Progress Energy

Crystal River Nuclear Plant
Docket No. 50-302
Operating License No. DPR-72

Ref: 10 CFR 54

November 29, 2011
3F1111-02

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Crystal River Unit 3 – Response to Request for Additional Information for the Review of the Crystal River Unit 3, Nuclear Generating Plant, License Renewal Application (TAC NO. ME0274) and Amendment #23

References: (1) CR-3 to NRC letter, 3F1208-01, dated December 16, 2008, "Crystal River Unit 3 – Application for Renewal of Operating License"

(2) NRC to CR-3 letter, dated November 8, 2011, "Request for Additional Information for the Review of the Crystal River Unit 3 Nuclear Generating Plant, License Renewal Application (TAC NO. ME0274)"

Dear Sir:

On December 16, 2008, Florida Power Corporation (FPC), doing business as Progress Energy Florida, Inc. (PEF), requested renewal of the operating license for Crystal River Unit 3 (CR-3) to extend the term of its operating license an additional 20 years beyond the current expiration date (Reference 1). Subsequently, the Nuclear Regulatory Commission (NRC), by letter dated November 8, 2011, provided a request for additional information (RAI) concerning the CR-3 License Renewal Application (Reference 2). Enclosure 1 to this letter provides the response to Reference 2. In addition, Enclosure 2 to this letter contains Amendment #23 to the License Renewal Application.

No new regulatory commitments are contained in this submittal; however, changes to the CR-3 License Renewal Commitments based on previous CR-3 letters to the NRC are included in Enclosure 3 for your information and use.

If you have any questions regarding this submittal, please contact Mr. Mike Heath, Supervisor, License Renewal, at (910) 457-3487, e-mail at mike.heath@pgnmail.com.

Sincerely,

Jon A. Franke
Vice President
Crystal River Unit 3

JAF/dwh

Enclosures: 1. Response to Request for Additional Information
2. Amendment #23 Changes to the License Renewal Application
3. Crystal River Unit 3 License Renewal Commitments, Revision 5

xc: NRC CR-3 Project Manager
NRC License Renewal Project Manager
NRC Regional Administrator, Region II
Senior Resident Inspector

A140
NRR

Progress Energy Florida, Inc.
Crystal River Nuclear Plant
15760 W. Power Line Street
Crystal River, FL 34428

STATE OF FLORIDA

COUNTY OF CITRUS

Jon A. Franke states that he is the Vice President, Crystal River Nuclear Plant for Florida Power Corporation, doing business as Progress Energy Florida, Inc.; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

Jon A. Franke
Vice President
Crystal River Nuclear Plant

The foregoing document was acknowledged before me this 29 day of November, 2011, by Jon A. Franke.

Signature of Notary Public
State of Florida

CAROLYN E. PORTMANN
Commission # DD 937553
Expires March 1, 2014
Bonded Thru Troy Fain Insurance 800-385-7019

(Print, type, or stamp Commissioned
Name of Notary Public)

Personally Known ✓ -OR- Produced Identification _____

PROGRESS ENERGY FLORIDA, INC.

CRYSTAL RIVER UNIT 3

DOCKET NUMBER 50 - 302 / LICENSE NUMBER DPR - 72

ENCLOSURE 1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

REQUEST FOR ADDITIONAL INFORMATION

RAI B.2.22-3.1

Background
The December 8, 2010, response to request for additional information (RAI) B.2.22-3, stated that alternative methods would be used to examine the nuclear services and decay heat seawater system intake conduits due to their depth of installation and proximity to the intake canal. The response also stated that the alternative method of inspection will be based on proven technology and industry operating experience, and will be qualified subject to performance demonstration specific to the plant, including consideration for piping material, design, and service. The response further stated that the performance demonstration will verify the ability of the test methods, equipment, and personnel to detect loss of material with sufficient resolution to ensure no loss of intended function. The April 26, 2011, response to RAI B.2.22-4 revised license renewal application Section A.1.1.20 to include a statement that the intake conduit inspections will be performed by qualified methods.

Issue
Given that there are no currently qualified methods to examine the nuclear services and decay heat seawater system intake conduits one will have to be developed and demonstrated.

Request
If a qualified method has been developed for inspecting the nuclear services and decay heat seawater system intake conduits, state this method and provide sufficient information such that the staff can confirm that the method will adequately manage the effects of aging.

If an alternative qualified performance demonstrated method to inspect the nuclear services and decay heat seawater system intake conduits must be developed then the proposed final safety analysis report (FSAR) supplement should contain a summary description of activities for managing the effects of aging as required by 10 CFR 21(d). The FSAR supplement should include, for example, that the test method will be based on proven technology and test parameters, a performance demonstration will verify the ability of the test methods, equipment, and personnel, and the alternative method will be capable of detecting loss of material with sufficient resolution to ensure no loss of intended function, and will consider industry operating experience.

Response

The CR-3 License Renewal FSAR Supplement description of the CR-3 Buried Piping and Tanks Inspection Program has been revised to provide additional detail regarding inspection activities associated with the Nuclear Services and Decay Heat Seawater System intake conduits. The revised description reflects that test activities will be based on proven technology and test parameters. Test methods will incorporate the use of performance demonstration and qualified methods as necessary to assure the efficacy of test results. These results will be capable of detecting loss of material with sufficient resolution to ensure no loss of intended function, and will consider applicable industry operating experience.

This response involves a change to the License Renewal Application; refer to the information in Enclosure 2.

PROGRESS ENERGY FLORIDA, INC.

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ENCLOSURE 2

AMENDMENT #23 CHANGES TO THE LICENSE RENEWAL APPLICATION

AMENDMENT #23 CHANGES TO THE LICENSE RENEWAL APPLICATION

Source of Change	License Renewal Application (LRA) Amendment 23 Changes
RAI B.2.22-3.1	On LRA Page A-13, replace Subsection A.1.1.20 as amended by LRA Amendments 12, 15, and 20, with the following paragraphs: The Buried Piping and Tanks Inspection Program is a new program that manages the aging effect of loss of material for the external surfaces of buried steel piping components, as well as cracking and degradation of material properties of concrete, in CR-3 systems within the scope of License Renewal. The Program includes preventive measures to mitigate corrosion by protecting the external surface of buried components through use of coating or wrapping. The Program also includes visual examination of buried piping components made accessible by excavation. Program administrative controls to be developed include ensuring an appropriate as-found pipe coating and material condition inspection is performed whenever buried piping within the scope of this Program is exposed; specifying that an inspection datasheet will be used; requiring inspection results to be documented; including precautions concerning excavation and use of backfill for License Renewal piping and tanks, including a requirement that buried pipe and tank coating inspection shall be performed, when excavated, by qualified personnel to assess its condition; and including a requirement that a coating engineer or other qualified individual should assist in evaluation of any pipe and tank coating damage or degradation found during the inspection. The Buried Piping and Tanks Inspection Program activities for the element Detection of Aging Effects are performed consistent with the requirements of NUREG-1801, Revision 2, except that CR-3 will use alternative methods, such as Broadband Electromagnetic (BEM) scanning, to examine the Nuclear Services and Decay Heat Seawater System intake conduit piping from the inside to determine the condition of its external surfaces. These examinations will be performed using qualified methods subject to performance demonstration to verify the efficacy of the examination techniques and inspection results. This examination will be performed on at least 50% of the length of one of the two intake conduits, such that at least 25% of the piping length of both conduits will be inspected. Qualification of the test methods will be established based on proven technology and test parameters, consideration of operating experience at other facilities, and will be validated with a performance demonstration specific to CR-3. The performance demonstration will incorporate piping material, design and service conditions, and will verify the ability of the test methods, equipment, and personnel to detect loss of material with sufficient resolution to ensure no loss of intended function. Initial testing will be performed prior to the period of extended operation, and will be repeated at intervals based on test results to ensure no loss of intended function prior to the next test performance. Test qualifications, including performance demonstration results, will be documented with the results of the initial testing. The following table outlines the minimum inspection schedule prescribed for the Buried Piping and Tanks Inspection Program. (Note that the table of inspections was provided in LRA Amendment #20 via PEF letter to the NRC 3F0411-05, dated April 26, 2011.)

PROGRESS ENERGY FLORIDA, INC.

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ENCLOSURE 3

CRYSTAL RIVER UNIT 3 LICENSE RENEWAL COMMITMENTS, REVISION 5

CRYSTAL RIVER UNIT 3 LICENSE RENEWAL COMMITMENTS, REVISION 5				
ITEM NO.	**COMMITMENT**	**FINAL SAFETY ANALYSIS REPORT (FSAR) SUPPLEMENT LOCATION**	**PROGRAM IMPLEMENTATION SCHEDULE**	**LICENSE RENEWAL APPLICATION (LRA) SOURCE**
1	In accordance with the guidance of NUREG-1801, Rev. 1, regarding aging management of reactor vessel internals components, CR-3 will: (1) participate in the industry programs for investigating and managing aging effects on reactor internals, (2) evaluate and implement the results of the industry programs as applicable to the reactor internals, and (3) upon completion of these programs, but not less than 24 months before entering the period of extended operation, submit an inspection plan for reactor internals to the NRC for review and approval.	A.1.1	As stated in the commitment	Reactor Vessel Internals Aging Management Activities LRA Section A.1.1
2	In accordance with the guidance of NUREG-1801, Rev. 1, regarding aging management of nickel alloy and nickel-clad components susceptible to primary water stress corrosion cracking, CR-3 will comply with applicable NRC Orders and will implement applicable: (1) Bulletins and Generic Letters and (2) staff-accepted industry guidelines.	A.1.1	As stated in the commitment	Primary Water Stress Corrosion Cracking of Nickel Alloys LRA Section A.1.1
3	The Program will be enhanced to select an alternate lubricant that is compatible with the fastener material and the contained fluid.	A.1.1.3	Prior to the period of extended operation	Reactor Head Closure Studs Program LRA Section B.2.3
4	The Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS) Program is a new program to be implemented. When a Safety Evaluation Report is issued for MRP-227, any required actions that affect the aging management strategy for these components will be incorporated into the program documents.	A.1.1.6	Prior to the period of extended operation	Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS) Program LRA Section B.2.6 RAI B.2.6-1

CRYSTAL RIVER UNIT 3 LICENSE RENEWAL COMMITMENTS, REVISION 5				
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5	Program administrative control documents will be enhanced to include: (1) guidance for torquing and closure requirements based on the EPRI documents endorsed by NUREG-1801, (2) requirements to remove instances where molybdenum disulfide lubricant is allowed for use in bolting applications in specific procedures and to add a general prohibition against use of molybdenum disulfide lubricants for bolted connections, (3) guidance for torquing and closure requirements that include proper torquing of the bolts and checking for uniformity of gasket compression after assembly, (4) guidance for torquing and closure requirements based on the recommendations of EPRI NP-5769, "Degradation and Failure of Bolting in Nuclear Power Plants," (with exceptions noted in NUREG-1339), EPRI TR-104213, "Bolted Joint Maintenance & Applications Guide," and EPRI 5067, "Good Bolting Practices, A Reference Manual for Nuclear Power Plant Personnel," Volumes I and II, (5) a centralized procedure based on EPRI NP-5769, EPRI TR-104213, and EPRI-5067 containing guidance regarding bolted joint leak tightness and pre-installation inspections consistent with the recommendations of those documents, (6) periodic examinations of a representative sample of bolting identified as potentially having yield strength ≥150 ksi for SCC consisting of periodic in situ ultrasonic testing or, alternatively, surface examination or bolt replacement, with sample sizes based on EPRI TR-107514 methodology, (7) examination of NSSS support high strength bolting for SCC concurrent with examinations of the associated supports at least once per 10-year ISI period, and (8) acceptance standards for examination of high strength structural bolting consistent with the recommendations of EPRI NP-5769 or application specific structural analyses.	A.1.1.8	Prior to the period of extended operation	Bolting Integrity Program LRA Section B.2.8, RAI B.2.8-2, RAI B.2.8-3

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6	The Program will be enhanced to: (1) include the Nuclear Services and Decay Heat Seawater System Pumps in a periodic inspection and/or rebuild program. This Program will be initiated during the current license period and inspect one or more pumps prior to the period of extended operation, (2) subject the Nuclear Services and Decay Heat Seawater System Discharge Conduits to inspection and evaluation subsequent to the SG replacement project, but prior to the period of extended operation, in order to determine the extent of activities required during the period of extended operation to support the intended function of these components, (3) incorporate hardness/scratch testing for selective leaching into the examinations of susceptible pumps and valves and, if evidence of degradation is detected, of seawater heat exchanger tubesheet cladding, (4) incorporate Nuclear Services and Decay Heat Seawater System Intake Conduit inspections for degraded or missing concrete lining. Affected areas will be monitored to assure no loss of intended function until such time as the lining can be repaired, (5) incorporate acceptance criteria into procedures for inspections for biofouling and maintenance of protective linings, and (6) establish periodic maintenance activities for Nuclear Services and Decay Heat Seawater System expansion joints prior to the period of extended operation.	A.1.1.10	As stated in the commitment	Open-Cycle Cooling Water System Program LRA Section B.2.10, RAI B.2.10-1, RAI B.2.10-2, RAI B.2.10-3

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7	Administrative controls for the Program will be enhanced to: (1) include in the Program all cranes within the scope of License Renewal, (2) require the responsible engineer to be notified of unsatisfactory crane inspection results involving loss of material, (3) specify the frequency of inspections for the cranes within the scope of License Renewal to be every refueling outage for cranes in the Reactor Building and every two years for cranes outside the Reactor Building, and (4) clarify that crane rails are to be inspected for abnormal wear and that members to be inspected for cracking include welds.	A.1.1.12	Prior to the period of extended operation	Inspection of Overhead Heavy Load and Light Load Handling Systems Program LRA Section B.2.12
8	The Program administrative controls will be enhanced to: (1) include specific guidance for periodic inspection of fire barrier walls, ceilings, and floors including a requirement to notify Fire Protection of any deficiencies having the potential to adversely affect the fire barrier function, (2) include additional inspection criteria as described in NUREG-1801 for penetration seals, (3) include additional inspection criteria for corrosion of fire doors, (4) specify minimum qualification requirements for personnel performing visual inspections of penetrations seals and fire doors, and (5) specify inspections of fire barrier walls, ceilings, and floors on a frequency of at least once every five years.	A.1.1.13	Prior to the period of extended operation	Fire Protection Program LRA Section B.2.13, RAI B.2.13-2.1

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9	The Program will be enhanced to: (1) incorporate a requirement to perform one or a combination of the following two activities: (a) Implement periodic flow testing consistent with the intent of NFPA 25, or (b) Perform wall thickness evaluations to verify piping is not impaired by pipe scale, corrosion products, or other foreign material. For sprinkler systems, this may be done by flushing, internal inspection by removing one or more sprinkler heads, or by other obstruction investigation methods, (such as technically proven ultrasonic and X-ray examination) that have been evaluated as being capable of detecting obstructions. (These inspections will be performed before the end of the current operating term. The results from the initial inspections will be used to determine inspection intervals thereafter during the period of extended operation.), (2) perform internal inspections of system piping at representative locations as required to verify that loss of material due to corrosion has not impaired system intended function. Alternately, non-intrusive inspections (e.g., ultrasonic testing) can be used to verify piping integrity. (These inspections will be performed before the end of the current operating term. The results from the initial inspections will be used to determine inspection intervals thereafter during the period of extended operation.), (3) incorporate a requirement to perform a visual inspection of yard fire hydrants annually consistent with the intent of NFPA 25 to ensure timely detection of signs of degradation, such as corrosion, and (4) consistent with the intent of NFPA 25, either replace the sprinkler heads prior to reaching their 50-year service life or revise site procedures to perform field service testing, by a recognized testing laboratory, of representative samples from one or more sample areas. (Subsequent testing will be performed on a representative sample at an interval of 10 years after the initial field service testing.)	A.1.1.14	Prior to the period of extended operation	Fire Water System Program LRA Section B.2.14, RAI B.2.14-1

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10	The Aboveground Steel Tanks Program is a new program to be implemented.	A.1.1.15	Prior to the period of extended operation	Aboveground Steel Tanks Program LRA Section B.2.15
11	The Program will be enhanced to: (1) adjust the inspection frequency for the Diesel-Driven Emergency Feedwater Pump Fuel Oil Storage Tank to ensure an inspection is performed prior to the period of extended operation, (2) inspect the internal surfaces of the Diesel-Driven Fire Pump Fuel Oil Storage Tanks. Based on the results of the inspection, the tanks will be cleaned and flushed as necessary. These inspections will be performed every 2 years, unless trending indicates an appropriate change in frequency is warranted, and (3) perform UT inspections of the Diesel-Driven Fire Pump Fuel Oil Storage Tanks prior to the period of extended operation, and at intervals not to exceed 10 years.	A.1.1.16	Prior to the period of extended operation	Fuel Oil Chemistry Program LRA Section B.2.16 RAI B.2.16-1.1
12	The Program will be enhanced to: (1) ensure that neutron exposure conditions of the reactor vessel remain bounded by those used to project the effects of embrittlement to the end of the 60-year extended license period and (2) establish formalized controls for the storage of archived specimens to ensure availability for future use by maintaining the identity, traceability, and recovery of the archived specimens throughout the storage period.	A.1.1.17	Prior to the period of extended operation	Reactor Vessel Surveillance Program LRA Section B.2.17
13	The One-Time Inspection Program is a new program to be implemented.	A.1.1.18	Prior to the period of extended operation	One-Time Inspection Program LRA Section B.2.18
14	The Selective Leaching of Materials Program is a new program to be implemented.	A.1.1.19	Prior to the period of extended operation	Selective Leaching of Materials Program LRA Section B.2.19

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15	The Buried Piping and Tanks Inspection Program is a new program to be implemented.	A.1.1.20	Prior to the period of extended operation	Buried Piping and Tanks Inspection Program LRA Section B.2.20
16	Program administrative controls will be revised to incorporate periodic volumetric examinations of ASME Code Class 1 small-bore socket welds. A volumetric examination technique will be developed capable of detecting cracking in Class 1 socket welds. The total number of socket welds selected for examination will be at least 10% of the total population per inservice inspection (ISI) interval. Prior to the period of extended operation, CR-3 will perform a baseline inspection equivalent to one third of those inspections required for an interval. The regular inspection schedule is to commence in the third period of the fourth ISI interval.	A.1.1.1	Prior to the period of extended operation	ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD Program LRA Section B.2.1, RAI B.2.21-3 RAI B.2.21-5
17	The Program will be enhanced to: (1) incorporate measures to assure the integrity of surfaces that are inaccessible or not readily visible during both plant operations and refueling outages, and (2) incorporate inspection attributes for degradation of coatings.	A.1.1.22	Prior to the period of extended operation	External Surfaces Monitoring Program LRA Section B.2.22, RAI B.2.22-1
18	The Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components Program is a new program to be implemented.	A.1.1.23	Prior to the period of extended operation	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components Program LRA Section B.2.23
19	Program administrative controls will be enhanced to (1) identify the structures that have masonry walls in the scope of License Renewal, (2) include inspection of the masonry walls in the Machine Shop in a periodic engineering activity (PMID), and 3) require periodic inspection of masonry walls every five years.	A.1.1.29	Prior to the period of extended operation	Masonry Wall Program LRA Section B.2.29 RAI 2.2-06 RAI B.2.29-1

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20	Program will be enhanced by revising the administrative controls that implement the Program to: (1) identify all License Renewal structures and systems that credit the Program for aging management in the corporate procedure for condition monitoring of structures, (2) require notification of the responsible engineer when below grade concrete including concrete pipe is exposed so an inspection may be performed prior to backfilling, (3) require periodic groundwater chemistry monitoring including consideration for potential seasonal variations, (4) require periodic inspections of the water control structures, i.e., Circulating Water Intake Structure, Circulating Water Discharge Structure, Nuclear Service Sea Water Discharge Structure, Intake Canal, and Raw Water Pits, on a frequency not to exceed five years, (5) require periodic inspections of the Circulating Water Intake Structure submerged portions on a frequency not to exceed five years, (6) identify additional civil/structural commodities and associated inspection attributes and performance standard required for License Renewal in the corporate procedure for condition monitoring of structures, (7) identify additional inspection criteria for structural commodities in the site system walkdown checklist, (8) add inspection of corrosion to the inspection criteria for the bar racks at the Circulating Water Intake Structure as a periodic maintenance activity, (9) add an inspection of the earth for loss of form and loss of material for the Wave Embankment Protection Structure as a periodic maintenance activity, (10) include additional in-scope structures and specific civil/structural commodities in periodic engineering activities, (11) require periodic inspections of the Fluorogold slide bearing plates used in structural steel platform applications in the Reactor Building., (12) require periodic inspection of structures on a frequency of at least once every five years, and (13) include the quantitative acceptance criteria of ACI 349.3R, Chapter 5, and (14) perform a baseline inspection using the quantitative acceptance criteria of ACI 349.3R prior to the period of extended operation.	A.1.1.30	Prior to the period of extended operation	Structures Monitoring Program LRA Section B.2.30, RAI B.2.13-2.1 RAI B.2.30-6

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21	The Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program is a new program to be implemented.	A.1.1.31	Prior to the period of extended operation	Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program LRA Section B.2.31
22	The Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits Program is a new program to be implemented.	A.1.1.32	Prior to the period of extended operation	Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits Program LRA Section B.2.32
23	The Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program is a new program to be implemented.	A.1.1.33	Prior to the period of extended operation	Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program LRA Section B.2.33
24	The Metal Enclosed Bus Program is a new program to be implemented.	A.1.1.34	Prior to the period of extended operation	Metal Enclosed Bus Program LRA Section B.2.34
25	The Fuse Holder Program is a new program to be implemented.	A.1.1.35	Prior to the period of extended operation	Fuse Holder Program LRA Section B.2.35

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26	The Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program is a new program to be implemented.	A.1.1.36	Prior to the period of extended operation	Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program LRA Section B.2.36
27	Administrative controls for the Program will be enhanced to: (1) include provisions to monitor and trend data for incorporation in test procedures to ensure the projection meets the acceptance criteria, (2) incorporate acceptance criteria tables for accumulated weight losses of monitored Carborundum samples, and (3) implement periodic Boron-10 Areal Density Gauge for Evaluating Racks (BADGER) testing or comparable neutron attenuation testing for racks in Pools A and B to ensure that the neutron absorption intended function is maintained, and that technical specification criticality requirements are continually met.	A.1.1.37	Prior to the period of extended operation	Fuel Pool Rack Neutron Absorber Monitoring Program LRA Section B.2.37, RAI 3.3.2.2.6-2, RAI B.2.37-2
28	The High-Voltage Insulators in the 230KV Switchyard Program is a new program to be implemented.	A.1.1.38	Prior to the period of extended operation	High-Voltage Insulators in the 230KV Switchyard Program LRA Section B.2.38

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29	Administrative controls for the Program will be revised to: (1) enhance procedures and activities credited for performance of physical inspections to reflect that inspections of components exposed to closed-cycle cooling water will be performed as made available on an opportunistic basis, (2) flag procedures and activities credited with performance monitoring of parameters in the Instrument Air and Secondary Services Closed Cycle Cooling Water Systems to assure pump and heat exchanger performance are identified as license renewal activities, and (3) flag procedures associated with closed cycle cooling water chemistry controls to identify chemistry controls associated for in-scope systems as License Renewal activities.	A.1.1.11	Prior to the period of extended operation	Closed-Cycle Cooling Water System Program LRA Section B.2.11, RAI B.2.11-1, RAI B.2.11-2
30	Implementing procedures for the Program will be enhanced to ensure compliance with the requirements in NUREG-1801, Revision 1, Section XI.M19.	A.1.9	Prior to the period of extended operation	Steam Generator Tube Integrity Program LRA Section A.1.9 RAI B.2.9-2.1
31	CR-3 will perform a review of design basis ASME Code Class 1 fatigue evaluations to determine whether the NUREG/CR-6260 based locations that have been evaluated for the effects of the reactor coolant environment on fatigue usage are the limiting locations for the CR-3 plant configuration. If more limiting locations are identified, the most limiting location will be evaluated for the effects of the reactor coolant environment on fatigue usage. If any of the limiting locations consist of nickel alloy, NUREG/CR-6909 methodology for nickel alloy will be used in the evaluation.	A.1.2.2.10	Prior to the period of extended operation	Environmentally - Assisted Fatigue Review RAI 4.3.3-6

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32	CR-3 will develop and submit a plant-specific Concrete Containment Tendon Prestress aging management program (AMP) to address plant operating experience from the concrete delaminations; include any revised Minimum Required Values and plans and schedules for revising the plant-specific program basis and implementation documents; include details for collecting surveillance data, performing the regression analyses and log-linear trend plots, and a schedule for performing the tendon surveillances; provide a discussion of tendon surveillances, including re-stressed tendons and any remaining undisturbed tendons; and provide a discussion of tendon surveillances, including use of common tendons during the period of extended operation. The AMP will follow the criteria of NUREG-1800, Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants, Revision 2, and will ensure aging effects are adequately managed during the period of extended operation.	A.1.1.41	At least one year prior to the period of extended operation	Concrete Containment Tendon Prestress Program RAI B.3.3-1