

March 7, 2018

Serial: BSEP 18-0026

10 CFR 50.55a(z)(1)

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

Subject: Brunswick Steam Electric Plant, Unit No. 2
Renewed Facility Operating License No. DPR-62
Docket No. 50-324
Additional Information Regarding Proposed Alternative In Accordance With
10 CFR 50.55a(z)(1) for Reactor Pressure Vessel Nozzle-to-Vessel Weld
Examination

References:

1. Letter from Bryan B. Wooten (Duke Energy) to the NRC Document Control Desk, *Proposed Alternative In Accordance With 10 CFR 50.55a(z)(1) for Reactor Pressure Vessel Nozzle-to-Vessel Weld Examination*, dated November 29, 2017, ADAMS Accession Number ML17334A109
2. Letter from Douglas A. Broaddus (NRC) to Michael J. Annacone (Carolina Power & Light Company), *Request for Alternatives to the Reactor Pressure Vessel Nozzle-to-Vessel Weld and Inner Radius Examinations (TAC Nos. ME3854 and ME3855)*, dated January 31, 2011, ADAMS Accession Number ML110060504

Ladies and Gentlemen:

By letter dated November 29, 2017 (i.e., Reference 1), Duke Energy Progress, LLC (Duke Energy), submitted a proposed alternative (i.e., ISI-08) for the fourth 10-year inservice inspection interval for the Brunswick Steam Electric Plant (BSEP), Unit No. 2. This alternative would allow the examination of Unit 2 nozzle-to-vessel weld 2B11-RPV-N11B to be completed during the Unit 2 refueling outage scheduled for March 2019 (i.e., B2R24). Subsequent telephone discussions with the NRC identified the need to clarify scope of the submitted alternative.

The proposed alternative is being requested to extend the Unit 2 fourth 10-year inservice inspection interval, only for the specified reactor pressure vessel instrumentation nozzle-to-shell weld 2B11-RPV-N11B. This extension is solely to perform the specified volumetric examination. Since ASME Code Case N-702, *Alternative Requirements for Boiling Water Reactor (BWR) Nozzle Inner Radius and Nozzle-to-Shell Welds Section XI, Division 1*, will continue to be applied to limit examinations to a minimum of 25 percent of the nozzle-to-shell welds, an extension for continued use of the inservice inspection alternative ISI-05 (i.e., Reference 2) until refueling outage B2R24 is also needed. The extension being requested through proposed alternative ISI-08 is not being requested for, and will not be applied to, any other component

covered by the Brunswick Inservice Inspection Program. The fifth 10-year inservice inspection interval start and end dates for the specified reactor pressure vessel instrumentation nozzle-to-shell weld 2B11-RPV-N11B will not be altered (i.e., a portion of the fourth and fifth intervals will overlap) and the fifth interval Code-specified scheduling and examination scope will be maintained for this component.

In addition, the proposed alternative provided discussion on the requirements of IWA-2430(d)(1). The intent of this discussion was to reflect that this Code allowance was considered, but determined to not be applicable, for extending the Unit 2 fourth 10-year inservice inspection interval for the specified reactor pressure vessel instrumentation nozzle-to-shell weld 2B11-RPV-N11B. Thus, to clarify, the proposed relief request does not rely upon the requirements of IWA-2430(d)(1) for the requested one-time extension for the specified reactor pressure vessel instrumentation nozzle-to-shell weld.

This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager - Regulatory Affairs, at (910) 832-2487.

Sincerely,

A handwritten signature in blue ink that reads "Bryan B. Wooten". The signature is written in a cursive style with a large initial "B" and "W".

Bryan B. Wooten
Director – Organizational Effectiveness
Brunswick Steam Electric Plant

BBW/mkb

cc:

U.S. Nuclear Regulatory Commission, Region II
ATTN: Ms. Catherine Haney, Regional Administrator
245 Peachtree Center Ave, NE, Suite 1200
Atlanta, GA 30303-1257

U.S. Nuclear Regulatory Commission
ATTN: Mr. Gale Smith, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U.S. Nuclear Regulatory Commission
ATTN: Mr. Andrew Hon (Mail Stop OWFN 8G9A)
11555 Rockville Pike
Rockville, MD 20852-2738

Chair - North Carolina Utilities Commission **(Electronic Copy Only)**
4325 Mail Service Center
Raleigh, NC 27699-4300
swatson@ncuc.net

Mr. Cliff Dautrich, Bureau Chief
North Carolina Department of Labor
Boiler Safety Bureau
1101 Mail Service Center
Raleigh, NC 27699-1101