes	I	T/H	No					Yes
WF3	18	SI IFT1306	B IXMITR		RCS LOOP 1 SHDN LINE FLOW LOOP	Yes	No	Yes	No	Yes	1		No			Yes	Yes	
WF3	18	SUFT1307	A IXMITR		RCS LOOP 2 SHDN LINE	Yes	No	Yes	No	Yes	1		No			Yes	Yes	
	.0				LCL CNTRL SW FOR CNTRL VLV SI													
WF3	20	SI IHIS0225	B IBISSW		MVAAA225-B	Yes	No	Yes	No	Yes	I		No			Yes	Yes	
					LCL CNTRL SW FOR													
WF3	20	SI IHIS0225	A IBISSW		MVAAA225-A	Yes	No	Yes	No	Yes	1		No			Yes	Yes	
		-	· ·		LCL CNTRL SW FOR												· · · · ·	
	20				CNTRL VLV SI	Vac	No	Vec	No	Vac			No			Vac	Vac	
VVF3	∠0	SI ITISU220	D 18122M		IVI V AAAZZO-D	res	INO	res	INO	res	I	1	INO			res	res	

							Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fun	ctions	
									Maintains				Environment	?					
	SQUG	0			SSEL	Equipment		Undergoes	at least			Insido	High Temp		Reactor	Reactor	Reactor	Decav	
Unit	Equip	Current E	quipme	nt ID	Equipment	Description	Seismic	Configuration	one of the	Replaced?	IPEEE	/	/	Borated	Reactivity	Coolant	Coolant	Heat	Eunction
	Type							Inspections?	5 Safety			Outside	Humidity?	System?	Control	Control	Control	Removal	Function
								mopoonono	Functions			(1/0)	(T/H)			Control	Control		
						LCL CNTRL SW FOR													
	20		^			CNTRL VLV SI	Vaa	No	Vee	No	Vaa			No			Vee	Vee	
VVFS	20	5111150220	A	IDISSW		I CL CNTRL SW FOR	res	INU	res	INO	res			INO			res	res	
						CNTRL VLV SI													
WF3	20	SI IHIS0227	В	IBISSW		MVAAA227-B	Yes	No	Yes	No	Yes	I		No			Yes	Yes	
						CNTRL SW FOR													
WF3	20	SI IHIS0227	А	IBISSW		MVAAA227-A	Yes	No	Yes	No	Yes	I		No			Yes	Yes	
						LCL CNTRL SW FOR													
W/F3	20	SI 1HIS0228	в	IBISSW/		CNTRL VLV SI MVAAA228-B	Ves	No	Ves	No	Ves	1		No			Yes	Ves	
1110	20	0111100220	D	IBIOOW		LCL CNTRL SW FOR	103	i No	103		103			NO			103	103	
						CNTRL VLV SI													
WF3	20	SI IHIS0228	A	IBISSW			Yes	No	Yes	No	Yes			No			Yes	Yes	
						COOL RTN ISOL VLV													
						HYDRLC PRESS SW PMP													
WF3	18	SI IPS0405	В	IBISSW		SHUT-OFF/RE	Yes	No	Yes	Yes	Yes		T/H	No			Yes	Yes	
						COOL RTN ISOL VLV													
						HYDRLC PRESS SW PMP													
WF3	18	SI IPS0405	A	IBISSW		SHUT-OFF/RE	Yes	No	Yes	No	Yes		T/H	No			Yes	Yes	
						TANK 1B FILL/DRAIN													
WF3	8	SI ISV0307	В	ICNTRL		VALVE SOLENOID	Yes	No	Yes	No	Yes	1	T/H	No			Yes	Yes	
						SAFETY INJECTION													
WF3	8	SI ISV0307	А	ICNTRL		VALVE SOLENOID	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
						SAFETY INJECTION													
WF3	8	SI ISV0323	В	VALVE		TANK 1B VENT	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
WF3	8	SI ISV0323	А	VAI VE		TANK 1A VENT	Yes	No	Yes	No	Yes	1	Т/Н	Yes			Yes	Yes	
	<u> </u>	011070020				SAFETY INJECTION	100	110	100		100			100			100	100	
WF3	8	SI ISV0324	В	VALVE		TANK 2B VENT	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
WE3	8	SLISV/0324	Δ			SAFETY INJECTION	Ves	No	Ves	No	Ves		т/н	Yes			Yes	Ves	
1110	0	011070024	Α	VALVL		SAFETY INJECTION	103	i No	103		103		1711	103			103	103	
WF3	8	SI ISV0325	В	VALVE		TANK 1B VENT	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
\//⊑3	8	SI IS\/0325	Δ			SAFETY INJECTION	Vec	No	Ves	No	Vec	I	т/н	Yes			Vee	Vec	
VVI 5	0	511570525		VALVL		SAFETY INJECTION	103	NO	163	INO	163	1	1711	163			163	103	
WF3	8	SI ISV0326	В	VALVE		TANK 2B VENT	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
\//E3	Q	SI ISV/0326	۸			SAFETY INJECTION	Voc	No	Voc	No	Voc		т/ц	Voc			Vos	Voc	
VVF3	0	311370320	A	VALVE		RC LOOP 1 SHDN	165	INU	165	INU	165	1	1/П	165			165	162	
						COOLING ISOLATION													
WF3	8	SI ISV0405	B4	ICNTRL		VALVE SOLENOID	Yes	No	Yes	Yes	No		T/H	No			Yes	Yes	
						COOLING ISOLATION													
WF3	8	SI ISV0405	B3	ICNTRL		VALVE SOLENOID	Yes	No	Yes	Yes	No	<u> </u>	T/H	No			Yes	Yes	
						RC LOOP 1 SHDN													
WF3	8	SI ISV0405	B2	ICNTRI			Yes	No	Yes	Yes	No	I	т/н	No			Yes	Yes	
		0.1010400				LPSI PUMP B MINIMUM							. ,						
WF3	8	SI ISV1161	В	VALVE		FLOW RECIRC	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WE3	8	SU ISV/1161	Δ			LPSI PUMP A MINIMUM	Yoe	No	Yes	No	Yee	1		Yee			Yee	Yoe	
1110		0.1041101	~	╸ᅲ┎╘╹╘	1	LPSI A TO RC LOOP 2B	103		103		103		1	103			163	103	
WF3	8	SI ISV6011		VALVE		UPSTR AUTO VENT ISOL	Yes	No	Yes	No	Yes			Yes			Yes	Yes	

							Screen 1	Screen 2	Screen 3		Screen 4					Fiv	e Safety Fund	ctions	
									Maintaina				Environment	?					
	SQUG				SSEL	Equipment		Undergoes	Maintains at loast						Pagetor	Reactor	Reactor	Decay	
Unit	Equip	Current Ec	luipme	nt ID	Equipment	Description	Soismic	Regular	at least	Boplacod2	IDEEE	Inside	High Temp	Demotent	Reactor	Coolant	Coolant	Heat	Containment
	Туре				ID	Description	Seisinic	Configuration	5 Safoty	Replaceur		/ Outside	/ Humidity2	Borated System2	Control	Pressure	Inventory	Pomoval	Function
								Inspections?	Eunctions				(T/H)	System	Control	Control	Control	Removal	
									1 unctions			((1711)						
						LPSI A TO RC LOOP 2B													
	0					DWNSTR AUTO VENT	Vee	No	Vaa	Na	Vee			Vee			Vaa	Vee	
VVF3	8	SI ISV6012		VALVE			res	INO	Yes	NO	res	I		Yes			Yes	res	
						SAFETY INJECTION													
WF3	6	SI MPMP0001	В	PUMP		PUMP B	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
						LOW PRESSURE													
			_			SAFETY INJECTION													
WF3	6	SI MPMP0001	Α	PUMP	-		Yes	NO	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	5	SI MPMP0002	в	PUMP		PUMP B	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
			-			HIGH PRESSURE	100				100	-						100	
						SAFETY INJECTION													
WF3	5	SI MPMP0002	А	PUMP		PUMP A	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
	01					REFUELING WATER	Maa	N	N/s s	NI-	Mar			Mar			Mar	Maa	
VVF3	21	SI MPOLUUUT		ACCUMU			res	res	res	INO	res			res			res	res	
						STRG POOL OUTLET													
WF3	7	SI MVAAA106	В	VALVE		HEADER B ISOLATION	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
						REFUELING WATER													
	_	0	_			STRG POOL OUTLET								~					
WF3	1	SI MVAAA106	A	VALVE		HEADER A ISOLATION	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF3	0	SI MVAAA107	В	VALVE		HEADER B CHECK	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
-						LPSI PUMP B SUCTION													
WF3	0	SI MVAAA1071	В	VALVE		CHECK	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
W/E2	0		D			LPSI PUMP B SUCTION	Voo	No	Voo	No	Vaa			Vaa			Vaa	Voo	
VVFS	0	SI WIVAAA 100	D	VALVE			165	INU	165	INU	165	1		165			165	Tes	
						FLOW RECIRC STOP													
WF3	0	SI MVAAA116	В	VALVE		CHECK	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
						SI RECIRCULATING HDR													
	0		Р			B TO RWSP UPSTREAM	Vaa	No	Vee	No	Vaa			Vaa			Vaa	Vaa	
VVFS	0	SI WVAAA 120	В	VALVE			res	INU	res	INO	res			res			res	res	
						A TO RWSP UPSTREAM													
WF3	8	SI MVAAA120	А	VALVE		ISOLATION	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
						SI RECIRCULATING HDR													
W/E3	8	SI M\/AAA121	B				Yes	No	Ves	No	Ves			Yes			Yes	Ves	
		\$1.11177V3121	5			SI RECIRCULATING HDR	100		100		100		1	100	<u> </u>	1	100	100	
						A TO RWSP													
			-			DOWNSTREAM													
WF3	8	SI MVAAA121	Α	VALVE			Yes	No	Yes	No	Yes			Yes			Yes	Yes	
W/E3	0	SI MI\/AAA122	B				Yes	No	Ves	No	Ves			Yes			Yes	Yes	
WI 5	Ū	OTWINAAAIZZ	D	VALVE		SHUTDOWN COOLING	103	110	103	110	103			103			103	103	
WF3	8	SI MVAAA125	В	VALVE		HX B INLET	Yes	No	Yes	Yes	Yes	1		Yes			Yes	Yes	
						SHUTDOWN COOLING													
WF3	8	SI MVAAA125	A	VALVE			Yes	No	Yes	No	Yes			Yes			Yes	Yes	
						DISCHARGE FLOW													
WF3	7	SI MVAAA129	в	VALVE		CONTROL	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
-		~				LPSI PUMP A		-		_									
						DISCHARGE FLOW													
WF3	7	SI MVAAA129	A	VALVE			Yes	No	Yes	No	Yes			Yes			Yes	Yes	
\//E3	8	SI MV/444135	R				Vac	No	Vec	No	Vec	1		Vec			Vec	Vac	
1113	U	011010/00/0100	U	VALVL	1	SOOLING WAININ-OF	103		163	INU	169	1	1	103			103	103	1

					Screen 1	Screen 2	Screen 3			Screen 4				Fiv	e Safety Fun	ctions	
							Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (I/O)	High Temp / Humidity? (T/H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	8	SI MVAAA135 A VALV	E	RC LOOP 2 SHDN COOLING WARM-UP	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
WF3	8	SI MVAAA138 B VALV	E	LPSI HEADER TO RC LOOP 1B FLOW CONTROL	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
WF3	8	SI MVAAA138 A VALV	E	LPSI HEADER TO RC LOOP 2B FLOW CONTROL	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
WF3	8	SI MVAAA139 B VALV	E	LPSI HEADER TO RC LOOP 1A FLOW CONTROL	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	8	SI MVAAA139 A VALV	E	LPSTHEADER TO RC LOOP 2A FLOW CONTROL	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
WF3	0	SI MVAAA201 B VALV	E	HPSI PUMP B SUCTION CHECK	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	8	SI MVAAA219 B VALV	E	HPSI DISCHARGE HEADER B ORIFICE BYPASS	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF3	8	SI MVAAA219 A VALV	 'E	HPSI DISCHARGE HEADER A ORIFICE BYPASS	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF3	8	SI MVAAA225 B VAL	F	HPSI HDR B TO RC LOOP 1A FLOW CONTROI	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF3	8	SI MVAAA225 A VAL	F	HPSI HDR A TO RC LOOP 1A FLOW CONTROI	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF0	0		-	HPSI HDR B TO RC LOOP 1B FLOW	Vac	No	Vee	No	Vee			Vee			Vee	Vaa	
VVF3	0	SI MIVAAA220 B VALV	_	HPSI HDR A TO RC LOOP 1B FLOW	res		res		res			res			Tes	res	
WF3	8	SI MVAAA226 A VALV	<u>E</u>	HPSI HDR B TO RC LOOP 2A FLOW	Yes	No	Yes	No	Yes			Yes			Yes	Yes	
WF3	8	SI MVAAA227 B VALV	Έ	CONTROL HPSI HDR A TO RC LOOP 2A FLOW	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	8	SI MVAAA227 A VALV	E	CONTROL HPSI HDR B TO RC	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	8	SI MVAAA228 B VALV	E	CONTROL HPSI HDR A TO RC	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	8	SI MVAAA228 A VALV	E	CONTROL RC LOOP 1 HOT LEG INJ	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
WF3	7	SI MVAAA301 VALV	E	LEAKAGE DRAIN RC LOOP 2 HOT LEG INJ	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
WF3	7	SI MVAAA302 VALV	E	LEAKAGE DRAIN SAFETY INJECTION	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
WF3	7	SI MVAAA303 B VALV	E	TANK 1B LEAKAGE DRAIN SAFETY INJECTION	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
WF3	7	SI MVAAA303 A VALV	E	TANK 1A LEAKAGE DRAIN	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
WF3	7	SI MVAAA304 B VALV	E	TANK 2B LEAKAGE DRAIN	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	

							Screen 1	Screen 2	Screen 3			Screen 4				Fiv	e Safety Fund	ctions	
									Maintaine				Environment	?					
	SQUG				SSEL	Fauipment		Undergoes	at least			Incida			Reactor	Reactor	Reactor	Decay	
Unit	Equip	Current Eq	uipmer	nt ID	Equipment	Description	Seismic	Regular	one of the	Replaced?	IPFFF	Inside	Hign Temp	Borated	Reactivity	Coolant	Coolant	Heat	Containment
	Туре				ID			Configuration	5 Safety			Outside	Humidity?	System?	Control	Pressure	Inventory	Removal	Function
								Inspections?	Functions			(1/0)	(T/H)			Control	Control		
						TANK 2A I FAKAGE													
WF3	7	SI MVAAA304	А	VALVE		DRAIN	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
						SAFETY INJECTION													
WF3	7	SI MVAAA307	В	VALVE		TANK 1B FILL/DRAIN	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
WE3	7	SI MV/AAA307	^				Vos	No	Vos	No	Vos		ти	Vos			Vos	Vos	
				VALVE		SAFETY INJECTION	103		163	NO	103		.,	103			163	163	
WF3	7	SI MVAAA308	В	VALVE		TANK 2B FILL/DRAIN	Yes	No	Yes	No	Yes	1	T/H	Yes			Yes	Yes	
	_	<u> </u>				SAFETY INJECTION													
WF3	1	SI MVAAA308	A	VALVE		TANK 2A FILL/DRAIN	Yes	NO	Yes	NO	Yes	I	I/H	Yes			Yes	Yes	
						TANK 1B OUTLET													
WF3	8	SI MVAAA331	В	VALVE		ISOLATION	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
						SAFETY INJECTION													
W/E2	o	SI MIV/A A A 221	^				Vaa	No	Voo	No	Voo		т/ц	Voo			Voo	Voo	
VVFS	0	SI WIVAAASSI	A	VALVE			165	INU	165	INU	165	I	1/П	165			Tes	Tes	
						TANK 2B OUTLET													
WF3	8	SI MVAAA332	В	VALVE		ISOLATION	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
						SAFETY INJECTION													
WF3	8	SI MVAAA332	Δ			ISOLATION	Yes	No	Yes	No	Yes	1	т/н	Yes			Yes	Yes	
	0	01107001002	7	VALUE		SI TANK DRAIN HEADER	100	110	100	110	100	1	.,	100			100	100	
WF3	7	SI MVAAA343		VALVE		TO RWSP ISOLATION	Yes	No	Yes	No	Yes	I	T/H	Yes			Yes	Yes	
						RC LOOP 1 SHDN													
WF3	8	SI MVAAA401	в			SUCTION ISOI	Yes	No	Yes	No	Yes	1	т/н	Yes			Yes	Yes	
				V/ L V L		RC LOOP 2 SHDN	100	110	100	110	100		.,	100			100	100	
						COOLING UPSTREAM													
WF3	8	SI MVAAA401	A	VALVE		SUCTION ISOL	Yes	No	Yes	No	Yes		T/H	Yes			Yes	Yes	
						SUCTION INSIDE													
WF3	7	SI MVAAA405	в	VALVE		CONTAINMENT ISOL	Yes	No	Yes	Yes	Yes	I	T/H	Yes			Yes	Yes	
						RC LOOP 2 SDC													
	7		^				Vaa	No	Vaa	Vaa	Vaa		T / L1	Vaa			Vee	Vaa	
VVF3	/	SI WIVAAA405	A	VALVE			res	INO	res	res	res	I	1/H	res			res	res	
						SUCTION OUTSIDE													
WF3	8	SI MVAAA407	В	VALVE		CONTAINMENT ISOL	Yes	No	Yes	Yes	Yes	I		Yes			Yes	Yes	
						RC LOOP 2 SDC													
WF3	8	SI MVAAA407	Α			CONTAINMENT ISOI	Yes	No	Yes	Yes	Yes	1		Yes			Yes	Yes	
	~					SHUTDOWN COOLING						•						100	<u> </u>
			_			HX B OUTLET													
WF3	8	SI MVAAA412	В	VALVE		ISOLATION	Yes	No	Yes	Yes	Yes			Yes			Yes	Yes	
						HX A OUTLET													
WF3	8	SI MVAAA412	А	VALVE		ISOLATION	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
						SHUTDOWN COOLING													
	0		P			HX B TEMPERATURE	Vaa	N-	Vaa	Nia	Vee			Vaa			Vee	Var	
VVF3	ð	SI WIVAAA415	В	VALVE			Tes	NO	Tes	NO	Tes			Tes			Tes	Tes	
						HX A TEMPERATURE													
WF3	8	SI MVAAA415	А	VALVE		CONTROL	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
	0		-			RC LOOP 2 HOT LEG INJ	Ver	NI-	Vee	Nia	Vac			Var			Vee	Var	
VVF3	ŏ	SI WIVAAA502	В	VALVE	<u> </u>		Yes	NO	res	INO	res			res			res	res	
WF3	8	SI MVAAA502	Α	VALVE		ISOLATION	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
						RC LOOP 2 HOT LEG INJ													
WF3	8	SI MVAAA506	В	VALVE		FLOW CONTROL	Yes	No	Yes	No	Yes			Yes			Yes	Yes	

					Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fun	ctions	
							Maintaina				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T / H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
	0			RC LOOP 1 HOT LEG INJ	Vaa	No	Vaa	No	Vaa			Vaa			Vee	Vaa	
VVF3	8	SI MVAAA506 A VALVE			Yes	NO	res	NO	Yes			res			Yes	res	
				SUMP OUTLET HEADER													
WF3	8	SI MVAAA602 B VALVE		BISOLATION	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
				SAFETY INJECTION													
WF3	8	SI MVAAA602 A VALVE		A ISOLATION	Yes	No	Yes	No	Yes	I		Yes			Yes	Yes	
				SAFETY INJECTION													
WF3	0	SI MVAAA604 B VALVE		B CHECK	Yes	No	Yes	No	Yes	1		Yes			Yes	Yes	
				CONTAINMENT SUMP				-									
W/E3	7			HEADER INSIDE CNTMT	Ves	No	Ves	No	Vec		т/н	Ves					Ves
VVI 5				CONTAINMENT SUMP	163	NO	163	NO	163	- I	1711	163					103
14/50	_			HEADER OUTSIDE													
WF3	/	SP MVAAA106 VALVE			Yes	NO	Yes	NO	Yes	I		NO					Yes
WF3	1	SSDEMCC311A PANEL		CENTER 311A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
W/E2	1			MOTOR CONTROL	Voo	No	Vaa	No	Vaa			No	Voo	Voo	Voo	Voo	Voo
VVI 3	I	SSDEMECSTIAD FANLE		MOTOR CONTROL	165	NO	165	NO	165	1		NO	165	165	165	165	165
WF3	1	SSDEMCC311B PANEL		CENTER 311B	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WE3	1	SSDEMCC312A PANEL		MOTOR CONTROL CENTER 312A	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
				MOTOR CONTROL													
WF3	1	SSDEMCC312B PANEL		CENTER 312B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	1	SSDEMCC313A PANEL		CENTER 313A	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				MOTOR CONTROL													
WF3	1	SSDEMCC313B PANEL		CENTER 313B	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
WF3	1	SSDEMCC315A PANEL		CENTER 315A	Yes	No	Yes	No	Yes	0	н	No				Yes	
WE2	4			MOTOR CONTROL	Vaa	Ne	Vaa	No	Vaa	0		No				Vaa	
VVF3	1	SSDEMCC315B PANEL		MOTOR CONTROL	res	NO	Tes	NO	res	0	п	NO				res	
WF3	1	SSDEMCC317 B PANEL		CENTER 317B	Yes	No	Yes	No	Yes	I		No					Yes
W/E3	1	SSDEMCC317 A PANEL		MOTOR CONTROL	Ves	No	Ves	No	Vec			No					Ves
1110	I	CODEWOODTI A FAMEL		(4160-480/277V XFMR)	163		163		163								100
14/50				STA SERVICE XFMR-												Ň	
VVF3	4	SSDENII3ISA IRANSF		(4160-480/277V XFMR)	res	INO	res	INO	res	0	Н	INO				res	
				STA SERVICE XFMR-													
WF3	4	SSDEMT315B TRANSF		3B315-S	Yes	No	Yes	No	Yes	0	Н	No				Yes	
				DISTRIBUTION													
WF3	4	SSDEMT31A TRANSF		TRANSFORMER	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
				(4160-480/277V XFMR) STA SERVICE XEMR-													
WF3	4	SSDEMT31B TRANSF		3B31-S	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	2	SSDESWGR31A PANEL		SWITCHGEAR 31A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	2	B PANEL		SWITCHGEAR 31AB	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	2	SSDESWGR31B PANEL		SWITCHGEAR 31B	Yes	No	Yes	No	Yes			No	Yes	Yes	Yes	Yes	Yes
				STEAM GEN 2													
WF3	7	SSLMVAAA8004 B VALVE		INSIDE CNTMT ISOL	Yes	No	Yes	Yes	Yes	1	T/H	No					Yes
				STEAM GEN 1					1								
WF3	7	SSLMVAAA8004 A VALVF		INSIDE CNTMT ISOL	Yes	No	Yes	Yes	Yes	1	T/H	No					Yes

					Screen 1	Screen 2	Screen 3			Screen 4				Five	e Safety Fun	ctions	
							Maintains				Environment	?					
Unit	SQUG Equip Type	Current Equipment ID	SSEL Equipment ID	Equipment Description	Seismic	Undergoes Regular Configuration Inspections?	at least one of the 5 Safety Functions	Replaced?	IPEEE	Inside / Outside (1/O)	High Temp / Humidity? (T / H)	Borated System?	Reactor Reactivity Control	Reactor Coolant Pressure Control	Reactor Coolant Inventory Control	Decay Heat Removal	Containment Function
WF3	7	SSLMVAAA8006 B VALVE		STEAM GEN 2 BLOWDOWN SAMPLE OUTSIDE CNTMT ISOL	Yes	No	Yes	No	Yes	I		No					Yes
WF3	7	SSLMVAAA8006 A VALVE		STEAM GEN 1 BLOWDOWN SAMPLE OUTSIDE CNTMT ISOL	Yes	No	Yes	No	Yes	I		No					Yes
WF3	10	SVSMAHU0001 B BLOWER		SWGR MAIN VENTILATION AIR HANDLING UNIT AH-25B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	10	SVSMAHU0001 A BLOWER		SWGR MAIN VENTILATION AIR HANDLING UNIT AH-25A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	10	SVSMAHU0002 B BLOWER		SWGR AUX VENTILATION AIR HANDLING UNIT AH-30B	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	10	SVSMAHU0002 A BLOWER		SWGR AUX VENTILATION AIR HANDLING UNIT AH-30A	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	9	SVSMFAN0003 B BLOWER		COMPUTER BATTERY ROOM EXHAUST FAN B	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	9	SVSMFAN0003 A BLOWER		COMP BATT RM EXHST FAN A E-46(3A-SA)	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA101 VALVE		MAKEUP DAMPER D- 65(A)	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA102 VALVE		SVS DOWNSTREAM MAKEUP DAMPER D- 65(SB)	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA103 B VALVE		SVSMAHU0001B AH- 25(3B-SB) INLET DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA103 A VALVE		SVSMAHU0001A AH- 25(3A-SA) INLET DAMPER	Yes	No	Yes	No	Yes	I		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA201 B VALVE		AH-30 SB INLET DAMPER D-50(SB)	Yes	No	Yes	No	Yes	1		No	Yes	Yes	Yes	Yes	Yes
WF3	7	SVSMVAAA201 A VALVE		AH-30 SA INLET DAMPER D-50(SA)	Yes	No	Yes	No	No	I		No	Yes	Yes	Yes	Yes	Yes
WF3	8	SBVMVAAA112 B VALVE		SBV EXHAUST FAN B RECIRC CHECK	Yes	No	Yes	No	No	I		No	Yes	Yes	Yes	Yes	Yes

SWEL1 #	EQUIPM	IENT II	D	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-001	MS MVAAA106	А	VALVE	MAIN STEAM LINE 1 SAFETY #1	RB	+46	R1		MS	0	O, H	N	5817-4718
SWEL1-002	SSDEMCC311B		PANEL	MOTOR CONTROL CENTER 311B	RAB	+21	212		SSD	1	I	Ν	SQ-E-2
SWEL1-003	SSDEMCC315B		PANEL	MOTOR CONTROL CENTER 315B	СТВ	-35	B59A		SSD	1	O, H	N	1564-2118 1564-2119
SWEL1-004	CEDEBKR3918	В	CKTBRK	REACTOR TRIP SWGR BREAKER TCB-2 COMPARTMENT 2C	RAB	+21	212		CED	2	I	Ν	SQ-NSSS-ICE-3
SWEL1-005	SSDESWGR31AB		PANEL	SWITCHGEAR 31AB	RAB	+21	212B		SSD	2	I	Ν	SQ-E-8
SWEL1-006	4KVESWGR3A		PANEL	SWITCHGEAR 3A	RAB	+21	212A		4KV	3	I	N	1564-4017 1564-4018 1564-4019
SWEL1-007	ID EMTMD	В	TRANSF	SUPS INVERTER MD AC INPUT MAIN TRANSFORMER	RAB	+21	212A	В	ID	4	I	Y	1564-1829
SWEL1-008	SSDEMT315B		TRANSF	(4160-480/277V XFMR) STA SERVICE XFMR-3B315-S	RAB	+21	B59A		SSD	4	O, H	Y	5817-117
SWEL1-009	CC MPMP0001	В	PUMP	COMPONENT COOLING WATER PUMP B	RAB	+21	233	В	СС	5	I	Y	1564-1347
SWEL1-010	EFWMPMP0001	AB	PUMP	EMERGENCY FEEDWTR PUMP AB	RAB	-35	B49	AB	EFW	5	I	Y	1564-1493
SWEL1-011	EGFMPMP0001	А	PUMP	DIESEL OIL TRANSFER PUMP A	RB	-35	B52	A	EGF	5	O, H	Y	1564-1224
SWEL1-012	SI MPMP0002	В	PUMP	HIGH PRESSURE SAFETY INJECTION PUMP B	RAB	-35	B16	В	SI	5	I, B	Y	1564-72
SWEL1-013	SI MPMP0001	A	PUMP	LOW PRESSURE SAFETY INJECTION PUMP A	RAB	-35	B15	A	SI	6	I, B	Ν	1564-85 1564-86 1564-87
SWEL1-014	ACCMVAAA126	В	VALVE	ACC HEADER B CCW HX OUTL TEMPERATURE CONTROL VALVE	RAB	+21	236	В	ACC	7	I	Ν	5817-2158 5817-2159
SWEL1-015	ACCMVAAA138	А	VALVE	ACC WET COOLING TOWER A CROSS-CONNECT ISOLATION	СТА	-35		A	ACC	7	О, Н	Ν	1564-9924 1564-9925
SWEL1-016	BAMMVAAA126	A	VALVE	BORIC ACID MAKEUP PUMP A RECIRC VALVE	RAB	-35	B38	А	BAM	7	I, B	Ν	1564-150
SWEL1-017	BD MVAAA103	A	VALVE	S/G 1 BLOWDOWN OUTSIDE CONTAINMENT ISOLATION	RB	-4	B100	A	BD	7	I	N	5817-11962

SWEL1 #	EQUIPM	IENT IC)	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-018	BM MVAAA109		VALVE	REACTOR DRAIN TANK OUTLET INSIDE CONTAINMENT ISOL	RCB	-11	421		BM	7	I, T, H, B	N	1564-4667
SWEL1-019	CAPMVAAA103		VALVE	CONTAINMENT PURGE INLET INSIDE ANNULUS	ANN	+21	420		CAP	7	I, T, H	Ν	1564-4379
SWEL1-020	CC MVAAA135	В	VALVE	DRY COOLING TOWER B CCW INLET ISOLATION	СТВ	-35	B60A	В	CC	7	О, Н	Ν	1564-8424 1564-8431
SWEL1-021	CC MVAAA322	В	VALVE	CCW HEADER B RETURN FROM ESSENTIAL CHILLERS ISOL	RAB	+21	236	В	СС	7	I	Ν	1564-4045
SWEL1-022	CC MVAAA835	А	VALVE	CNTMT FAN COOLERS TRAIN A TEMPERATURE CONTROL	RB	-4	B100	А	СС	7	I	Ν	1564-2514 1564-4390
SWEL1-023	CC MVAAA963	А	VALVE	SHUTDOWN HEAT EXCHANGER A CCW FLOW CONTROL	RAB	-35	B17	А	СС	7	Ι	Ν	1564-4628 1564-4629
SWEL1-024	CMUISV0407	В	ICNTRL	SV FOR CMU-407B	СТВ	-35	B59A	В	CMU	7	O, H	Ν	5817-4614
SWEL1-025	CS MVAAA125	В	VALVE	CONTAINMENT SPRAY HDR B ISOLATION	RB	-35	B53	В	CS	7	I, B	Ν	1564-3133
SWEL1-026	CVCMVAAA209		VALVE	CHARGING HEADER ISOLATION	RB	+21	225B		CVC	7	I, B	Ν	5817-1776
SWEL1-027	EFWMVAAA223	В	VALVE	EMERGENCY FEEDWATER HDR B TO SG2 BACKUP FLOW CNTRL	RB	+46	R2	В	EFW	7	О, Н	Ν	5817-3745
SWEL1-028	EFWMVAAA229	В	VALVE	EMERGENCY FEEDWATER TO SG2 BACKUP ISOLATION	RB	+46	R2	A	EFW	7	O, H	N	5817-3571 5817-3744
SWEL1-029	HVCMVAAA205	А	VALVE	CONTROL ROOM EMERG FLTR A INLET DAMPER	RAB	+46	314	A	HVC	7	I	Ν	1564-6628
SWEL1-030	HVRMVAAA107		VALVE	RAB NORMAL SUPPLY TO CVAS DOWNSTREAM ISOLATION	RAB	-35	B17		HVR	7	I	N	1564-8744 5817-3595
SWEL1-031	HVRMVAAA303	А	VALVE	CVAS FILTER TRAIN A MINIMUM FLOW INLET	RAB	+46	299	A	HVR	7	I	Ν	SQ-HV-42
SWEL1-032	HVRMVAAA502	A	VALVE	EG A ROOM EXHAUST FAN VARIABLE PITCH BLADE	RAB	+46	304	A	HVR	7	I	Ν	SQ-HV-11
SWEL1-033	IA MVAAA909		VALVE	IA ISOL TO CONTAINMENT @ PEN #9	RB	-4	B100		IA	7	I	N	1564-3559

Table	2 –	Seismic	Walkdown	Equip	ment l	List 1	(SWEL	1)
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SWEL1 #	EQUIPM	IENT ID)	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-034	MS MVAAA116	A	VALVE	STEAM GENERATOR 1 ATMOSPHERE DUMP VALVE	RB	+46	R1	A	MS	7	О, Н	N	5817-232 5817-423 5817-6268 5817-12128
SWEL1-035	MS MVAAA124	В	VALVE	MAIN STEAM ISOLATION VALVE 2	RB	+46	R2	В	MS	7	О, Н	Ν	1564-3707
SWEL1-036	SI MVAAA129	В	VALVE	LPSI PUMP B DISCHARGE FLOW CONTROL	RAB	-35	B16	В	SI	7	I, B	Ν	1564-284
SWEL1-037	SI MVAAA307	А	VALVE	SAFETY INJECTION TANK 1A FILL/DRAIN	RCB	+35	421	A	SI	7	I, T, H, B	Ν	1564-145
SWEL1-038	SI MVAAA405	В	VALVE	RC LOOP 1 SDC SUCTION INSIDE CONTAINMENT ISOL	RCB	+21	421	В	SI	7	I, T, H, B	Ν	1564-1269
SWEL1-039	SVSMVAAA201	В	VALVE	AH-30 SB INLET DAMPER D- 50(SB)	RAB	+7		В	SVS	7	I, B	N	1564-5763 1564-6028 1564-6628
SWEL1-040	BAMMVAAA113	А	VALVE	BORIC ACID MAKEUP TANK A GRAVITY FEED VALVE	RAB	-35	B38	A	BAM	8	I, B	Ν	SQ-NSSS-PE-24
SWEL1-041	CARMVAAA204	А	VALVE	CAR EXHAUST HEADER A DISCHARGE	RAB	+46	299	A	CAR	8	I	Ν	1564-4386
SWEL1-042	CHWMVAAA900		VALVE	SWGR MAIN SVSMAHU0001- B CHW OUTLET FCV	RAB	+46	323	В	CHW	8	I	Ν	5817-2710
SWEL1-043	EGAISV0411	В	VALVE	EG B EMERGENCY MODE FUEL CONTROL #2	RAB	+21	222		EGA	8	I	N	1564-2080 1564-2081 1564-2082
SWEL1-044	MS MVAAA120	А	VALVE	MSIV 1 UPSTREAM DRIP POT NORMAL DRAIN	RB	+46	R1	A	MS	8	О, Н	Ν	1564-1548
SWEL1-045	MS MVAAA401	A	VALVE	EFW PUMP AB TURBINE STEAM SUPPLY FROM S/G 1	RB	+46	300	A	MS	8	О, Н	Ν	5817-5815 5817-6914 5817-7250 5817-8170
SWEL1-046	NG ISV0809		VALVE	NITROGEN ACCUMULATOR #5 OUTLET STOP	RB	+46	R1		NG	8	О, Н	Ν	5817-5363 5817-5366 5817-5367 5817-6400
SWEL1-047	RC ISV1014		VALVE	REACTOR VESSEL VENT TO QUENCH TANK ISOLATION	RCB	+46	421	В	RC	8	I, T, H, B	Ν	5817-5362 5817-5369
SWEL1-048	RC ISV3184		VALVE	PRESSURIZER VENT TO QUENCH TANK	RCB	+46	421		RC	8	I, T, H, B	Ν	5817-5362 5817-5369
SWEL1-049	SBVMVAAA110	А	VALVE	SBV EXHAUST FAN A SUCTION ISOLATION	RAB	+46	299	A	SBV	8	I	N	1564-4384

SWEL1 #	EQUIPM	IENT II	D	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-050	SBVMVAAA112	В	VALVE	SBV EXHAUST FAN B RECIRC CHECK	RAB	+46	-	В	SBV	8	I	Ν	1564-4084
SWEL1-051	SI ISV1161	А	VALVE	LPSI PUMP A MINIMUM FLOW RECIRC	RAB	-35	B15		SI	8	I, B	Ν	5817-6401
SWEL1-052	SI MVAAA121	A	VALVE	SI RECIRCULATING HDR A TO RWSP DOWNSTREAM ISOLATION	RB	-35	B53	A	SI	8	I, B	Ν	1564-6618
SWEL1-053	SI MVAAA138	В	VALVE	LPSI HEADER TO RC LOOP 1B FLOW CONTROL	RB	-35	B53		SI	8	I, B	Ν	1564-142
SWEL1-054	SI MVAAA219	А	VALVE	HPSI DISCHARGE HEADER A ORIFICE BYPASS	RB	-35	B53	A	SI	8	I, B	Ν	1564-6615
SWEL1-055	SI MVAAA227	В	VALVE	HPSI HDR B TO RC LOOP 2A FLOW CONTROL	RB	-35	B53	В	SI	8	I, B	Ν	5817-11904 5817-11905
SWEL1-056	SI MVAAA415	В	VALVE	SHUTDOWN COOLING HX B TEMPERATURE CONTROL	RAB	-35	B16	В	SI	8	I, B	Ν	5817-1419 5817-3594
SWEL1-057	SI MVAAA502	А	VALVE	RC LOOP 1 HOT LEG INJ ISOLATION	RB	-35	B53		SI	8	I, B	Ν	1564-6617
SWEL1-058	SI MVAAA602	В	VALVE	SAFETY INJECTINO SUMP OUTLET HEADER B ISOLATION	RB	-35	B53	В	SI	8	I, B	Ν	5817-10933
SWEL1-059	ACCMFAN0002	В	BLOWER	WET COOLING TOWER B FAN 2-SB	СТВ	-35	B60A		ACC	9	О, Н	Ν	SQ-MN-203
SWEL1-060	CC MFAN0003	А	BLOWER	DRY COOLING TOWER A FAN 3-SA	СТА	-35	B59A	А	СС	9	О, Н	Ν	1564-1435 5817-11268
SWEL1-061	HVCMAHU0001	A	BLOWER	CONTROL ROOM AIR HANDLING UNIT AH-12A	RAB	+46		A	HVC	9	Ι	Ν	1564-7545 1564-9361 1564-9362 1564-9363
SWEL1-062	HVCMFAN0010	В	BLOWER	CONTROL ROOM EMER FILTRATION UNIT B	RAB	+46	314	В	HVC	9	I	Ν	1564-5052
SWEL1-063	HVRMFAN0025	А	BLOWER	EDG ROOM A EXHAUST FAN E-28A	RAB	+46	299	A	HVR	9	I	Ν	1564-4560
SWEL1-064	HVCMAHU0009	А	BLOWER	CONTROL ROOM EMER FILTRATION UNIT A	RAB	+46		A	HVC	10	I	Y	1564-5051
SWEL1-065	HVRMAHU0028	А	BLOWER	CCW PUMP ROOM A AIR HANDLING UNIT AH-10A	RAB	+21	235	A	HVR	10	I	Ν	1564-4586 1564-8953
SWEL1-066	HVRMAHU0032	В	BLOWER	SHUTDOWN COOLING HX B AIR HANDLING UNIT AH-3B	RAB	-35	B20	В	HVR	10		Ν	1564-4585
SWEL1-067	RFRMCHL0001	В	HTEXCH	ESSENTIAL CHILLER B	RAB	+46	299	В	RFR	11	I	Y	5817-10990

SWEL1 #	EQUIPI	MENT ID)	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-068	DC EPDPB	DC	PANEL	PDP B-DC	RAB	+21	212B	В	DC	14	I	Y	SQ-E-1
SWEL1-069	ID EPDPMD		PANEL	PDP MD NUCLEAR INST CHANNEL D	RAB	+21	212		ID	14	I	Y	5817-4678
SWEL1-070	DC EBATB		BATTRY	125V BAT & RACK 125VDC BATTERY B-S 60 CELLS	RAB	+21	213	В	DC	15	I	Y	SQ-E-5
SWEL1-071	DC EBC1A		BATTRY	BATTERY CHARGER A1	RAB	+21	212	A	DC	16	I	Y	1564-1146 1564-1157
SWEL1-072	EG MDSG0001	В	GENERA	EMERGENCY DIESEL GENERATOR B	RAB	+21	222	В	EG	17	I	Y	1564-1999 1564-2040 1564-2041 1564-2042 1564-2043 1564-2055 1564-2057 1564-2058
SWEL1-073	CC ILS7011	В	IBISSW	CCW SURGE TANK B SIDE LO/LO LEVEL SWITCH	RAB	+91	417	В	СС	18	I	Ν	1564-1489
SWEL1-074	EGFILT6903	А	IXMITR	DIESEL OIL FEED TNK A LVL TRANSMITTER	RAB	+46	328B		EGF	18	О, Н	Y	1564-7973
SWEL1-075	IC ICDC1	С	PANEL	INSTRUMENT CABINET C-1C	RCB	+21	421		IC	18	I, T, H	Ν	1564-9155
SWEL1-076	IC ICDC12		PANEL	INSTRUMENT CABINET C-12	RB	-4	B145		IC	18	I	Ν	1564-9210
SWEL1-077	IC ICDC9		PANEL	INSTRUMENT CABINET C-9	RCB	+21	421		IC	18	I, T, H	Ν	1564-9158
SWEL1-078	NG IPIS0945	В	IBISSW	NITROGEN HEADER 6 PRESS INDICATING SWITCH	RB	+46			NG	18	О, Н	Ν	5817-5815 5817-7250 5817-8270
SWEL1-079	SG ILT1115	А	IXMITR	STEAM GENERATOR 1 LEVEL IXMITR (WIDE RANGE)	RCB	-4	421		SG	18	I, T, H	Ν	5817-5727
SWEL1-080	RC ITE0122	HA1	IXMITR	REACTOR COOLANT LOOP 2 HOT LEG TEMPERATURE	RCB	-4	423		RC	19	I, T, H	Ν	SQ-IC-6
SWEL1-081	EG ECP6850	В	PANEL	DIESEL GEN B ENGINE CONTROL PANEL	RAB	+21	222	В	EG	20	I	Ν	1564-2169
SWEL1-082	ESFECP0001	А	PANEL	ESFAS CABINETS	RAB	+21	212A		ESF	20	I	Y	1564-6395
SWEL1-083	IC EAUX2		PANEL	AUXILIARY PANEL 2(SB)	RAB	+35	262	В	IC	20	I	N	SQ-IC-36

SWEL1 #	EQUIPM		D	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
SWEL1-084	IC ECP08		PANEL	ENGINEERED SAFEGUARD CONTRL PANEL CP8	RAB	+46	304		ESF	20	I	Ν	1564-9337
SWEL1-085	IC ECP22		PANEL	CORE PROTECTION CALCULATORS	RAB	+46	304		CPC	20	I	Ν	1564-5421 1564-5422 1564-5423 1564-5424
SWEL1-086	IC ECP26		PANEL	PROCESS ANALOG CONTROL PROTECTIVE CHANNEL B	RAB	+46	304		PAC	20	I	Ν	1564-2554
SWEL1-087	IC ELCP61		PANEL	LOCAL CONTROL PANEL PAC LCP-61	RAB	+21	212A		PAC	20	I	Y	5817-5884
SWEL1-088	RFRECP3311	3B	PANEL	WATER CHILLER COMPRESSOR CONTROL PANEL 3B	RAB	+46	299	В	RFR	20	I	Y	SQ-HV-6A
SWEL1-089	BAMMTNK0001	А	ACCUMU	BORIC ACID MAKEUP TANK A	RAB	-35		А	BAM	21	I, B	Ν	1564-427
SWEL1-090	CC MHX0001	А	HTEXCH	COMPONENT COOLING WATER HEAT EXCHANGER A	RAB	+21	220	А	СС	21	I	Y	1564-1466
SWEL1-091	CC MTNK0001	С	ACCUMU	COMPONENT COOLING WATER SURGE TANK	RAB	+91	417		СС	21	О, Н	Y	1564-4554
SWEL1-092	CS MHX0001	А	HTEXCH	SHUTDOWN COOLING HEAT EXCHANGER A	RAB	-35	B48	A	CS	21	I, B	Y	SQ-NSSS-PE-39
SWEL1-093	EGFMTNK0001	A	ACCUMU	FUEL OIL STORAGE TANK A	RB	-35		A	EGF	21	О, Н	Y	1564-2525 1564-2526 1564-2527
SWEL1-094	NG MACC0003		ACCUMU	NITROGEN ACCUMULATOR #3	RAB	+21			NG	21	I	Y	SQ-MN-245
SWEL1-095	EGAMCMP0002	А	BLOWER	EG A AIR COMPRESSOR A2	RAB	+21	221	А	EGA	12	I	Ν	1564-2060 5817-9388
SWEL1-096	EGAMRCR0002	А	ACCUMU	(AIR RECEIVER) EGA AIR RECEIVER A2	RAB	+21	221		EGA	12	I	Y	1564-2060 5817-9388
SWEL1-097	4KVESWGR3B		PANEL	SWITCHGEAR 3B	RAB	+21	212	В	4KV	3	I	N	1564-4013 1564-4014 1564-4331

BL2#	Equipment ID			Description	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	N/R
2001	FS EBKR312A	10F	CKTBRK	RWSP PURIFICATION PUMP	RAB	+21	212A	Α	FS	2		
2002	FS EBKR314A	5D	CKTBRK	FUEL POOL PURIFICATION PUMP	FHB	+1	B151	Α	FS	2	l	
2003	FS EBKR314A	5M	CKTBRK	FUEL POOL PUMP A	FHB	+1	B151	Α	FS	2		
2004	FS EBKR314B	5M	CKTBRK	FUEL POOL PUMP B	FHB	+1	B151	В	FS	2	l	
2005	FS EBKR314B	6F	CKTBRK	REFUELING CANAL DRAIN PUMP	FHB	+1	B151	В	FS	2		
2006	FS EOL312A	10F	RELAY	RFLG WTR POOL PURIF PUMP TOL	RAB	+21	212A		FS	2		
2007	FS EOL314A	5D	RELAY	FUEL POOL PURIF PUMP TOL	FHB	+1	B151		FS	2		
2008	FS EOL314A	5M	RELAY	FUEL POOL PUMP A TOL	FHB	+1	B151	Α	FS	2	l	
2009	FS EOL314B	5M	RELAY	FUEL POOL PUMP B TOL	FHB	+1	B152	В	FS	2	l	
2010	FS EOL314B	6F	RELAY	REFUELING CANAL DRAIN PUMP TOL	FHB	+1	B152		FS	2		
2011	FS ITE2010		PIPE	FP WATER TO FP PUMPS TEMP ELEMENT THERMOWELL	FHB	+1	-	-	FS	0	I, B	
2012	FS ITE2020		PIPE	FUEL POOL HX OUTLET HDR TEMP ELEMENT THERMOWELL	FHB	+1	-	-	FS	0	I, B	
2013	FS MHX0001		HTEXCH	FUEL POOL HEAT EXCHANGER TUBE SIDE	FHB	+1	-	-	FS	21	I, B	
2014	FS MHX0002		HTEXCH	BACK-UP FUEL POOL HX PO#J11-100014	FHB	-35	-	-	FS	21	I, B	
2015	FS MPMP0001	Α	PUMP	FUEL POOL PUMP A	FHB	+1	B157	Α	FS	5	I, B	
2016	FS MPMP0001	В	PUMP	FUEL POOL PUMP B	FHB	+1	B157	В	FS	5	I, B	
2017	FS MSTRN0001		FILTER	REFUEL WTR STORAGE POOL OUTLT TO REFUEL WTR PUMP	FHB	+1	-	-	FS	0	I, B	
2018	FS MSTRN0002		FILTER	FUEL POOL INLET STRAINER	FHB	+1	-	-	FS	0	I, B	
2019	FS MVAAA101	А	VALVE	FUEL POOL PUMP A SUCTION ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2020	FS MVAAA101	В	VALVE	FUEL POOL PUMP B SUCTION ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2021	FS MVAAA102	А	VALVE	FUEL POOL PUMP A SUCTION DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2022	FS MVAAA102	В	VALVE	FUEL POOL PUMP B SUCTION DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2023	FS MVAAA103	А	VALVE	FUEL POOL PUMP A DISCH LINE FS IPI0401 RT	FHB	+1	-	-	FS	Manual	I, B	
2024	FS MVAAA103	В	VALVE	FUEL POOL PUMP B DISCH LINE FS IPI0402 RT	FHB	+1	-	-	FS	Manual	I, B	
2025	FS MVAAA104	А	VALVE	FUEL POOL PUMP A DISCHARGE CHECK	FHB	+1	B156	-	FS	Check	I, B	
2026	FS MVAAA104	В	VALVE	FUEL POOL PUMP B DISCHARGE CHECK	FHB	+1	B157	-	FS	Check	I, B	
2027	FS MVAAA105	А	VALVE	FUEL POOL PUMP A DISCHARGE DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2028	FS MVAAA105	В	VALVE	FUEL POOL PUMP B DISCHARGE DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2029	FS MVAAA106	А	VALVE	FUEL POOL PUMP A DISCHARGE ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2030	FS MVAAA106	В	VALVE	FUEL POOL PUMP B DISCHARGE ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2031	FS MVAAA107		VALVE	FUEL POOL PUMPS DISCHARGE HEADER FS IPS0403 ROOT	FHB	+1	-	-	FS	Manual	I, B	
2032	FS MVAAA108		VALVE	FUEL POOL PUMPS DISCHARGE HEADER VENT	FHB	+1	-	-	FS	Manual	I, B	
2033	FS MVAAA1081		VALVE	FUEL POOL HEAT EXCHANGER TUBE SIDE VENT	FHB	+1	-	-	FS	Manual	I, B	
2034	FS MVAAA10811		VALVE	FUEL POOL HEAT EXCHANGER INLET ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2035	FS MVAAA1082		VALVE	FUEL POOL HEAT EXCHANGER TUBE SIDE DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2036	FS MVAAA109		VALVE	FUEL POOL HEAT EXCHANGER OUTLET LINE DRAIN	FHB	+1	-	-	FS	Manual	I, B	
2037	FS MVAAA110		VALVE	FUEL POOL HEAT EXCHANGER OUTLET ISOLATION	FHB	+1	-	-	FS	Manual	I, B	
2038	FS MVAAA111		VALVE	FUEL POOL HEAT EXCHANGERS OUTLET HEADER VENT	FHB	+1	-	-	FS	Manual	I, B	
2039	FS MVAAA404		VALVE	FUEL POOL ION EXCHANGER TO RWSP ISOLATION	RB	-4	B100	-	FS	Manual	I, B	
2040	FS MVAAA405		VALVE	FP IX TO REFUELING CAVITY OUTSIDE CONTAINMENT ISOL	RB	-4	-	-	FS	Manual	I, B	
2041	FS MVAAA406		VALVE	FP IX TO REFUELING CAVITY INSIDE CONTAINMENT ISOL	RCB	-4	-	-	FS	Manual	I, B	
2042	FS MVAAA415		VALVE	REFUELING CAVITY DRN PUMP INSIDE CONTAINMENT ISOL	RCB	-4	-	-	FS	Manual	I, B	
2043	FS MVAAA416		VALVE	REFUELING CAVITY DRN PUMP OUTSIDE CONTAINMENT ISOL	RB	-4	-	-	FS	Manual	I, B	
2044	FS MVAAA422		VALVOP	REFUELING CAVITY DRN PUMP TO RWSP ISOLATION	R	-4	-	-	FS	Manual	I, B	
2045	FS MVAAA422		VALVE	REFUELING CAVITY DRN PUMP TO RWSP ISOLATION	RB	-4	-	-	FS	Manual	I, B	
2046	FS MVAAA423		VALVE	RWSP PURIFICATION PUMP SUCTION ISOL FROM RWSP	RB	-35	-	-	FS	Manual	I, B	
2047	FS MVAAA423		VALVOP	RWSP PURIFICATION PUMP SUCTION ISOL FROM RWSP	RB	-4	-	-	FS	Manual	I, B	
DI 0 #				Description			DOOM					
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BL2#					BLUG.	ELEV.	RUUM	IRAIN	STSTEMTTPE	CLASS		N/R
2048	FS MVAAA601		VALVE	BACK-UP FUEL POOL HX INLET ISOLATION	FHB	-35	-	-	FS	Manual	I, B	
2049	FS MVAAA602		VALVE	BACK-UP FUEL POOL HX INLET THEF OLDE DEALN	FHB	-35	-	-	FS	Manual	I, B	
2050	FS MVAAA603		VALVE	BACK-UP FUEL POOL HX INLET TUBE SIDE DRAIN	FHB	-35	-	-	FS	Manual	I, B	
2051	FS MVAAA604		VALVE	BACK-UP FUEL POOL HX U-TUBE SIDE DRAIN	FHB	-35	-	-	FS	Manual	I, B	
2052	FS MVAAA605		VALVE	BACK-UP FUEL POOL HX OUTLET TUBE SIDE VENT	FHB	-35	-	-	FS	Manual	I, B	
2053	FS MVAAA606		VALVE	BACK-UP FUEL POOL HX U-TUBE SIDE VENT	FHB	-35	-	-	FS	Manual	I, B	
2054	FS MVAAA607	S MVAAA607 VALVE		BACK-UP FUEL POOL HX OUTLET LINE VENT	FHB	-35	-	-	FS	Manual	I, B	-
2055	FS MVAAA608		VALVE	BACK-UP FUEL POOL HX OUTLET ISOLATION	FHB	-35	-	-	FS	Manual	I, B	
2056	FS EBKR45AB	EBKR45AB 16 CKTBRK		FUEL POOL LEVEL ALARM HORN	RAB	+35	262	-	FS	14		
2057	FS ILS2000		IBISSW	FUEL POOL WATER HIGH LEVEL SWITCH	FHB	+46	F361	-	FS	0	I, B	
2058	FS ILS2000	A1	IBISSW	FUEL POOL WATER LOW LEVEL SWITCH	FHB	+46	F361	-	FS	0	I, B	
2059	FS ILS2000	A2	IBISSW	FUEL POOL WATER LOW LEVEL SWITCH	FHB	+46	F361	-	FS	0	I, B	
2060	FS EREL0631	А	RELAY	FUEL POOL LOW LEVEL ALARM RL1 RELAY	FHB	+46	F361	-	FS	0	I	
2061	FS EREL0631	В	RELAY	FUEL POOL LOW-LOW LEVEL TRIP RLL1 RELAY	FHB	+46	F361	-	FS	0	I	
2062	CC MVAAA620		VALVE	FUEL POOL HEAT EXCH'S TEMPERATURE CONTROL	FHB	+1	B161	-	FS, CCW	7	I	
2063	CC EBKR90A	21	CKTBRK	MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)	RAB	+35	262	Α	FS, CCW	14	I	
2064	CC EBKR91B	21	CKTBRK	MAIN FUEL POOL HX TCV CHANNEL B SOL (CC-620)	RAB	+35	262	В	FS, CCW	14	I	
2065	CC ISV0620	1	ICNTRL	SV FOR CC-620	FHB	+1	B161	-	FS, CCW	8	I	
2066	CC ISV0620	2	ICNTRL	SV FOR CC-620	FHB	+1	B161	-	FS, CCW	8		
2067	CC MPMP0001	Α	PUMP	COMPONENT COOLING WATER PUMP A	RAB	+21	235	Α	FS, CCW	5	I	
2068	CC MPMP0001	AB	PUMP	COMPONENT COOLING WATER PUMP AB	RAB	+21	234	AB	FS, CCW	5	l	
2069	CC MPMP0001	В	PUMP	COMPONENT COOLING WATER PUMP B	RAB	+21	233	В	FS, CCW	5	l	
2070	CC EMTR3A	2	MOTOR	COMPONENT COOLING WATER PUMP A	RAB	+21	235	Α	FS, CCW	5		
2071	CC EMTR3AB	4	MOTOR	COMPONENT COOLING WATER PUMP AB	RAB	+21	234	AB	FS, CCW	5	I	
2072	CC EMTR3B	81	MOTOR	COMPONENT COOLING WATER PUMP B	RAB	+21	233	В	FS, CCW	5	I	
2073	FS EMTR314A	5M	MOTOR	FUEL POOL PUMP A MOTOR	FHB	+1	B156	Α	FS	5	I	
2074	FS EMTR314B	5M	MOTOR	FUEL POOL PUMP B MOTOR	FHB	+1	B157	В	FS	5		
2075	FS EMTR314B	6F	MOTOR	REFUELING CANAL DRAIN PMP MOTOR	FHB	-35	B58	В	FS	5	Ι	

Table 4 – Rapid Drain-Down List (RDD)

RDD#			DESCRIPTION	BASIS FOR INCLUSION/EXCLUSION	RDD
			FUEL POOL COOLING PIPING VENTS AND INST.	These small lines are not attached to the spent fuel pool or to larger lines that can drain the fuel	
R-01	3FS1-35	PIPE	TAPS	pool. See drawings 4305-4425 and 4305-4433.	N
R-02	3FS1-55	PIPE	FUEL POOL CLG. LOOP DRAIN AND LOC SAMPLES	These small lines are not attached to the spent fuel pool or to larger lines that can drain the fuel pool. See drawing 4305-4425.	N
R-03	3FS10-2	A PIPE	FUEL POOL PUMP A SUCTION	Connected to 3FS12-1A/B header. Plain end of header in spent fuel pool at elevation 40'- 6" will prevent drain down of the pool. See drawings 4305-4423 and 4305-4424.	N
R-04	3FS10-3	B PIPE	FUEL POOL PUMP B SUCTION	Connected to 3FS12-1A/B header. Plain end of header in spent fuel pool at elevation 40 - 6" will prevent drain down of the pool. See drawings 4305-4423 and 4305-4424.	N
R-05	3FS10-4	A PIPE	FUEL POOL PUMP A DISCH TO FUEL POOL HT EXCH	Line not attached to pool where it could cause drain down. See drawing 4305-4425.	N
R-06	3FS10-5	B PIPE	FUEL POOL PUMP B DISCH TO FUEL POOL HT EXCH	Line not attached to pool where it could cause drain down. See drawing 4305-4425.	N
R-07	3FS10-76	A/B PIPE	TO SUPPLEMENTAL FUEL POOL HEAT EXCH.	Line not attached to pool where it can cause drain down. Runs between line 3FS12-6A/B and FS MHX0002 (BACKUP HEAT EXCHANGER). See drawing G169 and 4305-4425.	N
R-08	3FS12-1	A/B PIPE	FUEL POOL PUMPS SUCTION HDR FROM SPENT FUEL POOL	Plain end at elevation 40'-6" where it enters the pool. This line cannot drain down the pool. See drawings 4305-4423, 4305-4424, and G169.	N.
R-09	3FS12-6	A/B PIPE	FUEL POOL PMPS COMB DISCH HDR UPST.F.P. HEAT EXCH	Line not attached to pool where it could cause drain down. See drawing 4305-4425.	N
R-10	3FS12-7	A/B PIPE	FUEL POOL PMPS DISCH HDR DWSTM.F.P.HEAT EXCH.	Holes in pipe at elevation 40'-6" inside the fuel pool will prevent drain down. See drawings 4305- 4433 and G169. Also, see EC 5000083767.	N
R-11	3FS12-51	A/B PIPE	DELETED PER DC-3465	Line is removed by DC 3465. See drawing 4305-4433 and EC 5000083767.	N
R-12	7FS0 3/4-72	PIPE	REFUEL CANAL DR PUMP STRN DRAIN LINE	Connected to fuel pool through line 7FS4-45, which can cause rapid drain down. Therefore, this line is included in RDD list. See drawing V8.4-1001-11.	Y
R-13	7FS1-36	PIPE	F.P.PURIF. LOOP VENTS AND INSTRUMENT TAPS	This line is not connected to the spent fuel pool. Also, it is not attached to lines 7FS4-45, 7FS4- 46, 7FS4-47, or 7FS0 3/4-72. See drawings 4305-4431 and 4305-4445.	N
R-14	7FS1-56	PIPE	FUEL POOL PURIF.LOOP DR AND LOC. SAMPLES.	This line is not connected to the spent fuel pool. Also, it is not attached to lines 7FS4-45, 7FS4- 46, 7FS4-47, or 7FS0 3/4-72. See drawing 4305-4445.	N
R-15	7FS1-57	PIPE	FUEL POOL SYS DR. LOC SAMPLES VENTS & INST TAPS	This line is not connected to the spent fuel pool. Also, it is not attached to lines 7FS4-45, 7FS4-46, 7FS4-47, or 7FS0 3/4-72. See drawings 4305-4431 and V8.4-1001-16.	N
R-16	7FS2-21	PIPE	FUEL POOL SKIMMER LINE	Plain end on pipe at elevation 43' -0 7/8" inside the spent fuel pool will prevent drain down. See drawings V8.4-1001-13, 4305-4428, G169, EC 5000083763, and EC 5000083770.	N
R-17	7FS2-50	PIPE	SPENT FUEL CASK DECON PIT TO FHB SUMP	This line is not connected to the spent fuel pool. Also, it is not attached to lines 7FS4-45, 7FS4-46, 7FS4-47, or 7FS0 3/4-72. See drawing V8.4-1001-12.	N
R-18	7FS3-8	PIPE	FUEL POOL PURIF. PUMP SUCT FROM FUEL POOL	Plain end on pipe at elevation 40'-6" inside the spent fuel pool will prevent drain down. See drawings G169, 4305-4428, and EC 5000083763.	N
D 10	7500 40	חוסב	FUEL POOL ION EXCH OUTLET DOWNSTREAM OF	Plain end on pipe at elevation 42'-6" inside the spent fuel pool will prevent drain down. See	NI
R-19	753-13	PIPE	STRAINER SPENT FUEL POOL MILLEROM R W.A. VIA COW MILL	Plain and on nine at elevation 42'-6" inside the spent fuel nool will prevent drain down. See	IN
R-20	7FS3-19	PIPE	PUMP	drawings G169 AND 4305-4435.	N
R-21	7FS3-20	PIPE	FUEL POOL PURIF. PUMP PRIMING LINE	This line is not connected to the spent fuel pool. Also, it is not attached to lines 7FS4-45, 7FS4-46, 7FS4-47, or 7FS0 3/4-72. See drawings 4305-4435 and G169.	N
R-22	7FS3-22	PIPE	DELETED PER DC-3465	Line is removed by DC 3465. See drawing 4305-4428 and EC 5000083763.	N
R-23	7FS3-23	PIPE	DELETED PER DC-3465	Line is removed by DC 3465. See drawing 4305-4428 and EC 5000083763.	Ν
R-24	7FS3-44	PIPE	REFUEL CANAL & SPT. FUEL CASK STOR DR. PUMP DISCH.	Bottom of pipe at elevation 42'-6" inside fuel pool will prevent drain down of the pool. See drawings 4305-4445 and G169.	N
				This is attached to a drain in the bottom of the refuel canal. This can result in a drain down of the pool to near the top of the fuel bundles. See drawings 4305-4446, G874 S02, and EC	
R-25	7FS4-45	PIPE	REFUEL CANAL DRAIN PUMP SUCTION	5000084044.	Y

Table 4 – Rapid Drain-Down List (RDD)

RDD#		DESCRIPTION	BASIS FOR INCLUSION/EXCLUSION	RDD
		SPENT FUEL CASK STORAGE TO DRAIN PUMP	The drain in the Cask Storage Area is covered with a welded plate. However, this line is connected directly to line 7FS4-45 which can cause a drain down of the pool. See drawings 4305-	
R-26	7FS4-46 PIPE	SUCTION	4446, G874 S02, and EC 5000084044.	Y
			This line is connected to 7FS4-46 which does have the capability to cause rapid drain down of the	
R-27	7FS4-47 PIPE	SPEN FUEL CASK DECONTAM. PIT	pool. See drawing 4305-4446.	Y
	FS		Line 7FS4-45, which can cause a rapid drain of the pool, is attached to the suction on this pump.	
R-28	MPMP0002 PUN	P REFUELING CANAL DRAIN PUMP	See drawing 4305-4446.	Y

Table 5 – Seismic Walkdown Equipment List 2 (SWEL 2)

									SYSTEM		ENVIRONMENT	N/R	RDD
SWEL2#	EQUIPMENT ID		ID	DESCRIPTION	BLDG.	ELEV	ROOM	TRAIN	TYPE	CLASS			RBB
SWEL2-001	FS EBKR314A	5D	CKTBRK	FUEL POOL PURIFICATION PUMP	FHB	+1	B151	A	FS	1			N/A
SWEL2-002	FS EBKR314A	5M	CKTBRK	FUEL POOL PUMP A	FHB	+1	B151	A	FS	1			N/A
SWEL2-003	FS EBKR314B	6F	CKTBRK	REFUELING CANAL DRAIN PUMP	FHB	+1	B151	В	FS	1			N/A
SW/EL 2 004		21	сктррк	MAIN FUEL POOL HX TCV CHANNEL A		+25	262	۸	<u> </u>	14			NI/A
3WLL2-004	CCEDRIGOA	21	GRIDIN	MAIN FUEL POOL HX TCV CHANNEL B		133	202		00	14	I		11/7
SWEL2-005	CC EBKR91B	21	CKTBRK	SOL (CC-620)	RAB	+35	262	В	CC	14			N/A
SWEL2-006	FS EBKR314B	5M	CKTBRK	FUEL POOL PUMP B	FHB	+1	B151	В	FS	1			N/A
SWEL2-007	FS EOL314A	5M	RELAY	FUEL POOL PUMP A TOL	FHB	+1	B151	А	FS	1	I		N/A
SWEL2-008	FS EOL314B	5M	RELAY	FUEL POOL PUMP B TOL	FHB	+1	B152	В	FS	1	I		N/A
SWEL2-009	FS EOL314B	6F	RELAY	REFUELING CANAL DRAIN PUMP TOL	FHB	+1	B152	-	FS	1	I		N/A
SW/EL 2 010		2	MOTOR			+21	225	۸	<u> </u>	5	1		NI/A
300EL2-010	CC EIVITROA	2	MUTUR	COMPONENT COOLING WATER	RAD	721	230	A		5	I		IN/A
SWEL2-011	CC MPMP0001	А	PUMP	PUMP A	RAB	+21	235	А	CC	5	I		N/A
SWEL2-012	FS EMTR314A	5M	MOTOR	FUEL POOL PUMP A MOTOR	FHB	+1	B156	А	FS	5			N/A
SWEL2-013	FS EMTR314B	5M	MOTOR	FUEL POOL PUMP B MOTOR	FHB	+1	B157	В	FS	5	I		N/A
SW/FI 2-014	ES EMTR314B	6F	MOTOR	REFUELING CANAL DRAIN PMP	FHB	-35	B58	B	FS	5	1		NI/A
SWEL2-015	ES MPMP0001	Δ			FHB	+1	B157	Δ	FS	5	I/B		N/A
SWEL2-016	FS MPMP0001				FHB	+1	B157	B	FS	5	I/B		N/A
OWLL2-010		0		FUEL POOL HEAT EXCH'S		• 1	DIGI	D	10	<u> </u>			
SWEL2-017	CC MVAAA620		VALVE	TEMPERATURE CONTROL	FHB	+1	B161	-	CC	7	I		N/A
SWEL2-018	CC ISV0620	1	ICNTRL	SV FOR CC-620	FHB	+1	B161	-	CC	8			N/A
SWEL2-019	CC ISV0620	2	ICNTRL	SV FOR CC-620	FHB	+1	B161	-	CC	8			N/A
SWEL2-020	FS MHX0001		HTEXCH	FUEL POOL HEAT EXCHANGER TUBE	FHB	+1	-	-	FS	21	I/B		N/A
				BACK-UP FUEL POOL HX PO#J11-	FUD	05			50	04			N1/A
SWEL2-021	FS MHX0002		HIEXCH	100014 REFLIEL CANAL DR PLIMP STRN	FHB	-35	-	-	F5	21	I/B		N/A
SWEL2-022	7FS0 3/4-72		PIPE	DRAIN LINE	FHB	-	-	-	FS	0	I / B		R-12
	7504.45			REFUEL CANAL DRAIN PUMP					50	0			D 05
SWEL2-023	7FS4-45		PIPE	SUCTION SPENT FUEL CASK STORAGE TO	FHB	-	-	-	FS	0	I/B		R-25
SWEL2-024	7FS4-46		PIPE	DRAIN PUMP SUCTION	FHB	-	-	-	FS	0	I/B		R-26
SWEL2-025	7FS4-47		PIPE	SPENT FUEL CASK DECONTAM PIT	FHB	-	-	-	FS	0	I/B		R-27
SWEL2-026	FS MPMP0002		PUMP	REFUELING CANAL DRAIN PUMP	FHB	-35	B58	-	FS	5	I/B		R-28