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

Ref: 10 CFR 54

November 23, 2010
3F1110-03

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) – Containment Opening and Amendment #14

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 October 27, 2009, "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 October 27, 2009, provided a request for additional information (RAI) concerning the CR-3 License Renewal Application (Reference 2). By e-mail dated January 13, 2010, the NRC staff indicated that the response to this RAI should be contingent on completion of a root cause analysis rather than on the date specified in Reference 2. The root cause analysis has been completed. Enclosure 1 to this letter provides the response to Reference 2. Enclosure 2 to this letter contains Amendment #14 to the License Renewal Application.

With the exception of changes to License Renewal Application (LRA) Section 4.5.1, Tendon Stress Relaxation Analysis, this letter also addresses changes to the LRA and previous responses to RAIs that resulted from the containment repairs. An update to Section 4.5.1, RAI 4.5-1, and RAI B.2.26-1 will be provided in a later submittal.

No new regulatory commitments are contained in this submittal.

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 14 Changes to the License Renewal Application

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

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

A140
LRR

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 23 day of November, 2010, by Jon A. Franke.

Carolyn E Portmann

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.2.25-4

Background:

In order to perform a scheduled steam generator replacement, 10 vertical and 17 horizontal containment pre-stressing tendons were de-tensioned in preparation for hydro-demolition of a containment section.

Issue:

During hydro-demolition of the containment concrete, a crack was identified in the concrete near the horizontal tendons, approximately nine inches from the outer surface of the containment, on all four sides of the temporary opening. In addition, during hydro-demolition water leaked out of the containment concrete at several places some distance away from the edge of the temporary opening.

Request:

1. Explain how the recent plant-specific operating experience will be incorporated into the ASME Section XI, Subsection IWL and Subsection IWE AMPs, and whether a plant-specific program is necessary to manage aging of the containment. Include the containment concrete, pre-stressing tendons, and the containment liner plate in the discussion.

2. Identify and explain any changes to the license renewal application based on the recent plant-specific operating experience.

Response:

The technical root cause of the Reactor Building (RB) concrete delamination was determined to be a redistribution of stresses as a result of the de-tensioning scope and sequence associated with the steam generator replacement (SGR) containment opening activities. The redistributed stresses exceeded the tensile capacity of the concrete, resulting in cracking along the high stress line connecting the horizontal tendons. As the cracks propagated and joined, delamination occurred over a wide area. The programmatic root cause of the event was the inability of industry-accepted tools to predict the concrete delamination. Prevention of the concrete delamination could not have been predicted based on the existing information and models at the time of SGR. Major breakthroughs in the development of state-of-the-art modeling methodology would have been needed to predict the concrete delamination. Other factors which contributed to exceeding the tensile capacity of the concrete were associated with the original design. However, the original design, materials, and construction of the RB wall were determined to be acceptable for its original design function and will continue to be acceptable following repair of the RB wall. Based on the results of the technical root cause determination, responses are provided below.

1. *The delamination was specifically associated with the tendon de-tensioning scope and sequence. There were no new aging effects identified in the root cause investigation or the repair efforts for concrete, tendons or liner plate either for the ASME Section XI, Subsection*

IWL or the Subsection IWE Aging Management Programs during the root cause investigation. As a result of the technical root cause of the RB concrete delamination, a number of corrective actions were initiated to ensure the concrete, tendons and liner plate are restored to their original condition and are fully capable of performing their design functions as part of the Corrective Action Program. Each of these corrective actions is being tracked to closure by the Corrective Action Program. The following corrective actions are provided as additional information; however, no new commitments are contained in this response. Corrective actions include the following:

- *Repair the containment wall in accordance with formal Engineering Change (EC) documents. ECs are being implemented for Crack Arresting, De-tensioning, Concrete and Reinforcing Steel Removal, Concrete and Reinforcing Steel Replacement, and Re-tensioning/Testing.*

- *Perform a detailed analysis of the tendon de-tensioning plan in support of the containment repair effort. Modify the plan as necessary and ensure the stresses show positive margin as validated using CR-3 delamination data.*

- *Perform a detailed analysis of the tendon re-tensioning plan in support of the containment repair effort. Modify the plan as necessary and ensure the stresses show positive margin as validated using CR-3 delamination data.*

- *Monitor displacement of the RB walls during re-tensioning to confirm the building response relative to computer prediction.*

- *Monitor the RB wall with strain gauges and acoustic instruments during re-tensioning to ensure responses are within established limits per the repair design documents.*

- *Perform a detailed analysis of the stress consequences of typical activities such as heating up and cooling down of containment in outages or solar heating of an entire bay.*

- *Establish an inspection plan to periodically monitor containment concrete condition to ensure there are no unexpected changes. The inspection should use Non Destructive Examination (NDE) such as Impulse Response mapping of the area and selective core drilling in areas identified as suspect by NDE.*

- *Establish a monitoring program that evaluates the response of the installed containment monitoring sensors to ensure the two types of concrete in RB Bay 3-4 (between buttresses 3 and 4) are behaving consistently as an indication of good coupling.*

During removal of delaminated concrete in RB Bay 3-4, vertical and horizontal cracks were observed in the remaining portions of the RB wall. Vertical hairline cracks were also observed in other bays around the Containment where additional hoop tendons had been de-tensioned. This condition was addressed by the Corrective Action Program. The cause of the horizontal cracks was due to tensile stress introduced by de-tensioning additional tendons in combination with concrete removal at the SGR opening. Concrete was removed in the area with horizontal cracks by extending the size of the SGR opening. The cause of the vertical cracks was due to de-tensioning the additional tendons in 2010. The cracks in Bay 3-4 were excavated and repaired with new concrete or were small and acceptable *within the existing design basis and accordingly were left as-is. The cracks in other bays were small and acceptable within the existing design basis and accordingly were left as-is. Visual examinations of the repaired concrete surfaces will be completed in accordance with the requirements of ASME Section XI, Subsection IWL repair/replacement requirements. The routine visual examinations in accordance with the ASME Section XI, Subsection IWL Program will continue to identify concrete aging effects, including cracking.*

The RB liner plate, a portion of which was removed to create an opening for the Steam Generator Replacement Project, was restored to its original configuration. An Engineering Change (EC) provided the repair activities for re-installing the liner plate, including welding, inspections, NDE, and re-coating.

CR-3 plans to continue utilizing the existing ASME Section XI, Subsection IWL and IWE Programs as described in the License Renewal Application (LRA) to manage aging of the containment concrete, pre-stressing tendons, and the containment liner plate. The corrective actions discussed above are being tracked to closure in the Corrective Action Program in order to ensure the RB concrete wall, tendons and liner are restored to their original condition and are fully capable of performing their design functions. There are no plans to develop a plant-specific aging management program.

Each of the ECs and corrective actions discussed above are available for review at CR-3.

2. *The following changes to the LRA are required based on the RB concrete delamination. No new commitments are contained in these updated responses. Refer to Enclosure 2 for details of the LRA changes.*

   <u>*Section 3.5.2.2.1.4, Loss of Material Due to General, Pitting, and Crevice Corrosion (LRA page 3.5-23)*</u>

   Section 3.5.2.2.1.4.1 should be revised to state:

   > *Original concrete meeting ACI 318 was used in contact with the embedded steel liner. ACI 201.2R was not used as guidance for concrete mix proportions, but ACI 301-66 was used, and it provides similar guidance to produce a low permeability, dense, air entrained, low water-cement ratio concrete, properly placed and cured. In addition, a new concrete mix was developed to replace the delaminated concrete in the RB wall using a plant concrete specification which followed the guidance of ACI 211.1-91 and ACI 211.4-R93. The concrete specification produced a low permeability, dense, air entrained, low water-cement ratio concrete, properly placed and cured, which met the guidance of ACI 201.2R.*

   The following provides a justification for the addition to LRA 3.5.2.2.1.4 which discusses Further Evaluation of Aging Management as recommended by NUREG-1801 for concrete used on the RB. For Subsection 3.5.2.2.1.4.1, the new concrete mix used to replace the delaminated concrete on the RB wall used a concrete specification that followed the guidance of American Concrete Institute (ACI) 211.1-91 and ACI 211.4-R93. The actual concrete mix design (i.e., a 7000 psi mix) produced by the plant concrete specification was compared to ACI 201.2R and was determined to meet the guidance of ACI 201.2R as follows:

ACI 201.2R (Section 1.4.2 and Table 2.2.3) recommends a water cement ratio (w/c) not exceeding 0.50 for frost resistant regular weight concrete for "All other structures" which would apply to the RB wall at CR-3. The target w/c for the 7000 psi mix is 0.47 which does not exceed the 0.50 as recommended by ACI 201.2R. In addition the water to cementitious materials ratio maximum (which includes the weight of cement and flyash) is 0.375 which also does not exceed 0.50 as recommended by ACI 201.2R.

For air entrainment, the average air content recommended by ACI 201.2R (Table1.4.3) for ¾" aggregate in a moderate exposure is 5% ± 1½% (or 3½% - 6½%). Also, the notes to Table 1.4.3 indicate air content may be reduced by approximately 1% for concrete with higher strengths (or 2½%) under certain conditions. The air content limit of the 7000 psi mix is specified as 3½% maximum which is within the range of ACI 201.2R. In addition, ACI 201.2R air content is based on moderate exposure, whereas CR-3 is in a negligible or mild weathering zone. Since there is not an air content specified in ACI 201.2R for a negligible or mild weathering region, a maximum of 3½% air content is considered acceptable.

For suitable materials, ACI 201.2R (Section 1.4.4) recommends materials include cement conforming to American Society for Testing and Materials (ASTM) C150 or C595, pozzolans conforming to ASTM C618, aggregates conforming to ASTM C33, air-entraining admixture conforming to ASTM 260, and chemical admixtures conforming to ASTM C494. The 7000 psi mix requires materials conform to the same ASTM standards. See a similar discussion of RAI 3.5.2.2.2.2-2 which was included in CR-3 letter 3F1209-03, dated December 3, 2009 (NRC Accession #ML093410638).

Section 3.5.2.2.1.10 – Cracking Due to Expansion and Reaction with Aggregate, and Increase in Porosity and Permeability, Due to Leaching of Calcium Hydroxide

Section 3.5.2.2.1.10, the 1st paragraph should be revised to state:

> *Cracking due to expansion and reaction with aggregate is not an applicable aging effect. For the original concrete design mixes, the fine and coarse aggregates were tested with each brand of cement for possible alkali reaction in accordance with ASTM C227; and aggregates did not react within the reinforced concrete. In addition, original concrete was constructed to ACI 301-66, which provides guidance similar to ACI 201.2R for producing high density, low permeability concrete. For the repair concrete used to replace the delaminated concrete in the RB wall, an Engineering Change (EC) was used for qualification of the aggregates used. The EC documented that expansion and reaction with aggregates was not a concern based on use of cement low in alkalis, use of aggregates which have a good record of durability, and that exposure to water is limited to rain on the vertical surface of the RB wall. In addition, the entire surface of the repair concrete is readily accessible, and any cracking regardless of aging mechanism is examined by the ASME Section XI, Subsection IWL Program. The repair concrete used to replace the delaminated concrete in the RB wall is being constructed to a concrete specification which follows the guidance of ACI 211.1-91 and ACI 211.4-R93. The concrete specification provides similar guidance as ACI 201.2R for producing a high density, low permeability concrete.*

The EC which was used for qualification of the aggregates documented that alkali reactivity qualification testing of aggregates per ASTM C227 was not needed. The EC documented that for an alkali reaction to occur, three conditions must be present: (1) Cement shall be *high in alkalis, (2) Aggregates have to be reactive, and (3) Water is required. The EC documented that the cement used was low in alkalis based on test reports (less than maximum allowed by ASTM C150), the selected aggregates had a good record of durability, and exposure to water is limited to rain on the vertical surface of the RB wall. See RAI response to LRA Section 3.5.2.2.1.4.1 (above) for a comparison of concrete used to repair the delaminated concrete in the RB wall with ACI 201.2R guidance.*

Section 3.5.2.2.1.10, the 2nd paragraph should be revised to state:

> *For increase in porosity and permeability due to leaching of calcium hydroxide, concrete was constructed to ACI 301-66; or (for RB wall repair) ACI 211.1-91 and ACI 211.4-R93 which provide guidance similar to ACI 201.2R for producing high density, low permeability concrete. However, an increase in porosity and permeability due to leaching of calcium hydroxide is conservatively considered to be an aging effect requiring management, because minor indications of leaching in below grade concrete exists in the RB tendon access gallery. The aging effect of change in material properties has been assigned, as equivalent to an increase in porosity and permeability, and is managed by the ASME Section XI, Subsection IWL Program.*

The revision adds Codes ACI 211.1-91 and ACI 211.4-R93 for the RB wall concrete repair but still assumes an aging effect of change in material properties because minor indications of leaching in below grade concrete exists in the RB tendon access gallery. See RAI response to LRA Section 3.5.2.2.1.4 above for a comparison of concrete used to repair the delaminated concrete in the RB wall with ACI 201.2R guidance.

Section 4.5.1, Tendon Stress Relaxation Analysis

In order to initiate concrete repairs on the RB wall, a large number of additional tendons had to be de-tensioned (64 of 144 vertical tendons and 155 of 282 hoop tendons). After the concrete is replaced, tendons will be re-tensioned. A re-tensioning plan is being developed. An update to LRA Section 4.5.1 will be provided after the tendon re-tensioning plan is approved.

Appendix A.1.2.4, Concrete Containment Tendon Pre-stress

Same comment as provided in the discussion of Section 4.5.1 above.

A review was performed of the RAI Responses previously submitted to the NRC to determine if a revised response was warranted based on the RB concrete delamination. A supplement to the following RAI Responses is provided below, arranged by the Progress Energy letter number. No new commitments are contained in these updated RAI responses.

Letter *3F1009-07, October 13, 2009 (NRC Accession #ML092890155)*	***RAI*** *B.2.26-1*
In the next to last paragraph in RAI Response B.2.26-1, the 30th year tendon surveillance report, the percent of forecast values at 60 years above minimum design is provided for vertical, hoop and dome tendons. The response provided is accurate through the 30th year tendon surveillance. As a result of the repair of the RB wall concrete delamination, the 60-year percentage of forecast values above the minimum required values will change. An	

update to this RAI will be submitted after the tendon re-tensioning plan is approved.

Letter *3F1009-07, October 13, 2009 (NRC Accession #ML092890155)*	***RAI*** *B.2.26-2*

The following additional response is provided to RAI B.2.26-2:

Another Nuclear Condition Report (NCR) was initiated as a follow-up to NCR 251318 to further investigate the low lift-off forces in the hoop pre-stressing tendons. As a corrective action, a calculation was prepared which developed revised forecasts for the forces in hoop tendons examined during the previous three surveillances (i.e., the 6th, 7th and 8th) using a creep function based on actual CR-3 concrete mix creep test results. It was concluded that the forecasts for the forces in hoop tendons examined during the 6th, 7th and 8th surveillances used a generic creep function to compute time dependent losses which provided a substantial underestimate of CR-3 concrete creep strain. As a result, the forecast forces were well above levels that would be determined by using a more realistic creep function from actual CR-3 concrete mix creep test results. More specifically, the new calculation showed all but six measured hoop tendon forces would have exceeded forecast values. The six measured forces that were below predicted still exceeded the lower acceptance limits (95% of predicted). Therefore, all tendon forces measured during the 6th, 7th and 8th surveillances were acceptable. In addition, the mean of the lift-off forces measured during each of the surveillances exceeded the mean of the predicted hoop tendon forces. Margins between the mean measured and mean predicted hoop tendon forces were 91, 79 and 64 kips for the 6th, 7th and 8th surveillances, respectively.

The ASME Section XI, Subsection IWL Program tendon surveillances will continue to monitor the structural integrity of the containment. Forecast of tendon stress forces for subsequent tendon surveillances will use the new inputs for concrete shrinkage and creep which should provide a more accurate forecast of tendon stress now and during the period of extended operation.

Letter *3F1209-03, December 3, 2009 (NRC Accession #ML093410638)*	***RAI*** *3.5.2.2.1.2-1*

In the response letter, CR-3 stated, "In consideration of the recent discovery of a gap in the concrete of the outer radius of the CR-3 containment structure, which was the subject of NRC Event Notification 45416, dated October 7, 2009, and NRC Special Inspection Team Press Release No. 11-09-055, dated October 9, 2009, Progress Energy Florida, Inc., (PEF) will evaluate the need to revise the technical response to this Request for Additional Information (RAI) at a later date. This evaluation will be completed following the root cause determination that is currently in progress and subsequent assessment of any impact on the technical and aging management programs discussed in this response."

Based on CR-3's previous response, an amended response should be provided which states:

CR-3 has reviewed its response to RAI 3.5.2.2.1.2-1 in letter 3F1209-03 dated December 3, 2009 (NRC Accession #ML093410638). The root cause of the gap in the concrete of the outer radius of the CR-3 containment structure was not related to increased stress levels from settlement. No further response is required for RAI 3.5.2.2.1.2-1.

Letter 3F1009-08, October 22, 2009 (NRC Accession #ML093000505)	*RAI 4.5-1*
The response stated, "In consideration of the recent discovery of a gap in the concrete of the outer radius of the CR-3 containment structure (subject of Event Notification 45416, dated October 7, 2009, and NRC Special Inspection Team Press Release No. 11-09-055, dated October 9, 2009), CR-3 will evaluate the need to revise the technical response to this RAI at a later date. This evaluation will be complete following the root cause determination that is currently in progress and subsequent assessment of any impact on the technical and aging management in this response." An update to LRA Response to RAI 4.5-1 will be provided after the tendon re-tensioning plan is approved.	

Letter 3F1209-12, December 30, 2009 (NRC Accession #ML100040096)	*RAI B.2.25-3.1*
The engineering analysis referenced in RAI Response B.2.25-3.1 has been completed and it was determined that the bulged areas of the RB do not adversely affect the ability of the RB to perform its intended function during the period of extended operation. The following supplemental information is provided: A basis document was prepared which established an acceptable bulge size limit for the containment liner. Finite element analysis was used to establish the acceptance criteria for bulging of the liner. The acceptable bulge size is based on anchor shear and displacement capacities. The analysis was based on the design basis accident load combinations, including concrete creep due to sustained pre-stress load. Strains in the liner were also checked against strain limits given in the Final Safety Analysis Report and in the ASME Section III, Division 2 Code and found to be acceptable. The leading apparent cause of the liner bulging based on the analysis is initial as-built deviations combined with pre-stress and concrete creep/shrinkage, which has produced small bulges. Elevated temperatures of 120°F-150°F were shown to produce only small increases in bulge size, and cycling at operating temperatures does not contribute to significant bulge growth. The calculation analysis also included a summary of the liner bulge sizes from previous IWE Program visual examination results and laser scans data performed in early 2010. In addition, an NCR corrective action was initiated to document the extent of condition of liner bulges. This corrective action documented all the liner bulges to date from previous IWE Program visual examination results and laser scans performed in 2010. The measured and scanned liner bulge heights documented are within the established acceptance criteria from the engineering analysis. Any future anomalies will be evaluated for acceptability in accordance with ASME Section XI, Subsection IWE-3500. In addition to the above, an Augmented Owner-Elected examination of three selected bulged areas, representative of all bulged areas, will be performed over the three following refueling outages to measure bulge height and liner thickness to determine any change in condition. This has been incorporated into the IWE Program. The liner thickness measurements will validate that corrosion has not affected the minimum required thickness.	

PROGRESS ENERGY FLORIDA, INC.

CRYSTAL RIVER UNIT 3

DOCKET NUMBER 50 - 302 / LICENSE NUMBER DPR - 72

ENCLOSURE 2

AMENDMENT 14 CHANGES TO THE LICENSE RENEWAL APPLICATION

Amendment 14 Changes to the License Renewal Application

Source of Change	License Renewal Application Amendment 14 Changes
RAI B.2.25-4	Replace LRA Subection 3.5.2.2.1.4, Item 1, on Page 3.5-23, with the following: 1. Original concrete meeting ACI 318 was used in contact with the embedded steel liner. ACI 201.2R was not used as guidance for concrete mix proportions, but ACI 301-66 was used, and it provides similar guidance to produce a low permeability, dense, air entrained, low water-cement ratio concrete, properly placed and cured. In addition, a new concrete mix was developed to replace the delaminated concrete in the RB wall using a plant concrete specification which followed the guidance of ACI 211.1-91 and ACI 211.4-R93, not ACI 201.2R. The concrete specification provided similar guidance to produce a low permeability, dense, air entrained, low water-cement ratio concrete, properly placed and cured. Replace the information in LRA Subection 3.5.2.2.1.10, on Pages 3.5-25 and 3.5-26, with the following: Cracking due to expansion and reaction with aggregate is not an applicable aging effect. For the original concrete design mixes, the fine and coarse aggregates were tested with each brand of cement for possible alkali reaction in accordance with ASTM C227; and aggregates did not react within the reinforced concrete. In addition, original concrete was constructed to ACI 301-66, which provides guidance similar to ACI 201.2R for producing high density, low permeability concrete. For the repair concrete used to replace the delaminated concrete in the RB wall, an Engineering Change (EC) was used for qualification of the aggregates used. The EC documented that expansion and reaction with aggregates was not a concern based on use of cement low in alkalis, use of aggregates which have a good record of durability, and that exposure to water is limited to rain on the vertical surface of the RB wall. In addition, the entire surface of the repair concrete is readily accessible, and any cracking regardless of aging mechanism is examined by the ASME Section XI, Subsection IWL Program. In addition, the repair concrete used to replace the delaminated concrete in the RB wall is being constructed to a concrete specification which follows the guidance of ACI 211.1-91 and ACI 211.4-R93. The concrete specification provides similar guidance as ACI 201.2R for producing a high density, low permeability concrete. For increase in porosity and permeability due to leaching of calcium hydroxide, concrete was constructed to ACI 301-66; or (for RB wall repair) ACI 211.1-91 and ACI 211.4-R93 which provide guidance similar to ACI 201.2R for producing high density, low permeability concrete. However, an increase in porosity and permeability due to leaching of calcium hydroxide is conservatively considered to be an aging effect requiring management, because minor indications of leaching in below grade concrete exists in the RB tendon access gallery. The aging effect of change in material properties has been assigned, as equivalent to an increase in porosity and permeability, and is managed by the ASME Section XI, Subsection IWL Program.
PEF-Identified Change	Revise the Discussion column of Table 3.5.1, Item 3.5.1-22, on Page 3.5-36, to replace the reference to ASME Section XI, Subsection IWE with reference to ASME Section XI, Subsection IWL. This corrects an error that was inadvertently made in the original LRA.