



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

June 27, 2014

Vice President, Operations
Entergy Operations, Inc.
Arkansas Nuclear One
1448 S.R. 333
Russellville, AR 72802

SUBJECT: ARKANSAS NUCLEAR ONE, UNITS 1 AND 2 – STAFF ASSESSMENT OF THE FLOODING WALKDOWN REPORT SUPPORTING IMPLEMENTATION OF NEAR-TERM TASK FORCE RECOMMENDATION 2.3 RELATED TO THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT (TAC NOS. MF0194 AND MF0195)

Dear Sir or Madam:

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*, Section 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 that may 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 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 two letters dated November 27, 2012, as supplemented by letters dated November 26, 2013, and May 15, 2014, Entergy Operations, Inc., submitted Flooding Walkdown Reports as requested in Enclosure 4 of the 50.54(f) letter for Arkansas Nuclear One, Units 1 and 2. In addition, by letters dated January 31, 2014, and April 30, 2014, Entergy Operations, Inc., provided a response to the NRC staff's request for additional information dated December 23, 2013, needed for the staff to complete its assessments.

The NRC staff reviewed the information provided and, as documented in the enclosed staff assessment, determined sufficient information was provided to be responsive to Enclosure 4 of the 50.54(f) letter.

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If you have any questions, please contact me at 301-415-2833 or via e-mail at Peter.Bamford@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Peter Bamford". The signature is written in a cursive style with a large, looping initial "P".

Peter J. Bamford, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosure:
Staff Assessment of Flooding
Walkdown Report

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STAFF ASSESSMENT OF FLOODING WALKDOWN REPORT
NEAR-TERM TASK FORCE RECOMMENDATION 2.3 RELATED TO
THE FUKUSHIMA DAI-ICHI NUCLEAR POWER PLANT ACCIDENT
ENTERGY OPERATIONS, INC.
ARKANSAS NUCLEAR ONE, UNITS 1 AND 2
DOCKET NOS. 50-313 AND 50-368

1.0 INTRODUCTION

On March 12, 2012,¹ the U.S. Nuclear Regulatory Commission (NRC) issued a request for information per Title 10 of the *Code of Federal Regulations*, Section 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 4, "Recommendation 2.3: Flooding,"² to the 50.54(f) letter requested licensees to conduct flooding 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.

Enclosure 4 of the 50.54(f) letter requested licensees to include the following:

- a. Describe the design basis flood hazard level(s) for all flood-causing mechanisms, including groundwater ingress.
- b. Describe protection and migration features that are considered in the licensing basis evaluation to protect against external ingress of water into SSCs [structures, systems and components] important to safety.
- c. Describe any warning systems to detect the presence of water in rooms important to safety.
- d. Discuss the effectiveness of flood protection systems and exterior, incorporated, and temporary flood barriers. Discuss how these systems and barriers were evaluated using the acceptance criteria developed as part of Requested Information item 1.h.
- e. Present information related to the implementation of the walkdown process (e.g., details of selection of the walkdown team and procedures,) using the documentation template discussed in Requested Information item 1.j, including actions taken in response to the peer review.

¹ Agencywide Documents Access and Management System (ADAMS) Accession No. ML12053A340.

² ADAMS Accession No. ML12056A050.

- f. Results of the walkdown including key findings and identified degraded, nonconforming, or unanalyzed conditions. Include a detailed description of the actions taken or planned to address these conditions using guidance in Regulatory Issues Summary 2005-20, Revision 1, Revision to the NRC Inspection Manual Part 9900 Technical Guidance, "Operability Conditions Adverse to Quality or Safety," including entering the condition in the corrective action program.
- g. Document any cliff-edge effects identified and the associated basis. Indicate those that were entered into the corrective action program. Also include a detailed description of the actions taken or planned to address these effects.
- h. Describe any other planned or newly installed flood protection systems or flood mitigation measures including flood barriers that further enhance the flood protection. Identify results and any subsequent actions taken in response to the peer review.

In accordance with the 50.54(f) letter, Enclosure 4, Required Response Item 2, licensees were required to submit a response within 180 days of the NRC's endorsement of the flooding walkdown guidance. By letter dated May 21, 2012,³ the Nuclear Energy Institute (NEI) staff submitted NEI 12-07, Revision 0, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," to the NRC staff to consider for endorsement. By letter dated May 31, 2012,⁴ the NRC staff endorsed the walkdown guidance.

By two letters dated November 27, 2012,⁵ Entergy Operations, Inc. (Entergy, the licensee), provided a response to Enclosure 4 of the 50.54(f) letter Required Response Item 2, for Arkansas Nuclear One (ANO), Units 1 and 2. The licensee also submitted supplements by letters dated November 26, 2013,⁶ and May 15, 2014.⁷ The NRC staff issued a request for additional information (RAI) to the licensee regarding available physical margin (APM) in a letter dated December 23, 2013.⁸ The licensee responded to the NRC staff's request by letters dated January 31, 2014,⁹ and April 30, 2014.¹⁰

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 4 of the 50.54(f) letter.

³ ADAMS Package Accession No. ML121440522.

⁴ ADAMS Accession No. ML12144A142.

⁵ ADAMS Accession Nos. ML12334A008 (Unit 1) and ML12334A006 (Unit 2).

⁶ ADAMS Accession No. ML13336A786.

⁷ ADAMS Accession No. ML14139A379.

⁸ ADAMS Accession No. ML13325A891.

⁹ ADAMS Accession No. ML14031A183.

¹⁰ ADAMS Accession No. ML14120A494.

2.0 REGULATORY EVALUATION

The 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 for Nuclear Power Plants," Criterion 2, "Design bases for protection against natural phenomena," and Appendix A "Seismic and Geological Criteria for Nuclear Plants," to 10 CFR Part 100. Criterion 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, tsunami, and seiches without loss of capability to perform their safety functions.

For initial licensing, each licensee was required to develop and maintain design bases that, as defined by 10 CFR 50.2, identify the specific functions to be performed by an SSC, 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 (CLB) is the set of NRC requirements applicable to a specific plant, and a licensee's written commitments for ensuring compliance with, and operation within, applicable NRC requirements and the plant-specific design basis that are in effect.

3.0 TECHNICAL EVALUATION

3.1 Design Basis Flooding Hazard for ANO, Units 1 and 2

The licensee stated that the design basis flood hazards for ANO, Units 1 and 2, are:
(1) probable maximum flood (PMF) on the Dardanelle reservoir in the Arkansas River coincident with an instantaneous failure of the Ozark Dam, which is located 51 miles upstream; and
(2) groundwater intrusion during the flooding events due to high groundwater level near the ground surface. The ANO site is surrounded on three sides by the Dardanelle reservoir. The postulated flood event (PMF plus Ozark Dam failure) would result in a maximum flood level of 361 feet (ft) Mean Sea Level (MSL). Groundwater intrusion into the Seismic Class 1 structures is as low as the base grade at elevation 317 ft MSL. In addition, to protect critical equipment and components, splash effects are considered up to 10 feet above PMF level of 358 ft MSL (368 ft MSL).

The licensee stated that the CLB duration of the postulated flood is 2 to 5 days. The licensee considered the effect of wind and waves and indicated that these effects were bounded by the combination of the PMF and the Ozark dam failure events.

Based on the NRC staff's review, the staff concludes that the licensee appears to have described the design basis flood hazard level(s) requested in the 50.54(f) letter, consistent with the walkdown guidance.

3.2 Flood Protection and Mitigation

3.2.1 Flood Protection and Mitigation Description

The licensee stated that the flood protection features credited in the CLB for ANO, Units 1 and 2, consist of watertight doors, door seals, penetration seals through exterior walls, neoprene sealed hatches, and check valves. The licensee stated that all safety-related structures, systems, and components (SSCs) are designed at locations above 361 ft MSL, enclosed within the flood protected Seismic Category I structures or placed at elevations above 369 ft MSL to protect against splash effects in the Intake Structure area. The Seismic Category I structures include the Reactor Building, Auxiliary Building, Emergency Diesel Fuel Storage Vaults, and the Post Accident Sampling System (PASS) Building. These structures are also designed to be protected from groundwater intrusion for any parts below the grade elevation (353 ft MSL).

The licensee stated that the Auxiliary Building roof scuppers and roof drainage for both units are free from debris and blockage, with an inspection for adequate drainage in the event of local intense precipitation.

The licensee stated that ANO, Units 1 and 2 operating procedures for natural emergencies indicate that in order to maintain offsite power to the plant, the installation of jumpers from the 161 kilovolt Pleasant Hill transmission line to Startup Transformer #2 is necessary. Additional flood protection measures such as temporary flood barriers are needed. As required on the CLB basis, watertight doors are assumed to remain closed or to be verified as closed during a flooding event. The licensee stated that doors and hatches that cannot be accessed without requiring personnel to travel outdoors are maintained in a normally closed position, thus, impacts of adverse weather are not considered a hindrance to the flooding response.

For ANO, Unit 2, the licensee stated that the effects of local intense precipitation are bounded by the effects of PMF coupled with the Ozark Dam failure event. The licensee stated that the openings and penetrations for all SSCs that are located below the CLB elevation (361 ft MSL) are designed to be closed within 4 hours when the water level at intake structure reaches 350 ft MSL. The licensee stated that wall leakage into the Seismic Category I structures during the flooding event would be controlled by sumps and sump pumps, and that it is considered minimal and would have no adverse effect on the flood protection of the structures. The CLB for ANO Unit 1 does not discuss local intense precipitation.

3.2.2 Incorporated and Exterior Barriers

The site has incorporated and exterior barriers that are permanently in place, requiring no operator manual actions. These barriers include: the exterior structural walls of the Seismic Category I structures, including the Unit 1 and 2 Reactor Buildings, Auxiliary Buildings, Emergency Diesel Fuel Storage Vaults, and PASS Buildings. Additional flood protection features credited in ANO, Units 1 and 2, CLB are watertight doors and door seals, penetration seals through exterior walls, neoprene sealed hatches, and check valves. Both of the Unit 1 and Unit 2 Auxiliary Buildings have sumps which include pumps and level instrumentation.

3.2.3 Temporary Barriers and Other Manual Actions

Both ANO units have temporary barriers and other manual actions that require operator action. The actions include installation of a jumper connection by a third-party vendor to maintain offsite power to the site when the water level exceeds 356.5 ft MSL.

ANO, Unit 2 also includes the following actions/barriers: (1) water-level measurement at least once per 24 hours when the water level is below 350 ft MSL and once per 2 hours when the water level in the Dardanelle reservoir is above 350 ft MSL at the intake structure; (2) closure of openings and penetrations to the flood-protected structures within 4 hours after the water level reaches 350 ft MSL. The licensee did not explicitly state whether operations in (1) and (2) above are manual or automatic actions.

3.2.4 Reasonable Simulation and Results

The licensee stated that the simulations for the site adverse weather procedure were performed and confirmed step by step against the five guidance questions in Section 5.5.6 of NEI 12-07. The licensee indicated that its staff can complete the procedure executing it as written and in the time frame required. In addition, the equipment was properly staged and in working condition. The licensee indicated that the completion of the activities will not be impeded by a flooding event.

3.2.5 Conclusion

Based on the NRC staff's review, the licensee appears to have described protection and mitigation features, as requested in the 50.54(f) letter, consistent with the walkdown guidance.

3.3 Warning Systems

The licensee stated that no interior water level warning systems or alarms are credited for external flood protection in the CLB for ANO, Units 1 and 2. The flood protection actions are initiated once the water level of the Dardanelle Reservoir exceeds 350 ft MSL.

Based on the NRC staff's review, it appears that the licensee has provided information to describe any warning systems, as requested the 50.54(f) letter, consistent with the walkdown guidance.

3.4 Effectiveness of Flood Protection Features

The licensee inspected the flood protection features, mainly incorporated active and passive features. The license stated that for both units no credible pathways (such as cracks or leaks, etc.) were identified through walls and penetrations located below the CLB flood elevation of 361 ft MSL. Doors and door seals were found to be in a good working condition and functioning as intended.

The licensee inspected flood protection features at safety-related structures and provided observations of the effectiveness of the features. Both unit's Auxiliary Building roof scuppers

and roof drains are confirmed as being free of any potential blockage or debris that could impede roof drainage. Both unit's Auxiliary Building sumps and level instrumentation were confirmed to be in working order and verified as being maintained. The Emergency Cooling Pond Intake and Discharge structures were confirmed to have debris blocking features.

The licensee stated that flood barriers and seals, watertight doors, hatches, and internal conduit seals, were within the scope of the Maintenance Rule Program and maintained. Site topography, which the licensee stated is not a CLB flood protection feature, was verified against site drainage drawings and confirmed to have no flood waters directed toward protected features.

The licensee stated that the observations which were not immediately able to be judged as acceptable on the walkdowns were entered into the ANO CAP to allow for more detailed evaluation to be completed.

Based on the NRC staff's review of the licensee's submittal, as supplemented, it appears that the licensee has discussed the effectiveness of flood protection features, as requested in the 50.54(f) letter, consistent with the walkdown guidance.

3.5 Walkdown Methodology

By letter dated June 8, 2012,¹¹ the licensee responded to the 50.54(f) letter that it intended to utilize the NRC endorsed walkdown guidelines contained in NEI 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features."¹² The licensee's walkdown submittal dated November 27, 2012, as supplemented by letter dated May 15, 2014, indicated that the licensee implemented the walkdowns consistent with the intent of the guidance provided in NEI 12-07. The licensee did not identify any exceptions from NEI 12-07.

Based on the NRC staff's review of the licensee's submittal, as supplemented, it appears that the licensee has presented information related to the implementation of the walkdown process, as requested in the 50.54(f) letter, consistent with the walkdown guidance.

3.6 Walkdown Results

3.6.1 Walkdown Scope

The licensee stated that following review of the 2012 flood protection walkdown report and observations during the restricted access features walkdowns in September 2013, discrepancies were discovered in the walkdowns performed in 2012 that required additional walkdowns to address discrepancies. The licensee entered these discrepancies into the CAP and re-performed a majority of the walkdowns in 2014. The licensee documented the results in the supplemental report dated May 15, 2014. Examples of these discrepancies were associated with ductwork, ceiling/floor areas, and embedded features such as floor drain connectivity and embedded conduit routing.

¹¹ ADAMS Accession No. ML12164A567.

¹² ADAMS Accession No. ML12173A215.

The scope of the walkdowns at ANO, Units 1 and 2, included the inspection of features credited in the CLB for protection and mitigation from external flood events to confirm that the features are available, functional, and properly maintained. The licensee verified that SSCs, portable flood mitigation equipment, and the procedures needed to install and/or operate during a flood are acceptable and capable of performing their design function as credited in the CLB for ANO, Units 1 and 2.

ANO Unit 1: The licensee performed a total of 135 walkdown packages (68 packages for the 2012 walkdown, 5 packages for the 2013 walkdown, and 62 packages for the 2014 walkdown) of flood protection features, including the exterior structural walls, doors and door seals, penetration seals through exterior walls, neoprene sealed hatches, Reactor Building, Auxiliary Building and Tendon Gallery equipment and escape hatches, Auxiliary Building roof drains and scuppers, and Auxiliary Building sumps, sump pumps and level instrumentation. The licensee performed reasonable simulations of manual actions for the site adverse weather procedure.

ANO Unit 2: The licensee performed a total of 180 walkdowns packages of flood protection features (80 packages for the 2012 walkdown, 7 packages for the 2013 walkdown, and 93 packages for the 2014 walkdown) including the exterior structural walls, doors and door seals, penetration seals through exterior walls, neoprene sealed hatches, Reactor Building, Auxiliary Building and Tendon Gallery equipment and escape hatches, and Auxiliary Building sumps, sump pumps and level instrumentation. In addition, the licensee performed reasonable simulations of manual actions for the site adverse weather procedure. The time (4 hours) to complete closure of openings and penetrations was evaluated and confirmed.

The licensee used/developed acceptance criteria consistent with the intent of NEI 12-07.

3.6.2 Licensee Evaluation of Flood Protection Effectiveness, Key Findings, and Identified Deficiencies

The licensee performed an evaluation of the overall effectiveness of the plant's flood protection features. On the basis of the results of walkdowns completed, the licensee indicated that ANO's flood protection features provide sufficient protection to ensure the safe operation of Units 1 and 2 in the CLB external flood event.

NEI 12-07 defines a deficiency as follows: "a deficiency exists when a flood protection feature is unable to perform its intended function when subject to a design basis flooding hazard." In the initial walkdown report, by letter dated November 27, 2012, the licensee did not report any deficiencies. The licensee entered several potential deficiencies, which the licensee defined as features that did not meet the acceptance criteria, into the CAP. Operability determinations were performed, and none of the features were deemed deficient. The licensee took corrective actions to make all features acceptable.

In 2013, the licensee identified a possible path for flood water from the Auxiliary Building Extension to the Unit 2 Auxiliary Building. A flood barrier was installed at Door 381 to correct this issue. The licensee also revised the procedure for natural emergencies to require the

installation of this temporary barrier during a flooding event to isolate the ANO, Unit 2, Auxiliary Building from the Auxiliary Building Extension.

During the walkdowns performed in 2013 and 2014, the licensee identified several deficiencies including degraded penetration seals and unisolated abandoned-in-place equipment (i.e. creating a flowpath for flooding). The licensee took immediate action at both Units 1 and 2, and repaired or replaced all flood seals, isolated the abandoned equipment, and took compensatory measures. The compensatory measures included fabricating and properly staging temporary flood barriers and staging seal material to be installed in the event of external flooding.

NEI 12-07 specifies that licensees identify observations/potential deficiencies in the CAP that were not yet dispositioned at the time the walkdown report was submitted. The licensee did not report observations awaiting disposition.

3.6.3 Flood Protection and Mitigation Enhancements

The licensee determined that no additional or enhanced flood protection features were necessary as a result of the flood walkdowns.

3.6.4 Planned or Newly Installed Features

The licensee determined that additional flood protection features were necessary as a result of the flood walkdowns. These included the compensatory measures described in Subsection 3.6.2 above.

3.6.5 Deficiencies Noted and Actions Taken or Planned to Address

The licensee identified conditions of features that did not meet the NEI 12-07 acceptance criteria and entered them into the CAP. The deficient conditions and actions taken are discussed in Section 3.6.2 above.

3.6.6 Staff Analysis of Walkdowns

The NRC staff reviewed the licensee's walkdown report dated November 27, 2012, as supplemented by letter dated May 15, 2014. The licensee evaluated the capability of flood protection features in response to the CLB flood and concluded that all the features assessed are available, functional, and implementable to provide sufficient protection to ensure the safe operation of Units 1 and 2 in the external flood event. The licensee identified that some observed conditions of flood protection features did not meet the acceptance criteria. These observations were entered into CAP and addressed by the licensee. The licensee confirmed that a feature is in a PM program and the testing, monitoring, and inspection is being performed and is adequate. Reasonable simulations were performed consistent with NEI guidance.

By letter dated March 24, 2014,¹³ the NRC staff identified unresolved item (URI) 05000313/2013011-005 regarding flood barrier effectiveness at ANO. The conclusions of this

¹³ ADAMS Accession No. ML14083A409.

staff assessment reflect the licensee's submittals up to and including the update dated May 15, 2014, and, therefore, do not apply to any future NRC staff conclusions regarding URI 05000313/2013011-005.

Based on the NRC staff's review of the licensee's submittal, as supplemented, it appears that the licensee has provided results of the walkdowns and described any other planned or newly installed flood protection systems or flood mitigation measures as requested in the 50.54(f) letter. Based on the information provided by the licensee, the NRC staff concludes that the licensee's implementation of the walkdown process meets the intent of the walkdown guidance. Available Physical Margin

The NRC staff issued a RAI to the licensee regarding the available physical margin (APM) dated December 23, 2013.¹⁴ The licensee responded by letters dated January 31, 2014, and April 30, 2014. The licensee has reviewed its APM determination process, and entered any unknown APMs into the CAP. The staff reviewed the responses to the RAI, and concluded that the licensee met the intent of the APM determination per NEI 12-07.

Based on the NRC staff's review, it appears that the licensee has documented the information requested for any cliff-edge effects, as requested by the 50.54(f) letter. Further, the NRC staff reviewed the licensee's submittals, and concludes that the licensee met the intent of the APM determination per NEI 12-07.

3.7 NRC Oversight

3.7.1 Independent Verification by Resident Inspectors

On June 27, 2012, the NRC issued Temporary Instruction (TI) 2515/187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns."¹⁵ In accordance with the TI, NRC inspectors independently verified that the ANO, Units 1 and 2 licensee implemented the flooding walkdowns consistent with the intent of the walkdown guidance. Additionally, the inspectors independently performed walkdowns of a sample of flood protection features. The inspection reports dated February 13, 2013,¹⁶ and August 13, 2013,¹⁷ document the results of these inspections. No findings of significance were identified. As mentioned in Section 3.6.6 of this assessment, the NRC staff continues to evaluate URI 05000313/2013011-005.

4.0 SSCs NOT WALKED DOWN

The licensee identified restricted access and inaccessible features.

4.1 Restricted Access

The licensee identified several features in ANO, Units 1 and 2, that were restricted access. The features were generally in high radiation areas or required equipment disassembly. The

¹⁴ ADAMS Accession No. ML13325A891.

¹⁵ ADAMS Accession No. ML12129A108.

¹⁶ ADAMS Accession No. ML13045A520.

¹⁷ ADAMS Accession No. ML13225A747.

licensee documented the restricted access items in the CAP and scheduled the follow-up walkdowns for September 2013. In the supplemental walkdown report, dated May 15, 2014, the licensee indicated that all restricted access features have been walked down by September 2013.

4.2 Inaccessible Features

The licensee determined several flood protection features to be inaccessible. These features included wall areas behind installed equipment and rooms with high dose rates as determined by licensee Radiation Protection staff. Inaccessible features were evaluated by document reviews and/or by comparison with the material condition of surrounding or similar features. These evaluations established reasonable assurance that the inaccessible features can perform their design basis function during an external flood.

5.0 CONCLUSION

The NRC staff concludes that the licensee's implementation of flooding walkdown methodology meets the intent of the walkdown guidance. The staff concludes that the licensee, through the implementation of the walkdown guidance activities and, in accordance with plant processes and procedures, verified the plant configuration with the current flooding licensing basis; addressed degraded, nonconforming, or unanalyzed flooding conditions; and verified the adequacy of monitoring and maintenance programs for protective features.

The NRC staff notes that the URI detailed in the NRC's inspection report dated March 24, 2014, will be processed in accordance with NRC policy.

The NRC staff reviewed the information provided and determined that sufficient information was provided to be responsive to Enclosure 4 of the 50.54(f) letter.

If you have any questions, please contact me at 301-415-2833 or via e-mail at Peter.Bamford@nrc.gov.

Sincerely,

/RA/

Peter J. Bamford, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-313 and 50-368

Enclosure:
Staff Assessment of Flooding
Walkdown Report

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