

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.1 QUALITY ASSURANCE DURING DESIGN

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

---

Insert the following information at the end of **DCD Section 17.1**.

RBS COL  
17.2-2-A


Entergy is responsible for the establishment and execution of the quality assurance program during the design, construction and operations phases of RBS Unit 3. Entergy may delegate and has delegated to others, such as GEH and Black & Veatch (B&V) Energy, the work of establishing and executing the quality assurance program, or any parts thereof, but retains responsibility for the quality assurance program.

Effective during the combined operating license application (COLA) development, the B&V QA Program (**Reference 17.1-201**) and the "GE Nuclear Energy Quality Assurance Program Description" (**Reference 17.1-202**) define the QA program requirements for design activities.

The Quality Assurance Program Description (QAPD) discussed in **Section 17.5** will be phased in based on the stage of the project and will be fully implemented in accordance with **Table 13.4-201**. During the implementation period, the Entergy Corporate QA Manual (**Reference 17.1-203**) will be applicable unless the QAPD requirements have been implemented. The phased implementation/conversion commenced with the submittal of this COL application.

17.1.25 REFERENCES

- 17.1-201 Black & Veatch, "Nuclear Organization Quality Assurance Manual," Revision 3, March 21, 2008.
- 17.1-202 "GE Nuclear Energy Quality Assurance Program Description," NEDO-11209-04A (NRC accepted), March 1989.
- 17.1-203 Entergy Operations, Inc., "Entergy Quality Assurance Program Manual," Revision 18, April 2008.

United States Nuclear Regulatory Commission Official Hearing Exhibit	
DETROIT EDISON COMPANY (Fermi Nuclear Power Plant, Unit 3)	
	<b>ASLBP #:</b> 09-880-05-COL-BD01 <b>Docket #:</b> 05200033 <b>Exhibit #:</b> INTS071-00-BD01 <b>Admitted:</b> 10/31/2013 <b>Rejected:</b> <b>Other:</b>
	<b>Identified:</b> 10/31/2013 <b>Withdrawn:</b> <b>Stricken:</b>

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.2 QUALITY ASSURANCE DURING CONSTRUCTION AND OPERATIONS

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

---

Replace the first paragraph with the following.

RBS COL  
17.2-1-A

The Quality Assurance Program in place during the construction and operations phases, including adapting the design to specific plant implementation, is described in [Section 17.5](#).

---

17.2.1 COL INFORMATION

17.2-1-A QA Program for the Construction and Operations Phases

RBS COL  
17.2-1-A

This COL item is addressed in [Sections 17.2](#) and [17.5](#).

17.2-2-A QA Program for Design Activities

RBS COL  
17.2-2-A

This COL Item is addressed in [Sections 17.1](#) and [17.5](#).

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.3 QUALITY ASSURANCE PROGRAM DESCRIPTION

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

---

Replace the first and second sentences of this section with the following.

RBS COL  
17.3-1-A

The Quality Assurance Program Description applicable to the combined license applicant is described in **Section 17.5**.

---

17.3.1 COL INFORMATION

17.3-1-A Quality Assurance Program Document

RBS COL  
17.3-1-A

This COL Item is addressed in **Sections 17.3** and **17.5**.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.4 RELIABILITY ASSURANCE PROGRAM DURING DESIGN PHASE

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

17.4.1 INTRODUCTION

---

Replace the third paragraph and subsequent bulleted list with the following.

STD COL  
17.4-1-A

The objectives of reliability assurance during the operations phase are integrated into the Quality Assurance Program ([Section 17.5](#)), the Maintenance Rule (MR) Program ([Section 17.6](#)), and other operational programs. Specific reliability assurance activities are addressed within operational programs (e.g., maintenance rule, surveillance testing, inservice testing, inservice inspection, and quality assurance) and the maintenance programs.

The MR Program incorporates the following aspects of operational reliability assurance (refer to [Section 17.6](#)):

- Use of PRA importance measures, the expert panel process, and deterministic methods to determine the list of risk-significant SSCs
  - Evaluation and maintenance of the reliability of risk-significant SSCs
  - Monitoring the effectiveness of maintenance activities needed for operational reliability assurance
  - Classifying, initially, as high-safety-significant, all SSCs that are in the scope of the design reliability assurance program (D-RAP), or applying expert panel review for any exceptions
  - Use of historical data and industry operating experience on equipment performance as available
  - Use of specific criteria to establish the level of performance or condition being maintained for SSCs within the scope of the MR Program; and use of monitoring to identify declining trends between surveillances and to minimize the likelihood of undetected performance or condition degradation to unacceptable levels, to the extent possible
  - Use of maintenance programs to determine the nature and frequency of maintenance activities to be performed on plant equipment, including SSCs within the scope of the MR Program
-

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.4.6 SSC IDENTIFICATION/PRIORITIZATION

---

Add the following new paragraph at the end of this section.

STD COL  
17.4-1-A

The list of risk-significant SSCs will be confirmed via ITAAC (see **DCD Tier 1, Table 3.6-1**).

---

17.4.9 OPERATIONAL RELIABILITY ASSURANCE ACTIVITIES

---

Replace the second paragraph with the following.

STD COL  
17.4-1-A

Refer to **Section 17.4.1** for the implementation of reliability assurance during the operations phase.

---

17.4.10 OWNER/OPERATOR'S RELIABILITY ASSURANCE PROGRAM

---

Replace the fifth bullet with the following.

STD COL  
17.4-1-A

- MR Program: The MR Program is described in **Section 17.6**.

Replace the last sentence in this section with the following.

Refer to **Section 17.4.1** for the implementation of reliability assurance activities.

---

17.4.13 COL INFORMATION

17.4-1-A Operation Reliability Assurance Activities

STD COL  
17.4-1-A

This COL Item is addressed in **Sections 17.4.1, 17.4.6, 17.4.9, 17.4.10, and 17.6**.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

STD SUP  
17.5-1

**17.5 QUALITY ASSURANCE PROGRAM DESCRIPTION - DESIGN  
CERTIFICATION, EARLY SITE PERMIT, AND NEW LICENSE  
APPLICANTS**

QA applied to the DC activities is described in [DCD Section 17.1](#).

---

RBS COL  
17.2-1-A  
RBS COL  
17.3-1-A

The Quality Assurance Program in place during the construction and operations phases is described in the Quality Assurance Program Description (QAPD), which is maintained as a separate document. This QAPD is based on NEI 06-14A, "Quality Assurance Program Description" ([Reference 17.5-201](#)).

RBS COL  
17.2-2-A

The Quality Assurance Program in place prior to implementation of the QAPD is described in [Section 17.1](#).

The implementation milestones for the Operational Quality Assurance Program are provided in [Section 13.4](#).

---

**17.5.1 REFERENCES**

17.5-201 Nuclear Energy Institute, "Quality Assurance Program Description," NEI 06-14A.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

17.6 MAINTENANCE RULE PROGRAM

STD COL  
17.4-1-A

**NEI 07-02**, "Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52," (**Reference 17.6-201**) is incorporated by reference with the following supplemental information.

---

STD SUP  
17.6-1

The text of the template provided in **NEI 07-02** is generically numbered as "17.X." When the template is incorporated by reference into this section, numbering is changed from "17.X" to "17.6."

---

17.6.1.1 Maintenance Rule Scoping per 10 CFR 50.65(b)

---

STD SUP  
17.6-3

In Paragraph 17.6.1.1.b, replace "(DRAP - see FSAR Section 17.Y)" with the following.

(See **Section 17.4**)

---

17.6.3 MAINTENANCE RULE PROGRAM RELATIONSHIP WITH  
RELIABILITY ASSURANCE ACTIVITIES

---

Replace with the following.

STD SUP  
17.6-2

Reliability during the operations phase is assured through the implementation of operational programs, i.e., the MR program (**Section 17.6**), the Quality Assurance Program (**Section 17.5**), the Inservice Inspection Program (**Sections 3.9.3.7.1(3)(e), 5.2.4, and 6.6, and DCD Section 3.8.1.7.3**), and the Inservice Testing Program (**Section 3.9.6, Section 5.2.4, Section 6.6, and Section 3.9.3.7.1(3)(e)**), as well as the Technical Specifications Surveillance Requirements (**Chapter 16**), and the preventive maintenance program.

---

17.6.6 REFERENCES

17.6-201 Nuclear Energy Institute, "Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52," **NEI 07-02**.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

**CHAPTER 18 HUMAN FACTORS ENGINEERING**

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



**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

**CHAPTER 19    PROBABILISTIC RISK ASSESSMENT AND SEVERE  
ACCIDENTS**

19.1    INTRODUCTION

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

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

19.2 PRA RESULTS AND INSIGHTS

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

19.2.3.2.4 Evaluation of External Event Seismic

**Significant Core Damage Sequences of External Event Seismic**

---

Replace the second and third sentences of the first paragraph with the following.

STD COL  
19.2.6-1-H

As-built SSC High Confidence Low Probability of Failure (HCLPF)s will be compared to those assumed in the ESBWR seismic margin analysis shown in **DCD Table 19.2-4**. Deviations from the HCLPF values or other assumptions in the seismic margins evaluation will be analyzed to determine if any new vulnerabilities have been introduced. This comparison and analysis will be completed prior to fuel load.

---

19.2.6 COL INFORMATION

19.2.6-1-H Seismic High Confidence Low Probability of Failure Margins

STD COL  
19.2.6-1-H

This COL Item is addressed in **Section 19.2.3.2.4**.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

19.3 SEVERE ACCIDENT EVALUATIONS

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

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

19.4 PRA MAINTENANCE

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

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

19.5 CONCLUSIONS

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

---

RBS SUP 19.5-1

In accordance with 10 CFR 52.79(a)(46), this report is required to contain a description of the plant-specific PRA and its results. As part of the development of the certified design PRA, site and plant specific information were reviewed to determine if any changes from the certified design PRA were warranted. This review included consideration of site-specific information such as site meteorological data and site-specific population distributions, as well as plant-specific design information that replaced the conceptual design information described in the DCD. **Subsection 1.8.5** was also reviewed to determine if there were any departures affecting the PRA results.

The review of site-specific information and plant-specific design information determined that: (1) the DCD PRA bounds site-specific and plant-specific design parameters and design features and (2) these parameters and features have no significant impact on the DCD PRA results and insights. Therefore, based on this review, it is concluded that there is no significant change from the certified design PRA. In that there are no significant changes from the certified design PRA, incorporation of **DCD Chapter 19** into the FSAR satisfies the requirement of 10 CFR 52.79(a)(46) for a description of the plant-specific PRA and its results.

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

APPENDIX 19A      REGULATORY TREATMENT OF NON-SAFETY  
SYSTEMS (RTNSS)

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

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

APPENDIX 19ACM AVAILABILITY CONTROLS MANUAL

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

**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

APPENDIX 19B      DETERMINISTIC ANALYSIS FOR CONTAINMENT  
PRESSURE CAPABILITY

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



**River Bend Station, Unit 3  
COL Application  
Part 2, FSAR**

APPENDIX 19C      PROBABILISTIC ANALYSIS FOR CONTAINMENT  
PRESSURE FRAGILITY

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