AREVAEPRDCPEm Resource

From: WILLIFORD Dennis (AREVA) [Dennis.Williford@areva.com]
Sent: Thursday, August 09, 2012 5:00 PM
To: Tesfaye, Getachew
Cc: Jaffe, David; LENTZ Tony (EXTERNAL AREVA); VANCE Brian (AREVA); LEIGHLITER John (AREVA)
Subject: Revised Files in Preparation for Follow-up ITAAC/RAI 469 Meeting on August 29th
Attachments: RAI 469 Model ITAAC Table r1.doc; RAI 469 No Model ITAAC Table r1.doc

Getachew,
During our ITAAC Public Meeting on July 26th, AREVA committed to provide the NRC a list of the revised ITAAC models based on feedback from the meeting within 2 weeks (by August 9th). We plan to discuss further during our Follow-up Meeting on August 29th (as a part of the Tier 2* Meeting). We have incorporated almost all the feedback from NRC staff into these revised files. The highlighted/shaded area in the file are areas where additional discussion is ongoing with our engineering staff in order to finalize the ITAAC wording. The number of these is few and we continue to work with our engineering staff on resolution of these and are hoping to have these completed and ready to discuss at the August 29th meeting. Please send to the NRC participants from our earlier meeting for their review so we can discuss during our follow-up meeting.

Thanks,
Dennis

Dennis Williford, P.E.
U.S. EPR Design Certification Licensing Manager
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From: LENTZ Tony (External RS/NB)
Sent: Thursday, August 09, 2012 3:33 PM
To: WILLIFORD Dennis (RS/NB)
Subject: RE: Files in Preparation for ITAAC/RAI 469 Meeting

Dennis,

Attached are the revised files. The shading in the No Model file represents items that we have not closed with Engineering on how to reword.

Tony

From: WILLIFORD Dennis (RS/NB)
Sent: Friday, July 20, 2012 2:59 PM
To: Getachew.Tesfaye@nrc.gov
Cc: Jaffe, David; LENTZ Tony (External RS/NB); GARDNER Darrell (RS/NB)
Subject: Files in Preparation for ITAAC/RAI 469 Meeting

Getachew,
Attached are 3 files in preparation for the upcoming ITAAC/RAI 469 meeting on July 26th. These files are intended to be used during the working portion of the meeting. Our goal is to review the "Model ITAAC Table" file during the meeting (total of 68 models). The "No Model ITAAC Table" file includes miscellaneous one-of-a-

kind unique ITAAC. There are a total of 68 models. The combined ITAAC table contains both ITAAC categories and includes all non-programmatic ITAAC included in Tier 1 of the U.S. EPR FSAR.

Thanks,
Dennis

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Email Number: 4049

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Subject: Revised Files in Preparation for Follow-up ITAAC/RAI 469 Meeting on August 29th
Sent Date: 8/9/2012 5:00:11 PM
Received Date: 8/9/2012 5:00:23 PM
From: WILLIFORD Dennis (AREVA)

Created By: Dennis.Williford@areva.com

Recipients:
"Jaffe, David" <David.Jaffe@nrc.gov>
Tracking Status: None
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Tracking Status: None

Post Office: auscharmx02.adom.ad.corp

Files	**Size**	**Date & Time**
MESSAGE	2597	8/9/2012 5:00:23 PM
RAI 469 Model ITAAC Table r1.doc	213056	
RAI 469 No Model ITAAC Table r1.doc	562752	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
	1.0 BUILDINGS				
B1	Model		The basic configuration of the YYY structures separates the ## YYY by an internal hazards separation barrier so that the impact of internal hazards, including fire, flood, high energy line break and missile impact, is contained within the YYY of hazard origination. Figure x.x.x-x through Figure x.x.x-x identify the internal hazards separation barrier.	a. An inspection of the basic configuration of the YYY structures will be performed. b. A fire protection analysis will be performed. c. Inspection of barriers, doors, dampers, and penetrations existing within the internal hazards protective barriers separating the ## YYY will be performed. d. Tests of dampers that separate the ## YYY will be performed using test signals. e. A post-fire safe shutdown analysis will be performed. f. An internal flooding analysis for the YYY will be performed. g. An inspection of the YYY features identified in the internal flooding analysis in part (f) that maintain the impact of the internal flooding to the YYY of origin will be performed.	a. The basic configuration of the YYY structures provides separation as shown on Figure x.x.x-x through Figure x.x.x-x. b. The fire protection analysis concludes that barriers, doors, dampers, and penetrations existing within the internal hazards protective barriers have a minimum 3-hour fire rating and mitigate the propagation of smoke to the extent that safe shutdown is not adversely affected. c. The configuration of fire barriers, doors, dampers and penetrations that separate the ## YYY agrees with the fire protection analysis. d. Dampers that separate the ## YYY close on receipt of a signal. e. The post-fire safe shutdown analysis concludes that at least one success path is available for safe shutdown. f. The internal flooding analysis for the YYY concludes that the impact of internal flooding is contained within the YYY of origin. g. The YYY flood protection features that maintain the impact of internal flooding to the YYY of origin are installed and agree with the flooding analysis.

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
B2	Model		The YYY structures are Seismic Category I and are designed and constructed to withstand design basis loads, as specified below, without loss of structural integrity and safety related functions. • Normal plant operation (including dead loads, live loads, lateral earth pressure loads, equipment loads, hydrostatic, hydrodynamic, and temperature loads). • Internal events (including internal flood loads, accident pressure loads, accident thermal loads, accident pipe reactions, and pipe break loads, including reaction loads, jet impingement loads, cubicle pressurization loads, and missile impact loads). • External events (including wind, rain, snow, flood, tornado, tornado-generated missiles and earthquake).	~~a.~~ An inspection and analysis of the as-built YYY structures for the design basis loads will be performed. ~~b. Deviations from the design will be analyzed.~~	~~a.~~ A report concludes that the as-built YYY structures will withstand the design basis loads specified without loss of structural integrity or safety-related functions. ~~b. A report reconciles deviations to the design.~~
B3	Model		The YYY structures have key dimensions and tolerances specified in Table x.x.x-x.	a. An as-built inspection of key dimensions and tolerances of the YYY structures will be performed. ~~b. Deviations from the design will be analyzed.~~	a. The dimensions of the YYY structures conform to the key dimensions and tolerances specified in Table x.x.x-x. ~~b. A report reconciles deviations to the design.~~
B4	Model		The ZZZ site grade level is located between 12 inches and 18 inches below the finish floor elevation at ground entrances.	An as-built inspection of the ZZZ site grade level will be performed.	The ZZZ site grade level is located between 12 inches and 18 inches below finish floor elevation at ground entrances.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
	2.0 ARRANGEMENT				
A1	Model		The functional arrangement of the ZZZ is as described in the Design Description of Section x.x.x, Tables x.x.x-1 and x.x.x-x, and as shown on Figure x.x.x-1.	An inspection of the as-built system will be performed.	The as-built ZZZ conforms to the functional arrangement as described in the Design Description of Section x.x.x, Tables x.x.x-1 and x.x.x-x, and as shown on Figure x.x.x-1.
A2	Model		Deleted.~~The location of the ZZZ equipment is as listed in Table x.x.x-1.~~	Deleted.~~An inspection will be performed.~~	Deleted.~~The ZZZ equipment listed in Table x.x.x-1 is located as listed in Table x.x.x-1.~~
A3	Model		The location of the XXX is as listed in Table x.x.x-x.	An as-built inspection of the as-built system will be performed.	The XXX listed in Table x.x.x-x is located as listed in Table x.x.x-x.
A4	Model		Physical separation exists between divisions of the ZZZ located in the YYY Buildings as shown on Figure x.x.x-1.	An as-built inspection of the as-built system will be performed.	The divisions of the ZZZ are located in separate YYY Buildings as shown on Figure x.x.x-1.
	3.0 MECHANICAL DESIGN FEATURES				
M01	Model		Components identified as Seismic Category I in Table x.x.x-x can withstand seismic design basis loads without a loss of the function listed in Table x.x.x-x	a. Type tests, analyses, or a combination of type tests and analyses will be performed on the components identified as Seismic Category I in Table x.x.x-x using analytical assumptions, or under conditions, which bound the Seismic Category I design requirements. b. An as-built ~~I~~inspection~~s~~ will be performed of the components identified as Seismic Category I in Table x.x.x-x to verify that the installation of components, including anchorage, is bounded by the approved design. ~~are installed per seismic qualification report (SQDP, EQDP, or analyses) requirements.~~	a. Seismic qualification reports (SQDP, EQDP, or analyses) conclude that the components identified as Seismic Category I in Table x.x.x-x can withstand seismic design basis loads without a loss of the function listed in Table x.x.x-x including the time required to perform the listed function. b. Inspection reports conclude that the installation of components identified as Seismic Category I in Table x.x.x-x, including anchorage, is bounded by the approved design. ~~are installed per seismic qualification reports (SQDP, EQDP, or analyses) requirements.~~

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
M02	Model		XXX piping shown as ASME Code Section III on Figure x.x.x-x is designed in accordance with ASME Code Section III requirements.	Analysis of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. {{DAC}}	ASME Code Section III Design Reports (NCA-3550) conclude that the design of XXX piping shown as ASME Code Section III on Figure x.x.x-x complies with ASME Code Section III requirements. {{DAC}}
M02	Model		XXX piping shown as ASME Code Section III on Figure x.x.x-x is reconciled in accordance with an ASME Code Section III design requirements.	Analyses of ~~the piping shown as ASME Code Section III on Figure x.x.x-x using~~ ASME Code Design Reports (NCA-3550) for the piping shown as ASME Code Section III on Figure x.x.x-x will be performed.	For XXX piping shown as ASME Code Section III on Figure x.x.x-x, ASME Code Data Reports (N-5) conclude that design reconciliation (NCA-3554) has been completed in accordance with the ASME Code Section III for the system. The report(s) document the results of the reconciliation analysis.
M03	Model		XXX piping shown as ASME Code Section III on Figure x.x.x-x is fabricated, installed, and inspected in accordance with ASME Code Section III requirements.	An inspection of the piping shown as ASME Code Section III on Figure x.x.x-x will be performed.	For XXX piping shown as ASME Code Section III on Figure x.x.x-x, ASME Code Data Report(s) (certified, when required by ASME Code) and inspection reports (including N–5 Data Reports where applicable) conclude that the piping is fabricated, installed, and inspected in accordance with ASME Code Section III requirements.
M04	Model		Pressure boundary welds in XXX piping shown as ASME Code Section III on Figure x.x.x-x meet ASME Code Section III non-destructive examination requirements.	An ~~I~~inspection~~s~~ of pressure boundary welds will be performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports conclude that non-destructive examination of pressure boundary welds in XXX piping shown as ASME Code Section III on Figure x.x.x-x comply with ASME Code Section III requirements.
M05	Model		XXX piping shown as ASME Code Section III on Figure x.x.x-x retains pressure boundary integrity at design pressure.	Hydrostatic tests will be performed.	For XXX piping shown as ASME Code Section III on Figure x.x.x-x, ASME Code Section III Data Reports conclude that hydrostatic test results comply with ASME Code Section III requirements.
M06	Model		Components listed in Table x.x.x-x as ASME Code Section III are designed in accordance with ASME Code Section III requirements.	Analysis of ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed.	ASME Code Section III Design Reports (NCA-3550) conclude that the design of components listed as ASME Code Section III in Table x.x.x-x complies with ASME Code Section III requirements.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
M06	Model		Components listed in Table x.x.x-x as ASME Code Section III are reconciled in accordance with ASME Code Section III design requirements.	Analyses of ASME Code Design Reports (NCA-3550) for components listed as ASME Code Section III in Table x.x.x-x will be performed.	For components listed as ASME Code Section III in Table x.x.x-x, ASME Code Data Reports (N-5) conclude that design reconciliation (NCA-3554) has been completed in accordance with the ASME Code Section III for the as-built system. The report(s) document the results of the reconciliation analysis.
M07	Model		Components listed in Table x.x.x-x as ASME Code Section III are fabricated, installed, and inspected in accordance with ASME Code Section III requirements.	An inspection of components listed in Table x.x.x-x as ASME Code Section III will be performed.	For components listed in Table x.x.x-x as ASME Code Section III, ASME Code Data Report(s) (certified, when required by ASME Code) and inspection reports (including N–5 Data Reports where applicable) conclude that the components are fabricated, installed, and inspected in accordance with ASME Code Section III requirements.
M08	Model		Pressure boundary welds on components listed in Table x.x.x-x as ASME Code Section III meet ASME Code Section III non-destructive examination requirements.	An Iinspections of pressure boundary welds will be performed in accordance with ASME Code Section III requirements.	For components listed as ASME Code Section III in Table x.x.x-x, ASME Code Section III Data Reports conclude that non-destructive examination of pressure boundary welds comply with ASME Code Section III requirements.
M09	Model		Components listed in Table x.x.x-x as ASME Code Section III retain pressure boundary integrity at design pressure.	Hydrostatic tests will be performed.	For components listed as ASME Code Section III in Table x.x.x-x, ASME Code Section III Data Reports conclude that hydrostatic test results comply with ASME Code Section III requirements.
M10	Model		Components listed in Table x.x.x-x as ASME AG-1 Code are designed in accordance with ASME AG-1 Code requirements.	An analysis will be performed of ASME AG-1 Code Design Verification Reports.	ASME AG-1 Code Design Verification Reports (AA-4400) conclude that the design of components listed as ASME AG-1 Code in Table x.x.x-x complies with ASME AG-1 Code requirements.
M11	Model		Components listed in Table x.x.x-x as ASME AG-1 Code are fabricated in accordance with ASME AG-1 Code requirements, including welding requirements.	An Iinspections will be performed.	For components listed as ASME AG-1 Code in Table x.x.x-x, reports conclude that the component is fabricated in accordance with ASME AG-1 Code requirements, including welding requirements.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
M12	Model		Components listed in Table x.x.x-x as ASME AG-1 Code are installed, inspected, and tested in accordance with ASME AG-1 Code requirements.	An as-built Iinspections and tests will be performed.	For components listed x-x as ASME AG-1 Code in Table x.x.x-x, reports conclude that the component is installed, inspected, and tested in accordance with meets ASME AG-1 Code inspection and testing requirements.
M13	Model		Check valves listed in Table x.x.x-x will function to change position as listed in Table x.x.x-x under normal system operating conditions.	Tests will be performed for the operation of the check valves listed in Table x.x.x-x.	The check valves change position as listed in Table x.x.x-x under system normal operating conditions.
M14	Model		Class 1E valves listed in Table x.x.x-x will function to change position as listed in Table x.x.x-x under normal system operating conditions.	Tests will be performed for the operation of the valves listed in Table x.x.x-x.	The valves change position as listed Table x.x.x-x under normal system operating conditions.
M15	Model		Class 1E dampers listed in Table x.x.x-x will function to change position as listed in Table x.x.x-x under normal system operating conditions.	Tests will be performed for the operation of the dampers listed in Table x.x.x-x.	The dampers change position as listed in Table x.x.x-x under normal system operating conditions.
M16	Model		Valves listed in Table x.x.x-x will be functionally designed and qualified such that each valve is capable of performing its intended function for a full range of system differential pressure and flow, ambient temperatures, and available voltage (as applicable) under conditions ranging from normal operating to design-basis accident conditions.	Tests or type tests of the valves listed in Table x.x.x-x will be performed.	A test report concludes that the valves listed in Table x.x.x-x function under conditions ranging from normal operating to design-basis accident conditions.

GRP	Sect	No.	Design Commitment	ITA	AC
M17	Model		Containment isolation valves are located close to containment penetrations.	~~a.~~ An as-built inspection and analysis will be performed. ~~b. Inspection of the location of containment isolation valves will be performed. Deviations to the design location of containment isolation valves will be reconciled to the design analysis.~~	~~a.~~ An as-built analysis concludes that the containment isolation valves listed in Table x.x.x-x are located as close to the containment penetrations as practical with consideration of the following: - Access for inspection of welds. - Containment leak testing. - Replacement. - Valve maintenance. ~~b. A report concludes that deviations to the design location of containment isolation valves have been reconciled.~~
	4.0 I&C DESIGN FEATURES, DISPLAYS, AND CONTROLS				
I01	Model		Displays listed in Table x.x.x-x are indicated on the PICS operator workstations in the MCR and the RSS.	a. Tests will be performed ~~in the MCR~~ using test signals. b. Tests will be performed ~~in the RSS~~ using test signals.	a. Displays listed in Table x.x.x-x are indicated on the PICS operator workstations in the MCR. b. Displays listed in Table x.x.x-x are indicated on the PICS operator workstations in the RSS.
I02	Model		Controls on the PICS operator workstations in the MCR and the RSS perform the function listed in Table x.x.x-x.	a. Tests will be performed using controls on the PICS operator workstations in the MCR. b. Tests will be performed using controls on the PICS operator workstations in the RSS.	a. Controls on the PICS operator workstations in the MCR perform the function listed in Table x.x.x-x. b. Controls on the PICS operator workstations in the RSS perform the function listed in Table x.x.x-x.
I03	Model		Class 1E XXXX equipment listed in Table x.x.x-x can function when subjected to EMI, RFI, ESD, and power surges.	Type tests or type tests and analyses will be performed.	Equipment identified as Class 1E in Table x.x.x-x can function when subjected to EMI, RFI, ESD, and power surges.

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
I04	Model		Communications independence is provided between the ## XXXX divisions.	Tests using test signals, analyses, or a combination of tests using test signals and analyses will be performed.	Communications independence between the XXXX divisions is provided by: • The XXXX function processors do not interface directly with a network. Separate communication modules interface directly with the network. • Separate send and receive data channels are used in both the communications module and the XXXX function processor. • The XXXX function processors operate in a strictly cyclic manner. • The XXXX function processors operate asynchronously from the XXXX communications module.
I04	Model		Communications independence is provided between XXXX equipment and non-Class 1E equipment.	Tests using test signals, analyses, or a combination of tests using test signals and analyses will be performed on the XXXX equipment.	Communications independence between XXXX equipment and non-Class 1E equipment is provided by: • Data communications between XXXX function processors and non-Class 1E equipment is through a Monitoring and Service Interface (MSI). • The MSI does not interface directly with a network. Separate communication modules interface directly with the network. • Separate send and receive data channels are used in both the communications module and the MSI. • The MSI operates in a strictly cyclic manner. • The MSI operates asynchronously from the communications module. • The XXXX uses a hardware device to ensure that unidirectional signals are sent to non-safety-related I&C systems.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
I05	Model		Electrical isolation is provided on connections between XXXX equipment and non-Class 1E equipment.	~~a. Analyses will be performed to determine the test specification for electrical isolation devices on connections between XXXX equipment and non-Class 1E equipment.~~ a~~b~~. Type tests, analyses, or a combination of type tests and analyses will be performed on the electrical isolation devices between XXXX equipment and non-Class 1E equipment. b~~c~~. An as-built ~~I~~inspection~~s~~ will be performed on connections between XXXX equipment and non-Class 1E equipment.	~~a. A test plan provides the test specification for determining whether a device is capable of preventing the propagation of credible electrical faults on connections between XXXX equipment and non-Class 1E equipment.~~ a~~b~~. A report concludes that the Class 1E isolation devices used between XXXX equipment and non-Class 1E equipment prevent the propagation of credible electrical faults. b~~c~~. Class 1E electrical isolation devices exist on connections between XXXX equipment and non-Class 1E equipment.
I06	Model		Locking mechanisms are provided on the XXXX cabinet doors. ~~Opened~~ XXXX cabinet doors that are not closed are indicated in the MCR.	~~a. An inspection will be performed.~~ a~~b~~. A test will be performed. b~~c~~. A test will be performed.	~~a. Locking mechanisms exist on the XXXX cabinet doors.~~ a~~b~~. The locking mechanisms on the XXXX cabinet doors operate properly. b~~c~~. ~~Opened~~ XXXX cabinet doors that are not closed are indicated on the PICS in the MCR ~~when a XXXX cabinet door is in the open position~~.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
I07	Model		The XXXX system design and application software are developed using a process composed of six lifecycle phases, with each phase having outputs which must conform to the requirements of that phase. The six lifecycle phases are the following: 1) Basic Design Phase. 2) Detailed Design Phase. 3) Manufacturing Phase. 4) System Integration and Testing Phase. 5) Installation and Commissioning Phase. 6) Final Documentation Phase.	a. Analyses will be performed to verify that the outputs for the XXXX basic design phase conform to the requirements of that phase. b. Analyses will be performed to verify that the outputs for the XXXX detailed design phase conform to the requirements of that phase. c. Analyses will be performed to verify that the outputs for the XXXX manufacturing phase conform to the requirements of that phase. d. Analyses will be performed to verify that the outputs for the XXXX system integration and testing phase conform to the requirements of that phase. e. Analyses will be performed to verify that the outputs for the XXXX installation and commissioning phase conform to the requirements of that phase. f. Analyses will be performed to verify that the outputs for the XXXX final documentation phase conform to the requirements of that phase.	a. A report concludes that the outputs conform to requirements of the basic design phase of the XXXX. b. A report concludes that the outputs conform to requirements of the detailed design phase of the XXXX. c. A report concludes that the outputs conform to the requirements of the manufacturing phase of the XXXX. d. A report concludes that the outputs conform to the requirements of the system integration and testing phase of the XXXX. e. A report concludes that the outputs conform to the requirements of the installation and commissioning phase of the XXXX. f. A report concludes that the outputs conform to the requirements of the final documentation phase of the XXXX.

GRP	Sect	No.	Design Commitment	ITA	AC
I08	Model		The XXXX is designed so that safety-related functions required for an AOO or PA are performed in the presence of the following: • Single detectable failures within the XXXX. • Failures caused by the single failure. • Failures and spurious system actions that cause or are caused by the AOO or PA requiring the safety function.	A failure modes and effects analysis will be performed on the XXXX at the level of replaceable modules and components.	A report concludes that the XXXX is designed so that safety-related functions required for an AOO or PA are performed in the presence of the following: • Single detectable failures within the XXXX. • Failures caused by the single failure. • Failures and spurious system actions that cause or are caused by the AOO or PA requiring the safety function.
I09	Model		The equipment for each XXXX division is distinctly identified and distinguishable from other identifying markings placed on the equipment~~, and the identifications do not require frequent use of reference material~~.	An as-built ~~I~~inspection~~s~~ will be performed on the XXXX equipment to verify that the equipment for each XXXX division is distinctly identified and distinguishable from other markings placed on the equipment~~ and that the identifications do not require frequent use of reference material~~.	The equipment for each XXXX division is distinctly identified and distinguishable from other identifying markings placed on the equipment~~, and the identifications do not require frequent use of reference material~~.
I10	Model		The XXXX receives input signals from the sources listed in Table x.x.x-x.	A test will be performed using test signals.	The XXXX receives input signals from the sources listed in Table x.x.x-x.
I11	Model		The XXXX provides the output signals to the recipients listed in Table x.x.x-x.	A test will be performed using test signals.	The XXXX provides output signals to the recipients listed in Table x.x.x-x.
I12	Model		Hardwired disconnects exist between the SU and each divisional MSI of the XXXX. The hardwired disconnects prevent the connection of the SU to more than a single division of the XXXX.	a. An as-built ~~I~~inspection~~s~~ will be performed. b. A ~~T~~test~~s~~ will be performed.	a. Hardwired disconnects exist between the SU and each divisional MSI of the XXXX. b. The hardwired disconnects prevent the connection of the SU to more than a single division of the XXXX.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
I13	Model		The XXXX is capable of performing its safety function when XXXX equipment is in maintenance bypass. Bypassed XXXX equipment is indicated in the MCR.	a. A test of the XXXX will be performed ~~using test signals~~ to verify the maintenance bypass functionality. b. A test will be performed using test signals to verify the existence of indications on the PICS in the MCR when XXXX equipment is in maintenance bypass (inoperable).	a. The XXXX can perform its safety functions when XXXX equipment is in maintenance bypass. b. Bypassed XXXX equipment is indicated in the MCR on the PICS.
I14	Model		The XXXX generates automatic ZZZ signals for the input variables listed in Table x.x.x-x.	A test will be performed on the XXXX using test signals.	The XXXX generates an ZZZ signal after the test signal reaches the trip limit for the input variables listed in Table x.x.x-x. The ZZZ signals remain following removal of the test signal. The ZZZ signals are removed when test signals that represent the completion of the ZZZ function are present. Deliberate operator action is required to return the XXXX to normal.
I15	Model		~~Interlocks for the~~ The XXXX ~~initiate~~ contains the following interlocks: ~~a.~~ • Opening ~~b.~~ • Opening ~~c.~~ • Opening	A ~~T~~tests will be performed using test signals.	The following interlocks respond as specified below when activated by a test signal: ~~a.~~ • Opening ~~b.~~ • Opening ~~c.~~ • Opening
I16	Model		Equipment listed as being controlled by a PACS module in Table x.x.xx responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.	A test will be performed using test signals.	Equipment listed as being controlled by a PACS module in Table x.x.xx responds to the state requested and provides drive monitoring signals back to the PACS module. The PACS module will protect the equipment by terminating the output command upon the equipment reaching the requested state.

GRP	Sect	No.	Design Commitment	ITA	AC
I17	Model		During data communication, the PS function processors receive only the pre-defined messages for that specific function processor. Other messages are ignored.	a. An analysis will be performed. b. A test will be performed.	a. A report ~~determines the test specification for the PS function processors to verify that only~~ defines the pre-defined messages for that specific function processor and other messages are ignored. b. ~~A report concludes that t~~The PS function processors receive only the pre-defined messages for that specific function processor. Other messages are ignored.
	5.0 ELECTRICAL POWER DESIGN FEATURES				
E01	Model		The components designated as Class 1E in Table x.x.x-x are powered from the Class 1E division as listed in Table x.x.x-x in a normal or alternate feed condition.	a. Test~~sing~~ will be performed by providing a test signal in each normally aligned division. b. Test~~sing~~ will be performed by providing a test signal in each division with the alternate feed aligned to the divisional pair.	a. The test signal provided in the normally aligned division is present at the respective Class 1E components identified in Table x.x.x-x. b. The test signal provided in each division with the alternate feed aligned to the divisional pair is present at the respective Class 1E components identified in Table x.x.x-x.
E02	Model		Without an alternate feed installed, independence is maintained between the ## XXXX divisions.	Test~~sing~~ will be performed by providing a test signal in each XXXX division, one division at a time.	Without an alternate feed installed, the test signal exists only in the XXXX division under test, when a test signal is applied in each XXXX division.
E03	Model		With the alternate feed installed from EPSS division W to division X, independence is maintained between the load group created by divisions W and X, and the load group created by divisions Y and Z. EPSS divisions Y and Z are independent of each other.	Test~~sing~~ will be performed by providing a test signal in each EPSS division, one division at a time, while the alternate feed is installed from EPSS division W to division X.	a. A test signal exists only in the load group created by Class 1E divisions W and X when the test signal is provided in Class 1E division W or X. b. A test signal exists only in the division under test when the test signal is provided in Class 1E division Y or Z.
E04	Model		Non-safety-related loads connected to the XXXX are electrically isolated from the XXXX by an qualified isolation device.	a. Type tests, analyses, or a combination of type tests and analyses of the isolation devices will be performed. b. An as-built inspection will be performed.	a. The isolation devices used between the XXXX and non-safety-related loads are qualified to provide electrical isolation. b. A qualified electrical isolation device exists between non-safety-related loads connected to the XXXX, and the XXXX.

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
E05	Model		The XXXX inverters are sized to power the design XXXX loads on the respective supplied MCC.	a. An as-built inspection and analysis will be performed. b. An inspection will be performed.	a. An as-built equipment sizing analysis concludes each XXXX inverter rating is greater than the analyzed load requirements. b. The ratings of the XXXX inverters meet the analysis criteria.
E06	Model		XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x and their feeder breakers and load breakers, are sized to supply their load requirements.	a. An as-built inspection and analysis will be performed. b. An inspection will be performed.	a. An as-built Eequipment sizing analysis concludes analyses conclude that ratings for XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x and their feeder breakers and load breakers, are greater than their analyzed load requirements. b. The ratings of XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x and their feeder breakers and load breakers, meet the analysis criteria.
E07	Model		XXXX cables and buses are sized to supply their assigned load requirements.	a. An as-built inspection and analysis will be performed. b. An inspection will be performed.	a. An as-built Eequipment sizing analysis concludes analyses conclude XXXX cables and buses are sized to supply analyzed load requirements. b. The ratings of XXXX cables and buses meet the analysis criteria.
E08	Model		XXXX interrupting devices (e.g., circuit breakers and fuses) are coordinated so that the circuit interrupting device closest to the fault open before other devices.	a. An as-built inspection and analysis will be performed. b. An inspection will be performed.	a. An as-built Eequipment protection and coordination analysis concludes analyses conclude that for the XXXX interrupting devices (e.g., circuit breakers and fuses) are coordinated so that the circuit interrupting device closest to the fault open before other devices. b. The ratings of XXXX interrupting devices (e.g., circuit breakers and fuses) meet the analysis criteria.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
E09	Model		XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x, are rated to withstand fault currents for the time required to clear the fault from its power source.	~~a.~~ An as-built inspection and analysis will be performed. ~~b. An inspection will be performed.~~	~~a.~~ An as-built ~~S~~short-circuit analysis concludes ~~analyses conclude~~ that current capability for XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x, is greater than the analyzed fault currents for the time required to clear the fault from its power source as determined by circuit interrupting device coordination analysis. ~~b. The ratings of XXXX switchgear, load centers, MCCs, and transformers, listed in Table x.x.x-x, meet the analysis criteria.~~
E09	Model		The feeder and load circuit breakers for XXXX switchgear, load centers, and MCCs are rated to interrupt fault currents.	~~a.~~ An as-built inspection and analysis will be performed. ~~b. An inspection will be performed.~~	~~a.~~ An as-built ~~S~~short-circuit analysis concludes ~~analyses conclude~~ that current interrupting capability for XXXX switchgear, load center, and MCC feeder and load circuit breakers, is greater than the analyzed fault currents. ~~b. The ratings of XXXX switchgear, load center, and MCC feeder and load circuit breakers meet the analysis criteria.~~
E10	Model		Each XXXX battery is able to provide power for starting and operating design loads for a minimum of two hours when the ac supply to the battery charger is lost.	a. An analysis will be performed. b. A battery discharge test will be performed.	a. An as-built analysis concludes the XXXX battery is able to provide power for starting and operating analyzed design loads for a minimum time of two hours while battery terminal voltage remains above minimum voltage required for the design loads. b. The capacity of the XXXX battery is equal to or greater than the analyzed battery design duty cycle.
E10	Model		Each XXXX battery charger supplies assigned XXXX loads while maintaining the respective EUPS battery charged.	a. An analysis will be performed. b. A battery charger capacity test will be performed.	a. An as-built analysis concludes each XXXX battery charger rating is greater than the analyzed load requirements. b. Each XXXX battery charger can maintain an output current that can supply the assigned XXXX loads while maintaining the respective XXXX battery charged.

MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
E11	Model		Each XXDG output rating is greater than the analyzed loads assigned in the respective XXXX divisions.	a. An as-built inspection and analysis will be performed. b. An inspection will be performed.	a. An as-built analysis concludes each XXDG output rating is greater than the analyzed loads assigned in the respective XXXX divisions. b. Each XXXDG provides an output power capacity greater than the analyzed loads.
	6.0 ENVIRONMENTAL QUALIFICATIONS				
Q1	Model		Components designated as harsh environment in Table x.x.x-x will perform the function listed in Table x.x.x-x under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions.	a. Type tests or type tests and analysis will be performed to demonstrate the ability of the components designated as harsh environment in Table x.x.x-x to perform the function listed in Table x.x.x-x under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions. b. An as-built inspection will be performed of the Ccomponents designated as harsh environment in Table x.x.x-x will be inspected to verify that the installation is bounded by the approved design. in accordance with the EQDP requirements, and deviations will be reconciled.	a. EQDPs exist and conclude that the components designated as harsh environment in Table x.x.x-x can perform the function listed in Table x.x.x-x under normal environmental conditions, containment test conditions, anticipated operational occurrences, and accident and post-accident environmental conditions, including the time required to perform the listed function. b. Inspection reports exist and conclude that the installation of components designated as harsh environment in Table x.x.x-x is bounded by the approved design.have been installed per the EQDP requirements and deviations have been reconciled.

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
Q2	Model		Components designated as mild environment in Table x.x.x-x will perform their function under normal environmental conditions, AOOs, and accident and post-accident environmental conditions.	a. Type tests or type tests and analysis will be performed to demonstrate the ability of the components designated as mild environment in Table x.x.x-x to perform their function normal environmental conditions, AOOs, and accident and post-accident environmental conditions. b. An as-built inspection will be performed of the ~~C~~components designated as mild environment Table x.x.x-x ~~will be inspected~~ to verify that the installation is bounded by the approved design. ~~in accordance with the EQDP requirements, and deviations will be reconciled.~~	a. EQDPs conclude that components designated as mild environment in Table x.x.x-x can perform their function under normal environmental conditions, AOOs, and accident and post-accident environmental conditions, including the time required to perform their function. b. Inspection reports ~~exist and~~ conclude that the installation of components designated as mild environment in Table x.x.x-x is bounded by the approved design.~~have been installed per the EQDP requirements and deviations have been reconciled.~~
	7.0 EQUIPMENT AND SYSTEM PERFORMANCE				
S01	Model		Containment isolation valves listed in Table x.x.x-x close within the containment isolation response time following initiation of a containment isolation signal.	Tests will be performed using test signals.	Containment isolation valves listed in Table x.x.x-x close within the time listed in Table x.x.x-x ~~60 seconds~~ after receipt of an isolation test signal from the PACS module. (NOTE: a new table will be added to list the CIV closure times.)
S02	Model		The pumps listed in Table x.x.x-x have NPSHA that is greater than NPSHR at system run-out flow.	Tests and analyses will be performed.	The pumps listed in Table x.x.x-x have NPSHA that is greater than NPSHR at system run-out flow.
S03	Model		The ZZZ heat exchangers listed in Table x.x.x-x have the capacity to transfer the design heat load to the WWW.	Tests and analyses will be performed.	Each ZZZ heat exchanger has the capacity to transfer a heat load of at least #### BTU/hr to the WWW via the heat exchangers listed in Table x.x.x-x.
S04	Model		The ZZZ has provisions to allow flow testing of the ZZZ pumps during plant operation.	Tests will be performed.	The ZZZ pump flow test line recirculates at least ### gpm back to the ZZZ.

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MODEL ITAAC TABLE, r1

GRP	Sect	No.	Design Commitment	ITA	AC
S05	Model		The ZZZ provides recirculation cooling to maintain design temperatures in the XXX rooms in the WWW Buildings, while operating in a design basis accident alignment.	~~a. An analysis will be performed.~~ a~~b~~. Tests and analysis of the ZZZ cooling units will be performed. b. Tests and analysis of the ZZZ fans will be performed.	~~a. Each ZZZ cooling coil is capable of providing design cooling requirements.~~ ~~Each ZZZ air inlet heater is capable of providing design heating capacity, while operating in a design basis accident alignment.~~ a~~b~~. The ZZZ is capable of providing cooling to maintain design temperatures in the XXX rooms in the WWW Buildings, while operating in a design basis accident alignment. b. Each ZZZ fan is capable of meeting the design air flow requirements, while operating in a design basis accident alignment.
S05	Model		The ZZZ provides heating to maintain design temperatures in the XXX rooms in the WWW Buildings, while operating in a design basis accident alignment.	a. Tests and analysis of the ZZZ heaters will be performed. b. Tests and analysis of the ZZZ fans will be performed.	a. The ZZZ is capable of providing heating to maintain design temperatures in the XXX rooms in the WWW Buildings, while operating in a design basis accident alignment. b. Each ZZZ fan is capable of meeting the design air flow requirements, while operating in a design basis accident alignment.
S06	Model		XXX provide relief capacity.	Vendor ~~T~~tests and analysis will be performed.	Each XXX provides relief capacity ≥ #### lbm/hr at #### psig.
S07	Model		Valves listed in Table x.x.x-x fail to the position as ~~shown~~ listed in Table x.x.x-x on loss of power.	Tests will be performed.	Following loss of power, the valves listed in Table x.x.x-x fail to the position as ~~shown~~ listed in Table x.x.x-x.

GRP	Sect	No.	Commitment	ITA	AC
A5			Miscellaneous Inspection		
A5	3.6	2.1	Class 1E cables and raceways are marked according to their respective division color code.	An as-built inspection will be performed.	Class 1E cables and raceways are marked according to their respective color code.
A5	2.8.1	2.2	The axis of the turbine rotor shafts is positioned favorable to the Reactor Building and other essential safety-related structures, except for two of the four Essential Service Water Buildings and the two Emergency Power Generating Buildings, such that the safety-related structures are located outside the turbine missile low-trajectory hazard zone. The low-trajectory hazard zone is defined as an area bounded by lines that are inclined at 25 degrees to the turbine wheel planes and pass through the end wheels of the low pressure stages.	An as-built inspection will be performed.	Safety-related structures, except for two of the four Essential Service Water Buildings and the two Emergency Power Generating Buildings, are located outside the turbine missile low-trajectory hazard zone.
B5			Fire & Flooding Related		
B5	2.1.1.4	3.6	NI structural walls or floors having exterior penetrations located below grade elevation are protected against external flooding by watertight seals.	An as-built inspection of NI exterior structural wall and floor penetrations located below grade elevation will be performed.	Watertight seals exist for exterior penetrations of NI structural walls and floors located below grade elevation.
B5	2.1.1.8	2.2	As shown on Figure 2.1.1-4, a flooding barrier is provided to prevent ingress of water into the core melt spreading area. Penetrations within the core melt water ingression barrier are protected by watertight seals. Doors within the core melt water ingression barrier are watertight doors.	An as-built Iinspection ~~of the core melt water ingression barrier~~ will be performed.	The RCB provides a core melt spreading area water ingression barrier as shown on Figure 2.1.1-4. Penetrations within the core melt water ingression barrier are protected by watertight seals. Doors within the core melt water ingression barrier are watertight doors.
B5	2.1.1.8	2.7	The RBA is separated from the SBs and the FB and the RBA is separated from the RCB by internal hazard	a. A fire protection analysis will be performed. b. Inspection of as-built conditions of	a. The fire protection analysis concludes that barriers, doors, dampers, and penetrations providing separation have a minimum 3-hour

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GRP	Sect	No.	Commitment	ITA	AC
			protection barriers that have a minimum 3-hour fire rating. The barriers are shown on Figure 2.1.1-20.	features such as barriers, doors, dampers, and penetrations, which separate the RBA from the SBs and FB, and the RBA is separated from the RCB versus construction drawings of barriers, doors, dampers and penetrations as determined in the part (a) analysis will be performed. c. Testing of dampers that separate the RBA from the SBs and FB and the RBA from the RCB will be performed. d. A post-fire safe shutdown analysis will be performed. e. A smoke effects analysis will be performed.	fire rating and mitigate the propagation of smoke to the extent that safe shutdown is not adversely affected.Completion of fire protection analysis which concludes that features such as barriers, doors, dampers, and penetrations that separate the RBA from the SBs and FB, and the RBA from the RCB, have a minimum 3-hour fire rating. b. The configuration of fire barriers, doors, dampers, and penetrations that separate the RBA from the SBs and FB and the RBA from the RCB , as shown on Figure 2.1.1-20, agrees with the construction drawingsfire protection analysis. c. Dampers that separate the RBA from the SBs and FB and the RBA from the RCB are operable under air flow conditions. d. Completion of tThe post-fire safe shutdown analysis concludes that at least one success path comprised of the minimum set of SSC is available for safe shutdown. e. The smoke effects analysis concludes that smoke and other products of combustion do not migrate through the credited barriers and adversely affect safe shutdown.
B5	2.1.1.8	2.10	Essential equipment required for plant shutdown located in the RCB and RBA is located above the internal flood level.	a. An internal flood analysis for the RCB and RBA will be performed. b. An as-built inspection of the RCB and RBA will be performed.	a. The internal flood analysis for the RCB and RBA defines the essential equipment required for plant shutdown and the internal flood level in the RCB and RBA. b. Essential equipment in the RCB and RBA required for plant shutdown is located above the internal flood level.
B5	2.1.1.8	2.24	Fire protection features provide separation within the RBA.	a. A fire protection analysis will be performed. b. Inspection of barriers, doors, dampers, and penetrations existing within the internal hazards	a. The fire protection analysis concludes that barriers, doors, dampers, and penetrations providing separation have a minimum 3-hour fire rating and mitigate the propagation of smoke to the extent that safe shutdown is not

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				protective barriers will be performed. c. Tests of dampers that provide separation within the RBA will be performed~~ using test signals~~. d. A post-fire safe shutdown analysis will be performed. e. A smoke effects analysis will be performed.	adversely affected. b. The configuration of fire barriers, doors, dampers and penetrations existing within the internal hazards protective barriers agrees with the fire protection analysis. c. Dampers that provide separation within the RBA are operable under air flow conditions~~close on receipt of a signal~~. d. The post-fire safe shutdown analysis concludes that at least one success path is available for safe shutdown. e. The smoke effects analysis concludes that smoke and other products of combustion do not migrate through the credited barriers and adversely affect safe shutdown.
B5	2.1.1.8	2.25	Fire protection features provide separation within the RCB.	a. A fire protection analysis will be performed. b. Inspection of barriers, doors, dampers, and penetrations existing within the internal hazards protective barriers will be performed. c. Tests of dampers that provide separation within the RCB will be performed using test signals. d. A post-fire safe shutdown analysis will be performed.	a. The fire protection analysis concludes that barriers, doors, dampers, and penetrations providing separation have a minimum 3-hour fire rating and mitigate the propagation of smoke to the extent that safe shutdown is not adversely affected. b. The configuration of fire barriers, doors, dampers and penetrations existing within the internal hazards protective barriers agrees with the fire protection analysis. c. Dampers that provide separation within the RCB are operable under air flow conditions. d. The post-fire safe shutdown analysis concludes that at least one success path is available for safe shutdown.
B5	2.1.5	3.6	ESWB structural walls or floors having exterior penetrations located below grade elevation are protected against external flooding by watertight seals.	An as-built inspection of ESWB exterior structural wall~~s~~ and floor~~s~~ penetrations located below grade elevation will be performed.	Watertight seals exist for exterior penetrations of ESWB structural walls and floors located below grade elevation.
B6			Miscellaneous Inspection		
B6	2.1.1.4	3.1	The ~~basic configuration of the~~ NI	An as-built inspection of the ~~as-built~~	The ~~as-built basic configuration of the~~ NI

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GRP	Sect	No.	Commitment	ITA	AC
			structures includes: a. A continuous external hazards barrier. b. Decoupling of SB 2/3 and FB internal structures from their outer external hazards barrier walls, at their exterior walls along the entire wall length and the upper ceiling, and from the RSB above Elevation 0 feet, 0 inches.	basic configuration of the NI structures will be performed.	structures has have the following features: a. The RB, SB 2/3, and the FB share a common boundary exterior surface at the SBs and FB structures roofs and walls to form a continuous external hazards barrier for the RB, SB 2/3 and FB structures as shown on Figure 2.1.1-2 and Figure 2.1.1-3. b. SB 2/3 and the FB are decoupled from the external hazards barrier by a minimum of 3 inches at the external SBs and FB walls along their entire length and the upper ceiling, and from the RSB above Elevation 0' 0" as shown on Figure 2.1.1-11, Figure 2.1.1-12, Figure 2.1.1-15 and Figure 2.1.1-17.
B6	2.1.1.4	3.3	The NI structures include safety-significant radiation barriers for normal operation and post-accident radiation shielding as listed in Table 2.1.1-3.	An as-built inspection of the NI structures safety-significant radiation barriers will be performed.	The NI structures safety-significant radiation barriers that provide normal operation and post-accident radiation shielding are as listed in Table 2.1.1-3.
B6	2.1.1.8	2.1	Six rib support structures are provided at the bottom of the reactor cavity as shown on Figure 2.1.1-9.	An as-built Iinspection of the reactor vessel cavity will be performed.	Six rib support structures are provided at the bottom of the reactor cavity as shown on Figure 2.1.1-9.
B6	2.1.1.8	2.3	Core melt cannot relocate to upper containment due to the existence of concrete barriers as shown on Figure 2.1.1-9.	An as-built Iinspection of the RCB will be performed.	Concrete barriers are located within the RCB as shown on Figure 2.1.1-9.

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GRP	Sect	No.	Commitment	ITA	AC
B6	2.1.1.8	2.8	The following provisions are provided for water flow to the IRWST: • As shown on Figure 2.1.1-4, RCB rooms which are adjacent to the IRWST contain wall openings to allow water flow into the IRWST. • As shown on Figure 2.1.1-5, RCB rooms which are directly above the IRWST, contain openings in the floor to allow water flow into the IRWST. The floor openings are protected by weirs and trash racks to provide a barrier against material transport into the IRWST.	An as-built Iinspection of the RCB will be performed.	The RCB configuration includes the following provisions: • As shown on Figure 2.1.1-4, the two rooms labeled Areas for MHSI, LHSI & SAHRS pipe penetrations contain wall openings to allow water flow into the IRWST. • As shown on Figure 2.1.1-5, the RCB rooms, which are directly above the IRWST,contain openings in the floor. The floor openings are provided with weirs and trash racks.
B6	2.1.1.8	2.9	RBA penetrations that contain high-energy lines, as listed in Table 2.1.1-7, have guard pipes.	An as-built Iinspection of the RBA will be performed.	RBA penetrations that contain high-energy lines, as listed in Table 2.1.1-7, have guard pipes.
B6	2.1.1.8	2.11	The reactor pressure vessel, reactor coolant pumps, pressurizer, steam generators, and interconnecting RCS piping are insulated with reflective metallic insulation.	An as-built inspection will be performed.	The reactor pressure vessel, reactor coolant pumps, pressurizer, steam generators, and interconnecting RCS piping are insulated with reflective metallic insulation.
B6	2.1.1.8	2.19	RCB doors with blowout panels listed in Table 2.1.1-6(a) are provided with missile restraint in accordance with the approved design.	An as-built Iinspections will be performed of RCB doors with blowout panels.	The RCB doors with blowout panels listed in Table 2.1.1-6(a) have a missile restraint in accordance with the approved design.
B6	2.1.1.8	2.20	RCB vent path areas provide pressure relief for the rooms listed in Table 2.1.1-6(b).	An as-built Iinspections and analysis will be performed of the total vent path area.	The total vent path area is greater than or equal to the value listed in Table 2.1.1-6(b) for the corresponding room.
B6	2.1.1.11	2.3	The SFSP has a minimum depth from the bottom of the SFSP to the spent pool operating floor.	An as-built inspection of the SFSP will be performed.	The SFSP has a minimum depth of 47 feet, 2 inches as measured from the bottom of the SFSP to the spent fuel pool operating floor.

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GRP	Sect	No.	Commitment	ITA	AC
B6	2.1.1.11	2.4	The SFSP includes no gates, openings, or drains below an elevation corresponding to the top of stored fuel assemblies.	An as-built inspection of the SFSP will be performed.	The SFSP includes no gates, openings, or drains below 16 feet, 6-11/16 inches as measured from the bottom of the SFSP.
B6	2.1.1.11	2.5	The SFSP includes no piping that extends below an elevation of 10 feet above the top of the stored fuel assemblies.	An as-built inspection of the SFSP will be performed.	The SFSP includes no piping that extends below 26 feet, 6-11/16 inches as measured from the bottom of the SFSP.
B7			Miscellaneous Test		
B7	2.1.1.8	2.5	The RCB, including the liner plate and penetration assemblies, maintains its pressure boundary integrity at the design pressure.	A Structural Integrity Test of the RCB, including the liner plate and penetration assemblies, will be performed in accordance with ASME Code Section III.	ASME Code Section III Data Reports ~~exist and~~ conclude that for the RCB, including the liner plate and penetration assemblies, the Structural Integrity Test results comply with ASME Code Section III, Division 2, CC-6400 requirements at a test pressure of 115% of the design pressure of 62 psig.

GRP	Sect	No.	Commitment	ITA	AC
B8			Miscellaneous Analysis		
B8	2.1.1.8	2.6	The RCB is a post-tensioned, pre-stressed concrete structure.	a. An analysis of ASME Code Section III Design Report for the RCB post-tensioned, pre-stressed concrete structure will be performed. b. Inspections will be performed for the existence of ASME Code Section III Construction Report for the RCB post-tensioned, pre-stressed concrete structure. be. An as-built analysis of the RCB post-tensioned, pre-stressed concrete structure using as-designed and as-built information and ASME Code Design Report (NCA-3550) will be performed.	a. ASME Code Section III Design Report (NCA-3550) concludes that the design of the RCB post-tensioned, pre-stressed concrete structure complies with ASME Code Section III, Division 2 requirements. b. ASME Code Section III Construction Report (NCA-3454) exists for the RCB post-tensioned, pre-stressed concrete structure. be. ASME Code Data Report (NCA-8000) concludes that design reconciliation (NCA-3554) of the RCB post-tensioned, pre-stressed concrete structure with the Design Report (NCA-3550) has occurred. The report(s) document the results of the reconciliation analysis. ASME Code Section III Design Report (NCA-3550) concludes that design reconciliation (NCA-3554) has been completed in accordance with the ASME Code Section III for the as-built system. The report(s) document the results of the reconciliation analysis.
B8	2.1.1.8	2.13	The RCB has a minimum containment free volume.	An as-built inspection and analysis will be perfomed of the minimum containment free volume.	The RCB minimum containment free volume is greater than or equal to 2.755 x 10^6 ft^3.
B8	2.1.1.8	2.14	The RCB and RCB internal structures have a minimum containment heat sink surface area.	An as-built inspection and analysis will be perfomed of the minimum containment heat sink surface area.	The RCB and RCB internal structures containment heat sink surface area is greater than or equal to 699,633 ft^2.
B9			Miscellaneous Combination of ITA		
B9	2.1.1.8	2.15	The integrated leak rate from the RCB does not exceed the maximum allowable leakage rate.	a. An as-built analysis will be perfomed that defines the RCB air mass. b. A test will be performed to evaluate the RCB leakage rate.	a. A report defines the RCB air mass. b. The RCB leakage rate does not exceed 0.25% of RCB air mass per day at a containment test pressure of 55 psig.

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GRP	Sect	No.	Commitment	ITA	AC
B9	2.1.1.8	2.18	RCB doors and blowout panels provide pressure relief.	a. Type tests will be performed for the swing doors to demonstrate the ability of the doors to open. b. Type tests will be performed to demonstrate the ability of the blowout panels to open. c. An as-built inspection will be performed to verify the vent direction of doors.	a. The pressure at which the swing doors listed in Table 2.1.1-6(a) begins to open is less than or equal to 3.48 psid. b. The pressure at which the blowout panels listed in Table 2.1.1-6(a) open is less than or equal to 1.74 psid. c. The doors listed in listed in Table 2.1.1-6(a) provide the vent direction as identified.
B9	2.1.1.8	2.21	The RCB has a maximum volume of Microtherm insulation within the zone of influence.	a. An analysis will be perfomed that defines the zone of influence. b. An as-built inspection of the components and piping in the zone of influence will be performed.	a. A report defines the zone of influence inside the RCB. b. The components and piping in the zone of influence will have less than or equal to 1 ft^3 of Microtherm insulation.
B9	2.1.1.8	2.23	Coatings in the RCB are consistent with the GSI 191 DBA evaluations.	An as-built ~~I~~inspection~~s~~ and analysi~~e~~s of the as-built coatings used in containment will be conducted.	A report ~~exists and~~ concludes that the ~~as-built~~ coatings used in the RCB ~~containment~~ are consistent with the safety injection suction strainer debris generation, debris transport, and downstream effects GSI 191 DBA evaluations.
B9	2.1.1.8	2.26	Thermal properties of the RCB concrete mix design are as defined in the Construction Specification.	a. An as-built ~~I~~inspection~~s~~ will be performed for the existence of ASME Code Section III, Division 2 Construction Specification(s) defining the thermal properties of the RCB concrete mix design. b. Testing of the concrete mix design will be performed.	a. ASME Code Section III, Division 2, (CC-2230) test records exist for the RCB concrete mix design. b. ASME Code Section III, Division 2, (CC-2230) test records exist for the RCB concrete mix design and conclude that it meets the thermal properties specified.
B9	2.1.1.8	2.27	The IRWST has sufficient mass to compensate for water retention in the RCB and RCB internal structures.	~~During construction,~~ An as-built inspection~~s~~ and analysis will be performed ~~and dimensional deviations from~~ of the RCB and RCB internal structures ~~will be analyzed for impact on the IRWST water retention mass~~.	~~Reconciliation of the dimensional deviations to the RCB and RB internal structures~~ A report concludes that the water retention in the RCB and RCB internal structures is less than or equal to 535,000 lb_m.

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NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
E12			Miscellaneous Inspection		
E12	2.5.3	4.1	The SBODGs are connected to the EPSS Class 1E buses through two in-series circuit breakers (one Class 1E circuit breaker at the Class 1E EPSS bus and one non-Class 1E circuit breaker at the non-Class 1E NPSS bus).	An as-built inspection will be performed.	The SBODGs are connected to the EPSS Class 1E buses through two in-series circuit breakers (one Class 1E circuit breaker at the Class 1E EPSS bus and one non-Class 1E circuit breaker at the non-Class 1E NPSS bus).
E12	2.5.3	4.5	The electrical portions of the SBODG air start system are independent of the electrical portions of the EDG air start system.	An as-built inspection will be performed.	a. The SBODG air start system compressors are powered from the normal power supply system buses and are independent of the EDG air start system. b. The SBODG pilot air start solenoids are powered from the 12 hour uninterruptible power supply system buses and are independent of the EDG air start system.
E12	2.5.5	4.2	EAT power cables and instrumentation and control circuits are routed separately from NAT power cables and instrumentation and control circuits.	An as-built inspection will be performed.	The EAT power cables and instrumentation and control circuits are routed separately from NAT power cables and instrumentation and control circuits.
E12	2.5.8	2.1	Surge arresters are provided for MSUs, NATs and EATs.	An as-built inspection will be performed.	The surge arresters are provided for MSUs, NATs and EATs.
E12	2.5.8	2.2	The main generator, EDG, and SBODG neutrals are connected to the station grounding grid.	An as-built inspection will be performed.	The main generator, EDG, and SBODG neutrals are connected to the station grounding grid.
E12	2.5.8	2.3	AC distribution system transformer neutral points are connected to the station grounding grid.	An as-built inspection will be performed.	The ac distribution system transformer neutral points are connected to the station grounding grid.
E12	2.5.8	2.4	The ground bus of ac distribution system switchgear, loads centers, and MCCs listed in Table 2.5.1-2 is connected to the station grounding grid.	An as-built inspection will be performed.	The ground bus of the ac distribution system switchgear, load centers, and MCCs listed in Table 2.5.1-2 is connected to the station grounding grid.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
E12	2.5.8	2.5	Plant instrumentation grounding system is connected to the station grounding grid.	An as-built inspection will be performed.	The plant instrumentation grounding system is connected to the station grounding grid.
E12	2.5.9	3.2	Special emergency lighting in the MCR and RSS is powered by the EUPS.	An as-built inspection will be performed.	a. The special emergency lighting system provides lighting in the MCR and is powered from the EUPS. b. The special emergency lighting system provides lighting in the RSS and is powered from the EUPS.
E13			Miscellaneous Test		
E13	2.4.6	3.1	The PFAS is provided with both an electrically supervised primary and secondary power source that will transfer automatically to the secondary source upon loss of the primary source.	A test will be performed.	The PFAS is provided with an electrically supervised primary and secondary power source that will transfer automatically to the secondary source upon loss of the primary source.
E13	2.5.2	5.15	EUPS operating voltage remains within the terminal voltage range of the supplied safety-related equipment during the battery duty cycle.	An test will be performed.	EUPS battery terminal voltage remains greater than minimum required terminal voltage after a period of no less than two hours with a discharge rate that is equal to or greater than the battery design duty cycle capacity.
E13	2.5.3	4.2	SBODG #1 is capable of connecting to EPSS Divisions 1 and 2.	A test will be performed using test signals.	SBODG #1 is capable of starting and being available to connect to EPSS Divisions 1 and 2 within 10 minutes of receiving a test signal.
E13	2.5.3	4.3	SBODG #2 is capable of connecting to EPSS Divisions 3 and 4.	A test will be performed using test signals.	SBODG #2 is capable of starting and being available to connect to EPSS Divisions 3 and 4 buses within 10 minutes of receiving a test signal.
E13	2.5.7	5.5	The reactor trip breakers open when a signal is provided to the shunt trip coil.	A test will be performed using test signals.	The reactor trip breakers open when the shunt trip coil is energized.

GRP	Sect	No.	Commitment	ITA	AC
E13	2.5.9	3.3	The emergency lighting and special emergency lighting sub-systems provide illumination at the MCR and RSS workstations and safety-related panels.	A test will be performed.	a. The emergency lighting and special emergency lighting sub-systems provide at least 100 foot-candles illumination at the MCR operator workstations and at least 50 foot-candles at the safety-related panels. b. The emergency lighting and special emergency lighting sub-systems provide at least 100 foot-candles illumination at the RSS operator workstations and at least 50 foot-candles at the safety-related panels. c. The special emergency lighting system provides at least ten foot-candles at the MCR operator workstations when powered from the EUPS~~it is the only MCR lighting system in operation~~. d. The special emergency lighting system provides at least ten foot-candles at the RSS operator workstations when powered from the EUPS~~it is the only RSS lighting system in operation~~.
E14			Miscellaneous Analysis		
E14	2.2.1	5.3	The power supply arrangement is such that only two EDGs are required to operate to supply power to the minimum number of PZR heaters.	An analysis will be performed.	An analysis concludes that only two EDGs are required to operate to supply power to the minimum number of emergency PZR heaters, which are rated at 144 kW per heater.
E14	2.5.2	5.19	Harmonic distortion does not prevent safety-related equipment from performing safety functions.	An as-built analysis will be performed.	An analysis of the Class 1E buses concludes that total harmonic distortion does not exceed 5 percent voltage distortion on the Class 1E buses.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
E15			Miscellaneous Combination of ITA		
E15	2.5.1	6.3	The EPSS provides voltages at the supplied safety-related equipment during normal and accident conditions that exceed the minimum required operating voltage of that equipment.	a. An analysis will be performed. b. A test will be performed.	a. ~~The~~ An analysis concludes the voltage at the supplied safety-related equipment during normal and accident conditions exceeds the minimum required operating voltage of that equipment. b. EPSS bus voltage measurements verify safety-related terminal voltages exceed the minimum required operating voltage for that equipment.
I18			Miscellaneous Inspection		
I18	2.4.4	4.21	SAS connections to the SICS are hardwired for manual grouped controls.	An as-built ~~I~~inspection~~s~~ will be performed.	SAS connections to the SICS are hardwired for manual grouped controls.
I18	2.4.5	4.4	The input wiring from other I&C systems to the PACS is properly connected.	An as-built inspection will be performed to verify that the input wiring from other I&C systems to the PACS is properly connected.	The input wiring from the other I&C systems to the PACS is properly connected.
I19			Miscellaneous Test		
I19	2.4.1	4.3	The permissives listed in Table 2.4.1-5 provide operating bypass capability for the corresponding PS functions.	a. A test will be performed using test signals for each function listed as being bypassed by an inhibited permissive in Table 2.4.1-5. b. A test will be performed using test signals for each function listed as being bypassed by a validated permissive in Table 2.4.1-5.	a. The functions listed as being bypassed by inhibited permissives in Table 2.4.1-5 are bypassed when test signals representing the corresponding inhibited permissive are present. b. The functions listed as being bypassed by validated permissives in Table 2.4.1-5 are bypassed when test signals representing the corresponding validated permissive are present.

GRP	Sect	No.	Commitment	ITA	AC
I19	2.4.1	4.7	Input variables from the SCDS listed in Table 2.4.1-2 and Table 2.4.1-3 provide the inputs for generating RT signals and ESF signals in Table 2.4.1-2 and the ESF signals in Table 2.4.1-3.	a. An analysis will be performed. b. An inspection, test, or a combination of inspection and A test will be performed.	a. A report concludes that for each RT signal listed in Table 2.4.1-2 and each ESF signal listed in Table 2.4.1-3, the input variables from the SCDS associated with the signals are used in the PS software design for generating each signal. b. The input variables from the SCDS listed in Table 2.4.1-2 and Table 2.4.1-3 provide the inputs for generating RT signals and ESF signals in Table 2.4.1-2 and the ESF signals in Table 2.4.1-3. wiring from the SCDS listed in Table 2.4.1-2 and Table 2.4.1-3 is connected to the correct input terminals of the PS..
I19	2.4.1	4.9	The PS uses TXS system communication messages that are sent with a specific protocol.	An inspection A test will be performed on PS equipment to verify that PS communication messages are sent with a specific protocol.	The TXS system communication messages use a specific protocol structure and message error determination. Messages are validated by the following series of checks: • Message header check contains the following: - Protocol version - Sender ID - Receiver ID - Message ID - Message type - Message length • Message age is monitored. • Message cyclic redundancy check is performed so that if one of the checks fails, the affected data are marked with an error status.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
I19	2.4.4	4.23	Permissive P15 provides operating bypass capability for the following SAS functions: • Safety Injection and Heat Removal System - Automatic Trip of LHSI Pump (in RHR Mode) on Low Delta Psat. • Safety Injection and Heat Removal System - Automatic Trip of LHSI Pump (in RHR Mode) on Low Loop Level.	A test will be performed using test signals.	A report concludes that Permissive P15 provides operating bypass capability for the following SAS functions: • Safety Injection and Heat Removal System - Automatic Trip of LHSI Pump (in RHR Mode) on Low Delta Psat. • Safety Injection and Heat Removal System - Automatic Trip of LHSI Pump (in RHR Mode) on Low Loop Level.
I19	2.4.5	4.1	The priority module prioritizes different system inputs in the following order from highest to lowest priority: • PS/DAS • SAS • SICS • PAS	A test will be performed using test signals.	A report concludes that the priority module prioritizes different system inputs in the following order from highest to lowest priority: • PS/DAS • SAS • SICS • PAS
I19	2.4.5	4.5	The capability for testing of the PACS is provided while retaining the capability of the PACS to accomplish its safety function. PACS divisions in test are indicated in the MCR.	a. A test will be performed using test signals. b. <u>A test will be performed using test signals.</u>~~An inspection will be performed to verify the existence of indication in the MCR when a division of the PACS is placed in test.~~	a. The capability for testing of the PACS is provided while retaining the capability of the PACS to accomplish its safety functions. b. PACS divisions in test are indicated <u>on the PICS operator workstations</u> in the MCR.
I19	2.4.5	4.10	The capability of 100% combinatorial testing of the PACS priority module is provided to preclude a software common cause failure.	A type test will be performed ~~using test signals~~.	The capability of 100% combinatorial testing of the PACS priority module is provided to preclude a software common cause failure.
I19	2.4.6	3.2	A trouble signal indication is provided in the MCR upon a loss of either power source to a LFCP or workstation.	A test will be performed using test signals.	A trouble signal <u>is indicated on the PICS operator workstations</u> ~~indication is provided~~ in the MCR upon a loss of either power source to a LFCP or workstation.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
I19	2.4.8	2.1	Containment air cooler condensate flow rate is indicated in the MCR.	A Ttests will be performed in the MCR using test signals.	Containment air cooler condensate flow rate is indicated on the PICS operator workstations in the MCR.
I19	2.4.8	2.2	MSL local humidity detection system indication is provided in the MCR.	A Ttests will be performed using test signals.	MSL local humidity is indicated on the PICS operator workstations in the MCR.
I19	2.4.8	2.3	Containment air cooler condensate flow rate sensors support RCS leakage detection.	A Ttests will be performed using test signals.	Containment air cooler condensate flow rate sensors can detect a flow of 0.5 gpm.
I19	2.4.13	4.3	Each reactor trip contactor listed in Table 2.4.13-1 opens when an RT signal is received from the corresponding PS division.	A test will be performed using test signals.	Each reactor trip contactor listed in Table 2.4.13-1 opens in response to an RT test signal from the corresponding PS division.
I19	2.4.13	4.4	The CRDCS limits the RCCA bank withdrawal rate to a maximum value of 30 in per minute or less.	A test will be performed using test signals.	The CRDCS limits the RCCA bank withdrawal rate to a maximum value of 30 inches per minute or less.
I19	2.4.24	3.4	The DAS allows manual, system-level actuation of the functions listed in Table 2.4.24-3.	A test will be performed using test signals.	The DAS allows manual actuation of the functions listed in Table 2.4.24-3.
I19	2.4.25	4.3	Bypassed or inoperable SCDS channel status information is retrievable in the MCR.	A test will be performed using test signals.	Bypassed or inoperable SCDS channels status information is indicated on the PICS operator workstations in the MCR.

GRP	Sect	No.	Commitment	ITA	AC
I19	2.4.26	4.11	The RPMS uses TXS system communication messages that are sent with a specific protocol.	~~An inspection~~ A test will be performed on RPMS equipment to verify that RPMS communication messages are sent with a specific protocol.	The TXS system communication messages use a specific protocol structure and message error determination. Messages are validated by the following series of checks: • Message header check contains the following: - Protocol version - Sender ID - Receiver ID - Message ID - Message type - Message length • Message age is monitored. • Message cyclic redundancy check is performed so that if one of the checks fails, the affected data are marked with an error status.
I19	2.9.5	3.3	Containment sump level sensors support RCS leakage detection.	A ~~T~~tests~~s~~ will be performed using test signals.	Containment sump level sensors can detect a level increase of 0.5 gpm within one hour.
I20			Miscellaneous Analysis		
I20	2.2.1	4.4	Instrumentation providing input to the uncertainty in power supports the power uncertainty assumed in the ~~safety analysis~~approved design.	A power uncertainty analysis using vendor certified instrument accuracies will be performed.	Power uncertainty analysi~~e~~s using vendor certified instrument accuracies is equal to or less than the power uncertainty assumed in the ~~safety analysis~~approved design.

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GRP	Sect	No.	Commitment	ITA	AC
I20	2.4.1	4.6	PS setpoints associated with the automatic RT signals listed in Table 2.4.1-2 and the automatic ESF signals listed in Table 2.4.1-3 are determined using a documented methodology that addresses: • The determination of applicable contributors to instrumentation loop errors. • The method in which the errors are combined. • How the errors are applied to the design analytical limits.	An analysis will be performed.	A report concludes that the PS setpoints associated with the automatic RT signals listed in Table 2.4.1-2 and the automatic ESF signals listed in Table 2.4.1-3 are determined using a documented methodology that addresses: • ~~For t~~The determination of applicable contributors to instrument loop error. • ~~For c~~Combining instrument loop errors. • ~~For h~~How the errors are applied to the design analytical limits.
I20	2.4.1	4.22	The operational availability of each input variable listed in Table 2.4.1-2 and Table 2.4.1-3 can be confirmed during reactor operation including post-accident periods by one of the following methods: • By perturbing the monitored variable. • By introducing and varying, a substitute input of the same nature as the measured variable. • By cross-checking between channels that bear a known relationship to each other. • By specifying equipment that is stable and the period of time it retains its calibration during post-accident conditions.	An analysis will be performed to demonstrate that the operational availability of each input variable listed in Table 2.4.1-2 and Table 2.4.1-3 can be confirmed during reactor operation including post-accident periods.	A report concludes that the operational availability of each input variable listed in Table 2.4.1-2 and Table 2.4.1-3 can be confirmed during reactor operation including post-accident periods by one of the following methods: • By perturbing the monitored variable. • By introducing and varying, a substitute input of the same nature as the measured variable. • By cross-checking between channels that bear a known relationship to each other. • By specifying equipment that is stable and the period of time it retains its calibration during post-accident conditions.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
I20	2.4.4	4.15	The operational availability of each input variable listed in Table 2.4.4-2 can be confirmed during reactor operation including post-accident periods by one of the following methods: • By perturbing the monitored variable. • By introducing and varying, a substitute input of the same nature as the measured variable. • By cross-checking between channels that bear a known relationship to each other. • By specifying equipment that is stable and the period of time it retains its calibration during post-accident conditions.	An analysis will be performed to demonstrate that the operational availability of each input variable listed in Table 2.4.4-2 can be confirmed during reactor operation including post-accident periods.	A report concludes that the operational availability of each input variable listed in Table 2.4.4-2 can be confirmed during reactor operation including post-accident periods by one of the following methods: • By perturbing the monitored variable. • By introducing and varying, a substitute input of the same nature as the measured variable. • By cross-checking between channels that bear a known relationship to each other. • By specifying equipment that is stable and the period of time it retains its calibration during post-accident conditions.
I20	2.4.24	3.2	The technology used by the DAS is a technology that is not microprocessor based.	An analysis will be performed.	The technology used by the DAS is a technology that is not microprocessor based.
I20	2.9.4	4.3	The Reactor Building radiation monitor supports RCPB leakage detection.	An analysis will be performed.	The Reactor Building radiation monitor sensitivity of 3E-10 µCi/cc correlates to an ability to detect a leakage increase of 1 gpm.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
I20	3.7	2.1	PAM variables indications are provided to perform Type A, B, and C accident management functions defined by the emergency procedures and licensing basis documents.	An analysis of emergency procedures and licensing basis documents will be performed to identify a list of PAM variables required for accident management functions.	A report exists that documents the PAM variables that are provided for required accident management functions. The PAM variable list are is documented in a table format that includes the following: • Variable name that indicates the variable function. • Variable Type (A, B, C). • Range. • Safety classification (1E or non-1E). • Environmental and Seismic Qualification. • Minimum number of instruments required. • Monitoring duration for the variable.
I21			Miscellaneous Combination of ITA		
I21	2.4.1	4.24	The PS response time from sensor to ALU output, including sensor delay, for the RT signals listed in Table 2.4.1-2 is less than the value required to satisfy the design basis safety analysis response time assumptions. The PS response time from sensor to PACS output, including sensor delay, for the ESF signals listed in Table 2.4.1-3, is less than the value required to satisfy the design basis safety analysis response time assumptions.	a. An analysis will be performed to determine the required response time from sensor to ALU output, including sensor delay for the RT functions. An analysis will be performed to determine the required response time from sensor to PACS output, including sensor delay for the ESF functions. b. Tests, as-built analyses, or a combination of tests and as-built analyses will be performed on the DCS equipment that contributes to RT and ESF signal response times.	a. A report identifies the required response time from sensor to ALU output, including sensor delay, which supports the safety analysis response time assumptions for the RT signals listed in Table 2.4.1-2. A report exists and identifies the required response time from sensor to PACS output, including sensor delay, which supports the safety analysis response time assumptions for the ESF signals listed in Table 2.4.1-3. b. A report concludes that response times are less than the value required to support the safety analysis response time assumptions for the RT signals listed in Table 2.4.1-2 and ESF signals listed in Table 2.4.1-3.

GRP	Sect	No.	Commitment	ITA	AC
I21	2.4.1	4.26	PS self-test features are capable of detecting faults consistent with the requirements of the PS.	a. Type tests, analyses or a combination of type tests and analyses will be performed to verify that faults requiring detection through self-test features are detected by the PS equipment. b. Type tests, analyses or a combination of type tests and analyses will be performed to verify that upon detection of faults through self-test features, the PS equipment responds according to the type of fault.	a. A report concludes that the PS equipment is capable of detecting faults required to be detected by self-test features. b. A report concludes that upon detection of faults through self-test features, the PS equipment responds according to the type of fault.
I21	2.4.1	4.28	For each AOO or PA, a primary and secondary RT function using different sensors as input are identified and assigned to different PS subsystems.	a. An analysis will be performed to identify primary and secondary RT functions for each AOO or PA. b. An as-built inspection will be performed to verify that for each AOO or PA, the primary and secondary RT functions using different sensors as input are assigned to different PS subsystems.	a. A report identifies the primary and secondary RT functions for each AOO or PA. b. For each AOO or PA, the primary and secondary RT functions using different sensors as input are assigned to different PS subsystems.
I21	2.4.4	4.20	SAS self-test features are capable of detecting and responding to faults consistent with the requirements of the SAS.	a. Type tests, analyses or a combination of type tests and analyses will be performed to verify that faults requiring detection through self-test features are detected by the SAS equipment. b. Type tests, analyses or a combination of type tests and analyses will be performed to verify that upon detection of faults through self-test features, the SAS equipment responds according to the type of fault.	a. A report concludes that the SAS equipment is capable of detecting faults required to be detected by self-test features. b. A report concludes that upon detection of faults through self-test features, the SAS equipment responds according to the type of fault.

NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
I21	2.4.7	3.1	The SMS system can compute the CAV and provides a display of the CAV in the MCR.	a. Type tests, tests, analyses, or a combination of type tests, tests, and analyses will be performed. b. A ~~T~~test~~s~~ will be performed ~~in the MCR~~ using test signals.	a. The SMS can compute the CAV. b. Displays and alarms from CAV are indicated on the PICS operator workstations in the MCR.
I21	2.4.7	3.2	The SMS equipment has a dynamic range that allows measurement of the effects of seismic events.	Type tests, analyses or a combination of type tests and analyses of the SMS equipment will be performed.	The SMS has a dynamic range of at least 1000:1 zero-to-peak and is able to record at least 1.0 g zero-to-peak.
I21	2.4.7	3.3	The SMS equipment has bandwidth that allows measurement of the effects of seismic events.	Type tests, analyses or a combination of type tests and analyses of the SMS equipment will be performed.	The SMS has bandwidth of at least 0.2 to 50 Hertz.
I21	2.4.7	3.4	The SMS equipment has a sampling rate that allows measurement of the effects of seismic events.	Type tests, analyses or a combination of type tests and analyses of the SMS equipment will be performed.	The SMS has a sample rate of at least 200 samples per second in each of the three directions.
I21	2.4.7	3.5	The SMS equipment has a trigger rate that allows measurement of the effects of seismic events.	Type tests, analyses or a combination of type tests and analyses of the SMS equipment will be performed.	The SMS has an actuating level that is adjustable and within the range of 0.001g and 0.02g.
I21	2.4.8	2.4	MSL local humidity detection system supports main steam line leakage detection.	Tests, analyses, or combination of tests and analyses will be performed.	MSL local humidity detection system can detect MSL leakage of 0.1 gpm within 4 hours.
I21	2.7.6	4.1	The GFES provides the required suppression agent ~~design~~ concentration within the required discharge timeframe within the MCR sub-floor area enclosure.	a. An analysis will be performed. b. Tests, analyses, or combination of tests and analyses will be performed.	a. A report determines the required suppression agent concentration. b. The discharge time for the GFES required to achieve 95 percent of the minimum ~~design~~ concentration for flame extinguishment based on a 20 percent safety factor does not exceed 10 seconds.
I21	2.7.6	4.2	The suppression agent ~~design~~ concentration for the GFES within the MCR sub-floor area enclosure shall be maintained for a specified period of time.	a. An analysis will be performed. b. Tests, analyses, or combination of tests and analyses will be performed.	a. A report determines the required suppression agent concentration. b. The suppression agent ~~design~~ concentration for the GFES within the MCR sub-floor area enclosure shall be maintained for at least 15 minutes.

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GRP	Sect	No.	Commitment	ITA	AC
I21	2.8.1	3.2	The turbine generator has diverse and independent overspeed protection systems.	a. An as-built Iinspections and analysies will be performed on the overspeed protection systems. b. A Ttests will be performed for operation of the overspeed and backup overspeed protection systems listed in Table 2.8.1-2.	a. A report concludes that the turbine overspeed protection systems are diverse and independent by verifying: • Each system is designed and manufactured by a different vendor. • Software used to transform the analog speed signal into a digital signal is diverse between the two systems. • Components, process inputs and process outputs are not shared between the two systems. • The two systems are installed in separate cabinets. • The two systems are powered by separate power sources. b. Overspeed and backup overspeed turbine trips occur within the approved design limits for the systems listed in Table 2.8.1-2.
I21	3.7	3.1	PAM instrumentation is designed and qualified based on the level of importance of the variable type that each instrument supports.	a. An analysis will be performed to determine the performance, design, and qualification criteria for each PAM instrument based on the level of importance of the variable type that each instrument supports. b. Inspections, tests, or analyses will be performed to verify that the PAM instrumentation meets the documented performance, design, and qualification criteria.	a. A report exists that documents the performance, design, and qualification, criteria for each PAM instrument. b. A report concludes that the PAM instrumentation meets the documented performance, design, and qualification criteria.
M18			Miscellaneous Combination of ITA		
M18	3.8	2.1	Systems, structures, and components that are required to be functional during and following an SSE are protected against or qualified to withstand the dynamic and environmental effects associated with	a. A pipe break hazards analysis will be performed. {{DAC}} b. An as-built Iinspections of features for protection against pipe break	a. A pipe break hazards analysis exists that concludes the plant can be shut down safely and maintained in cold safe shutdown following a pipe break with loss of offsite power. For postulated pipe breaks, the pipe break hazards analysis confirms that:

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GRP	Sect	No.	Commitment	ITA	AC
			postulated failures in Seismic Category 1 and non-safety-related piping systems.	will be performed. c. Analyses will be performed to reconcile deviations with the pipe break hazards analysis.	• Piping stresses in the RCB penetration area are within allowable stress limits. • Pipe whip restraints and jet shield designs for protection of the essential systems and components can mitigate pipe break loads. • Loads on safety-related SSCs are within design load limits. • SSCs are protected or qualified to withstand the dynamic and environmental effects of postulated failures, including cubicle pressurization effects. A summary of the dynamic analyses applicable to high-energy piping systems, including: • Sketches showing the location of the resulting postulated pipe ruptures, including identification of longitudinal and circumferential breaks; structural barriers, if any; restraint locations; and the constrained directions in each restraint. • A summary of the data developed to select postulated break locations, including, for each point, the calculated stress, the calculated primary plus secondary stress/stress intensity range, and the calculated cumulative usage factor. • For failure in the moderate-energy piping systems, descriptions showing how safety-related systems are protected from spray wetting, flooding, and other adverse environmental effects. {{DAC}} b. The required features for protection against

GRP	Sect	No.	Commitment	ITA	AC
					pipe break exist. c. Reconciliation of deviations to the as-designed pipe break hazards analysis have been performed and conclude that the plant can be shut down safely and maintained in cold safe shutdown following a pipe break with loss of offsite power.
S08			Miscellaneous Crane Related		
S08	2.10.1	3.2	The containment polar crane main hoist is equipped with a dual load path reeving system and redundant holding brakes.	An as-built inspection of the containment polar crane main hoist load train assembly will be performed.	The containment polar crane main hoist is equipped with a dual load path reeving system from the hook to the hoist brakes and redundant holding brakeswith each reeving system capable of holding the load independently.
S08	2.10.1	3.3	The FB auxiliary crane main hoist is equipped with a dual load path reeving system and redundant holding brakes.	An as-built inspection of the auxiliary crane main hoist load train assembly will be performed.	The auxiliary crane main hoist is equipped with a dual load path reeving system from the hook to the hoist brakes and redundant holding brakeswith each reeving system capable of holding the load independently.
S08	2.10.1	4.3	The containment polar crane main hoist is designed such that a single failure will not result in the loss of the capability of the crane to safely retain the load.	Tests, inspections and analyses A test will be performed on the containment polar cranes. to confirm: a. The receiving system is designed to preclude a load drop in the event of a rope failure. b. Is equipped with two holding brakes. c. Has been rated load tested at a minimum of 125% of the rated load. d. Has been full-load tested at a minimum of 100% rated load. e. Has been no load tested to verify proper operation of limit switches, interlock and stop settings. f. Critical welds have been non-destructively tested. a. A rated load test will be performed.	The following tests, inspections and analyses have been successfully completed for the containment polar crane so that a single failure will not result in the loss of the capability of the crane to safely retain the load. A report concludes that the: a. Receiving system is designed to preclude a load drop in the event of a rope failure. b. Containment polar crane is equipped with two holding brakes. ae. Containment polar crane has passesd rated load testing at a minimum of 125% of the rated load. bd. Containment polar crane has passesd full-load testing at a minimum of 100% rated load. ce. Containment polar crane has passesd no load testing to verify proper operation of limit switches, interlock and stop settings.

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				b. A full load test will be performed. c. A no load test will be performed. d. An as-built inspection will be performed.	df. A report concludes that non-destructive examination of welded structural connections of the containment polar crane comply with ASME NOG-1 requirements.Critical welds have passed non-destructive testing.
S08	2.10.1	4.4	The FB auxiliary crane is designed such that a single failure will not result in the loss of the capability of the crane to safely retain the load.	Tests, inspections and analyses A test will be performed on the FB auxiliary cranes. to confirm: a. The receiving system is designed to preclude a load drop in the event of a rope failure. b. Is equipped with two holding brakes. c. Has been rated load tested at a minimum of 125% of the rated load. d. Has been full-load tested at a minimum of 100% rated load. e. Has been no load tested to verify proper operation of limit switches, interlock and stop settings. f. Critical welds have been non-destructively tested. a. A rated load test will be performed. b. A full load test will be performed. c. A no load test will be performed. d. An as-built inspection will be performed.	The following tests, inspections and analyses have been successfully completed for the auxiliary crane so that a single failure will not result in the loss of the capability of the crane to safely retain the load. A report concludes that the: a. Receiving system is designed to preclude a load drop in the event of a rope failure. b. Auxiliary crane is equipped with two holding brakes. ac. FB Aauxiliary crane has passed rated load testing at a minimum of 125% of the rated load. bd. FB Aauxiliary crane has passed full-load testing at a minimum of 100% rated load. ce. FB Aauxiliary crane has passed no load testing to verify proper operation of limit switches, interlock and stop settings. df. A report concludes that non-destructive examination of welded structural connections of the FB auxiliary crane comply with ASME NOG-1 requirements. Critical welds have passed non-destructive testing.

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GRP	Sect	No.	Commitment	ITA	AC
S08	2.10.1	4.5	Special lifting devices and slings used with the auxiliary crane and the main hoist of the containment polar crane are designed such that a single failure will not result in the loss of the capability of the crane to safely retain the load.~~for critical lifts have dual load paths or double safety factors.~~	a. An as-built ~~I~~inspection~~s~~ will be performed~~ on the lifting components~~. b. An as-built inspection will be performed. c. A test will be performed. d. An as-built inspection will be performed.	a. The special lifting devices ~~and slings~~ used with the FB auxiliary crane and the main hoist of the containment polar crane for critical lifts have dual load paths.~~ or~~ b. Slings used with the FB auxiliary crane and the main hoist of the containment polar crane for critical lifts have double safety factors. c. Special lifting devices used for critical lifts pass full-load testing at a minimum of 100% rated load. d. A report concludes that non-destructive examination of welded structural connections of Special lifting devices used for critical lifts comply with ASME NOG-1 requirements.
S08	2.10.1	4.6	Deleted.~~Special lifting devices used with the auxiliary crane and the main hoist of the polar crane for critical lifts are load tested followed by NDE of critical welds.~~	Deleted.~~a. Tests will be performed.~~ ~~b. Inspections will be performed.~~	Deleted.~~a. Special lifting devices used for critical lifts have passed full-load testing at a minimum of 100% rated load.~~ ~~b. Critical welds have passed non-destructive testing.~~
S09			Miscellaneous Pump Flow Related		
S09	2.2.1	7.3	The RCPs provide flow.	A ~~T~~tests will be performed.	The RCPs provides flow greater than the 119,692 gpm/loop and less than 134,662 gpm/loop.

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GRP	Sect	No.	Commitment	ITA	AC
S09	2.2.3	7.5	The SIS/RHRS delivers water to the reactor coolant system for core cooling.	A ~~T~~test~~s~~ will be performed.	The SIS/RHRS delivers the following flowrate to the reactor coolant system: a. MHSI pump capacity: ≥ 600 gpm @ 580 psia (cold leg pressure). b. LHSI pump capacity: ≥ 2200 gpm @ 25 psia (cold leg pressure). c. MHSI pump capacity: ≥ 165 gpm @ pressure greater than 1300.0 psia (shutoff head condition). d. LHSI pump capacity: ≥ 525 gpm @ pressure greater than 300.0 psia (shutoff head condition). e. MHSI pump capacity: ≤ 1110 gpm @ 14.5 psia (run-out condition). f. LHSI pump capacity: ≤ 3220 gpm @ 14.5 psia (run-out condition).
S09	2.2.3	7.9	Safety injection pumped flow will be delivered to the RCS before the maximum elapsed time.	A ~~T~~test~~s~~ will be performed to determine the safety injection pumped flow delivery time using test signals.	Time for safety injection flow to reach full flow does not exceed 15 seconds with offsite power available or 40 seconds with loss of offsite power after receipt of an isolation test signal from the PACS module.
S09	2.2.3	7.10	Each LHSI pump delivers water at the required flow rate to its respective hot leg of the reactor coolant system.	A ~~T~~test~~ing~~ will be performed to demonstrate that each LHSI pump delivers the required flow to its respective hot leg of the RCS.	Each LHSI pump delivers a flow rate greater than or equal to 1720 gpm to its respective hot leg of the RCS at an equivalent RCS pressure of 69.27 psia.
S09	2.2.4	7.2	The EFWS delivers water to the steam generators at the required flowrate to restore and maintain SG water level and remove decay heat following the loss of normal feedwater supply.	A ~~T~~test~~s~~ will be performed.	The EFWS delivers a minimum flow of 198,416 lb_m/hr (or 399.4 gpm at 122°F) at a pressure of 1426.1 psia.
S09	2.2.4	7.4	The EFWS limits the maximum flow rate to a depressurized steam generator.	A ~~T~~test~~s~~ will be performed.	The EFWS ~~-~~delivers a maximum flow of 490 gpm to a depressurized steam generator.
S09	2.2.5	7.4	The pumps listed in Table 2.2.5-1 each have the capacity to provide flow to the FPCS heat exchangers.	A ~~T~~test~~s~~ will be performed.	Each train of the FPCS delivers a minimum flow of ~~provides at least~~ 3576 gpm to the FPCS heat exchanger with one pump in operation.

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GRP	Sect	No.	Commitment	ITA	AC
S09	2.2.6	7.4	The CVCS system run-out flow does not exceed the design maximum allowable.	A test will be performed.	The CVCS system run-out flow is equal to or less than 112.66 lb$_m$/s total with both CVCS pumps running.
S09	2.2.6	7.5	The CVCS charging pumps listed in Table 2.2.6-1 provide the required seal water flow for operation of the reactor coolant pumps.	A ~~T~~testi~~ng~~ will be performed.	One CVCS charging pump delivers a minimum seal water flow of 6.15 gpm to each operating reactor coolant pump.
S09	2.5.3	3.4	Each fuel oil transfer pump capacity is greater than SBODG fuel oil consumption at the continuous rating.	A test will be performed.	The flow rate of each fuel oil transfer pump is greater than SBODG fuel oil consumption at the continuous rating.
S09	2.5.4	3.11	Each fuel oil transfer pump capacity is greater than EDG fuel oil consumption at the continuous rating.	A test will be performed.	The flow rate of each fuel oil transfer pump is greater than EDG fuel oil consumption at the continuous rating.
S09	2.7.1	7.3	The CCWS delivers water to the LHSI/RHRS heat exchangers to provide cooling.	A ~~T~~test~~s~~ will be performed.	The CCWS delivers a minimum flow of 2.19 x 10^6 lb$_m$/hr to each LHSI/RHR heat exchanger.
S09	2.7.1	7.4	The CCWS delivers water to the RCP thermal barrier coolers at the required flow from Common 1.b header and also from Common 2.b header.	A ~~T~~test~~s~~ will be performed.	The CCWS delivers a minimum -flow of 0.0792 x 10^6 lb$_m$/hr to ~~the~~ each thermal barrier cooler~~s~~ from Common 1.b header and also from Common 2.b header.
S09	2.7.1	7.5	The CCWS delivers water to Divisions 2 and 3 SCWS chiller heat exchangers.	A ~~T~~test~~s~~ will be performed.	The CCWS delivers a minimum -flow of 0.514 x 10^6 lb$_m$/hr to ~~the~~ each Divisions 2 and 3 SCWS chiller heat exchanger~~s~~.
S09	2.7.1	7.6	The CCWS delivers water to the spent fuel pool heat exchangers.	A ~~T~~test~~s~~ will be performed.	The CCWS delivers a minimum flow of 0.8818 x 10^6 lb$_m$/hr to ~~the~~ each spent fuel pool cooling heat exchanger~~s~~.
S09	2.7.2	7.3	The SCWS delivers water to the equipment listed in Table 2.7.2-1.	A ~~T~~test~~s~~ will be performed.	The SCWS delivers a total minimum flow of 565 gpm to the equipment listed in Table 2.7.2-1.
S09	2.7.11	7.6	The ESWS delivers water to the CCWS and EDG heat exchangers and the ESWPBVS room cooler.	A ~~T~~test~~s~~ will be performed using test signals.	The ESWS delivers water at ≥ 19,340 gpm~~the Normal Flow Rate for the ESW pump~~ to the CCWS and EDG heat exchangers and the ESWPBVS room cooler within 120 seconds after receipt of a test signal from the PACS module.

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GRP	Sect	No.	Commitment	ITA	AC
S10			Miscellaneous Volume Related		
S10	2.2.2	7.3	The IRWST provides a required water volume.	An as-built inspection and analysis.	The IRWST provides a minimum water volume of 66,886 ft^3.
S10	2.2.3	7.2	The accumulators listed in Table 2.2.3-1 provide a required water ~~storage~~ volume.	An as-built ~~I~~inspection~~s~~ and analys~~i~~es will be performed.	The accumulators listed in Table 2.2.3-1 provide a minimum water ~~total~~ volume of 1942.3 ft^3 per accumulator.
S10	2.2.4	7.3	The EFWS combined storage pool available volume supports cooldown.	An as-built ~~I~~inspection and analysis will be performed.	The EFWS combined storage pool minimum water volume is 365,000 gallons (total for 4 pools).
S10	2.5.3	3.2	Each SBODG has a fuel oil storage tank.	An as-built inspection and analysis will be performed.	Each SBODG fuel oil storage tank capacity is greater than the volume of fuel oil consumed by the SBODG operating at the continuous rating for 24 hours.
S10	2.5.3	3.3	Each SBODG has a fuel oil day tank.	An as-built inspection and analysis will be performed.	Each SBODG day tank capacity is greater than the volume of fuel oil consumed by the SBODG operating at the continuous rating for two hours.
S10	2.5.4	3.9	Each EDG has a fuel oil storage tank.	An as-built inspection and analysis will be performed.	Each EDG fuel oil storage tank capacity is greater than the volume of fuel oil consumed by the EDG operating at the continuous rating for seven days.
S10	2.5.4	3.10	Each EDG has a fuel oil day tank.	An as-built inspection and analysis will be performed.	Each EDG fuel oil day tank capacity is greater than the volume of fuel oil consumed by the EDG operating at the continuous rating for two hours.
S10	2.7.1	7.10	The CCWS surge tanks provide adequate capacity for system operation.	An as-built inspection and analysis will be performed.	~~The~~ Each CCWS surge tank water volume ~~capacity~~ is equal to or greater than 950 ft^3.
S10	2.7.1	7.11	Each CCWS surge tank maintains a reserve volume to accommodate ~~system~~ worst case total train leakage of less than or equal to 4 gph for 7 days of continuous operation with no makeup source available.	An as-built inspection and analysis will be performed.	Each CCWS surge tank has a reserve volume of 750 gallons. ~~accommondates worst case total train leakage of less than or equal to 4 gph.~~

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GRP	Sect	No.	Commitment	ITA	AC
S10	2.7.2	7.6	The SCWS expansion tank maintains a reserve volume to accommodate system leakage for seven days with no makeup source available.	An as-built inspection and analysis will be performed.	Each SCWS expansion tank has a reserve volume of 100 gallons. ~~accommodates system leakage for seven days.~~
S10	2.7.5	7.1	The FWDS includes two separate fresh water storage tanks.	An as-built inspection and analysis will be performed.	The water volume ~~capacity~~ of each of the two fire water storage tanks is ~~-~~greater than or equal to 300,000 gallons.
S10	2.7.11	7.11	The cooling tower basin is sized for the minimum basin water volume.	An as-built inspection and analysis will be performed.	The cooling tower basin size is capable to hold the minimum basin water volume.
S10	2.9.2	2.1	The SWMS provides the non-safety related function of storing radioactive solids prior to shipment.	An as-built inspection and analysis will be performed.	The nominal volume of each of the SWMS tanks is the nominal value ~~indicated~~ listed in Table 2.9.2-1.
S11			Miscellaneous Inspection		
S11	2.2.1	3.18	The RPV internals are provided with irradiation specimen guide baskets to hold capsules containing RPV material surveillance specimens.	An as-built inspection will be performed.	Two guide baskets are provided, located on opposite sides of the RPV, and each guide basket includes provisions to hold two material surveillance capsules.
S11	2.2.2	7.9	The IRWST has a trash rack located over each heavy floor opening.	a. An as-built inspection will be performed for the existence of a trash rack over each heavy floor opening. b. An as-built inspection will be performed to verify the maximum mesh grid opening of the trash rack.	a. A trash rack exists over each heavy floor opening to the IRWST. b. The trash rack has a maximum mesh grid opening of 4 x 4 inches.
S11	2.2.2	7.10	The IRWST has a weir located around each trash rack at the heavy floor opening.	An as-built inspection will be performed for the existence of a weir around each trash rack at the heavy floor opening.	A weir with a minimum height of 2 inches exists around each trash rack at the heavy floor opening.
S11	2.2.2	7.11	The IRWST has a weir located at the annular space wall openings.	An as-built inspection will be performed for the existence of a weir at the annular space wall openings.	A weir with a minimum height of 4 inches exists at the annular space wall opening.
S11	2.2.3	7.14	The SIS/RHRS includes high point vents to avoid gas accumulation in the SIS/RHRS.	An as-built inspection will be performed of the SIS/RHRS.	High point vents are installed in the SIS/RHRS.

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GRP	Sect	No.	Commitment	ITA	AC
S11	2.2.4	7.5	EFWS cross-connections allow alignment of EFWS pump suction on all EFWS storage pools and pump discharge alignment with any SG.	An as-built inspection will be performed.	The EFWS cross-connections allow the following system alignments: 1. Each EFWS pump suction to all EFWS storage pools. 2. Each EFWS pump discharge with ~~any~~ all SGs.
S11	2.2.5	7.6	The FPCS design provides for maintaining the spent fuel pool water level above the spent fuel.	An as-built ~~I~~inspection ~~and testing~~ will be performed to demonstrate the spent fuel pool water level is maintained above the spent fuel.	The spent fuel pool water level is maintained greater than or equal to 23 feet above the spent fuel.

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GRP	Sect	No.	Commitment	ITA	AC
S11	2.2.8	3.8	The new and spent fuel storage racks maintain the effective neutron multiplication factor less than the required limits during normal operations, during and after design basis seismic events, and during and after design basis dropped fuel assembly accidents.	Vendor and as-built Iinspections and analyses will be performed to verify key design features of the fuel storage racks.	Inspection reports and poison plate manufacturer reports verify the following new and spent fuel storage racks features: • Region 1 rack cell pitch is consistent with rack model inputs of the criticality analysisevaluation. • Region 2 rack cell pitch is consistent with rack model inputs of the criticality analysisevaluation. • The configuration of the neutron absorber plates for Region 1 racks is consistent with rack model inputs of the criticality analysisevaluation. • The configuration of the neutron absorber plates for Region 2 racks is consistent with rack model inputs of the criticality analysisevaluation. • The number of neutron absorber plates installed between storage cells in Region 1 racks agrees with the approved design drawings. • The number of neutron absorber plates installed between storage cells in Region 2 racks agrees with the approved design drawings. • The layout of fuel storage racks in the spent fuel pool agrees with the approved design drawings. • The layout of fuel storage racks in the new fuel storage vault agrees with the approved design drawings.
S11	2.3.2	2.1	The bottom of the reactor pit is lined with sacrificial concrete backed by refractory brick.	An as-built Iinspections of the reactor pit will be performed.	The bottom of the reactor pit is lined with sacrificial concrete backed by refractory brick in room number UJA11-001.

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GRP	Sect	No.	Commitment	ITA	AC
S11	2.3.2	2.2	The CMSS has a melt plug and gate in room number UJA11-001 that conforms to the approved design.	An as-built Iinspections of the cavity gate will be performed.	The CMSS has a melt plug and gate in room number UJA11-001 that conforms to the approved design.
S11	2.3.2	2.3	The CMSS has a melt discharge channel.	An as-built Iinspections of the melt discharge channel will be performed.	The CMSS has a melt discharge channel connecting rooms UJA11-001 and UJA04-002.
S11	2.3.2	2.4	The CMSS has a spreading room lined with sacrificial concrete.	An as-built Iinspections of the spreading room will be performed.	The CMSS has a spreading room (UJA04-002) lined with sacrificial concrete.
S11	2.3.2	2.5	The floor and walls of the spreading room are provided with channels for cooling water.	An as-built Iinspections of the spreading room will be performed.	The floor and walls of the spreading room (UJA04-002) are provided with channels for cooling water.
S11	2.5.3	3.1	The mechanical portions of the SBODG air start system are independent of the mechanical portions of the EDG air start system.	An as-built inspection will be performed.	The mechanical portion of the SBODG air start system is located in the sSwitchgear bBuilding and each EDG air start system is located in each EPGB.
S11	2.5.5	3.1	Each EAT and NAT has an oil containment system.	An as-built inspection will be performed.	Each EAT and NAT has an oil containment system.
S11	2.5.5	3.2	Each EAT and NAT has a deluge fire protection system.	An as-built inspection will be performed.	Each EAT and NAT has a deluge fire protection system.
S11	2.5.6	3.1	Each MSU has an oil containment system.	An as-built inspection will be performed.	Each MSU has an oil containment system.
S11	2.5.6	3.2	Each MSU has a deluge fire protection system.	An as-built inspection will be performed.	Each MSU has a deluge fire protection system.
S11	2.7.11	7.8	The inlet between the cooling tower basin and pump intake structure has a coarse and a fine debris screen for each ESW pump.	a. An as-built inspection will be performed ~~for the existence of a coarse and a fine debris screen at the inlet between the cooling tower basin and pump intake structure for each ESW pump~~. b. An as-built inspection ~~will be performed to verify the maximum mesh grid opening of the debris screens~~.	a. A coarse and a fine debris screen exists at the inlet between the cooling tower basin and pump intake structure for each ESW pump. b. The coarse debris screen has a maximum mesh grid opening of 2 -x 2 inches. The fine debris screen has a maximum mesh grid opening of 0.5 x 0.5 inches.

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GRP	Sect	No.	Commitment	ITA	AC
S12			Miscellaneous Test		
S12	2.2.1	3.29	The RCP flywheel maintains its structural integrity during an overspeed event.	An vendor ~~overspeed~~ test will be performed.	Test results verify that there is no loss of structural integrity at 125 percent of the motor synchronous speed of 1200 rpm.
S12	2.2.1	7.2	The RCPs have rotational inertia to provide coast down flow of reactor coolant as listed in Table 2.2.1-4 on loss of power to the pump motors.	A ~~T~~test~~s~~ will be performed.	The RCPs provide the minimum coastdown flow as listed in Table 2.2.1-4 on loss of power to the pump motors.
S12	2.2.1	7.4	RCP standstill seal system (SSSS) can be engaged when the RCP is stopped.	A ~~T~~test~~s~~ will be performed.	The SSSS on a RCP can be engaged when the RCP is stopped.
S12	2.2.1	7.5	PSRVs listed in Table 2.2.1-2 open within the time assumed in the safety analyses.	A ~~T~~test~~s~~ will be performed using test signals.	Each PSRV opens within 0.70 seconds (including pilot valve opening time) after receipt of a test signal from the PACS module.
S12	2.2.1	7.6	PSRVs listed in Table 2.2.1-2 open below the maximum setpoint assumed in the safety analyses.	A vendor ~~T~~tests will be performed.	Each PSRV opens below its maximum lift setting of 2600.4 psia.
S12	2.2.1	7.8	Each RCP breaker and RCP bus breaker is tripped by a protection system signal.	A ~~T~~test~~s~~ will be performed using test signals.	Each RCP breaker and RCP bus breaker is tripped by a protection system test signal.
S12	2.3.1	7.4	The fusible link of the convection foils listed in Table 2.3.1-1 fails at the designed temperature.	Type tests will be performed to demonstrate the ability of the fusible link to open.	The convection foil fusible link opens at or before reaching a temperature of 185 °F.
S12	2.3.1	7.5	The burst element of the convection foils listed in Table 2.3.1-1 opens at the designed pressure.	Type tests will be performed to demonstrate the ability of the burst element to open.	The convection foil burst element opens bidirectionally at a delta pressure of 0.7 psid ± 30%.
S12	2.3.1	7.6	The burst element of the rupture foils listed in Table 2.3.1-1 opens at the designed pressure.	Type tests will be performed to demonstrate the ability of the burst element to open.	The rupture foil burst element opens bidirectionally at a delta pressure of 0.7 psid ± 30%.
S12	2.5.1	6.1	Each EPSS division has an assigned EDG that provides power if there is a loss of offsite power.	A ~~T~~test~~s~~ will be performed.	Each EPSS division has an assigned EDG that provides power if there is a loss of offsite power.
S12	2.5.1	6.2	Each EPSS 6.9 kV switchgear offsite power supply circuit breaker is opened by a protection system LOOP signal.	A ~~T~~test~~s~~ will be performed using test signals.	Each EPSS division automatically separates from the offsite power supply on a LOOP test signal from the protection system.

GRP	Sect	No.	Commitment	ITA	AC
S12	2.5.1	6.4	EPSS loads are sequentially energized by the protection system during LOOP or LOCA conditions.	a. A test will be performed on each EPSS division without the alternate feed installed using test signals. b. A test will be performed on each EPSS division with the alternate feed installed using test signals.	a. EPSS loads are sequentially energized by the protection system during LOOP, LOCA, and LOOP/LOCA conditions without the alternate feed installed. b. EPSS loads are sequentially energized by the protection system during LOOP, LOCA and LOOP/LOCA conditions with the alternate feed installed.
S12	2.5.1	6.5	Each EPSS division transfers from the normal offsite circuit to the alternate offsite power supply circuit on a emergency auxiliary transformer failure signal.	A test will be performed using test signals.	Each EPSS division transfers from the normal offsite circuit to the alternate offsite circuit on an emergency auxiliary transformer failure test signal.
S12	2.5.1	6.6	EPSS loads that are sequenced by the protection system are shed by the protection system in an undervoltage condition prior to load sequencing.	A test will be performed using test signals.	EPSS loads that are sequenced by the protection system are shed by the protection system in an undervoltage condition prior to load sequencing.
S12	2.5.4	3.12	Each EDG starting air system is capable of providing air to start the respective EDG without being recharged.	A test will be performed.	Each EDG starts five consecutive times without recharging respective starting air receivers between EDG starts.
S12	2.5.4	3.15	Each EDG exhaust path has a bypass exhaust path.	Type tests will be performed on the EDG exhaust bypass device.	~~Type test results~~ A report concludes that the EDG rupture disk will rupture within the pressure limits defined by the EDG manufacturer.
S12	2.5.4	6.1	Each EDG is started by a protection system LOOP signal from the respective EPSS division medium voltage bus.	A test will be performed using test signals.	Each EDG is started by a protection system LOOP test signal from the respective EPSS division medium voltage bus, achieves rated speed and voltage and connects to the assigned EPSS bus in ≤ 15 seconds after receipt of a test signal.
S12	2.5.4	6.2	Each EDG is started by a protection system SIS actuation signal.	A test will be performed using test signals.	Each EDG is started by a protection system SIS actuation test signal, achieves rated speed and voltage and remains disconnected from the EPSS.

GRP	Sect	No.	Commitment	ITA	AC
S12	2.5.4	6.3	Each EDG will start and connect to the respective EPSS division medium voltage bus in an undervoltage condition concurrent with a SIS actuation signal.	A test will be performed using test signals.	Each EDG starts and connects to the respective EPSS division medium voltage bus in an undervoltage condition concurrent with a SIS actuation test signal. As loads are sequenced onto EPSS buses, EDG nominal output voltage and frequency remain ≥ 75 percent and 95 percent, respectively. Voltage and frequency are restored to within 10 percent and 2 percent nominal, respectively, within 60 percent of each load sequence step.
S12	2.5.4	6.7	Each EDG is capable of starting from standby conditions and achieving required voltage and frequency.	A test will be performed.	Each EDG starts from standby conditions and achieves voltage ≥ 6555 V and frequency ≥ 58.8 Hz in ≤ 15 seconds after receipt of a test signal; and steady state voltage ≥ 6555 V and ≤ 7260 V, frequency ≥ 58.8 Hz and ≤ 61.2 Hz.
S12	2.5.7	6.1	The reactor trip breakers open on a protection system reactor trip signal.	A test will be performed using test signals.	The reactor trip breakers open on a protection system reactor trip test signal.
S12	2.5.12	2.1	The digital telephone system, the public address and alarm system, the sound powered system, and the portable wireless communication system provide station to station communication and area broadcasting between the MCR and all the locations listed in Table 2.5.12-1.	A ~~T~~tests will be performed.	a. The digital telephone system, public address and alarm system, ~~and~~ the sound powered system, and the portable wireless communication system exist in the MCR and the locations listed in Table 2.5.12-1. b. Voice transmission and reception via the digital telephone system and the sound powered system ~~is~~ are verified between the MCR and the locations listed in Table 2.5.12-1. c. The broadcasting of voice messages from the MCR to the locations listed in Table 2.5.12-1 via the public address and alarm system is verified. d. Voice transmission and reception via the portable wireless communication system ~~is~~ are verified between the MCR and the locations listed in Table 2.5.12-1.

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GRP	Sect	No.	Commitment	ITA	AC
S12	2.6.1	6.1	The CRACS maintains a positive pressure in the CRE area relative to the outside environment and adjacent areas, while operating in a design basis accident alignment.	A test will be performed.	The CRACS maintains a positive pressure of greater than or equal to 0.125 inches water gauge in the CRE area relative to the outside environment and adjacent areas, while operating in a design basis accident alignment.
S12	2.6.1	6.2	Upon receipt of a containment isolation signal, the iodine filtration train will start automatically, outside air supply to the CRE area is diverted through the iodine filtration train, a minimum recirculation flowrate is established from the CRE area to the iodine filtration train and a positive pressure is maintained in the CRE area relative to the adjacent areas.	a. A test will be performed separately for each iodine filtration train using test signals. b. A test will be performed separately for each iodine filtration train using test signals. c. A test will be performed using test signals.	a. A separate test for each iodine filtration train confirms, upon receipt of a containment isolation test signal, that the iodine filtration train will start automatically within 60 seconds after receipt of a test signal from the PACS module; and the outside air supply to the CRE area is diverted through the iodine filtration train. b. A separate test for each iodine filtration train confirms, upon receipt of a containment isolation test signal, that a recirculation flowrate of greater than or equal to 3000 scfm is established from the CRE area to the iodine filtration train. c. A test confirms, upon receipt of a containment isolation test signal, that the CRACS maintains a positive ~~the~~ pressure of greater than or equal to 0.125 inches water gauge in the CRE area relative to the adjacent areas.
S12	2.6.1	6.4	The CRE area ventilation unfiltered air in-leakage is minimized in order to maintain the MCR habitability.	A test will be performed.	The unfiltered air in-leakage inside the CRE area boundary is less than or equal to 40 scfm.

GRP	Sect	No.	Commitment	ITA	AC
S12	2.6.1	6.7	Upon receipt of a high radiation alarm signal in the air intake duct, the iodine filtration train will start automatically, the outside air supply to the CRE area is diverted through the iodine filtration train, a minimum CRE recirculation flowrate is established from the CRE area to the iodine filtration train, and a positive pressure is maintained in the CRE area relative to the adjacent areas.	a. A test will be performed to separately for each iodine filtration train using test signals. b. A test will be performed separately for each iodine filtration train using test signals. c. A test will be performed using test signals.	a. A separate test for each iodine filtration train confirms, upon receipt of high radiation alarm test signal in the air intake duct, that the iodine filtration train will start automatically within 60 seconds after receipt of a test signal from the PACS module, and the outside air supply is diverted through the iodine filtration train. b. A separate test for each iodine filtration train confirms, upon receipt of high radiation alarm test signal in the air intake duct, that a CRE recirculation flowrate of greater than or equal to 3,000 scfm is established from the CRE area to the iodine filtration train. c. A test confirms, upon receipt of high radiation alarm test signal in the air intake duct, that the CRACS maintains a positive pressure of greater than or equal to 0.125 inches water gauge ~~is maintained~~ in the CRE area relative to the adjacent areas.
S12	2.6.3	7.1	The AVS provides a negative pressure between the inner and outer containment shells during postulated accidents.	A test will be performed using test signals.~~.~~	The AVS maintains ~~provides~~ a negative pressure of less than or equal to ~~at least~~ 0.25 inches water gauge within 305 seconds after receipt of a test signal from the PACS module.
S12	2.6.3	7.2	Upon receipt of containment isolation signal, the following actions occur automatically: a. Isolation of the normal operation train by closing the isolation dampers listed in Table 2.6.3-1 for Normal Operation Train. b. Start of the accident filtration trains and opening of the dampers listed in Table 2.6.3-1 for Accident Filtration Train.	A test will be performed using test signals.	A test confirms that upon receipt of containment isolation test signal, the following actions occur automatically within 60 seconds after receipt of an isolation test signal from the PACS module: a. The normal operation train is isolated by closing the isolation dampers listed in Table 2.6.3-1 for Normal Operation Train. b. The accident filtration trains start, and the dampers listed in Table 2.6.3-1 for Accident Filtration Train are aligned to the open position.

GRP	Sect	No.	Commitment	ITA	AC
S12	2.6.4	7.1	Upon receipt of a containment isolation signal, the FBVS maintains a negative pressure relative to the outside environment in the Fuel Building.	A test will be performed to verify, upon receipt of a containment isolation test signal, that the FBVS maintains a negative pressure relative to the outside environment in the Fuel Building.	~~The~~ A test confirms, upon receipt of a containment isolation test signal, that the FBVS maintains a negative ~~the~~ pressure of less than or equal to -0.25 inches water gauge relative to the outside environment in the Fuel Building.
S12	2.6.4	7.2	Upon receipt of a containment isolation signal, the FBVS isolation dampers identified in Table 2.6.4-1 realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack within the design basis closure time.	A test will be performed using test signals.	A test confirms, upon receipt of a containment isolation test signal, that the FBVS isolation dampers identified in Table 2.6.4-1 realign to exhaust air to the SBVS iodine filtration exhaust to the plant vent stack within 60 seconds from the PACS module.
S12	2.6.5	7.1	During accident conditions, the NABVS is shut down, and the backdraft damper prevents the SBVS and AVS exhaust air flow from discharging into the NABVS.	A test will be performed to verify, upon receipt of a containment isolation test signal, that the NABVS is shut down and the backdraft damper prevents the SBVS and AVS exhaust air flow discharging into NABVS.	A test confirms, upon receipt of a containment isolation test signal, that the NABVS is shut down and the backdraft damper prevents the SBVS and AVS exhaust air flow from discharging into the NABVS.
S12	2.6.6	7.1	Upon receipt of a containment isolation signal, the SBVS maintains a negative pressure in the hot mechanical rooms of the Safeguard Buildings relative to the adjacent areas.	A test will be performed using test signals.	~~The~~ A test confirms, upon receipt of a containment isolation test signal, that the SBVS maintains a negative ~~the~~ pressure of less than or equal to -0.25 inches water gauge in the hot mechanical rooms of the Safeguard Buildings relative to the adjacent areas.
S12	2.6.6	7.3	Upon receipt of a high radiation signal in the Fuel Building, both SBVS iodine filtration trains start automatically, the isolation dampers open, and the accident air is directed through the SBVS iodine filtration trains.	A test will be performed separately for each iodine filtration train using test signals.	A separate test for a radiation signal in the Fuel Building ~~(KLK38CR001/002)~~ confirms that upon receipt of a high radiation test signal in the Fuel Building or Reactor Building, both SBVS iodine filtration trains start automatically, the isolation dampers ~~(KLC45 AA003/AA004)~~ open, the SBVS isolation dampers ~~(KLC45 AA001/AA002)~~ close, iodine filtration banks isolation dampers ~~(30KLC41/42 AA001/AA002)~~ open, and the accident air is directed through the SBVS iodine filtration trains. The isolation dampers close or open within 60 seconds after receipt of a test signal from the PACS module.

GRP	Sect	No.	Commitment	ITA	AC
S12	2.6.6	7.4	Upon receipt of a containment isolation signal, the SBVS is isolated from the SBVSE and NABVS by automatically closing the air supply and exhaust isolation dampers, both SBVS iodine filtration trains start automatically, and the FB and SB exhaust air is directed through the iodine filtration trains to maintain a negative pressure inside the FB and SB.	A test will be performed using test signals.	A test confirms that upon receipt of a containment isolation test signal, the SBVS is isolated automatically within 60 seconds after receipt of a test signal from the PACS module by closing the SBVSE air supply isolation dampers (30KLC11/12/13/14 AA004/AA005) and the NABVS exhaust air isolation dampers (30KLC21/22/23/24 AA007/AA008). Both SBVS trains start automatically aligning the filter bank isolation dampers (30KLC41/42 AA001/AA002) (30KLC21/24 AA010) (30KLC31/32/33/34 AA003) to the open position, aligning the SB Division 1-4 exhaust trains isolation dampers (30KLC31/32/33/34AA 001) to the open position, and aligning the isolation dampers from the SB (30KLC45 AA001/AA002) and the FB (30KLC45 AA003/AA004) to the open position, and maintaining a minimum negative pressure of less than or equal to -0.25 inches water gauge inside the FB and SB. The isolation dampers close or open within 60 seconds after receipt of a test signal from the PACS module.
S12	2.6.7	6.2	The recirculation cooling units start and stop automatically in the EFWS and CCWS pump rooms when the room temperature reaches preset maximum and minimum temperatures in the pump rooms.	A test will be performed using test signals.	A test confirms the following: a. The recirculation cooling units start automatically in the EFWS and CCWS pump rooms prior to allowing the pump rooms to exceed the maximum design temperature104 °F. b. The recirculation cooling units stop automatically in the EFWS and CCWS pump rooms prior to allowing the pump rooms to fall below the minimum design temperature41°F.
S12	2.6.8	7.1	The CBVS low flow purge exhaust subsystem exhausts through a CBVS iodine filtration train.	A Ttests will be performed.	The CBVS exhausts through a CBVS iodine filtration train when the CBVS low flow purge exhaust subsystem is operating.

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GRP	Sect	No.	Commitment	ITA	AC
S12	2.7.11	7.7	The ESWS debris filters listed in Table 2.7.11-1 function to backwash upon high differential pressure.	A ~~T~~test~~s~~ will be performed using test signals.	The filters initiate backwash flow to filter blowdown upon high differential pressure test signal.
S12	2.8.2	7.4	Each MSRIV per main steam line opens upon receipt of a signal.	A ~~T~~test~~s~~ will be performed using test signals.	Each MSRIV opens within 1.8 seconds after receipt of a test signal from the PACS module.
S12	2.8.2	7.5	Each MSIV per main steam line closes upon receipt of a signal.	A ~~T~~test~~s~~ will be performed using test signals.	Each MSIV closes within 5 seconds after receipt of a test signal from the PACS module.
S12	2.8.2	7.7	Upon safety injection actuation, the MSRT controls secondary system cooldown at a pre-defined rate.	A test will be performed using test signals.	The MSRT pressure control set-point is ramped from 1414.7 psia to 900 psia within 19 minutes upon receipt of a safety injection actuation test signal.
S12	2.9.1	4.2	The LWMS discharge valves close upon receipt of a high radiation signal from the activity monitors downstream on the liquid radwaste release line.	A ~~T~~test~~s~~ will be performed using test signals.	The LWMS discharge valves ~~(30KPK29AA001 and 30KPK29AA002)~~ close upon receipt of a high radiation test signal from each activity monitor ~~(KPK29CR001 and KPK29CR002)~~ downstream on the liquid radwaste release line.
S12	2.9.3	7.2	The GWPS discharge valve closes upon receipt of a high radiation signal from the activity monitor downstream of the delay beds.	A ~~T~~test~~s~~ will be performed using test signals.	The GWPS discharge valve ~~(30KPL83AA005)~~ closes upon receipt of a high radiation test signal from the activity monitor ~~(KPL83CR001)~~ downstream of the delay beds.
S13			Miscellaneous Analysis		
S13	2.2.1	3.7	The piping and interconnected component nozzles listed in Table 2.2.1-1 have been evaluated for LBB.	An analysis will be performed. **{{DAC}}**	An analysis concludes that the piping and interconnected component nozzles listed in Table 2.2.1-1 meet the LBB acceptance criteria. **{{DAC}}**

GRP	Sect	No.	Commitment	ITA	AC
S13	2.2.3	7.13	LHSI and MHSI systems provide safety injection flow to the RCS during post-LOCA operation.	An analysis of plugging and wear of valves and orifices will be performed.	An ~~an~~analysis confirms that pressure drop/overall system resistance across ECCS is consistent with ~~safety analysis results~~the approved design for 30 days of post-LOCA operation. An anlysis also confirms that wear rates are acceptable for 30 days of post-LOCA operation based on the approved design~~provided equipment specification~~. Additionally, an analysis also confirms that post-LOCA debris will not clog the ECCS instrument lines.
S13	2.7.5	7.7	The standpipe and hose systems in areas containing systems and components required for safe plant shutdown in the event of a safe shutdown earthquake (SSE), including the water supply to these standpipes, are capable of remaining functional and supplying two hose stations following an SSE.	An as-built analysis will be performed ~~to demonstrate the ability of the standpipe and hose systems in areas containing systems and components required for safe plant shutdown in the event of a SSE to remain functional and supply two hose stations following a SSE~~.	~~Analyses demonstrate~~A analysis concludes that the FWDS will remain functional following a SSE and is capable of supplying the two hydraulically most remote hose stations with at least 75 gpm per hose stream.
S13	2.8.1	2.4	Turbine rotor integrity is provided through the combined use of selected materials with suitable toughness, analyses, testing, and inspections.	A plant-specific analysis of the turbine rotor material property data, turbine rotor and blade design, preservice inspection and testing results, and inservice inspection and testing requirements will be conducted.	A plant-specific analysis ~~exists and~~ concludes that the plant specific turbine rotor meets the requirements of the manufacturer's turbine missile probability analysis: (1) turbine material property data, rotor and blade design analyses (including loading combinations, assumptions and warm-up time) demonstrating safety margin to withstand loadings from overspeed events, and (2) the results of preservice inspection and testing, and the requirements for inservice inspection and testing.
S13	2.8.1	2.5	The probability of turbine material and overspeed related failures resulting in external turbine missiles is < $1x10^{-4}$ per turbine year.	A plant-specific material and overspeed failures analysis will be performed on the turbine design.	An plant-specific analysis ~~exists and~~ concludes that the probability of turbine material and overspeed related failures resulting in external turbine missiles is < $1x10^{-4}$ per turbine year.

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GRP	Sect	No.	Commitment	ITA	AC
S14			Miscellaneous Combination of ITA		
S14	2.2.1	3.5	The steam outlet nozzles on the SGs include flow-limiting devices.	An as-built inspection and analysis will be performed.	The flow area through each SG outlet nozzle flow-limiting device is a maximum of 1.39 ft^2.
S14	2.2.1	3.8	The RPV internals will withstand the effects of flow-induced vibration.	a. Tests and analyses of test results will be performed on a plant containing RPV internals representative of the U.S. EPR. b. An as-built inspection will be performed after hot functional testing. c. An as-built analysis will be performed on the effects of the RCP acoustic frequencies on RPV internals. d. An as-built analysis will be performed of the acoustic frequencies of the RCS volume to determine their loading impact to the RCS components when considering sources of flow excitation created by vortex-shedding frequencies of the applicable structures and blade passing frequencies of the RCP.	a. A comprehensive vibration assessment program report exists and concludes that RPV internals have no observable damage, no loose parts, and stress is within ASME Code Section III limits. b. Inspections show that the RPV internals have no observable damage or loose parts. c. An analysis of the effects of RCP acoustic frequencies on RPV internals exists and concludes that RPV internals stress is within ASME cCode Section III limits. d. An analysis of the acoustic frequencies and loading exists and concludes the RCS stress is within the ASME Code Section III limits.
S14	2.2.1	3.9	The RCS allows movement of the components for thermal expansion and contraction.	a. An as-built analysis of the RCS will be performed.. b. A test of the RCS will be performed.	a. A report test specification will defines clearances and gaps between RCS component supports. b. The measured clearances and gaps meet the test specificationanalysis requirements for RCS component supports.

GRP	Sect	No.	Commitment	ITA	AC
S14	2.2.1	3.19	Each RCP contains an oil collection system.	a. An as-built analysies will be performed. b. An as-built inspection will be performed on each RCP.	a. ~~Analyses demonstrate~~A report concludes that the oil collection system is designed 1) to withstand a safe-shutdown earthquake, 2) to collect lube oil from leakage sites in the RCP lube oil system, and 3) so that the drain line and collection tank are large enough to accommodate the largest potential oil leak. b. An oil collection system is installed on each RCP per the analysis.
S14	2.2.2	7.4	Post-LOCA pH control is provided for the IRWST with TSP.	An as-built inspection and analysis will be performed for the capacity of the TSP baskets to provide post-LOCA pH control.	The TSP baskets listed in Table 2.2.2-1 hold a capacity of TSP of ≥ 12,200 lb_m.
S14	2.2.2	7.5	The IRWST suction inlet line for each safety injection system division has a debris screen.	a. An as-built inspection will be performed for the existence of a debris screen in the IRWST suction inlet line for each safety injection system division. b. An as-built inspection and analysis will be performed to verify the minimum surface area and maximum mesh grid opening of the debris screen.	a. A debris screen exists in the IRWST suction inlet line in the IRWST suction inlet line for each safety injection system division. b. The debris screen has a minimum surface area of 753 ft^2 and the screen mesh is a maximum mesh grid opening of 0.08 x 0.08 inches.
S14	2.2.2	7.8	The IRWST has a retaining basket located directly below each heavy floor opening.	a. An as-built inspection will be performed for the existence of a retaining basket in the IRWST directly under each heavy floor opening. b. An as-built inspection and analysis will be performed to verify the minimum surface area and maximum mesh grid opening of the retaining basket.	a. A retaining basket exists in the IRWST directly below each heavy floor opening. b. The retaining basket has a minimum surface area of 721 ft^2 and a maximum mesh grid opening of 0.08 x 0.08 inches.
S14	2.2.3	7.3	Each accumulator line has a minimum head loss coefficient (fL/M01 + K).	Tests and analyses will be performed to verify each accumulator line minimum head loss coefficient (fL/M01 + K).	Each accumulator line has a minimum head loss coefficient (fL/M01 + K) of 3.71 for a flow area of 0.3941 ft^2 and f = 0.014.

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NO MODEL ITAAC TABLE, r1

GRP	Sect	No.	Commitment	ITA	AC
S14	2.2.3	7.12	LHSI heat exchanger cools the post-LOCA fluid for a minimum of 30 days.	Type tests, analyses, or a combination of type tests and analyses for heat exchanger performance will be performed.	Type tests, analyses, or a combination of type tests and analyses confirm that debris plugging and settlement in the tubes will not occur, and/or affect the performance of the heat exchanger for the 30-day mission time. Type tests, analyses, or a combination of type tests and analyses also confirms that failure due to abrasive wear will not degrade the performance of the heat exchanger below the 30-day acceptance criteria.
S14	2.3.1	7.1	The hydrogen mixing dampers listed in Table 2.3.1-1 provide pressure relief for design basis events.	An as-built inspection and analysis will be performed.	The hydrogen mixing dampers listed in Table 2.3.1-1 provide a minimum combined total open area of 64 ft^2.
S14	2.3.1	7.2	The convection foils listed in Table 2.3.1-1 provide pressure relief for design basis events.	An as-built inspection and analysis will be performed.	The convection foils listed in Table 2.3.1-1 provide a minimum combined total open area of 450 ft^2.
S14	2.3.1	7.3	The rupture foils listed in Table 2.3.1-1 provide pressure relief for design basis events.	An as-built inspection and analysis will be performed.	The rupture foils listed in Table 2.3.1-1 provide a minimum combined total open area of 420 ft^2.
S14	2.5.4	3.14	Each EDG lubricating oil system provides lubrication to the engine and turbocharger wearing parts during engine operation.	An as-built analysis and tests will be performed.	a. An analysis demonstrates each EDG lubricating oil system oil volume is capable of supporting at least 7 days of full load operation. b. A test report concludes each EDG and lubricating oil system operating at rated load conditions achieves stable temperatures and pressures within EDG manufacturers recommendations.
S14	2.6.7	6.3	The SBVSE maintains the hydrogen concentration levels in the battery rooms below one percent by volume.	A Ttests and analysis will be performed.	The air flow capability of the SBVSE maintains the hydrogen concentration levels in the battery rooms below one percent by volume.
S14	2.7.5	7.2	The FWDS pumps consist of at least one electric motor-driven pump and one diesel engine-driven pump that provide 100% capacity assuming failure of the largest pump or loss of offsite power.	a. An as-built inspection will be performed. b. An as-built analysis will be performed.	a. At least one electric motor-driven pump and one diesel engine-driven pump exists. b. An analysis concludes that one diesel and one electric pump provide 100% capacity assuming failure of the largest pump or loss of offsite power.

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GRP	Sect	No.	Commitment	ITA	AC
S14	2.7.6	3.4	The gaseous fire extinguishing system is consistent with the post-fire safe shutdown analysis.	a. A post-fire safe shutdown analysis will be performed. b. An as-built inspection will be performed.	a. The post-fire safe shutdown analysis concludes that at least one success path is available for safe shutdown. b. The gaseous fire extinguishing system is consistent with the post-fire safe shutdown analysis.
S14	2.8.2	7.3	MSRTs provide relief capacity.	A ~~T~~test~~s~~ and analysis will be performed.	Each MSRT provides relief capacity ≥ 2,844,146 lbm/hr at valve inlet static pressure of 1370 psig. With pressure measurement uncertainty of 30 psi, the maximum relieving pressure is 1400 psig.
S14	2.9.1	4.1	The LWMS processing equipment contains the proper types and amounts of filter media or treatment media.	An~~alyses and~~ as-built inspection~~s~~ and analysis will be performed~~ to verify the LWMS processing equipment contains filter/treatment media capable of maintaining offsite doses to members of the public within 10 CFR 20 limits and effluent concentrations below the annual average concentration limits of 10 CFR 20~~.	~~Analyses and inspection~~ A report~~s~~ concludes that the LWMS processing equipment contains filter/treatment media capable of maintaining offsite doses to members of the public within 10 CFR 20 limits and effluent concentrations below the annual average concentration limits of 10 CFR 20.
S14	2.9.3	7.1	The GWPS processing equipment contains delay beds listed in Table 2.9.3-1 filled with activated charcoal.	An as-built ~~I~~inspection~~s~~ and analysi~~e~~s will be performed to verify the mass of activated charcoal loaded in each delay bed.	Each delay bed listed in Table 2.9.3-1 contains a minimum of 5,440 lb_m of activated charcoal.