NRR-DRMAPEm Resource

From: Galvin, Dennis
Sent: Thursday, June 27, 2019 10:57 AM
To: Arthur.Zaremba@duke-energy.com
Cc: Mark Turkal (Mark.Turkal@duke-energy.com)
Subject: Brunswick RAIs – LAR to Revise TS 5.5.12, "Primary Containment Leakage Rate Testing Program" for Permanent Extension of Maximum Appendix J Test Intervals (L 2019-LLA-0031)
Attachments: Brunswick - TS 5.5.12 for Permanent Extension of Type A to 15 years - Final RAI 2019-06-27.pdf

Mr. Zaremba,

By letter dated dated February 27, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19058A768), Duke Energy Progress, LLC (the licensee) submitted a license amendment request (LAR) for Brunswick Steam Electric Plant Units 1 and 2 (BSEP). The proposed amendments would modify the BSEP Technical Specification (TS) 5.5.12, "Primary Containment Leakage Rate Testing Program," to allow for permanent extension of Appendix J containment leakage testing maximum intervals.

The U.S. Nuclear Regulatory Commission (NRC) staff has determined that additional information is needed to complete its review. The enclosed requests for additional information (RAIs) were e-mailed to the licensee in draft form on June 25, 2019 (ADAMS Accession No. ML19177A012). On June 26, 2019, the licensee informed the NRC staff that a clarification call was not necessary. The licensee agreed to provide responses to the RAIs by July 29, 2019. The NRC staff agrees with this date.

Respectfully,

Dennis Galvin
Project Manager
U.S Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Division of Operating Reactor Licensing
Licensing Project Branch 2-2
301-415-6256

Docket No. 50-325, 50-324

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OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR ADDITIONAL INFORMATION

RELATED TO LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION

TS 5.5.12, "PRIMARY CONTAINMENT LEAKAGE RATE TESTING PROGRAM" FOR

PERMANENT EXTENSION OF MAXIMUM APPENDIX J TEST INTERVALS

DUKE ENERGY PROGRESS, LLC

BRUNSWICK STEAM ELECTRIC PLANT UNITS 1 AND 2

DOCKET NOS. 50-325, 50-324

By license amendment request (LAR) dated February 27, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19058A768), Duke Energy Progress, LLC (Duke Energy) proposed a change to the Brunswick Steam Electric Plant (BSEP), Units 1 and 2 Technical Specification (TS) 5.5.12, "Primary Containment Leakage Rate Testing Program," to allow for permanent extension of Appendix J containment leakage testing maximum intervals.

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors," Option B, "Performance- Based Requirements," Item V.B.3 states that the regulatory guide or other implementation document used by a licensee to develop a performance-based leakage-testing program must be included, by general reference in the TSs. The current BSEP TS 5.5.12 states that the plant's program shall be in accordance with the guidelines contained in Regulatory Guide (RG) 1.163, "Performance Based Containment Leak Test Program," dated September 1995 (ADAMS Accession No. ML003740058). RG 1.163 endorsed the Nuclear Electric Institute (NEI) Topical Report NEI 94-01, Revision 0, "Industry Guideline for Implementing Performance Based Option of 10 CFR Part 50, Appendix J," dated July 26, 1995 (ADAMS Accession No. ML11327A025). The LAR proposes to replace this with a reference to NEI 94-01, Revision 3-A, dated July 31, 2012 (ADAMS Accession No. ML12221A202), with the conditions of NEI 94-01, Revision 2-A, dated November 19, 2008 (ADAMS Accession No. ML100620847). All revisions of NEI 94-01 require, as a prerequisite for extending the integrated leak rate test (ILRT) interval beyond three times in 10 years, that the results of the previous two tests are less than or equal to the performance criterion leakage rate specified in the TS.

LAR Enclosure page 25 has Tables 3.4.4-3 and 3.4.4-4 titled "Verification of Current Extended ILRT Interval for BSEP Unit (1 and 2 respectively)." The data entered in Table 3.4.4-4 for the 03/30/2005 Unit 2 ILRT performance is the same as that for Table 3.4.4-3 for the 03/25/2004 Unit 1 ILRT performance. This suggests a possible cut and paste transcription error.

LAR Tables 3.4.4-3 and 3.4.4-4 include columns labeled, "Measured Leakage Rate at 95% UCL (%wt./day)," "Water Level Corrections (%wt./day)," and "Corrections for valves not in Accident Positions during Test (%wt./day)." The data in these three columns when summed give the values in a fourth column labeled "Performance Leakage Rate…" LAR Enclosure pages 20 and 21 show Tables 3.4.4-1 and 3.4.4-2 titled "BSEP Unit 1(2) Type A Testing History," respectively.

Tables 3.4.4-1 and 3.4.4-2 include columns labeled “95% Upper Confidence Limit (wt.%/day),” “As-Found Leakage (wt.%/day),” “As-Left Leakage (wt.%/day),” and “Performance Leakage Rate (wt.%/day)”. It is not clear how the how the as-found leakage rate values were determined and why they differ from the as-left values and performance leakage rate values.

RAI SCPB-1: Provide the correct values for Tables 3.4.4-3 and 3.4.4-4 or confirm the values originally provided are correct. Provide a description of how the As-Found ILRT values shown in LAR Enclosure Tables 3.4.4-1 and 3.4.4-2 were derived relative to the “Performance Leakage Rate” values shown in Tables 3.4.4-3 and 3.4.4-4.