

FINAL SAFETY ANALYSIS REPORT

Chapter 1 Introduction and General Description of Plant

1.1 Introduction

This section of the ESBWR Design Control Document (DCD), i.e., the referenced DCD, is incorporated by reference with the following departures and/or supplements.

1.1.1 Format and Content

EF3 SUP 1.1-1

1.1.1.1 10 CFR 52 and Regulatory Guide 1.206

This FSAR was developed to comply with the content requirements of 10 CFR 52.79, and to the extent feasible, the content and format requirements contained in Regulatory Guide (RG) 1.206, “Combined License Applications for Nuclear Power Plants (LWR Edition).” See [Table 1.9-203](#), Conformance With the FSAR Content Guidance In RG 1.206. If the information requested by RG 1.206 is not needed (e.g., because it is already provided in the DCD or is located elsewhere in the FSAR), the table specifies the location of the information.

Section C.III.6 of RG 1.206 addresses referencing a design certification (DC) application rather than a certified design. The existing DC rules (10 CFR 52 appendices) require that a Combined License Application (COLA) that references a certified design include a plant-specific DCD containing the same type of information and using the same organization and numbering as the generic DCD for the ESBWR design, as modified and supplemented by the applicant’s exemptions and departures. Where necessary to present additional information, new sections were added following the logical structure of the ESBWR generic DCD.

1.1.1.2 Standard Review Plan

As required by 10 CFR 52.79(a)(41), an evaluation of the facility for conformance with the acceptance criteria contained in NUREG-0800, “Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants LWR Edition,” in effect six months prior to submittal of the COLA, was performed. This evaluation determined that this FSAR contains no unacceptable deviations from the acceptance criteria given in the applicable portions of the SRP. Where necessary, [Table 1.9-201](#), Conformance with Standard Review Plan, provides a summary of any differences from the SRP acceptance criteria, along with a justification for

an exception to a criterion or a Branch Technical Position (BTP); or the table identifies the applicable FSAR section(s) that addresses a difference.

1.1.1.3 **Tables and Figures**

Tabulations of data are designated “tables.” Each is identified by the section number followed by a number (for example, Table 1.9-204 would be an FSAR table in Section 1.9) The use of the “200” series for FSAR table numbers distinguishes FSAR tables from DCD tables. If a table from the DCD is referenced in the FSAR text, it is denoted as such, for example “DCD Table 4.1-1.” If a table from the DCD was revised for use in the FSAR, the original DCD table number is appended with an “R;” for example, if “DCD Table 4.2-1” was revised, it would have become “Table 4.2-1R.” Tables are located at the end of the section immediately following the text.

Drawings, pictures, sketches, curves, graphs, and engineering diagrams identified as “figures” are numbered using the section number followed by a number (for example, Figure 2.1-201 would be an FSAR figure in Section 2.1). The use of the “200” series for FSAR figure numbers distinguishes FSAR figures from DCD figures. If a figure from the DCD is referenced in the FSAR text, it is denoted as such; for example “DCD Figure 4.1-1.” If a figure from the DCD was revised for use in the FSAR, the original DCD figure number was appended with an “R;” for example, if “DCD Figure 4.2-1” was revised, it would have become “Figure 4.2-1R.” Figures are located at the end of the applicable section following the tables.

1.1.1.4 **Numbering of Pages**

Text pages are numbered sequentially within each chapter (for example, Page 1-4 is the fourth page of Chapter 1).

1.1.1.5 **Proprietary and Security-Related Sensitive Unclassified Non-Safeguards Information (SUNSI)**

Proprietary information and SUNSI¹ is withheld from public disclosure and therefore not included in the public version of the FSAR. SUNSI included in the non-public version of the FSAR is appropriately indicated.

1.1.1.6 **Acronyms**

In addition to the summary list of acronyms in the FSAR frontmatter, acronyms are defined at their first occurrence in FSAR text.

1.1.1.7 Incorporation by Reference

10 CFR 52.79 states in part that, “The final safety analysis report need not contain information or analyses submitted to the Commission in connection with the design certification, provided, however, that the final safety analysis report must either include or incorporate by reference the standard design certification final safety analysis report and must contain, in addition to the information and analyses otherwise required, information sufficient to demonstrate that the site characteristics fall within the site parameters specified in the design certification.” Therefore, because this COLA references the ESBWR DC application, this FSAR incorporates the ESBWR DCD by reference, with the departures presented in COLA Part 7, and with supplemental information, as appropriate (see [Subsection 1.1.1.10](#)). References in this FSAR to the DCD should be understood to mean the ESBWR DCD, Tier 2, submitted by GE-Hitachi Nuclear Energy Americas LLC (GEH), as Revision 10.

1.1.1.8 Departures from the Standard Design Certification (or Application)

A departure is a plant-specific “deviation” from design information in a standard DC rule or, consistent with Section C.III.6 of RG 1.206, from design information in a DC application.

10 CFR 52 clarifies that Tier 2 information in a standard DC rule does not include conceptual design information (CDI) and per Section C.III.6 of RG 1.206, Tier 2 information in a standard DC application does not include CDI. Therefore, replacement or revision of CDI does not constitute a departure. Additionally, information addressing combined license (COL) information/holder items and supplemental information (see [Subsection 1.1.1.10](#)) that does not change the intent or meaning of the ESBWR DCD text is not considered a departure from the ESBWR DCD.

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1. Any information which, if lost, misused, modified, or accessed without authorization, can reasonably be foreseen as causing harm to the public interest, the commercial or financial interest of the entity or individual to whom the information pertains, the conduct of NRC and Federal programs, or the personal privacy of individuals. SUNSI has been organized into the following seven groups:
 - Allegation information
 - Investigation information
 - Security-related information
 - Proprietary information
 - Privacy Act information
 - Federal, State, Foreign Government, and international agency information
 - Sensitive internal information

EF3 SUP 1.1-2

1.1.1.9 Obligations and Commitments

NEI 99-04, "Guidelines For Managing NRC Commitment Changes," provides the following definitions:

Obligation refers to any condition or action that is a legally binding requirement imposed on licensees through applicable rules, regulations, orders, and licenses (including technical specifications and license conditions). These conditions (also referred to as regulatory requirements) generally require formal NRC approval as part of the change-control process. Also included in the category of obligations are those regulations and license conditions that define change-control processes and reporting requirements for licensing basis documents such as the updated FSAR, quality assurance program, emergency plan, security plan, fire protection program, etc.

Regulatory Commitment means an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC.

For purposes of the Fermi 3 FSAR, the information provided to meet the content requirement of 10 CFR 52.79, including implicit implementation activities, are treated as Obligations. Statements related to the future development of information that is not currently available (e.g. COL Holder Items) are treated as commitments. Commitments are identified with the designator **[START COM X.Y-00#]** at the beginning of the commitment text, and **[END COM X.Y-00#]** at the end of the text.

1.1.1.10 Supplements

Supplements fall into one of the following categories (see [Table 1.1-201](#) for definitions of categories unless noted otherwise):

- COL Item
- Conceptual Design Information
- Supplemental Information (see definition below)

Supplemental information is FSAR information that includes information not related to COL Items, departures, or conceptual design (see [Table 1.1-201](#) for definition of terms); or is information to demonstrate that the design of the facility falls within the site characteristics and design parameters specified in the DCD.

1.1.1.11 **Left Margin Annotations**

FSAR sections are annotated in the left margin with information that identifies: 1) the reason the information is being provided and, as applicable, 2) whether the information is standard (identical) for any ESBWR application, or specific to the COLA for a particular plant.

The annotations and their definitions are listed in [Table 1.1-201](#).

1.1.1.12 **Tense**

Because this FSAR is a licensing basis document that will control plant design and operations after the COL is issued, the FSAR is generally written in the present tense. Thus, plant design and configuration are described in the present tense although the plant is not yet built. Similarly, programs, procedures, and organizational matters are generally described in the present tense although such descriptions may not yet be implemented. Accordingly, the use of the present tense in this FSAR should be understood as describing the plant, programs and procedures, and organization as they will exist when in place, and not as a representation that they are already in place.

1.1.2 **General Description**

1.1.2.1 **ESBWR Standard Plant Scope**

Replace the last sentence with the following.

EF3 CDI

The orientation of the principal plant structures for Unit 3 is shown in [Figure 2.1-204](#).

Add the following at the end of this section.

EF3 SUP 1.1-2

The ESBWR standard plant scope is discussed in DCD Section 1.1.2.1. In addition to the buildings and structures within the scope of the ESBWR standard plant, the plant includes an intake structure for plant makeup water, normal power heat sink and auxiliary heat sink cooling towers, storage tanks for water and fuel oil, a switchyard, and other site support systems and structures necessary to support the operation and maintenance of the facility.

1.1.2.2 Type of License Request

Add the following at the end of this section.

EF3 SUP 1.1-3

This application by the Detroit Edison Company is for a combined construction permit and operating license, i.e., COL under Section 103 of the Atomic Energy Act, for the third nuclear power plant to be located on the existing Enrico Fermi Atomic Power Plant (Fermi) site in Monroe County, Michigan. This COLA references a DC application for an ESBWR (consistent with Section C.III.6 of RG 1.206) for the Fermi site. The third unit is designated Enrico Fermi Unit 3 (Fermi 3).

1.1.2.4 Description of Location

Add the following at the end of this section.

EF3 SUP 1.1-4

The Fermi 3 site is located on the shore of the western end of Lake Erie, at Lagoona Beach in Frenchtown Township, Monroe County, Michigan. The site is approximately 13 km (8 miles) northeast of Monroe, Michigan, 48 km (30 miles) southwest of downtown Detroit, Michigan, and 25 miles northeast of Toledo, Ohio. Reactor centerline coordinates are latitude 41°57'39"N and longitude 83°15'43"W. The site consists of approximately 1260 acres on the same site is Fermi 1 and 2. Fermi 1 was originally a fast breeder reactor, and later also a conventional oil-fired power plant. Both are decommissioned. Fermi 2 is a General Electric boiling water reactor (BWR), rated at 3430 MWt. [Figure 2.1-204](#) shows the Fermi 3 site plan. [Figure 2.1-201](#) through [Figure 2.1-203](#) show various relationships of the Fermi 3 site to the surrounding vicinity.

Transportation facilities are readily available. Interstate Highways 75 and 275 are approximately 6 km (4 miles) west of the site. More immediate access to the site is available from the Dixie Highway, which runs north and south approximately 3 km (2 miles) west of the site. From the Dixie Highway, Enrico Fermi Drive (a paved private access road) enters the site on the western boundary where it serves as the main entrance. Rail service to the site is furnished by a spur line from the main line which is approximately 6 km (4 miles) west of the site.

1.1.2.7 **Rated Core Thermal Power**

Replace the last four sentences of this section with the following.

EF3 COL 1.1-1-A

Unit 3 operates at an estimated gross electrical power output at rated power of approximately 1594 MWe (as shown in DCD Section 10.1). The estimated net electrical power output, which is dependent on site ambient conditions, the normal plant heat sink (NPHS) operation controls, and station electrical loads, is between approximately 1485 MWe and 1585 MWe.

EF3 SUP 1.1-5

1.1.2.8 **Schedule**

[START COM 1.1-001] Construction and startup schedules will be provided after issuance of the COL once a positive decision to construct the plant has been made. **[END COM 1.1-001]**

1.1.3 **COL Unit-Specific Information**

1.1-1-A **Establish Rated Electrical Output**

EF3 COL 1.1-1-A

This COL Item is addressed in [Subsection 1.1.2.7](#).

Table 1.1-201 Left Margin Annotations (Sheet 1 of 2)

[EF3 SUP 1.1-1]

FSAR Component	Margin Annotation	Definition and Use
Standard Departure	STD DEP X.Y.Z -#	FSAR information that departs from the generic DCD and is common for all parallel applicants; i.e., the departure and discussion of the departure are identical for all applicants of the ESBWR technology. Each Standard Departure is numbered based on the applicable section down to the X.Y.Z level, e.g.: STD DEP 9.2-1, or STD DEP 9.2.1-1.
Plant-Specific Departure	(PLANT) DEP X.Y.Z-#	FSAR information that departs from the generic DCD and is plant-specific; i.e., the departure and discussion of the departure are not identical for all applicants of the ESBWR technology. Each Plant-Specific Departure is numbered based on the applicable section down to the X.Y.Z level, e.g.: EF3 DEP 9.2-1, or EF3 DEP 9.2.1-1.
Standard COL Item	STD COL X.Y-#-A	FSAR information that addresses a DCD COL Item that is common for all parallel applicants; i.e., the response to and discussion of the DCD COL Item are identical for all applicants of the ESBWR technology. Each Standard COL Item is numbered as identified in ESBWR DCD Table 1.10-1. The -A refers to a COL Applicant item.
Plant-Specific COL Item	(PLANT) COL X.Y-#-A or (PLANT) COL X.Y-#-H	FSAR information that addresses a DCD COL Item that is plant-specific; i.e., the response to the COL Item is not a Standard COL Item for parallel applicants. Each Plant-Specific COL Item is numbered as identified in the ESBWR DCD (see STD COL above).
Standard Conceptual Design Information	STD CDI	A Conceptual Design Information designation is used to identify FSAR information that replaces Conceptual Design Information in the DCD, in whole or in part. Replacement and supplemental Conceptual Design Information is generally plant-specific; however, for conceptual design that is generic for all applications the annotation for standard (STD) is used, STD CDI.
Plant Specific Conceptual Design Information	(PLANT) CDI	A Conceptual Design Information designation is used to identify FSAR information that replaces Conceptual Design Information in the DCD, in whole or in part. Plant specific replacement and supplemental Conceptual Design Information uses the annotation (PLANT) CDI, e.g., EF3 CDI.
Standard Supplemental Information	STD SUP X.Y-#	Supplemental FSAR information that is identical for all parallel applicants; i.e., the supplemental information is identical for all applicants of the ESBWR technology. Each Standard Supplemental Information designation is numbered based on applicable section down to the X.Y level, e.g., STD SUP 10.4-1.

Table 1.1-201 Left Margin Annotations (Sheet 2 of 2)

[EF3 SUP 1.1-1]

FSAR Component	Margin Annotation	Definition and Use
Plant-Specific Supplemental Information	(PLANT) SUP X.Y-#	Supplemental FSAR information that is plant specific (not standard). Each Plant Specific Supplemental Information designation is numbered based on applicable section down to the X.Y level, e.g., EF3 SUP 10.4-1.

1.2 General Plant Description

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.2.2.10.2 Solid Waste Management System

Delete the first sentence of the seventh paragraph and replace the first sentence of the seventh paragraph with the following.

EF3 DEP 11.4-1

The Radwaste Building is configured to accommodate at least 10 years of packaged Class B and C waste and approximately three months of packaged Class A waste considering routine operations and anticipated operational occurrences.

1.2.2.11.4 Main Turbine

Delete the second sentence of the first paragraph and replace the first sentence of the first paragraph with the following.

STD CDI

The main turbine has one high-pressure (HP) turbine and three low-pressure (LP) turbines.

1.2.2.11.7 Main Condenser

Delete the second sentence of the third paragraph and replace the first sentence of the third paragraph with the following.

STD CDI

The main condenser is a multi-pressure, triple-shell unit.

1.2.2.12.13 Hydrogen Water Chemistry System

Replace this section with the following.

STD CDI

The Hydrogen Water Chemistry System (HWCS) consists of hydrogen and oxygen supply systems to inject hydrogen in the feedwater and oxygen in the offgas, plus monitoring systems to track the effectiveness of the system.

1.2.2.12.15 **Zinc Injection System**

Replace this section with the following.

STD CDI

The Zinc Injection System is not utilized.

1.2.2.12.16 **Freeze Protection**

Replace this section with the following.

STD CDI

Freeze protection is incorporated at the individual system level using insulation and heat tracing for all external tanks and piping that may freeze during winter weather.

1.2.2.16.9 **Radwaste Building**

EF3 DEP 11.4-1

Replace Figure 1.2-21 to Figure 1.2-25 with [Figure 1.2-21R](#) to [Figure 1.2-25R](#) in the parenthesis in the first sentence.

1.2.2.16.10 **Other Building Structures**

Replace the fifth paragraph with the following.

EF3 CDI

Other facilities include the Service Building, Water Treatment Building, Administration Building, Training Center, Sewage Discharge System, warehouse, and hot and cold machine shop. These are all of conventional size and design, and in some cases may be shared with other units at the same site.

STD SUP 1.2-1

1.2.2.19 **Modular Construction Techniques and Plans**

[START COM 1.2-001] To the extent practical, modular construction techniques that have been applied during ABWR construction projects will be adapted and/or modified for use during ESBWR construction. Modularization reviews will be performed to develop a plan for bringing the ABWR experience into the ESBWR. Once completed, the results of the modularization reviews will be used as guidance to develop the detailed design of the areas affected by modularization. **[END COM 1.2-001]**

Figure 1.2-21R Radwaste Building Plan At Elevation –9350 [EF3 DEP 11.4-1]

{{{Security-Related Information – Withheld Under 10 CFR 2.390}}}

See Fermi 3 COLA Part 9

Figure 1.2-22R Radwaste Building Plan At Elevation –2350 [EF3 DEP 11.4-1]

{{{Security-Related Information – Withheld Under 10 CFR 2.390}}}

See Fermi 3 COLA Part 9

Figure 1.2-23R Radwaste Building Plan At Elevation 4650 [EF3 DEP 11.4-1]

{{{Security-Related Information – Withheld Under 10 CFR 2.390}}}

See Fermi 3 COLA Part 9

Figure 1.2-24R Radwaste Building Plan At Elevation 10650 [EF3 DEP 11.4-1]

{{{Security-Related Information – Withheld Under 10 CFR 2.390}}}

See Fermi 3 COLA Part 9

Figure 1.2-25R

**Radwaste Building Plan At Elevation Section A-A
And Section B-B**

[EF3 DEP 11.4-1]

{{{Security-Related Information – Withheld Under 10 CFR 2.390}}}

See Fermi 3 COLA Part 9

1.3 Comparison Tables

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following at the end of this section.

EF3 COL 1.3-1-A

There are no updates to DCD Table 1.3-1 based on unit specific information.

1.3.1 COL Information

1.3-1-A Update Table 1.3-1

This COL item is addressed in [Section 1.3](#).

1.4 Identification of Agents and Contractors

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

EF3 SUP 1.4-1

1.4.1 Detroit Edison Company²

Detroit Edison is the applicant for the COL, and Detroit Edison will be the licensee authorized to construct and operate Fermi 3. Detroit Edison is therefore responsible for making each of the key project decisions, including the ultimate decision on whether to build a new nuclear power plant, and would be the plant operator.

Detroit Edison has selected GE-Hitachi Nuclear Energy Americas, LLC (GEH) as the reactor technology vendor for the design of the unit. **[START COM 1.4-001]** The primary contractor for site engineering has not been selected at the time of COLA submittal; this information will be supplied in an FSAR update following selection. **[END COM 1.4-001]** Detroit Edison has responsibility for the operation of the unit. The following sections provide information on the experience and qualifications of the aforementioned agents and contractors as well as the division of responsibility between Detroit Edison and its agents and contractors.

2. On January 1, 2013 Detroit Edison Company (Detroit Edison) changed its name to DTE Electric Company (DTE Electric). Although the company's name changed, the actual legal entity remains the same.

1.4.2 **GE-Hitachi Nuclear Energy Americas, LLC (GEH)**

GEH is responsible for developing the complete standard plant for the ESBWR necessary to obtain a DC from the NRC, supporting preparation of the COL application, and activities to support deployment of the ESBWR on the Fermi site. GEH, established in June 2007, is a business alliance of GE and Hitachi's respective nuclear businesses, established to serve the global nuclear industry.

DCD Table 1.4-1 lists the commercial nuclear reactors that were completed by GE or are under construction by GEH. For 50 years, GE provided advanced technology for nuclear energy. GE developed breakthrough light water technology in the mid-1950s: the Boiling Water Reactor (BWR). Since then, GE developed nine evolutions of BWR technology, including the first operational advanced light water design in the world, the ABWR, and culminating in its latest generation of design, the ESBWR. All of GE's nuclear technology has been transferred to GEH. There are 67 plants operating worldwide utilizing GEH designs with an operating capacity of over 59 GW, including 36 BWR plants in North America. Various subcontractors are supporting GEH.

1.4.2.1 **Construction of the Turbine Island and Nuclear Island**

The contractors for the construction of the turbine island and the nuclear island have not yet been selected. The turbine island and the nuclear island together represent the power block. The contractor for the construction of the turbine island will be responsible for the erection and delivery of the turbine building, the electric building, and the contents of each building. The contractor for the construction of the nuclear island will be responsible for the erection and delivery of the reactor and fuel building, the control building, the hot machine shop, the radwaste building, and the contents of each building. Each contractor will be selected based on their historical work in the nuclear industry, ongoing nuclear business, ability to deliver integrated engineering and construction services, and available resources.

1.4.3 **Black & Veatch**

Black & Veatch served as primary contractor for development of the COL application, supplying engineering support, conceptual design, environmental impact assessments, and project management. Black & Veatch, based in Overland Park, KS, is an engineering, environmental, technical, construction services, and management services firm providing

a broad range of professional services to private and government sector clients throughout the world since 1915. Black & Veatch's nuclear activities date back to the closing years of World War II with early work including extensive service to the Atomic Energy Commission in the development of facilities at Los Alamos, New Mexico. More recent activities include the development activities for other COLAs, the Advanced Boiling Water Reactor (AWBR) Design Certification Program, and the Department of Energy's 2010 initiative for the deployment of new nuclear plants in the United States. Various subcontractors are supporting Black & Veatch, including:

1.4.3.1 Professional Service Industries, Inc. (PSI)

PSI performed laboratory testing in support of Fermi 3 site specific evaluations in [Chapter 2](#) and the Environmental Report. This effort included laboratory testing of rock and soil materials and water quality.

1.4.3.2 Boart Longyear

Boart Longyear performed geotechnical field investigations in support of [Chapter 2](#). That effort included performing standard penetration tests; obtaining core samples and rock cores; performing cone penetrometer tests; supporting down-hole seismic tests and laboratory tests of soil and rock samples; installing ground water observation wells; and preparing a data report.

1.4.3.3 AMEC/Geomatrix

AMEC/Geomatrix Inc. performed probabilistic seismic hazard assessments and related sensitivity analyses in support of [Chapter 2](#), developed the foundation input response spectra in support of [Subsection 3.7.1](#), and developed inputs for soil-structure interaction (SSI) analyses in support of [Subsection 3.7.2](#). These assignments included sensitivity analyses of seismic source parameters and updated ground motion attenuation relationships, development of updated Safe Shutdown Earthquake (SSE) ground motion values, and preparation of the related sections.

Other subcontractors may be added as needed.

1.4.4 Other Contractors

In addition to the major contractors listed above, contractual relationships may be established with specialized consultants to assist in developing the COLA as the need arises.

1.5 Requirements for Further Technical Information

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.5.1 Evolutionary Design

Add the following at the end of this section.

1.5.1.1 Post-Fukushima Near-Term Task Force Recommendations

STD SUP 1.5-1

Following the March 11, 2011, Great Tohoku Earthquake and subsequent tsunami at the Fukushima Dai-ichi nuclear power plant, the NRC issued Orders to licensees for implementing recommendations of the Near-Term Task Force Report ([Reference 1.5-201](#)). The following subsections describe how the recommendations applicable to the ESBWR are addressed.

1.5.1.1.1 Recommendation 4.2, Mitigating Strategies for Beyond-Design-Basis External Events

Following the March 2011 events in Japan at the Fukushima Dai-ichi nuclear power plant, the NRC issued to licensees Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" ([Reference 1.5-202](#)). This Order was for implementing Recommendation 4.2 of the NRC Near-Term Task Force Report ([Reference 1.5-201](#)). Order EA-12-049 specifies a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core, containment, and spent fuel pool cooling capabilities. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely. Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to

Requirements for Mitigation Strategies for Beyond-Design-Basis External Events” ([Reference 1.5-203](#)), endorses, with clarifications, the methodologies described in Nuclear Energy Institute (NEI) 12-06, “Diverse and Flexible Coping Strategies (FLEX) Implementation Guide,” ([Reference 1.5-204](#)). Although the guidance does not specifically address the ESBWR design, which employs passive design features, this subsection describes how ESBWR design features for beyond-design-basis external events meet the intent of the guidance.

For the ESBWR, the underlying strategies for coping with extended loss of AC power events involve a two-phase approach as follows:

- I. Initial Phase: Initial coping is implemented through installed plant equipment, without any AC power or makeup to the ultimate heat sink (i.e., safety-related Isolation Condenser System [ICS] and Passive Containment Cooling System [PCCS] pools or Gravity-Driven Cooling System [GDCCS]). For the ESBWR, this phase is covered by the existing licensing basis (i.e., 72-hr period for passive systems performance for core, containment, and spent fuel storage pools cooling).

Following the 72-hr passive system coping time, support is required to continue passive system cooling and makeup to the Isolation Condenser/Passive Containment Cooling System (IC/PCCS) pools and spent fuel storage pools. This support could be provided by installed plant ancillary equipment. The installed ancillary equipment is designed with the capacity to support passive system cooling from 3 to 7 days. As described in DCD Section 9.1.3 and Section 19A.3.1, makeup water can be provided through installed safety-related connections to the Fire Protection System (FPS) or spent fuel storage pool. Between 72 hours and seven days, the resources for performing these safety functions are available onsite.

- II. Final Phase: In order to extend the passive system cooling and IC/PCCS pools and spent fuel storage pools cooling time to beyond the initial phase (to an indefinite time), some offsite assistance is required. Specifically, for the ESBWR design, diesel fuel for the ancillary diesel generator or diesel fire pump must be replenished. Also, mitigation strategies including procedures, guidance, training, and acquisition, staging, or installation of equipment needed for the strategies to maintain core,

containment, and spent fuel storage pools cooling for an extended period of time will be fully implemented prior to initial fuel load.

1.5.1.1.2 **Recommendation 7.1, Reliable Spent Fuel Pool Instrumentation**

Following the March 2011 events in Japan at the Fukushima Dai-ichi nuclear power plant, the NRC issued to licensees Order EA-12-051, “Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation” ([Reference 1.5-205](#)). This Order was for implementing Recommendation 7.1 of the NRC Near-Term Task Force Report ([Reference 1.5-201](#)) for safety enhancements in the form of reliable spent fuel pool instrumentation for beyond-design-basis external events. Interim Staff Guidance JLD-ISG-2012-03, “Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation” ([Reference 1.5-206](#)), endorses, with exceptions, the methodologies described in Nuclear Energy Institute (NEI) 12-02, “Industry Guidance for Compliance with NRC Order EA-12-051, ‘To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,’” ([Reference 1.5-207](#)). Although the guidance does not specifically address the ESBWR design, which employs passive design features, this subsection describes how ESBWR design features for reliable spent fuel pool and buffer pool level instrumentation meet the intent of the guidance.

The ESBWR design provides reliable indication of the water level in spent fuel storage pools for monitoring pool water level conditions by trained personnel. As explained in DCD Subsection 9.1.2, the design basis for storage of spent fuel includes two separate areas for storage of spent fuel assemblies: (1) a separate deep pit area in the buffer pool in the Reactor Building; and (2) the Spent Fuel Pool (SFP) in the Fuel Building. As described in DCD Subsection 7.5.5, Subsection 9.1.2.4, and Subsection 9.1.3, safety-related level instrumentation is provided in the SFP and buffer pool, both Seismic Category I, to detect a low water level that would indicate a loss of decay heat removal ability in accordance with NRC regulatory requirements in 10 CFR Part 50 Appendix A, General Design Criterion 63. The SFP and buffer pool each have two wide-range safety-related level transmitters that transmit signals to the Main Control Room. These signals are used for collapsed water level indication and to initiate high/low-level alarms, both locally and in the

Main Control Room. At a minimum, alarm set points are included at the top of the active fuel, an adequate shielding level, and an elevation just below normal water level to give operators advanced notice of a loss of inventory but with sufficient margin to allow for 72 hours of pool boiling. The SFP also contains backup nonsafety-related level indicators that can be operated using portable onsite power supplies to indicate when the pool has been replenished to its normal water level.

Details regarding power to the instrumentation channels are in Subsection 7.1.2. In addition, instrumentation channels provide for power connections from sources independent of the plant alternating current (AC) and direct current (DC) power distribution systems, such as portable generators or replaceable batteries. Power supply designs should provide for quick and accessible connection of sources independent of the plant AC and DC power distribution systems. Onsite generators used as an alternate power source and replaceable batteries used for instrument channel power shall have sufficient capacity to maintain the level indication function until offsite resource availability is reasonably assured. The ESBWR DCD, Tier 1, Table 2.6.2-2 specifies a minimum instrument accuracy of ± 300 mm (1 ft), which meets the guidance set forth in JLD-ISG-2012-03. The instrumentation is designed to maintain its designed accuracy following a power interruption or change in power source without recalibration. Technical Specifications, Section 3.7.5, specifies periodic surveillance of the fuel pools water level during movement of irradiated fuel assemblies in the associated fuel storage pool or when irradiated fuel assemblies are stored in the associated fuel storage pool. For operating, testing, and calibrating the level instruments, training programs are described in DCD Section 13.2 and procedures are described in DCD Section 13.5.

1.5.4 **References**

- 1.5-201 "Recommendations for Enhancing Reactor Safety in the 21st Century, The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," July 12, 2011.
- 1.5-202 Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," March 12, 2012.
- 1.5-203 Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to

Requirements for Mitigation Strategies for
Beyond-Design-Basis External Events,” Revision 0.

- 1.5-204 NEI 12-06, “Diverse and Flexible Coping Strategies (FLEX) Implementation Guide,” Revision 1, August 2012.
- 1.5-205 Order EA-12-051, “Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,” March 12, 2012.
- 1.5-206 Interim Staff Guidance JLD-ISG-2012-03, “Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation,” Revision 0.
- 1.5-207 NEI 12-02, “Industry Guidance for Compliance with NRC Order EA-12-051, ‘To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,’” Revision 1, August 2012.

1.6 Material Incorporated By Reference

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following paragraph at the end of this section.

EF3 SUP 1.6-1

[Table 1.6-201](#) lists topical reports not included in DCD Section 1.6 that are incorporated in whole or in part by reference in the FSAR.

Table 1.6-201 Referenced Topical Reports (Sheet 1 of 2) [EF3 SUP 1.6-1]

Report No.	Title	Section No.
NEI 06-13A	Nuclear Energy Institute, "Technical Report on Template for an Industry Training Program Description," NEI 06-13A, Revision 2, March 2009	Appendix 13BB
NEI 07-02A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed under 10 CFR Part 52," NEI 07-02A, November 2010	17.6
NEI 07-03A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Radiation Protection Program Description," NEI 07-03A, Revision 0, May 2009	Appendix 12BB
NEI 07-08A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA)," NEI 07-08A, Revision 0, October 2009	Appendix 12AA
NEI 07-09A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Offsite Dose Calculation Manual (ODCM) Program Description," NEI 07-09A, Revision 0, March 2009	11.5
NEI 07-10A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Process Control Program (PCP)," NEI 07-10A, Revision 0, March 2009	11.4
NEI 06-12	Nuclear Energy Institute, "B.5.b. Phase 2 & 3 Submittal Guideline," NEI 06-12, Revision 3, September 2009	19.6
NEI 08-09	Nuclear Energy Institute, "Cyber Security Plan for Nuclear Power Reactors", NEI 08-09, Revision 6, April 2010	13.6
NEI 06-06	Nuclear Energy Institute, "Fitness for Duty Program Guidance for New Nuclear Power Plant Construction Sites," NEI 06-06, Revision 5, August 2009	13.7
NEI 10-05	Nuclear Energy Institute, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities," NEI 10-05, Revision 0, June 2011	Part 10, Section 3.7.2
NEI 07-01	Nuclear Energy Institute, "Methodology for Development of Emergency Action Levels Advanced Passive Light Water Reactors," NEI 07-01, Revision 0, September 2007	Part 10, Section 3.7.1
ST-56834/P	General Electric Company, "ESBWR Steam Turbine - Low Pressure Rotor Missile Generation Probability Analysis," ST-56834/P, Revision 4, October 18, 2011	10.2
ST-56834/N-P	General Electric Company, "ESBWR Steam Turbine - Low Pressure Rotor Missile Generation Probability Analysis," ST-56834/N-P, Revision 4, October 18, 2011	10.2
NEI 08-08A	Nuclear Energy Institute, "Generic FSAR Template Guidance for Life Cycle," NEI 08-08A, Revision 0, October 2009.	12.3
NEDC-33441P	GE Hitachi, "GE Hitachi Nuclear Energy Methodology for the Development of ESBWR Reactor Pressure Vessel Pressure-Temperature Curves," Revision 5, February 2011	5.3

Table 1.6-201 Referenced Topical Reports (Sheet 2 of 2)

[EF3 SUP 1.6-1]

Report No.	Title	Section No.
NEDO-33441	GE Hitachi, "GE Hitachi Nuclear Energy Methodology for the Development of ESBWR Reactor Pressure Vessel Pressure-Temperature Curves," Revision 5, February 2011	5.3
NEDE-33389	General Electric Hitachi, "ESBWR Safeguards Enhancements Report, "NEDE-Security Plan 33389, Revision 1, July 2009.	Security Plan
NEDE-33390	General Electric Hitachi, "ESBWR Interim Compensatory Measures Report," NEDE-33390, Revision 1, November 2008.	Security Plan
NEDE-33391	General Electric Hitachi, "ESBWR Safeguards Assessment Report," NEDE-33391, Revision 3, March 2010.	Security Plan

1.7 Drawings and Other Detailed Information

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.7.1 Electrical, Instrumentation and Control Drawings

Add the following at the end of this section.

EF3 SUP 1.7-1

[Table 1.7-201](#) supplements DCD Table 1.7-2 for those portions of the electrical system configuration drawings outside the scope of the DCD.

1.7.2 Piping and Instrumentation Diagrams

Add the following at the end of the first paragraph.

EF3 SUP 1.7-1

[Table 1.7-202](#) supplements DCD Table 1.7-3 for those portions of the mechanical system configuration drawings outside the scope of the DCD.

1.7.4 COL Information

1.7-1-H Final Design Configuration Confirmation

(Deleted)

Table 1.7-201 Summary of Electrical System Configuration Drawings

[EF3 SUP 1.7.1]

[Figure 8.2-201](#), 345 kV Switchyard Single-Line Diagram

[Figure 8.2-202](#), (Deleted)

[Figure 8.2-203](#), Transmission Line Map

Table 1.7-202 Summary of Mechanical System Configuration Drawings

[EF3 SUP 1.7-1]

[Figure 9.2-201](#), Potable Water System Simplified Diagram

[Figure 9.2-202](#), Sanitary Waste Discharge System Simplified Diagram

[Figure 9.2-203](#), Station Water System - Plant Cooling Tower Makeup System (PCTMS)

[Figure 9.2-204](#), Station Water System - Pretreated Water Supply System (PWSS)

[Figure 9.2-205](#), Plant Service Water System Simplified Diagram

[Figure 9.5-201](#), Fire Protection System Yard Main Loop

[Figure 10.4-201](#), Circ Natural Draft Cooling Tower and Pump Pit

[Figure 10.4-202](#), Condenser and Ball Cleaning System

[Figure 11.4-1R](#), Solid Waste Management System Process Diagram

[Figure 11.4-2R](#), SWMS Collection Subsystem

1.8 Interfaces with Standard Design

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.8.2 Identification of Balance of Plant Interfaces

Add the following paragraph after the first paragraph of this section.

STD CDI

The significant interface requirements for those systems that are beyond the scope of the DCD are identified in DCD Tier 1.

Delete the second sentence of the second paragraph of this section.

EF3 SUP 1.8-7

1.8.2.8 Independent Spent Fuel Storage Installation

Replace this section with the following.

No Fermi 3 ISFSI is currently planned. Any future Fermi 3 ISFSI will be located considering the impacts of external hazards as required by the associated 10 CFR 72 license for the Fermi 3 ISFSI.

EF3 SUP 1.8-1

1.8.3 Verification of Site Parameters

[Chapter 2.0](#) provides information demonstrating that the site characteristics fall within the ESBWR site parameters specified in the referenced certified design, except for the “minimum shear wave velocity” in DCD Table 2.0-1.

EF3 SUP 1.8-2

1.8.4 COL Information Items and Permit Conditions

[Section 1.10](#) identifies specific FSAR sections that address the COL Information items from the referenced certified design, and COL Action Items.

EF3 SUP 1.8-3

1.8.5 Generic Changes and Departures from the Referenced Certified Design

One site-specific departure has been identified from the referenced certified design, which is described in COLA Part 7. (Reference [Table 1.8-201](#))

EF3 SUP 1.8-5

1.8.7 Conceptual Design Information

The referenced DCD includes conceptual design information (CDI) for certain systems, or portions of systems, that are outside the scope of the standard plant design. [Table 1.8-202](#) identifies systems for which either the CDI in the DCD is adopted as the actual system design information, or the CDI in the DCD is replaced with site-specific design information, along with cross references to FSAR sections where the CDI is treated. Where there are differences between the conceptual design and the actual design, these differences have been evaluated. The evaluations have concluded that there are no impacts on the safety evaluations provided in the referenced certified design.

EF3 SUP 1.8-6

1.8.8 Probabilistic Risk Assessment

Site- and plant-specific information, including site meteorological data and site-specific population distribution, plant-specific design information that replaced conceptual design information described in the DCD, and the departures listed in [Subsection](#) , were reviewed with respect to the design certification PRA. The conclusion, which is documented in [Section 19.5](#), is that there is no significant change from the certified design PRA.

Table 1.8-201 Departures from the Referenced Certified Design [EF3 SUP 1.8-3]

Number	Subject	FSAR Section
EF3 DEP 11.4-1	Long-Term, Temporary Storage of Class B and C Low-Level Radioactive Waste	1.2.2.10.2, 1.2.2.16.9, 11.4, 11.4.1, 11.4.2.2.1, 11.4.2.2.2, 11.4.2.2.4, and 11.4.2.3.1

Table 1.8-202 Conceptual Design Information (CDI) (Sheet 1 of 2)

[EF3 SUP 1.8-5]

Item in DCD	CDI in DCD adopted as actual design	CDI in DCD replaced with actual design	Evaluation	FSAR Section
1.1.2.1 ESBWR Standard Plant Scope Figure 1.1-1 ESBWR Standard Plant General Site Plan		X	Site plan general site plan provided	1.1.2.1 Figure 2.1-204
1.2.2.11.4 Main Turbine	X		Conceptual turbine type selected as site specific design	1.2.2.11.4
1.2.2.11.7 Main Condenser	X		Conceptual condenser type selected as site specific design	1.2.2.11.7
1.2.2.12.13 Hydrogen Water Chemistry Table 3.2-1 P73 Note 9.3.9 Hydrogen Water Chemistry		X	Hydrogen water chemistry option utilized	1.2.2.12.13 9.3.9
1.2.2.12.15 Zinc Injection System Table 3.2-1 P74 Note 9.3.11 Zinc Injection System		X	Zinc Injection system not utilized	1.2.2.12.15 9.3.11
1.2.2.12.16 Freeze Protection		X	Freeze protection incorporated for external tanks and piping that may freeze during winter weather	1.2.2.12.16
1.2.2.16.10 Other Building Structures		X	Site-specific buildings specified	1.2.2.16.10
1.8.2 Identification of BOP Interfaces	X		Not applicable	
Appendix 3A Seismic Soil-Structure Interaction Analysis		X	Site-specific geotechnical data described in Chapter 2 and Subsection 3.7.1, and site-specific SSI analyses described in Subsection 3.7.1, Subsection 3.7.2, and Subsection 3.8.5	Appendix 3A Chapter 2 3.7.1, 3.7.2, and 3.8.5
Appendix 3A.2 ESBWR Standard Site Plan		X	Site-specific general site plan provided	Appendix 3A Figure 2.1-201
9.2.1 Plant Service Water Table 9.2-2 Figure 9.2-1		X	Site-specific system description and design characteristics described	9.2.1 Table 9.2-201 Figure 9.2-205
9.2.3 Makeup Water System Table 9.2-9		X	Site-specific system description and design characteristics described	9.2.3 Table 9.2-202

Table 1.8-202 Conceptual Design Information (CDI) (Sheet 2 of 2)

[EF3 SUP 1.8-5]

Item in DCD	CDI in DCD adopted as actual design	CDI in DCD replaced with actual design	Evaluation	FSAR Section
9.2.4 Potable and Sanitary Water Systems	X		Site-specific system description and design characteristics described	9.2.4 Table 9.2-201 Table 9.2-202
9.2.10 Station Water System	X		Site-specific system description and design characteristics described	9.2.10 Table 9.2-204 Table 9.2-205 Figure 9.2-203 Figure 9.2-204
9.3.9 Hydrogen Water Chemistry System	X		Site-specific system description and design characteristics described	9.3.9
9.3.11 Zinc Injection System	X		Zinc Injection System not utilized	9.3.11
9A Appendix 9A Fire Hazards Analysis	X		Site-specific building specified. Site-specific Fire Zone drawing supplied.	Figure 9A.2-33R Figure 9A.2-201
10.4.5 Circulating Water System Table 10.4-3 Figure 10.4-1	X		Site-specific system description and design characteristics described	10.4.5.2.1 10.4.5.2.2 10.4.5.2.3 10.4.5.6 10.4.5.8 Table 10.4-201 Table 10.4-3R Figure 10.4-201 Figure 10.4-202

1.9 Conformance with Standard Review Plan and Applicability of Codes and Standards

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.9.1 Conformance with Standard Review Plan

Add the following paragraph at the end of this section.

EF3 COL 1.9-3-A

[Table 1.9-201](#) evaluates conformance with the SRP sections and BTPs in effect six months prior to the submittal of the COLA. [Table 1.9-201](#) does not re-address conformance with the SRP for those portions of the facility design included in the referenced certified design.

In the table, the term “Conforms” means that no exception is being taken to the guidance in the SRP section/acceptance criteria as they apply to site-specific design information, operational aspects of the facility, or siting information in the FSAR. The term “Not applicable” means that the SRP section/acceptance criteria do not apply to the ESBWR or Fermi 3. Any differences with the SRP acceptance criteria are identified and justified, with references to the applicable FSAR section(s) that address the difference, as necessary.

1.9.2 Applicability to Regulatory Criteria

Add the following paragraphs at the end of this section.

EF3 COL 1.9-3-A

Division 1, 4, 5, and 8 Regulatory Guides

[Table 1.9-202](#) evaluates conformance with Division 1, 4, 5, and 8 RGs in effect six months prior to the submittal of the COLA. Each issued Division 1 RG is evaluated. Issued Division 4, 5, and 8 RGs identified in the SRP, RG 1.206, or DCD Table 1.9-21 as COL responsibility are also evaluated. [Table 1.9-202](#) does not re-address conformance with RGs for those portions of the facility design included in the referenced certified design.

In the table, the term “Conforms” means that no exception is being taken to the guidance in the regulatory positions as they apply to site-specific design information, operational aspects of the facility, or siting information in the FSAR. The term “Not applicable” means that the regulatory positions do not apply to the ESBWR or Fermi 3.

Regulatory Guide 1.206

[Table 1.9-203](#) evaluates conformance with the FSAR content guidance in RG 1.206. Where necessary, the table identifies the FSAR section where the required information is provided. In the table, the term “Conforms” means that the information called for in RG 1.206 is either: 1) already addressed in the DCD; or 2) addressed by adding new information beyond that contained in the DCD. The term “Not applicable” means that the information called for in RG 1.206 does not apply to the ESBWR or Fermi 3.

[Table 1.9-203](#) evaluates conformance with RG 1.206, Section C.III.1 , “Information Needed for a Combined License Application Referencing a Certified Design.” Section C.I, “Standard Format and Content of Combined License Applications for Nuclear Power Plants-Light-Water Reactor Edition,” were also evaluated, as applicable, if portions of these sections were referenced or identified in RG 1.206, Section C.III.1 .

EF3 SUP 1.9-1

Industrial Codes and Standards

[Table 1.9-204](#) identifies the Industrial Codes and Standards that are applicable to those portions of the Fermi 3 design that are beyond the scope of the DCD, and to the operational aspects of the facility.

1.9.3 Applicability of Experience Information

Add the following after the first sentence of the section.

EF3 SUP 1.9-2

[Table 1.9-205](#) lists NUREG, NUREG/CP, NUREG/GR, and NUREG/CR reports cited in the FSAR.

Add the following paragraph at the end of this section.

[Table 1.9-205](#) addresses operational experience information, as described in applicable NUREG reports, for those portions of the Fermi 3 design and operation that are beyond the scope of the DCD. The comment column of [Table 1.9-205](#) includes a reference to the applicable FSAR section that provides further discussion of the operational experience.

COL Information

1.9-3-A **SRP and Regulatory Guide Applicability**

EF3 COL 1.9-3-A

This COL Item is addressed in [Subsection 1.9.1](#) and [Subsection 1.9.2](#).

Table 1.9-201 Conformance with Standard Review Plan (Sheet 1 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
1	Introduction and Interfaces	Rev. 1	Nov-07	No Specific Acceptance Criteria	Conforms
2.0	Site Characteristics and Site Parameters	Initial Issuance	Mar-07	II.2, II.4, II.5	Not applicable, COLA references the ESBWR DCD.
				II.1, II.3	Conforms
2.1.1	Site Location and Description	Rev. 3	Mar-07	II.1, II.2	Conforms
2.1.2	Exclusion Area Authority and Control	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
2.1.3	Population Distribution	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.2.1 - 2.2.2	Identification of Potential Hazards in Site Vicinity	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
2.2.3	Evaluation of Potential Accidents	Rev. 3	Mar-07	II.1, II.2	Conforms
2.3.1	Regional Climatology	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
2.3.2	Local Meteorology	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.3.3	Onsite Meteorological Measurements Programs	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms with exception of proximity of trees to meteorological tower. Impacts from trees is addressed in Subsection 2.3.3.1.6 .
2.3.4	Short Term Atmospheric Dispersion Estimates for Accident Releases	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.4.1	Hydrologic Description	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms

Table 1.9-201 Conformance with Standard Review Plan (Sheet 2 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
2.4.2	Floods	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10	Conforms
2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	Rev. 4	Mar-07	II.1, II.2, II.3	Conforms
2.4.4	Potential Dam Failures	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
2.4.5	Probable Maximum Surge and Seiche Flooding	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
2.4.6	Probable Maximum Tsunami Hazards	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
2.4.7	Ice Effects	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.4.8	Cooling Water Canals and Reservoirs	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.4.9	Channel Diversions	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
2.4.10	Flooding Protection Requirements	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
2.4.11	Low Water Considerations	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.4.12	Groundwater	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.4.13	Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms. A tank rupture analysis was not performed since special design features were incorporated to mitigate the consequences of failures.
2.4.14	Technical Specifications and Emergency Operation Requirements	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
2.5.1	Basic Geologic and Seismic Information	Rev. 4	Mar-07	II.1, II.2	Conforms

Table 1.9-201 Conformance with Standard Review Plan (Sheet 3 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
2.5.2	Vibratory Ground Motion	Rev. 4	Mar-07	II.2	Conforms, except that NUREG-2115 is incorporated as the replacement for the Lawrence Livermore National Laboratory and the Electric Power Research Institute studies in the Central and Eastern United States.
2.5.3	Surface Faulting	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
2.5.4	Stability of Subsurface Materials and Foundations	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5 II.6, II.7, II.8, II.9, II.10, II.11, II.12	Conforms
2.5.5	Stability of Slopes	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.2.1	Seismic Classification	Rev. 2	Mar-07	II.1	Conforms
3.2.2	System Quality Group Classification	Rev. 2	Mar-07	II.1	Conforms
3.3.1	Wind Loadings	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.3.2	Tornado Loadings	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.4.1	Internal Flood Protection for Onsite Equipment Failures	Rev. 3	Mar-07	II.1, II.2	Conforms
3.4.2	Analysis Procedures	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
3.5.1.1	Internally Generated Missiles (Outside Containment)	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.2	Internally-Generated Missiles (Inside Containment)	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.3	Turbine Missiles	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.1.5	Site Proximity Missiles (Except Aircraft)	Rev. 4	Mar-07	II.1, II.2	Conforms

Table 1.9-201 Conformance with Standard Review Plan (Sheet 4 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.5.1.6	Aircraft Hazards	Rev. 3	Mar-07	II.1, II.2	Conforms
3.5.2	Structures, Systems, and Components to be Protected from Externally-Generated Missiles	Rev. 3	Mar-07		Conforms
3.5.3	Barrier Design Procedures	Rev. 3	Mar-07	II.1, II.2	Conforms
3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
3.6.3	Leak-Before-Break Evaluation Procedures	Rev. 1	Mar-07	II.1, II.2	Not applicable. ESBWR design does not rely on a Leak Before Break Evaluation.
3.7.1	Seismic Design Parameters	Rev. 3	Mar-07	All except II.4	Conforms except that the ESBWR is based on a single earthquake (SSE) design. Supplemented by "Interim Staff Guidance on Ensuring Hazard-Consistent Seismic Input for Site Response and Soil Structure Interaction Analyses," DC/COL-ISG-017, March 2010.
				II.4	Conforms - supplemented by "Interim Staff Guidance on Seismic Issues Associated with High Frequency Ground Motion in Design Certification and Combined License Applications," DC/COL-ISG-1, May 2008.

Table 1.9-201 Conformance with Standard Review Plan (Sheet 5 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.7.2	Seismic System Analysis	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
3.7.3	Seismic Subsystem Analysis	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms except that the ESBWR is based on a single earthquake (SSE) design.
3.7.4	Seismic Instrumentation	Rev. 2	Mar-07	II.1, II.2	Conforms
3.8.1	Concrete Containment	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.8.2	Steel Containment	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.8.4	Other Seismic Category I Structures	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
3.8.5	Foundations	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.9.1	Special Topics for Mechanical Components	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.9.2	Dynamic Testing and Analysis of Systems, Structures, and Components	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
3.9.3	ASME Code Class 1, 2, and 3 Components, and Component Supports, and Core Support Structures	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
3.9.4	Control Rod Drive Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
3.9.5	Reactor Pressure Vessel Internals	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints	Rev. 3	Mar-07	II.1, II.3, II.4, II.5, II.6	Conforms
				II.2	Not applicable. There are no safety related pumps.
3.9.7	Risk-Informed Inservice Testing	Rev. 0	Aug-98	II.A, II.B	Not applicable. Risk-informed inservice testing is not being used.
3.9.8	Risk-Informed Inservice Inspection of Piping	Rev. 0	Sep-03	II.1, II.2, II.3	Not applicable. Risk-informed inservice inspection of piping is not being used.
3.10	Seismic and Dynamic Qualification of Mechanical and Electrical Equipment	Rev. 3	Mar-07	II.1, II.2, II.3, II.5	Conforms
				II.4, II.6	Conforms
3.11	Environmental Qualification of Mechanical and Electrical Equipment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16	Conforms
3.12	ASME Code Class 1, 2, and 3 Piping Systems, Piping Components and their Associated Supports	Initial Issuance	Mar-07	II.A, II.B, II.C, II.D	Conforms
3.13	Threaded Fasteners - ASME Code Class 1, 2, and 3	Initial Issuance	Mar-07	II.1, II.2	Conforms
BTP 3-1	Classification of Main Steam Components Other than the Reactor Coolant Pressure Boundary for BWR Plants	Rev. 2	Mar-07		Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 3-2	Classification of BWR/6 Main Steam and Feedwater Components Other than the Reactor Coolant Pressure Boundary	Rev. 2	Mar-07		Conforms
BTP 3-3	Protection Against Postulated Piping Failures in Fluid Systems Outside Containment	Rev. 3	Mar-07		Conforms
BTP 3-4	Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment	Rev. 2	Mar-07		Conforms
4.2	Fuel System Design	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
4.3	Nuclear Design	Rev. 3	Mar-07	II.1, II.2, II.4	Conforms
				II.3	Conforms
4.4	Thermal and Hydraulic Design	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.8, II.9, II.10	Conforms
				II.7	Not applicable
4.5.1	Control Rod Drive Structural Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
4.5.2	Reactor Internal and Core Support Structure Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
4.6	Functional Design of Control Rod Drive System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
BTP 4-1	Westinghouse Constant Axial Offset Control (CAOC)	Rev. 3	Mar-07		Not applicable to the ESBWR
5.2.1.1	Compliance with the Codes and Standards Rule, 10 CFR 50.55a	Rev. 3	Mar-07	RG 1.26	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
5.2.1.2	Applicable Code Cases	Rev. 3	Mar-07	RG 1.84, RG 1.147, RG 1.192	Conforms
5.2.2	Overpressure Protection	Rev. 3	Mar-07	II.1, II.2, II.5, II.6, II.7	Conforms
				II.3, & II.4	Not applicable to the ESBWR
5.2.3	Reactor Coolant Pressure Boundary Materials	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. Acceptance Criterion II.3 is addressed in DCD Section 5.2.3.3
5.2.4	Reactor Coolant Pressure Boundary Inservice Inspection and Testing	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	Rev. 2	Mar-07	II.1, II.2	Conforms
5.3.1	Reactor Vessel Materials	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
5.3.2	Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms
5.3.3	Reactor Vessel Integrity	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
5.4	Reactor Coolant System Component and Subsystem Design	Rev. 2	Mar-07		Conforms
5.4.1.1	Pump Flywheel Integrity (PWR)	Rev. 2	Mar-07		Not applicable to the ESBWR
5.4.2.1	Steam Generator Materials	Rev. 3	Mar-07		Not applicable to the ESBWR
5.4.2.2	Steam Generator Program	Rev. 2	Mar-07		Not applicable to the ESBWR

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
5.4.6	Reactor Core Isolation Cooling System (BWR)	Rev. 4	Mar-07	II.1, II.2, II.4, II.5, II.6, II.7a, b, c & f, II.8, II.9, II.10	As applicable to a passive-design isolation condenser system (ICS) in place of an active-design reactor core isolation cooling (RCIC) system. Criterion II.2 addressed in DCD Table 1.9-5
				II.3 and II.7d & e	Not applicable to the ESBWR
5.4.7	Residual Heat Removal (RHR) System	Rev. 4	Mar-07	II.1, II.2, II.3, II.4	Conforms
5.4.8	Reactor Water Cleanup System (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
5.4.11	Pressurizer Relief Tank	Rev. 3	Mar-07		Not applicable to the ESBWR
5.4.12	Reactor Coolant System High Point Vents	Rev. 1	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
5.4.13	Isolation Condenser System (BWR)	Initial Issuance	Mar-07	II.1, II.2, II.3, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12	Conforms
				II.4	Conforms with the following exception: The ESBWR is designed to shut down safely without reliance on offsite or diesel-generator-derived AC power, therefore, RG 1.93 is only applicable to onsite safety-related DC power systems.
BTP 5-1	Monitoring of Secondary Side Water Chemistry in PWR Steam Generators	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 5-2	Overpressurization Protection of Pressurized-Water Reactors While Operating at Low Temperatures	Rev. 3	Mar-07		Not applicable to the ESBWR

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 5-3	Fracture Toughness Requirements	Rev. 3	Mar-07		Conforms
BTP 5-4	Design Requirements of the Residual Heat Removal System	Rev. 3	Mar-07		Conforms
6.1.1	Engineered Safety Features Materials	Rev. 2	Mar-07	II.1, II.2, II.3, II.4	Conforms
6.1.2	Protective Coating Systems (Paints) - Organic Materials	Rev. 3	Mar-07	II.1	Conforms
6.2.1	Containment Functional Design	Rev. 3	Mar-07		Conforms
6.2.1.1.A	PWR Dry Containments, Including Subatmospheric Containments	Rev. 3	Mar-07		Not applicable to the ESBWR
6.2.1.1.B	Ice Condenser Containments	Draft Rev. 3	Jun-96		Not applicable to the ESBWR
6.2.1.1.C	Pressure-Suppression Type BWR Containments	Rev. 7	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
6.2.1.2	Subcompartment Analysis	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
6.2.1.3	Mass and Energy Release Analysis for Postulated Loss-of-Coolant Accidents (LOCAs)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
6.2.1.4	Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures	Rev. 2	Mar-07		Not applicable to the ESBWR

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.2.1.5	Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability Studies	Rev. 3	Mar-07		Conforms. See DCD Table 1.9-6, and DCD Table 1.9-20, and Appendix 6C.
6.2.2	Containment Heat Removal Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8	Conforms
6.2.3	Secondary Containment Functional Design	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. See DCD Table 1.9-20.
6.2.4	Containment Isolation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16, II.17, II.18, II.19, II.20, II.21, II.22	Conforms
6.2.5	Combustible Gas Control in Containment	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
6.2.6	Containment Leakage Testing	Rev. 3	Mar-07		Conforms
6.2.7	Fracture Prevention of Containment Pressure Boundary	Rev. 1	Mar-07	II.1, II.2	Conforms
6.3	Emergency Core Cooling System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.6, II.7, II.8, II.10 II.5, II.9	Conforms Not applicable to ESBWR design. ESBWR does not have pumps in these safety related functions and ESBWR does not have HPCI or RCIC pumps.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.4	Control Room Habitability System	Rev. 3	Mar-07	II.1, II.2, II.4, II.5, II.6	Conforms
				II.3	Exception: For differential pressure testing of the control room, the periodic verification interval of every 18 months in Acceptance Criteria II.3.a through II.3.c is increased to every 24 months to accommodate the ESBWR's two year operating cycle. The frequencies for testing the CR HVAC system are defined by Technical Specifications 3.7.2 and 5.5.12 of the referenced certified design.
				II.7	Exception: SRP states that self-contained breathing apparatus for the control room personnel should be on hand. DCD 6.4.1.1 states that CRHA habitability requirements are satisfied without the need for individual breathing apparatus and/or special clothing.
6.5.1	ESF Atmosphere Cleanup Systems	Rev. 3	Mar-07		Conforms. Surveillances, testing, and maintenance guidelines for the CRHAVS are addressed in Technical Specifications 3.7.2, 5.5.12, and 5.5.13, Maintenance Rule requirements in Section 17.6, and procedure requirements in Section 13.5
6.5.2	Containment Spray as a Fission Product Cleanup System	Rev. 4	Mar-07		Not applicable. See DCD Table 1.9-20.

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
6.5.3	Fission Product Control Systems and Structures	Rev. 3	Mar-07	II.1, II.2, (there is no II.3) II.4	Conforms Not applicable. Drywell spray function is not credited in DCD Chapter 15 dose analysis.
6.5.4	Ice Condenser as a Fission Product Cleanup System	Draft Rev. 4	Jun-96		Not applicable to the ESBWR
6.5.5	Pressure Suppression Pool as a Fission Product Cleanup System	Rev. 1	Mar-07	II.1, II.2 II.3	Conforms. Refer to DCD Table 1.9-20. Not applicable.
6.6	Inservice Inspection and Testing of Class 2 and 3 Components	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11	Conforms
6.7	Main Steam Isolation Valve Leakage Control System (BWR)	Draft Rev. 3	Jun-96		Not applicable
BTP 6-1	pH For Emergency Coolant Water for Pressurized Water Reactors	Initial Issuance	Mar-07		Not applicable to the ESBWR
BTP 6-2	Minimum Containment Pressure Model for PWR ECCS Performance Evaluation	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 6-3	Determination of Bypass Leakage Paths in Dual Containment Plants	Rev. 3	Mar-07		Conforms. Refer to DCD Table 1.9-20.
BTP 6-4	Containment Purging During Normal Plant Operations	Rev. 3	Mar-07		Conforms. Refer to TS SR 3.6.1.3.

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 6-5	Currently the Responsibility of Reactor Systems Piping From the RWST (or BWST) and Containment Sump(s) to the Safety Injection Pumps	Rev. 3	Mar-07		Not applicable
7.0	Instrumentation and Controls - Overview of Review Process	Rev. 5	Mar-07		Conforms
Appendix 7.0-A	Review Process for Digital Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms
7.1	Instrumentation and Controls - Introduction	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . ITAAC addressed in COLA Part 10.
7.1-T	Table 7-1 Regulatory Requirements, Acceptance Criteria, and Guidelines for Instrumentation and Control Systems Important to Safety	Rev. 5	Mar-07		Conforms
Appendix 7.1-A	Acceptance Criteria and Guidelines for Instrumentation and Controls Systems Important to Safety	Rev. 5	Mar-07	1, 2, 3, 4, 5	Conforms
Appendix 7.1-B	Guidance for Evaluation of Conformance to IEEE Std 279	Rev. 5	Mar-07		Conforms
Appendix 7.1-C	Guidance for Evaluation of Conformance to IEEE Std 603	Rev. 5	Mar-07		Conforms
Appendix 7.1-D	Guidance for Evaluation of the Application of IEEE Std 7-4.3.2	Initial Issuance	Mar-07	SRM to SECY 93-087 II.Q	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
7.2	Reactor Trip System	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.3	Engineered Safety Features Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.4	Safe Shutdown Systems	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.5	Information Systems Important to Safety	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.6	Interlock Systems Important to Safety	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.7	Control Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
7.8	Diverse Instrumentation and Control Systems	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, SRM to SECY 93-087 II.Q	Conforms. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
7.9	Data Communication Systems	Rev. 5	Mar-07	II.1, II.2, II.3	Conforms. Addressed in DCD Section 7.1. Procedures addressed in Section 13.5 . Technical Specifications addressed in Chapter 16 . ITAAC addressed in COLA Part 10.
Appendix 7-A	General Agenda, Station Site Visits (formerly Appendix 7-B)	Rev. 5	Mar-07		Not applicable. Provides guidance to the NRC to conduct site visits.
Appendix 7-B	Acronyms, Abbreviations, and Glossary (formerly Appendix 7-C)	Rev. 5	Mar-07		Conforms
BTP 7-1	Guidance on Isolation of Low-Pressure Systems from the High-Pressure Reactor Coolant System	Rev. 5	Mar-07		Conforms
BTP 7-2	Guidance on Requirements of Motor-Operated Valves in the Emergency Core Cooling System Accumulator Lines	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-3	Guidance on Protection System Trip Point Changes for Operation with Reactor Coolant Pumps Out of Service	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-4	Guidance on Design Criteria for Auxiliary Feedwater Systems	Rev. 5	Mar-07		Not applicable to the ESBWR
BTP 7-5	Guidance on Spurious Withdrawals of Single Control Rods in Pressurized Water Reactors	Rev. 5	Mar-07		Not applicable to the ESBWR

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 7-6	Guidance on Design of Instrumentation and Controls Provided to Accomplish Changeover from Injection to Recirculation Mode	Rev. 5	Mar-07		Not applicable. ESBWR does not use recirculation pumps or active ECCS pumps.
HICB-7	Not Used				Not used
BTP 7-8	Guidance for Application of Regulatory Guide 1.22	Rev. 5	Mar-07		Conforms. Chapter 16 addresses Technical Specifications.
BTP 7-9	Guidance on Requirements for Reactor Protection System Anticipatory Trips	Rev. 5	Mar-07		Conforms
BTP 7-10	Guidance on Application of Regulatory Guide 1.97	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.
BTP 7-11	Guidance on Application and Qualification of Isolation Devices	Rev. 5	Mar-07		Conforms.
BTP 7-12	Guidance on Establishing and Maintaining Instrument Setpoints	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.
BTP 7-13	Guidance on Cross-Calibration of Protection System Resistance Temperature Detectors	Rev. 5	Mar-07		Not applicable. RTDs are not used in the ESBWR protection systems.
BTP 7-14	Guidance on Software Reviews for Digital Computer-Based Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms
HCIB-15	Not Used				Not used

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 7-16	Withdrawn				Withdrawn
BTP 7-17	Guidance on Self-Test and Surveillance Test Provisions	Rev 5	Mar-07		Conforms. Section 13.5 addresses procedures. Chapter 16 addresses Technical Specifications.
BTP 7-18	Guidance on the Use of Programmable Logic Controllers in Digital Computer-Based Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms. Section 13.5 addresses procedures.
BTP 7-19	Guidance for Evaluation of Diversity and Defense-in-Depth in Digital Computer-Based Instrumentation and Control Systems	Rev. 5	Mar-07		Conforms
HCIB-20	Not Used				Not used
BTP 7-21	Guidance on Digital Computer Real-Time Performance	Rev. 5	Mar-07		Conforms
8.1	Electric Power - Introduction	Rev. 3	Mar-07		Conforms
8.2	Offsite Power System	Rev. 4	Mar-07	II.4, II.5, II.6, II.8 II.1, II.2, II.3, II.7	Conforms Not applicable. ESBWR is a passive design and does not rely on offsite power.

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
8.3.1	A-C Power Systems (Onsite)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4.A through II.4.H, II.4.J, II.5, II.6, II.7, II.10	Conforms
				II.4.I	Not applicable. The ESBWR diesel generators are not safety-related.
				II.8	Not applicable. The ESBWR diesel generators are not safety-related, nor is AC power needed to achieve safe shutdown.
				II.9	Conforms. Addressed in DCD 17.4 and Section 17.6 .
8.3.2	D-C Power Systems (Onsite)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.7, II.8, II.9, II.10	Conforms
				II.5, II.6	Not applicable. Addressed in DCD Sections 8.3.2.1.1 and 8.3.2.2.2.
				II.11	Not applicable. The ESBWR is designed to shutdown safely without reliance on offsite or diesel-generator-derived AC power for 72 hours, which exceeds station blackout requirements.
				II.12	Conforms. Addressed in Section 17.6 .
				II.13	Conforms. Addressed in Section 17.6 .
8.4	Station Blackout	Initial Issuance	Mar-07	II.1, II.2	Conforms. Addressed in DCD Section 15.5.5.
				II.3	Not applicable. Onsite Class 1E Emergency AC power sources are not required for ESBWR safe shutdown.
				II.4, II.5	Conforms. Addressed in Section 17.6 .

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
Appendix 8-A	General Agenda, Station Site Visits	Rev. 1	Mar-07		Not applicable. Provides guidance to NRC to conduct site visits.
BTP 8-1	Requirements on Motor-Operated Valves in the ECCS Accumulator Lines	Rev. 3	Mar-07		Not applicable. The ESBWR does not have any safety-related motor-operated valves.
BTP 8-2	Use of Diesel-Generator Sets for Peaking	Rev. 3	Mar-07		Not applicable. The ESBWR can achieve safe shutdown without AC power and the diesel-generator sets are not safety-related. Therefore, this BTP is not applicable.
BTP 8-3	Stability of Offsite Power Systems	Rev. 3	Mar-07		Conforms. Stability studies were performed to investigate the loss of off-site generation.
BTP 8-4	Application of the Single Failure Criterion to Manually Controlled Electrically Operated Valves	Rev. 3	Mar-07		Not applicable. The ESBWR does not use any manually-operated valves to mitigate an accident.
BTP 8-5	Supplemental Guidance for Bypass and Inoperable Status Indication for Engineered Safety Features Systems	Rev. 3	Mar-07		Not applicable. The ESBWR is designed in accordance with ICSB 21, the predecessor to BTP 8-5, as stated in DCD Table 8.1-1 and DCD Section 8.3.2.2.2. Also, refer to DCD Table 7.1-1 for conformance to RG 1.47 and Bypass and Inoperable Status Indicator (BISI) for all safety-related systems.
BTP 8-6	Adequacy of Station Electric Distribution System Voltages	Rev. 3	Mar-07		Not applicable. The ESBWR is designed in accordance with PSB 1, the predecessor to BTP 8-6, as stated in DCD Table 8.1-1 and DCD Section 8.3.1.1.2.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 8-7	Criteria for Alarms and Indications Associated with Diesel-Generator Unit Bypassed and Inoperable Status	Rev. 3	Mar-07		Not applicable. The ESBWR does not use safety-related diesel generators.
9.1.1	Criticality Safety of Fresh and Spent Fuel Storage and Handling	Rev. 3	Mar-07	II.1	Conforms
9.1.2	New and Spent Fuel Storage	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
9.1.3	Spent Fuel Pool Cooling and Cleanup System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7 II.8	Conforms Conforms. EP-ITAAC are addressed in COLA Part 10.
9.1.4	Light Load Handling System (Related to Refueling)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.1.5	Overhead Heavy Load Handling Systems	Rev. 1	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.2.1	Station Service Water System	Rev. 5	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.2.2	Reactor Auxiliary Cooling Water Systems	Rev. 4	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.2.3	Demineralized Water Makeup System				SRP withdrawn
9.2.4	Potable and Sanitary Water Systems	Rev. 3	Mar-07	II.1.A, II.1.B, II.1.C	Conforms
9.2.5	Ultimate Heat Sink	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
9.2.6	Condensate Storage Facilities	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.3.1	Compressed Air System	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms. Instrument Air is addressed in DCD Section 9.3.6, Service Air is addressed in DCD Section 9.3.7, and High Pressure Nitrogen Supply System is addressed in DCD Section 9.3.8.
9.3.2	Process and Post-accident Sampling Systems	Rev. 3	Mar-07	II.1, II.3, II.4 II.2	Conforms Exception. Technical Specifications do not require analyses. Subsection 9.3.2 addresses actions required to qualify process sampling for taking radioactive samples without having a specific post-accident sampling system. Analyses and frequencies of process systems are addressed in plant operating procedures.
9.3.3	Equipment and Floor Drainage System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
9.3.4	Chemical and Volume Control System (PWR) (Including Boron Recovery System)	Rev. 3	Mar-07		Not applicable to the ESBWR
9.3.5	Standby Liquid Control System (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
9.4.1	Control Room Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms. Section 9.4 was evaluated against these criteria.
9.4.2	Spent Fuel Pool Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.4.3	Auxiliary and Radwaste Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms. Section 9.4 was evaluated against these criteria.
9.4.4	Turbine Area Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.4.5	Engineered Safety Feature Ventilation System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
9.5.1	Fire Protection Program	Rev. 5	Mar-07	II.1, II.2, II.4	Not applicable. See Table 1.9-202 and DCD Table 1.9-21.
				II.3, II.5, II.6	Conforms
				II.7	Exception: The elements of the Fire Protection Program required to be operational prior to receipt of new fuel are those elements necessary to protect buildings storing new fuel and adjacent fire areas that could affect the fuel storage area. Other required elements of the Fire Protection Program will be fully operational prior to initial fuel loading. Refer to Section 13.4 .
9.5.2	Communications Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.14	Conforms
9.5.3	Lighting Systems	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.5	Emergency Diesel Engine Cooling Water System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.6	Emergency Diesel Engine Starting System	Rev. 3	Mar-07		Not applicable to the ESBWR
9.5.7	Emergency Diesel Engine Lubrication System	Rev. 3	Mar-07		Not applicable to the ESBWR

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
9.5.8	Emergency Diesel Engine Combustion Air Intake and Exhaust System	Rev. 3	Mar-07		Not applicable to the ESBWR
10.2	Turbine Generator	Rev. 3	Mar-07	II.1.A, II.1.B	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2	Turbine Generator (continued)			II.1.C	<p>Exception—The Turbine Generator Set (TGS) has the capability to permit periodic testing of all components important to safety while the unit is at or above rated speed. In DCD Section 10.2.2.7, a list of components that may be tested with the unit at load is provided. However, some load reduction may be necessary before testing main stop and control valves, and intermediate stop and intercept valves (see DCD Section 10.2.3.7). Overspeed trip testing is performed at speed levels greater than or equal to rated speed with no electrical load. Thus, not all components are capable of being tested at rated load as required in the corresponding Acceptance Criterion.</p> <p>Load reduction for turbine valve testing is common in the existing fleet of power reactors and is considered acceptable. Testing at turbine loads below the rated load condition is considered an acceptable means of confirming that equipment relied on to prevent turbine overspeed related failures is available and capable of providing required functions. Further, component redundancies, as described in DCD Section 10.2.2.4, ensure that a single failure of any of the above valves important to safety will not disable the function of the overspeed protection system.</p>

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2	Turbine Generator (continued)			II.2.A	<p>Exception—Inservice inspection of main steam and reheat valves is discussed in DCD Sections 10.2.2.7 and 10.2.3.7. The first disassembly and visual inspection of all main stop valves, main control valves, intermediate stop, and intercept valves are performed within the first three refueling shutdowns. However, the interval for subsequent inspections may be extended beyond the SRP interval of 3-1/3 years to an interval consistent with applicable industry guidance, subject to the requirements of the turbine missile probability analysis. The inspection interval may not exceed the requirements or assumptions in the turbine missile probability analysis. Further, inspection intervals are only extended if there are no significant findings in the initial (baseline) inspections. Thus, with the above provisions, extending the inspection interval beyond the SRP interval is considered acceptable.</p>
				II.2.B, II.3	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.2.3	Turbine Rotor Integrity	Rev. 2	Mar-07	II.1, II.2	Conforms
				II.3.A	Exception - DCD Section 10.2.3.5 states that, "Forgings are rough-machined with minimum stock allowance prior to heat treatment." This statement meets the intent of the corresponding SRP Acceptance Criterion. The exception to the Acceptance Criterion is introduced with the reference to welded rotors. The GE N3R-6F52 steam turbine selected for this site utilizes integral forgings in the rotor design and fabrication. Although other manufacturers produce welded rotors, the GE N3R-6F52 rotor is not a welded rotor design and does not utilize welding to construct the base rotor. Flaws in the forging may be repaired by welding and other means, but only after heat treatment. Thus, the intent of this Acceptance Criterion is met.
				II.3.B, II.3.C, II.3.D, II.4, II.5	Conforms
10.3	Main Steam Supply System	Rev. 4	Mar-07	II.1, II.2, II.3, II.4A, II.5, II.6, II.7, II.8	Conforms
				II.4B	Not applicable to the ESBWR
10.3.6	Steam and Feedwater System Materials	Rev. 3	Mar-07	II.1, II.2	Conforms
10.4.1	Main Condensers	Rev. 3	Mar-07	II.1	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.4.2	Main Condenser Evacuation System	Rev. 3	Mar-07	II.1	Exception: ESBWR design is based on "Standards for Steam Surface Condensers," 10 th Ed., Heat Exchanger Institute (2006)
10.4.3	Turbine Gland Sealing System	Rev. 3	Mar-07		Conforms
10.4.4	Turbine Bypass System	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms
10.4.5	Circulating Water System	Rev. 3	Mar-07	II.1	Conforms
10.4.6	Condensate Cleanup System	Rev. 3	Mar-07	II.1	Conforms
				II.2	Not applicable to the ESBWR
10.4.7	Condensate and Feedwater System	Rev. 4	Mar-07	II.1, II.2.B, II.3, II.4, II.5, II.6	Conforms
				II.2.A	Not applicable to the ESBWR
				II.7	Exception: This SRP acceptance criterion states that guidance for acceptable FAC inspection programs "is found in (NRC) Generic Letter 89-08 and in EPRI NP-3944." EPRI document NSAC-202L, Rev. 2, supersedes EPRI NP-3944 and is therefore referenced in place of EPRI NP-3944 in DCD Section 6.6.7, for guidance regarding FAC (erosion corrosion) monitoring and related inspection programs. The more recent document, EPRI NSAC-202L, utilizes more extensive industry experience and improved inspection methods and modeling. The substitution of EPRI NSAC-202L, Rev. 2, in place of EPRI NP-3944 is therefore acceptable.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
10.4.7	Condensate and Feedwater System (Continued)			II.8	Conforms. Addressed in DCD Sections 3.9.3, 5.2.4, and 10.4.7, and DCD Tables 1.9-22 and 1.11-1.
10.4.8	Steam Generator Blowdown System (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
10.4.9	Auxiliary Feedwater System (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 10-1	Design Guidelines for Auxiliary Feedwater System Pump Drive and Power Supply Diversity for Pressurized Water Reactor Plants	Rev. 3	Mar-07		Not applicable to the ESBWR
BTP 10-2	Design Guidelines for Avoiding Water Hammers in Steam Generators	Rev. 4	Mar-07		Not applicable to the ESBWR
11.1	Source Terms	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.6, II.7, II.8, II.9	Conforms. For acceptance criteria II.9, an alternate computer code to the BWR GALE code is used as described in the DCD. Addressed in DCD Section 12.2 and in FSAR Section 12.2 .
				II.5	Conforms. Addressed in Section 11.2 and 11.3
11.2	Liquid Waste Management System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms. Addressed in DCD Sections 11.2 and 12.2, and in Section 11.2 and 12.2 .
				II.6	Not applicable. Applies to ESP applications.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
11.3	Gaseous Waste Management System	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms. Addressed in DCD Sections 11.3 and 12.2, and in Section 11.2 and 12.2 .
				II.8	Not applicable. Applies to ESP applications.
11.4	Solid Waste Management System	Rev. 3	Mar-07	II.1, II.2, II.5, II.7, II.8, II.9, II.10, II.14	Conforms.
				II.3, II.4, II.6, II.11, II.12, II.13	Conforms (addressed in DCD Section 11.4 and in Section 11.4 ; for Acceptance Criterion II.13, this is also addressed in Section 11.5) with the following exception: RG 1.206, Section 13.4 includes the PCP as an operational program, and only requires a program description in the COLA and a milestone for full program implementation. The FSAR provides a description of the PCP, along with the implementation milestone. Procedures for handling waste will be developed once the PCP is implemented.
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems	Rev. 4	Mar-07	II.1, II.2	Conforms (addressed in DCD Section 11.5.2) with the following exception: Procedural controls are based on NQA-1, rather than RG 1.33, as described in Section 13.5 . Quality Assurance Program requirements are addressed in Section 17.5 .

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems (Continued)			II.3, II.4, II.5	Conforms (addressed in DCD Sections 11.5.2 and 11.5.3, and in Section 11.5) with the following exceptions: 1) RG 1.206, Section 13.4 includes the ODCM (including the SREC) and PCP as operational programs, and only requires program descriptions in the COLA and milestones for full program implementation. The FSAR provides descriptions of the PCP and ODCM along with implementation milestones. 2) Procedural controls are based on NQA-1, rather than RG 1.33, as described in Section 13.5 . Quality Assurance Program requirements are addressed in Section 17.5 . Conformance with NUREG-0718 is addressed in DCD Table 1.9-8.
				II.6	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
BTP 11-3	Design Guidance for Solid Radioactive Waste Management Systems Installed in Light-Water-Cooled Nuclear Power Reactor Plants	Rev. 3	Mar-07	B.1,B.3, B.5 B.2, B.4	Conforms Conforms (addressed in DCD Section 11.4 and in Section 11.4 ; for Acceptance Criterion II.13, this is also addressed in Section 11.5) with the following exception: RG 1.206, Section 13.4 includes the PCP as an operational program, and only requires a program description in the COLA and a milestone for full program implementation. The FSAR provides a description of the PCP, along with the implementation milestone. Procedures for handling waste will be developed once the PCP is implemented.
BTP 11-5	Postulated Radioactive Releases Due to a Waste Gas System Leak or Failure	Rev. 3	Mar-07		Conforms. Addressed in DCD Section 11.3.
BTP 11-6	Postulated Radioactive Releases Due to Liquid-containing Tank Failures	Rev. 3	Mar-07		Conforms. Addressed in DCD Section 15.3.16 and in Subsection 2.4.13 .
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable	Rev. 3	Mar-07	II.1, II.2, II.3, II.4	Conforms. Addressed in Section 13.2 , and Appendix 12AA and Appendix 12BB .

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
12.2	Radiation Sources	Rev. 3	Mar-07	II.1	Not applicable. Acceptance criterion cites RG 1.3. SRP states RG 1.3 is applicable to license holders issued prior to January 10, 1997. COL applicant is not a license holder.
				II.2	Not applicable to the ESBWR
				II.3	Conforms. Addressed in DCD Sections 12.3 and 15.4 and in Section 6.4 .
				II.4	Conforms. Addressed in DCD Sections 12.3.
				II.5	Conforms
				II.6	Conforms. Addressed in DCD Appendix 1A and DCD Section 12.2.
				II.7	Conforms. Addressed in DCD Section 12.2.
12.3–12.4	Radiation Protection Design Features	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
12.5	Operational Radiation Protection Program	Rev. 3	Mar-07	II.1	Conforms with the following exceptions: 1) NUREG-0731 is not active, and is not utilized; 2) RG 8.8 specifies the use of RG 1.16. Reporting per C.1.b(2) and C.1.b(3) of RG 1.16 is no longer required.
				II.2.A, II.2.B, II.2.C, II.2.D, II.2.E.i, II.2.E.ii, II.2.E.iii, II.2.E.iv, II.2.F, II.2.G, II.2.H, II.4	Conforms
				II.2.E.v	Conforms with the following exception: NUREG-1736 states that RGs 8.20, 8.26, and 8.32 are outdated and recommends use of the methods in RG 8.9, Rev. 1. Therefore, the methods identified in RG 8.9, Rev. 1 will be used in place of those in RGs 8.20, 8.26, and 8.32.
				II.3	Conforms with the following exceptions: 1) RG 8.25 is not applicable to power stations; 2) NUREG-1736 states that RGs 8.20, 8.26, and 8.32 are outdated and recommends use of the methods in RG 8.9, Rev. 1; and 3) RP program and procedures are established, implemented, maintained, and reviewed under the QA Program described in Section 17.5 .

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.1.1	Management and Technical Support Organization	Rev. 5	Mar-07	II.1.A, B, D, II.2.A.i through II.2.A.v	Conforms.
				II.1.C	Exception: The experience requirements of corporate staff are set by corporate policy and not provided in detail; however, the experience level of Detroit Edison, as discussed in Section 13.1 and Appendix 13AA , in the area of nuclear plant development, construction, and management establishes that Detroit Edison has the necessary capability and staff to ensure that design and construction of the facility will be performed in an acceptable manner.
				II.2.A.vi, II.2.A.vii	Conforms. Addressed in Section 13.1 and 14.2 .
				II.2.A.viii	Not applicable. Only applies to applicants whose applications were pending as of February 16, 1982.
13.1.2–13.1.3	Operating Organization	Rev. 6	Mar-07	General 1	Conforms.
13.1.2–13.1.3	Operating Organization (Continued)			General 2, General 3	Conforms
				General 4	Not applicable. There are no requests for exemptions from the requirements of 10 CFR 50.54(m).

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
				II.1.A, II.1.B	Conforms with the following exception: Section 17.5 states, “The operational phase quality assurance program requirements will be established through the Company’s commitment to ANSI/ASME NQA-1-1994 as described within this QAPD. This edition of NQA-1 contains overall quality assurance requirements equivalent to those of ANSI N18.7-1976, and the Company has included within this QAPD the required administrative controls from ANSI N18.7-1976. Therefore, the Company does not commit to compliance with the requirements of ANSI N18.7-1976/ANS-3.2.”
				II.1.A.i through II.1.A.v, II.1.C, II.1.D, II.1.E, II.1.F, II.1.G	Conforms
				II.1.H	Conforms. Addressed in Section 13.2 .
13.2.1	Reactor Operator Requalification Program: Reactor Operator Training	Rev. 3	Mar-07	II.1.A.i	Conforms. Addressed in Section 13.1 .
				II.1.A.ii, II.1.A.iii, II.1.A.v, II.1.B, II.1.D, II.1.E	Conforms

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.2.1	Reactor Operator Requalification Program: Reactor Operator Training (Continued)			II.1.A.iv	Conforms. Addressed in Section 13.1 , 13.2 , and 17.5 .
				II.1.A.vi	Conforms. Addressed in DCD Chapter 18.
				II.1.A.vii	Exception: The COLA incorporates by reference approved industry template NEI 06-13, which does not address compliance with NUREG-1021.
				II.1.C	Exception: This item states that “formal segments of the initial licensed operator training program should be substantially complete when the pre-operational program test begins.” Appendix 13BB commits to a similar state of readiness: “Before initial fuel loading, the number of persons trained in preparation for RO and SRO licensing examinations will be sufficient to meet regulatory requirements, with allowances for examination contingencies and without the need for planned overtime.”
13.2.2	Non-Licensed Plant Staff Training	Rev. 3	Mar-07	II.1, II.2, II.3, II.4, II.5, II.7, II.8, II.9	Conforms.

Table 1.9-201 Conformance with Standard Review Plan (Sheet 38 of 48)

[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.2.2	Non-Licensed Plant Staff Training (Continued)			II.6	Exception. This item states that “formal segments of the initial training program should be substantially complete when the pre-operational test program begins.” Appendix 13BB commits to a similar state of readiness: “Before initial fuel loading, sufficient plant staff will be trained to provide for safe plant operations.”
				II.10	Conforms. Addressed in DCD Section 9.5.1.
				II.11	Conforms. Addressed in Sections 13.2 and 13.4
13.3	Emergency Planning	Rev. 3	Mar-07	II.1, II.2,	Conforms. Addressed in Section 13.4 , COLA Part 5, and COLA Part 10.
				II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II.11, II.12, II.13, II.17, II.18, II.27, II.28, II.29, II.30	Conforms. Addressed in COLA Part 5.
				II.14	Not applicable. Allows NRC to issue a license when applicant asserts that noncompliance with offsite EP requirements is because state or local government has declined to participate in emergency planning.
				II.15, II.16, II.19, II.20, II.21	Not applicable. Only applies to ESP applications.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.3	Emergency Planning (Continued)			II.22	Not applicable. Only applies to design certification applications.
				II.23, II.24	Conforms. Addressed in COLA Part 10.
				II.25	Conforms. Addressed in DCD Section 13.3 and COLA Part 5. The Fermi 2 EOF will be used for Fermi 3.
				II.26	Conforms. Reviewed under SRPs 7.5 and 18.2.
				II.31	Conforms. Addressed in Section 13.4
13.4	Operational Programs	Rev. 3	Mar-07		Conforms
13.5.1.1	Administrative Procedures - General	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
				II.8	Section 13.5 and DCD Section 18.9 discuss conformance with NUREG-0711
				II.9, II.10, II.11, II.12, II.13, II.14, II.15, II.16, II.17, II.18, II.19, II.20	Conforms
13.5.2.1	Operating and Emergency Operating Procedures	Rev. 2	Mar-07	II.1	Conforms
				II.2.A, II.2.B	Conforms
				II.2.C	Section 13.5 and DCD Section 18.9 discuss conformance with NUREG-0711
				II.2.D, II.2.E, II.2.F, II.2.G, II.2.H, II.2.I	Conforms
13.6	Physical Security	Rev. 3	Mar-07		Addressed in COLA Part 8.

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[EF3 COL 1.9-3-A]

SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
13.6.1	Physical Security - Combined License Review Responsibilities	Initial Issuance	Mar-07		Addressed in COLA Part 8.
13.6.2	Physical Security - Design Certification	Initial Issuance	Mar-07		Not applicable. Applies to design certification applications.
13.6.3	Physical Security - Early Site Permit	Initial Issuance	Mar-07		Not applicable. Applies to ESP applications.
14.2	Initial Plant Test Program - Design Certification and New License Applicants	Rev. 3	Mar-07	1A, 1B, 1C, 2A, COL/OL Applicants: 3A, 3B, 3C, 3D, 3E, 3F, 3G, 3H, 4A, 4B, 5A, 5B, 5C, 5D, 6A, 6B, 6C	Conforms with the following exception: Refer to Table 1.9-202 for exceptions to RG 1.68.
				DC Applicants: 3A, 3B, 3C, 3D, 4A, 6A, 6B, 6C	Not applicable. Applies to DC applicants.
14.2.1	Generic Guidelines for Extended Power Uprate Testing Programs	Initial Issuance	Aug-06		Not applicable. Applies to power uprates.
14.3	Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2	Conforms
14.3.1	[Reserved]	[Reserved]	Mar-07		Not used
14.3.2	Structural and Systems Engineering - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9, II.10, II. 11	Conforms
14.3.3	Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2.A, II.2.B, II.2.C, II.2.D, II.2.E	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
14.3.4	Reactor Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
14.3.5	Instrumentation and Controls - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
14.3.6	Electrical Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	Class 1E Equipment: II.1, II.2, II.3, II.4, II.5 Other Electrical Equipment Important to Safety: II.1, II.2, II.3, II.4, II.5	Conforms
14.3.7	Plant Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7, II.8, II.9	Conforms
14.3.8	Radiation Protection - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3	Conforms
14.3.9	Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
14.3.10	Emergency Planning - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2	Conforms
14.3.11	Containment Systems - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4, II.5	Conforms
14.3.12	Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria	Initial Issuance	Mar-07	II.1	Conforms
15	Introduction - Transient and Accident Analyses	Rev. 3	Mar-07	I.1, I.2, I.3, I.4, I.5, I.6	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.0.1	Radiological Consequence Analyses Using Alternative Source Terms	Rev. 0	Jul-00	V	Conforms
15.0.2	Review of Transient and Accident Analysis Method	Rev. 0	Dec-05	II.1, II.2, II.3, II.4, II.5, II.6	Conforms
15.0.3	Design Basis Accident Radiological Consequences of Analyses for Advanced Light Water Reactors	Initial Issuance	Mar-07		Conforms
15.1.1– 15.1.4	Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief or Safety Valve	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, 1, 2, 3, 4	Conforms
15.1.5	Steam System Piping Failures Inside and Outside of Containment (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
15.1.5.A	Radiological Consequences of Main Steam Line Failures Outside Containment of a PWR				Not applicable to the ESBWR
15.2.1– 15.2.5	Loss of External Load; Turbine Trip; Loss of Condenser Vacuum; Closure of Main Steam Isolation Valve (BWR); and Steam Pressure Regulator Failure (Closed)	Rev. 2	Mar-07	II.1A, II.1B, II.1C, II.1D, II.2A, II.2B, II.2C, II.2D, II.2E, II.2F, II.3A, II.3B, II.3C, II.3D	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.2.6	Loss of Nonemergency AC Power to the Station Auxiliaries	Rev. 2	Mar-07	II.1, II.2, II.3, II.4, II.5, II.5B, II.5C, II.5D	Conforms
				II.5A	Not applicable. There are no RCS loops in the ESBWR.
15.2.7	Loss of Normal Feedwater Flow	Rev. 2	Mar-07	II.1A, II.1B, II.1C, II.1D, II.2A, II.2B, II.2C, II.2D, II.2E, II.2F, II.3A, II.3B, II.3C, II.3D	Conforms
15.2.8	Feedwater System Pipe Breaks Inside and Outside Containment (PWR)	Rev. 2	Mar-07		Not applicable to the ESBWR
15.3.1– 15.3.2	Loss of Forced Reactor Coolant Flow Including Trip of Pump Motor and Flow Controller Malfunctions	Rev. 2	Mar-07		Not applicable to the ESBWR
15.3.3– 15.3.4	Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break	Rev. 3	Mar-07		Not applicable to the ESBWR
15.4.1	Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup Condition	Rev. 3	Mar-07	II.1A, II.1C	Conforms
				II.1B	Not applicable to the ESBWR
15.4.2	Uncontrolled Control Rod Assembly Withdrawal at Power	Rev. 3	Mar-07	II.1A, II.1C	Conforms
				II.1B	Not applicable to the ESBWR
15.4.3	Control Rod Misoperation (System Malfunction or Operator Error)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.4.4 - 15.4.5	Startup of an Inactive Loop or Recirculation Loop at an Incorrect Temperature, and Flow Controller Malfunction Causing an Increase in BWR Core Flow Rate	Rev. 2	Mar-07	II.1A, II.1B, II.1C, II.1D, II.1E, II.1F, II.1, II.2, II.3, II.4	Not applicable, ESBWR does not have forced recirculation systems.
15.4.6	Inadvertent Decrease in Boron Concentration in the Reactor Coolant System (PWR)	Rev. 2	Mar-07		Not applicable to the ESBWR
15.4.7	Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position	Rev. 2	Mar-07	II.1, II.2	Conforms
15.4.8	Spectrum of Rod Ejection Accidents (PWR)	Rev. 3	Mar-07		Not applicable to the ESBWR
15.4.8.A	Radiological Consequences of a Control Rod Ejection Accident (PWR)				Not applicable to the ESBWR
15.4.9	Spectrum of Rod Drop Accidents (BWR)	Rev. 3	Mar-07	II.1, II.2, II.3	Conforms. Postulated events are not applicable to the ESBWR.
15.4.9.A	Radiological Consequences of Control Rod Drop Accident (BWR)	Rev 2	July 81		Conforms. Postulated control rod drop events are not applicable to the ESBWR.
15.5.1– 15.5.2	Inadvertent Operation of ECCS and Chemical and Volume Control System Malfunction that Increases Reactor Coolant Inventory	Rev. 2	Mar-07	II.1, II.2, II.3	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.6.1	Inadvertent Opening of a PWR Pressurizer Pressure Relief Valve or a BWR Pressure Relief Valve	Rev. 2	Mar-07	II.1, II.2, II.3, II.A, II.B, II.C, II.D	Conforms
15.6.2	Radiological Consequences of the Failure of Small Lines Carrying Primary Coolant Outside Containment	Rev. 2	Jul-81	II.1, II.2	Conforms
15.6.3	Radiological Consequences of Steam Generator Tube Failure				Not applicable to the ESBWR
15.6.4	Radiological Consequences of Main Steam Line Failure Outside Containment (BWR)	Rev. 2	Jul-81	II.1, II.2, II.3	Conforms
				II.4	Conforms. Addressed in TS 3.4.3.
15.6.5	Loss-of-Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary	Rev. 3	Mar-07	II.1A, II.1B, II.1C, II.1D, II.1.E, II.2, II.3	Conforms.
15.6.5.A	Radiological Consequences of a Design Basis Loss-of-Coolant Accident Including Containment Leakage Contribution	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20.
15.6.5.B	Radiological Consequences of a Design Basis Loss-of-Coolant Accident: Leakage From Engineered Safety Feature Components Outside Containment	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20.

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
15.6.5.D	Radiological Consequences of a Design Basis Loss-of-Coolant Accident: Leakage From Main Steam Isolation Valve Leakage Control System (BWR)	Rev 1	July 81		Not Applicable. Reference DCD Table 1.9-20.
15.7.3	Postulated Radioactive Releases Due to Liquid-Containing Tank Failures			II.1, II.2	Conforms
15.7.4	Radiological Consequences of Fuel Handling Accidents	Rev. 2	Jul-81	II.1, II.2, II.3, II.4, II.5	Conforms. Radiological assumptions superseded by SRP 15.0.1.
15.7.5	Spent Fuel Cask Drop Accidents	Rev. 2	July 81	II.1, II.2, II.3, II.4, II.5	Conforms. Because a spent fuel cask drop exceeding 9.2 m (30 ft) is not postulated (DCD Section 15.4.10.1), per SRP 15.7.5 a design basis radiological analysis is not required. Therefore, the acceptance criteria do not apply even though the SRP does.
15.8	Anticipated Transients Without Scram	Rev. 2	Mar-07	II.1A	Not applicable. ESBWR does not have recirculation pumps.
				II.1B, II.1C, II.1D, II.1E, II.1F	Conforms
15.9	Boiling Water Reactor Stability	Initial Issuance	Mar-07	II.1, II.2, II.3, II.4A, II.4B, II.5, II.6, II.7, II.8, II.9A, II.9B, II.9C, II.9D, II.10, II.11	Conforms
16	Technical Specifications	Rev. 2	Mar-07		Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
16.1	Risk-informed Decision Making: Technical Specifications	Rev. 1	Mar-07		Not applicable
17.1	Quality Assurance During the Design and Construction Phases	Rev. 2	Jul-81		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.
17.2	Quality Assurance During the Operations Phase	Rev. 2	Jul-81		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.
17.3	Quality Assurance Program Description	Rev. 0	Aug-90		Not applicable. RG 1.206 refers the COL applicant to Section 17.5 for the format and content of a QA Program for design and construction of new plants.
17.4	Reliability Assurance Program (RAP)	Initial Issuance	Mar-07	II.B.1, II.B.2, II.B.3, II.B.4, II.B.5, II.B.6, II.B.7, II.B.8, II.B.9	Conforms. Addressed in DCD Section 17.4 and in Section 17.6 .
17.5	Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants	Initial Issuance	Mar-07	II.A, II.B, II.C, II.D., II.E, II.F, II.G, II.H, II.I, II.J, II.K, II.L, II.M, II.N, II.O, II.P, II.Q, II.R, II.S, II.T, II.U, II.V, II.W Option 1	Conforms
				II.W Option II	Not applicable for Fermi 3. Option I chosen.
17.6	Maintenance Rule	Rev. 1	Aug-07	II.1, II.2	Conforms

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SRP Section	Title	Rev	Date	Specific Acceptance Criteria	Evaluation
18	Human Factors Engineering	Rev. 2	Mar-07	II.A	Conforms
				II.B, II.C	Not applicable. These acceptance criteria apply to changes to existing plants.
19.0	Probabilistic Risk Assessment and Severe Accident Evaluation for New Reactors	Rev. 2	Jun-07	II.1, II.2, II.3, II.4, II.5, II.6, II.7	Conforms
				II.8, II.9	Not applicable. Only applies to Westinghouse AP 600 design.
19.1	Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities	Rev. 2	Jun-07		Not applicable. There are no plans for risk-informed activities.
19.2	Review of Risk Information Used to Support Permanent Plant Specific Changes to the Licensing Basis: General Guidelines	Initial Issuance	Jun-07		Not applicable. There are no plans for risk-informed applications.

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.1	Net Positive Suction Head for Emergency Core Cooling and Containment Heat Removal System Pumps	Rev. 0	Nov-70	General	Not applicable
1.3	Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors	Rev. 2	Jun-74	General	Not applicable. RG 1.183 is used.
1.4	Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors	Rev. 2	Jun-74	General	Not applicable
1.5	Assumptions Used for Evaluating the Potential Radiological Consequences of a Steam Line Break Accident for Boiling Water Reactors	Rev. 0	Mar-71	General	Not applicable. RG 1.183 is used.
1.6	Independence Between Redundant Standby (Onsite) Power Sources and Between Their Distribution Systems	Rev. 0	Mar-71	General	The ESBWR Standard Plant does not need or have any safety-related standby AC power sources. RG 1.6 is only applicable as applied to the safety-related DC power sources and to the nonsafety-related onsite and offsite power sources as related to independence and redundancy between their sources and distribution systems.
1.7	Control of Combustible Gas Concentrations in Containment	Rev. 3	Mar-07	General	Conforms
1.8	Qualification and Training of Personnel for Nuclear Power Plants	Rev. 3	May-00		See App 17AA, QAPD, Part IV

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.9	Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants	Rev. 4	Mar-07	General	Not applicable
1.11	Instrument Lines Penetrating Primary Reactor Containment (Safety Guide 11) Supplement to Safety Guide 11, Backfitting Considerations	Rev. 0	Feb-72	C.1, C.2, E	Conforms
1.12	Nuclear Power Plant Instrumentation for Earthquakes	Rev. 2	Mar-97	C.1, C.4 – C.7, C.3, C.8	Conforms Conforms. The seismic monitoring program, including the necessary test and operating procedures, will be implemented prior to receipt of fuel on site.
1.13	Spent Fuel Storage Facility Design Basis	Rev. 2	Mar-07	General	Conforms
1.14	Reactor Coolant Pump Flywheel Integrity	Rev. 1	Aug-75	General	Not applicable
1.16	Reporting of Operating Information—Appendix A Technical Specifications	Rev. 4	Aug-75	General	Conforms with the following exceptions: Reporting per C.1.b(2) and C.1.b(3) is no longer required.
1.20	Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing	Rev. 3	Mar-07	C.1 C.2 C.3	Conforms. Conforms. Conforms.
1.21	Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants	Rev. 1	Jun-74	General	Conforms. Subsection 11.4.2.3 (NEI 07-10A) and Subsection 11.5.4.5 (NEI 07-09A) provide descriptions of the PCP and ODCM, respectively. Implementation milestones are provided in Section 13.4 .

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.22	Periodic Testing of Protection System Actuation Functions	Rev. 0	Feb-72	General	Conforms. Operational program implementation is described in Section 13.4 .

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.23	Meteorological Monitoring Programs For Nuclear Power Plants	Rev. 1	Mar-07	General	<p>Exception: The meteorological monitoring program for pre-operational and operational phases complies with RG 1.23, Rev. 1. The meteorological monitoring program used for pre-application complies for the most part, with RG 1.23, Revision 0 and Draft Revision 1 (Sept. 1980). Specific areas where the pre-application monitoring program do not comply with RG 1.23 Rev. 1, are discussed in Subsection 2.3.3.1. Specific areas where the pre-application monitoring program do not comply with RG 1.23, Rev. 0, and Draft Ref. 1 (1980), and also do not comply with RG 1.23, Rev. 1 (2007), are as follows: The RG in part requires that sensors should be located at a distance of at least 10 times the height of any nearby obstruction if the height of the obstruction exceeds one-half the height of the wind measurement. This criterion is not met for the existing meteorological tower at Fermi 2 and relocation of the tower would be required for construction of Fermi 3 (Refer to Subsection 2.3.3.1.1). In addition, the proximity of trees to the existing meteorological tower does not meet this criterion. This is addressed in Subsection 2.3.3.1.6. Calibration of wind direction sensor does not include test for starting threshold. Refer to Subsection 2.3.3.1.3 for discussion.</p>

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.24	Assumptions Used for Evaluating the Potential Radiological Consequences of a Pressurized Water Reactor Radioactive Gas Storage Tank Failure	Rev. 0	Mar-72	All	Not applicable
1.25	Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors	Rev. 0	Mar-72	General	Not applicable. RG 1.183 is used.
1.26	Quality Group Classifications and Standards of Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants	Rev. 4	Mar-07		See App 17AA, QAPD, Part IV
1.27	Ultimate Heat Sink for Nuclear Power Plants	Rev. 2	Jan-76	General	The UHS is within the scope of the referenced certified design and is addressed in DCD Section 9.2.5.
1.28	Quality Assurance Program Requirements (Design and Construction)	Rev. 3	Aug-85		See App 17AA, QAPD, Part IV
1.29	Seismic Design Classification	Rev. 4	Mar-07		See App 17AA, QAPD, Part IV
1.30	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment	Rev. 0	Aug-72	General	Exception: The QAPD identified in Section 17.5 addresses a QA program based on a newer NQA-1-1994, as discussed in SRP 17.5.
1.31	Control of Ferrite Content in Stainless Steel Weld Metal	Rev. 3	Apr-78	General	Conforms. Operational program implementation is described in Section 13.4 .

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.32	Criteria for Power Systems for Nuclear Power Plants	Rev. 3	Mar-04	General	Conforms.
1.33	Quality Assurance Program Requirements (Operation)	Rev. 2	Feb-78		See App 17AA, QAPD, Part IV
1.34	Control of Electroslag Weld Properties	Rev. 0	Dec-72	General	Conforms. Operational program implementation is described in Section 13.4
1.35	Inservice Inspection of UngROUTED Tendons in Prestressed Concrete Containments	Rev. 3	Jul-90	General	Not applicable
1.35.1	Determining Prestressing for Inspection of Prestressed Concrete Containments	Rev. 0	Jul-90	General	Not applicable
1.36	Nonmetallic Thermal Insulation for Austenitic Stainless Steel	Rev. 0	Feb-73	General	Conforms. Operational program implementation is described in Section 13.4
1.37	Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants	Rev. 1	Mar-07		See App 17AA, QAPD, Part IV
1.38	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants	Rev. 2	May-77	General	Exception. Section 17.5 identifies equivalent quality assurance standards.
1.39	Housekeeping Requirements for Water-Cooled Nuclear Power Plants	Rev. 2	Sep-77	General	Exception. Section 17.5 identifies equivalent quality assurance standards.
1.40	Qualification Tests of Continuous-Duty Motors Installed Inside the Containment of Water-Cooled Nuclear Power Plants	Rev. 0	Mar-73	General	Conforms

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.41	Preoperational Testing of Redundant On-Site Electric Power Systems to Verify Proper Load Group Assignments	Rev. 0	Mar-73	General	Conforms with the following exception: There are no safety-related DGs for ESBWR.
1.43	Control of Stainless Steel Weld Cladding of Low-Alloy Steel Components	Rev. 0	May-73	General	Conforms
1.44	Control of the Use of Sensitized Stainless Steel	Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .
1.45	Reactor Coolant Pressure Boundary Leakage Detection Systems	Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .
1.47	Bypassed and Inoperable Status Indication for Nuclear Power Plant Safety Systems	Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4 .
1.50	Control of Preheat Temperature for Welding of Low-Alloy Steel	Rev. 0	May-73	General	Conforms. Operational program implementation is described in Section 13.4
1.52	Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants	Rev. 3	Jun-01	General	Conforms
1.53	Application of the Single-Failure Criterion to Safety Systems	Rev. 2	Nov-03	General	Conforms
1.54	Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants	Rev. 1	Jul-00		See App 17AA, QAPD, Part IV
1.56	Maintenance of Water Purity in Boiling Water Reactors	Rev. 1	Jul-78	General	Conforms.

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.57	Design Limits and Loading Combinations for Metal Primary Reactor Containment System Components	Rev. 1	Mar-07	General	Conforms
1.59	Design Basis Floods for Nuclear Power Plants (Errata Published 7/30/80)	Rev. 2	Aug-77	General	Conforms
1.60	Design Response Spectra for Seismic Design of Nuclear Power Plants	Rev. 1	Dec-73	General	Conforms
1.61	Damping Values for Seismic Design of Nuclear Power Plants	Rev. 1	Mar-07	General	Conforms
1.62	Manual Initiation of Protective Actions	Rev. 0	Oct-73	General	Conforms
1.63	Electric Penetration Assemblies in Containment Structures for Nuclear Power Plants	Rev. 3	Feb-87	General	Conforms
1.65	Materials and Inspections for Reactor Vessel Closure Studs	Rev. 0	Oct-73	General	Conforms
1.68	Initial Test Programs for Water-Cooled Nuclear Power Plants	Rev. 3	Mar-07	General	Conforms with the following exception: Equipment listed in Appendix A, Items 1.k(2) and 1.k(3) not included in the initial test program.
1.68.1	Preoperational and Initial Startup Testing of Feedwater and Condensate Systems for Boiling Water Reactor Power Plants	Rev. 1	Jan-77	General	Conforms
1.68.2	Initial Startup Test Program to Demonstrate Remote Shutdown Capability for Water-Cooled Nuclear Power Plants	Rev. 1	Jul-78	General	Conforms
1.68.3	Preoperational Testing of Instrument and Control Air Systems	Rev. 0	Apr-82	General	Conforms

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.69	Concrete Radiation Shields for Nuclear Power Plants	Rev. 0	Dec-73	General	Conforms
1.70	Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants LWR Edition	Rev. 3	Nov-78	--	Not applicable. RG 1.206 is used. Table 1.9-203 .
1.71	Welder Qualification for Areas of Limited Accessibility	Rev. 1	Mar-07	General	Conforms. Operational program implementation is described in Section 13.4 .
1.72	Spray Pond Piping Made from Fiberglass-Reinforced Thermosetting Resin	Rev. 2	Nov-78	General	Not applicable
1.73	Qualification Tests of Electric Valve Operators Installed Inside the Containment of Nuclear Power Plants	Rev. 0	Jan-74	General	Conforms
1.75	Criteria for Independence of Electrical Safety Systems	Rev. 3	Feb-05	General	Conforms
1.76	Design Basis Tornado and Tornado Missiles for Nuclear Power Plants	Rev. 1	Mar-07	General	Conforms
1.77	Assumptions Used for Evaluating a Control Rod Ejection Accident for Pressurized Water Reactors	Rev. 0	May-74	General	Not applicable
1.78	Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release	Rev. 1	Dec-01	General	Conforms
1.79	Preoperational Testing of Emergency Core Cooling Systems for Pressurized Water Reactors	Rev. 1	Sep-75	General	Not applicable
1.81	Shared Emergency and Shutdown Electric Systems for Multi-Unit Nuclear Power Plants	Rev. 1	Jan-75	General	Not applicable

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.82	Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident	Rev. 3	Nov-03	General	Not applicable
1.83	Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes	Rev. 1	Jul-75	General	Not applicable
1.84	Design, Fabrication, and Materials Code Case Acceptability, ASME Section III	Rev. 34	Oct 07	General	Conforms. Code Case N-782,s also applied as described in the Comments Section for RG 1.84 in Table 1.9-21 of the DCD.
1.86	Termination of Operating Licenses for Nuclear Reactors	Rev. 0	Jun-74	General	This RG is outside the scope of the FSAR.
1.87	Guidance for Construction of Class 1 Components in Elevated-Temperature Reactors (Supplement to ASME Section III Code Cases 1592, 1593, 1594, 1595, and 1596)	Rev. 1	Jun-75	General	Not applicable
1.89	Environmental Qualification of Certain Electric Equipment Important to Safety for Nuclear Power Plants	Rev. 1	Jun-84	General	Conforms. Source terms from RG 1.183 used.
1.90	Inservice Inspection of Prestressed Concrete Containment Structures with Grouted Tendons	Rev. 1	Aug-77	General	Not applicable
1.91	Evaluations of Explosions Postulated to Occur on Transportation Routes Near Nuclear Power Plants	Rev. 1	Feb-78	General	Conforms
1.92	Combining Modal Responses and Spatial Components in Seismic Response Analysis	Rev. 2	Jul-06	General	Conforms

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.93	Availability of Electric Power Sources	Rev. 0	Dec-74	General	Conforms with the following exception: The ESBWR is designed to shut down safely without reliance on offsite or diesel-generator-derived AC power, therefore, the regulatory guide is only applicable to onsite safety-related DC power systems.
1.94	Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants	Rev. 1	Apr-76	General	Exception. Section 17.5 identifies equivalent QA standards in NQA-1, Subpart 2.5.
1.96	Design of Main Steam Isolation Valve Leakage Control Systems for Boiling Water Reactor Nuclear Power Plants	Rev. 1	Jun-76	General	Not applicable
1.97	Criteria for Accident Monitoring Instrumentation for Nuclear Power Plants	Rev. 4	Jun-06	General	Conforms. Operational program implementation is described in Section 13.4
1.98	Assumptions Used for Evaluating the Potential Radiological Consequences of a Radioactive Offgas System Failure in a Boiling Water Reactor	Rev. 0	Mar-76	General	Not applicable. Superseded by BTP 11-5.
1.99	Radiation Embrittlement of Reactor Vessel Materials	Rev. 2	May-88	General	Conforms. Operational program implementation is described in Section 13.4
1.100	Seismic Qualification of Electric and Mechanical Equipment for Nuclear Power Plants	Rev. 2	Jun-88	General	Conforms

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.101	Emergency Response Planning and Preparedness for Nuclear Power Reactors	Rev. 5	Jun-05	General	Conforms except Fermi 3 Emergency Plan utilizes NEI 07-01, Rev. 0 for EALs instead of Appendix 1 of NUREG-0654/FEMA-REP-1
1.102	Flood Protection for Nuclear Power Plants	Rev. 1	Sep-76	General	Conforms
1.105	Setpoints For Safety-Related Instrumentation	Rev. 3	Dec-99	General	Conforms. Operational program implementation is described in Section 13.4
1.106	Thermal Overload Protection for Electric Motors on Motor-Operated Valves	Rev. 1	Feb-77	General	Not applicable
1.107	Qualifications for Cement Grouting for Prestressing Tendons in Containment Structures	Rev. 1	Feb-77	General	Not applicable
1.109	Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I	Rev. 1	Oct-77	General	Conforms
1.110	Cost-Benefit Analysis for Radwaste Systems for Light-Water-Cooled Nuclear Power Reactors	Rev. 0	Mar-76	General	Conforms
1.111	Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors	Rev. 1	Jul-77	General	Conforms
1.112	Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light-Water-Cooled Nuclear Power Reactors	Rev. 1	Mar-07	General	Conforms except the suggested breakdown identified in Appendix A to the RG is not used because it is not consistent with the DCD presentation of information.

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.113	Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I	Rev. 1	Apr-77	General	Conforms
1.114	Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit	Rev. 2	May-89	General	Conforms
1.115	Protection Against Low-Trajectory Turbine Missiles	Rev. 1	Jul-77	General	Conforms
1.116	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems	Rev. 0	May-77	General	Exception: Section 17.5 identifies equivalent QA standards in NQA-1, Subpart 2.8.
1.117	Tornado Design Classification	Rev. 1	Apr-78	General	Conforms
1.118	Periodic Testing of Electric Power and Protection Systems	Rev. 3	Apr-95	General	Conforms. Operational program implementation is described in Section 13.4 .
1.121	Bases for Plugging Degraded PWR Steam Generator Tubes	Rev. 0	Aug-76	General	Not applicable
1.122	Development of Floor Design Response Spectra for Seismic Design of Floor-Supported Equipment or Components	Rev. 1	Feb-78	General	Conforms
1.124	Service Limits and Loading Combinations for Class 1 Linear-Type Supports	Rev. 2	Feb-07	General	Conforms
1.125	Physical Models for Design and Operation of Hydraulic Structures and Systems for Nuclear Power Plants	Rev. 1	Oct-78	General	Conforms
1.126	An Acceptable Model and Related Statistical Methods for the Analysis of Fuel Densification	Rev. 1	Mar-78	General	Conforms

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.127	Inspection of Water-Control Structures Associated with Nuclear Power Plants	Rev. 1	Mar-78	General	Conforms
1.128	Installation Design and Installation of Vented Lead-Acid Storage Batteries for Nuclear Power Plants	Rev. 2	Feb-07	General	Conforms
1.129	Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants	Rev. 2	Feb-07	General	Conforms
1.130	Service Limits and Loading Combinations for Class 1 Plate-and-Shell-Type Supports	Rev. 2	Mar-07	General	Conforms
1.131	Qualification Tests of Electric Cables, Field Splices, and Connections for Light-Water-Cooled Nuclear Power Plants	Rev. 0	Aug-77	General	Conforms
1.132	Site Investigations for Foundations of Nuclear Power Plants	Rev. 2	Oct-03	C.1, C.2, C.3, C.4.1 - C.4.2, C.4.4, C.5 - C.7 C4.3.2.5 C.4.5	Conforms. Properties of borrow materials not investigated. Cat I structures are on bedrock. Some borehole logging required reconciliation of final results
1.133	Loose-Part Detection Program for the Primary System of Light Water Cooled Reactors	Rev. 1	May-81	General	Not applicable

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.134	Medical Evaluation of Licensed Personnel for Nuclear Power Plants	Rev. 3	Mar-98	General	Conforms. Although RG 1.134 is not specifically identified in the FSAR, equivalent requirements for medical evaluations for licensed personnel are embedded in policies and procedures of operations and training departments.
1.135	Normal Water Level and Discharge at Nuclear Power Plants	Rev. 0	Sep-77	General	Not applicable. Water levels are determined per SRP 2.4.1 and ANS-2.8-1992.
1.136	Design Limits, Loading Combinations, Materials, Construction, and Testing of Concrete Containments	Rev. 3	Mar-07	General	Conforms
1.137	Fuel-Oil Systems for Standby Diesel Generators	Rev. 1	Oct-79	General	Not applicable
1.138	Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants	Rev. 2	Dec-03	General	Conforms
1.139	Guidance for Residual Heat Removal	Rev. 0	May-78	General	Conforms
1.140	Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Normal Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants	Rev. 2	Jun-01	General	Conforms. Operational program implementation is described in Section 13.4 .
1.141	Containment Isolation Provisions for Fluid Systems	Rev. 0	Apr-78	General	Conforms
1.142	Safety-Related Concrete Structures for Nuclear Power Plants (Other Than Reactor Vessels and Containments)	Rev. 2	Nov-01	General	Conforms

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.143	Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants	Rev. 2	Nov-01	General	Conforms. Operational program implementation is described in Section 13.4
1.145	Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants	Rev. 1	Feb-83	General	Conforms
1.147	Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1	Rev. 15	Oct 07	General	Conforms. Operational program implementation is described in Section 13.4 .
1.148	Functional Specification for Active Valve Assemblies in Systems Important to Safety in Nuclear Power Plants	Rev. 0	Mar-81	General	Conforms
1.149	Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations	Rev. 3	Oct-01	General	Conforms
1.150	Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations	Rev. 1	Feb-83	General	Conforms. Operational program implementation is described in Section 13.4 .
1.151	Instrument Sensing Lines	Rev. 0	Jul-83	General	Conforms. Operational program implementation is described in Section 13.4 .
1.152	Criteria for Use of Computers in Safety Systems of Nuclear Power Plants	Rev. 2	Jan-06	General	Conforms. Operational program implementation is described in Section 13.4
1.153	Criteria for Safety Systems	Rev. 1	Jun-96	General	Conforms
1.154	Format and Content of Plant-Specific Pressurized Thermal Shock Safety Analysis Reports for Pressurized Water Reactors	Rev. 0	Jan-87	General	Not applicable

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.155	Station Blackout	Rev. 0	Aug-88	General	Conforms, except no emergency AC power is required for the ESBWR. Only the coping analysis is applicable. Operational program implementation is described in Section 13.4
1.156	Environmental Qualification of Connection Assemblies for Nuclear Power Plants	Rev. 0	Nov-87	General	Conforms
1.157	Best-Estimate Calculations of Emergency Core Cooling System Performance	Rev. 0	May-89	General	Conforms
1.158	Qualification of Safety-Related Lead Storage Batteries for Nuclear Power Plants	Rev. 0	Feb-89	General	Conforms
1.159	Assuring the Availability of Funds for Decommissioning Nuclear Reactors	Rev. 1	Oct-03	General	Conforms. The amount of funds for decommissioning and the method of financial assurance is described in COLA Part 1.
1.160	Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Rev. 2	Mar-97	General	Conforms. Operational program implementation is described in Section 13.4 .
1.161	Evaluation of Reactor Pressure Vessels with Charpy Upper-Shelf Energy Less Than 50 Ft.-Lb.	Rev. 0	Jun-95	General	Not applicable.
1.162	Format and Content of Report for Thermal Annealing of Reactor Pressure Vessels	Rev. 0	Feb-96	General	This RG is outside the scope of the FSAR.
1.163	Performance-Based Containment Leak-Test Program	Rev. 0	Sep-95	General	Conforms
1.165	Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion	Rev. 0	Mar-97	General	Not Applicable. RG 1.165 has been withdrawn. RG 1.208 was used.

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.166	Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Postearthquake Actions	Rev. 0	Mar-97	General	Conforms. The seismic monitoring program, including the necessary test and operating procedures, will be implemented prior to receipt of fuel on site.
1.167	Restart of a Nuclear Power Plant Shut Down by a Seismic Event	Rev. 0	Mar-97	General	Not applicable.
1.168	Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 1	Feb-04	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.
1.169	Configuration Management Plans for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.
1.170	Software Test Documentation for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.
1.171	Software Unit Testing for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.
1.172	Software Requirements Specifications for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.
1.173	Developing Software Life Cycle Processes for Digital Computer Software Used in Safety Systems of Nuclear Power Plants	Rev. 0	Sep-97	General	Conforms. Procedures addressed in Section 13.5 ITAAC addressed in COLA Part 10.

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.174	An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis	Rev. 1	Nov-02	General	Not applicable. The approach described in this RG is not being used.
1.175	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing	Rev. 0	Aug-98	General	Not applicable. Risk informed inservice testing is not being used.
1.177	An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications	Rev. 0	Aug-98	General	Not applicable. Risk informed Technical Specifications are not being used.
1.178	An Approach For Plant-Specific Risk-informed Decisionmaking Inservice Inspection of Piping	Rev. 1	Sep-03	General	Not applicable. Risk informed inservice inspection is not being used.
1.179	Standard Format and Content of License Termination Plans for Nuclear Power Reactors	Rev. 0	Jan-99	General	This RG is outside the scope of the FSAR.
1.180	Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems	Rev. 1	Oct-03	General	Conforms. Operational program implementation is described in Section 13.4
1.181	Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e)	Rev. 0	Sep-99	General	Conforms
1.182	Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants	Rev. 0	May-00	General	Conforms
1.183	Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors	Rev. 0	Jul-00	General	Conforms

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.184	Decommissioning of Nuclear Power Reactors	Rev. 0	Jul-00	General	Not applicable. The RG provides guidance on how to conduct decommissioning activities.
1.185	Standard Format and Content for Post-Shutdown Decommissioning Activities Report	Rev. 0	Jul-00	General	This RG is outside the scope of the FSAR.
1.186	Guidance and Examples for Identifying 10 CFR 50.2 Design Bases	Rev. 0	Dec-00	General	This RG is outside the scope of the FSAR.
1.187	Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments	Rev. 0	Nov-00	General	Conforms.
1.188	Standard Format and Content for Applications to Renew Nuclear Power Plant Operating Licenses	Rev. 1	Sep-05	General	This RG is outside the scope of the FSAR.
1.189	Fire Protection for Nuclear Power Plants	Rev. 1	Mar-07	General	Conforms with the following exception. Section C.1.1.c of the RG states that during construction, on sites with an operating unit, the superintendent of the operating plant should have overall responsibility for fire protection. However, due to physical and administrative separation of Fermi 3 from the operating unit, the onsite executive in charge of construction will have overall responsibility for Fermi 3 fire protection during construction.
1.190	Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence	Rev. 0	Mar-01	General	Conforms. The reactor vessel material surveillance program is described in Subsection 5.3.1.8 . Implementation of the program is described in Section 13.4

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[EF3 COL 1.9-3-A]

RG Number	Title	Revision	Date	RG Position	Evaluation
1.191	Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown	Rev. 0	May-01	General	This RG is outside the scope of the FSAR.
1.192	Operation and Maintenance Code Case Acceptability, ASME OM Code	Rev. 0	Jun-03	General	Conforms. Operational program implementation is described in Section 13.4
1.193	ASME Code Cases Not Approved for Use	Rev. 2	Oct-07	General	Conforms
1.194	Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants	Rev. 0	Jun-03	General	Conforms
1.195	Methods and Assumptions for Evaluating Radiological Consequences of Design Basis Accidents at Light-Water Nuclear Power Reactors	Rev. 0	May-03	General	Not applicable. RG 1.183 is used.
1.196	Control Room Habitability at Light-Water Nuclear Power Reactors	Rev. 1	Jan-07	General	Conforms
1.197	Demonstrating Control Room Envelope Integrity at Nuclear Power Plant Reactors	Rev. 0	May-03	General	Conforms
1.198	Procedures and Criteria for Assessing Seismic Soil Liquefaction At Nuclear Power Plant Sites	Rev. 0	Nov-03	General	Conforms
1.199	Anchoring Components and Structural Supports in Concrete	Rev. 0	Nov-03	General	Conforms
1.200	An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities	Rev. 1	Jan-07	General	Not applicable

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.201	Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance	Rev. 1	May-06	General	Not applicable
1.202	Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors	Rev. 0	Feb-05	General	Not applicable. The RG provides guidance for submitting decommissioning cost estimates to NRC prior to license termination.
1.203	Transient and Accident Analysis Methods	Rev. 0	Dec-05	General	Conforms
1.204	Guidelines for Lightning Protection of Nuclear Power Plants	Rev. 0	Nov-05	General	Conforms. Operational program implementation is described in Section 13.4 .
1.205	Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants	Rev. 0	May-06	General	Not applicable. Risk-informed, performance-based fire protection is not used.
1.206	Combined License Applications for Nuclear Power Plants (LWR Edition)	Rev. 0	Jun-07	General	See Table 1.9-203 .
1.207	Guidelines for Evaluating Fatigue Analyses Incorporating the Life Reduction of Metal Components Due to the Effects of the Light-Water Reactor Environment for New Reactors	Rev. 0	Mar-07	General	Conforms
1.208	A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion	Rev. 0	Mar-07	All	Conforms, except that NUREG-2115 is incorporated as the replacement for the Lawrence Livermore National Laboratory and the Electric Power Research Institute studies in the Central and Eastern United States.

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RG Number	Title	Revision	Date	RG Position	Evaluation
1.209	Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants	Rev. 0	Mar-07	General	Conforms. Operational program implementation is described in Section 13.4
1.221	Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants	Rev. 0	Oct-11	General	Not applicable, Refer to Subsection 2.3.1.3.1.3
4.7	General Site Suitability Criteria for Nuclear Power Stations	Rev. 2	Apr-98	General	Conforms.
4.15	Quality Assurance for Radiological Monitoring Programs (Inception Through Normal Operations to License Termination) – Effluent Streams and the Environment	Rev. 2	Jul-07	General	Conforms. Subsection 11.5.4.5 (NEI 07-09A) provides a description of the ODCM. The implementation milestone is provided in Section 13.4
4.21	Minimization of Contamination and Radioactive Waste Generation: Life-Cycle Planning	Rev 0	Jun-08	General	Conforms through implementation of NEI 08-08A.
5.7	Entry/Exit Control for Protected Areas, Vital Areas, and Material Access Areas	Rev. 1	May-80	General	As appropriate, addressed in the DCD and plant-specific security plans (i.e., Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan)
5.12	General Use of Locks in the Protection and Control of Facilities and Special Nuclear Materials	Rev. 0	Nov-73	General	As appropriate, addressed in the DCD and plant-specific security plans (i.e., Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan)

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RG Number	Title	Revision	Date	RG Position	Evaluation
5.44	Perimeter Intrusion Alarm Systems	Rev. 3	Oct-97	General	Conforms to one test option as discussed in the RG defined by a plant station procedure.
5.62	Reporting of Safeguards Events	Rev. 1	Nov-87	General	Not applicable. Reportability of Safeguards Events is in accordance with 10 CFR 73 Appendix G.
5.66	Access Authorization Program for Nuclear Power Plants	Rev. 1	Jul-09	General	Conforms
5.69	Guidance for the Application of the Radiological Sabotage Design-Basis Threat in the Design, Development, and Implementation of a Physical Security Program that meets 10 CFR 73.55 Requirements	Rev 0	Aug-07	General	Conforms
8.1	Radiation Symbol	Rev. 0	Feb-73	General	Conforms. The facility utilizes standard radiation symbols.
8.2	Guide for Administrative Practices in Radiation Monitoring	Rev. 0	Feb-73	General	Conforms. Operational program implementation is described in Section 13.4
8.4	Direct-Reading and Indirect-Reading Pocket Dosimeters	Rev. 0	Feb-73	General	Conforms. Operational program implementation is described in Section 13.4
8.5	Criticality and Other Interior Evacuation Signals	Rev. 1	Mar-81	General	Conforms. Operational program implementation is described in Section 13.4 .

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RG Number	Title	Revision	Date	RG Position	Evaluation
8.6	Standard Test Procedure for Geiger-Muller Counters	Rev. 0	May-73	General	Exception: Instrument calibration programs is based upon criteria in ANSI N323A-1997 (with 2004 correction Sheet) "Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments." The ANSI 42.3-1969 Standard is no longer recognized as sufficient for calibration of modern Instruments. Operational program implementation is described in Section 13.4
8.7	Instructions for Recording and Reporting Occupational Radiation Dose Data	Rev. 2	Nov-05	General	Conforms. Operational program implementation is described in Section 13.4
8.8	Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable	Rev. 3	Jun-78	General	Conforms. Operational program implementation is described in Section 13.4
8.9	Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program	Rev. 1	Jul-93	General	Conforms. Operational program implementation is described in Section 13.4
8.10	Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable	Rev. 1-R	May-77	General	Conforms. Operational program implementation is described in Section 13.4
8.11	Applications of Bioassay for Uranium	Rev. 0	Jun-74	General	Not applicable. RG 8.11 has been superseded by RG 8.9, Rev 1.
8.13	Instruction Concerning Prenatal Radiation Exposure	Rev. 3	Jun-99	General	Conforms. Operational program implementation is described in Section 13.4
8.15	Acceptable Programs for Respiratory Protection	Rev. 1	Oct-99	General	Conforms. Operational program implementation is described in Section 13.4

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RG Number	Title	Revision	Date	RG Position	Evaluation
8.19	Occupational Radiation Dose Assessment in Light-Water Reactor Power Plants – Design Stage Man-Rem Estimates	Rev. 1	Jun-79	General	Conforms
8.20	Applications of Bioassay for I-125 and I-131	Rev. 1	Sep-79	General	Exception. Per NUREG-1736, RG 8.20 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4
8.25	Air Sampling in the Workplace	Rev. 1	Jun-92	General	Not applicable. RG does not apply to reactor licensees.
8.26	Applications of Bioassay for Fission and Activation Products	Rev. 0	Sep-80	General	Exception. Per NUREG-1736, RG 8.26 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4
8.27	Radiation Protection Training for Personnel at Light-Water-Cooled Nuclear Power Plants	Rev. 0	Mar-81	General	Conforms. Operational program implementation is described in Section 13.4
8.28	Audible-Alarm Dosimeters	Rev. 0	Jul-81	General	Conforms. Operational program implementation is described in Section 13.4
8.29	Instruction Concerning Risks from Occupational Radiation Exposure	Rev. 1	Feb-96	General	Conforms. Operational program implementation is described in Section 13.4
8.32	Criteria for Establishing a Tritium Bioassay Program	Rev. 0	Jul-88	General	Exception. Per NUREG-1736, RG 8.32 is outdated. RG 8.9 is used. Operational program implementation is described in Section 13.4
8.33	Quality Management Program	Rev. 0	Oct-91	General	Not applicable to nuclear power plants. RG 8.33 applies to nuclear medicine.

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RG Number	Title	Revision	Date	RG Position	Evaluation
8.34	Monitoring Criteria and Methods To Calculate Occupational Radiation Doses	Rev. 0	Jul-92	General	Conforms. Operational program implementation is described in Section 13.4
8.35	Planned Special Exposures	Rev. 0	Jun-92	General	Conforms. Operational program implementation is described in Section 13.4
8.36	Radiation Dose to the Embryo/Fetus	Rev. 0	Jul-92	General	Conforms. Operational program implementation is described in Section 13.4
8.38	Control of Access to High and Very High Radiation Areas of Nuclear Plants	Rev. 1	May-06	General	Conforms. Operational program implementation is described in Section 13.4

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
(Sheet 1 of 39) [EF3 COL 1.9-3-A]

Section	Section Title	Conformance Evaluation
C.III.2 1	Introduction and General Description of the Plant	Conforms
C.III.2 1.1	Introduction	Conforms
C.III.2 1.2	General Plant Description	Conforms. Addressed in Subsection 1.2.2.19 and Section 2.0 , and DCD Figures 1.2-1 through 1.2-33.
C.III.2 1.3	Comparisons with Other Facilities	Conforms
C.III.2 1.4	Identification of Agents and Contractors	Conforms
C.III.2 1.5	Requirements for Further Technical Information	Conforms
C.III.2 1.6	Material Referenced	Conforms
C.III.2 1.7	Drawings and Other Detailed Information	Conforms
C.III.2 1.8	Site and Plant Design Interfaces and Conceptual Design Information	Conforms
C. III.2 1.9	Conformance with Regulatory Criteria	Conforms
C.III.2 2.1.1	Site Location and Description	Conforms
C.III.2 2.1.2.1	Authority	Conforms
C.III.2 2.1.2.2	Control of Activities Unrelated to Plant Operation	Conforms. There are no known significant changes regarding activities unrelated to plant operation within the exclusion area.
C.III.2 2.1.2.3	Arrangements for Traffic Control	Conforms. There are no known significant changes regarding highways, railroads, or waterways that traverse the exclusion area.
C.III.2 2.1.2.4	Abandonment or Relocation of Roads	Conforms. There are no known significant changes regarding any public roads traversing the exclusion area.
C.III.2 2.1.3	Population Distribution	Conforms
C.III.2 2.2	Nearby Industrial, Transportation, and Military Facilities	Conforms

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
(Sheet 2 of 39) [EF3 COL 1.9-3-A]

Section	Section Title	Conformance Evaluation
C.III.2 2.3.1	Regional Climatology	Conforms
C.III.2 2.3.2	Local Meteorology	Conforms
C.III.2 2.3.3	Onsite Meteorological Measurements Program	Conforms.
C.III.2 2.3.4	Short-Term Atmospheric Dispersion Estimates for Accident Releases	Conforms
C.III.2 2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases	Conforms
C.III.2 2.4.1	Hydrologic Description	Conforms
C.III.2 2.4.2	Floods	Conforms
C.III.2 2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers	Conforms
C.III.2 2.4.4	Potential Dam Failures	Conforms
C.III.2 2.4.5	Probable Maximum Surge and Seiche Flooding	Conforms
C.III.2 2.4.6	Probable Maximum Tsunami Hazards	Conforms
C.III.2 2.4.7	Ice Effects	Conforms.
C.III.2 2.4.8	Cooling Water Canals and Reservoirs	Conforms
C.III.2 2.4.9	Channel Diversions	Conforms
C.III.2 2.4.10	Flooding Protection Requirements	Conforms. There are no safety-related SSCs that are not part of the DC facility.
C.III.2 2.4.11	Low Water Considerations	Conforms
C.III.2 2.4.12	Groundwater	Not applicable. A permanent dewatering system is not required.
C.III.1 2.4.13	Accidental Release of Radioactive Liquid Effluent in Ground and Surface Waters	Conforms

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Section	Section Title	Conformance Evaluation
C.III.2 2.4.14	Technical Specifications and Emergency Operation Requirements	Conforms
C.III.2 2.5.1	Basic Geologic and Seismic Information	Conforms
C.III.1 2.5.2	Vibratory Ground Motion	Conforms
C.III.2 2.5.3	Surface Faulting	Conforms
C.III.2 2.5.4	Stability of Subsurface Materials and Foundations	Conforms
C.III.1 2.5.4.1	Geologic Features	Conforms
C.III.1 2.5.4.2	Properties of Subsurface Materials	Conforms
C.III.1 2.5.4.3	Foundation Interfaces	Conforms
C.III.1 2.5.4.4	Geophysical Surveys	Conforms
C.III.1 2.5.4.5	Excavations and Backfill	Conforms
C.III.1 2.5.4.6	Ground Water Conditions	Conforms
C.III.1 2.5.4.7	Response of Soil and Rock to Dynamic Loading	Conforms
C.III.1 2.5.4.8	Liquefaction Potential	Conforms
C.III.1 2.5.4.9	Earthquake Site Characteristics	Conforms
C.III.1 2.5.4.10	Static Stability	Conforms
C.III.1 2.5.4.11	Design Criteria	Conforms
C.III.1 2.5.4.12	Techniques to Improve Subsurface Conditions	Conforms
C.III.2 2.5.5	Stability of Slopes	Conforms

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
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Section	Section Title	Conformance Evaluation
C.III.1 3.1	Conformance with NRC General Design Criteria	Conforms. Conformance with the NRC's criteria in 10 CFR 50, Appendix A, is described in DCD Section 3.1 and the applicable DCD system sections.
C.III.1 3.2.1	Seismic Classification	Conforms. There are no additional safety-related or RTNSS SSCs subject to seismic classification beyond those addressed in the DCD. There are no SSCs outside the referenced certified design that are required to be designed for an OBE.
C.III.1 3.2.2	System Quality Group Classification	Conforms. There are no additional safety-related or RTNSS SSCs subject to system quality group classification beyond those addressed in the DCD.
C.III.1 3.3.1 (1)	Wind Loadings	Conforms. There are no safety-related SSCs outside the scope of the certified design. Nonsafety-related facility SSCs that are not included in the referenced certified design meet the requirements of DCD Sections 3.3.1.3 and 3.3.2.3.
C.III.1 3.3.1 (2)	Wind Loadings	Conforms
C.III.1 3.3.2	Tornado Loadings	Conforms
C.III.1 3.4	Internal Flood Protection	Conforms. There are no SSCs outside the scope of the referenced certified design that require internal flood protection whose failure could prevent a safe shutdown of the plant or result in the uncontrolled release of significant radioactivity.
C.III.1 3.4.2	Analysis Procedures	Conforms. There are no Seismic Category I structures outside the scope of the referenced certified design.
C.III.1 3.5.1.1	Internally Generated Missiles (Outside Containment)	Conforms. There are no SSCs outside the scope of the referenced certified design that are required to be protected against damage from internally generated missiles.
C.III.1 3.5.1.2	Internally Generated Missiles (Inside Containment)	Conforms.
C.III.1 3.5.1.3	Turbine Missiles	Conforms. Addressed in DCD Section 10.2.3.8.
C.III.1 3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds	Conforms. Table 2.0-201 demonstrates that the site-specific tornado characteristics are bounded by the parameters assumed in the DCD. DCD Section 3.5.1.4 indicates that resistance to missiles is independent of site topography.

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Section	Section Title	Conformance Evaluation
C.III.1 3.5.1.5	Site Proximity Missiles (Except Aircraft)	Conforms
C.III.2 3.5.1.6	Aircraft Hazards	Conforms
C.III.1 3.5.2	Structures, Systems, and Components To Be Protected from Externally Generated Missiles	Conforms. There are no SSCs outside the scope of the referenced certified design that are required to be protected from externally generated missiles.
C.III.1 3.5.3	Barrier Design Procedures	Conforms. There are no SSCs that require reanalysis for tornado, extreme wind, or site proximity missile impact or for aircraft impact.
C.III.1 3.6	Protection against Dynamic Effects Associated with the Postulated Rupture of Piping	Conforms
C.III.1 3.6.1	Plant Design for Protection against Postulated Piping Failures in Fluid systems Outside of Containment	Conforms
C.III.1 3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping	Conforms
C.III.1 3.6.3	Leak-Before-Break Evaluation Procedures	Not Applicable. ESBWR design does not rely on a Leak Before Break Evaluation.
C.III.1 3.7.1	Seismic Design Parameters	Conforms. Addressed in DCD Sections 3.7 and 3.7.1 and Subsection 3.7.1.
C.III.1 3.7.1.1	Design Ground Motion	Conforms. Addressed in DCD Section 3.7.1.1 and Subsections 2.5.2 and 3.7.1.1.
C.III.1 3.7.1.2	Percentage of Critical Damping Values	Conforms. Addressed in DCD Section 3.7.1.2 and Subsection 3.7.1.2.
C.III.1 3.7.1.3	Supporting Media for Seismic Category I Structures	Conforms. Addressed in DCD Section 3.7.1.3 and Subsection 3.7.1.3.
C.III.1 3.7.2	Seismic System Analysis	Conforms. Addressed in DCD Section 3.7.2.
C.III.1 3.7.2.1	Seismic Analysis Methods	Conforms
C.III.1 3.7.2.2	Natural Frequencies and Responses	Conforms. Addressed in DCD Section 3.7.2.2.
C.III.1 3.7.2.3	Procedures Used for Analytical Modeling	Conforms
C.III.1 3.7.2.4	Soil/Structure Interaction	Conforms. Addressed in DCD Section 3.7.2.4 and Subsection 3.7.2.4.

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Section	Section Title	Conformance Evaluation
C.III.1 3.7.2.5	Development of Floor Response Spectra	Conforms. Addressed in DCD Section 3.7.2.5.
C.III.1 3.7.2.6	Three Components of Earthquake Motion	Conforms
C.III.1 3.7.2.7	Combination of Modal Responses	Conforms
C.III.1 3.7.2.8	Interaction of Nonseismic Category I Structures with Seismic Category I Structures	Conforms. There are no Seismic Category I structures outside the scope of the referenced certified design. In lieu of providing the plant-specific distances between structures and the heights of structures, the distance and height requirements for Non-Seismic Category I structures are addressed in DCD Section 3.7.2.8. Soil Structure Interaction for Non-Seismic Category I structures is addressed in Subsection 3.7.2.8.
C.III.1 3.7.2.9	Effects of Parameter Variations on Floor Response Spectra	Conforms. Addressed in DCD Section 3.7.2.9.
C.III.1 3.7.2.10	Use of Constant Vertical Static Factors	Conforms
C.III.1 3.7.2.11	Method Used to Account for Torsional Effects	Conforms
C.III.1 3.7.2.12	Comparison of Responses	Conforms. Addressed in DCD Section 3.7.2.12.
C.III.1 3.7.2.13	Methods for Seismic Analysis of Dams	Not applicable. There are no Seismic Category I dams in the ESBWR design per DCD Section 3.7.3.14.
C.III.1 3.7.2.14	Determination of Dynamic Stability of Seismic Category I Structures	Conforms. Addressed in DCD Sections 3.7.2.14 and 3.8.5.5, and Subsections 3.7.2.14 and 3.8.5.5.
C.III.1 3.7.2.15	Analysis Procedure for Damping	Conforms
C.III.1 3.7.3.1	Seismic Analysis Methods	Conforms
C.III.1 3.7.3.2	Procedures Used for Analytical Modeling	Conforms
C.III.1 3.7.3.3	Analysis Procedure for Damping	Conforms
C.III.1 3.7.3.4	Three Components of Earthquake Motion	Conforms
C.III.1 3.7.3.5	Combination of Modal Responses	Conforms. Addressed in DCD Section 3.7.3.7.
C.III.1 3.7.3.6	Use of Constant Vertical Static Factors	Conforms
C.III.1 3.7.3.7	Buried Seismic Category I Piping, Conduits, and Tunnels	Conforms. Addressed in DCD Section 3.7.3.13.

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Section	Section Title	Conformance Evaluation
C.III.1 3.7.3.8	Methods for Seismic Analysis of Seismic Category I Concrete Dams	Not applicable. There are no Seismic Category I dams for Fermi 3.
C.III.1 3.7.3.9	Methods for Seismic Analysis of Above-Ground Tanks	Conforms. Addressed in DCD Section 3.7.3.15.
C.III.1 3.7.4	Seismic Instrumentation	Conforms
C.III.1 3.8.1	Concrete Containment	Conforms
C.III.1 3.8.2	Steel Containment	Conforms
C.III.1 3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments	Conforms
C.III.1 3.8.4	Other Seismic Category I Structures	Conforms. There are no Seismic Category I structures that are outside the scope of the DCD.
C.III.1 3.8.5	Foundations	Conforms. Addressed in DCD Section 3.8.5 and Subsection 3.8.5.
C.III.1 3.9.1	Special Topics for Mechanical Components	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.1	Design Transients	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.2	Computer Programs Used in Analysis	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.3	Experimental Stress Analysis	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.1.4	Considerations for the Evaluation of the Faulted Condition	Conforms. There are no Seismic Category I components or supports beyond those evaluated in the reference certified design.
C.III.1 3.9.2	Dynamic Testing and Analysis of Systems, Components, and Equipment	Conforms. There are no systems outside the scope of the referenced certified design that require dynamic testing and analysis.

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Section	Section Title	Conformance Evaluation
C.III.1 3.9.2.1	Piping Vibration, Thermal Expansion, and Dynamic Effects	Conforms. There are no ASME Code Class 1, 2, and 3 systems; other high-energy piping systems inside seismic Category I structures; high-energy portions of systems for which failure could reduce the functioning of any seismic Category I plant feature to an unacceptable level; or seismic Category I portions of moderate-energy piping systems located outside containment outside the scope of the referenced certified design.
C.III.1 3.9.2.2	Seismic Analysis and Qualification of Seismic Category I Mechanical Equipment	Conforms
C.III.1 3.9.2.3	Dynamic Response Analysis of Reactor Internals Under Operational Flow Transients and Steady-State Conditions	Conforms. There are no ESBWR pressure vessel internals that the referenced certified design does not cover.
C.III.1 3.9.2.4	Pre-Operational Flow-Induced Vibration Testing of Reactor Internals	Conforms. There are no BWR pressure vessel internals that the referenced certified design does not cover. DCD Sections 3.9.2.3 and 3.9.2.4 adequately cover the analysis of potential adverse flow effects that could impact BWR vessel internals.
C.III.1 3.9.2.5	Dynamic System Analysis of the Reactor Internals Under Faulted Condition	Conforms. Addressed in DCD Section 3.9.3.1 and DCD Table 3.9-2.
C.III.1 3.9.2.6	Correlations of Reactor Internals Vibration Tests with the Analytical Results	Conforms. Addressed in DCD Section 3.9.2.6.
C.III.1 3.9.3	ASME Code Class 1, 2, and 3 Components and Component Supports, and Core Support Structures	Conforms. There are no pressure-retaining components or component supports designed or constructed in accordance with ASME Code Class 1, 2, or 3, or GDC 1,2,4,14, or 15, beyond those evaluated in the referenced certified design.
C.III.1 3.9.4	Control Rod Drive Systems	Conforms
C.III.1 3.9.5.1	Design Arrangements	Conforms
C.III.1 3.9.5.2	Loading Conditions	Conforms
C.III.1 3.9.5.3	Design Bases	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 3.9.5.4	BWR Reactor Pressure Vessel Internals Including Steam Dryer	Conforms. There are no reactor pressure vessel internals (including the steam dryer) or other main steam system components that are not covered by the referenced certified design. Classification of the reactor internals is described in Section 3.9.2.4.
C.III.1 3.9.6.1	Functional Design and Qualification of Pumps, Valves, and Dynamic Restraints	Conforms. There is no safety-related equipment beyond the scope of the referenced certified design.
C.III.1 3.9.6.2	Inservice Testing Program for Pumps	Not applicable. There are no safety-related pumps.
C.III.1 3.9.6.3	Inservice Testing Program for Valves	Conforms. Addressed in DCD Section 3.9.6; the list of valves included in the IST program is provided in DCD Table 3.9-8. IST Program test procedures and schedules are addressed in Technical Specifications 5.5.5. Justification for cold shutdown and refueling outage test schedules is addressed in DCD Section 3.9.6 and DCD Table 3.9-8. The implementation milestones for the IST and MOV Programs are addressed in Section 13.4
C.III.1 3.9.6.3.1	Inservice Testing Program for Motor-Operated Valves (MOVs)	Conforms. Addressed in DCD Section 3.9.6.
C.III.1 3.9.6.3.2	Inservice Testing Program for Power-Operated Valves (POVs) Other Than MOVs	Conforms. Addressed in DCD Section 3.9.6.
C.III.1 3.9.6.3.3	Inservice Testing Program for Check Valves	Conforms. Addressed in DCD Section 3.9.6.
C.III.1 3.9.6.3.4	Pressure Isolation Valve (PIV) Leak Testing	Not applicable. The ESBWR plant does not have any PIVs.
C.III.1 3.9.6.3.5	Containment Isolation Valve (CIV) Leak Testing	Conforms
C.III.1 3.9.6.3.6	Inservice Testing Program for Safety and Relief Valves	Conforms. Addressed in DCD Table 3.9-8.
C.III.1 3.9.6.3.7	Inservice Testing Program for Manually Operated Valves	Conforms. Addressed in DCD Table 3.9-8.
C.III.1 3.9.6.3.8	Inservice Testing Program for Explosively Activated Valves	Conforms. Addressed in DCD Table 3.9-8.
C.III.1 3.9.6.4	Inservice Testing Program for Dynamic Restraints	Conforms with the following exception: A plant specific snubber table will be prepared in conjunction with closure of ITAAC Table 3.1-1.

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Section	Section Title	Conformance Evaluation
C.III.1 3.9.6.5	Relief Requests and Alternative Authorizations to ASME OM Code	Conforms
C.III.1 3.10.1	Seismic Qualification Criteria	Conforms. There is no seismic or dynamic qualification required for equipment that is outside the scope of the referenced certified design.
C.III.1 3.10.2	Methods and Procedures for Qualifying Mechanical and Electrical Equipment and Instrumentation	Conforms
C.III.1 3.10.3	Methods and Procedures of Analysis or Testing of Supports of Mechanical and Electrical Equipment and Instrumentation	Conforms
C.III.1 3.10.4	Test and Analyses Results and Experience Database	Conforms
C.III.1 3.11	Environmental Qualification of Mechanical and Electrical Equipment	Conforms. There is no other equipment beyond that which has been evaluated in the referenced certified design.
C.III.1 3.11.1	Equipment Location and Environmental Conditions	Conforms
C.III.1 3.11.2	Qualification Tests and Analysis	Conforms
C.III.1 3.11.3	Qualification Test Results	Conforms
C.III.1 3.11.4	Loss of Ventilation	Conforms
C.III.1 3.11.5	Estimated Chemical and Radiation Environment	Conforms
C.III.1 3.11.6	Qualification of Mechanical Equipment	Conforms
C.III.1 3.12.1	Introduction	Conforms
C.III.1 3.12.2	Codes and Standards	Conforms. Addressed in DCD Sections 3.2, 3.6, 3.7, and Chapter 5 and Chapter 14 .
C.III.1 3.12.3	Piping Analysis Methods	Conforms. Addressed in DCD Sections 3.7.2.2 and 3.7.3.9.
C.III.1 3.12.3.1	Experimental Stress Analyses	Conforms. Addressed in DCD Section 3.9.1.3.
C.III.1 3.12.3.2	Modal Response Spectrum Method	Conforms. Addressed in DCD Section 3.7.2.1.
C.III.1 3.12.3.3	Response Spectra Method (or Independent Support Motion Method)	Conforms. Addressed in DCD Section 3.7.2.1.2.
C.III.1 3.12.3.4	Time History Method	Conforms. Addressed in DCD Section 3.7.2.1.1.

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Section	Section Title	Conformance Evaluation
C.III.1 3.12.3.5	Inelastic Analyses Method	Not Applicable. Per DCD Section 3.9.1.4 (Inelastic Analyses Methods), except for pipe whip restraints, inelastic analyses methods are not used in the ESBWR piping design and analysis.
C.III.1 3.12.3.6	Small-Bore Piping Method	Conforms. Addressed in DCD Section 3.7.3.16.
C.III.1 3.12.3.7	Nonseismic/Seismic Interaction (II/I)	Conforms with the following exception: The location and distance between piping systems will be established as part of the completion of ITAAC Table 3.1-1.
C.III.1 3.12.3.8	Seismic Category I Buried Piping	Not Applicable. Per DCD Section 3.7.3.13, there is no buried Seismic Category I piping.
C.III.1 3.12.4	Piping Modeling Technique	Conforms. Addressed in DCD Section 3.7.3.3.1 and Appendix 3D for the PISYS computer code.
C.III.1 3.12.4.1	Computer Codes	Conforms. Addressed in DCD Appendix 3D.
C.III.1 3.12.4.2	Dynamic Piping Model	Conforms. Addressed in DCD Section 3.7.3.3.1.
C.III.1 3.12.4.3	Piping Benchmark Program	Conforms. Addressed in DCD Appendix 3D.
C.III.1 3.12.4.4	Decoupling Criteria	Conforms. Addressed in DCD Sections 3.7.2.3 and 3.7.3.16.
C.III.1 3.12.5.1	Seismic Input Envelope vs. Site-Specific Spectra	Conforms. Addressed in DCD Section 3.7.1.
C.III.1 3.12.5.2	Design Transients	Conforms. Addressed in DCD Section 3.9.1.1 and DCD Table 3.9-1.
C.III.1 3.12.5.3	Loadings and Load Combination	Conforms. Addressed in DCD Section 3.9.1.1 and DCD Table 3.9-8.
C.III.1 3.12.5.4	Damping Values	Conforms. Addressed in DCD Section 3.7.1.2 and DCD Table 3.7-1.
C.III.1 3.12.5.5	Combination of Modal Responses	Conforms. Addressed in DCD Section 3.7.3.7.
C.III.1 3.12.5.6	High-Frequency Modes	Conforms. Addressed in DCD Sections 3.7.1.1 and 3.7.1.2.
C.III.1 3.12.5.7	Fatigue Evaluation of ASME Code Class 1 Piping	Conforms. Addressed in DCD Section 3.9.3.4 and DCD Table 3.9-8.
C.III.1 3.12.5.8	Fatigue Evaluation of ASME Code Class 2 and 3 Piping	Conforms. Addressed in DCD Section 3.9.
C.III.1 3.12.5.9	Thermal Oscillations in Piping Connected to the Reactor Coolant System	Conforms
C.III.1 3.12.5.10	Thermal Stratification	Conforms. Addressed in DCD Section 3.9.2.1.2.
C.III.1 3.12.5.11	Safety Relief Valve Design, Installation, and Testing	Conforms. Addressed in DCD Figures 5.2-3 and 5.4-3, and DCD Table 3.9-8.

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Section	Section Title	Conformance Evaluation
C.III.1 3.12.5.12	Functional Capability	Conforms. Addressed in DCD Table 3.9-2, Note 13, and DCD Chapters 5 and 6.
C.III.1 3.12.5.13	Combination of Inertial and Seismic Anchor Motion Effects	Conforms. Addressed in DCD Section 3.7.3.9.
C.III.1 3.12.5.14	Operating-Basis Earthquake as a Design Load	Not applicable. The SSE establishes the design load for the ESBWR.
C.III.1 3.12.5.15	Welded Attachments	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.5.16	Modal Damping for Composite Structures	Conforms. Addressed in DCD Section 3.7.2.13.
C.III.1 3.12.5.17	Minimum Temperature for Thermal Analyses	Conforms. Addressed in DCD Sections 3.9.1.1 and 3.9.3.1.
C.III.1 3.12.5.18	Intersystem Loss-of-Coolant Accident	Conforms. Addressed in DCD Appendix 3K.
C.III.1 3.12.5.19	Effects of Environment on Fatigue Design	Conforms. Addressed in DCD Section 3.9.3.4. The reference in RG 1.206 to 1.76 appears to be in error, and should have referenced 1.207.
C.III.1 3.12.6.1	Applicable Codes	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.2	Jurisdictional Boundaries	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.3	Loads and Load Combinations	Conforms. Addressed in DCD Section 3.9 and DCD Appendix 3B.
C.III.1 3.12.6.4	Pipe Support Baseplate and Anchor Bolt Design	Conforms. Addressed in DCD Section 3.9.3.7.
C.III.1 3.12.6.5	Use of Energy Absorbers and Limit Stops	Conforms. Addressed in DCD Section 3.9.3.7.
C.III.1 3.12.6.6	Use of Snubbers	Conforms. Addressed in DCD Section 3.9.3.7.1(3).
C.III.1 3.12.6.7	Pipe Support Stiffnesses	Conforms. Addressed in DCD Section 3.7.3.3.1.
C.III.1 3.12.6.8	Seismic Self-Weight Excitation	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.9	Design of Supplementary Steel	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.10	Consideration of Friction Forces	Conforms. Addressed in DCD Section 3.9.3.7.1(5).
C.III.1 3.12.6.11	Pipe Support Gaps and Clearances	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.12	Instrumentation Line Support Criteria	Conforms. Addressed in DCD Section 3.9.3.7.1.
C.III.1 3.12.6.13	Pipe Deflection Limits	Conforms. Addressed in DCD Section 3.9.2.1.1 and Chapter 14 .

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Section	Section Title	Conformance Evaluation
C.III.1 3.13	Threaded Fasteners – ASME code Class 1, 2, and 3	Conforms
C.III.1 3.13.1.1	Materials Selection	Conforms
C.III.1 3.13.1.2	Special Materials Fabrication Processes and Special Controls	Conforms
C.III.1 3.13.1.3	Fracture Toughness Requirements for Threaded Fasteners Made of Ferritic Materials	Conforms
C.III.1 3.13.1.5	Certified Material Test Reports	Conforms
C.III.1 3.13.2	Inservice Inspection Requirements	Conforms
C.III.1 4.1	Reactor: Summary Description	Conforms
C.III.1 4.2	Fuel System Design	Conforms
C.III.1 4.3	Nuclear Design	Conforms
C.III.1 4.4	Thermal and Hydraulic Design	Conforms
C.III.1 4.5.1	Control Rod Drive Structural Materials	Conforms
C.III.1 4.5.2	Reactor Internal and Core Support Materials	Conforms
C.III.1 4.6	Functional Design of Reactivity Control System	Conforms
C.III.1 5.1	Reactor Coolant and Connecting Systems: Summary Description	Conforms
C.III.1 5.2.1	Compliance with ASME Codes and Code Cases	Conforms
C.III.1 5.2.2.1	Design Bases	Conforms
C.III.1 5.2.2.2	Design Evaluation	Conforms
C.III.1 5.2.2.3	Piping and Instrumentation Diagrams	Conforms
C.III.1 5.2.2.4	Equipment and Component Description	Conforms
C.III.1 5.2.2.5	Mounting of Pressure-Relief Devices	Conforms
C.III.1 5.2.2.6	Applicable Codes and Classification	Conforms
C.III.1 5.2.2.7	Material Specification	Conforms
C.III.1 5.2.2.8	Process Instrumentation	Conforms
C.III.1 5.2.2.9	System Reliability	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 5.2.2.10	Testing and Inspection	Conforms. Addressed in DCD Section 5.2.2.4, and in Section 3.9 and Chapter 14 .
C.III.1 5.2.3.1	Material Specifications	Conforms
C.III.1 5.2.3.2	Compatibility with Reactor Coolant	Conforms. Addressed in DCD Section 5.2.3.
C.III.1 5.2.3.3	Fabrication and Processing of Ferritic Materials	Conforms
C.III.1 5.2.3.4	Fabrication and Processing of Austenitic Stainless Steels	Conforms
C.III.1 5.2.3.5	Prevention of Primary Water Stress-Corrosion Cracking for Nickel-Based Alloys (PWRs only)	Not applicable. Applies only to PWRs.
C.III.1 5.2.3.6	Threaded Fasteners	Conforms. Addressed in DCD Section 3.9.3.9.
C.III.1 5.2.4.1	Inservice Inspection and Testing Program	Conforms. Addressed in DCD Section 5.2.4 and in Subsection 5.2.4 .
C.III.1 5.2.4.2	Preservice Inspection and Testing Program	Conforms. Addressed in DCD Section 5.2.4.
C.III.1 5.2.5	Reactor Coolant Pressure Boundary Leakage Detection	Conforms
C.III.1 5.3.1.1	Material Specifications	Conforms
C.III.1 5.3.1.2	Special Processes Used for Manufacturing and Fabrication	Conforms
C.III.1 5.3.1.3	Special Methods for Nondestructive Examination	Conforms
C.III.1 5.3.1.4	Special Controls for Ferritic and Austenitic Stainless Steels	Conforms
C.III.1 5.3.1.5	Fracture Toughness	Conforms
C.III.1 5.3.1.6	Material Surveillance	Conforms. Addressed in DCD Section 5.3.1.6 and Subsection 5.3.1.8 .
C.III.1 5.3.1.7	Reactor Vessel Fasteners	RG does not contain any guidance in this section
C.III.1 5.3.2.1	Limit Curves	Conforms
C.III.1 5.3.2.2	Operating Procedures	Conforms. Addressed in DCD Sections 5.3.2.1, 5.3.2.2, and 5.3.3.6, and Subsection 5.3.3.6 .
C.III.1 5.3.2.3	Pressurized Thermal Shock (PWRs only)	Not applicable. Applies only to PWRs.
C.III.1 5.3.2.4	Upper-Shelf Energy	Conforms
C.III.1 5.3.3	Reactor Vessel Integrity	Conforms. Identification of a specific manufacturer is not required.
C.III.1 5.3.3.1	Design	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 5.3.3.2	Materials of Construction	Conforms
C.III.1 5.3.3.3	Fabrication Methods	Conforms
C.III.1 5.3.3.4	Inspection Requirements	Conforms. Addressed in DCD Section 5.3.3.4.
C.III.1 5.3.3.5	Shipment and Installation	Conforms. Addressed in DCD Section 5.3.3.5.
C.III.1 5.3.3.6	Operating Conditions	Conforms. Addressed in DCD Section 5.3.3.6.
C.III.1 5.3.3.7	Inservice Surveillance	Conforms. Addressed in DCD Section 5.3.3.7.
C.III.1 5.3.3.8	Threaded Fasteners	Conforms. Addressed in DCD Section 3.9.3.9.
C.III.1 5.4.1	Reactor Coolant Pumps or Circulation Pumps (BWR)	Conforms
C.III.1 5.4.1.1	Pump Flywheel Integrity (PWR)	Not applicable. Applies only to PWRs.
C.III.1 5.4.2	Steam Generators (PWR)	Not applicable. Applies only to PWRs.
C.III.1.5.4.3	Reactor Coolant System Piping and Valves	Conforms
C.III.1.5.4.4	Main Steamline Flow Restrictions	Conforms
C.III.1.5.4.5	Pressurizer	Not applicable. Applies only to PWRs.
C.III.1.5.4.6	Reactor Core Isolation Cooling System (BWRs/Isolation Condenser System (Economic Simplified BWR))	Conforms
C.III.1.5.4.7	Residual Heat Removal System/Passive Residual Heat Removal System (Advanced Light-Water Reactor) Shutdown Cooling Mode of the Reactor Water Cleanup System (Economic Simplified BWR)	Conforms
C.III.1.5.4.8	Reactor Water Cleanup System (BWR) Reactor Water Cleanup/Shutdown Cooling System (Economic Simplified BWR)	Conforms
C.III.1.5.4.9	Reactor Coolant System Pressure Relief Devices/Reactor Coolant Depressurization Systems	Conforms
C.III.1.5.4.10	Reactor Coolant System Component Supports	Conforms
C.III.1.5.4.11	Pressurizer Relief Discharge System (PWRs only)	Not applicable. Applies only to PWRs.

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Section	Section Title	Conformance Evaluation
C.III.1.5.4.12	Reactor Coolant System High-Point Vents	Conforms
C.III.1.5.4.13	Main Steamline, Feedwater, and Auxiliary Feedwater Piping	Conforms
C.III.1 6.1	Engineered Safety Features: Engineered Safety Feature Materials	Conforms. Addressed in DCD Section 6.1.
C.III.1 6.1.1.1	Materials Selection and Fabrication	Conforms
C.III.1 6.1.1.2	Composition and Compatibility of Core Cooling Coolants and Containment Sprays	Conforms. Addressed in DCD Sections 5.2.3.2, 5.4.8, 9.3.10, 5.2.3.4.1, 6.1.1.3.4, 9.1.3, 6.1.1.4, and 6.1.2.
C.III.1 6.1.2	Organic Materials	Conforms
C.III.1 6.2	Containment Systems	Conforms
C.III.1 6.2.1	Containment Functional Design	Conforms
C.III.1 6.2.2	Containment Heat Removal Systems	Conforms
C.III.1 6.2.3	Secondary Containment Functional Design	Not Applicable. The ESBWR plant does not have a secondary containment.
C.III.1 6.2.4	Containment Isolation System	Conforms.
C.III.1 6.2.5	Combustible Gas Control in Containment	Conforms.
C.III.1 6.2.6	Containment Leakage Testing	Conforms. Addressed in DCD Sections 6.2.6.1, 6.2.6.2, 6.2.6.3 and 6.2.6.4, and in Section 13.4 . Special testing requirements in RG 1.206, Section C.III.1 , Section 6.2.6.5 are not applicable to the ESBWR.
C.III.1 6.2.7	Fracture Prevention of Containment Pressure Vessel	Conforms
C.III.1 6.3	Emergency Core Cooling System	Conforms. There are no aspects of the site-specific design that affect the LOCA analyses in the DCD.
C.III.1 6.4	Habitability Systems	Conforms
C.III.1 6.5	Fission Product Removal and Control Systems	Conforms
C.III.1 6.6	Inservice Inspection of Class 2 and 3 Components	Conforms. Addressed in DCD Section 6.6 and in Subsection 6.6.10.3 .
C.III.1 6.6.1	Components Subject to Examination	Conforms
C.III.1 6.6.2	Accessibility	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 6.6.3	Examination Techniques and Procedures	Conforms. Addressed in DCD Section 6.6.3.2. There are no special examination techniques required to meet the ASME Code.
C.III.1 6.6.4	Inspection Intervals	Conforms. Addressed in DCD Section 6.6.4.
C.III.1 6.6.5	Examination Categories and Requirements	Conforms. Addressed in DCD Section 6.6.3.1.
C.III.1 6.6.6	Evaluation of Examination Results	Conforms (addressed in DCD Section 6.6.5), except that RG 1.206 references ASME Code Sections IWC-4000 and IWD-4000 for Class 2 and Class 3, respectively, whereas DCD Section 6.6.5 references IWA-4000. Later editions of ASME Code Section XI do not contain Sections IWC-4000 and IWD-4000, only IWA-4000. Therefore, the intent of the RG is met.
C.III.1 6.6.7	System Pressure Tests	Conforms. Addressed in DCD Section 6.6.6.
C.III.1 6.6.8	Augmented Inservice Inspection to Protect against Postulated Piping Failures	Conforms. Addressed in DCD Section 6.6.7.
C.III.1 6.7	Main Steamline Isolation Valve Leakage Control Steam (BWRs)	Not applicable to the ESBWR.
C.III.1 7	Instrumentation and Controls	Conforms. Addressed in DCD Chapter 7 and DCD Tier 1, and design-related ITAAC (DAC). There are no departures from the referenced certified design.
C.III.1 7.1	Introduction	Conforms. There is no safety-related instrumentation, control, or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.2	Reactor Trip System	Conforms. There is no reactor trip system instrumentation, control, or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.3	Engineered Safety Features Systems	Conforms. There are no ESF systems I&C or supporting systems that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.4	Systems Required for safe Shutdown	Conforms. There are no safe-shutdown systems I&C or supporting systems that have not been addressed in the referenced certified design or other parts of the COL application.

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Section	Section Title	Conformance Evaluation
C.III.1 7.5	Information Systems Important to Safety	Conforms. There are no information systems important to safety that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.6	Interlock Systems Important to Safety	Conforms. There are no interlock systems important to safety that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.7	Control Systems Not Required for Safety	Conforms. There is no control system instrumentation or supporting system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.8	Diverse Instrumentation and Control Systems	Conforms. There is no diverse I&C system that has not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 7.9	Data Communication Systems	Conforms. There are no data communication systems that have not been addressed in the referenced certified design or other parts of the COL application.
C.III.1 8	Electrical Power	Conforms
C.III.1 8.1	Introduction	Conforms. There are no safety-related or RTNSS onsite AC or DC loads that are added to the referenced certified design. There are no safety-related or RTNSS electrical systems that are beyond the scope of the referenced certified design.
C.III.1 8.2.1	Description	Conforms. Addressed in Section 8.2 .
C.III.1 8.2.2	Analysis	Conforms. Addressed in Section 8.2 .
C.III.1 8.3.1.1	AC Power Systems: Description	Conforms. Addressed in DCD Sections 8.3.1.
C.III.1 8.3.1.2	Analysis	Not applicable. Does not request information for passive designs.
C.III.1 8.3.1.3	Electrical Power System Calculations and Distribution System Studies for AC Systems	Conforms
C.III.1 8.3.2.1	DC Power Systems: Description	Not applicable. Does not request information for passive designs.
C.III.1 8.3.2.2	Analysis	Not applicable. Does not request information for passive designs.
C.III.1 8.3.2.3	Electrical Power System Calculations and Distribution System Studies for DC Systems	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 8.4.1(1)	Station Blackout: Description	Not applicable. Does not request information for passive designs.
C.III.1 8.4.1(2)		Not applicable. Does not request information for passive designs.
C.III.1 8.4.1(3)		Conforms. Addressed in Subsection 8.3.2.1.1 .
C.III.1 8.4.1(4)		Conforms. Addressed in Subsection 8.3.2.1.1 .
C.III.1 8.4.2	Analysis	Not applicable. Does not request information for passive designs.
C.III.1 9.1.1	Fuel Storage and Handling: Criticality Safety of Fresh and Spent Fuel Storage and Handling	Conforms. Addressed in DCD Sections 9.1.1 and 9.1.2.
C.III.1 9.1.2	New and Spent Fuel Storage	Conforms. Addressed in DCD Section 9.1.2.
C.III.1 9.1.3	Spent Fuel Pool Cooling and Cleanup System	Conforms. Addressed in DCD Section 9.1.3.
C.III.1 9.1.4	Light Load Handling System (Related to Refueling)	Conforms
C.III.1 9.1.5	Overhead Heavy Load Handling System	Conforms. Addressed in DCD Section 9.1.5.5 and in Subsection 9.1.4 and Subsection 9.1.5 .
C.III.1 9.2.1.1	Station Service Water System (Open, Raw Water Cooling Systems): Design Bases	Conforms. Addressed in DCD Section 9.2.1.1.
C.III.1 9.2.1.2	System Description	Conforms. Addressed in DCD Section 9.2.1.2 and in Subsection 9.2.1.2 .
C.III.1 9.2.1.3	Safety Evaluation	Conforms. Addressed in DCD Section 9.2.1.3 and in Subsection 9.2.1.2 (for long-term corrosion and fouling).
C.III.1 9.2.1.4	Inspection and Testing Requirements	Conforms. Addressed in DCD Section 9.2.1.4.
C.III.1 9.2.1.5	Instrumentation Requirements	Conforms. Addressed in DCD Section 9.2.1.5.
C.III.1 9.2.2	Cooling System for Reactor Auxiliaries (Closed Cooling Water Systems)	Conforms
C.III.1 9.2 (for DCD Section 9.2.3)	Makeup Water System Design Bases	Conforms. Design Bases, Safety Evaluation, Inspection and Testing Requirements, and Instrumentation are addressed in DCD Section 9.2.3. System Description is addressed in Subsection 9.2.3 .

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Section	Section Title	Conformance Evaluation
C.III.1 9.2.4	Potable and Sanitary Water Systems Design Basis	Conforms
C.III.1 9.2.5	Ultimate Heat Sink	The design of the UHS is within the scope of the referenced certified design, and inspection and testing requirements are addressed in DCD Section 9.2.5.
C.III.1 9.2.6	Condensate Storage Facilities	Conforms. There are no safety-related or RTNSS condensate storage facilities outside the scope of the referenced certified design that are sources of water for residual heat removal or sources of coolant inventory makeup for safety-related systems.
C.III.1 9.2 (for DCD Section 9.2.7)	Chilled Water System	Conforms. Addressed in DCD Section 9.2.7.
C.III.1 9.2 (for DCD Section 9.2.8)	Turbine Component Cooling Water System	Conforms. Addressed in DCD Section 9.2.8.
C.III.1 9.2 (for DCD Section 9.2.10)	Station Water System	Conforms. Design Bases, Safety Evaluation, Inspection and Testing Requirements, and Instrumentation are addressed in DCD Section 9.2.10. System Description is addressed in Subsection 9.2.10 .
C.III.1 9.3	Process Auxiliaries	Conforms. Hydrogen Water Chemistry is addressed in Subsection 9.3.9 , Oxygen Injection System is addressed in Subsection 9.3.10 , Zinc Injection System is addressed in Subsection 9.3.11 , and Auxiliary Boiler System is addressed in DCD Section 9.3.12.
C.III.1 9.3.1	Compressed Air Systems	Conforms. Instrument Air is addressed in DCD Section 9.3.6, Service Air is addressed in DCD Section 9.3.7, and High Pressure Nitrogen Supply System is addressed in DCD Section 9.3.8.
C.III.1 9.3.2	Process and Postaccident Sampling Systems	Conforms
C.III.1 9.3.3	Equipment and Floor Drain System	Conforms. Addressed in DCD Section 9.3.3.
C.III.1 9.3.4	Chemical and Volume Control System (PWRs) (Including Boron Recovery System)	Not applicable. Applies only to PWRs.
C.III.1 9.3.5	Standby Liquid Control System	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 9.4	Air Conditioning, Heating, Cooling, and Ventilation Systems	Conforms. Reactor Building HVAC System is addressed in DCD Section 9.4.6, Electric Building Heating, Ventilation, and Air Conditioning System is addressed in DCD Section 9.4.7, and Drywell Cooling System is addressed in DCD Section 9.4.8.
C.III.1 9.4.1	Control Room Area Ventilation System	Conforms
C.III.1 9.4.2	Spent Fuel Pool Area Ventilation Systems	Conforms
C.III.1 9.4.3	Auxiliary and Radwaste Area Ventilation System	Conforms
C.III.1 9.4.4	Turbine Building Area Ventilation System	Conforms
C.III.1 9.4.5	Engineered Safety Feature Ventilation System	Conforms
C.III.19.5.1	Fire Protection Program	Conforms
C.III.1 9.5.1.1(1)		Conforms
C.III.1 9.5.1.1(2)		Conforms
C.III.1 9.5.1.1(3)		Conforms. Addressed in Section 1.7 .
C.III.1 9.5.1.1(4)		Conforms. Will be completed in accordance with the milestones in Section 13.4
C.III.1 9.5.1.1(5)		Conforms. Will be completed in accordance with the milestones in Section 13.4
C.III.1 9.5.1.1(6)		Conforms
C.III.1 9.5.1.1(7)		Conforms. Will be completed in accordance with the milestones in Section 13.4
C.III.1 9.5.1.1(8)		Conforms
C.III.1 9.5.1.1(9)		Conforms. Addressed in DCD Sections 9.5.1.15 and 14.3, and in Section 13.4
C.III.1 9.5.2	Communication System	Conforms. Addressed in DCD Section 9.5.2 and in Subsection 9.5.2 .
C.III.1 9.5.3	Lighting System	Conforms. Addressed in DCD Section 9.5.3.
C.III.1 9.5.4	Diesel Generator Fuel Oil Storage and Transfer Systems	Conforms. Addressed in DCD Section 9.5.4 and in Subsection 9.5.4 .
C.III.1 9.5.4.1	Design Basis	Conforms. Addressed in DCD Section 9.5.4.
C.III.1 9.5.4.2	System Description	Conforms
C.III.1 9.5.4.3	Safety Evaluation	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 9.5.5	Diesel Generator Cooling Water Systems	Conforms. Addressed in DCD Section 9.5.5.
C.III.1 9.5.6	Diesel Generator Starting Systems	Conforms. Addressed in DCD Section 9.5.6.
C.III.1 9.5.7	Diesel Generator Lubrication Systems	Conforms. Addressed in DCD Section 9.5.7.
C.III.1 9.5.8	Diesel Generator Combustion Air Intake and Exhaust System	Conforms. Addressed in DCD Section 9.5.8.
C.III.1 10.1	Steam and Power Conversion: Introduction	Conforms. There are no principal design features of the steam and power conversion system that are outside the scope of the referenced certified design.
C.III.1 10.2.1 (1)	Design Bases	Conforms. Addressed in DCD Section 10.2.1.
C.III.1 10.2.1 (2)	Design Bases	Conforms. Addressed in DCD Section 10.2.2.
C.III.1 10.2.1 (3)	Design Bases	Conforms. Addressed in DCD Sections 3.5.1, 3.5.3, 3.6, and 10.2.4, and DCD Figure 3.5-2.
C.III.1 10.2.2 (1)	Description	Conforms. Addressed in DCD Sections 10.2.2, 10.2.3, and DCD Figures 1.2-12 to 1.2-20, 3.5-2, and 10.1-1.
C.III.1 10.2.2 (2)	Description	Conforms. Addressed in DCD Sections 10.2.2 and 10.2.3.
C.III.1 10.2.2 (3)	Description	Conforms. Addressed in DCD Section 10.2.2 and DCD Figures 10.2-1, 10.2-2, and 10.2-3.
C.III.1 10.2.2 (4)	Description	Conforms. Addressed in DCD Sections 10.2.3 and 14.2.8.
C.III.1 10.2.2 (5)	Description	Conforms. Addressed in DCD Sections 12.2.1, 12.2.3, 12.4.4, Table 12.2-23a and DCD Figures 12.3-12 to 12.3-18 and 12.3-32 to 12.3-38.
C.III.1 10.2.2 (6)	Description	Conforms. Addressed in DCD Sections 3.6, 10.2.2, and 10.2.4.
C.III.1 10.2.3 (1)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Subsection 10.2.3.7.
C.III.1 10.2.3 (2)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Subsection 10.2.3.7.
C.III.1 10.2.3 (3)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Subsection 10.2.3.7.
C.III.1 10.2.3 (4)	Turbine Rotor Integrity	Conforms. Addressed in DCD Section 10.2.3 and Subsection 10.2.3.7.
C.III.1 10.2.3 (5)	Turbine Rotor Integrity	Conforms. Addressed in DCD Sections 10.2.2 and 10.2.3, and Subsection 10.2.3.8.

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Section	Section Title	Conformance Evaluation
C.III.1 10.3	Main Steam Supply System	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (1)	Design Bases	Conforms. Addressed in DCD Section 10.3.1.
C.III.1 10.3.1 (2)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (3)	Design Bases	Conforms. Addressed in DCD Sections 10.3.2 and 10.3.3.
C.III.1 10.3.1 (4)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (5)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.1 (6)	Design Bases	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.2	Description	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.3	Evaluation	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.4	Inspection and Testing Requirements	Conforms. Addressed in DCD Section 10.3.4.
C.III.1 10.3.5	Water Chemistry (PWR Only)	Not applicable. Only applies to PWRs.
C.III.1 10.3.6 (1)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Section 10.3.6.
C.III.1 10.3.6 (2)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Sections 6.6 and 10.3.4.
C.III.1 10.3.6 (3)	Steam and Feedwater System Materials	Not applicable. DCD Section 10.3.6 states that there are no austenitic stainless steels in the steam and feedwater system piping.
C.III.1 10.3.6 (4)	Steam and Feedwater System Materials	Not Applicable. DCD Section 10.3.6 states that there are no austenitic stainless steels in the ASME Code Section III Class 1 and 2 portions of steam and feedwater piping.
C.III.1 10.3.6 (5)	Steam and Feedwater System Materials	Conforms. Addressed in DCD Section 10.3.
C.III.1 10.3.6 (6)	Steam and Feedwater System Materials	Not applicable. DCD identifies materials.
C.III.1 10.4 (1)	Other Features of the Steam and Power Conversion System	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 10.4.1	Main Condensers	Conforms. Sampling points for detection are discussed in DCD Section 10.4.1.5.4. Although sodium content and sampling for sodium content is not specifically mentioned in DCD Section 10.4.1, monitoring condensate for an increase in conductivity is considered an acceptable means to detect condenser tube leakage. A table of key parameters and associated action levels is provided as Table 10.4-201 . Alarm setpoints are established to provide an indication of abnormal chemistry conditions prior to reaching a recommended action level.
C.III.1 10.4.2	Main Condenser Evacuation System	Conforms. There are no design features of the main condenser evacuation system that are outside the scope of the referenced certified design.
C.III.1 10.4.3 (1)	Turbine Gland Sealing System	Conforms. Addressed in DCD Section 10.4.3.
C.III.1 10.4.3 (2)		Conforms with the following exception: For the operational phase, the QA Program is described in Chapter 17 , and is based on NQA-1, rather than RG 1.33.
C.III.1 10.4.4 (1)	Turbine Bypass System	Conforms. The Turbine Bypass System is consistent with the referenced certified design.
C.III.1 10.4.5 (1)	Circulating Water System	Conforms
C.III.1 10.4.5 (2)		Not applicable. The circulating water system does not interface with the UHS.
C.III.1 10.4.6 (1)	Condensate Cleanup System	Conforms
C.III.1 10.4.6 (2)		Conforms. Addressed in DCD Sections 10.4.1, 10.4.6, and 5.2.3, DCD Table 5.2-5, and in Table 10.4-201 .
C.III.1 10.4.6 (3)		Conforms
C.III.1 10.4.6 (4)		Not applicable. Only applies to PWRs.
C.III.1 10.4.7 (1)	Condensate and Feedwater Systems	Not applicable. Only applies to PWRs.
C.III.1 10.4.7 (2)		Conforms. Addressed in DCD Sections 1.2.2 and 5.2.4, and DCD Tables 1.9-22 and 1.11-1.
C.III.1 10.4.7 (3)		Not applicable. The condensate and feedwater systems are consistent with the referenced certified design.
C.III.1 10.4.8	Steam Generator Blowdown System (PWR)	Not applicable. Only applies to PWRs.

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Section	Section Title	Conformance Evaluation
C.III.1 10.4.9	Auxiliary Feedwater System (PWR)	Not applicable. Only applies to PWRs.
C.III.1 11.1	Source Terms	Conforms
C.III.1 11.2.1(1)	Liquid Waste Management Systems: Design Bases	Conforms. Addressed in DCD Section 11.2 and in Section 11.2 .
C.III.1 11.2.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.2.
C.III.1 11.2.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.2.1 and DCD Table 11.2-3. Conformance with RG 1.140 is addressed in DCD Section 9.4.3.
C.III.1 11.2.1(4)	Design Bases	Conforms. Addressed in DCD Section 9.4.3.
C.III.1 11.2.1(5)	Design Bases	Conforms. Addressed in DCD Sections 11.2.3 and 15.3.16 and in Subsection 2.4.13 .
C.III.1 11.2.1(6)	Design Bases	Conforms. Quality Assurance Program requirements are addressed in Chapter 17 .
C.III.1 11.2.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.2.4.
C.III.1 11.2.1(8)	Design Bases	Conforms
C.III.1 11.2.1(9)	Design Bases	Conforms. Addressed in DCD Section 11.2.2 and in Section 11.2 .
C.III.1 11.2.2(1)	System Description	Conforms. Addressed in DCD Section 11.2.2.
C.III.1 11.2.2(2)	System Description	Conforms. Addressed in DCD Section 11.2.2.
C.III.1 11.2.2(3)	System Description	Conforms. Addressed in DCD Section 11.2.2.
C.III.1 11.2.2(4)	System Description	Conforms. Addressed in DCD Section 11.2.2.
C.III.1 11.2.3(1)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 11.2 and 12.2, and in Section 12.2 .
C.III.1 11.2.3(2)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 11.2 and 12.2, and in Section 12.2 .
C.III.1 11.3.1(1)	Gaseous Waste Management Systems: Design Bases	Addressed in DCD Section 11.3. Conforms with the following exception: No discussion is provided regarding the capability of and requirements for using portable processing equipment for refueling outages.
C.III.1 11.3.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.3.
C.III.1 11.3.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.3.
C.III.1 11.3.1(4)	Design Bases	Conforms. Quality Assurance Program requirements are addressed in Chapter 17 .
C.III.1 11.3.1(5)	Design Bases	Conforms. Addressed in DCD Section 11.3.5.
C.III.1 11.3.1(6)	Design Bases	Conforms. Addressed in DCD Section 12.3.1.5
C.III.1 11.3.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.3.

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Section	Section Title	Conformance Evaluation
C.III.1 11.3.2(1)	System Description	Conforms. Addressed in DCD Section 11.3.2.
C.III.1 11.3.2(2)	System Description	Conforms. Addressed in DCD Section 11.3.2.
C.III.1 11.3.2(3)	System Description	Conforms. Addressed in DCD Section 11.3.2.
C.III.1 11.3.2(4)	System Description	Conforms. Addressed in DCD Sections 11.3.2, 11.3.3, and 9.4.
C.III.1 11.3.3	Radioactive Effluent Releases	Conforms. Addressed in DCD Section 11.3 and 12.2, and in Section 12.2 .
C.III.1 11.4.1(1)	Solid Waste Management System: Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(2)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(3)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(4)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Sections 11.4, 13.5, and 17.5 .
C.III.1 11.4.1(5)	Design Bases	Conforms. Addressed in DCD Section 11.4 and in Section 11.4 .
C.III.1 11.4.1(6)	Design Bases	Conforms.
C.III.1 11.4.1(7)	Design Bases	Conforms. Addressed in DCD Section 11.4.
C.III.1 11.4.2(1)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4
C.III.1 11.4.2(2)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4
C.III.1 11.4.2(3)	System Description	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 There are no temporary onsite storage facilities.
C.III.1 11.4.2 (4)	System Description	Conforms. Addressed in DCD Section 11.4.

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Section	Section Title	Conformance Evaluation
C.III.1 11.4.3 (1)	Radioactive Effluent Releases	Addressed in DCD Section 11.4 and in Section 11.4 . Conforms with the following exception: The FSAR provides a description of the PCP. Detailed waste packaging methodologies will be provided in the PCP. The implementation milestone is provided in Section 13.4 .
C.III.1 11.4.3 (2)	Radioactive Effluent Releases	Conforms. Addressed in DCD Sections 3.1 and 11.4.
C.III.1 11.4.3 (3)	Radioactive Effluent Releases	Conforms. Addressed in DCD Section 12.2.
C.III.1 11.5.1	Process and Effluent Radiological Monitoring and Sampling Systems: Design Bases	Conforms
C.III.1 11.5.2(1)	System Description	Conforms. Addressed in DCD Section 11.5.
C.III.1 11.5.2 (2)	System Description	Conforms with the following exception: Section 11.5 provides a description of the ODCM. The implementation milestone is provided in Section 13.4
C.III.1 11.5.2 (3)	System Description	Conforms with the following exception: Section 11.5 and TS Section 5 provide a description of the radiological effluent controls. The implementation milestone is provided in Section 13.4
C.III.1 11.5.2 (4)	System Description	Conforms with the following exception: Section 11.5 and TS Section 5 provide a description of the REMP. The implementation milestone is provided in Section 13.4
C.III.1 11.5.2 (5)	System Description	Conforms. Addressed in DCD Sections 3.1 and 11.5.
C.III.1 11.5.2 (6)	System Description	Conforms
C.III.1 11.5.2 (7)	System Description	Conforms
C.III.1 11.5.3	Effluent Monitoring and Sampling	Conforms
C.III.1 11.5.4	Process Monitoring and Sampling	Conforms
C.III.1 12.1.1	Policy Considerations	Conforms. Addressed in Section 12.1 and Section 12.5 .
C.III.1 12.1.2	Design Considerations	Conforms. Addressed in Section 12.5 .
C.III.1 12.1.3	Operational Considerations	Conforms. Addressed in Section 12.1 and Section 12.5 .
C.III.1 12.2.1	Contained Sources	Conforms. Addressed in DCD Section 12.2.1.
C.III.1 12.2.2	Airborne Radioactive Material Sources	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 12.3.1	Facility Design Features	Conforms
C.III.1 12.3.2	Shielding	Conforms
C.III.1 12.3.3	Ventilation	Conforms. Addressed in DCD Sections 9.4.1 and 12.3.
C.III.1 12.3.4	Area Radiation and Airborne Radioactivity Monitoring Instrumentation	Conforms. Addressed in Sections 12.3 and 12.5 .
C.III.1 12.3.5	Dose Assessment	Conforms. Addressed in DCD Section 12.4 and in Section 12.4 .
C.III.1 12.4	Dose Assessment	Conforms
C.III.1 12.5 (1) (a)	Operational Radiation Protection Program: Organization	Conforms. Addressed in Section 12.5 and Section 13.1
C.III.1 12.5 (1) (b)	Facilities	Conforms
C.III.1 12.5 (1) (c)	Instrumentation and Equipment	Conforms
C.III.1 12.5 (1) (d)	Procedures	Conforms
C.III.1 12.5 (1) (e)	Training	Conforms. Addressed in Section 12.5 and Section 13.2
C.III.1 12.5 (2)		Conforms. Addressed in DCD Section 12.3.
C.III.1 12.5 (3)		Conforms. Addressed in Section 12.5 , Section 13.1 , and Section 13.4
C.III.1 12.5 (4)		Conforms. Addressed in Section 13.4
C.III.1 12.5, last paragraph		Conforms. Addressed in Section 12.5 , Section 13.1 , Section 13.2 , and Section 13.5 .
C.III.1 12.5.1	Organization	Conforms. Addressed in Section 12.5 and Section 13.1
C.III.1 12.5.2	Equipment, Instrumentation, and Facilities	Conforms
C.III.1 12.5.3	Procedures	Addressed in Section 12.5 , Section 13.2 , Section 13.5 , and Section 17.5 . Conforms with one exception: With respect to RG 1.33, Detroit Edison's QA procedures follow NQA-1 rather than the older standards referenced in RG 1.33. The QA requirements are described in Section 17.5 .
C.III.1 13.1.1(1)	Organizational Structure of Applicant: Management and Technical Support Organization	Conforms. Addressed in Section 13.1 and Section 14.2 .
C.III.1 13.1.1(2)		Conforms
C.III.1 13.1.1(3)		Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 13.1.1(4)		Conforms
C.III.1 13.1.1(5)		Conforms
C.III.1 13.1.1(6)		Conforms
C.III.1 13.1.1(7)		Conforms. Addressed in Section 13.1 and Section 14.2 .
C.III.1 13.1.1.1	Design, Construction, and Operating Responsibilities	Conforms
C.III.1 13.1.1.2	Organizational Arrangement	Conforms. Addressed in Section 13.1 and Section 17.5 Fermi 3 is not a new, multi-unit plant site.
C.III.1 13.1.1.3	Qualifications	Conforms. Addressed in Section 13.1 and Section 17.5 .
C.III.1 13.1.2(1)		Exception. The guidelines of RG 1.33 are met through equivalent administrative controls described in Chapter 17 .
C.III.1 13.1.2(2)		Exception. The guidelines of RG 1.33 are met through equivalent administrative controls described in Chapter 17 .
C.III.1 13.1.2(3)		Conforms. Addressed in Subsection 9.5.1 and Section 13.1 .
C.III.1 13.1.2(4)		Conforms
C.III.1 13.1.2(5)		Conforms
C.III.1 13.1.2(6)		Conforms
C.III.1 13.1.2(7)		Conforms
C.III.1 13.1.2(8)		Conforms. Addressed in Appendix 13AA .
C.III.1 13.1.2.1	Plant Organization	Conforms. Addressed in Section 13.1 and Section 17.5 .
C.III.1 13.1.2.2(1)	Plant Personnel Responsibilities and Authorities	Conforms. Addressed in Section 13.1 and Section 17.5 .
C.III.1 13.1.2.2(2)		Conforms
C.III.1 13.1.2.2(3)		Conforms
C.III.1 13.1.2.3	Operating Shift Crews	Conforms
C.III.1 13.1.3.1	Qualification Requirements	Conforms. Addressed in Section 13.1 and Section 17.5 .
C.III.1 13.1.3.2	Qualifications of Plant Personnel	Exception. Resumes will not be included in the application, but will be available for inspection upon request.
C.III.1 13.2.1	Plant Staff Training Program	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 13.2.1.1 Licensed Staff (1)		Conforms with the following exceptions: 1) this item discusses inclusion of details of the licensed training program. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section; 2) the requirement for a “contingency plan...in the event fuel loading is subsequently delayed” is met by the operator re-qualification program; and 3) the industry standard content for this section does not include a discussion of proposed schedule for licensed personnel.
C.III.1 13.2.1.1 Licensed Staff (2)		Conforms
C.III.1 13.2.1.1 Licensed Staff (3)		Conforms
C.III.1 13.2.1.1 Licensed Staff (4)		Conforms
C.III.1 13.2.1.1 Licensed Staff (5)		Conforms
C.III.1 13.2.1.1 Licensed Staff (6)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (1)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (2)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (3)		Exception – This item discusses programs not covered under 10 CFR 50.120. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section.
C.III.1 13.2.1.1 Non-licensed Staff (4)		Conforms. Addressed in Subsection 9.5.1 .

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Section	Section Title	Conformance Evaluation
C.III.1 13.2.1.1 Non-licensed Staff (5)		Conforms
C.III.1 13.2.1.1 Non-licensed Staff (6)		Conforms with the following exception: The first part of this item discusses detailed course descriptions. As noted in Appendix 13BB , the systematic approach to training (SAT) process is used to establish and maintain training programs. Course duration and content are determined by the SAT process and by administrative procedure and are not included in the FSAR section. The implementation milestone is addressed in Section 13.4 .
C.III.1 13.2.1.1 Non-licensed Staff (7)		Conforms
C.III.1 13.2.1.2	Coordination with Preoperational Tests and Fuel Loading	Conforms with the following exception - Rather than providing contingency plans for training in the event of significantly delayed fuel loading the retraining programs are utilized, as described in Appendix 13BB . Figure 13.1-202 shows the training schedule relative to fuel loading.
C.III.1 13.2.2(1)	Applicable NRC Documents: 10 CFR 19	Conforms
C.III.1 13.2.2(2)	10 CFR 26	Conforms
C.III.1 13.2.2(3)	10 CFR 50	Conforms
C.III.1 13.2.2(4)	10 CFR 50 Appendix E	Conforms
C.III.1 13.2.2(5)	10 CFR 52	Conforms
C.III.1 13.2.2(6)	10 CFR 55	Conforms
C.III.1 13.2.2(7)	RG 1.8	Addressed in Table 1.9-202 .
C.III.1 13.2.2(8)	RG 1.149	Addressed in Table 1.9-202 .
C.III.1 13.2.2(9)	NUREG-0711	Conforms. HFE addressed in DCD Chapter 18.
C.III.1 13.2.2(10)	NUREG-1021	Exception: Industry standard content for this section does not explicitly include discussion of compliance with NUREG-1021, Operator Licensing Examination Standards for Power Reactors.
C.III.1 13.2.2(11)	NUREG-1220	Not applicable. NUREG provides instructions for NRC inspectors.

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Section	Section Title	Conformance Evaluation
C.III.1 13.2.2(12)	GL 86-04	Conforms
C.III.1 13.2.2(13)	RG 1.134	Conforms. Industry standard content for this section does not explicitly include a discussion of compliance with RG 1.134, Medical Evaluations.
C.III.1 13.3(1)	Emergency Planning	Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3(2)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3(3)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3(4)		Conforms. Addressed in Chapter 2 , and the Emergency Plan and Evacuation Time Estimate in COLA Part 5.
C.III.1 13.3(5)		Conforms. Addressed in COLA Part 5.
C.III.1 13.3(6)		Not applicable. Applies when state and/or local governments decline to participate in emergency planning and preparedness.
C.III.1 13.3(7)		Conforms
C.III.1 13.3.1 (1)	Combined License Application and Emergency Plan Content	Conforms. Addressed in COLA Part 5.
C.III.1 13.3.1 (2)		Conforms. Addressed in COLA Part 5 and COLA Part 10.
C.III.1 13.3.1 (3)		Conforms. Addressed in Chapter 1 and the Emergency Plan in COLA Part 5.
C.III.1 13.3.1 (4)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.1 (5)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.1 (6)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.1 (7)		Conforms. Addressed in Chapter 1 .
C.III.1 13.3.1 (8)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.1 (9)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.2 (1)	Emergency Plan Considerations for Multiunit Sites	Conforms. The Fermi 3 EP is a stand-alone plan and does not rely upon the EP for Fermi 2.
C.III.1 13.3.2 (2)		Not applicable. The Fermi 3 EP is a stand-alone plan and does not rely upon the EP for Fermi 2.

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Section	Section Title	Conformance Evaluation
C.III.1 13.3.2 (3)		Conforms. Addressed in the Emergency Plan in COLA Part 5 and COLA Part 10.
C.III.1 13.3.2 (4)		Conforms. Addressed in COLA Part 5.
C.III.1 13.3.2 (5)		Conforms. Addressed in the Emergency Plan in COLA Part 5.
C.III.1 13.3.2 (6)		Conforms. Addressed in the Emergency Plan and the Evacuation Time Estimate in COLA Part 5.
C.III.1 13.3.2 (7)		Not applicable. Provisions for co-located licensees do not apply.
C.III.1 13.3.2 (8)		Conforms. Addressed in COLA Part 10.
C.III.1 13.3.2 (9)		Not applicable. There are no adjacent sites.
C.III.1 13.3.3	Emergency Planning Inspections, Tests, Analyses, and Acceptance Criteria	Conforms. Addressed in COLA Part 10.
C.III.1 13.4	Operational Program Implementation	Conforms
C.III.1 13.5.1	Administrative Procedures	Conforms. Addressed in Sections 13.5 and Section 17.5
C.III.1 13.5.2.1	Operating and Emergency Operating Procedures	Conforms with the following exception: Subsection 13.5.1 identifies classes of procedures by topic or type in lieu of the specific title. Operating procedures will be developed after activities such as job and task analyses have been completed.
C.III.1 13.5.2.2	Maintenance and Other Operating Procedures	Conforms
C.III.1 13.6	Security	Conforms. Addressed in Sections 13.4 and Section 13.6 , and .
C.I13.7	FFD	Conforms
C.III.1 14.1	Verification Program: Specific Information to be Addressed for the Initial Plant Test Program	Conforms. Addressed in Section 14.2 and Section 14.3 .
C.III.1 14.2	Initial Plant Test Program	Conforms
C.III.1 14.2.1	Summary of Test Program and Objectives	Conforms
C.III.1 14.2.2	Organization and Staffing	Conforms. Addressed in DCD Section 14.2 and in Section 13.1 , Section 14.2 and Section 17.5
C.III.1 14.2.3	Test Procedures	Conforms. Addressed in DCD Section 14.2.
C.III.1 14.2.4	Conduct of Test Program	Conforms. Addressed in DCD Section 14.2.

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Section	Section Title	Conformance Evaluation
C.III.1 14.2.5	Review, Evaluation, and Approval of Test Results	Conforms. Addressed in DCD Section 14.2.
C.III.1 14.2.6	Test Records	Conforms
C.III.1 14.2.7	Conformance of Tests Programs with Regulatory Guides	Conforms. Addressed in DCD Section 14.2.3.
C.III.1 14.2.8	Utilization of Reactor Operating and Testing Experiences in Development of Test Program	Conforms. Addressed in DCD Section 14.2 and in Section 14.2 .
C.III.1 14.2.9	Trial Use of Plant Operating and Emergency Procedures	Conforms. Addressed in DCD Section 14.2.5 and in Section 13.2 .
C.III.1 14.2.10	Initial Fuel Loading and Initial Criticality	Conforms. Addressed in DCD Section 14.2.6.
C.III.1 14.2.11	Test Program Schedule	Conforms. Addressed in DCD Section 14.2.7 and in Subsection 14.2.7 .
C.III.1 14.2.12	Individual Test Descriptions	Conforms. Addressed in DCD Section 14.2.8 and in Subsection 14.2.9 .
C.III.1 14.3	Inspections, Tests, Analyses, and Acceptance Criteria	Conforms. Addressed in COLA Part 10.
C.III.1 15.1	Transient and Accident Analyses: Transient and Accident Classification	Conforms. There are no aspects of the site-specific design that affect the transient and accident analyses in the DCD.
C.III.1 15.2	Frequency of Occurrence	Conforms
C.III.1 15.3	Plant Characteristics Considered in the Safety Evaluation	Conforms
C.III.1 15.4	Assumed Protection System Actions	Conforms
C.III.1 15.5	Evaluation of Individual Initiating Events	Conforms.
C.III.1 15.6	Event Evaluation	See below
C.III.1 15.6.1	Identification of Causes and Frequency Classification	Conforms
C.III.1 15.6.2	Sequence of Events and Systems Operation	Conforms
C.III.1 15.6.3	Core and System Performance	Conforms
C.III.1 15.6.4	Barrier Performance	Conforms
C.III.1 15.6.5	Radiological Consequences	Conforms. Table 2.0-201 compares the site-specific short-term X/Qs for the EAB, LPZ, and control room to the X/Qs assumed in the DCD.

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Section	Section Title	Conformance Evaluation
C.III.1 16.1	Technical Specifications and Bases	Conforms. Addressed in COLA Part 4. There are no deviations from the generic TS bases.
C.III.1 16.2	Content and Format of Technical Specifications and Bases	Conforms. Addressed in COLA Part 4. No plant-specific deviations from the referenced certified generic Technical Specifications or Bases are required and none are being requested (e.g., incorporation of TSTF travelers).
C.III.1 17.1	Quality Assurance and Reliability Assurance: Quality Assurance During the Design and Construction Phase	Conforms
C.III.1 17.2	Quality Assurance During the Operations Phase	Conforms
C.III.1 17.3	Quality Assurance Program Description	Conforms
C.III.1 17.4.1	New Section 17.4 in the Standard Review Plan	Conforms
C.III.1 17.4.2	Reliability Assurance Program Scope, Stages, and Goals	Conforms. Addressed in Section 17.4 and DCD Section 17.4.
C.III.1 17.4.3	Reliability Assurance Program Implementation	Conforms. Addressed in Section 17.4 and Section 17.6 .
C.III.1 17.4.4	Reliability Assurance Program Information Needed in a COL Application	Conforms. Addressed in DCD Section 17.4 and in Section 17.4 , Section 17.5 , and Section 17.6
C.III.1 17.5	Quality Assurance Program Guidance	See below
C.III.1 17.5.1	COL Applicant QA Program Responsibilities	Conforms
C.III.1 17.5.2	Updated SRP Section 17.5 and the QA Program Description	Criterion I requires “retaining responsibility for the quality assurance program” while C.III.1.17.5.2 goes further to require “.. and maintain control over, those portions of the QA program delegated to other organizations.” Detroit Edison retained responsibility for the QA program (see FSAR Subsection 1.4.1), this responsibility was accomplished by fully delegating the work of establishing and executing the QA program under their QA program satisfying the requirements of Appendix B to 10 CFR Part 50.
C.III.1 17.5.3	Evaluation of the QAPD Against the SRP and QAPD Submittal Guidance	Conforms

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Section	Section Title	Conformance Evaluation
C.III.1 17.6	Description of the Applicant's Program for Implementation of 10 CFR 50.65, the Maintenance Rule	Conforms
C.III.1 17.6.1	Scoping per 10 CFR 50.65(b)	Conforms
C.III.1 17.6.2	Monitoring per 10 CFR 50.65(a)	Conforms
C.III.1 17.6.3	Periodic Evaluation per 10 CFR 50.65(a)(3)	Conforms
C.III.1 17.6.4	Risk Assessment and Management per 10 CFR 50.65(a)(4)	Conforms
C.III.1 17.6.5	Maintenance Rule Training and Qualification	Conforms
C.III.1 17.6.6	Maintenance Rule Program Role in Implementation of Reliability Assurance Program (RAP) in the Operations Phase	Conforms
C.III.1 17.6.7	Maintenance Rule Program Implementation	Conforms
C.III.1 Chapter 18	Human Factors Engineering	Conforms
	HFE principles incorporated into:	
	(1) Planning and management	Conforms. Addressed in DCD Section 18.2.
	(2) Plant design processes not closed with design certification	Conforms. Addressed in DCD Tier 1, ITAAC Table 3.3-1.
	(3) HSI, procedures, and training	Conforms. Addressed in DCD Tier 1, ITAAC Table 3.3-1, Items 6, 7, and 8.
	(4) implementation of the design	Conforms. Addressed in DCD Tier 1, ITAAC Table 3.3-1, Item 10.
	(5) monitoring of performance at the site	Conforms. Addressed in DCD Tier 1, ITAAC Table 3.3-1, Item 11.
	Applicant program addresses normal and emergency, maintenance, test, inspection and surveillance activities	Conforms. Addressed in DCD Section 18.1.
	FSAR/DCD describe objectives and scope of the applicant's activities related to element, methodology, and results for (12 HFE elements)	Conforms. Addressed in DCD Sections 18.3 through 18.13.

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
(Sheet 37 of 39) [EF3 COL 1.9-3-A]

Section	Section Title	Conformance Evaluation
	Applicant should reference detailed implementation plan reviewed and approved as part of design certification	Conforms. Addressed in DCD Section 18.2.1.
C.I 18.1	HFE Program Management	Conforms. Addressed in DCD Sections 18.2.2 and 18.2.3.
C.I 18.1.1	General HFE Program and Scope	Conforms. Addressed in DCD Sections 18.2.1 and 18.2.2.
C.I 18.1.2	HFE Team and Organization	Conforms. Addressed in DCD Section 18.2.3.
C.I 18.1.3	HFE Process and Procedures	Conforms. Addressed in DCD Section 18.2.1 and 18.2.2.
C.I 18.1.4	HFE Issues Tracking	Conforms. Addressed in DCD Section 18.2.2.
C.I 18.1.5	HFE Technical Program	Conforms. Addressed in DCD Sections 18.3 through 18.13.
C.I 18.2.1	Objectives and scope	Conforms. Addressed in DCD Section 18.3.1.
C.I 18.2.2.1	OER Process	Conforms. Addressed in DCD Section 18.3.2.
C.I 18.2.2.2	Predecessor plants and systems	Conforms. Addressed in DCD Section 18.3.2.1.
C.I 18.2.2.3	Risk-important human actions	Conforms. Addressed in DCD Section 18.3.2.2.
C.I 18.2.2.4	HFE technology	Conforms. Addressed in DCD Section 18.3.2.3.
C.I 18.2.2.5	Recognized industry issues	Conforms. Addressed in DCD Section 18.3.2.4.
C.I 18.2.2.6	Issued Identified by plant personnel	Conforms. Addressed in DCD Section 18.3.2.5.
C.I 18.2.2.7	Issue Analysis, Tracking, and Review	Conforms. Addressed in DCD Section 18.3.2.6.
C.I 18.2.3	Results	Conforms. Addressed in DCD Section 18.3.3.
C.I 18.3.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.4.2.
C.I 18.3.1.1	Functional Requirements Analysis	Conforms. Addressed in DCD Section 18.4.1.
C.I 18.3.1.2	Function Allocation Analysis	Conforms. Addressed in DCD Section 18.4.2.
C.I 18.3.2.1	Methodology for Functional Requirements Analysis	Conforms. Addressed in DCD Section 18.4.1.
C.I 18.3.2.2	Methodology for Function Allocation Analysis	Conforms. Addressed in DCD Section 18.4.2.
C.I 18.3.3	Results	Conforms. Addressed in DCD Sections 18.4.1 and 18.4.2.
C.I 18.4.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
(Sheet 38 of 39) [EF3 COL 1.9-3-A]

Section	Section Title	Conformance Evaluation
C.I 18.4.2	Methodology	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2
C.I 18.4.3	Results	Conforms. Addressed in DCD Sections 18.5.1 and 18.5.2
C.I 18.5.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.6.2.
C.I 18.5.2	Methodology	Conforms. Addressed in DCD Sections 18.6.4 and 18.6.5.
C.I 18.5.3	Results	Conforms. Addressed in DCD Section 18.6.6.
C.I 18.6.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.7.1.
C.I 18.6.2	Methodology	Conforms. Addressed in DCD Section 18.7.2.
C.I 18.6.3	Results	Conforms. Addressed in DCD Section 18.7.3.
C.I 6.3.2.8	Manual Actions	Conforms. Addressed in DCD Section 18.7.2.
C.I 18.7.1	Objectives and scope	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.1	HSI Design Inputs	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.2	Concept of operations	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.3	Functional Requirements Specification	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.4	HSI Concept Design	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.5	HSI Detailed Design and Integration	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.2.6	HSI Tests and Evaluations	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.1	Overview of HSI Design and Its Key Features	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.2	Safety Aspects of the HSI	Conforms. Addressed in DCD Section 18.8.1.
C.I 18.7.3.3	HSI Change Process	Conforms. Addressed in DCD Section 18.13.3.
C.I 18.8.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.9.1.
C.I 18.8.2	Methodology	Conforms. Addressed in DCD Section 18.9.2.
C.I 18.8.3	Results	Conforms. Addressed in DCD Section 18.9.3.
C.I 18.9.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.10.1 and 18.10.2.
C.I 18.9.2	Methodology	Conforms. Addressed in DCD Sections 18.10.3 and 18.10.4.
C.I 18.9.3	Results	Conforms. Addressed in DCD Section 18.10.5.
C.I 18.10.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.11 and 18.11.1.
C.I 18.10.2	Methodology	Conforms. Addressed in DCD Section 18.11.

Table 1.9-203 Conformance with the FSAR Content Guidance in RG 1.206
(Sheet 39 of 39) [EF3 COL 1.9-3-A]

Section	Section Title	Conformance Evaluation
C.I 18.10.2.1	Operational Conditions Sampling	Conforms. Addressed in DCD Section 18.11.
C.I 18.10.2.2	Design Verification	Conforms. Addressed in DCD Section 18.11.
C.I 18.10.2.3	Integrated System Validation	Conforms. Addressed in DCD Section 18.11.
C.I 18.10.2.4	Human Engineering Discrepancy Resolution	Conforms. Addressed in DCD Section 18.11.
C.I 18.10.3	Results	Conforms. Addressed in DCD Section 18.11.2.
C.I 18.11.1	Objectives and Scope	Conforms. Addressed in DCD Section 18.12.1.
C.I 18.11.2	Methodology	Conforms. Addressed in DCD Section 18.12.2.
C.I 18.11.3	Results	Conforms. Addressed in DCD Section 18.12.3.
C.I 18.12.1	Objectives and Scope	Conforms. Addressed in DCD Sections 18.13.1 and 18.13.2.
C.I 18.12.2	Methodology	Conforms. Addressed in DCD Sections 18.13.2 and 18.13.3.
C.I 18.12.3	Results	Conforms. Addressed in DCD Section 18.13.4.
C.III.1 Chapter 19	Probabilistic Risk Assessment and Severe Accident Evaluation	Conforms. As discussed in RG 1.206, Section C.III.1 .10, the FSAR follows the organization and numbering of the referenced certified design.

Table 1.9-204 Industrial Codes and Standards (Sheet 1 of 5) [EF3 SUP 1.9-1]

Code or Standard Number	Year	Title
American Concrete Institute (ACI)		
318-08	2008	Building Code Requirements for Structural Concrete and Commentary
349-01	2001	Code Requirements for Nuclear Safety-Related Concrete Structures
207.1R	2005 (Reapproved 2012)	Guide to Mass Concrete
207.2R	1995 (Reapproved 2002)	Report on Thermal and Volume Change Effects on Cracking of Mass Concrete
207.4R	2005 (Reapproved 2012)	Cooling and Insulating Systems for Mass Concrete
American Nuclear Society (ANS)		
2.8	1992	Determining Design Basis flooding at Power Reactor Sites an American
3.1	1993	Selection, Qualification, and Training of Personnel for Nuclear Power Plants
American National Standards Institute		
N323A	1997	Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments
N323D	2002	Installed Radiation Protection Instrumentation
B30.2	2001	Overhead and Gantry Cranes
American Society of Civil Engineers (ASCE)		
ASCE 4-98	1998	Seismic Analysis of Safety-Related Nuclear Structures and Commentary
ASCE 43-05	2005	Seismic Design Criteria for Structures, Systems, and Components in Nuclear Facilities
ASCE SEI/ASCE 7-05	2005	Minimum Design Loads for Buildings and other Structures
ASCE Practice No. 70	1990	Evapotranspiration and Irrigation Water Requirements
American Society Heating, Refrigerating, and Air-Conditioning (ASHRAE)		
ASHRAE Handbook	2005	American Society Heating, Refrigerating, and Air-Conditioning Engineers Handbook
American Society of Mechanical Engineers (ASME)		
NQA-1	1994	Quality Assurance Programs Requirements for Nuclear Facilities
Boiler and Pressure Vessel Code, Section IX	2007	Qualification Standard for Welding and Brazing Procedures, Welder, Brazers and Welding and Brazing Operators

Table 1.9-204 Industrial Codes and Standards (Sheet 2 of 5) [EF3 SUP 1.9-1]

Code or Standard Number	Year	Title
OM Code		Code for the Operation and Maintenance of Nuclear Power Plants
American Society for Testing and Materials (ASTM)		
C88-05	2005	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
American Society for Testing and Materials (ASTM) (Continued)		
C131-06	2006	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
C535-03	2003	Standard Test Method for Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
C1260-07	2007	Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
C1293-08b	2008	Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction
D422-63	2002	Standard Test Method for Particle-Size Analysis of Soils
D512-04	2004	Standard Test Methods for Chloride Ion in Water
D516-02	2002	Standard Test Methods for Sulfate Ion in Water,
D698-07	2007	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
D854-06	2006	Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer
D1140-00	2006	Standard Test Methods for Amount of Material in Soils Finer than No. 200 (75-mm)
D1557-07	2007	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2,700 kN-m/m ³))
D1586-99	1999	Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils
D1587-00	2000	Standard Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes
D2113-06	2006	Standard Practice for Rock Core Drilling and Sampling of Rock for Site Investigation
D2166-06	2006	Standard Test Method for Unconfined Compressive Strength of Cohesive Soil

Table 1.9-204 Industrial Codes and Standards (Sheet 3 of 5) [EF3 SUP 1.9-1]

Code or Standard Number	Year	Title
D2216-00	2000	Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
D2435-04	2004	Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading
D2487-06	2006	Standard Practice for Classification of Soils for Engineering Purposes
D2488-06	2006	Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)
American Society for Testing and Materials (ASTM) (Continued)		
D2850-03a	2003	Standard Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils
D3080-04	2004	Standard Test Methods for Direct Shear Test of Soil Under Consolidated Drained Conditions
D3550-01	2001	Standard Practice for Thick Wall, Ring-Lined, Split Barrel, Drive Sampling of Soils
D4220-95	2000	Standard Practices for Preserving and Transporting Soil Samples
D4253-00	2000	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
D4254-06	2006	Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density
D4318-05	2005	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
D4767-04	2004	Standard Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils
D5079-02	2002	Standard Practices for Preserving and Transporting Rock Core Samples
D5084-03	2003	Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter
D5607-02	2006	Standard Test Methods for Performing Laboratory Direct Shear Strength of Rock Specimens Under Constant Normal Force
D6151-97	1997	Standard Practice for Using Hollow-Stem Augers for Geotechnical Exploration and Soil Sampling
D6914-04	2004	Standard Practice for Sonic Drilling for Site Characterization and the Installation of Subsurface Monitoring Devices,

Table 1.9-204 Industrial Codes and Standards (Sheet 4 of 5) [EF3 SUP 1.9-1]

Code or Standard Number	Year	Title
D6938-10	2010	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
D7012-07	2007	Standard Test Methods for Compressive Strength and Elastic Moduli of Intact Rock Core Specimens under Varying States of Stress and Temperature
ASTM E-119	2007	Fire Test of Building Construction Materials
G51-95	2005	Standard Test Methods for Measuring pH of Soil for Use in Corrosion Testing
Applicable Building Codes		
Michigan Building Code	2003	Michigan Building Code
Applicable Building Codes (Continued)		
Michigan Department of Transportation	2003	Standard Specifications for Construction, Section 902 – Aggregates
Institute of Electrical and Electronics Engineers (IEEE)		
C2	2007	National Electric Safety Code
National Fire Protection Association (NFPA)		
NFPA 10	2007	Standard for Portable Fire Extinguishers
NFPA 15	2007	Standard for Water Spray Fixed Systems for Fire Protection
NFPA 25	2008	Recommended Practices for Inspection, Testing, and Maintenance of Standpipes and Hose Systems
NFPA 45	2004	Standard on Fire Protection for Laboratories Using Chemicals
NFPA 55	2005	Standard for Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks
NFPA 72	2007	National Fire Alarm Code
NFPA 422	2004	Guide for Aircraft Accident/Incident Response Assessment
NFPA 804	2006	Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants
Occupational Safety and Health Act (OSHA)		
29 CFR 1910	2006	Occupational Safety and Health Standards
29 CFR 1926	2006	Safety and Health Regulations for Construction
United States Army Corps of Engineers (USACE)		

Table 1.9-204 Industrial Codes and Standards (Sheet 5 of 5) [EF3 SUP 1.9-1]

Code or Standard Number	Year	Title
EM 1110-2908	1994	Engineering and Design Rock Foundations
Environmental Protection Agency (EPA)		
40 CFR 60	2006	EPA Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Table 1.9-205 NUREG Reports Cited (Sheet 1 of 3)

[EF3 SUP 1.9-2]

NUREG No.	Issue Date	Title	Comment/Section Where Discussed
0016, Rev. 1	01/1979	Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Boiling Water Reactors (BWRs)	12.2, Table 1.9-202 RG 1.111
0570	06/1979	Toxic Vapor Concentrations in the Control Room Following a Postulated Accidental Release	6.4
0612	07/1980	Control of Heavy Loads at Nuclear Power Plants	13.5, 9.1.5
0737	11/1980	Clarification of TMI Action Plan Requirements	12.5, 13.5, Appendix 14AA
0800	03/2007	Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants	1.1, 2.0, 2.2, 2.3, 2.4, 2.5, 9.3, 11.5, Appendix 14AA
1407	1991	Procedural and Submittal Guidance for the Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities	3.7.1
1437	05/1996	Generic Environmental Impact Statement for License Renewal of Nuclear Plants, U.S. Nuclear Regulatory Commission	12.2
1736	10/2001	Consolidated Guidance: 10 CFR Part 20 – Standards for Protection Against Radiation	1.9
1805	12/2004	Fire Dynamics Tools (FDTs) Quantitative Fire Hazard Analysis Methods for the U.S. Nuclear Regulatory Commission Fire Protection Inspection Program	2.2
2115	01/2012	Central and Eastern United States Seismic Source Characterization for Nuclear Facilities	2.5.2
2117	04/2012	Practical Implementation Guidelines for SSHAC Level 3 and 4 Hazard Studies	2.5.2
0654/FEMA-REP-1	11/1980	Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants	1.9, Emergency Plan
0696	02/1981	Functional Criteria for Emergency Response Facilities”, Final Report	Emergency Plan
0728	04/2005	NRC Incident Response Plan	Emergency Plan
0737, Sup 1	12/1982	Requirements for Emergency Response Capability	13.5, Emergency Plan
CP-0105	1990	“The 1886 Charleston Earthquake-An overview of Geological Studies,” in Proceedings of the U.S. Nuclear Regulatory Commission Seventeenth Water Reactor Safety Information Meeting	2.5.2

Table 1.9-205 NUREG Reports Cited (Sheet 2 of 3)

[EF3 SUP 1.9-2]

NUREG No.	Issue Date	Title	Comment/Section Where Discussed
CP-0133	1994	“Geologically Recent Near-Surface Faulting and Folding in Giles County, Southwest Virginia: New Exposures of Extensional and Apparent Reverse Faults in Alluvial Sediments Between Pembroke and Pearisburg,” Proceedings of the U.S. Nuclear Regulatory Commission for 1994, Twenty-First Water Reactor Safety Information Meeting	2.5.2
CR-0098	1978	Development of Criteria for Seismic Review of Selected Nuclear Power Plants	3.7.1
CR-1745	11/1980	Analysis of Techniques for Estimating Evacuation Times for Emergency Planning Zones,	Emergency Plan, ETE
CR-2650	10/1982	Allowable Shipment Frequencies for the Transport of Toxic Gases Near Nuclear Power Plants	2.2.3
CR-2858	11/82	PAVAN: An Atmospheric Dispersion Program for Evaluating Design Basis Accidental Releases of Radioactive Materials for Nuclear Power Stations	2.3.4
CR-2919	09/1982	XOQDDOQ: Computer Program for the Meteorological Evaluation of Routine Effluent Releases at Nuclear Power Stations	2.3.5 , Appendix 2B
CR-3145	10/1992	Geophysical Investigations of the Western Ohio – Indiana Region	2.5.1 , 2.5.2
CR-4013	04/1986	LADTAP II Technical Reference and User Guide	12.2
CR-4461	02/2007	Tornado Climatology of the United States	2.3
CR-4653	03/1987	GASPAR II Technical Reference and User Guide	12.2
CR-4685	1992	“Post-Pliocene Displacement on Faults Within the Kentucky River Fault System of East-Central Kentucky,” Kentucky Geological Survey, Series 11, Reprint 34, reprinted from U.S. Nuclear Regulatory Commission Report	2.5.2
CR-4831	03/1992	State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants	Emergency Plan
CR-5250	1986	Seismic Hazard Characterization of 69 Nuclear Plant Sites East of the Rocky Mountains: Questionnaires,” prepared by Lawrence Livermore National Laboratory	2.5.2
CR-5347	1989	Recommendation for Resolution of Public Comments on USI A-40, “Seismic Design Criteria”	3.7.1
CR-5503	07/1999	Techniques for Identifying Faults and Determining Their Origins	2.5.3
CR-5512	10/1992	Residual Radioactive Contamination from Decommissioning	2.4

Table 1.9-205 NUREG Reports Cited (Sheet 3 of 3)

[EF3 SUP 1.9-2]

NUREG No.	Issue Date	Title	Comment/Section Where Discussed
CR-5613	1990	Paleoliquefaction Features along the Atlantic Seaboard	2.5.2
CR-5730	1999	Paleoseismology Study Northwest of the New Madrid Seismic Zone	2.5.2
CR-6331	07/1997	Atmospheric Relative Concentrations in Building Wakes	2.3.4
CR-6372	04/1997	Recommendations for Probabilistic Seismic Hazard Analysis: Guidance on Uncertainty and Use of Experts	2.5.2
CR-6624	10/1992	Recommendations for Revision of Regulatory Guide 1.78	2.2
CR-6948	11/2007	Integrated Ground-Water Monitoring Strategy for NRC-Licensed Facilities and Sites: Logic, Strategic Approach and Discussion	2.4.12
CR-6728	10/2001	Technical Basis for Revision of Regulatory Guidance on Design Ground Motions: Hazard- and Risk-consistent Ground Motion Spectra Guidelines	2.5 , 3.7.1
CR-6863	01/2005	Development of Evacuation Time Estimate Studies for Nuclear Power Plants	Emergency Plan
CR-6926	2007	Evaluation of the Seismic Design Criteria in ASCE/SEI Standard 43-05 for Application to Nuclear Power Plants	3.7.1
GR-0018	2000	Dating of Liquefaction Features in the New Madrid Seismic Zone	2.5.2

1.10 Summary of COL Items

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following at the end of this section.

EF3 SUP 1.10-1

[Table 1.10-201](#) lists the FSAR location(s) where the individual COL items from the DCD are addressed.

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 1 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
1.1-1-A	Establish Rated Electrical Output	1.1.2.7
1.3-1-A	Update Table	1.3.1
1.7-1-H	Final Design Configuration Confirmation	1.7
1.9-3-A	SRP and Regulatory Guide Applicability	SRP: Table 1.9-201 RGs: 1.9.1 and 1.9.2 RG 1.206: Table 1.9-203
1.11-1-A	Address Table 1.11-1 Items That Refer to Notes (2) and (7)	1.11.1 and Table 1.11-201
1C.1-1-A	Handling of Safeguards Information	Appendix 1C, Table 1C-201
1C.1-2-A	Emergency Preparedness and Response Actions	Appendix 1C, Table 1C-202
2.0-1-A	Site Characteristics Demonstration	2.0
2.0-2-A	Site Location and Description Information in Accordance with SRP 2.1.1	2.0 and 2.1.1
2.0-3-A	Site-Specific Exclusion Area Authority and Control Information in Accordance with SRP 2.1.2	2.0 and 2.1.2
2.0-4-A	Describe the Population Distribution in Accordance with SRP 2.1.3	2.0 and 2.1.3
2.0-5-A	Identify Potential Hazards in the Site Vicinity, in Accordance with SRP 2.2.1 - 2.2.2	2.0 and 2.2
2.0-6-A	Evaluation of Potential Accidents in Accordance with SRP 2.2.3	2.0 and 2.2.3
2.0-7-A	Regional Climatology in Accordance with SRP 2.3.1	2.0 and 2.3.1
2.0-8-A	Local Meteorology in Accordance with SRP 2.3.2	2.0 and 2.3.2
2.0-9-A	Onsite Meteorological Measurement Programs in Accordance with SRP 2.3.3	2.0 and 2.3.3
2.0-10-A	Short-Term Diffusion Estimates for Accidental Atmospheric Releases in Accordance with SRP 2.3.4	2.0 and 2.3.4
2.0-11-A	Long-Term Diffusion Estimates in Accordance with SRP 2.3.5	2.0 and 2.3.5
2.0-12-A	Hydraulic Description Maximum Ground Water Level in Accordance with SRP 2.4.1	2.0 and 2.4.1
2.0-13-A	Protection of Below-Grade Penetrations and Access Openings from Floods in Accordance with SRP 2.4.2	2.0 and 2.4.2
2.0-14-A	Probable Maximum Flood on Streams and Rivers in Accordance with SRP 2.4.3	2.0 and 2.4.3
2.0-15-A	Potential Dam Failures Seismically Induced in Accordance with SRP 2.4.4	2.0 and 2.4.4

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 2 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
2.0-16-A	Probable Maximum Surge and Seiche Flooding in Accordance with SRP 2.4.5	2.0 and 2.4.5
2.0-17-A	Probable Maximum Tsunami in Accordance with SRP 2.4.6	2.0 and 2.4.6
2.0-18-A	Ice Effects in Accordance with SRP 2.4.7	2.0 and 2.4.7
2.0-19-A	Cooling Water Canals and Reservoirs in Accordance with SRP 2.4.8	2.0 and 2.4.8
2.0-20-A	Channel Diversion in Accordance with SRP 2.4.9	2.0 and 2.4.9
2.0-21-A	Flooding Protection Requirements in Accordance with SRP 2.4.10	2.0 and 2.4.10
2.0-22-A	Cooling Water Supply in Accordance with SRP 2.4.11	2.0 and 2.4.11
2.0-23-A	Groundwater in Accordance with SRP 2.4.12	2.0 and 2.4.12
2.0-24-A	Accidental Releases of Liquid Effluents in Ground and Surface Waters in Accordance with SRP 2.4.13	2.0 and 2.4.13
2.0-25-A	Technical Specifications and Emergency Operation Requirements in Accordance with SRP 2.4.14	2.0 and 2.4.14
2.0-26-A	Basic Geologic and Seismic Information in Accordance with SRP 2.5.1	2.0 and 2.5.1
2.0-27-A	Vibratory Ground Motion in Accordance with SRP 2.5.2	2.0, 2.5.2, and 3.7.1
2.0-28-A	Surface Faulting in Accordance with SRP 2.5.3	2.0 and 2.5.3
2.0-29-A	Stability of Subsurface Materials and Foundations in Accordance with SRP 2.5.4	2.0 and 2.5.4
2.0-30-A	Stability of Slopes in Accordance with SRP 2.5.5	2.0 and 2.5.5
2A.2-1-A	Confirmation of the ESBWR λ/Q Values	2.3.4.3 and 2A.2.4
2A.2-2-A	Confirmation of the Reactor Building λ/Q Values	2A.2.5
3.9.9-1-A	Reactor Internals Vibration Analysis, Measurement and Inspection Program	3.9.2.4
3.9.9-2-A	ASME Class 2 or 3 or Quality Group D Components with 60-Year Design Life	3.9.3.1
3.9.9-3-A	Inservice Testing Programs	3.9.6
3.9.9-4-A	Snubber Inspection and Test Program	3.9.3.7.1(3)e
3.10.4-1-A	Dynamic Qualification Report	3.10.1.4
3.11-1-A	Environmental Qualification Document (EQD)	3.11.4.4
4.3-1-A	Variances from Certified Design	4.3.3.1
4A-1-A	Variances from Certified Design	4A.1
5.2-1-A	Preservice and Inservice Inspection Program Description	5.2.4, 5.2.4.3.4, 5.2.4.6, 5.2.4.11, and 6.6

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 3 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
5.2-2-A	Leak Detection Monitoring	5.2.5 and 5.2.5.9
5.2-3-A	Preservice and Inservice Inspection NDE Accessibility Plan Description	5.2.4.2
5.3-2-A	Materials and Surveillance Capsule	5.3.1.8
6.4-1-A	CRHA Procedures and Training	6.4.4
6.4-2-A	Toxic Gas Analysis	6.4.5
6.6-1-A	Program Description	6.6
6.6-2-A	PSI/ISI NDE Accessibility Plan Description	6.6.2
8.2.4-1-A	Transmission System Description	8.2.1.1
8.2.4-2-A	Switchyard Description	8.2.1.2.1
8.2.4-3-A	Normal Preferred Power	8.2.1.2
8.2.4-4-A	Alternate Preferred Power	8.2.1.2
8.2.4-5-A	Protective Relaying	8.2.1.2.3
8.2.4-6-A	Switchyard DC Power	8.2.1.2.1
8.2.4-7-A	Switchyard AC Power	8.2.1.2.1
8.2.4-8-A	Switchyard Transformer Protection	8.2.1.2.1
8.2.4-9-A	Stability and Reliability of the Offsite Transmission Power Systems	8.2.2.1
8.2.4-10-A	Interface Requirements	8.2.2.1
8.3.4-1-A	Safety-Related Battery Float and Equalizing Voltage Values	8.3.2.1.1
8.3.4-2-A	Identification and Monitoring of Underground or Inaccessible Power and Control Cables to the PSWS and DG Fuel Oil Transfer System Equipment That Have Accident Mitigating Functions	8.3.3.2
8A.2.3-1-A	Cathodic Protection System	8A.2.1
9.1-4-A	Fuel Handling Operations	9.1.4.13, 9.1.4.18 and 9.1.4.19
9.1-5-A	Handling of Heavy Loads	9.1.5.6, 9.1.5.8, and 9.1.5.9
9.2.1-1-A	Material Selection	9.2.1.2
9.2.5-1-A	Post Seven day Makeup to Ultimate Heat Sink (UHS)	9.2.5
9.3.2-1-A	Post-Accident Sampling Program	9.3.2.2
9.3.9-1-A	Implementation of Hydrogen Water Chemistry	9.3.9
9.3.9-2-A	Hydrogen and Oxygen Storage and Supply	9.3.9.2
9.3.10-1-A	Oxygen Storage Facility	9.3.10.2
9.3.11-1-A	Determine Need for Zinc Injection System	9.3.11.2
9.3.11-2-A	Provide System Description for Zinc Injection System	9.3.11.4

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 4 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
9.5.1-1-A	Secondary Firewater Storage Source	9.5.1.4
9.5.1-2-A	Secondary Firewater Capacity	9.5.1.4
9.5.1-4-A	Piping and Instrument Diagrams	9.5.1.2, 9.5.1.4, 9.5.1.5, and Figure 9.5-201
9.5.1-5-A	Fire Barriers	9.5.1.10
9.5.1-6-A	Smoke Control	9.5.1.11
9.5.1-7-A	Fire Hazards Analysis (FHA) Compliance Review	9.5.1.12
9.5.1-8-A	Fire Protection (FP) Program Description	9.5.1.15
9.5.1-10-A	Fire Brigade	9.5.1.15.4, 13.1.2.1.5
9.5.1-11-A	Quality Assurance	9.5.1.15.9
9.5.2.5-1-A	Emergency Notification System	9.5.2.2
9.5.2.5-2-A	Grid Transmission Operator	9.5.2.2
9.5.2.5-3-A	Offsite Interfaces (1)	9.5.2.2
9.5.2.5-4-A	Offsite Interfaces (2)	9.5.2.2
9.5.2.5-5-A	Fire Brigade Radio System	9.5.2.2
9.5.4-1-A	Fuel Oil Capacity	9.5.4.2
9.5.4-2-A	Protection of Underground Piping	9.5.4.2
9A.7-1-A	Yard Fire Zone Drawings	9A.4.7
9A.7-2-A	Fire Hazards Analysis for Site Specific Areas	9A.4.7, 9A.5.7, 9A.5.8, and 9A.5.9
10.2-1-A	Turbine Maintenance and Inspection Program	10.2.2.4, 10.2.2.7, 10.2.3.6 and 10.2.3.7
10.2-2-A	Turbine Missile Probability Analysis	10.2.3.8
10.4-1-A	Leakage (of Circulating Water Into the Condenser)	10.4.6.3
11.2-1-A	Implementation of IE Bulletin 80-10	11.2.2.3
11.2-2-A	Implementation of Part 20.1406	11.2.2.3
11.4-1-A	SWMS Processing Subsystem Regulatory Guide Compliance	11.4.2.3.5
11.4-2-A	Compliance with IE Bulletin 80-10	11.4.2.3.5
11.4-3-A	Process Control Program	11.4.2.3.5
11.4-4-A	Temporary Storage Facility	11.4.1
11.4-5-A	Compliance with Part 20.1406	11.4.1
11.5-1-A	Subsystem Lower Limit of Detection	11.5.4.7

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 5 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
11.5-2-A	Offsite Dose Calculation Manual	11.5.4.4 , 11.5.4.5 , 11.5.5.8
11.5-3-A	Process and Effluent Monitoring Program	11.5 and 11.5.4.6 and Table 11.5-201
11.5-4-A	Site Specific Offsite Dose Calculation	11.5.4.8
11.5-5-A	Instrument Sensitivities	11.5.4.9
12.1-1-A	Regulatory Guide 8.10	Appendix 12BB
12.1-2-A	Regulatory Guide 1.8	Appendix 12BB
12.1-3-A	Operational Considerations	Appendix 12BB
12.1-4-A	Regulatory Guide 8.8	Appendix 12BB
12.2-2-A	Airborne Effluents and Doses	12.2.2.1 , 12.2.2.2 , and Table 2.0-201
12.2-3-A	Liquid Effluents and Doses	12.2.2.4
12.2-4-A	Other Contained Sources	12.2.1.5
12.3-2-A	Operational Considerations	12.3.4
12.3-4-A	Compliance with 10 CFR 20.1406	12.3.1.5
12.5-1-A	Equipment, Instrumentation, and Facilities	Appendix 12BB
12.5-2-A	Compliance with 10 CFR Part 50.34(f)(2)(xxvii) and NUREG-0737 Item III.D.3.3	Appendix 12BB
12.5-3-A	Radiation Protection Program	Appendix 12BB
13.1-1-A	Organizational Structure	9.5.1.15.3 , 13.1.1 through 13.1.3 , and Appendix 13AA
13.2-1-A	Reactor Operator Training	13.2.1 and Appendix 13BB
13.2-2-A	Training for Non-Licensed Plant Staff	13.2.2 and Appendix 13BB
13.3-1-A	Identification of OSC and Communication Interfaces with Control Room and TSC	13.3 and COLA Part 5, Sections II.F and II.H
13.3-2-A	Identification of EOF and Communication Interfaces with Control Room and TSC	13.3 and COLA Part 5, Sections II.F and II.H
13.3-3-A	Decontamination Facilities	13.3 and COLA Part 5, Section II.J
13.4-1-A	Operation Programs	13.4

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
 (Sheet 6 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
13.4-2-A	Implementation Milestones	13.4
13.5-1-A	Administrative Procedures Development Plan	13.5.1
13.5-2-A	Plant Operating Procedures Development Plan	13.5.2
13.5-3-A	Emergency Procedures Development	13.5.2
13.5-4-A	Implementation of the Plant Procedures Plan	13.5, 13.5.2
13.5-5-A	Procedures Included in Scope of Plan	13.5.2
13.5-6-A	Procedures for Calibration, Inspection and Testing	13.5.2
13.6-6-A	Key Control	13.6.1.1.5
13.6-7-A	Redundancy and Equivalency of the CAS and Secondary Alarm Station	Physical Security Plan
13.6-8-A	No Single Act Requirement for CAS and Secondary Alarm Station	13.6.2
13.6-9-A	Operational Alarm Response Procedures	13.6.1.1.3
13.6-10-A	Operational Surveillance Test Procedures	13.6.1.1.8
13.6-11-A	Maintenance Test Procedures	13.6.1.1.8
13.6-12-A	Operational Response Procedures to Security Events	13.6.2
13.6-13-A	Operational Alarm Response Procedures	13.6.1.1.3
13.6-14-A	Administrative Controls to Sensitive Cabinets	13.6.1.1.5
13.6-15-A	Administrative Controls to Sensitive Equipment	13.6.1.1.5
13.6-16-A	External Bullet Resisting Enclosures	13.6.2
13.6-17-A	Site-Specific Locations of Security Barriers	13.6.2
13.6-18-A	Ammunition for Armed Responders	13.6.2
13.6-19-A	Site-Specific Update of the ESBWR Safeguards Assessment Report	13.6.2
13.6-20-A	Physical Security ITAAC	13.6.2
14.2-1-A	Description - Initial Test Program Administration	14.2.2.1, Appendix 14AA
14.2-2-A	Startup Administrative Manual	14.2.2.1
14.2-3-A	Test Procedures	14.2.2.2
14.2-4-A	Test Program Schedule and Sequence	14.2.7
14.2-5-A	Site Specific Tests	14.2.9
14.2-6-A	Site Specific Test Procedures	14.2.9
14.3-1-A	Emergency Planning ITAAC	14.3.8
14.3-2-A	Site-Specific ITAAC	14.3.9
14.3A-1-1	Establish a Schedule for Design Acceptance Criteria ITAAC Closure	14.3A.1
16.0-1-A	COL Applicant Bracketed Items	5.3.1.5, COLA Part 4

Table 1.10-201 Summary of FSAR Sections Where DCD COL Items Are Addressed
(Sheet 7 of 7) [EF3 SUP 1.10-1]

Item No.	Subject/Description of Item	FSAR Section
17.2-1-A	QA Program for the Construction and Operations Phases	17.2
17.2-2-A	QA Program for Design Activities	17.2
17.3-1-A	Quality Assurance Program Document	17.3
17.4-1-A	Identification of Site-Specific SSCs Within the Scope of the RAP	
17.4-2-A	Operation Reliability Assurance Activities	17.4.1
18.13-1-A	Milestone for HPM Implementation	18.13.3
19.2.6-1-A	Seismic High Confidence Low Probability of Failure Margins	19.2.3.2.4

1.11 Technical Resolutions of Task Action Plan Items, New Generic Issues, New Generic Safety Issues and Chernobyl Issues

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.11.1 Approach

Add the following at the end of this section.

EF3 COL 1.11-1-A [Table 1.11-201](#) supplements DCD Table 1.11-1 to address the site-specific aspects of items that refer to Notes (2) and (7).

EF3 SUP 1.11-1 [Table 1.11-202](#) supplements DCD Table 1.11-1 to provide references to FSAR locations that provide additional information on specific issues.

1.11.2 COL Information

EF3 COL 1.11-1-A **1.11-1-A Address Table 1.11-1 Items that refer to Notes (2) and (7)**
This COL item is addressed in [Section 1.11](#) and [Table 1.11-201](#).

Table 1.11-201 COL Item Resolutions Related to NUREG-0933 Table II Task Action Plan Items and New Generic Issues (Sheet 1 of 2) [EF3 COL 1.11-1-A]

Action Plan Item/Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
Task Action Plan Items		
A-33	NEPA Review of Accident Risks	This environmental issue involves consideration of accidents on a risk specific basis. This subject is addressed in COLA Part 3, Chapter 7 .
B-1	Environmental Technical Specifications	Issue is addressed in COLA Part 4, Sections 5.5.1 and 5.5.3, which address the Offsite Dose Calculation Manual and Radioactive Effluent Controls Program. See also Subsection 11.5.4.5 and Subsection 11.5.4.6 .
B-28	Radionuclide/Sediment Transport Program	Issue is addressed in COLA Part 4, Sections 5.5.1 and 5.5.3, which address the Offsite Dose Calculation Manual and Radioactive Effluent Controls Program. See also Subsection 11.5.4.5 and Subsection 11.5.4.6 .
B-37	Chemical Discharges to Receiving Waters	Issue is addressed in COLA Part 3, Section 3.3 , Section 3.6 , Section 5.2 and Subsection 5.3.2.2.2 .
B-38	Reconnaissance Level Investigations	Issue is addressed in Chapter 2 and COLA Part 3, Chapter 2 .
B-39	Transmission Lines	Issue is addressed in COLA Part 3, Section 3.7 , Section 4.6 , and Section 5.6 .
B-40	Effects of Power Plant Entrainment on Plankton	Issue is addressed in COLA Part 3, Subsection 5.3.1.2 .
B-41	Impacts on Fisheries	Impact of power plant operation on fishery resources is addressed in COLA Part 3, Subsection 5.3.1.2 and Subsection 5.2.2.1 .
B-42	Socioeconomic Environmental Impacts	Issue is addressed in COLA Part 3, Section 4.4 and Section 5.8 .
B-43	Value of Aerial Photographs for Site Evaluation	Work completed to date on this issue is published in NUREG/CR-2861. The use of aerial photography is discussed in COLA Part 3, Section 2.1 and Subsection 2.4.1 .
C-16	Assessment of Agricultural Land in Relation to Power Plant Siting and Cooling System Selection	(3) The impact of construction and power plant operation on agricultural land use is addressed in COLA Part 3, Section 4.1 and Section 5.1 . Water use for agricultural lands is addressed in COLA Part 3, Subsection 2.3.2 and Subsection 2.3.3 .

Table 1.11-201 COL Item Resolutions Related to NUREG-0933 Table II Task Action Plan Items and New Generic Issues (Sheet 2 of 2) [EF3 COL 1.11-1-A]

Action Plan Item/Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
NEW GENERIC ISSUES		
184	Endangered Species	Issue is addressed in COLA Part 3, Subsection 2.4.1.2, Subsection 2.4.2.2, Subsection 2.4.2.4 Subsection 4.3.1, Subsection 4.3.2.4, Subsection 5.3.1.2, and Subsection 5.3.3.2.
201	Small-Break LOCA and Loss of Offsite Power Scenario	Generic Issue 201 was dropped with no action required.
202	Spent Fuel Pool Leakage Limits	Generic Issue 202 was dropped with no action required.
203	Potential Safety Issues with Cranes that Lift Spent Fuel Casks	Generic Issue 203 was dropped with no action required.

**Table 1.11-202 Supplementary Resolutions Related to NUREG-0933 Table II TMI
 Action Plan Items and Human Factors Issues** [EF3 SUP 1.11-1]

Action Plan Item/Issue Number	Description	Associated Location(s) Where Discussed and/or Technical Resolution
TMI Action Plan Items		
1.A.1.1	Shift Technical Advisor	Subsection 13.1.2 and DCD Section 18.6
1.A.1.2	Shift Supervisor Administrative Duties	Subsection 13.1.2
1.A.1.3	Shift Manning	Subsection 13.1.2 , Table 13.1-202 , Figure 13.1-203 , and DCD Section 18.6
1.A.2.1(1)	Qualifications – Experience	Subsection 13.1.3 , Table 13.1-201 , Section 17.5 , and DCD Section 18.6
1.C.3	Shift Supervisor Responsibilities	Subsection 13.1.2
1.F.2(6)	Increase the Size of Licensees' QA Staff	Table 13.1-201 and Section 17.5
1.F.2(9)	Clarify Organizational Reporting Levels for the QA Organization	Subsection 13.1.1 , Table 13.1-201 , and Section 17.5
II.B.3	Post Accident Sampling	Appendix 12BB
III.D.3.3	In-Plant Radiation Monitoring	Appendix 12BB
Human Factors Issues		
HF1.1	Shift Staffing	Table 13.1-202 and Subsection 13.1.2

EF3 SUP 1.12-1

1.12 Impact of Construction Activities on Fermi 2

1.12.1 Introduction

Paragraph 10 CFR 52.79(a)(31) requires that the FSAR include the following information:

For nuclear power plants to be operated on multi-unit sites, an evaluation of the potential hazards to the structures, systems, and components important to safety of operating units resulting from construction activities, as well as a description of the managerial and administrative controls to be used to provide assurance that the limiting conditions for operation are not exceeded as a result of construction activities at the multi-unit sites.

Accordingly, the evaluation of the potential impact of the construction of Fermi 3 on Fermi 2 structures, systems, and components (SSCs) important to safety is summarized below, along with a description of the managerial and administrative controls used to provide assurance that Fermi 2 limiting conditions for operation (LCOs) are not exceeded as a result of Fermi 3 construction activities. This evaluation involves several sequential steps:

- Identification of potential construction activity hazards
- Identification of SSCs important to safety
- Identification of LCOs
- Identification of impacted SSCs and LCOs
- Identification of applicable managerial and administrative controls

1.12.2 Potential Construction Activity Hazards

Fermi 3 is located on the existing Fermi site on a parcel of land adjacent to and generally southwest of the operating unit, Fermi 2, as shown in [Figure 2.1-204](#).

Based on experience from similar projects, the scope of work necessary to construct Fermi 3 is well understood. In general, it includes, but is not necessarily limited to, activities such as site exploration, grading, clearing and installation of drainage and erosion control measures; boring, drilling, dredging, demolition and excavating; storage and warehousing of equipment; and construction, erection and fabrication of new facilities. These activities involve major ESBWR standard plant structures such as the Reactor Building, Control Building, Fuel Building, Turbine Building,

Radioactive Waste Building and Electrical Building; as well as related support facilities such as transformers, switchyard(s), transmission lines, cooling water structures and systems, water treatment facilities, storage tanks, etc.

The applicable time period for such activities starts when work is first performed under the COL for Fermi 3 and ends for each Fermi 3 SSC when responsibility for that SSC is transferred to the accountable operating organization.

Each of the types of construction activities necessary to build a new unit was examined to identify the potential hazards to the existing units. The resulting list of construction activities and potential hazards is shown in [Table 1.12-201](#).

1.12.3 Structures, Systems and Components Important to Safety

Consistent with 10 CFR 50.34 and 10 CFR 50, Appendix A, Fermi 2 SSCs important to safety were identified in Chapter 3 of the Fermi 2 Updated Final Safety Analysis Report (UFSAR) ([Reference 1.12-201](#)); additionally, information in Chapters 4, 5, 6, 7, 8 and 9 of the Fermi 2 UFSAR was utilized.

1.12.4 Limiting Conditions for Operation

Pursuant to 10 CFR 50.36, LCOs are the lowest functional capability or performance levels of equipment required for safe operation of a facility and are established in operating unit technical specifications for each item meeting one or more of the following criteria:

- Criterion 1 – Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2 – A process variable, design feature, or operating restriction that is an initial condition of a design basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 3 – A SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 4 – A SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The applicable LCOs are found in the Fermi 2 Technical Specifications ([Reference 1.12-202](#)).

1.12.5 **Impacted Structures, Systems and Components and Limiting Conditions for Operation**

The information described in [Subsection 1.12.2](#) through [Subsection 1.12.4](#) was evaluated to identify Fermi 2 SSCs and LCOs that might be impacted by Fermi 3 construction activities. For example, internal/in-plant Fermi 2 LCO parameters such as “Control Rod OPERABILITY,” “Shutdown Margin,” and “RCS Specific Activity” were eliminated by examination. Similarly, SSCs both internal and specific to Fermi 2 are not affected. These include items such as the Hydraulic Control Units, Fuel Storage Racks and Control Rod Drive Assemblies.

For each of the potential hazards listed in [Table 1.12-201](#), [Table 1.12-202](#) presents the potential consequences to the SSCs of the existing unit that were identified in the above process.

1.12.6 **Managerial and Administrative Controls**

[START COM 1.12-001] Managerial and administrative controls are utilized to identify preventive and mitigative measures and provide notification of hazardous activity initiation in order to prevent or minimize exposure of SSCs to the identified hazards. Applicable managerial and administrative controls are listed in [Table 1.12-203](#). **[END COM 1.12-001]**

Specific hazards, impacted SSCs, and managerial and administrative controls including safety/security interfaces will be developed and implemented as work progresses on site. For example, prior to construction activities that involve the use of large construction equipment such as cranes, managerial and administrative controls will be in place to prevent adverse impacts on Fermi 2 overhead power lines, switchyard, security boundary, etc., by providing the necessary restrictions on the use of large construction equipment.

Additional controls are established during construction as addressed in [Appendix 13AA, Subsection 13AA.1.9](#), “Management and Review of Construction Activities.” Periodic assessment during construction is addressed in [Appendix 13AA, Subsection 13AA.1.9](#).

1.12.7 **References**

- 1.12-201 Enrico Fermi Unit 2, Updated Final Safety Analysis Report, Revision 14, November 2006.
- 1.12-202 Enrico Fermi Unit 2 Technical Specifications.

Table 1.12-201 Potential Hazards to Fermi 2 from Fermi 3 Construction Activities
 (Sheet 1 of 2) [EF3 SUP 1.12-1]

Construction Activity	Potential Hazards
Site Exploration, Grading, Clearing, Installation of Drainage and Erosion Control Measures, etc.	Impact on Overhead Power Lines
	Impact on Transmission Towers
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact on Site Access and Egress
	Impact on Drainage Facilities and Structures
	Impact on Onsite Transportation Routes
	Impact on Slope Stability
	Impact of Increased Soil Erosion and Local Flooding
	Impact of Construction-Generated Dust and Equipment Exhausts
	Impact of Encroachment on Plant Protected or Vital Areas
Boring, Drilling, Pile Driving, Dredging, Demolition, Excavation, etc.	Impact of Encroachment on Structures and Facilities
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact on Foundation Integrity
	Impact on Structural Integrity
	Impact on Slope Stability
Equipment Movement, Material Delivery, Vehicle Traffic, etc.	Impact of Ground Vibration
	Impact of Overpressure from Use of Explosives
	Impact on Overhead Power Lines
	Impact on Transmission Towers
	Impact on Underground Conduits, Piping, Tunnels, etc.
	Impact of Crane Load Drops
	Impact of Crane or Crane Boom Failures
Impact of Vehicle Accidents	
Equipment And Material Laydown, Storage, Warehousing, etc.	Impact of Vehicle Runaways
	Impact of Releases of Stored Flammable, Hazardous or Toxic Materials
	Impact of Increase Local Flooding
	Impact of Wind-Generated, Construction-Related Debris and Missiles

Table 1.12-201 Potential Hazards to Fermi 2 from Fermi 3 Construction Activities
 (Sheet 2 of 2) [EF3 SUP 1.12-1]

Construction Activity	Potential Hazards
General Construction, Erection, Fabrication, etc.	Impact on Instrumentation and Control Systems and Components
	Impact on Electrical Systems and Components
	Impact on Cooling Water Systems and Components
	Impact on Radioactive Waste Release Points and Parameters
	Impact of Abandonment of SSCs
	Impact of Relocation of SSCs
Connection, Integration, Tie-In, Testing, etc.	Impact on Instrumentation and Control Systems and Components
	Impact on Electrical and Power Systems and Components
	Impact on Cooling Water Systems and Components
General Site Construction Activities	Impact on Site Security Systems

**Table 1.12-202 Potential Consequences to Fermi 2 Due to Potential Hazards
 Resulting from Fermi 3 Construction Activities) (Sheet 1 of 3)**
 [EF3 SUP 1.12-1]

Potential Hazard	Potential Consequences
Primary Containment	
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion
Reactor Auxiliary Building	
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion
Control Center Complex (Including Cable Spreading Room)	
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion
Impact of vibratory ground motion	Operational disruptions due to vibration induced spurious trips
Control Room Emergency Filtration and Control Center Air Conditioning Systems	
Impact of Construction-Generated Dust and Equipment Exhausts	Effects of Construction-Generated Dust and Equipment Exhausts on Control Room Habitability Systems Air Intakes
Impact of Releases of Flammable, Hazardous or Toxic Materials	Effects of Releases of Flammable, Hazardous or Toxic Materials on Control Room Habitability Systems Design Basis
Diesel Generators	
Impact of Construction-Generated Dust and Equipment Exhausts	Effects of Construction-Generated Dust and Equipment Exhausts on Emergency Diesel Generator Combustion Air Intakes
Fire Protection System	
Impact on Underground Conduits, Piping, Tunnels, etc.	Degradation of FPS Availability or Capacity
Impact of the Relocation of SSCs	Degradation of FPS Availability or Capacity

**Table 1.12-202 Potential Consequences to Fermi 2 Due to Potential Hazards
 Resulting from Fermi 3 Construction Activities) (Sheet 2 of 3)**
 [EF3 SUP 1.12-1]

Potential Hazard	Potential Consequences
Gaseous Radioactive Waste Management System	
Impact on Radioactive Waste Release Points and Parameters	Building and Facility Effects on Gaseous Release X/Q and D/Q Assumptions
Turbine Building	
Impact of vibratory ground motion	Operational disruptions due to vibration induced spurious trips
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion
Offsite Power System	
Impact on overhead power lines	Transmission line disruptions due to grading or clearing, equipment movement, crane boom failures, etc.
Impact on transmission towers	Transmission line disruptions due to grading or clearing, equipment movement, crane boom failures, etc.
Impact of vibratory ground motion	Operability disruptions due to vibration induced spurious trips
Impact on electrical systems and components	Operability disruptions due to equipment movement, system interconnections, etc.
Onsite Power Systems	
Impact of vibratory ground motion	Operability disruptions due to vibration induced spurious trips
Impact on electrical systems and components	Operability disruptions due to vibration induced spurious trips, system interconnections, etc.
General Service Water Intake Building	
Impact of crane or crane boom failures	Building degradation due to crane boom failure
Impact of wind-generated construction-related debris and missiles	Construction-related debris or missile
Residual Heat Removal Complex	
Impact of Crane or Crane Boom Failures	Building Degradation Due to Crane Boom Failure
Impact of Wind-Generated Construction-Related Debris and Missiles	Effects of Construction-Related Debris or Missiles
Impact of Overpressure from Use of Explosives	Building Degradation Due to Structural Damage as a Result of Explosion

**Table 1.12-202 Potential Consequences to Fermi 2 Due to Potential Hazards
Resulting from Fermi 3 Construction Activities) (Sheet 3 of 3)**
[EF3 SUP 1.12-1]

Potential Hazard	Potential Consequences
Impact on underground conduits, piping, tunnels, etc.	Degradation of RHR System and Emergency Diesel Generator availability or capacity
Impact on cooling water systems and structures	Degradation of RHR System and Emergency Diesel Generator availability or capacity

Table 1.12-203 Managerial and Administrative Controls for Fermi 3 Construction Activity Hazards (Sheet 1 of 2) [EF3 SUP 1.12-1]

Hazard	Control
Impact on overhead power lines	Administrative controls for appropriate standoff and/or installation of temporary support towers
Impact on transmission towers	Administrative controls for appropriate standoff and/or installation of temporary support towers
Impact on underground conduits, piping, tunnels, etc.	Administrative controls to identify potentially affected SSCs; evaluation to ensure structural integrity during construction; and/or temporary measures to mitigate impacts
Impact of construction-generated dust and equipment exhausts	Administrative controls to avoid or minimize construction dust (for example, use of water spray trucks) and/or enhanced monitoring of potentially affected system intakes, filters, etc.
Impact of overpressure from use of explosives	Administrative controls to coordinate transport, storage and use of explosives and/or temporary measures to mitigate impacts
Impact of vehicle accidents	Administrative controls to respond to site accidents (for example, construction fire brigade and/or hazardous materials response team)
Impact of ground vibration	Administrative controls to identify potentially affected SSCs, and/or temporary measures to mitigate impacts
Impact of crane or crane boom failures	Administrative controls for appropriate standoff and/or load limits (for example, minimum standoff distances and/or load limitations)
Impact of releases of flammable, hazardous or toxic materials	Administrative controls on quantities and types of flammable, hazardous or toxic materials
Impact of wind-generated, construction-related debris and missiles	Administrative controls on equipment and material storage and transport, and for reducing power or shutting down Fermi 2 during high winds or high wind warnings
Impact on electrical systems and components	Administrative controls to identify potentially affected SSCs; evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts
Impact on cooling water systems and components	Administrative controls to identify potentially affected SSCs; evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts
Impact on radioactive waste release points and parameters	Enhanced monitoring and control to ensure releases are within limits

**Table 1.12-203 Managerial and Administrative Controls for Fermi 3 Construction
Activity Hazards (Sheet 2 of 2)**

[EF3 SUP 1.12-1]

Hazard	Control
Impact of relocation of SSCs	Administrative controls to identify potentially affected SSCs effects of releases of flammable, hazardous or toxic materials on control room habitability systems design basis evaluation to ensure system and component integrity during construction; and/or temporary measures to mitigate impacts
Impact on site security systems	Administrative controls to coordinate construction activities with Fermi 2 physical protection personnel and procedures

Appendix 1A Response to TMI Related Matters

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Table 1A-1, 10 CFR 50.34(f)(3)(i), TMI Item I.C.5

Add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

ESBWR construction and operations engineers are also continually involved in reviewing industry experience from these same sources in accordance with the administrative procedures described in DCD Section 18.3.2.

Table 1A-1, 10 CFR 50.34(f)(3)(iii), TMI Item I.F.2

Add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

The Quality Assurance Program described in [Chapter 17](#) also meets the requirements of issue I.F.2 as they apply to the construction and operation of the ESBWR.

Table 1A-1, 10 CFR 50.34(f)(3)(vii), TMI Item II.J.3.1

Add “13.1” as an “Associated Location(s)” and add the following to the end of the ESBWR Resolution statement:

STD SUP 1A.1-1

The ESBWR construction and operations teams have also developed a management plan for the ESBWR project that consists of a properly structured organization with open lines of communication, clearly defined responsibilities, well-coordinated technical efforts, and appropriate control channels.

The organizational structure is discussed in [Section 13.1](#).

Appendix 1B Plant Shielding to Provide Access to Areas and Protect Safety Equipment for Post-Accident Operation [II.B.2]

This section of the referenced DCD is incorporated by reference with no departures or supplements.

Appendix 1C Industry Operating Experience

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Appendix 1C.1 Evaluation

Replace the last paragraph with the following.

**STD COL 1C.1-1-A
STD COL 1C.1-2-A
STD SUP 1C-1**

DCD Tables 1C-1 and 1C-2 are supplemented by [Tables 1C-201](#) and [1C-202](#). These tables address Generic Letters and Bulletins that have been in effect/issued up to six months before the COL application submittal date, and after the SRP revisions that are applicable to this FSAR. They also address Generic Letter 82-39 and IE Bulletin 2005-02, which were identified in the DCD as the responsibility of the COL applicant.

Appendix 1C.2 COL Information

STD COL 1C.1-1-A

1C.1-1-A Handling of Safeguards Information

This COL item is addressed in Section 1C.1 and the [Table 1C-201](#) entry for Generic Letter 82-39.

STD COL 1C.1-2-A

1C.1-2-A Emergency Preparedness and Response Actions

This COL item is addressed in Section 1C.1 and the [Table 1C-202](#) entry for IE Bulletin 2005-02.

Table 1C-201 Operating Experience Review Results Summary—Generic Letters

No.	Issue Date	Title	Evaluation Result or Location(s) Where Discussed
[STD COL 1C.1-1-A]			
82-39	12/22/82	Problems with the Submittals of 10 CFR 73.21 Safeguards Information Licensing Review	Not Applicable. Is an administrative communication. The site has an approved procedure for handling Safeguards Information including how to mail such information to authorized recipients.
[EF3 DEP11.4-1]			
81-38	11/10/81	Storage of Low-Level Radioactive Wastes at Power Reactor Sites	The Radwaste Building includes space for processing and storage of low level waste. Storage space is provided for at least 10 years of packaged Class B and C waste and approximately 3 months worth of packaged Class A waste. Section 11.4
07-01	02/07/07	Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients.	Applicable. Monitoring of underground cable is addressed in Subsection 17.6.4.

Table 1C-202 Operating Experience Review Results Summary—IE Bulletins
 [STD COL 1C.1-2-A]

No.	Issue Date	Title	Evaluation Result or Location(s) Where Discussed
2005-02	07/18/05	Emergency Preparedness and Response Actions for Security-Based Events	COLA Part 5, Emergency Plan