ArevaEPRDCPEm Resource

From: Pederson Ronda M (AREVA NP INC) [Ronda.Pederson@areva.com]
Sent: Wednesday, September 30, 2009 4:19 PM
To: Tesfaye, Getachew
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); BEELMAN Ronald J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSAR Ch 6, Supplement 3
Attachments: RAI 221 Supplement 3 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 3 of the 32 questions of RAI No. 221 on June 17, 2009. Supplement 1 response to RAI No. 221 was sent on July 31, 2009 to address 4 of the remaining 29 questions. Supplement 2 response to RAI No. 221 was sent on August 27, 2009 to address 8 of the remaining 25 questions. The attached file, "RAI 221 Supplement 3 Response US EPR DC.pdf," provides technically correct and complete responses to 3 of the 17 remaining questions.

Appended to this file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the response to RAI 221 Question 06.02.01-18.

The following table indicates the respective pages in the response document, "RAI 221 Supplement 3 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 221 — 06.02.01-16	2	2
RAI 221 — 06.02.01-18	3	3
RAI 221 — 06.02.01-20	4	5

The schedule for technically correct and complete responses to the remaining questions remains unchanged and is provided below:

Question #	Response Date
RAI 221 — 06.02.01-15	December 17, 2009
RAI 221 — 06.02.01-21	December 17, 2009
RAI 221 — 06.02.01-22	December 17, 2009
RAI 221 — 06.02.01-23	December 17, 2009
RAI 221 — 06.02.01-24	December 17, 2009
RAI 221 — 06.02.01-26	December 17, 2009
RAI 221 — 06.02.01-28	December 17, 2009
RAI 221 — 06.02.01-30	December 17, 2009
RAI 221 — 06.02.01-32	December 17, 2009
RAI 221 — 06.02.01-33	December 17, 2009
RAI 221 — 06.02.01-34	December 17, 2009
RAI 221 — 06.02.01-35	December 17, 2009
RAI 221 — 06.02.01-42	December 17, 2009
RAI 221 — 06.02.01-44	December 17, 2009

Sincerely,

Ronda Pederson
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From: WELLS Russell D (AREVA NP INC)
Sent: Thursday, August 27, 2009 6:19 PM
To: 'Getachew Tesfaye'
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); SLIVA Dana (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSAR Ch 6, Supplement 2

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 3 of the 32 questions of RAI No. 221 on June 17, 2009. Supplement 1 response to RAI No. 221 was sent on July 31, 2009 to address 4 of the remaining 29 questions. The attached file, "RAI 221 Supplement 2 Response US EPR DC.pdf," provides technically correct and complete responses to 8 of the remaining 25 questions.

The following table indicates the respective pages in the response document, "RAI 221 Supplement 2 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 221 — 06.02.01-27	2	5
RAI 221 — 06.02.01-29	6	7
RAI 221 — 06.02.01-38	8	13
RAI 221 — 06.02.01-39	14	14
RAI 221 — 06.02.01-40	15	15
RAI 221 — 06.02.01-41	16	18
RAI 221 — 06.02.01-43	19	20
RAI 221 — 06.02.01-46	21	22

The schedule for technically correct and complete responses to the remaining questions remains unchanged and is provided below:

Question #	Response Date
RAI 221 — 06.02.01-15	December 17, 2009
RAI 221 — 06.02.01-16	September 30, 2009
RAI 221 — 06.02.01-18	September 30, 2009
RAI 221 — 06.02.01-20	September 30, 2009
RAI 221 — 06.02.01-21	December 17, 2009
RAI 221 — 06.02.01-22	December 17, 2009
RAI 221 — 06.02.01-23	December 17, 2009
RAI 221 — 06.02.01-24	December 17, 2009
RAI 221 — 06.02.01-26	December 17, 2009
RAI 221 — 06.02.01-28	December 17, 2009
RAI 221 — 06.02.01-30	December 17, 2009

RAI 221 — 06.02.01-32	December 17, 2009
RAI 221 — 06.02.01-33	December 17, 2009
RAI 221 — 06.02.01-34	December 17, 2009
RAI 221 — 06.02.01-35	December 17, 2009
RAI 221 — 06.02.01-42	December 17, 2009
RAI 221 — 06.02.01-44	December 17, 2009

Sincerely,

(Russ Wells on behalf of)

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From: Pederson Ronda M (AREVA NP INC)
Sent: Friday, July 31, 2009 2:51 PM
To: 'Tesfaye, Getachew'
Cc: BEELMAN Ronald J (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSARCh. 6 , Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to 3 of the 32 questions of RAI No. 221 on June 17, 2009. The attached file, "RAI 221 Supplement 1 Response US EPR DC.pdf" provides technically correct and complete responses to 4 of the remaining 29 questions and a revised schedule for the one partial response (RAI 221 — 06.02.01-38c) of the remaining 29 questions.

The following table indicates the respective pages in the response document, "RAI 221 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 221 — 06.02.01-25	2	2
RAI 221 — 06.02.01-31	3	3
RAI 221 — 06.02.01-36	4	4
RAI 221 — 06.02.01-37	5	5

The schedule for technically correct and complete responses to the remaining questions has been changed and is provided below:

Question #	Response Date
RAI 221 — 06.02.01-15	December 17, 2009
RAI 221 — 06.02.01-16	September 30, 2009
RAI 221 — 06.02.01-18	September 30, 2009
RAI 221 — 06.02.01-20	September 30, 2009
RAI 221 — 06.02.01-21	December 17, 2009

RAI 221 — 06.02.01-22	December 17, 2009
RAI 221 — 06.02.01-23	December 17, 2009
RAI 221 — 06.02.01-24	December 17, 2009
RAI 221 — 06.02.01-26	December 17, 2009
RAI 221 — 06.02.01-27	August 27, 2009
RAI 221 — 06.02.01-28	December 17, 2009
RAI 221 — 06.02.01-29	August 27, 2009
RAI 221 — 06.02.01-30	December 17, 2009
RAI 221 — 06.02.01-32	December 17, 2009
RAI 221 — 06.02.01-33	December 17, 2009
RAI 221 — 06.02.01-34	December 17, 2009
RAI 221 — 06.02.01-35	December 17, 2009
RAI 221 — 06.02.01-38c	August 27, 2009
RAI 221 — 06.02.01-39	August 27, 2009
RAI 221 — 06.02.01-40	August 27, 2009
RAI 221 — 06.02.01-41	August 27, 2009
RAI 221 — 06.02.01-42	December 17, 2009
RAI 221 — 06.02.01-43	August 27, 2009
RAI 221 — 06.02.01-44	December 17, 2009
RAI 221 — 06.02.01-46	August 27, 2009

Sincerely,

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From: Pederson Ronda M (AREVA NP INC)
Sent: Wednesday, June 17, 2009 5:41 PM
To: 'Getachew Tesfaye'
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); GUCWA Len T (EXT); BEELMAN Ronald J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSARCh. 6 (Part 2 of 2)

Getachew,
Attached is response to RAI 221 (Part 2 of 2).

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From: Pederson Ronda M (AREVA NP INC)
Sent: Wednesday, June 17, 2009 5:09 PM
To: 'Getachew Tesfaye'
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); GUCWA Len T (EXT); BEELMAN Ronald J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSARCh. 6 (Part 1 of 2)

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 221 Response US EPR DC.pdf" provides technically correct and complete responses to 3 of the 32 questions.

The following table indicates the respective pages in the response document, "RAI 221 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 221 — 06.02.01-15	2	2
RAI 221 — 06.02.01-16	3	3
RAI 221 — 06.02.01-17	4	4
RAI 221 — 06.02.01-18	5	5
RAI 221 — 06.02.01-19	6	6
RAI 221 — 06.02.01-20	7	7
RAI 221 — 06.02.01-21	8	8
RAI 221 — 06.02.01-22	9	9
RAI 221 — 06.02.01-23	10	10
RAI 221 — 06.02.01-24	11	11
RAI 221 — 06.02.01-25	12	12
RAI 221 — 06.02.01-26	13	13
RAI 221 — 06.02.01-27	14	14
RAI 221 — 06.02.01-28	15	15
RAI 221 — 06.02.01-29	16	16
RAI 221 — 06.02.01-30	17	17
RAI 221 — 06.02.01-31	18	18
RAI 221 — 06.02.01-32	19	19
RAI 221 — 06.02.01-33	20	20
RAI 221 — 06.02.01-34	21	21
RAI 221 — 06.02.01-35	22	22
RAI 221 — 06.02.01-36	23	23
RAI 221 — 06.02.01-37	24	24
RAI 221 — 06.02.01-38	25	25
RAI 221 — 06.02.01-39	26	26
RAI 221 — 06.02.01-40	27	27
RAI 221 — 06.02.01-41	28	28
RAI 221 — 06.02.01-42	29	29
RAI 221 — 06.02.01-43	30	30
RAI 221 — 06.02.01-44	31	31

RAI 221 — 06.02.01-45	32	34
RAI 221 — 06.02.01-46	35	35

A complete answer is not provided for 29 of the 32 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 221 — 06.02.01-15	December 17, 2009
RAI 221 — 06.02.01-16	September 30, 2009
RAI 221 — 06.02.01-18	September 30, 2009
RAI 221 — 06.02.01-20	September 30, 2009
RAI 221 — 06.02.01-21	December 17, 2009
RAI 221 — 06.02.01-22	December 17, 2009
RAI 221 — 06.02.01-23	December 17, 2009
RAI 221 — 06.02.01-24	December 17, 2009
RAI 221 — 06.02.01-25	July 31, 2009
RAI 221 — 06.02.01-26	December 17, 2009
RAI 221 — 06.02.01-27	August 27, 2009
RAI 221 — 06.02.01-28	December 17, 2009
RAI 221 — 06.02.01-29	August 27, 2009
RAI 221 — 06.02.01-30	December 17, 2009
RAI 221 — 06.02.01-31	July 31, 2009
RAI 221 — 06.02.01-32	December 17, 2009
RAI 221 — 06.02.01-33	December 17, 2009
RAI 221 — 06.02.01-34	December 17, 2009
RAI 221 — 06.02.01-35	December 17, 2009
RAI 221 — 06.02.01-36	July 31, 2009
RAI 221 — 06.02.01-37	July 31, 2009
RAI 221 — 06.02.01-38c	July 31, 2009
RAI 221 — 06.02.01-39	August 27, 2009
RAI 221 — 06.02.01-40	August 27, 2009
RAI 221 — 06.02.01-41	August 27, 2009
RAI 221 — 06.02.01-42	December 17, 2009
RAI 221 — 06.02.01-43	August 27, 2009
RAI 221 — 06.02.01-44	December 17, 2009
RAI 221 — 06.02.01-46	August 27, 2009

Sincerely,

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From: Getachew Tesfaye [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Tuesday, May 19, 2009 7:30 PM
To: ZZ-DL-A-USEPR-DL
Cc: Walton Jensen; Christopher Jackson; Jason Carneal; Joseph Colaccino; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 221 (2792), FSARCh. 6

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on April 14, 2009, and on May 15, 2009, you informed us that the RAI is clear with exception of Draft RAI Question 06.02.01-15, Part 33. After further evaluation, the staff has determined that Draft RAI Question 06.02.01-15, Part 33 is unnecessary and it is deleted. Additionally, per your request, RAI 221 has been renumbered to break up the single RAI question with 32 parts into 32 separate questions, i.e. Question 06.02.01-15, Part1-32 are now Questions 06.02.01-15 - Question 06.02.01-46. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 845

Mail Envelope Properties (5CEC4184E98FFE49A383961FAD402D310145D3C1)

Subject: Response to U.S. EPR Design Certification Application RAI No. 221, FSAR Ch 6, Supplement 3
Sent Date: 9/30/2009 4:19:05 PM
Received Date: 9/30/2009 4:19:15 PM
From: Pederson Ronda M (AREVA NP INC)

Created By: Ronda.Pederson@areva.com

Recipients:
"BENNETT Kathy A (OFR) (AREVA NP INC)" <Kathy.Bennett@areva.com>
Tracking Status: None
"DELANO Karen V (AREVA NP INC)" <Karen.Delano@areva.com>
Tracking Status: None
"BEELMAN Ronald J (AREVA NP INC)" <Ronald.Beelman@areva.com>
Tracking Status: None
"Tesfaye, Getachew" <Getachew.Tesfaye@nrc.gov>
Tracking Status: None

Post Office: AUSLYNCMX02.adom.ad.corp

Files	**Size**	**Date & Time**
MESSAGE	13550	9/30/2009 4:19:15 PM
RAI 221 Supplement 3 Response US EPR DC.pdf	132687	

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

Response to

Request for Additional Information No. 221 (2792), Supplement 3

5/19/2009

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 06.02.01 - Containment Functional Design
Application Section: 6.2.1, Technical Report ANP-10299P

QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects) (SPCV)

Question 06.02.01-16:

Section 2.2.3 of ANP-10299P describing the mixing dampers states that they open with a differential pressure of plus of minus 35 mille bar or an absolute pressure of 1.2 bar. Discuss the redundancy of these sensors and actuation logic.

Response to Question 06.02.01-16:

Based on the safety classification and function of the hydrogen mixing dampers (HMD), redundancy has been designed into the associated digital instrumentation and control (I&C) logic-sensors. A total of eight logic-sensor units (two per steam generator (SG) loop) continuously monitors the differential pressure across the SG ceiling formed by the foils at the top of the SG compartments. Each sensor monitors the differential pressure that exists at that location (between the accessible and equipment rooms). This arrangement complies with failure modes and effects analysis (FMEA) requirements so that a single sensor can be out of service for maintenance and a single-failure can occur without affecting the HMD function. If high differential pressure is sensed by digital I&C logic at any two of the eight sensor unit locations, all eight HMDs receive an “OPEN” command. Two additional logic-sensors are also provided to monitor absolute containment pressure. These sensors are located in the containment dome. If high absolute pressure is sensed by the digital I&C logic at either of the two absolute containment pressure sensor unit locations, all eight HMDs receive an “OPEN” command. A signal by any two of the eight differential pressure logic-sensor units, or by either of the two absolute containment pressure logic-sensor units, triggers the opening of all eight HMDs.

The HMDs are kept closed by a solenoid brake during normal (energized) operation and fail-safe in the “OPEN” position upon loss of power. No battery backup is provided (this would violate the fail-safe principle). In case of a loss of offsite power (LOOP), the HMDs would fail-safe open. When power is restored, the HMDs remain open. Only manual operator action can reset the opening signal and close the dampers.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.

Question 06.02.01-18:

In regard to ANP-10299P, for both the differential pressure instrumentation and absolute pressure instrumentation which open the mixing dampers, demonstrate that the actuation sensors as well as associated instrumentation and wiring, are environmentally qualified for the conditions that might occur within a reactor containment following a LOCA or MSLB.

Response to Question 06.02.01-18:

The actuation sensors (differential and absolute pressure), associated instrumentation, and wiring are part of the Equipment Qualification (EQ) program. Based on analysis results, this equipment will be environmentally qualified for design basis accident bounding conditions that may occur inside containment following a loss of coolant accident (LOCA) or main steam line break (MSLB). U.S. EPR FSAR Tier 2, Appendix 3D provides information regarding the approach to environmental qualification of electrical and mechanical equipment. U.S. EPR FSAR Tier 2, Table 3.10-1, Table 3.10-2, Table 3.11-1, and Table 3.11-2 will be revised to add the safety-related and non-safety/augmented-quality-related equipment and instrumentation of the combustible gas control system (CGCS).

FSAR Impact:

U.S. EPR FSAR Tier 2, Table 3.10-1, Table 3.10-2, Table 3.11-1, and Table 3.11-2 will be revised as described in the response and indicated on the enclosed markup.

Question 06.02.01-20:

Section 2.2 of ANP-10299P describes the CONVECT system which establishes a circulation pattern within the containment building following a high energy piping break. The degree of circulation will depend on the opened areas and the resulting flow losses. Provide the effective open area of the rupture and convection foils and the flow loss coefficients. Discuss how these values were determined.

Response to Question 06.02.01-20:

Table 06.02.01-20-1 provides the effective open areas of the rupture and convection foils. Because there are three different sized rupture foils, three different effective open areas have been provided. The convection foil open area is the same size as the Type I rupture foils. The effective open areas are based on results from burst tests completed during the qualification of these components. The effective flow areas were previously provided in the Response to RAI 1, Supplement 2, Question 6.2.1-07a.

The flow loss coefficients for both the rupture and convection foils are 3.43 in the forward flow direction (equipment rooms to accessible area) and 2.75 in the reverse flow direction (accessible area to equipment rooms). These values are used to model the foil flow losses in the multi-node Gothic model for the containment analysis and are based upon the sharp-edged orifice in an infinite wall values from Reference 1.

References for Question 06.02.01-20:

1. I.E. Idelchik, “Handbook of Hydraulic Resistance,” 3rd Edition, Begell House, 1996, ISBN 1-56700-074-6 (Diagram 4-18, page 225).

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.

Table 06.02.01-20-1—Foil Data

	Effective Open Area	Units
Convection Foil		
Type I	628 x 653 (24.724 x 24.724)	mm (inch)
Rupture Foil		
Type I	628 x 653 (24.724 x 24.724)	mm (inch)
Type II	653 x 455 (24.724 x 17.913)	mm (inch)
Type III	653 x 319 (24.724 x 12.559)	mm (inch)

U.S. EPR Final Safety Analysis Report Markups

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

Sheet 118 of 170

Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Starting air system starting devices	30XJX10AP	31UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system filters	30XJX10AT	31UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system tanks	30XJX10BB	31UBP01001	M	M	SI	S C/NM	Y (5)
Air start system pressure	30XJX10CP	31UBP01001	M	M	SI	S 1E	Y (5)
Starting air system valves (from the receiver inlet check valve	30XJX20AA	32UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system starting devices	30XJX20AP	32UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system filters	30XJX20AT	32UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system tanks	30XJX20BB	32UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system pressure	30XJX20CP	32UBP01001	M	M	SI	S 1E	Y (5)
Starting air system valves (from the receiver inlet check valve	30XJX30AA	33UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system starting devices	30XJX30AP	33UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system filters	30XJX30AT	33UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system tanks	30XJX30BB	33UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system pressure	30XJX30CP	33UBP01001	M	M	SI	S 1E	Y (5)
Starting air system valves (from the receiver inlet check valve	30XJX40AA	34UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system starting devices	30XJX40AP	34UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system filters	30XJX40AT	34UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system tanks	30XJX40BB	34UBP01001	M	M	SI	S C/NM	Y (5)
Starting air system pressure	30XJX40CP	34UBP01001	M	M	SI	S 1E	Y (5)
AC synchronous generator mech.	30XKA10AG	31UBP01001	M	M	SI	S C/NM	Y (5)
AC synchronous generator mech.	30XKA20AG	32UBP01001	M	M	SI	S C/NM	Y (5)
AC synchronous generator mech.	30XKA30AG	33UBP01001	M	M	SI	S C/NM	Y (5)
AC synchronous generator mech.	30XKA40AG	34UBP01001	M	M	SI	S C/NM	Y (5)
Combustible Gas Control System (CGCS)							
H2 MIXING DAMPER 01	30JMT20AA001	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 02	30JMT20AA002	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 03	30JMT20AA003	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 04	30JMT20AA004	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 05	30JMT20AA005	30UJA07014	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 06	30JMT20AA006	30UJA07014	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 07	30JMT20AA007	30UJA07014	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 08	30JMT20AA008	30UJA07014	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 01 – OPEN (M)	30JMT20CG001A	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 01 – CLOSED (M)	30JMT20CG001B	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 02 – OPEN (M)	30JMT20CG002A	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 02 – CLOSED (M)	30JMT20CG002B	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 03 – OPEN (M)	30JMT20CG003A	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)
H2 MIXING DAMPER 03 – CLOSED (M)	30JMT20CG003B	30UJA07015	H	H	ES SI	S C/NM	Y (4) Y (5)

06.02.01-18

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)		Safety Class (Note 4)		EQ Program Designation (Note 5)	
H2 MIXING DAMPER 04 – OPEN (M)	30JMT20CG004A	30UJA07015	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 04 – CLOSED (M)	30JMT20CG004B	30UJA07015	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 05 – OPEN (M)	30JMT20CG005A	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 05 – CLOSED (M)	30JMT20CG005B	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 06 – OPEN (M)	30JMT20CG006A	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 06 – CLOSED (M)	30JMT20CG006B	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 07 – OPEN (M)	30JMT20CG007A	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 07 – CLOSED (M)	30JMT20CG007B	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 08 – OPEN (M)	30JMT20CG008A	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
H2 MIXING DAMPER 08 – CLOSED (M)	30JMT20CG008B	30UJA07014	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB101	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB102	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB103	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB104	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB105	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB106	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB107	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB108	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB109	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB110	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB111	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB112	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB113	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB114	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB115	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB116	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB117	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB118	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB119	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB120	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB121	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB122	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB123	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB124	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB125	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB126	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB127	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Rupture Foil – SG LOOP 1	30JMT20AB128	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 1	30JMT20AB151	30UJA34003	H	H	ES	SI	S	C/NM	Y (4)	Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Convection Foil – SG LOOP 1	30JMT20AB152	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB153	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB154	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB155	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB156	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB157	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB158	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB159	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB160	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB161	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB162	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB163	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB164	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB165	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB166	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB167	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB168	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB169	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB170	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB171	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB172	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB173	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB174	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB175	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB176	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB177	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB178	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB179	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 1	30JMT20AB180	30UJA34003	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB201	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB202	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB203	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB204	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB205	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB206	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB207	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB208	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB209	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB210	30UJA34004	H	H	ES SI	S C/NM	Y (4) Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)		Safety Class (Note 4)	EQ Program Designation (Note 5)	
Rupture Foil – SG LOOP 2	30JMT20AB211	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB212	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB213	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB214	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB215	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB216	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB217	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB218	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB219	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB220	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB221	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB222	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB223	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB224	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB225	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB226	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB227	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 2	30JMT20AB228	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB251	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB252	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB253	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB254	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB255	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB256	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB257	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB258	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB259	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB260	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB261	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB262	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB263	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB264	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB265	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB266	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB267	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB268	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB269	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB270	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB271	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)		Safety Class (Note 4)	EQ Program Designation (Note 5)
Convection Foil – SG LOOP 2	30JMT20AB272	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB273	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB274	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB275	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB276	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB277	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB278	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB279	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 2	30JMT20AB280	30UJA34004	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB301	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB302	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB303	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB304	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB305	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB306	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB307	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB308	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB309	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB310	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB311	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB312	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB313	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB314	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB315	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB316	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB317	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB318	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB319	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB320	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB321	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB322	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB323	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB324	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB325	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB326	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB327	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 3	30JMT20AB328	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB351	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB352	30UJA34007	H	H	ES	SI	S	C/NM	Y (4) Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Convection Foil – SG LOOP 3	30JMT20AB353	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB354	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB355	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB356	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB357	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB358	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB359	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB360	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB361	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB362	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB363	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB364	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB365	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB366	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB367	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB368	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB369	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB370	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB371	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB372	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB373	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB374	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB375	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB376	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB377	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB378	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB379	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 3	30JMT20AB380	30UJA34007	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB401	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB402	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB403	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB404	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB405	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB406	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB407	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB408	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB409	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB410	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB411	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Rupture Foil – SG LOOP 4	30JMT20AB412	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB413	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB414	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB415	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB416	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB417	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB418	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB419	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB420	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB421	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB422	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB423	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB424	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB425	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB426	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB427	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Rupture Foil – SG LOOP 4	30JMT20AB428	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB451	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB452	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB453	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB454	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB455	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB456	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB457	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB458	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB459	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB460	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB461	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB462	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB463	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB464	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB465	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB466	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB467	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB468	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB469	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB470	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB471	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)
Convection Foil – SG LOOP 4	30JMT20AB472	30UJA34008	H	H	ES SI	S C/NM	Y (4) Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)		Safety Class (Note 4)		EQ Program Designation (Note 5)	
Convection Foil – SG LOOP 4	30JMT20AB473	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB474	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB475	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB476	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB477	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB478	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB479	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Convection Foil – SG LOOP 4	30JMT20AB480	30UJA34008	H	H	ES	SI	S	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT001	30UJA18019	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT002	30UJA18007	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT003	30UJA18008	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT004	30UJA18003	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT005	30UJA18004	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT006	30UJA18018	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT007	30UJA23019	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT008	30UJA23006	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT009	30UJA23015	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT010	30UJA23006	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT011	30UJA23007	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT012	30UJA23008	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT013	30UJA23016	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT014	30UJA23009	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT015	30UJA23009	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT016	30UJA15001	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT017	30UJA23002	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT018	30UJA23002	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT019	30UJA23013	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT020	30UJA23003	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT021	30UJA23004	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT022	30UJA23005	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT023	30UJA23014	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT024	30UJA23005	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT025	30UJA29019	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT026	30UJA29016	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT027	30UJA29013	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT028	30UJA29018	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT029	30UJA34019	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT030	30UJA34007	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)
Passive Autocatalytic Recombiner	30JMT10AT031	30UJA34007	H	H	ES	SII	NS-AQ	C/NM	Y (4)	Y (5)

Table 3.10-1 List of Seismically and Dynamically Qualified Mechanical and Electrical Equipment

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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Passive Autocatalytic Recombiner	30JMT10AT032	30UJA34008	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT033	30UJA34008	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT034	30UJA34003	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT035	30UJA34003	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT036	30UJA34004	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT037	30UJA34004	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT038	30UJA38001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT039	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT040	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT041	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT042	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT043	30UJA38001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT044	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT045	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT046	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)
Passive Autocatalytic Recombiner	30JMT10AT047	30UJA40001	H	H	ES SII	NS-AQ C/NM	Y (4) Y (5)

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Electrical Systems

Class 1E Uninterruptible Power Supply (EUPS)

As a Result of the EQ Program Screening No Components in This System were Identifed for Seismic Qualification.

Emergency Power Supply (EPSS)

As a Result of the EQ Program Screening No Components in This System were Identifed for Seismic Qualification.

Non-Class 1E Uninterruptible Power Supply (NUPS)

As a Result of the EQ Program Screening No Components in This System were Identifed for Seismic Qualification.

Lighting & Small Power System (LGT)

As a Result of the EQ Program Screening No Components in This System were Identifed for Seismic Qualification.

Normal Power Supply (NPSS)

31BBC01 13.8 kV Bus (Switchgear)	31BBC01GS0	31UJK18027	M	M	RT ES SII	NS-AQ	Y (5)
32BBC01 13.8 kV Bus (Switchgear)	32BBC01GS0	32UJK18020	M	M	ES SII	NS-AQ	Y (5)
33BBC01 13.8 kV Bus (Switchgear)	33BBC01GS0	33UJK18020	M	M	ES SII	NS-AQ	Y (5)

Table 3.10-2—List of U.S. EPR Important-to-Safety Systems Screened for the Seismic Qualification Program
Sheet 1 of 4

Category	Systems
Fluid Systems	Reactor Coolant JE (except JEW), JA, JDA [1]
	Safety Injection & Residual Heat Removal JNA, JND, JNG
	Component Cooling Water KA
	Essential Service Water PE
	Safety Chilled Water QK
	Extra Borating JDH
	Feedwater LA
	Emergency Feedwater LAR, LAS
	In-containment Refueling Water Storage Tank (IRWST) JNK
	Main Steam LB
	Steam Generator Blowdown LCQ
	Chemical & Volume Control System KBA, KBD, JEW
Auxiliary Systems	Nuclear Sampling KU
	Sampling Activity Monitoring KLK
	Emergency Diesel Generator Set XJA, XKA, XJN, XJV, XJG, XJQ, XJR, XJX, XCN
06.02.01-18	Combustible Gas Control JMT

Table 3.11-1—List of Environmentally Qualified Electrical/I&C Equipment
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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Exhaust gas system valve actuators	30XJR40AA	34UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Lube oil system valve actuators	30XJV10AA	31UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Lube oil system valve actuators	30XJV20AA	32UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Lube oil system valve actuators	30XJV30AA	33UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Lube oil system valve actuators	30XJV40AA	34UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Starting air system valve actuators	30XJX10AA	31UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Starting air system valve actuators	30XJX20AA	32UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Starting air system valve actuators	30XJX30AA	33UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Starting air system valve actuators	30XJX40AA	34UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
AC synchronous generator electrical	30XKA10AG	31UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
AC synchronous generator electrical	30XKA20AG	32UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
AC synchronous generator electrical	30XKA30AG	33UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
AC synchronous generator electrical	30XKA40AG	34UBP01001	M	M	SI	S 1E EMC	Y (5) Y (6)
Combustible Gas Control System (CGCS)							
H2 MIXING DAMPER 01	30JMT20AA001	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 02	30JMT20AA002	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 03	30JMT20AA003	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 04	30JMT20AA004	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 05	30JMT20AA005	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 06	30JMT20AA006	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 07	30JMT20AA007	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 08	30JMT20AA008	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 01 – OPEN (M)	30JMT20CG001A	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 01 – CLOSED (M)	30JMT20CG001B	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 02 – OPEN (M)	30JMT20CG002A	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 02 – CLOSED (M)	30JMT20CG002B	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 03 – OPEN (M)	30JMT20CG003A	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 03 – CLOSED (M)	30JMT20CG003B	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 04 – OPEN (M)	30JMT20CG004A	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 04 – CLOSED (M)	30JMT20CG004B	30UJA07015	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 05 – OPEN (M)	30JMT20CG005A	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 05 – CLOSED (M)	30JMT20CG005B	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 06 – OPEN (M)	30JMT20CG006A	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 06 – CLOSED (M)	30JMT20CG006B	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 07 – OPEN (M)	30JMT20CG007A	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 07 – CLOSED (M)	30JMT20CG007B	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 08 – OPEN (M)	30JMT20CG008A	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
H2 MIXING DAMPER 08 – CLOSED (M)	30JMT20CG008B	30UJA07014	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 1 – Two Room Containment	30JMT20CP001	30UJA34003	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 2 – Two Room Containment	30JMT20CP002	30UJA34003	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 3 – Two Room Containment	30JMT20CP003	30UJA34004	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 4 – Two Room Containment	30JMT20CP004	30UJA34004	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 5 – Two Room Containment	30JMT20CP005	30UJA34007	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 6 – Two Room Containment	30JMT20CP006	30UJA34007	H	H	ES SI	S 1E EMC	Y(1) Y(5)
Delta Pressure 7 – Two Room Containment	30JMT20CP007	30UJA34008	H	H	ES SI	S 1E EMC	Y(1) Y(5)

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Table 3.11-1—List of Environmentally Qualified Electrical/I&C Equipment
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Name Tag (Equipment Description)	Tag Number	Local Area KKS ID (Room Location)	EQ Environment (Note 1)	Radiation Environment Zone (Note 2)	EQ Designated Function (Note 3)	Safety Class (Note 4)	EQ Program Designation (Note 5)
Delta Pressure 8 – Two Room Containment	30JMT20CP008	30UJA34008	H	H	ES SI	S 1E EMC	Y(1) Y(5)
	06.02.01-18						
Electrical Systems							
Class 1E Uninterruptible Power Supply (EUPS)							
31BGA01 120 V PANELBOARD	31BGA01GW001	31UJK18027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRA 480 V Bus (MCC)	31BRA00GW001	31UJK18027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRA 480 V Bus (MCC)	31BRAGW0	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRU01 Inverter	31BRU01GU0	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRU01 Inverter	31BRU01GU001	31UJK14027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW10 AC/DC Converter	31BRW10GR0	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW10 AC/DC Converter	31BRW10GR001	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW12 AC/DC Converter	31BRW12GR0	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW12 AC/DC Converter	31BRW12GR001	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW16 AC/DC Converter	31BRW16GR0	31UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BRW16 AC/DC Converter	31BRW16GR001	31UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTD01 Battery	31BTD01GR0	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTD01 Battery	31BTD01GR001	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTP01 Standby Battery Charger	31BTP01GR0	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTP01 Battery Charger	31BTP01GR001	31UJK14027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTP02 Battery Charger	31BTP02GR0	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BTP02 Battery Charger	31BTP02GR001	31UJK14027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUC 250 VDC Bus (Switchboard)	31BUC00GW001	31UJK14027	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUC 250 VDC Bus (Switchboard)	31BUCGW0	31UJK14028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW11 DC/DC Converter	31BUW11GR001	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW11 DC/DC Converter	31BUW11GU0	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW13 DC/DC Converter	31BUW13GR001	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW13 DC/DC Converter	31BUW13GU0	31UJK18025	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW16 DC/DC Converter	31BUW16GR001	31UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
31BUW16 DC/DC Converter	31BUW16GU0	31UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BGA01 120 V PANELBOARD	32BGA01GW001	32UJK18020	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRA 480 V Bus (MCC)	32BRA00GW001	32UJK18020	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRA 480 V Bus (MCC)	32BRAGW0	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRU01 Inverter	32BRU01GU0	32UJK22028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRU01 Inverter	32BRU01GU001	32UJK22029	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW30 AC/DC Converter	32BRW30GR0	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW30 AC/DC Converter	32BRW30GR001	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW32 AC/DC Converter	32BRW32GR0	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW32 AC/DC Converter	32BRW32GR001	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW36 AC/DC Converter	32BRW36GR0	32UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW36 AC/DC Converter	32BRW36GR001	32UBP10002	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BRW38 AC/DC Converter	32BRW38GR0	32UJK18004	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BTD01 Battery	32BTD01GR0	32UJK22028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)
32BTD01 Battery	32BTD01GR001	32UJK22028	M	M	RT ES PAM SI	S 1E EMC	Y (5) Y (6)

Table 3.11-2—List of U.S. EPR Important to Safety Systems Screened for the EQ Program
Sheet 1 of 4

Category	Fluid Systems
Fluid Systems	Reactor Coolant JE (except JEW), JA, JDA[1]
	Safety Injection & Residual Heat Removal JNA, JND, JNG
	Component Cooling Water KA
	Essential Service Water PE
	Safety Chilled Water QK
	Extra Borating JDH
	Feedwater LA
	Emergency Feedwater LAR, LAS
	In-containment Refueling Water Storage Tank (IRWST) JNK
	Main Steam LB
	Steam Generator Blowdown LCQ
	Chemical & Volume Control System KBA, KBD, JEW
Auxiliary Systems	Nuclear Sampling KU
	Sampling Activity Monitoring KLK
	Emergency Diesel Generator Set XJA, XKA, XJN, XJV, XJG, XJQ, XJR, XJX, XCN
06.02.01-18	Combustible Gas Control JMT