ArevaEPRDCPEm Resource

From: DUNCAN Leslie E (AREVA NP INC) [Leslie.Duncan@areva.com]
Sent: Thursday, February 18, 2010 1:36 PM
To: Tesfaye, Getachew
Cc: DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); LENTZ Tony F (EXT)
Subject: Response to U.S. EPR Design Certification Application RAI No. 307, FSAR Ch. 14, Supplement 1
Attachments: RAI 307 Supplement 1 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for a technically correct and complete response to RAI No. 307 on November 20, 2009. The attached file, “RAI 307 Supplement 1 Response US EPR DC.pdf,” provides technically correct and complete responses to 1 of the remaining 2 questions, as committed.

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 307 Question 14.03.03-45.

The following table indicates the respective pages in the response document, “RAI 307 Supplement 1 Response US EPR DC.pdf,” that contain AREVA NP’s response to the subject questions.

Question #	Start Page	End Page
RAI 307 — 14.03.03-45	2	3

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

Question #	Response Date
RAI 307 — 14.03-14	March 18, 2010

Sincerely,

Les Duncan
Licensing Engineer
AREVA NP Inc.
An AREVA and Siemens Company
Tel: (434) 832-2849
Leslie.Duncan@areva.com

From: Pederson Ronda M (AREVA NP INC)
Sent: Friday, November 20, 2009 7:34 PM
To: Tesfaye, Getachew
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); DUNCAN Leslie E (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 307, FSAR Ch. 14

Getachew,

Attached please find AREVA NP Inc.’s response to the subject request for additional information (RAI). The attached file, “RAI 307 Response US EPR DC.pdf” provides a schedule since a technically correct and complete response to the 2 questions is not provided.

The following table indicates the respective pages in the response document, “RAI 307 Response US EPR DC.pdf” that contain AREVA NP’s response to the subject questions.

Question #	Start Page	End Page
RAI 307 — 14.03-14	2	4
RAI 307 — 14.03.03-45	5	6

A complete answer is not provided for 2 of the 2 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 307 — 14.03-14	March 18, 2010
RAI 307 — 14.03.03-45	February 18, 2010

Sincerely,

Ronda Pederson

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From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Monday, October 26, 2009 10:58 AM
To: ZZ-DL-A-USEPR-DL
Cc: Dehmel, Jean-Claude; Frye, Timothy; Ng, Ching; Dixon-Herrity, Jennifer; Jennings, Jason; Miernicki, Michael; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 307 (3816, 3777),FSAR Ch. 14

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on October 9, 2009, and discussed with your staff on October 22, 2009. Drat RAI Question 14.03.03-45 was modified as a result of that discussion. 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: 1150

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Subject: Response to U.S. EPR Design Certification Application RAI No. 307, FSAR Ch. 14, Supplement 1
Sent Date: 2/18/2010 1:35:53 PM
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RAI 307 Supplement 1 Response US EPR DC.pdf		296270

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Response to

Request for Additional Information No. 307 (3816, 3777), Supplement 1, Revision 1

10/26/2009

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 14.03 - Inspections, Tests, Analyses, and Acceptance Criteria
SRP Section: 14.03.03 - Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria

Application Section: 14.3

QUESTIONS for Health Physics Branch (CHPB)
QUESTIONS for Engineering Mechanics Branch 2 (ESBWR/ABWR Projects) (EMB2)

Question 14.03.03-45:

Follow-up to RAI Question 14.03.03-32

In the response to RAI 14.03.03-32 dated July 24, 2009, AREVA revised FSAR Tier 2 Section 14.3 to include a discussion of construction ITAAC and design ITAAC. The ASME Code Section III piping design was identified as an example of design ITAAC that establish the commitment for completing the design of an SSC. An acceptable methodology to be used by for the design is described in other sections of EPR FSAR Tier 2. The applicant also indicated that there can be three scenarios for closing design ITAAC: 1) closure through amendment of design certification rule; 2) closure through the COL review process; and 3) closure after COL issuance. The requirement to submit a schedule for ITAAC closure is the responsibility of the COL applicant. A new COL Information Item 14.3-3 was added in Section 14.3 indicating that the COL applicant will identify a plan for implementing design ITAAC. The plan includes the evaluations that will be preformed, the schedule for performing these evaluations, and associated processes and information that will be available for NRC audit. Plans for SCOL applicants/licensees may apply that the design ITAAC completion used for first standard plant. In the included FSAR markup of Table 1.8-2, AREVA indicated that COL Information Item 14.3-3 is an action required by COL Holder.

Even though AREVA had substantiated the discussion about the use of ITAAC and COL Information Item, the staff found the response to be insufficient in addressing the process of using Design Acceptance Criteria in lieu of completing the piping design.

The staff has identified following concerns:

1. The applicant introduced the term Design ITAAC, which can be closed under three scenarios. Descriptions of these scenarios are the same as those in Section 8.3.1 of NEI 08-01 Revision 3, “Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52,” for closing Design Acceptance Criteria (DAC). However, AREVA has not indicated in the application that DAC will be used in piping design area. These special ITAAC could be acceptable because piping design is one of the areas allowed to use DAC during the staff’s review of design certifications and subsequent safety determination. According to SECY Paper 92-053 and its associated Staff Requirement Memorandum, the NRC implemented the policy of accepting the use of DAC in lieu of detailed design information in a limited number of design areas on a case-by-case basis, as requested by the design certification applicants. Again as in the previous RAI, AREVA is requested to indicate in the EPR FSAR Tier 2 that DAC will be used in lieu of detail design information for piping design.
2. The staff disagreed that the COL Information Item 14.3-3 to be completed by “COL Holder” as identified in Tier 2, Table 1.8-2. It is believed that the COL applicant referencing US EPR design certification should provide the plan for the staff to make the safety determination prior to the issuance of the license. The staff requests AREVA to revise the wording in Section 14.3 to address these issues.
3. In the COL information Item 14.3-3, AREVA indicated that the plan the COL applicant provided will identify the evaluations to be performed. The staff agreed that the COL applicant will provide the details of the evaluations. However, for piping design, the staff found that AREVA needs to specify what those evaluations are. In particular, AREVA should indicate what was not completed in the FSAR and how those evaluations relate to specific design ITAAC. The staff requested AREVA to include a separate paragraph or

section in Tier 2 Section 14.3 to discuss the specific of piping DAC and associated design ITAAC for piping design reports, as-built reconciliation, and/or other piping areas (possibly as-designed pipe break hazard analysis).

4. For the COL information Item 14.3-3, AREVA indicated that for subsequent plants, the plan may be an indication that the plant will apply the design ITAAC completion that was used for the first standard plant. The staff agrees that the piping design completed for the first plant will be available to subsequent plants for closure of the design ITAAC under the "one issue-one review-one position" approach if the same standard piping design will be used by this particular COL applicant. Thus, the staff requests the applicant amend the statement to illustrate that referencing the completed design ITAAC only applies if a standard piping design used.

Response to Question 14.03.03-45:

1. U.S. EPR FSAR Tier 1 uses DAC in human factors engineering (HFE), instrumentation and controls (I&C), and piping design. U.S. EPR FSAR Tier 2, Section 14.3 will be revised to include a discussion on DAC and to indicate the areas that DAC are used. The wording of U.S. EPR FSAR Tier 2, Table 1.8-2, COL Information Item 14.3-3 will be revised to change design ITAAC to DAC, and U.S. EPR FSAR Tier 1, Chapters 2 and 3 will be revised to identify the individual DAC.
2. A response to this question will be provided by April 14, 2010. The NRC has recently issued ESP/DC/COL-ISG-015, "Interim Staff Guidance on Post-Combined License Commitments" (ML093561416), which provides guidance on COL information items. Additional time is needed to evaluate the impact of ISG-015 on the DAC information item in U.S. EPR FSAR Tier 2, Table 1.8-2, COL Information Item 14.3-3.
3. U.S. EPR FSAR Tier 2, Section 14.3 will be revised to include a discussion on piping DAC and to list the U.S. EPR FSAR Tier 1 sections containing DAC. U.S. EPR FSAR Tier 1, Chapters 2 and 3 will be revised to identify DAC.
4. U.S. EPR FSAR Tier 2, Section 14.3 will be revised to state that "a subsequent plant's plan to apply the DAC completion of the first standard plant is only applicable where the standard design is used for piping, HFE, or I&C."

FSAR Impact:

U.S. EPR FSAR Tier 1, Chapters 2 and 3 will be revised as described in the response and indicated on the enclosed markup.

U.S. EPR FSAR Tier 2, Table 1.8-2 and Section 14.3 will be revised as described in the response and indicated on the enclosed markup.

U.S. EPR Final Safety Analysis Report Markups

14.3 Inspections, Tests, Analys~~i~~es, and Acceptance Criteria

Section 14.3 explains the selection criteria and methods used to develop the U.S. EPR Tier 1 certified design material (CDM) and the inspections, tests, analyses, and acceptance criteria (ITAAC). Tier 1 means the portion of the design-related information contained in a generic FSAR that is approved and certified by the design certification rule (10 CFR 52). The design descriptions, interface requirements, and site parameters are derived from Tier 2 information. Tier 1 information includes:

- Definitions and general provisions.
- Design descriptions.
- ITAAC.
- Significant interface requirements.
- Significant site parameters.

The information in the Tier 1 portion of the FSAR is extracted from the detailed information contained in Tier 2. While the Tier 1 information must address the complete scope of the design to be certified, the amount of design information is proportional to the safety-significance of the structures and systems of the design.

There are two material categories in Tier 1: CDM and ITAAC.

- CDM is the design commitment. CDM is in the form of design descriptions, tables, and figures, and is binding for the lifetime of a facility.
- ITAAC will be used to verify the U.S. EPR as-built features. ITAAC material is in tabular format only and expires at initial fuel loading.

In the Tier 1 ITAAC entries, as-built means the physical properties of a structure, system, or component following the completion of its installation or construction activities at its final location at the plant site. Determination of physical properties of the as-built structure, system, or component may be based on measurements, inspections, or tests that occur prior to completion of installation, provided that subsequent fabrication, handling, installation activities, and testing do not alter their properties. The point at which completion of installation occurs varies according to the feature to which the ITAAC applies.

- For ASME Code Section III Division 1 ITAAC, completion of installation means the signature of the Authorized Nuclear Inspector on the ASME Code N-5 Data Report.
- For other systems, completion of installation means the point at which the equipment is mechanically (welded, bolted, mounted, etc.) attached in its final location at the plant site.

Tier 1 design description or the ITAAC table commitments column. This is acceptable because the design description defines the important design feature that needs to be included in the CDM, whereas the numerical value is a measurement standard that determines if the feature has been provided.

14.3.3 Tier 1, Chapter 3, Non-System Based Design Descriptions and ITAAC

The format and selection process for Tier 1, Chapter 3 is similar to Tier 1, Chapter 2 in that it includes CDM and ITAAC tables. Tier 1, Chapter 3 addresses the following non-system based topics:

- Section 3.1 – Security.
- Section 3.2 - Reliability assurance program (RAP).
- Section 3.3 - Initial test program (ITP).
- Section 3.4 - Human factors engineering (HFE).
- Section 3.5 - Containment isolation.
- Section 3.6 - Plant Cabling
- Section 3.7 - Accident Monitoring Instrumentation

14.3.4 Tier 1, Chapter 4, Interface Requirements

Interface requirements are items to be met by the site-specific portions of a facility that are not within the scope of the certified design. The site-specific portions of the design are those that depend on site characteristics. Interface requirements define the design features and characteristics that demonstrate that the site-specific portion of the design conforms to the certified design. Interface requirements comply with 10 CFR 52.47(a)(26) requirements.

14.3.5 Tier 1, Chapter 5, Site Parameters

Tier 1, Chapter 5 defines safety-significant site parameters that are the basis for the standard plant design presented in the U.S. EPR design certification application. The list of site parameters follows the suggested list contained in SRP 2.0 and corresponds with the requirements for site parameter information contained in 10 CFR 52.47(a)(1). Compliance with these site parameters is verified during the COL application process, so no ITAAC are necessary for site parameters.

14.03.03-45

14.3.6 Design Acceptance Criteria

As described in SECY 92-053 (Reference 3), design acceptance criteria (DAC) "are a set of prescribed limits, parameters, procedures, and attributes upon which the NRC

14.03.03-45

re1ies, in a limited number of technical areas, in making a final safety determination to support a design certification. The DAC are to be objective (measurable, testable, or subject to analysis using pre-approved methods), and must be verified as a part of the ITAAC performed to demonstrate that the as-built facility conforms to the certified design." DAC are applied to (1) technologies, such as I&C systems and control room design, that are changing so rapidly that it would be unwise to freeze the details of the design many years before a plant is ready to be constructed, and (2) design areas such as piping analyses, where the as-built or as-procured information to complete the final design is not available.

As described in NEI 08-01, Section 8.3.1 (Reference 4), which is endorsed by Regulatory Guide 1.215 (Reference 5), "There are three options to close DAC, all of which involve essentially the same level of design detail. The design information necessary to close DAC should be that level which would have been provided during design certification review if DAC had not been used. Regardless of the option used to close DAC, NRC closure of DAC embodies a determination that the design has been completed in accordance with the design certification. The three options for DAC closure are:

- *Closure through amendment of design certification rule* – Under this option, the design certification applicant would submit an amendment with design information that implements the DAC. Completed DAC would be deleted from the set of design certification ITAAC; however, the ITAAC on the as-built SSCs would remain (or be modified, as necessary) to demonstrate that the as-built facility conforms to the completed DAC. The NRC would review the amendment request, issue a safety evaluation, and conduct rulemaking to amend the design certification rule.

- *Closure through the COLA review process* – Under this option, the COL application contains the additional design information needed to implement the DAC. The NRC reviews the design and includes the results of its review in the safety evaluation for the COL. The COL should reflect that the DAC have been completed. The as-built ITAAC would remain (or be modified as part of the NRC review of the COLA, as necessary) to demonstrate that the as-built facility conforms to the completed DAC.

- *Closure after COL issuance* – Under this option, the COL is issued with DAC. When the necessary additional design information is available, the licensee's DAC implementation is inspected by the NRC as part of the Engineering Design Verification (EDV) process, as described in Inspection Manual Chapter 2504. Following issuance of the NRC EDV inspection report, and resolution of any findings that would otherwise preclude DAC close-out, close-out of DAC is accomplished via the ITAAC closure process described in this document (e.g., close-out is initiated by a licensee's ITAAC close-out letter to NRC)."

U.S. EPR FSAR Tier 1 uses DAC in the areas of human factors engineering (HFE), I&C, and piping design. DAC are identified in U.S. EPR FSAR Tier 1 with {{DAC}}.

14.03.03-45

14.3.6.1 Human Factors Engineering DAC

U.S. EPR FSAR Tier 1, Table 3.4-1 contains HFE DAC, which are identified with {{DAC}}.

14.3.6.2 Instrumentation and Control DAC

I&C DAC identify the process and requirements necessary to develop the design information and acceptance criteria for the various design stages. By following these I&C DAC, the COL Licensee will have sufficient information to determine which elements of the design are necessary for each phase of the I&C DAC closure.

The following U.S. EPR FSAR Tier 1 sections contain I&C DAC, which are identified with {{DAC}}:

- Section 2.4.1.
- Section 2.4.2.
- Section 2.4.4.
- Section 2.4.24.
- Section 3.7.

14.3.6.3 Piping DAC

U.S. EPR piping DAC consists of both ASME Code Section III piping analyses and pipe break analyses. The piping design may be completed on a system-by-system basis for applicable systems. Information will be made available to the NRC to facilitate reviews, inspections, and audits throughout the analyses process and, if appropriate, the NRC may inform the licensee of concerns as they are identified so that adjustments may be made in a timely manner.

ASME Code Section III prescribes certain procedures and requirements that are to be followed for completing the piping design. The piping DAC includes a verification of the ASME Code Section III design report to verify that the appropriate code design requirements for each system have been implemented. The design information (including ASME design reports) will be available to the NRC for review, inspection, and audit.

The following U.S. EPR FSAR Tier 1 sections contain ASME Code Section III DAC, which are identified with {{DAC}}:

- Sections 2.2.1 through 2.2.7.
- Section 2.3.3.

- Section 2.5.4.
- Section 2.7.1.
- Section 2.7.2.
- Section 2.7.11.
- Section 2.8.2.
- Section 2.8.6.
- Section 2.8.7.
- Section 3.5.

For completing the pipe break analyses DAC, the analyses will document that structures, systems, and components (SSC) which are required to be functional during and following a safe shutdown earthquake have adequate high-energy and moderate energy pipe break mitigation features. The pipe break analyses verify that the criteria used to postulate pipe breaks, the analytical methods used to analyze pipe breaks, and the method to confirm the adequacy of the results of the pipe break analyses are appropriate. The pipe break analyses reports provides assurance that the high-energy and moderate-energy line break analyses have been completed.

The following U.S. EPR FSAR Tier 1 sections contain pipe break hazards analysis DAC and leak before break (LBB) DAC, which are identified with {{DAC}}:

- Section 2.1.1.
- Section 2.2.1.

A COL applicant that references the U.S. EPR design certification will identify a plan for implementing DAC. The plan will identify 1) the evaluations that will be performed for DAC, 2) the schedule for performing these evaluations, and 3) the associated design processes and information that will be available to the NRC for audit. For subsequent plants, this plan may be an indication that the plant will apply the DAC completion that was used for the first standard plant. A subsequent plant's plan to apply the DAC completion of the first standard plant is only applicable where the standard design is used for piping, HFE, or I&C.

14.3.7 References

1. NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," U.S. Nuclear Regulatory Commission, March 2007.

2. ASME Boiler and Pressure Vessel Code, Section III, "Rules of Construction of Nuclear Facility Components," Class 1, 2, and 3 Components, The American Society of Mechanical Engineers, 2004 (No Addenda).

3. SECY 92-053, "Use of Design Acceptance Criteria During 10 CFR Part 52 Design Acceptance Reviews."

4. NEI 08-01, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52," Revision 3.

5. Regulatory Guide 1.215, "Guidance for ITAAC Closure Under 10 CFR Part 52," Revision 0.

14.03.03-45

Table 1.8-2—U.S. EPR Combined License Information Items
Sheet 42 of 47

Item No.	Description	Section	Action Required by COL Applicant	Action Required by COL Holder
14.2-12	A COL applicant that references the U.S. EPR design certification will provide site-specific test abstract information for plant laboratory equipment.	14.2.12	Y	
14.3-1	A COL applicant that references the U.S. EPR design certification will provide ITAAC for emergency planning, physical security, and site-specific portions of the facility that are not included in the Tier 1 ITAAC associated with the certified design (10 CFR 52.80(a)).	14.3	Y	
14.3-2	A COL applicant that references the U.S. EPR design certification will describe the selection methodology for site-specific SSC to be included in ITAAC, if the selection methodology is different from the methodology described within the FSAR, and will also provide the selection methodology associated with emergency planning and physical security hardware. 14.03.03-45	14.3	Y	
14.3-3	A COL applicant that references the U.S. EPR design certification will identify a plan for implementing DAC. The plan will identify 1) the evaluations that will be performed for DAC, 2) the schedule for performing these evaluations, and 3) the associated design processes and information that will be available to the NRC for audit.	14.3	14.03.03-45	Y
16.0-1	Reviewer's Notes and brackets are used to identify information or parameters that are plant specific or are based on preliminary design information. A COL applicant that references the U.S. EPR design certification will provide the necessary information in response to the Reviewer's Notes and replace preliminary information provided in brackets of the Technical Specifications and Technical Specification Bases with plant specific values.	16.0	Y	

Table 2.1.1-4—Nuclear Island ITAAC (3 4 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.4	A pipe break hazards analyses summary 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.	a. A pipe break hazards analysis will be performed. {{DAC}} 14.03.03-45 b. Inspection of the as-built conditions of features identified in the part (a) analysis versus final as-built construction drawings of those features will be performed.	a. A pipe break hazards analyses summary 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 and confirms whether: – Piping stresses in the RCB penetration area are within allowable stress limits. – Pipe whip restraints and jet shield designs can mitigate pipe break loads. – Loads on safety-related SSCs are within design load limits. – SSCs are protected or qualified to withstand the environmental effects of postulated failures. {{DAC}} b. The as-built configuration of the pipe break analysis protection features agree with the associated construction drawings.
3.5	Deleted.Essential SSCs in RCB, SBs and FB rooms listed in Table 2.1.1-6 are protected from the dynamic effects of pipe breaks.	Deleted.a. An analysis of essential SSCs in the rooms listed in Table 2.1.1-6 will be performed to determine the protective features required for the dynamic effects of pipe breaks. b. An inspection of as-installed features providing protection for essential systems and components	Deleted.a. Essential SSCs in rooms listed in Table 2.1.1-6 are protected from the dynamic effects of pipe breaks. b. Essential SSCs in rooms listed in Table 2.1.1-6 are protected from the dynamic effects of pipe breaks and

Table 2.2.1-5—~~RCS~~ Reactor Coolant System ITAAC (9 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.7	The piping and interconnected component nozzles listed in Table 2.2.1-1 have been evaluated for LBB. 14.03.03-45	An analysis will be performed. {{DAC}}	An analysis exists and concludes that the piping and equipment listed in Table 2.2.1-1 meets the LBB acceptance criteria. {{DAC}}
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 inspection will be performed after hot functional testing.	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 limits. b. Inspections show that the RPV internals have no observable damage or loose parts.
3.9	The RCS is designed to allow movement of the components as necessary due to thermal expansion and contraction.	A test of the RCS will be performed.	The measured gaps meet the specification requirements for the necessary component supports.
3.10	Deleted.	Deleted.	Deleted.
3.11	Deleted. ~~Components listed as ASME Code Class I in Table 2.2.1-1 will be analyzed for fatigue per ASME Section III Class I.~~	Deleted. ~~An analysis will be performed.~~	Deleted. ~~a. Fatigue analysis has been performed for components listed as ASME Code Class I in Table 2.2.1-1.~~ ~~b. For components listed as ASME code Class I in Table 2.2.1-1, operating modes where peak stresses are within ten percent of allowable have been identified.~~
3.12	Deleted.	Deleted.	Deleted.
3.13	Deleted.	Deleted.	Deleted.
3.14	Deleted.	Deleted.	Deleted.

Table 2.2.1-5—RCS Reactor Coolant System ITAAC (9 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.20	Portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1. {{DAC}}
3.21	Portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information. Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1, ASME Code Data Reports (N-5) exist and 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 as-built condition. For portions of the RCS piping shown as ASME Code Section III in Figure 2.2.1-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.2.2-3—In-Containment Refueling Water Storage Tank SystemIRWSTS ITAAC (7 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.4	Deleted.	Deleted.	Deleted.
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1. {{DAC}}
3.9	Portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.For portions of the IRWSTS piping shown as ASME Code Section III in Figure 2.2.2-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.2.3-3—Safety Injection System and Residual Heat Removal SystemSIS/RHRS ITAAC (8 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.10	Portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1. {{DAC}}
3.11	Portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.For portions of the SIS/RHRS piping shown as ASME Code Section III in Figure 2.2.3-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.2.4-3—Emergency Feedwater System~~EFWS~~ ITAAC (5 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.8	Deleted.	Deleted.	Deleted.
3.9	Portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. ~~Inspections will be performed for the existence of ASME Code Section III Design Reports.~~ {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1 comply with ASME Code Section III requirements. ~~ASME Code section III Design Reports (NCA-3550) exist for portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1.~~ {{DAC}}
3.10	Portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.~~Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.~~	For portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.~~For portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.~~
3.11	Pressure boundary welds in portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1 are in accordance with ASME Code Section III.	Inspections of pressure boundary welds verify that welding is performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports exist and conclude that pressure boundary welding for portions of the EFWS piping shown as ASME Code Section III in Figure 2.2.4-1 has been performed in accordance with ASME Code Section III.

Table 2.2.5-3—Fuel Pool Cooling and Purification SystemFPCPS ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1. {{DAC}}
3.10	Portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.For portions of the FPCPS piping shown as ASME Code Section III in Figure 2.2.5-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.2.6-3—Chemical and Volume Control System CVCS ITAAC (6 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.6	Deleted. Components listed as ASME Code Class 1 in Table 2.2.6-1 will be analyzed for fatigue per ASME Section III Class 1.	Deleted. An analysis will be performed.	Deleted. a. Fatigue analysis has been performed for components listed as ASME Code Class 1 in Table 2.2.6-1. b. For components listed as ASME Code Class 1 in Table 2.2.6-1, operating modes where peak stresses are within ten percent of allowable have been identified.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Deleted.	Deleted.	Deleted.
3.10	Portions of the CVCS piping shown as ASME Code Section III in Figure 2.2.6-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. **{{DAC}}** 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the CVCS piping shown as ASME Code Section III in Figure 2.2.6-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the CVCS piping shown as ASME Code Section III in Figure 2.2.6-1. **{{DAC}}**

Table 2.2.7-3—Extra Borating System ~~EBS~~ ITAAC (6 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.10	Portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. ~~Inspections will be performed for the existence of ASME Code Section III Design Reports.~~ {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1 comply with ASME Code Section III requirements. ~~ASME Code section III Design Reports (NCA-3550) exist for portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1.~~ {{DAC}}
3.11	Portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.~~Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.~~	For portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.~~For portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.~~
3.12	Pressure boundary welds in portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1 are in accordance with ASME Code Section III.	Inspections of pressure boundary welds verify that welding is performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports exist and conclude that pressure boundary welding for portions of the EBS piping shown as ASME Code Section III in Figure 2.2.7-1 has been performed in accordance with ASME Code Section III.

Table 2.3.3-3—Severe Accident Heat Removal System SAHRS ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1. {{DAC}}
3.10	Portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.For portions of the SAHRS piping shown as ASME Code Section III in Figure 2.3.3-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.4.1-79—Protection System ITAAC (5 12 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
4.13	The PS performs interlock functions.interlocks exist as provided in Table 2.4.1-8.	Tests will be performed on the as-built PS using test signals to simulate plant conditions that require the interlock functions operation of the interlocks listed in Table 2.4.1-86.	The PS generates the correct output signals for each interlock function listed in Table 2.4.1-6 when the test signals are such that the interlock function is required.interlocks exist as provided in Table 2.4.1-8.
4.14	The PS hardware and software are developed using a design process composed of five life cycle phases with each phase having design outputs which must conform to the requirements of that phase. The five life cycle phases are the following: 1) Basic design phase. 2) Detailed design phase. 3) Manufacturing phase. 4) Testing phase. 5) Installation and commissioning phase. 14.03.03-45 →	a. Inspections will be performed to verify that the PS basic design phase process has design outputs. {{DAC}} b. Analyses will be performed to verify that the design outputs for the PS basic design phase conform to the requirements of that phase. {{DAC}} c. Inspections will be performed to verify that the PS detailed design phase process has design outputs. {{DAC}} d. Analyses will be performed to verify that the design outputs for the PS detailed design phase conform to the requirements of that phase. {{DAC}} e. Inspections will be performed to verify that the PS manufacturing phase process has design outputs. f. Inspections will be performed to verify that the PS testing phase process has design outputs.	a. A report exists and provides the design outputs for the basic design phase of the PS hardware and software design process. {{DAC}} b. A verification and validation (V&V) report exists and concludes that the design outputs conform to the requirements of the PS basic design phase. {{DAC}} c. A report exists and provides the design outputs for the detailed design phase of the PS hardware and software design process. {{DAC}} d. A V&V report exists and concludes that the design outputs conform to the requirements of the PS detailed design phase. {{DAC}} e. A report exists and provides the design outputs for the manufacturing phase of the PS hardware and software design process. f. A report exists and provides the design outputs for the testing phase of the PS hardware and software design process.

Table 2.4.1-79—Protection System ITAAC (5 12 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
4.21	Key lock switches are provided at the PS cabinets to restrict modifications to the PS software.	a. Inspections will be performed to verify the existence of key lock switches that restrict modifications to the PS software. b. Tests will be performed to verify that the key lock switches restrict modifications to the PS software	a. Key lock switches are provided at the PS cabinets. b. Key lock switches at the PS cabinets restrict modifications to the PS software.
4.22	The operational availability of each input variable can be confirmed during reactor operation including post-accident periods.	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 by one of the following methods: • By perturbing the monitored variable. • By introducing and varying, as appropriate, 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.	A report exists and 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, as appropriate, 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.
4.23	The PS hardware and software are designed to conform to the key TELEPERM XS principles, features, and quality methods.	A TELEPERM XS platform changes analysis will be performed on the PS hardware and software to verify its conformance to the key TELEPERM XS principles, features, and quality methods. **{{DAC}}**	A report exists and concludes that the PS hardware and software are designed to conform to the key TELEPERM XS principles, features, and methods. **{{DAC}}**

14.03.03-45

Table 2.4.2-2—Safety Information and Control System ITAAC (4 8 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
4.5	The SICS hardware and software are developed using a design process composed of five life cycle phases with each phase having design outputs which must conform to the requirements of that phase. The five life cycle phases are the following: 1) Basic design phase. 2) Detailed design phase. 3) Manufacturing phase. 4) Testing phase. 5) Installation and commissioning phase.	a. Inspections will be performed to verify that the SICS basic design phase process has design outputs. {{DAC}}	a. A report exists and provides the design outputs for the basic design phase of the SICS hardware and software design process. {{DAC}}
		b. Analyses will be performed to verify that the design outputs for the SICS basic design phase conform to the requirements of that phase. {{DAC}}	b. A verification and validation (V&V) report exists and concludes that the design outputs conform to the requirements of the SICS basic design phase. {{DAC}}
	14.03.03-45	c. Inspections will be performed to verify that the SICS detailed design phase process has design outputs. {{DAC}}	c. A report exists and provides the design outputs for the detailed design phase of the SICS hardware and software design process. {{DAC}}
		d. Analyses will be performed to verify that the design outputs for the SICS detailed design phase conform to the requirements of that phase. {{DAC}}	d. A V&V report exists and concludes that the design outputs conform to the requirements of the SICS detailed design phase. {{DAC}}
		e. Inspections will be performed to verify that the SICS manufacturing phase process has design outputs.	e. A report exists and provides the design outputs for the manufacturing phase of the SICS hardware and software design process.
		f. Inspections will be performed to verify that the SICS testing phase process has design outputs.	f. A report exists and provides the design outputs for the testing phase of the SICS hardware and software design process.
		g. Analyses will be performed to verify that the design outputs for the SICS testing phase conform to the requirements of that phase.	g. A V&V report exists and concludes that the design outputs of the testing phase conform to the requirements of the SICS testing phase.

Table 2.4.2-2—Safety Information and Control System ITAAC (4 8 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
		b. Tests will be performed to verify the proper operation of the locking mechanisms on the SICS cabinet doors located outside of the MCR.	b. The locking mechanisms on the SICS cabinet doors located outside of the MCR operate properly.
		c. Tests and inspections will be performed to verify an indication exists in the MCR when a SICS cabinet door located outside of the MCR is in the open position.	c. Opened SICS cabinet doors located outside of the MCR are indicated in the MCR.
4.13	Key lock switches on the QDS restrict connections between the QDS and the QDS service unit.	Tests will be performed to verify that the key lock switches on the QDS restrict modifications to the SICS software.	Key lock switches on the QDS restrict modifications to the SICS software.
4.14	The SICS is capable of performing its safety function when one of the SICS divisions is out of service. Out of service divisions of SICS are indicated in the MCR.	a. A test of the SICS will be performed to verify the SICS can perform its safety function when one of the SICS divisions is out of service. b. Inspections will be performed to verify the existence of indications in the MCR when a SICS division is placed out of service.	a. The SICS can perform its safety functions when one of the SICS divisions is out of service. b. Out of service divisions of SICS are indicated in the MCR.
4.15	The SICS hardware and software are designed to conform to the key TELEPERM XS principles, features, and quality methods. **{{DAC}}**	A TELEPERM XS platform changes analysis will be performed on the SICS hardware and software to verify its conformance to the key TELEPERM XS principles, features, and quality methods. **{{DAC}}**	A report exists and concludes that the SICS hardware and software are designed to conform to the key TELEPERM XS principles, features, and methods. **{{DAC}}**

14.03.03-45

Table 2.4.4-5—Safety Automation System ITAAC (~~3~~ 9 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
4.4	The SAS provides the interlocks listed in Table 2.4.4-4.	Tests will be performed using test signals to verify the operation of the interlocks listed in Table 2.4.4-4.	The interlocks listed in Table 2.4.4-4 respond as specified when activated by a test signal.
4.5	The SAS hardware and software are developed using a design process composed of five life cycle phases with each phase having design outputs which must conform to the requirements of that phase. The five life cycle phases are the following: 1) Basic design phase. 2) Detailed design phase. 3) Manufacturing phase. 4) Testing phase. 5) Installation and commissioning phase. 14.03.03-45 →	a. Inspections will be performed to verify that the SAS basic design phase process has design outputs. {{DAC}} b. Analyses will be performed to verify that the design outputs for the SAS basic design phase conform to the requirements of that phase. {{DAC}} c. Inspections will be performed to verify that the SAS detailed design phase process has design outputs. {{DAC}} d. Analyses will be performed to verify that the design outputs for the SAS detailed design phase conform to the requirements of that phase. {{DAC}} e. Inspections will be performed to verify that the SAS manufacturing phase process has design outputs. f. Inspections will be performed to verify that the SAS testing phase process has design outputs.	a. A report exists and provides the design outputs for the basic design phase of the SAS hardware and software design process. {{DAC}} b. A verification and validation (V&V) report exists and concludes that the design outputs conform to the requirements of the SAS basic design phase. {{DAC}} c. A report exists and provides the design outputs for the detailed design phase of the SAS hardware and software design process. {{DAC}} d. A V&V report exists and concludes that the design outputs conform to the requirements of the SAS detailed design phase. {{DAC}} e. A report exists and provides the design outputs for the manufacturing phase of the SAS hardware and software design process. f. A report exists and provides the design outputs for the testing phase of the SAS hardware and software design process.

Table 2.4.4-5—Safety Automation System ITAAC (3 9 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
4.16	The SAS hardware and software are designed to conform to the key TELEPERM XS principles, features, and quality methods. **{{DAC}}** 14.03.03-45	A TELEPERM XS platform changes analysis will be performed on the SAS hardware and software to verify its conformance to the key TELEPERM XS principles, features, and quality methods. **{{DAC}}**	A report exists and concludes that the SAS hardware and software are designed to conform to the key TELEPERM XS principles, features, and methods. **{{DAC}}** 14.03.03-45
5.1	The Class 1E SAS components identified as Class 1E in Table 2.4.4-1 are powered from the a Class 1E division as listed in Table 2.4.4-1 in a normal or alternate feed condition.	a. Testing will be performed for components identified as Class 1E in Table 2.4.4-1 by providing a test signal in each normally aligned division. b. Testing will be performed for components identified as Class 1E in Table 2.4.4-1 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 2.4.4-1. 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 2.4.4-1.

Next File

Table 2.4.24-4—Diverse Actuation System ITAAC (2 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
2.1	The DAS equipment is located as listed in Table 2.4.24-1.	Inspections will be performed of the location of the DAS equipment.	The equipment listed in Table 2.4.24-1 is located as listed in Table 2.4.24-1.
2.2	Physical separation exists between the four divisions of the DAS.	Inspections will be performed to verify that the divisions of the DAS are located in separate buildings.	The four divisions of the DAS are located in separate safeguard buildings.
3.1	The DAS hardware and software are developed using a design process composed of five life cycle phases with each phase having design outputs which must conform to the requirements of that phase. The five life cycle phases are the following: 1) Basic design phase. 2) Detailed design phase. 3) Manufacturing phase. 4) Testing phase. 5) Installation and commissioning phase.	a. Inspections will be performed to verify that the DAS basic design phase process has design outputs. {{DAC}} 14.03.03-45 b. Inspections will be performed to verify that the DAS detailed design phase process has design outputs. {{DAC}} 14.03.03-45 c. Inspections will be performed to verify that the DAS manufacturing phase process has design outputs. d. Inspections will be performed to verify that the DAS testing phase process has design outputs. e. Inspections will be performed to verify that the DAS installation and commissioning phase process has design outputs.	a. A report exists and provides the design outputs for the basic design phase of the DAS hardware and software design process. {{DAC}} b. A report exists and provides the design outputs for the detailed design phase of the DAS hardware and software design process. {{DAC}} c. A report exists and provides the design outputs for the manufacturing phase of the DAS hardware and software design process. d. A report exists and provides the design outputs for the testing phase of the DAS hardware and software design process. e. A report exists and provides the design outputs for the installation and commissioning phase of the DAS hardware and software design process.
3.2	The system hardware and system software in the DAS are diverse from the system hardware and system software in the protection system (PS).	An analysis will be performed to demonstrate that the system hardware and system software in the DAS are diverse from the system hardware and system software in the PS.	A report exists and concludes that the system hardware and system software in the DAS are diverse from the system hardware and system software in the PS.

Table 2.5.4-4—Emergency Diesel Generator ITAAC (7 10 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.15	Each EDG exhaust path has a bypass exhaust path.	Analysis or type tests will be performed on the EDG exhaust bypass device. Analysis, tests, type tests or a combination of analysis, test and type tests will be performed on the EDG exhaust bypass device.	Analysis or type test results conclude that the EDG rupture disk will rupture within the pressure limits defined by the EDG manufacturer. Each EDG exhaust path bypass device provides an exhaust path when actuated.
3.16	Portions of the EDG piping shown as ASME Code Section III in Figure 2.5.4-1, Figure 2.5.4-2, Figure 2.5.4-3, Figure 2.5.4-4, and Figure 2.5.4-5 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. **{{DAC}}** 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the EDG piping shown as ASME Code Section III in Figure 2.5.4-1, Figure 2.5.4-2, Figure 2.5.4-3, Figure 2.5.4-4, and Figure 2.5.4-5 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the EDG piping shown as ASME Code Section III in Figure 2.5.4-1, Figure 2.5.4-2, Figure 2.5.4-3, Figure 2.5.4-4, and Figure 2.5.4-5. **{{DAC}}**

Table 2.7.1-3—Component Cooling Water System ITAAC (7 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
		b. Inspections will be performed of the Seismic Category I components identified in Table 2.7.1-1 to verify that the components, including anchorage, are installed as specified on the construction drawings and deviations have been reconciled to the seismic qualification reports (SQDP, EQDP, or analyses).b. Inspections will be performed of the as-installed Seismic Category I equipment listed in Table 2.7.1-1 to verify that the equipment including anchorage is installed as specified on the construction drawings.	b. Inspection reports exist and conclude that the Seismic Category I components identified in Table 2.7.1-1, including anchorage, are installed as specified on the construction drawings and deviations have been reconciled to the seismic qualification reports (SQDP, EQDP, or analyses).b. Inspection reports exist and conclude that the as-installed Seismic Category I equipment listed in Table 2.7.1-1 including anchorage is installed as specified on the construction drawings.
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Portions of the CCWS piping shown as ASME Code Section III in Figure 2.7.1-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. **{{DAC}}** 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the CCWS piping shown as ASME Code Section III in Figure 2.7.1-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the CCWS piping shown as ASME Code Section III in Figure 2.7.1-1. **{{DAC}}**

Table 2.7.2-3—Safety Chilled Water System ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.5	Deleted.	Deleted.	Deleted.
3.6	Deleted.	Deleted.	Deleted.
3.7	Deleted.	Deleted.	Deleted.
3.8	Deleted.	Deleted.	Deleted.
3.9	Portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. ~~Inspections will be performed for the existence of ASME Code Section III Design Reports.~~ {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1 comply with ASME Code Section III requirements. ~~ASME Code section III Design Reports (NCA-3550) exist for portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1.~~ {{DAC}}
3.10	Portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.~~Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.~~	For portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.~~For portions of the SCWS piping shown as ASME Code Section III in Figure 2.7.2-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.~~

Table 2.7.11-3—Essential Service Water System ITAAC (6 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.12	Portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1. {{DAC}}
3.13	Portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information. Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1, ASME Code Data Reports (N-5) exist and 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 as-built condition. For portions of the ESWS piping shown as ASME Code Section III in Figure 2.7.11-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 2.8.2-3—Main Steam System MSS ITAAC (6 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.8	Portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1. {{DAC}}
3.9	Portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information. Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1, ASME Code Data Reports (N-5) exist and 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 as-built condition. For portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.
3.10	Pressure boundary welds in portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1 are in accordance with ASME Code Section III.	Inspections of pressure boundary welds verify that welding is performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports exist and conclude that pressure boundary welding for portions of the MSS piping shown as ASME Code Section III in Figure 2.8.2-1 has been performed in accordance with ASME Code Section III.

Table 2.8.6-3— Main Feedwater System MFWS ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.9	Portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1. {{DAC}}
3.10	Portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information. Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1, ASME Code Data Reports (N-5) exist and 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 as-built condition. For portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.
3.11	Pressure boundary welds in portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1 are in accordance with ASME Code Section III.	Inspections of pressure boundary welds verify that welding is performed in accordance with ASME Code Section III requirements.	ASME Code Section III Data Reports exist and conclude that pressure boundary welding for portions of the MFWS piping shown as ASME Code Section III in Figure 2.8.6-1 has been performed in accordance with ASME Code Section III.

Table 2.8.7-3—Steam Generator Blowdown System SGBS ITAAC (5 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
3.8	Portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3550) and associated reference documents will be performed. Inspections will be performed for the existence of ASME Code Section III Design Reports. {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3550) exist and conclude that portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1 comply with ASME Code Section III requirements. ASME Code section III Design Reports (NCA-3550) exist for portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1. {{DAC}}
3.9	Portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3550) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information. Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.	For portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1, ASME Code Data Reports (N-5) exist and 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 as-built condition. For portions of the SGBS piping shown as ASME Code Section III in Figure 2.8.7-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.

Table 3.4-1—Human Factors Engineering ITAAC (5 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
1.0	HFE operating experience review (OER) is performed in accordance with the prescribed process described in the OER Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	An output summary report exists and concludes that the lessons learned from the reviewed operating experience have been incorporated into the HSI design. {{DAC}}
2.0	Functional requirements are performed in accordance with the prescribed process described in the Functional Requirements Analysis (FRA) Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	An output summary report exists and includes: • A list of functions in-scope for meeting plant safety objectives. • Details of the differences between functional requirements for safety functions between predecessor designs and the U.S. EPR. • Technical justification and design basis for each difference between predecessor and U.S. EPR functional requirement. {{DAC}}
3.0	Functional allocation decisions are made based on a set of automation criteria which is defined and validated with the prescribed process described in the FRA Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	The output summary report exists and includes: • The complete set of automation criteria used including the established control hierarchy between automatic and manual actions. • A list of the functions automated for predecessor EPRs and the differences between the predecessors and the U.S. EPR. • Technical justification for each difference in functional allocation. {{DAC}}

Table 3.4-1—Human Factors Engineering ITAAC (5 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
4.0	A task analysis is performed in accordance with the prescribed process described in the Task Analysis (TA) Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	a. The output summary report exists and includes a description of how iterations of TA for procedure development, the procedures themselves, and training programs result in an HSI design that supports in-scope control, information, and support requirements. {{DAC}} b. The draft operating procedure guidelines identify functions needed to complete the given series of tasks. {{DAC}}
5.0	The staffing and qualification analysis includes an evaluation of the number and qualifications of personnel needed to operate, maintain, and test the U.S. EPR based on HSI design features.	An analysis of the V&V activities driven by the initial staffing assumptions for the U.S. EPR document has been performed. {{DAC}} 14.03.03-45	The output summary report of the U.S. EPR staffing and qualifications analyses demonstrates that the HSI design supports the number, roles, and responsibilities of the plant operating staff to adequately meet the demands of the processes of the plant. {{DAC}}
6.0	Human reliability analysis evaluates the potential for, and mechanisms of, human errors that may affect plant safety. Integration of human reliability analysis findings with HFE design is performed in accordance with the Human Reliability Analysis (HRA) Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	The output summary report exists and documents the list of risk-important human actions (HA) and summarizes how those HA and the associated tasks and scenarios were addressed during the various parts of the HFE design process including validation of HRA assumptions. {{DAC}}

Table 3.4-1—Human Factors Engineering ITAAC (5 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
7.0	HSI design is performed in accordance with the prescribed process described in the HSI Design Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	The output summary report exists which: • Demonstrates that the HSI design was performed in accordance with the prescribed process. • Documents the HSI descriptions including how the design requirements and design characteristics were met. • Documents the outcome of tests and evaluations performed in support of V&V of HSI design. {{DAC}}
8.0	The selection of the minimum inventory is performed in accordance with the HSI Design Implementation Plan.	An analysis is performed on the final HSI design results documents. {{DAC}} 14.03.03-45	A final results summary document exists that concludes that the HSI design process for the minimum inventory was conducted in accordance with the implementation plan and contains: • The detailed HSI description including its form, function and performance requirements and characteristics. • The basis for the HSI requirements and design characteristics. • The records of the basis of the design changes. • The outcomes of tests and evaluations. {{DAC}}

Table 3.4-1—Human Factors Engineering ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
9.0	Procedures are developed in accordance with the Procedure Implementation Plan which directs the integration of the HFE procedure development.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	An output summary report exists which: • Addresses the final set of procedures and support equipment developed using the established methodology. • Includes the results of verification and validation activities as they relate to procedure development. • Describes how procedures will be maintained and updates controlled. • Gives a description of how operators access and use procedures, especially during operational events including: • Storage of procedures. • Ease of operator access to the correct procedures. {{DAC}}
10.0	Training is developed in accordance with the Training Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	An output summary report exists and includes: • The roles of organizations that contributed to the training program. • How learning objectives were developed and translated into the use of associated knowledge, skills, and attributes. • The use of resources (e.g., lectures, simulators, computer-based training, schedule) for training. • Methods used to evaluate effectiveness of the program. {{DAC}}

Table 3.4-1—Human Factors Engineering ITAAC (5 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
11.0	HFE verification and validation is performed in accordance with the prescribed process described in the Verification and Validation (V&V) Implementation Plan.	An analysis of the output summary report has been performed. {{DAC}} 14.03.03-45	The output summary report exists which: • Demonstrates that the V&V was performed in accordance with the prescribed process. • Demonstrates that the design conforms to HFE design principles. • Demonstrates that the design enables plant personnel to successfully perform their tasks to achieve plant safety and other operation goals. • Provides results of V&V activities and conclusions from these activities. {{DAC}}
12.0	Design implementation is performed in accordance with the prescribed process described in the Design Implementation Plan.	An analysis of the output summary has been performed. {{DAC}} 14.03.03-45	The output summary report exists that demonstrates: • The design implementation was performed in accordance with the prescribed process for validation that the as-built design conforms to the standard design resulting from the HFE V&V process. • Appropriate issues identified in the HFE issues tracking database have been adequately addressed. {{DAC}}

Next File

Table 3.5-3—Containment Isolation ITAAC (6 Sheets)

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
3.6	Deleted.	Deleted.	Deleted.
3.7	Portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1 are designed in accordance with ASME Code Section III requirements.	Inspections of the ASME Code Section III Design Reports (NCA-3350) and associated reference documents will be performed. ~~Inspections will be performed for the existence of ASME Code Section III Design Reports.~~ {{DAC}} 14.03.03-45	ASME Code Section III Design Reports (NCA-3350) exist and conclude that portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1 comply with ASME Code Section III requirements. ~~ASME Code section III Design Reports (NCA-3550) exist for portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1.~~ {{DAC}}
3.8	Portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1 are installed in accordance with an ASME Code Section III Design Report.	Analyses to reconcile as-built deviations to the ASME Code Design Reports (NCA-3350) will be performed. Piping analyzed using time-history methods will be reconciled to the as-built information.~~Inspections will be performed to verify the existence of an analysis which reconciles as-fabricated deviations to the ASME Code Design Report as required by ASME Code Section III.~~	For portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1, ASME Code Data Reports (N-5) exist and 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 as-built condition.~~For portions of the containment isolation piping shown as ASME Code Section III in Figure 3.5-1, ASME Code Data Reports (N-5) exist and conclude that reconciliation (NCA-3554) of the as-installed system with the Design Report (NCA-3550) has occurred.~~

Table 3.7-2—Accident Monitoring Instrumentation ITAAC (2 Sheets)

	Commitment Wording	Inspections, Tests, Analyses	Acceptance Criteria
2.1	AMI that are credited in emergency procedures and that are not addressed by existing ITAAC are identified. 14.03.03-45	An analysis will be performed to identify those instruments that are credited in emergency procedures and that are not addressed by existing ITAAC. (divisional separation, seismic design, Class 1E power source, and environmental qualification). {{DAC}}	A report exists and provides a list of AMI that monitor type A, B, C, and D variables credited in emergency procedures and that are not addressed by existing ITAAC (divisional separation, seismic design, Class 1E power source, and environmental qualification). {{DAC}}
3.1	The AMI identified in 3.7.2.1 are provided with divisional separation.	Inspection will be performed to verify the AMI identified in 3.7.2.1 is divisionally separated.	The AMI identified in 3.7.2.1are divisionally separated.
3.2	The AMI identified in 3.7.2.1 can withstand seismic design basis loads without a loss of their function.The AMI identified in 3.7.2.1 can withstand seismic design basis loads without loss of function.	a. Type tests, analyses, or a combination of type tests and analyses will be performed on the AMI identified in 3.7.2.1 using analytical assumptions, or under conditions, which bound the seismic design requirements.a. Type tests, analyses, or a combination of type tests or analyses will be performed on the AMI identified in 3.7.2.1 using analytical assumptions, or under conditions, which bound the Seismic Category I design requirements.	a. Seismic qualification reports (SQDP, EQDP, or analyses) exist and conclude that the AMI identified in 3.7.2.1 can withstand seismic design basis loads without a loss of the function.a. A report exists and concludes that the AMI identified in 3.7.2.1 can withstand seismic design basis loads without the loss of function.