

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 6, 2015

Entergy Nuclear Operations, Inc. Indian Point Energy Center 450 Broadway, GSB P.O. Box 249 Buchanan, NY 10511-0249

SUBJECT: NUCLEAR REGULATORY COMMISSION PLAN FOR THE AUDIT OF

ENTERGY NUCLEAR OPERATIONS, INC'S. FLOOD HAZARD

REEVALUATION REPORT SUBMITTAL RELATING TO THE FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATION 2.1-FLOODING FOR INDIAN POINT NUCLEAR GENEARTING UNIT NOS. 2 AND 3 (TAC NOS. MF3313

AND MF3314)

Dear Sir or Madam,

This letter documents the U.S Nuclear Regulatory Commission (NRC) staff's plan to perform an additional regulatory audit of Entergy Nuclear Operations, Inc. (Entergy) Flood Hazard Reevaluation Report (FHRR) submittal related to the Fukushima Near-Term Task Force Recommendation 2.1, Flooding for Indian Point Nuclear Generation Unit Nos. 2 and 3 (Indian Point). This technical audit will be performed consistent with NRC Office of Nuclear Reactor Regulation, Office Instruction LIC-111, "Regulatory Audits," dated December 29, 2008, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082900195). The audit will be conducted over multiple sessions, as needed, and the NRC staff will develop an audit summary report to document its observations and conclusions within 90 days of the final audit session.

The audit will provide the NRC with a better understanding of three key aspects of the Indian Point FHRR, which was submitted on December 23, 2013 (ADAMS Accession No. ML13364A005), and revised on December 9, 2014 (ADAMS Accession No. ML14357A052). Those areas to be covered by the audit include the following: storm surge analysis; dam failure analysis; and selection of a probable maximum precipitation magnitude for use in the respective flood hazard re-evaluations. The audit is intended to support completion of the staff's review of the FHRR and the subsequent issuance of a Staff Assessment.

The enclosed audit plan outlines the process that will allow the NRC staff to identify additional information necessary for the staff to complete the FHRR review. The details of this audit have been discussed with Mr. Bryan Ford of your staff.

If you have any questions, please contact me at (301) 415-3733 or by e-mail at Robert.Kuntz@nrc.gov.

Sincerely,

Robert F. Kuntz, Senior Project Manager Hazards Management Branch Japan Lessons-Learned Division Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure: Audit Plan

cc w/encl: Distribution via Listserv

# NRC PLAN FOR THE AUDIT OF ENTERGY NUCLEAR OPERATION INC'S. FLOOD HAZARD REEVALUATION REPORT SUBMITTAL RELATED TO THE FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATION 2.1, FLOODING FOR INDIAN POINT NUCLEAR GENERATING UNIT NOS. 2 AND 3

#### **BACKGROUND AND AUDIT BASIS:**

By letter dated March 12, 2012, the U.S. Nuclear Regulatory Commission (NRC) issued a request for information to all power reactor licensees and holders of construction permits in active or deferred status, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(f) "Conditions of license" (hereafter referred to as the "50.54(f) letter"). The request was issued in connection with implementing lessons-learned from the 2011 accident at the Fukushima Dai-ichi nuclear power plant, as documented in The Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident. Recommendation 2.1 of that document recommended that the staff issue orders to all licensees to reevaluate seismic and flooding for their sites against current NRC requirements and guidance. Subsequent Staff Requirements Memoranda associated with Commission Papers SECY 11-0124 and SECY-11-0137, instructed the NRC staff to issue requests for information to licensees pursuant to 10 CFR 50.54(f).

By letter dated December 23, 2013, Entergy Nuclear Operations, Inc. (Entergy, the licensee) submitted its Flood Hazard Reevaluation Report (FHRR) for Indian Point Nuclear Generating Unit Nos. 2 and 3 (Indian Point) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13364A005) and revised the FHRR on December 9, 2014 (ADAMS Accession No. ML14357A052). The NRC staff has begun its review of the aforementioned submittal and plans to conduct a regulatory audit of Entergy to aid in its review of the licensee's FHRR.

#### REGULATORY AUDIT SCOPE AND METHODOLGY:

The areas of focus for the regulatory audit is the information contained in the Indian Point FHRR submittal, and all associated and relevant supporting documentation used in the development of the aforementioned document including, but not limited to, methodology, process information, calculations, computer models, etc. The audit will be conducted and completed over several meetings, the dates of which will be determined, as necessary.

# INFORMATION AND OTHER MATERIAL NECESSARY FOR THE REGULATORY AUDIT:

The information required for the audit is the licensee's models and supporting calculations, documentation related to the storm surge and site specific probable maximum precipitation analyses, HEC-HMS and HEC-RAS modeling, event durations, and the dam failure analysis. Other information needs will be discussed as audit meetings are scheduled.

### NRC AUDIT TEAM:

Title	Team Member	Affiliation	
Team Leader, NRR/JLD	Robert Kuntz	NRC	
Branch Chief, NRO/DSEA	Chris Cook	NRC	
Technical Lead	Mike Lee	NRC	
Technical Support	Michelle Bensi	NRC	
Technical Support	Kevin Quinlan	NRC	
Technical Support	Henry Jones	NRC	
Technical Manager	Laura Quinn-Willingham	NRC	
Technical Support	Rajiv Prasad	Pacific Northwest National Laboratory	
Technical Support	Scott DeNeale	Oak Ridge National Laboratory	
Technical Support	Chih-Chieh Kao	Oak Ridge National Laboratory	
Technical Support	Chris Bender	Taylor Engineering	

## LOGISTICS:

The audit meetings will be coordinated with Entergy staff.

#### **DELIVERABLES:**

The NRC team will develop an audit summary report to convey the audit results. The report will be placed in ADAMS within 90 days of the completion of the final audit session, and will be publicly available.

The information discussed in the audit may be included, fully or in part, in the development of the NRC technical staff's assessment documenting the staff's FHRR review.

If you have any questions, please contact me at (301) 415-3733 or by e-mail at Robert.Kuntz@nrc.gov.

Sincerely,

# /RA by Tekia Govan for/

Robert F. Kuntz, Senior Project Manager Hazards Management Branch Japan Lessons-Learned Division Office of Nuclear Reactor Regulation

Docket Nos. 50-247 and 50-286

Enclosure: Audit Plan

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#### ADAMS Accession No.: ML15124A340

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DATE	05/06/15	05/06/15	05/06/15	05/06/15

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