



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 4, 2014

Mr. George T. Hamrick
Vice President
Brunswick Nuclear Plant
P. O. Box 10429
South Port, NC 28461

SUBJECT: BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2 - STAFF ASSESSMENT OF THE SEISMIC WALKDOWN REPORT SUPPORTING IMPLEMENTATION OF NEAR-TERM TASK FORCE RECOMMENDATION 2.3 RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT (TAC NO. MF0100)

Dear Mr. Hamrick:

On March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information letter per Title 10 of the *Code of Federal Regulations*, Subpart 50.54(f) (50.54(f) letter). The 50.54(f) letter was issued to power reactor licensees and holders of construction permits requesting addressees to provide further information to support the NRC staff's evaluation of regulatory actions to be taken in response to lessons learned from Japan's March 11, 2011, Great Tōhoku Earthquake and subsequent tsunami. The request addressed the methods and procedures for nuclear power plant licensees to conduct seismic and flooding hazard walkdowns to identify and address degraded, nonconforming, or unanalyzed conditions through the corrective action program, and to verify the adequacy of the monitoring and maintenance procedures.

By letter dated November 27, 2012, Duke Energy Progress, Inc. (Duke Energy), formerly known as Carolina Power & Light Company, submitted its Seismic Walkdown Report as requested in Enclosure 3 of the 50.54(f) letter for the Brunswick Steam Electric Plant, Unit 2. By letter dated November 26, 2013, Duke Energy provided a response to the NRC request for additional information for the staff to complete its assessments. By letter dated July 31, 2013, Duke Energy provided their plan to complete the seismic walkdowns for the inaccessible items and submit the final walkdown report by December 31, 2014.

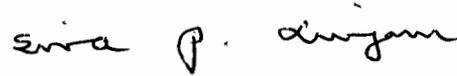
The NRC staff acknowledges that a supplemental letter will be provided by December 31, 2014, addressing the remaining inaccessible items consistent with the regulatory commitment. The NRC staff reviewed the information provided and, as documented in the enclosed staff assessment, determined that you have provided sufficient information to be responsive to Enclosure 3 of the 50.54(f) letter.

G. Hamrick

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If you have any questions, please contact me at 301-415-1564 or by e-mail at Siva.Lingam@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Siva P. Lingam". The signature is written in a cursive style with a large initial 'S' and a distinct 'P'.

Siva P. Lingam, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-324

Enclosure:
Staff Assessment of Seismic Walkdown Report

cc w/encl: Distribution via Listserv

STAFF ASSESSMENT OF SEISMIC WALKDOWN REPORT
NEAR-TERM TASK FORCE RECOMMENDATION 2.3 RELATED TO
THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT
DUKE ENERGY PROGRESS, INC.
BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2
DOCKET NO. 50-324

1.0 INTRODUCTION

On March 12, 2012, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340), the U.S. Nuclear Regulatory Commission (NRC) issued a request for information per Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Subpart 50.54(f) (50.54(f) letter) to all power reactor licensees and holders of construction permits in active or deferred status. The request was part of the implementation of lessons learned from the accident at the Fukushima Dai-ichi nuclear power plant. Enclosure 3, "Recommendation 2.3: Seismic" (ADAMS Accession No. ML12056A049), to the 50.54(f) letter requested licensees to conduct seismic walkdowns to identify and address degraded, nonconforming, or unanalyzed conditions using the corrective action program (CAP), verify the adequacy of monitoring and maintenance procedures, and report the results to the NRC.

The 50.54(f) letter requested licensees provide the following:

- a. Information concerning the plant-specific hazard licensing bases and a description of the protection and mitigation features considered in the licensing basis evaluation.
- b. Information related to the implementation of the walkdown process.
- c. A list of plant-specific vulnerabilities identified by the Individual Plant Examination of External Events (IPEEE) program and a description of the actions taken to eliminate or reduce them.
- d. Results of the walkdown including key findings and identified degraded, nonconforming, or unanalyzed conditions.
- e. Any planned or newly installed protection and mitigation features.
- f. Results and any subsequent actions taken in response to the peer review.

In accordance with the 50.54(f) letter, Enclosure 3, Required Response Item 2, licensees were required to submit a response within 180 days of the NRC's endorsement of the seismic walkdown process. By letter dated May 29, 2012 (ADAMS Accession No. ML121640872), the Nuclear Energy Institute staff submitted Electric Power Research Institute (EPRI) Draft 7

Enclosure

Report 1025286, "Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic" (walkdown guidance) to the NRC staff to consider for endorsement. By letter dated May 31, 2012 (ADAMS Accession No. ML12145A529), the NRC staff endorsed the walkdown guidance.

By letter dated November 27, 2012 (ADAMS Accession No. ML12349A388), Duke Energy Progress, Inc. (Duke Energy or the licensee) provided a response to Enclosure 3 of the 50.54(f) letter Required Response Item 2, for Brunswick Steam Electric Plant, Unit 2 (BSEP-2). By letter dated July 31, 2013 (ADAMS Accession No. ML13221A177), the licensee updated its commitment for completing and reporting the delayed inspections of inaccessible items by December 31, 2014. The NRC staff reviewed the walkdown report and determined that additional supplemental information would assist the NRC staff in completing its review. By letter dated November 1, 2013 (ADAMS Accession No. ML13304B418), the NRC staff requested additional information to gain a better understanding of the processes and procedures used by the licensee in conducting the walkdowns and walk-bys. The licensee responded to the NRC staff request by letter dated November 26, 2013 (ADAMS Accession No. ML13338A413).

The NRC staff evaluated the licensee's submittals to determine if the information provided in the walkdown report met the intent of the walkdown guidance and if the licensee responded appropriately to Enclosure 3 of the 50.54(f) letter.

2.0 REGULATORY EVALUATION

The structures, systems, and components (SSCs) important to safety in operating nuclear power plants are designed either in accordance with, or meet the intent of Appendix A to 10 CFR Part 50, General Design Criteria (GDC) 2: "Design Bases for Protection Against Natural Phenomena;" and Appendix A to 10 CFR Part 100, "Reactor Site Criteria." GDC 2 states that SSCs important to safety at nuclear power plants shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunamis, and seiches without loss of capability to perform their safety functions.

For initial licensing, each licensee was required to develop and maintain design bases. As required by 10 CFR 50.2, each licensee should have identified the specific functions each SSC of a facility must perform, and the specific values or ranges of values chosen for controlling parameters as reference bounds for the design.

The design bases for the SSCs reflect appropriate consideration of the most severe natural phenomena that have been historically reported for the site and surrounding area. The design bases also reflect sufficient margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated.

The current licensing basis is the set of NRC requirements applicable to a specific plant, including the licensee's docketed commitments for ensuring compliance with, and operation within, applicable NRC requirements and the plant-specific design basis, including all modifications and additions to such commitments over the life of the facility operating license.

3.0 TECHNICAL EVALUATION

3.1 Seismic Licensing Basis Information

The licensee provided information on the plant-specific licensing basis for the Seismic Category I SSCs for BSEP-2 in Section 2.0 of the seismic walkdown report. Consistent with the walkdown guidance, the NRC staff noted that the report includes a summary of the Design-Basis Earthquake and a description of the codes, standards, and methods used in the design of the Seismic Category I SSCs for meeting the plant-specific seismic licensing basis requirements.

Based on the NRC staff's review, the staff concludes that the licensee has provided information on the plant-specific seismic licensing basis and a description of the protection and mitigation features considered in the licensing bases evaluation consistent with Section 8, Submittal Report, of the walkdown guidance.

3.2 Seismic Walkdown Methodology Implementation

Section 2, Personnel Qualifications; Section 3, Selection of SSCs; Section 4, Seismic Walkdowns and Area Walk-Bys; and Section 5, Seismic Licensing Basis Evaluations, of the walkdown guidance provide guidance to licensees regarding the implementation of an appropriate seismic walkdown methodology. By letter dated June 11, 2012 (ADAMS Accession No. ML12171A199), the licensee confirmed that it would utilize the walkdown guidance in performance of the seismic walkdowns at BSEP-2.

The walkdown report dated November 27, 2012, did not identify any deviations from the walkdown guidance.

The NRC staff reviewed the following sections of the walkdown methodology implementation provided in the walkdown report:

- Personnel Qualifications
- Development of Seismic Walkdown Equipment Lists (SWELs)
- Implementation of Walkdown Process
- Licensing Basis Evaluations and Results

3.2.1 Personnel Qualifications

Section 2, Personnel Qualifications, of the walkdown guidance provides licensees with qualification information for personnel who will be involved in the conduct of the seismic walkdowns and area walk-bys.

The NRC staff reviewed the information provided in Section 3 of the walkdown report, which includes information on the walkdown personnel and their qualifications. Specifically, the staff reviewed the summary of the background, experience, and level of involvement for the following personnel involved in the seismic walkdown activities: equipment selection personnel, seismic walkdown engineers (SWEs), licensing basis reviewers, IPEEE reviewers, peer review team, and operations staff.

The NRC staff noted that the walkdown report does not provide specific names and background information for the operations staff involved in the walkdown activities. However, the licensee stated that the plant operation staff assisted the equipment selection personnel for the SWEL development. While reviewing Section 3, Personnel Qualifications, of the walkdown report the staff noted that a senior reactor operator with almost 30 years of nuclear experience at BSEP, provided assistance to the plant operation staff by supporting its seismic walkdown activities. The NRC staff concludes that the plant operation staff was assisted by a licensed plant operator with the appropriate operations knowledge and experience to support the seismic walkdown activities.

The NRC staff noted that, in some cases, the licensee did not specify whether the SWEs completed one of the two training sessions required by the walkdown guidance (Near-Term Task Force Recommendation or Seismic Qualification Utility Group). The NRC staff noted that the independent peer review report stated that training consistent with the EPRI training was provided to all SWEs before any inspections were performed. The peer review report also states that the resumes of the SWEs were reviewed and determined the SWEs to have qualifications that were consistent with the requirements of the regulatory guidance.

Based on the review of the licensee's submittals, the NRC staff concludes that those involved in the seismic walkdown activities have the appropriate seismic background, knowledge and experience, as specified in Section 2 of the walkdown guidance.

3.2.2 Development of the SWELs

Section 3, Selection of SSCs, of the walkdown guidance provides guidance to licensees for selecting the SSCs that should be placed on the SWELs, so that they can be walked down by qualified personnel.

The NRC staff reviewed the overall process used by the licensee to develop the BSEP-2 base list, SWEL 1 (sample list of designated safety functions equipment) and SWEL 2 (sample list of spent fuel pool related equipment). The overall equipment selection process followed the screening process shown in Figures 1-1 and 1-2 of the walkdown guidance. Based on Attachments 2 and 5 of the walkdown report, BSEP-2 SWELs 1 and 2 meet the inclusion requirements of the walkdown guidance. Specifically, the following attributes were considered in the sample selection:

- A variety of systems, equipment and environments
- IPEEE equipment
- Major new or replacement equipment
- Risk considerations

Due to individual plant configurations and the walkdown guidance screening process followed to select the final SWEL equipment, it is possible that some classes of equipment will not be represented on the SWEL. The walkdown guidance recognizes this is due to the equipment not being present in the plant (e.g., some plants generate direct current power using inverters and therefore do not have motor generators) or the equipment being screened out during the screening process (the screening process is described in Section 3 of the walkdown guidance). The licensee indicated that BSEP-2 has five equipment classes shared with BSEP-1 since it could

serve the function for both units. The items from the shared classes were inspected during BSEP-2 walkdown effort and included on the BSEP-2 seismic walkdown report. Further, a detailed explanation was provided justifying cases where specific classes of equipment were not included as part of the SWEL. Based on the information provided, the NRC staff concludes that these exclusions are acceptable.

The NRC staff noted that the licensee did not identify items in the SWEL 1 as IPEEE equipment. In the walkdown report, the licensee indicated that no seismic vulnerabilities were identified for BSEP-2 IPEEE seismic program and that the outlier conditions for Unresolved Safety Issue (USI) A-46 have been resolved as addressed in a Duke Energy letter to the NRC on September 11, 1998. Therefore, the NRC staff concurs with the licensee that no items are needed to be added to the SWEL 1 for IPEEE purposes.

In Section 4.2 and Attachment 4 of the walkdown report, the licensee identified six SSCs that could have a possible rapid drain-down capability. The licensee evaluated and determined that none of the SSCs identified contain a drain down path that could lead to a rapid drain-down of the BSEP-2 spent fuel pool within 72 hours after an earthquake to a level of approximately 10-feet above the spent fuel stored in the pool. After reviewing the information provided in this section, the staff concludes that the licensee provided sufficient information to justify that there are no items that could lead to rapid drain-down of the BSEP-2 spent fuel pool.

In a letter dated July 31, 2013, the licensee stated their plans to accelerate the inspection, evaluation and reporting of the delayed walkdowns of inaccessible items with a new completion date of December 31, 2014. The licensee stated SWEL component substitutions with like components were planned to accommodate the new schedule; however, compliance with the walkdown guidance would be maintained. The licensee clarified during a subsequent conference call with NRC staff that the substituted items represent equipment of a comparable condition, design and environment. The NRC staff reviewed the licensee's proposed plans and the justification provided during the conference call (dated October 1, 2013, ADAMS Accession No. ML13281A069) for the equipment substitution and agrees that the substituted items are comparable to the previous ones and located in similar environmental conditions. The licensee will provide a full description of the substitutions in their updated report to be submitted by December 31, 2014. In addition, the NRC staff concludes that the SWEL diversity has been maintained and the overall SWEL with the substitutions continues to have representation from every equipment class as the original SWEL.

After reviewing the SWELs 1 and 2, the NRC staff concludes that the sample of SSCs represents a diversity of component types and assures inclusion of components from critical systems and functions, thereby meeting the intent of the walkdown guidance. In addition, the NRC staff notes that the equipment selection personnel were appropriately supported by plant operations staff as described in the walkdown guidance.

3.2.3 Implementation of the Walkdown Process

Section 4, Seismic Walkdowns and Area Walk-Bys, of the walkdown guidance provides information to licensees regarding the conduct of the seismic walkdowns and area walk-bys for each site.

The NRC staff reviewed Section 5 of the walkdown report, which summarizes the results of the seismic walkdowns and area walk-bys, including an overview of the number of items walked down and the number of areas walked-by. The walkdown report states that two seismic review teams, each of which included at least two SWEs, conducted the seismic walkdowns and area walk-bys. According to the signed seismic walkdown checklists (SWCs) and area walk-by checklists (AWCs), these activities were conducted during August 9, 2012, and the weeks of September 25, 2012, and October 14, 2012. The walkdown report also states that the SWEs discussed their observations and judgments with each other during the walkdowns. Additionally, the SWEs agreed on the results of their seismic walkdowns and area walk-bys before reporting the results of their review. Attachments 6 and 7 of the walkdown report provide the completed SWCs and AWCs documenting the results for each item of equipment on SWELs 1 and 2 and each area containing SWEL equipment. The licensee used the checklists provided in Appendix C of the walkdown guidance report without modification.

The licensee documented cases of potentially adverse seismic conditions (PASCs) in the checklists for further evaluation. In Section 5.3 of the walkdown report the licensee included a table listing the PASCs identified during the seismic walkdowns and the area walk-bys. The table describes how each condition was addressed (e.g., placement in the CAP), its resolution and its current status. Based on the review of the checklists, the staff was unable to confirm that all the PASCs identified during the walkdowns were included in this table.

By letter dated November 1, 2013, the NRC staff issued two questions in a request for additional information (RAI) in order to obtain clarification regarding the process followed by the licensee when evaluating conditions identified in the field during the walkdowns and walk-bys. Specifically, in RAI 1 the staff requested the licensee to provide further explanation regarding how a field observation was determined to be PASC, and to ensure that the basis for determination was addressed using normal plant processes and documented in the walkdown report. In response to RAI 1, the licensee indicated that the SWEs used engineering judgment, based on their experience and training, to identify PASCs and that after an active discussion of observations and judgments the field observations that could not be readily judged to be acceptable were documented along with an evaluation of the condition using available design information. The licensee stated that it documented the walkdown results, including observations and PASCs, on the SWCs and AWCs. The licensee stated that SSCs determined to be a PASC at the time of the inspection were noted as such on the checklist. In cases where the SSCs could not be determined to be a PASC at the time of the inspection, the condition was documented in the checklist and further discussion completed before determining if it was a PASC.

The licensee stated that any condition that was determined to be a PASC was further evaluated for its ability to meet its seismic design basis requirements and included, if necessary, into the BSEP-2 CAP. The licensee indicated that it performed a licensing basis evaluation for all items entered in the CAP. The licensee stated that non-PASC evaluations were included on the seismic walkdown checklists and area walk-by checklists. The licensee defined non-PASC conditions as those documented during the walkdown inspection and later evaluated and determined to not affect the ability of the item to perform its intended safety function during or after design basis ground motion. The licensee referred to BSEP-2 walkdown report submitted on November 27, 2012, for a complete list of identified PASCs. The licensee indicated that all PASCs were addressed and did not identify new PASCs.

After evaluating the licensee's response, the staff concludes that the licensee responded appropriately to RAI 1 and that all identified PASCs were properly identified and documented in the table provided in Section 5.3 of the walkdown report.

In addition to the information provided above, the NRC staff notes that anchorage configurations were verified to be consistent with existing plant documentation for at least 50 percent of the SWEL items, in accordance with Section 4 of the walkdown guidance.

The equipment and areas that were inaccessible during the 180-day period are listed in a table in Section 5.6 of the walkdown report. This section also includes the condition that caused the delay of the walkdown. A total of 24 SWEL items were inaccessible at the time of the initial walkdowns, including components located inside the primary containment buildings, panels and cabinets. The NRC staff noted that the walkdown report does not clearly state whether the licensee opened cabinets as part of the seismic walkdowns. Based on a detailed review of SWCs and AWCs, the staff confirmed that some cabinets were opened by the seismic walkdown team to verify the internal components. Some electrical equipment with panels were either locked because they represented a personal safety hazard or contained a potential risk to affect the plant while at power. For these inaccessible items, the licensee walked down and performed area walk-bys for the electrical equipment without opening the panels to inspect inside. In addition, the staff confirmed in Section 5.6 of the walkdown report that inaccessible cabinets will be opened during the plant's next refueling outage. Additionally, in the letter to the NRC dated July 31, 2013, the licensee presented an accelerated plan to complete walkdown activities for all of the remaining inaccessible items and committed to provide a supplemental submittal with the results of these delayed walkdown items by December 31, 2014.

Based on the information provided in the licensee's submittals, the NRC staff concludes that the licensee's implementation of the walkdown process meets the intent of the walkdown guidance.

3.2.4 Licensing Basis Evaluations and Results

Section 5, Seismic Licensing Basis Evaluations, of the walkdown guidance provides information to licensees regarding the conduct of licensing basis evaluations for items identified during the seismic walkdowns as degraded, nonconforming, or unanalyzed that might have potential seismic significance.

The NRC staff reviewed Section 6 of the BSEP-2 walkdown report and the licensee response to the NRC staff letter dated November 1, 2013. The licensee provided additional clarification regarding the process for conducting the seismic licensing basis evaluations of the PASCs identified during the seismic walkdowns and area walk-bys. The licensee stated that any condition that was identified as a PASC was further evaluated for its ability to meet its seismic design basis requirements and included, if necessary, in the BSEP-2 CAP. The licensee stated that it performed licensing basis evaluations for all items entered in the CAP.

Section 5.3, Results, of the walkdown report summarizes the condition, status and action taken for each item judged as a PASC, including the current status of each of the items the licensee entered into the CAP. The staff reviewed the CAP entries and the description of the actions taken or planned to address deficiencies. The staff concludes that the licensee appropriately

identified degraded, nonconforming, or unanalyzed conditions and entered them into the CAP, which meets the intent of the walkdown guidance.

3.2.5 Conclusion

Based on the discussion above, the NRC staff concludes that the licensee's implementation of seismic walkdown methodology, in general, meets the intent of the walkdown guidance for personnel qualifications, development of SWELs, implementation of the walkdown process, and seismic licensing basis evaluations.

3.3 Peer Review

Section 6, Peer Review, of the walkdown guidance provides licensees with information regarding the conduct of peer reviews for the activities performed during the seismic walkdowns. Page 6-1 of the walkdown guidance identifies the following activities to be conducted during the peer review process:

- Review the selection of the SSCs included on the SWEL
- Review a sample of the checklists prepared for the seismic walkdowns and area walk-bys
- Review the licensing basis evaluations
- Review the decisions for entering the potentially adverse conditions into the CAP
- Review the submittal report
- Summarize the results of the peer review process in the submittal report

The NRC staff reviewed the information provided in Section 8 and Attachment 8 of the BSEP-2 Walkdown Report, which describes the conduct of the peer review. In addition, the staff reviewed the response to RAI 2. In RAI 2, the staff requested the licensee to provide additional information on the overall peer review process that was followed as part of the walkdown activities. Specifically, the staff requested the licensee to confirm that the activities identified on page 6-1 of the walkdown guidance were assessed and documented in the report. The licensee was also requested to confirm that any individual involved in performing any given walkdown activity was not a peer reviewer for that same activity. In response to RAI 2, the licensee confirmed that all the activities identified on page 6-1 of the walkdown guidance were included as part of the peer review process and referred to the summary of the peer review activities provided in Attachment 8 of the walkdown report. In addition, the licensee confirmed that the peer review team had no duties associated to other seismic walkdown related activities.

The staff reviewed the licensee's summary of each of these activities, the peer review findings, and resolution of peer review comments. After reviewing the licensee's submittals, the NRC staff concludes that the licensee sufficiently documented the results of the peer review activities and how these reviews affected the work described in the walkdown report.

Based on the discussion above, the NRC staff concludes that the licensee's results of the peer review and subsequent actions taken in response to the peer review meet the intent of Section 6 of the walkdown guidance.

3.4 IPEEE Information

Section 7, IPEEE Vulnerabilities, of the walkdown guidance provides information to licensees regarding the reporting of the evaluations conducted and actions taken in response to seismic vulnerabilities identified during the IPEEE program. Through the IPEEE program and Generic Letter 88-20, "Individual Plant Examination for Severe Accident Vulnerabilities – 10 CFR 50.54(f)," licensees previously had performed a systematic examination to identify any plant-specific vulnerabilities to severe accidents.

The licensee provided background information regarding their IPEEE program and stated that no seismic vulnerabilities were identified as part of the BSEP-2 IPEEE. The licensee also referenced a submittal to the NRC, dated September 11, 1998, in which outlier conditions for USI A-46 were identified and resolved.

Based on the NRC staff's review of Section 7 of the walkdown report, the staff concludes that the licensee's identification of plant-specific vulnerabilities (including anomalies, outliers, and other findings) identified by the IPEEE program, as well as actions taken to eliminate or reduce them, meets the intent of Section 7 of the walkdown guidance.

3.5 Planned Upgrades

The licensee did not identify any planned or newly installed protection and mitigation features in the walkdown report.

3.6 NRC Oversight

3.6.1 Independent Verification by Resident Inspectors

On July 6, 2012 (ADAMS Accession No. ML12156A052), the NRC issued Temporary Instruction (TI) 2515/188 "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." In accordance with the TI, NRC inspectors independently verified that the BSEP-2 licensee implemented the seismic walkdowns in accordance with the walkdown guidance. Additionally, the inspectors independently performed walkdowns of a sample of seismic protection features. One finding of very low significance (green) for not having an adequate procedure for maintenance on fluorescent lights over safety-related equipment was identified during this inspection. This was not a regulatory violation. The licensee entered this issue into the CAP for resolution. The inspection report dated February 8, 2013 (ADAMS Accession No. ML13039A066), documents the results of this inspection.

4.0 INACCESSIBLE ITEMS

The equipment and areas that were inaccessible during the 180-day period are listed in Section 5.6 of the walkdown report. Section 5.6 of the walkdown report explains the conditions leading to the delayed walkdown. As discussed above, by a letter dated July 31, 2013, the licensee presented their accelerated plan to complete walkdown activities and committed to provide a supplemental submittal with the results of these delayed walkdown items by December 31, 2014.

The NRC staff concludes that the inaccessible equipment list was developed consistent with the walkdown guidance. The schedule for completion is consistent with the NRC expectation to complete all delayed walkdown items by December 31, 2014.

5.0 CONCLUSION

The NRC staff concludes that the licensee's implementation of seismic walkdown methodology meets the intent of the walkdown guidance for BSEP-2. The NRC staff concludes that, through the implementation of the walkdown guidance activities, and in accordance with plant processes and procedures, the licensee verified the plant configuration with the current seismic licensing basis; addressed degraded, nonconforming, or unanalyzed seismic conditions; and verified the adequacy of monitoring and maintenance programs for protective features. Furthermore, the NRC staff notes that no immediate safety concerns were identified. The NRC staff acknowledges that a supplemental letter will be provided by December 31, 2014, addressing the remaining inaccessible items consistent with the regulatory commitment. The NRC staff reviewed the information provided and determined that the licensee responded appropriately to Enclosure 3 of the 50.54(f) letter, dated March 12, 2012, for BSEP-2.

G. Hamrick

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If you have any questions, please contact me at 301-415-1564 or by e-mail at Siva.Lingam@nrc.gov.

Sincerely,

/RA/

Siva P. Lingam, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-324

Enclosure:
Staff Assessment of Seismic Walkdown Report

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*** concurrence by e-mail**

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