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10 CFR 50.4

Serial: BSEP 14-0006  
February 27, 2014

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

Duke Energy Progress, Inc. (Duke Energy)  
Brunswick Steam Electric Plant, Unit Nos. 1 and 2  
Docket Nos. 50-325 and 50-324  
Renewed License Nos. DPR-71 and DPR-62

Subject: Second Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)

References:

1. Nuclear Regulatory Commission (NRC) Order Number EA-12-051, *Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation*, dated March 12, 2012, Agencywide Documents Access and Management System (ADAMS) Accession Number ML12054A679
2. NRC Interim Staff Guidance JLD-ISG-2012-03, *Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation*, Revision 0, dated August 29, 2012, ADAMS Accession Number ML12221A339
3. NEI 12-02, *Industry Guidance for Compliance with NRC Order EA-12-051, "To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation"*, Revision 1, dated August 2012, ADAMS Accession Number ML12240A307
4. CP&L and FPC Letter, *Carolina Power & Light Company and Florida Power Corporation's Initial Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated October 29, 2012, ADAMS Accession Number ML12307A020
5. CP&L Letter, *Overall Integrated Plans in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated February 28, 2013, ADAMS Accession Number ML13086A096
6. Duke Energy Letter, *First Six-Month Status Reports in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated August 26, 2013, ADAMS Accession Number ML13242A010

ADD  
NRC

7. NRC Letter, *Brunswick Steam Electric Plant, Units 1 and 2 – Interim Staff Evaluation and Request for Additional Information Regarding the Overall Integrated Plan for Implementation of Order EA-12-051, Reliable Spent Fuel Pool Instrumentation (TAC Nos. MF0973 AND MF0974)*, dated November 18, 2013, ADAMS Accession Number ML13269A345

Ladies and Gentlemen,

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-051 (i.e., Reference 1) to Duke Energy. Reference 1 was immediately effective and directs Duke Energy to have a reliable indication of water level in associated spent fuel storage pools. Specific requirements are outlined in Attachment 2 of Reference 1.

Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (i.e., Reference 2) and an Overall Integrated Plan (OIP) pursuant to Section IV, Condition C. Reference 2 endorses industry guidance document NEI 12-02, Revision 1 (i.e., Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the Duke Energy initial status report regarding spent fuel pool instrumentation. Reference 5 provided the Duke Energy OIP.

Reference 1 requires submission of a status report at six-month intervals following submittal of the OIP. Reference 3 provides direction regarding the content of the status reports. Reference 6 provided the first six-month status report for Brunswick Steam Electric Plant (BSEP). The purpose of this letter is to provide the second six-month status report pursuant to Section IV, Condition C.2, of Reference 1, that delineates progress made in implementing the requirements of Reference 1 (Enclosure). The enclosed report provides an update of milestone accomplishments since the last status report, including any changes to the compliance method, schedule, or need for relief and the basis, if any.

By letter dated November 18, 2013, (i.e., Reference 7), the NRC staff provided an Interim Staff Evaluation (ISE) which included a Request for Additional Information (RAI) to BSEP. In accordance with Reference 7, the NRC staff indicated that Duke Energy should provide the information requested in the six-month status reports, as the information becomes available, with all information to be provided by September 30, 2014. This six-month status report contains no RAI responses.

This letter contains no new regulatory commitments and no revision to existing regulatory commitments.

Should you have any questions regarding this submittal, please contact Lee Grzeck, Manager-Regulatory Affairs, at (910) 457-2487.

I declare under penalty of perjury that the foregoing is true and correct. Executed on  
February 27, 2014.

Sincerely,



George T. Hamrick

Enclosure:

Second Six-Month Status Report for the Implementation of Order EA-12-051, Order  
Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation, Brunswick  
Steam Electric Plant (BSEP), Unit Nos. 1 and 2

cc:

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**ENCLOSURE**

**SECOND SIX-MONTH STATUS REPORT FOR THE IMPLEMENTATION OF ORDER  
EA-12-051, ORDER MODIFYING LICENSES WITH REGARD TO RELIABLE SPENT FUEL  
POOL INSTRUMENTATION**

**BRUNSWICK STEAM ELECTRIC PLANT (BSEP), UNIT NOS. 1 AND 2**

**DOCKET NOS. 50-325 AND 50-324**

**RENEWED LICENSE NOS. DPR-71 AND DPR-62**

Second Six Month Status Report for the Implementation of Order EA-12-051, Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation

## **1 Introduction**

Brunswick Steam Electric Plant (BSEP) developed an Overall Integrated Plan (OIP) (i.e., Reference 1 of this enclosure), documenting the requirements to install reliable spent fuel pool level instrumentation in response to NRC Order EA-12-051. The first six-month update was provided to the NRC on August 26, 2013 (i.e., Reference 2 of this enclosure). This enclosure provides milestones, including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any, that occurred during the period from July 31, 2013, to January 28, 2014, hereafter referred to as "the update period."

## **2 Milestone Accomplishments**

The following milestones were completed during the update period:

- As addressed in BSEP's Response to an NRC Request for Additional Information (i.e., Reference 8 of this enclosure), through-air (non-contact) wave radar technology will be utilized.

## **3 Schedule Status**

There are no changes to the schedule as reported in Reference 1 of this enclosure.

## **4 Changes to Compliance Method**

No changes were made during the update period.

## **5 Need for Relief/Relaxation and Basis for the Relief/Relaxation**

BSEP expects to comply with the order implementation date and no relief/relaxation is required at this time.

## **6 Open Items from Overall Integrated Plan and Interim Staff Evaluation**

There are no open items documented in the OIP or in the Interim Staff Evaluation (ISE). The ISE issued to BSEP (i.e., Reference 7 of this enclosure) included a Request for Additional Information (RAI).

## **7 Potential Interim Staff Evaluation Impacts**

No potential impacts to the ISE have been identified.

## 8 References

The following references support the updates to the Overall Integrated Plan described in this enclosure.

1. CP&L Letter, *Overall Integrated Plans in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated February 28, 2013, Agencywide Documents Access and Management System (ADAMS) Accession Number ML13086A096
2. Duke Energy Letter, *First Six-Month Status Reports in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated August 26, 2013, ADAMS Accession Number ML13242A010
3. Nuclear Regulatory Commission (NRC) Order Number EA-12-051, *Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation*, dated March 12, 2012, ADAMS Accession Number ML12054A679
4. NRC Interim Staff Guidance JLD-ISG-2012-03, *Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation*, Revision 0, dated August 29, 2012, ADAMS Accession Number ML12221A339
5. NEI 12-02, *Industry Guidance for Compliance with NRC Order EA-12-051, "To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation"*, Revision 1, dated August 2012, ADAMS Accession Number ML12240A307
6. CP&L and FPC Letter, *Carolina Power & Light Company and Florida Power Corporation's Initial Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated October 29, 2012, ADAMS Accession Number ML12307A020
7. NRC letter, *Brunswick Steam Electric Plant, Units 1 and 2 - Interim Staff Evaluation and Request for Additional Information Regarding the Overall Integrated Plan for Implementation of Order EA-12-051, Reliable Spent Fuel Pool Instrumentation (TAC Nos. MF0973 AND MF0974)*, dated November 18, 2013, ADAMS Accession Number ML13269A345
8. Duke Energy Letter, *Response to Request for Additional Information Regarding Overall Integrated Plan Submitted in Response to the Commission Order Modifying Licenses With Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)*, dated July 22, 2013, ADAMS Accession Number ML13219B117