

Brunswick Nuclear Plant 8470 River Rd SE Southport, NC 28461

June 3, 2021

Serial: RA-21-0171

10 CFR 50.4(b)(5)(ii) 10 CFR 50.54(q)(5) 10 CFR 72.4

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2 Renewed Facility Operating License Nos. DPR-71 and DPR-62 Docket Nos. 50-325 and 50-324 Revision to Radiological Emergency Response Plan Implementing Procedure

Ladies and Gentlemen:

In accordance with 10 CFR 50.4(b)(5)(ii), 10 CFR 50.54(q)(5), and 10 CFR 72.4, Duke Energy Progress, LLC (Duke Energy), is submitting an analysis summary for Revision 3 of CSD-EP-BNP-0101-01, *EAL Technical Basis Document*, and Revision 3 of CSD-EP-BNP-0101-02, *EAL Wallchart (Both Hot And Cold)*, Radiological Emergency Response Plan (ERP) Implementing Procedures.

Duke Energy has evaluated these revisions in accordance with 10 CFR 50.54(q) and determined that they do not result in a reduction in the effectiveness of the ERP. The ERP continues to meet the standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E.

This document contains no regulatory commitments.

Please refer any questions regarding this submittal to Ms. Sabrina Salazar, Manager – Nuclear Support Services, at (910) 832-3207.

Sincerely,

Sabrina Salazar

Manager – Nuclear Support Services Brunswick Steam Electric Plant

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U.S. Nuclear Regulatory Commission Page 2 of 2

Enclosure:

10 CFR 50.54(q)(5) Summary for CSD-EP-BNP-0101-01, Revision 3, and CSD-EP-BNP-0101-02, Revision 3

cc (with Enclosure):

Ms. Laura Dudes, NRC Regional Administrator, Region II
Mr. Andrew Hon, NRC Project Manager
Mr. Gale Smith, NRC Senior Resident Inspector
Mr. John Nguyen, NRC
Director Spent Fuel Management Division, NRC Nuclear Material Safety / Safeguards Office
Chair - North Carolina Utilities Commission

10 CFR 50.54(q)(5) Summary for CSD-EP-BNP-0101-01, Revision 3,and CSD-EP-BNP-0101-02, Revision 3

In accordance with 10 CFR 50.54(q)(5), Duke Energy Progress, LLC, is providing a summary of the revision analysis for CSD-EP-BNP-0101-01, *EAL Technical Basis Document*, Revision 3, and CSD-EP-BNP-0101-02, *EAL Wallchart (Both Hot And Cold)*, Revision 3, which both became effective on May 20, 2021.

The changes to CSD-EP-BNP-0101-01, *EAL Technical Basis Document*, are as follows.

- Incorporated changes from Emergency Preparedness Program Frequently Asked Questions (EPFAQ) 2019-04 in response to Boiling Water Reactor Owners Group Revision 4 of Emergency Procedure and Severe Accident Guidelines (EPG/SAG).
- References were updated to superseding procedures.
- Reactor Pressure Vessel (RPV) level reference number was made consistent throughout document to align with Emergency Operating Procedures (EOPs).
- Verbiage was updated for Engineering Change (EC) 418443 Unit 2 No-load Disconnect Switch Replacement.

The changes to CSD-EP-BNP-0101-02, EAL Wallchart (Both Hot And Cold), are as follows.

• Incorporated changes from Emergency Preparedness Program Frequently Asked Questions (EPFAQ) 2019-04 in response to Boiling Water Reactor Owners Group Revision 4 of Emergency Procedure and Severe Accident Guidelines (EPG/SAG).

The changes to CSD-EP-BNP-0101-01 and CSD-EP-BNP-0101-02 were evaluated in accordance with 10 CFR 50.54(q). The evaluation concluded that these changes do not result in a reduction in the effectiveness of the ERP; the ERP continues to meet the standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E. The changes do not reduce the licensee's capability to assess, classify, and declare an emergency condition within 15 minutes of the availability of indications. The classification of the event would not be different from that approved by the NRC in a site-specific application or from the endorsed industry EAL scheme that had been approved. The meaning or intent of the basis of the approved EAL is unchanged. As such, there is no impact to compliance, adherence, or effectiveness of the Emergency Plan.

•References:

- 1. EREG AR Number 2376099 (CSD-EP-BNP-0101-01)
- 2. EREG AR Number 2376717 (CSD-EP-BNP-0101-02)