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10 CFR 50.4

Serial: BSEP 14-0005 February 28, 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 Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)

References:

- 1. Nuclear Regulatory Commission (NRC) Order Number EA-12-049, *Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events*, dated March 12, 2012, Agencywide Documents Access and Management System (ADAMS) Accession Number ML12054A735
- NRC Interim Staff Guidance JLD-ISG-2012-01, Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, Revision 0, dated August 29, 2012, ADAMS Accession Number ML12229A174
- 3. NEI 12-06, *Diverse and Flexible Coping Strategies (FLEX) Implementation Guide*, Revision 0, dated August 2012, ADAMS Accession Number ML12242A378
- CP&L and FPC to NRC, 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated October 29, 2012, ADAMS Accession Number ML12307A021
- CP&L to NRC, Overall Integrated Plan in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated February 28, 2013, ADAMS Accession Number ML13071A559
- Duke Energy Letter, First Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated August 20, 2013, ADAMS Accession Number ML13248A447

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Ladies and Gentlemen,

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Order EA-12-049 (i.e., Reference 1) to Duke Energy. Reference 1 was immediately effective and directs Duke Energy to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. 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 12-06, Revision 0 (i.e., Reference 3) with clarifications and exceptions identified in Reference 2. Reference 4 provided the Duke Energy initial status report regarding mitigation strategies at the Brunswick and Robinson Steam Electric Plants and the Shearon Harris Nuclear Power Plant. Reference 5 provided the Duke Energy OIP for Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2.

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 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. The attached 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.

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 28, 2014.

Sincerely,

Jeorge I. Hamrich

George T. Hamrick

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Enclosure:

Second Six-Month Status Report for the Implementation of Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events, Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2

CC:

U. S. Nuclear Regulatory Commission, Region II ATTN: Mr. Victor M. McCree, Regional Administrator 245 Peachtree Center Ave, NE, Suite 1200 Atlanta, GA 30303-1257

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

U. S. Nuclear Regulatory Commission ATTN: Ms. Michelle P. Catts, NRC Senior Resident Inspector 8470 River Road Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission ATTN: Ms. Jessica A. Kratchman (Mail Stop OWFN 9D2) 11555 Rockville Pike Rockville, MD 20852-2738

Chair - North Carolina Utilities Commission P.O. Box 29510 Raleigh, NC 27626-0510

ENCLOSURE

SECOND SIX-MONTH STATUS REPORT FOR THE IMPLEMENTATION OF ORDER EA-12-049, ORDER MODIFYING LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS

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

BSEP Second Six-Month Status Report

1 Introduction

Brunswick Steam Electric Plant (BSEP) developed an Overall Integrated Plan (OIP) (i.e., Reference 1 of this enclosure), documenting the diverse and flexible strategies (FLEX), in response to NRC Order EA-12-049. The OIP was submitted to the NRC on February 28, 2013. The first six month update was submitted to the NRC on August 20, 2013 (i.e., Reference 2 of this enclosure). This enclosure provides an update of milestone accomplishments, including any changes to the compliance method, schedule, or need for relief/relaxation and the basis, if any, that occurred during the period between July 31, 2013, and January 28, 2014, hereafter referred to as the "update period."

2 Milestone Accomplishments

The following milestones were completed during the update period:

• Completed and submitted First Six Month Status Report.

3 Milestone Schedule Status

The following provides an update to Attachment 2 of the OIP. It provides the activity status of each item, and whether the expected completion date has changed. The dates are planning dates and subject to change as design and implementation details are developed.

The revised milestone target completion dates are not expected to impact the Order implementation date.

Milestone	Target Completion Date	Activity Status	Revised Completion Date
Submit 60 Day Status Report	10/29/12	Complete	Date Not Revised
Submit Overall Integrated Implementation Plan	2/28/13	Complete	Date Not Revised
Submit 6 Month Status Report	8/30/13	*Complete	Date Not Revised
Perform Staffing Analysis Phase 1 of NEI12-01	11/29/13	Complete	Date Not Revised

Milestone	Target Completion Date	Activity Status	Revised Completion Date
Submit 6 Month Status Report	2/28/14	*Started	Date Not Revised
Develop Unit 2 Modification Engineering Change (EC) Packages, including Storage Facility	3/27/14	Started	*3/30/15 Unit 2 Modifications will be completed and ready to exit RFO B222R1
Perform station-specific analysis following generic BWROG FLEX implementation analysis review (Open Item 19)	3/30/14	Started	*8/15/14
Develop Strategies/Contract with Regional Response Center (RRC)	4/1/14	Started	*8/15/14
Submit 6 Month Status Report	8/29/14	Not Started	Date Not Revised
SAT Process for Training (Unit 2)	1/27/14	Started	*07/24/14
SAT Process for Training (Unit 1)	1/26/15	Not Started	Date Not Revised
Develop Training Plan (Unit 2)	07/27/14	Started	Date Not Revised
Develop Training Plan (Unit 1)	07/26/15	Not Started	Date Not Revised
Procure Equipment (Unit 2)	11/27/14	Started	Date Not Revised
Procure Equipment (Unit 1)	11/26/15	Started	Date Not Revised
Procure Additional FLEX Equipment (Unit 2)	11/27/14	*Delete	*Milestone deleted. Milestone labeled 'Procure Equipment (Unit 2)' is all inclusive.
Procure Additional FLEX Equipment (Unit 1)	11/26/15	*Delete	*Milestone deleted. Milestone labeled 'Procure Equipment (Unit 1)' is all inclusive.
Create Maintenance Procedures (Unit 2)	01/27/15	Not Started	Date Not Revised
Create Maintenance Procedures (Unit 1)	01/26/16	Not Started	Date Not Revised
Procedure Changes incorporating response strategies (Unit 2)	01/27/15	*Started	Date Not Revised
Procedure Changes incorporating response strategies (Unit 1)	01/26/16	Not Started	Date Not Revised

Milestone	Target Completion Date	Activity Status Revised Completion Da		
Implement Training (Unit 2)	02/27/15	Started	Date Not Revised	
Implement Training (Unit 1)	02/26/16	Not Started	Date Not Revised	
Submit 6 Month Status Report	2/27/15	Not Started	Date Not Revised	
Unit 2 Implementation Outage	March 2015	Not Started	Date Not Revised	
Develop Unit 1 Modification EC Packages	3/26/15	Not Started	* 3/30/16 Unit 1 Modifications will be completed and ready to exit RFO B121R1	
Submit 6 Month Status Report	8/31/15	Not Started	Date Not Revised	
Implement Modifications (Unit 2)	April 2015	Not Started	Date Not Revised	
Implement Modifications (Unit 1)	April 2016	Not Started	Date Not Revised	
Submit 6 Month Status Report	2/29/16	Not Started	Date Not Revised	
Unit 1 Implementation Outage	March 2016	Not Started	Date Not Revised	
Submit Completion Report (Unit 2)	April 2015	Not Started	Date Not Revised	
Submit Completion Report (Unit 1)	April 2016	Not Started	Date Not Revised	
Submit 6 Month Status Report	8/31/16	Not Started	Date Not Revised	

*Indicates a change since last 6 month update.

4 Changes to Compliance Method

The following summarizes changes that were made during the second update period to the strategies as documented in the OIP (i.e., Reference 1 of this enclosure) or the changes that were provided by Reference 2 of this enclosure. These changes do not impact BSEP's compliance with NEI 12-06.

 <u>Change</u>: The OIP identified a modification to the Reactor Core Isolation Cooling/High Pressure Coolant Injection (RCIC/HPCI) suction line at the Condensate Storage Tank (CST). This modification would have facilitated alignment of the Clean Water Storage Tank (CWST) to the RCIC system suction. This modification will not be implemented.

<u>Justification</u>: NEI 12-06 requires a primary and alternate connection point for Core Cooling. BSEP has identified the Suppression Pool and the clean water storage tank as its primary and alternate connection points, respectively. The OIP discusses taking suction from the CST, to maintain core cooling, if it is available following the Beyond-Design-Basis-External-Event (BDBEE). The modification was reviewed and determined to be an enhancement for

operations personnel. The removal of this modification from the scope of work to be performed does not impact BSEP's ability to meet the guidance contained within NEI 12-06.

Documentation: No additional documentation is required.

2) <u>Change</u>: The OIP identified a modification to an abandoned Auxiliary Steam Line which would be used to support core and spent fuel pool cooling during Phases 2 and 3. This line, which was to provide a path from outside Secondary Containment (Reactor Building) to inside Secondary Containment, will no longer be used. Instead, BSEP will perform a core bore on the East wall of Secondary Containment to facilitate the following objectives: primary connection for the core cooling supply line and primary connection for the spent fuel pool cooling supply line. A single supply line will penetrate Secondary Containment and split into two separate lines once inside. Each interior line will be capable of ensuring proper distribution of required makeup water for Core Cooling and Spent Fuel Pool (SFP) Cooling.

Strategy for Primary Connection for Core Cooling: A FLEX pump, of sufficient capacity and discharge head, will be deployed to the general area of the CWST. Discharge hoses will be deployed from the pump to the exterior East wall of each Reactor Building (RB) and connected to the new primary connection point. In each RB, hoses will be deployed from the interior connection of this penetration to a new connection point at the drywell personnel access roof. The hose will be connected to a hard pipe that will be connected to an existing flange on the Reactor Water Cleanup (RWCU) return line on top of the Drywell access. An isolation valve at the RWCU return line will be manually opened to supply cooling water to the reactor vessel through the "B" feedwater injection line.

Strategy for Primary Connection for SFP Cooling: A FLEX pump, of sufficient capacity and discharge head, will be deployed to the general area of the CWST. Discharge hoses will be deployed from the pump to the exterior East wall of each Reactor building and connected to the new primary connection point. In each RB, hoses will be deployed from the interior connection for this penetration to a new connection point to the "B" loop RHR Fuel Pool Cooling Assist line. An isolation valve in the SFP cooling system will be manually opened to supply cooling water to the SFP through the "B" RHR Fuel Pool Cooling Assist line.

<u>Justification</u>: NEI 12-06 requires that at least one connection point of FLEX equipment only involves access through seismically robust structures. The Auxiliary Steam Line was chosen due to availability. During detailed design, it was determined the Auxiliary Steam Line would be challenged to meet the seismic requirements outlined in NEI 12-06. A core bore has been identified as the most efficient method to provide the primary connection point for both Core Cooling and SFP Cooling, and will be protected from all applicable external hazards.

<u>Documentation</u>: Open Item 10 will track completion of this item, and Open Item 1 will track demonstration of deployment path acceptability.

3) <u>Change</u>: The OIP identified a modification to the abandoned Supplemental Spent Fuel Pool Cooling line in support of cooling the spent fuel pool during Phases 2 and 3. This line, which was to provide a path from outside Secondary Containment (RB) to inside Secondary Containment, will no longer be used. Instead, BSEP will pull hoses from our FLEX pump through the RB air lock doors to the 117' elevation. These hoses will either fill the SFP or provide the required spray to the SFP. This approach, which has been established as our

alternate connection point for SFP Cooling, is currently documented as one of BSEP's B.5.b strategies for filling the SFP.

<u>Justification</u>: NEI 12-06 requires an alternate connection point for SFP makeup. During detailed design reviews it was determined that Table C-3, of NEI 12-06, acknowledges the use of hoses to fill the SFP meets the guidance in NEI 12-06.

<u>Documentation</u>: Open Item 9 will track completion of this item and Open Item 1 will track demonstration of deployment path acceptability.

4) <u>Change:</u> The OIP discussed, in multiple locations, the use and modifications of Severe Accident Mitigation Alternative (SAMA) diesel generators. The OIP will be modified to reflect the use of newly procured FLEX diesel generators instead of the SAMA diesel generators.

<u>Justification</u>: Detailed design evaluations determined that the existing SAMA diesel generators could not be protected from all applicable hazards as identified in NEI 12-06. A qualified building, providing protection from all applicable hazards, will be built. New FLEX diesel generators (i.e., approximately 500 kW, 480 VAC), capable of re-powering key equipment and instruments utilized in FLEX strategies, will be procured and pre-staged within the new FLEX diesel generator storage building.

Documentation: No additional documentation is required.

5) <u>Change</u>: The OIP identified a modification, in support of DC Power Management, which required pre-staging two 400 kW generators and maintaining a +1 generator in the FLEX Storage Building. The modification included an external connection point for the +1 generator. The modification will now pre-stage two 500 kW generators, but the requirement for a third generator has been removed from BSEP's plan. The connection point originally planned for the N+1 diesel generator will continue to be installed, but will be designated for the Regional Response Center (RRC) generator.

<u>Justification</u>: NEI 12-06 identifies that electrical diversity can be accomplished by providing a primary and alternate method to repower key equipment and instruments utilized in FLEX strategies. During detailed analysis, it was determined that a single 500 kW generator can repower the key equipment and instruments needed for both BSEP units. Each 500 kW generator has sufficient margin to supply both units' Division II Battery Chargers, thereby maintaining DC distribution to the key equipment. One 500kW generator will satisfy the N requirement for both BSEP units and the second 500 kW generator will satisfy the +1 requirement for BSEP.

<u>Documentation</u>: Open Item 9 will track completion of this item and Open Item 1 will track demonstration of deployment path acceptability.

6) <u>Change:</u> The OIP Attachment 1A, identified Action Item 4 as a "Time Constraint" action. The specific action states, "SAMA diesel generator started and loaded." The time constraint is identified as 5.0 hours. The new action states, "FLEX diesel generator started and loaded." The time constraint is 1 hour.

Justification: The 500 kW generators (as discussed in Change 5) are being referenced as

FLEX Diesel Generators with both the N and the +1 FLEX Diesel Generator being pre-staged. The original action allowed for failure of the initial N SAMA diesel generator and the deployment of the +1 diesel generator. The mobilization time required for the +1 diesel generator (5.0 hours) is no longer a limiting condition. The revised strategy will facilitate repowering the key equipment and instruments utilized in FLEX strategies by either the initial FLEX diesel generator or the +1 FLEX diesel generator and satisfies previously established Station Blackout requirement of 1 hour.

<u>Documentation</u>: Open Item 9 will track completion of this item and Open Item 1 will track demonstration of deployment path acceptability.

7) <u>Change</u>: The OIP, Attachment 1A, identified Action Item 5 as a "Time Constraint" action. The specific action states, "Deep load shedding is completed." The time constraint is identified as 1.25 hours. This is no longer considered to be a "Time Constraint" action.

<u>Justification</u>: The original determination that this action was a "Time Constraint" action was based on extending the Phase 1 coping time for re-powering key equipment and instruments utilized in FLEX strategies from 1 hour to 5.8 hours. Initially, this action was determined to be necessary to facilitate a failure of a SAMA diesel generator and the deployment of the +1 diesel generator. As discussed above in Change 6, the +1 FLEX diesel generator will be prestaged; therefore, time delays associated with deployment no longer apply. DC power deep load shedding is no longer required as a strategy to extend coping time.

Documentation: Open Item 9 will track completion of this item.

8) <u>Change</u>: The OIP identified a modification, in support of DC Power Management, that would provide the means to connect the RRC supplied 4160 VAC generator to the existing 4160 VAC Emergency Busses during Phase 3. The modification will not be implemented.

<u>Justification</u>: NEI 12-06 requires the use of off-site equipment during Phase 3. During detailed design, BSEP evaluated the need for the 4160 VAC connection during the Phase 3 response. To extend BSEP's coping time for Phase 2, a 480 VAC generator with sufficient capacity will maintain BSEP's ability to protect the core, containment integrity, and spent fuel. The removal of this modification from the scope of work to be performed does not impact BSEP's ability to meet the guidance contained within NEI 12-06.

Documentation: No additional documentation is required.

9) <u>Change</u>: The OIP, Attachment 1A, identified Action Item 8 as a "Time Constraint" action. The specific action states, "Align SAMA diesel generators to 480 VAC; power for MOVs, AC instruments, battery room fans, etc. (critical load 24/48 VDC battery chargers). N+1 SAMA diesel generator deployed and loaded, if necessary." The time constraint is identified as 24 hours. This is no longer considered to be a "Time Constraint" action.

<u>Justification</u>: The original determination that this action was a "Time Constraint" action was based on BSEP's response to meet the guidance contained within EA-12-50, Reference 10 of this enclosure. EA-12-50 has been superseded by EA-13-109. EA-13-109, Reference 11 of this enclosure will not be implemented in conjunction with FLEX implementation. Actions to

re-power MOVs, AC instruments, battery room fans, etc. become contingency actions and will be performed when needed based on power availability.

Documentation: No additional documentation is required.

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

Generic Concerns

The NRC has recently endorsed three Generic Issues associated with FLEX:

- 1. Electric Power Research Institute (EPRI) Report 3002001785, Use of Modular Accident Analysis Program (MAAP) in Support of Post-Fukushima Applications.
 - BSEP will abide by this generic resolution
- 2. EPRI Report 3002000623, Nuclear Maintenance Applications Center: Preventive Maintenance Basis for FLEX Equipment.
 - BSEP will abide by this generic resolution
- 3. NEI position paper, *Shutdown/Refueling Modes*, to enhance the shutdown risk process and procedures.
 - BSEP will abide by this generic resolution

Plan Open Items

The following tables provide a summary status of the Open Items. The table under Section 6a. provides the open items that were previously identified in the original OIP submitted on February 28, 2013, and in the first six-month status report submitted in Reference 2 of this enclosure. The table under Section 6b. provides a list of open items that were added after July 30, 2013.

Table 6a. Open Items Documented in the OIP.

	Overall Integrated Plan Open Item	Status
1.	Perform a formal validation of FLEX deployment, connection, and action timelines after the procedural guidance is developed and related staffing study is completed.	Not Started
2.	Implement programmatic controls.	Not Started
3.	Develop plant equipment control guidelines, in accordance with NEI 12-06, Section 11.5, to manage the unavailability of equipment and applicable connections that directly perform a FLEX mitigation strategy.	Not Started
4.	Establish programs and process to assure personnel proficiency in the mitigation of beyond- design-basis events is developed and maintained in accordance with NEI 12-06, Section 11.6.	Started
5.	Maintain FLEX strategies in overall FLEX basis documents.	Started
6.	Modify existing plant configuration control procedures to ensure that changes to the plant design, physical plant layouts, roads, buildings, and miscellaneous structures will not adversely impact the approved FLEX strategies in accordance with NEI 12-06, Section 11.8.	Not Started
7.	Complete applicable training prior to the implementation of FLEX.	Started
8.	Complete construction of FLEX Equipment Storage Building prior to the implementation of FLEX.	Started
9.	Develop BSEP procedures and programs to address storage structure requirements, deployment path requirements, and FLEX equipment requirements relative to the hazards applicable to BSEP.	Started
10.	Design FLEX equipment connection points (e.g., mechanical, pneumatic, and electrical) to withstand the applicable external hazards.	Started

	Overall Integrated Plan Open Item	Status
11.	Perform study to validate Suppression Pool temperatures exceeding 220°F.	Started
12.	Develop site specific procedures or guidelines, utilizing the industry developed guidance from the Owners' Groups, EPRI, and NEI Task team, to address the criteria in NEI 12-06.	Started
13.	Modify the current HCVS in accordance with NRC Order EA-12-050, Issuance of Order to Modify Licenses with Regard to Reliable Hardened Containment Vents.	Deleted. EA-12-050 superseded by EA-13-109. Action to be tracked by EA-13-109 response.
14.	Complete SFP level instrumentation modifications per NRC Order EA 12-051, Issuance of Order to Modify Licenses With Regard to Reliable Spent Fuel Pool Instrumentation.	Started
15.	Develop deep load-shedding procedures to extend coping time for station batteries.	Not Started
16.	Modify procedures such that operator manual actions, in areas where habitability is a concern, occur early in the FLEX timeline, to the extent practical.	Not Started
17.	Revise procedures to open Reactor Building doors to provide a natural air circulation path.	Not Started
18.	Provide transportation equipment to move large skids/trailer-mounted equipment provided from off-site.	Not Started
19.	Review generic BWROG analysis of FLEX implementation and perform station-specific analysis (NEDC 33771P, Revision 1).	Started
20.	Develop a process/methodology to rupture the Wetwell Vent Disc with Containment pressure below 55 psi.	Not Started
21.	Water Makeup to the CWST during Phase 3 response.	Not Started
22.	Develop guidance for obtaining local vital indications during a loss of DC in conjunction with an ELAP. This strategy will be available for appropriate plant personnel use in response to these failures.	Not Started

Table 6b.	Open	Items	added	after	July 30	2013
	Open	1001110	adaça	ancor	oury 00,	2010

Overall Integrated Plan Open Item	Status
None	Not applicable

7 Potential Interim Safety Evaluation Impacts

There are no potential impacts to the Draft Safety Evaluation identified at this time.

8 References

The following references support updates to the OIP as described in this attachment.

- CP&L to NRC, Overall Integrated Plan in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated February 28, 2013, Agencywide Documents Access and Management System (ADAMS) Accession Number ML13071A559
- 2. Duke Energy Letter, First Six-Month Status Report in Response to March 12, 2012, Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049), dated August 20, 2013, ADAMS Accession Number ML13248A447
- 3. Nuclear Regulatory Commission (NRC) Order Number EA-12-049, *"Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events,"* dated March 12, 2012, ADAMS accession Number ML12054A735
- NRC Interim Staff Guidance JLD-ISG-2012-01, Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation strategies for Beyond-Design-Basis External Events, Revision 0, dated August 29, 2012, ADAMS Accession Number ML12229A174
- 5. NEI 12-06, *Diverse and Flexible Coping Strategies (FLEX) Implementation Guide,* Revision 0, dated August 2012, ADAMS Accession Number ML12242A378
- CP&L and FPC to NRC, 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order EA-12-049), dated October 29, 2012, ADAMS Accession Number ML12307A021
- 7. NRC letter from Jack R. Davis, Director Mitigating Strategies Directorate Office of Nuclear Reactor Regulation, to Nuclear Energy Institute, Mr. Joseph E. Pollock, Vice President Nuclear Operations, dated September 30, 2013, ADAMS Accession Number ML13267A382

- 8. NRC letter from Jack R. Davis, Director Mitigating Strategies Directorate Office of Nuclear Reactor Regulation, to Nuclear Energy Institute, Mr. Joseph E. Pollock, Vice President Nuclear Operations, dated October 3, 2013, ADAMS Accession Number ML13275A318
- 9. NRC letter from Jack R. Davis, Director Mitigating Strategies Directorate Office of Nuclear Reactor Regulation, to Nuclear Energy Institute, Mr. Joseph E. Pollock, Vice President Nuclear Operations, dated October 7, 2013, ADAMS Accession Number ML13276A224
- 10. NRC Order Number EA-12-050, *Issuance of Order to Modify Licenses with Regard to Reliable Hardened Containment Vents*, dated March 12, 2012, ADAMS Accession Number ML12054A694
- 11. NRC Order Number EA-13-109, Issuance of Order to Modify Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation Under Severe Accident Conditions, dated June 6, 2013, ADAMS Accession Number ML13143A321