



10 CFR 50.4

February 26, 2013  
Serial: BSEP 13-0033

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2  
Docket Nos. 50-325, 50-324  
Comments on Draft Safety Evaluation for Amendments Regarding Addition of  
Analytical Methodology Topical Reports to Technical Specification 5.6.5 and  
Revision to Minimum Critical Power Ratio Safety Limit

References:

1. Letter from Michael J. Annacone (CP&L) to the U.S. Nuclear Regulatory Commission, *Request for License Amendments – Addition of Analytical Methodology Topical Report to Technical Specification 5.6.5, "CORE OPERATING LIMITS REPORT (COLR)," and Revision to Technical Specification 2.1.1.2 Minimum Critical Power Ratio Safety Limit*, dated March 6, 2012, ADAMS Accession Number ML12076A062
2. Letter from Christopher Gratton (NRC) to Michael J. Annacone (CP&L), *Brunswick Steam Electric Plant, Units 1 and 2 - Draft Safety Evaluation for Amendments Regarding Addition of Analytical Methodology Topical Reports to Technical Specification 5.6.5 and Revision to Minimum Critical Power Ratio Safety Limit (TAC Nos. ME8135 and ME8136)*, dated February 11, 2013, , ADAMS Accession Number ML13039A210

By letter dated March 6, 2012 (i.e., Reference 1), as supplemented by letters dated August 29, 2012, September 21, 2012, November 29, 2012, and January 22, 2013, Carolina Power & Light Company (CP&L) requested license amendments to revise the Technical Specifications (TS) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. On February 11, 2013 (i.e., Reference 2), CP&L was requested to review the NRC's draft safety evaluation and comment on the proprietary nature of the safety evaluation.

During the review of the draft safety evaluation, one area that is proprietary was identified in the second sentence of the second complete paragraph of safety evaluation, page 6. CP&L recommends the sentence be reworded as follows, to address removal of the proprietary excerpt:

The AREVA supplemental information concluded that data show that uncertainty decreases with increasing fast fluence gradient; however, the staff determined that the data were insufficient to support this conclusion.

ADD  
NRR

During review of the draft safety evaluation, some observations of a minor nature were also made. They do not change the conclusions of the draft safety evaluation, and are provided as information only.

1. Page 1, Paragraph 2: "...previous code version of SAFLIM" should be "...previous code version of SAFLIM2".
2. Page 5, last paragraph: "control blade shadow corrosion and difference between predicted and actual fluence gradients on the fuel channel inner and outer surfaces." should be changed to "control blade shadow corrosion and difference between fluence gradients on the fuel channel inner and outer surfaces."

This change is recommended because the actual in-reactor channel bow is not affected by the calculated fluence gradients.

3. Page 6, second paragraph, last sentence change:

From:

Because the large majority of the predicted fuel channel fluence gradients are clearly supported by the empirical channel bow data base, the NRC staff determined that the channel bow treatment for SAFLIM-3D is acceptable for use at BSEP, provided that it can be shown that those channels whose fluence gradients exceed the bounds of the measured channel bow database are in non-limiting locations within the core.

To:

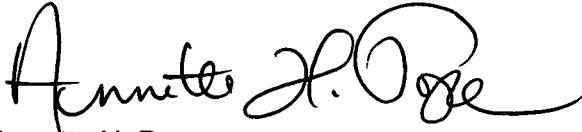
Because the large majority of the predicted fuel channel fluence gradients are clearly supported by the empirical channel bow data base, the NRC staff determined that the as-approved ANP-10307PA channel bow treatment for SAFLIM-3D is acceptable for use at BSEP, provided that it can be shown that those channels whose fluence gradients exceed the bounds of the measured channel bow database are in non-limiting locations within the core.

This change is recommended in order to make clearer that the condition implied above relates to the as-approved SAFLIM3D methodology Licensing Topical Report

4. Page 6, last paragraph: The last phrase of the proposed license condition "outside the bounds of the measurement database from with the model uncertainty is determined." should be changed to "... outside the bounds of the measurement database from which the model uncertainty is determined."
5. Page 8, paragraph 2: In the middle of the paragraph, in one instance, the condition report is identified as "CR 2011-2074" where it should be "CR 2011-2274."
6. Page 8, footnote 3: "... fuel assembly reaches its critical power ratio" should be changed to "... fuel assembly reaches its critical power" or "... fuel assembly reaches a critical power ratio of 1.00."

This document contains no regulatory commitments. Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager – Regulatory Affairs, at (910) 457-2487.

Sincerely,

A handwritten signature in black ink, appearing to read "Annette H. Pope". The signature is fluid and cursive, with the first name "Annette" being more legible than the last name "Pope".

Annette H. Pope  
Manager – Organizational Effectiveness  
Brunswick Steam Electric Plant

WRM/wrm

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