NRR-DMPSPEm Resource

From:	Galvin, Dennis
Sent:	Thursday, May 10, 2018 12:29 PM
To:	Grzeck, Lee (Lee.Grzeck@duke-energy.com)
Cc:	Mark Turkal (Mark.Turkal@duke-energy.com); Hon, Andrew; Tindell, Brian; Patel, Amrit
Subject:	Brunswick – LAR to Relocate PT Limits Curves to PTLR – DRAFT Supplemental Information Needed (EPID: L 2018-LLA-0094)
Attachments:	BSEP PTLR LAR - Draft Supplemental Information Request 2018-05-10 L-2018-LLA-0094.pdf

Mr. Grzeck,

By letter dated April 4, 2018, Duke Energy Progress, LLC (Duke Energy) submitted a license amendment request (LAR) for Brunswick Steam Electric Plant, Unit Nos. 1 and 2 (Brunswick). The proposed amendment to the Brunswick Technical Specifications (TSs) would revise and relocate the Pressure Temperature Limit Curves to a licensee-controlled Pressure and Temperature Limits Report. The request was submitted in accordance with guidance provided in U.S. Nuclear Regulatory Commission (NRC) Generic Letter 96-03, "Relocation of the Pressure Temperature Limit Curves and Low Temperature Overpressure Protection System Limits," dated January 31, 1996.

The purpose of this letter is to provide the DRAFT results of the NRC staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its characterization of the regulatory requirements or the licensing basis of the plant.

The NRC staff has reviewed your application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

The NRC staff has reviewed your application and preliminarily concluded that the information delineated in the DRAFT request attached to this email is necessary to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment in terms of regulatory requirements and the protection of public health and safety and the environment.

This DRAFT is being sent to in accordance with LIC-109, "Acceptance Review Procedures," to facilitate a conference call with the NRC staff. It is the staff's expectation that the conference call will occur as soon as possible, but no later than 5 days from the date of this email.

Please contact me with any questions.

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

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Recipients:
"Mark Turkal (Mark.Turkal@duke-energy.com)" <Mark.Turkal@duke-energy.com>
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Options
Priority: Standard
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DRAFT SUPPLEMENTAL INFORMATION NEEDED

AMENDMENT REQUEST TO REVISE THE TECHNICAL SPECIFICATIONS TO RELOCATE THE PRESSURE-TEMPERATURE LIMIT CURVES TO A PRESSURE AND TEMPERATURE LIMITS REPORT

DUKE ENERGY PROGRESS, LLC

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2

DOCKET NO. 50-324

By letter dated April 4, 2018 (Agencywide Document Access and Management System (ADAMS) Accession No. ML18094B058), Duke Energy Progress, LLC (Duke Energy) submitted a license amendment request (LAR) for Brunswick Steam Electric Plant, Unit Nos. 1 and 2 (Brunswick). The proposed amendment to the Brunswick Technical Specifications (TSs) would revise and relocate the Pressure Temperature Limit Curves to a licensee-controlled Pressure and Temperature Limits Report (PTLR). The request was submitted in accordance with guidance provided in U.S. Nuclear Regulatory Commission (NRC) Generic Letter (GL) 96-03, "Relocation of the Pressure Temperature Limit Curves and Low Temperature Overpressure Protection System Limits," dated January 31, 1996.

In accordance with GL 96-03, Attachment 1, to implement a PTLR, requesting licensees are required, among other things, to propose to (1) use an NRC-approved methodology to develop the PTLR, (2) describe how the neutron fluence is calculated, and (3) provide the neutron fluence values that are used in the adjusted reference temperature calculation.

Duke Energy proposes to incorporate BWROG-TP-11-022-A, Revision 1, "Pressure Temperature Limits Report Methodology for Boiling Water Reactors," (ADAMS Accession No. ML13277A557) into the new TS Section 5.6.7, to describe the previously reviewed and approved analytical methods used to determine the PT Limits. Regarding the reactor vessel neutron fluence, Table 1-1 of BWROG-TP-11-022-A, Revision 1, states that fluence methods and results must comply with Regulatory Guide (RG) 1.190, "Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence," March 2001 (ADAMS Accession No. ML010890301), and have NRC approval for use with this licensing topical report. LAR Enclosure Attachment 1, Section 3.2, "Technical Analysis," subsection titled "Neutron Fluence Calculations," explains that the fluence calculations were updated using an NRC-approved methodology in accordance with RG 1.190. However, the LAR does not indicate the method used or otherwise provide information demonstrating conformance with BWROG-TP-11-022-A, Revision 1. The neutron fluence values that are used in the adjusted reference temperature calculation are included in LAR Enclosure Attachment 1, Section 3.2.

LAR Enclosure Section 3.1 discusses the amendments (ADAMS Accession No. ML031690683), issued on June 18, 2003, that approved the current Brunswick PT Limits for 32 effective full-power years and the associated vessel fluence methodology. The proposed PTLR in LAR Enclosure Attachment 6, in Section 3.0 "Methodology," indicates that the neutron fluence is calculated in accordance with RG 1.190 as documented in Westinghouse Report,

WCAP-17660-NP, Revision 0, “Neutron Exposure Evaluations for Core Shroud and Pressure Vessel Brunswick Units 1 and 2,” November 2012. However, WCAP-17660-NP has not been submitted to the NRC.

The LAR does not clearly identify what NRC-approved neutron fluence methodology will be used with the PTLR in accordance with GL 96-03 and BWROG-TP-11-022-A, Revision 1. The LAR does not describe how the neutron fluence is calculated in accordance with GL 96-03. Duke Energy is requested to submit WCAP-17660-NP, or otherwise provide information that identifies the NRC-approved neutron fluence methodology used to develop the PTLR and that fully describes how the neutron fluence is calculated in accordance with RG 1.190.