



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I**  
2100 RENAISSANCE BOULEVARD, SUITE 100  
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

May 6, 2013

EA-10-090  
EA-10-248  
EA-11-106

Mr. Jeffrey Forbes  
Chief Nuclear Officer  
Entergy Nuclear Operations, Inc  
P.O. Box 31955  
Jackson, MS 39286-1995

**SUBJECT: CONFIRMATION OF COMPLETION OF ACTIONS TAKEN BY ENTERGY  
NUCLEAR OPERATIONS, INC., AS SET FORTH IN NRC CONFIRMATORY  
ORDER DATED JANUARY 26, 2012**

Dear Mr. Forbes:

This letter acknowledges the actions taken by Entergy Nuclear Operations, Inc (Entergy) in response to the Confirmatory Order (Order) (ADAMS Accession No. ML120260627<sup>1</sup>) issued January 26, 2012, by the U.S. Nuclear Regulatory Commission (NRC). The actions were taken to fulfill commitments made as part of a settlement agreement reached during a November 9, 2011, Alternative Dispute Resolution (ADR) mediation session between Entergy and the NRC. Entergy requested the ADR mediation session in response to a letter the NRC issued September 8, 2011 (ML112510187), which enclosed a summary of three investigations conducted by the NRC Office of Investigations (OI) at the James A. FitzPatrick Nuclear Power Plant (FitzPatrick). The NRC letter described apparent violations, some of which were determined to be willful, identified during the investigations. The letter also included the offer for ADR.

The apparent willful violations involved the failures by FitzPatrick technicians, on occasions between 2006 and 2009, to: 1) test required individuals for respirator fit, in accordance with the requirements specified in Title 10 of the Code of Federal Regulations (CFR) Section 20.1703 and site procedures; 2) maintain accurate documentation of completed respirator fit tests, in accordance with the requirements of 10 CFR 50.9; 3) perform and/or accurately document, in accordance with site procedures required by technical specifications (TS) and 10 CFR 50.9, independent verification of Drywell Continuous Atmospheric Monitoring System (DWCAM) valve positions after the valves were manipulated; 4) document a personal contamination event in accordance with site procedures required by TS; 5) perform a contamination survey prior to removing an item from a radiologically controlled area, in accordance with site procedures required by TS; and, 6) perform daily radiological surveys of the reactor building 326 foot elevation airlock, in accordance with 10 CFR 20.1501(a).

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<sup>1</sup> Designation in parentheses refers to an Agencywide Documents Access and Management System (ADAMS) accession number. The documents referenced in this letter and its enclosure are publicly-available using the accession number in ADAMS.

As part of the settlement agreement, Entergy agreed to take a number of actions, which were subsequently documented in the Order. Specifically, Entergy agreed to: A) review its existing fleet-wide general employee training to ensure it provides adequate coverage of procedural compliance and the requirement to maintain complete and accurate records, and make revisions, as necessary; B) prepare a case study about the event and present it to the site personnel at each of its commercial nuclear power plants; C) document a commitment to maintain a specified safety culture monitoring process (such as the one described in NEI 09-07, "Fostering a Strong Nuclear Safety Culture") at each of Entergy's commercial nuclear power plants; D) review its safety culture monitoring procedure to determine if use of the procedure (had it been implemented at the time of the violations) would have resulted in identification of the safety culture weaknesses that led to misconduct, and revising the procedure accordingly; E) deliver a presentation about the event to industry representatives in each NRC geographical region; F) assess the radiation protection departments at each of its commercial nuclear power plants to ensure activities are being conducted in accordance with NRC regulations; and, G) inform the NRC upon when all of the above-listed actions are complete.

The NRC has concluded that Entergy satisfied all of the terms of the Order. Enclosed with this letter is a document listing: 1) the Order commitments; 2) a description of the actions taken by Entergy to meet the commitments; and, 3) a description of the actions taken by the NRC to verify that the commitments have been properly implemented. You are not required to submit any further correspondence to the NRC on this matter. If you have any questions or comments, please contact Art Burritt, Chief, Projects Branch 2, Division of Reactor Projects, Region I, at 610-337-5069.

A copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room located at NRC Headquarters in Rockville, MD, and from ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

*/RA/*

William M. Dean  
Regional Administrator

Docket Nos. 50-333; 50-313; 50-368; 50-416; 50-247; 50-286; 50-255; 50-293; 50-458; 50-271; 50-382

License Nos. DPR-59; DPR-51; NFP-6; NFP-29; DPR-26; DPR-64; DPR-20; DPR-35; NFP-47; DPR-28; NFP-38

Enclosure:

Completion of Actions Set Forth in the NRC Confirmatory Order Dated January 26, 2012

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ENCLOSURE  
COMPLETION OF ACTIONS SET FORTH IN THE NRC CONFIRMATORY ORDER DATED JANUARY 26, 2012

**Commitment A:**

Review Entergy's fleet-wide general employee training (GET) to ensure adequate coverage of the lessons learned from the event that formed the basis for the Confirmatory Order (Order), regarding both procedural compliance and the requirement to maintain complete and accurate records in accordance with 10 CFR 50.9. Document the results of this review within 60 days after issuance of the Order (i.e., by March 26, 2012). If the review reveals a need to revise the GET, make the appropriate revisions within 180 days of the date of the Order (i.e., by July 24, 2012).

**Actions Taken and NRC Conclusion:**

In NRC Inspection Report No. 05000333/2012003 (ML12220A278), the NRC documented its inspection observation that Entergy had reviewed its fleet-wide GET training material content with respect to lessons learned from the events that formed the basis for the Order and concluded that the related lesson plan did not adequately address the need for procedural compliance and the requirement to maintain complete and accurate records in accordance with 10 CFR 50.9. The NRC noted that Entergy developed recommended improvements to the GET training material, which were projected to be incorporated in the lesson plan during the third quarter of 2012. Subsequently, in NRC Inspection Report No. 05000333/2012005 (ML13038A174), the NRC documented the results of its review of the revised training material, and the NRC determination that Entergy had incorporated the recommended improvements to address the previous gaps in the GET training material with respect to the Order.

The NRC concludes that Entergy satisfactorily completed this commitment.

**Commitment B:**

Prepare a case study about the event that formed the basis of the Order, highlighting the role of those who had the opportunity to detect, report, and prevent the misconduct, as well as on the actions of the individuals who engaged in the misconduct. The Site Vice President or General Manager for Plant Operations at each of Entergy's nine commercial nuclear power plants will present the case study during two station-wide meetings to ensure that both day and night shift personnel will have the opportunity to attend. Entergy will complete these presentations within 180 days of the Order (i.e., by July 24, 2012).

ENCLOSURE  
COMPLETION OF ACTIONS SET FORTH IN THE NRC CONFIRMATORY ORDER DATED JANUARY 26, 2012

**Actions Taken and NRC Conclusion:**

In letters dated May 22, and 23, 2012 (ML ML12229A175 & ML12229A157), Entergy informed the NRC that it had developed the case study presentation materials and established a planned schedule (included in the May 22, 2012, letter) for conducting the station-wide meetings, which it intended to commence on June 14, 2012, and complete by July 19, 2012.

In NRC Inspection Report No. 05000333/2012003 (ML12220A278), the NRC documented that it reviewed the case study prior to Entergy's first scheduled presentation on June 14, 2012, and also observed a sample of the case study presentations (namely, those at FitzPatrick and Pilgrim Nuclear Power Station). In the report, the NRC documented its conclusion that the case study adequately covered the event that formed the basis of the Order. Subsequently, in NRC Inspection Report No. 05000333/2012005 (ML13038A174), the NRC documented its independent verification that Entergy had, in fact, conducted the case study presentations at each of its nine commercial nuclear power plants.

The NRC concludes that Entergy satisfactorily completed this commitment.

**Commitment C:**

Within 90 days of the date of the Order (i.e., by April 25, 2012), Entergy will add a commitment to the commitment tracking system to maintain the safety culture monitoring processes as described in NEI 09-07, "Fostering a Strong Nuclear Safety Culture," or similar processes, at Entergy's nine commercial nuclear power plants.

**Actions Taken and NRC Conclusion:**

In NRC Inspection Report No. 05000333/2012003 (ML12220A278), the NRC documented its independent verification that Entergy staff had added commitments to the commitment tracking systems at their nine commercial nuclear power plants to maintain the safety culture monitoring processes.

The NRC concludes that Entergy satisfactorily completed this commitment.

ENCLOSURE  
COMPLETION OF ACTIONS SET FORTH IN THE NRC CONFIRMATORY ORDER DATED JANUARY 26, 2012

**Commitment D:**

Within 90 days of the date of the Order (i.e., by April 25, 2012), Entergy will review its procedure EN-QV-136, Nuclear Safety Culture Monitoring, which implements the safety culture monitoring processes in NEI 09-07, to determine whether the procedure (if it had been in effect at the time of the violations) would have detected the safety culture weaknesses that led to the misconduct that formed the basis for the Order. If the review indicates that the implementation of that procedure may not have detected the weaknesses, Entergy will develop enhancements to the NEI process that would improve the ability to detect those weaknesses and revise the Entergy procedure accordingly. Entergy will complete this procedure revision, if needed, within 120 days of the completion of that review (i.e., by May 25, 2012). Additionally, within 30 days after revising its procedure (i.e., by June 24, 2012), Entergy will provide the results of its review to NEI for consideration in revising NEI document 09-07.

**Actions Taken and NRC Conclusion:**

In a letter to the NRC dated August 3, 2012 (ML12229A542), Entergy documented that it completed the review of procedure EN-QV-136 on April 13, 2012, and, based on the results of that review, completed the procedure revision on July 11, 2012. Entergy also enclosed a copy of the letter it sent to NEI on August 3, 2012, providing the results of its review for NEI's consideration in revising NEI 09-07. Specifically, Entergy suggested that that safety culture monitoring activities could benefit from an increased focus on the use of intuition and observation for "faint signals" by station managers and a reduced emphasis on the collection of hard data and the binning of that data into the INPO principles associated with nuclear safety culture.

In NRC Inspection Report No. 05000333/2012003 (ML12220A278), the NRC documented its review of Entergy's conclusion that, in all likelihood, implementation of its procedure EN-QV-136 would not have detected the safety culture weaknesses that led to the misconduct that formed the basis for the Order. Entergy staff determined that the procedure should have a greater focus on data analysis, discussion of safety culture issues, and developing actions to address safety culture weaknesses, with less emphasis on data sorting and review. In the report, the NRC documented its conclusion that Entergy's review identified appropriate procedure enhancement recommendations. Subsequently, in NRC Inspection Report No. 05000333/2012005 (ML13038A174), the NRC documented its review of Entergy's August 3, 2012, letter.

The NRC concludes that, in spite of not meeting the agreed-upon dates for each of the required actions, Entergy satisfactorily completed this commitment.

ENCLOSURE  
COMPLETION OF ACTIONS SET FORTH IN THE NRC CONFIRMATORY ORDER DATED JANUARY 26, 2012

**Commitment E:**

Within 360 days of the date of the Order (i.e., by January 20, 2013), Entergy will deliver a presentation to Regional Utility Groups (RUG) or Plant Managers Meetings at NRC Regions I, II, III, and IV, which will discuss the events that led to the Order, the lessons learned, and actions taken.

**Actions Taken and NRC Conclusion:**

In NRC Inspection Report No. 05000333/2013002 (ML13114A540), the NRC documented its verification that Entergy developed a presentation and delivered it at each of the RUGs in Regions I, II, III, and IV. The last presentation was completed in August 2012, which met the requirement of the Order to complete the presentations within 360 days of the date of the Order. In the report, the NRC documented its determination, based on a review of the presentation slides and speaker's notes, that the presentation provided a summary of the events leading to the Order, lessons learned, and actions taken.

The NRC concludes that Entergy satisfactorily completed this commitment.

**Commitment F:**

Within 360 days of the date of the Order (i.e., by January 20, 2013), Entergy will develop an assessment plan and conduct an assessment consistent with that plan at the nine Entergy commercial nuclear power plants. That assessment will review the rigor with which members of the radiation protection departments perform and document routine department activities. If those assessments identify performance or documentation issues, Entergy will enter those issues into its corrective action programs.



ENCLOSURE  
COMPLETION OF ACTIONS SET FORTH IN THE NRC CONFIRMATORY ORDER DATED JANUARY 26, 2012

**Actions Taken and NRC Conclusion:**

In a letter dated June 21, 2012 (ML12229A150), Entergy informed the NRC that it had prepared the assessment plan and established a proposed schedule for conducting the assessments, with the first scheduled to commence on July 16, 2012.

In NRC Inspection Report No. 05000333/2013002 (ML13114A540), the NRC documented its determination, based on a review of the assessment plan, that the assessment scope was sufficient to review the rigor with which members of the RP departments perform and document routine activities. Specifically, the NRC identified that the assessment included reviews of routine RP documents (e.g., radiation surveys, respiratory fit test records, condition reports, audits and assessments, etc), and also included interviews with a variety of site personnel, as well as field observations of department activities. The NRC also concluded that the planned assessment team compositions (i.e., a Team Leader, an RP department member for the site being assessed, and two RP department members from other Entergy sites for each assessment) was reasonable.

In the report, the NRC documented that it reviewed a sample of the assessment results (Palisades, Indian Point, and River Bend), and determined the assessments were performed in accordance with the assessment plan and that issues identified during the assessments were entered into each site's corrective action program, as appropriate. The NRC also documented that it reviewed a sample of the condition reports resulting from the assessments at the remaining Entergy sites. The NRC concluded that the issues identified from these assessments were administrative in nature (e.g., missing or illegible signatures, survey data not entered onto survey maps, inconsistent terminology, and supervisory reviews not completed within Entergy timeliness expectations). The NRC also verified the assessments were completed within 360 days of the date of the Order, as required.

The NRC concludes that Entergy satisfactorily completed this commitment.

**Commitment G:**

Within 30 days of completion of all the actions, Entergy will send NRC a letter informing the Commission that all actions are complete.

**Actions Taken and NRC Conclusion:**

In a letter dated February 1, 2013 (ML13113A014), Entergy informed the NRC that it completed the actions required by the Order. In this letter, Entergy summarized each item and the responding actions taken, as outlined above.

The NRC concludes that Entergy satisfactorily completed this commitment.