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August 4, 2016

Serial: BSEP 16-0072

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
Response to Request for Additional Information Regarding License Amendment
Request to Relocation of Specific Surveillance Frequency Requirements to a
Licensee-Controlled Program

References:

1. Letter from William R. Gideon (Duke Energy) to U.S. Nuclear Regulatory Commission, *Application For Technical Specification Change Regarding Risk-Informed Justification for the Relocation of Specific Surveillance Frequency Requirements to a Licensee-Controlled Program*, dated December 21, 2015, ADAMS Accession Number ML16004A249
2. NRC E-mail Capture, *Brunswick Unit 1 and Unit 2 Request for Additional Information related to LAR to Relocation of Specific Surveillance Frequency Requirements to Licensee Controlled Program (CAC NOS. MF7206 and MF7207)*, dated July 28, 2016, ADAMS Accession Number ML16210A193

Ladies and Gentlemen:

By letter dated December 21, 2015 (i.e., Reference 1), Duke Energy Progress, Inc., submitted a license amendment request (LAR) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The proposed amendment would modify the Technical Specifications (TSs) by relocating specific surveillance frequencies to a licensee-controlled program with the implementation of Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specification Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies," Revision 1. Additionally, the change would add a new program, the Surveillance Frequency Control Program, to TS Section 5.5, "Programs and Manuals." The changes are consistent with Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) Standard Technical Specifications (STS) Change TSTF-425, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b," Revision 3.

On July 28, 2016, by electronic mail (i.e., Reference 2), the NRC provided a request for additional information (RAI) regarding the LAR. Duke Energy's response is provided in the enclosure of this letter.

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No new regulatory commitments are contained in this letter.

Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager – Regulatory Affairs, at (910) 457-2487.

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on August 4, 2016.

Sincerely,



William R. Gideon

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Enclosure:

Response to Request for Additional Information

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cc (with enclosure):

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Response to Request for Additional Information

By letter dated December 21, 2015 (i.e., Reference 1), Duke Energy Progress, Inc., submitted a license amendment request (LAR) for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2. The proposed amendment would modify the Technical Specifications (TSs) by relocating specific surveillance frequencies to a licensee-controlled program with the implementation of Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specification Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies," Revision 1. Additionally, the change would add a new program, the Surveillance Frequency Control Program, to TS Section 5.5, "Programs and Manuals." The changes are consistent with Nuclear Regulatory Commission (NRC) approved Technical Specification Task Force (TSTF) Standard Technical Specifications (STS) Change TSTF-425, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b," Revision 3.

On July 28, 2016, by electronic mail (i.e., Reference 2), the NRC provided a request for additional information (RAI) regarding the LAR. Duke Energy's response is provided below.

NRC RAI:

RAI Regulatory Bases:

Title 10 of *Code of Federal Regulations*, Part 50, Section 36, Technical specifications. (c) Technical specifications will include items in the following categories: (3) *Surveillance requirements*. Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

RAI

- Note 4 of SR 3.3.1.1.17 for Units 1 and 2 contains a sentence "Testing of APRM and Oscillation Power Range Monitor (OPRM) outputs shall alternate" that is marked for deletion. There is no provision provided in the approved TSTF-425, Revision 3 for deletion of this sentence and there is no explanation or justification of this deviation from current technical specifications in the application for a license amendment.

Please explain the impact of the deletion of this sentence and the justification for its deletion.

Response:

Brunswick Surveillance Requirement (SR) 3.3.1.1.17 corresponds to SR 3.3.1.1.15 in Approved TSTF-425, Revision 3. Brunswick SR 3.3.1.1.17, Note 4, reflects plant specific power range neutron monitoring system design as approved by the NRC on March 8, 2002, in Amendments 217 and 243 for Units 1 and 2, respectively (i.e., ADAMS Accession No. ML020720742). Note 4 is the same for both Units 1 and 2.

The following provides a comparison of the two SRs.

Brunswick SR 3.3.1.1.17	TSTF-425, Revision 3, SR 3.3.1.1.15
<p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. Neutron detectors are excluded. 2. For Functions 3 and 4, the sensor response time may be assumed to be the design sensor response time. 3. For Function 5, "n" equals 4 channels for the purpose of determining the STAGGERED TEST BASIS Frequency. 4. For Function 2.e, "n" equals 8 channels for the purpose of determining the STAGGERED TEST BASIS Frequency. Testing of APRM and Oscillation Power Range Monitor (OPRM) outputs shall alternate. <p>-----</p> <p>Verify the RPS RESPONSE TIME is within limits.</p>	<p>-----NOTES-----</p> <ol style="list-style-type: none"> 1. Neutron detectors are excluded. 2. For Function 5, "n" equals 4 channels for the purpose of determining the STAGGERED TEST BASIS Frequency. <p>-----</p> <p>Verify the RPS RESPONSE TIME is within limits.</p>

Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specification Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies," Revision 1, addressed relocation of staggered test basis frequencies to licensee control under the Surveillance Frequency Control Program. The approved TSTF-425, Revision 3, removed Notes (e.g., Note 2 for SR 3.3.1.1.15) which include explanatory detail associated with implementation of the staggered test basis frequency. The sentence "Testing of APRM and Oscillation Power Range Monitor (OPRM) outputs shall alternate" provides such explanatory detail associated with implementation of the staggered test basis frequency. The existing bases for Brunswick SR 3.3.1.1.17 states, in part:

Note 4 allows the STAGGERED TEST BASIS Frequency for Function 2.e to be determined based on 8 channels rather than the 4 actual 2-Out-Of-4 Voter channels. The redundant outputs from the 2-Out-Of-4 Voter channel (2 for APRM trips and 2 for OPRM trips) are considered part of the same channel, but the OPRM and APRM outputs are considered to be separate channels for application of SR 3.3.1.1.17, so n = 8. The note further requires that testing of OPRM and APRM outputs be alternated.

Relocation of this phrase results in no greater loss in level of detail than elimination of Note 2 for SR 3.3.1.1.15 consistent with approved TSTF-425, Revision 3. Rather it moves explanatory detail associated with implementation of the staggered test basis frequency to the Surveillance Frequency Control Program, which is consistent with the relocation of the surveillance frequency.