

# UNITED STATES NUCLEAR REGULATORY COMMISSION

**REGION I** 

2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PENNSYLVANIA 19406-2713

December 18, 2013

EA-13-076

Mr. John Ventosa Vice President, Operations Entergy Nuclear Operations, Inc. Indian Point Energy Center 450 Broadway, GSB P.O. Box 429 Buchanan, NY 10511-0249

SUBJECT: INDIAN POINT ENERGY CENTER UNITS 2 & 3 - NRC INSPECTION REPORT

NOS. 05000247/2013011 & 05000286/2013011 AND NRC OFFICE OF

**INVESTIGATIONS REPORT NO. 1-2012-036** 

Dear Mr. Ventosa:

This refers to an investigation initiated on March 30, 2012, by the NRC Office of Investigations (OI) to determine if the Chemistry Manager at Entergy Nuclear Operations' (ENO's) Indian Point Energy Center Units 2 and 3 (IP), deliberately falsified data pertaining to IP's Emergency Diesel Generator (EDG) fuel oil storage tanks. IP Technical Specifications (TS) require implementation of a diesel fuel oil testing program to verify the acceptability of the fuel oil in the onsite fuel oil storage tanks (FOSTs) and in the reserve fuel oil storage tank (RFOST), which is a common tank for both IP operating units. Per the TS, the fuel oil is sampled every 92 days and analyzed to determine if it: (1) is within limits for parameters such as viscosity and sulfur content; and, (2) has a total particulate concentration of  $\leq$  10 mg/l. If the particulate concentration is out of specification, the parameter must be restored to within limits within 7 days for an FOST and 30 days for the RFOST, or the licensee must immediately declare the associated EDGs inoperable (for the RFOST, because all the IP EDGs would be affected, this would require a dual unit shutdown).

In January and February 2012, the IP Engineering Department conducted a self-assessment in preparation for an upcoming NRC Component Design Bases Inspection, which included a review of EDG fuel oil delivery systems and storage tanks. The assessment team identified that: (1) RFOST samples taken on June 17, 2011, and December 1, 2011 had not been entered into the Chemistry Department database until July 14, 2011, and January 23, 2012, respectively; (2) both samples had exceeded the TS particulate limits; and (3) no condition reports had been written in response to the out of TS condition and, evidently, no re-sampling performed.

On February 2, 2012, the assessment team leader sent an email to the Chemistry staff specialist who had entered the sample results in the database (and copied the Chemistry Manager on the email), and questioned how the TS condition had been met, since it did not appear resampling had been performed and the EDGs had not been declared inoperable. The Chemistry specialist responded that he had been unaware of the TS limit and, therefore, had not recognized that it had been exceeded. Subsequently, on February 5, 2012, database entries were made to indicate that RFOST resamples for June 17, 2011, and December 1, 2011, had actually been performed on June 29, 2011, and December 9, 2011, respectively (i.e., within the 30 day period allowed by TS), and that the re-samples were within the TS limits. These entries were coded in the database as being made by the Chemistry Manager, and the re-samples as being taken by one of the Chemistry technicians. In response to a condition report written by the assessment team leader, the Chemistry Manager indicated that the resamples had been taken but had not been timely entered into the database. Subsequently, in response to questions from IP staff about why no paperwork from the offsite laboratory that usually analyzes such samples existed for the resamples, the Chemistry Manager wrote a condition report in which he stated that the re-samples had been analyzed in-house.

The NRC recognizes that ENO next initiated an investigation into this issue, and that the Chemistry Manager did not comply with requests to be interviewed by ENO's investigators and abruptly retired. However, the Chemistry Manager subsequently submitted to an interview with OI and, during that interview, admitted that the two RFOST re-samples had actually not been obtained and that he had, instead, created false information to show an acceptable result based on historical sample results. The Manager also admitted to OI that, during this same timeframe, he had similarly provided false information for one of the onsite storage tanks (the 22 EDG FOST) after learning that the TS particulate for a November 18, 2011, sample had been exceeded, by indicating a re-sample had been taken that was within limits when, in fact, no resampling was performed. The Manager further admitted that the information pertaining to the supposed resamples that he had entered into the aforementioned condition reports had been false. A Factual Summary of the OI report is enclosed (Enclosure 1).

Based on the NRC investigation, the NRC identified two apparent violations that are being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. The current NRC Enforcement Policy is included on the NRC's Website at <a href="www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html">www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html</a>. The apparent violations involve: (1) operating IP Units 2 and 3 in violation of site TS requirements after the Chemistry manager identified that the fuel oil in the 22 FOST and the RFOST exceeded limits; and, (2) failing to initiate a condition report or otherwise report the condition such that a Licensee Event Report could be written. These apparent violations are described in detail in Enclosure 2, "Apparent Violations Being Considered for Escalated Enforcement."

Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued at this time. In addition, please be advised that the number and characterization of apparent violations described herein may change as a result of further NRC review. Before the NRC makes its enforcement decision, the NRC would like to discuss the apparent violations and ENO's corrective actions at a pre-decisional enforcement conference (PEC). In particular, the NRC is interested in discussing actions taken by ENO to address the Chemistry manager's apparent deliberate misconduct. The NRC decision to hold a PEC does not mean that the NRC

has determined that violations have occurred or that enforcement action will be taken. Rather, this conference is being requested to assist the NRC in making an enforcement decision. The conference will also include an opportunity for you to provide your perspective on these matters and any other information that you believe the NRC should take into consideration in making an enforcement decision. In presenting your corrective actions, you should be aware that the promptness and comprehensiveness of your actions will be considered in assessing any potential civil penalty for the apparent violations.

In lieu of a PEC, you may also request alternative dispute resolution (ADR) with the NRC in an attempt to resolve this issue. ADR is a general term encompassing various techniques for resolving conflicts using a neutral third party. The technique that the NRC has decided to employ is mediation; a voluntary, informal process in which a trained neutral mediator works with parties to help them reach resolution. If the parties agree to use ADR, they select a mutually agreeable neutral mediator who has no stake in the outcome and no power to make decisions. Mediation gives parties an opportunity to discuss issues, clear up misunderstandings, be creative, find areas of agreement, and reach a final resolution of the issues. Additional information concerning the NRC ADR program can be obtained at <a href="http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html">http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html</a>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC program as a neutral third party. Please contact ICR at 877-733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of this issue through ADR.

Either the PEC or the ADR mediation session will be closed to public observation because the NRC's preliminary findings are based on an NRC OI report that has not been publicly disclosed. However, the time and date of the PEC or ADR will be publicly announced. Please contact Art Burritt, Chief, Projects Branch 2, Division of Reactor Projects, at 610-337-5069 within **10** days of the date of this letter to notify the NRC whether you will be attending a PEC or electing to engage in ADR, and to discuss when the meeting will occur. Either the PEC or ADR should be held in our office in King of Prussia, PA, within **30** days of the date of this letter.

No written response regarding the apparent violations is required at this time. In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be made available electronically for public inspection in the NRC Public Document Room and from the NRC Agency-wide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>.

Sincerely,

## /RA/

Michael L. Scott Acting Division Director Division of Reactor Projects

## **Enclosures:**

- 1. Factual summary of OI Investigation Report No. 1-2012-036
- 2. Apparent Violations Being Considered for Escalated Enforcement Action
- 3. Brochure NUREG/BR-0317, "The Nuclear Regulatory Commission's Post-Investigation ADR Program: Alternative Dispute Resolution Administered by Cornell University's Institute on Conflict Resolution"

Docket Nos. 50-247 and 50-286 License Nos. DPR-26 and DPR-64

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Sincerely,

/RA/

Michael L. Scott Acting Division Director Division of Reactor Projects

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1. Factual summary of OI Investigation Report No. 1-2012-036

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Docket Nos. 50-247 and 50-286 License Nos. DPR-26 and DPR-64

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Letter to Mr. John Ventosa from Michael L. Scott, dated December 18, 2013

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# Factual Summary of NRC Office of Investigations Case No. 1-2012-036

In January and February, 2012, the Indian Point (IP) Engineering Department conducted a self-assessment in preparation for an upcoming NRC Component Design Bases Inspection. The self-assessment included a review of IP's Emergency Diesel Generator (EDG) fuel oil delivery systems and storage tanks. The assessment team reviewed EDG fuel oil sample data maintained in an IP Chemistry Department database and identified that: 1) samples taken from the reserve fuel oil storage tank (RFOST) on June 17, 2011, and December 1, 2011, had not been entered into the database until July 14, 2011, and January 23, 2012 (respectively); 2) both samples had exceeded the Technical Specifications (TS) particulate limits; and 3) no condition reports (CRs) had been written in response to the out of TS condition and, evidently, no resampling performed.

On February 2, 2012, the team leader sent an email to the Chemistry staff specialist who had entered the sample results in the database (and copied the Chemistry Manager), and questioned how the TS condition had been exited. The Chemistry specialist responded that he had been unaware of the TS limit and, therefore, had not recognized that it had been exceeded. Subsequently, on February 5, 2012, database entries were made to indicate that resamples for the RFOST samples taken on June 17, 2011, and December 1, 2011, had actually been performed on June 29, 2011, and December 9, 2011, respectively (i.e., within the 30 day period allowed by TS), and that the re-samples were within the TS limits. These entries were coded in the database as being made by the Chemistry Manager, and the re-samples as being taken by one of the Chemistry technicians. In response to a condition report written by the assessment team leader, the Chemistry Manager indicated that the re-samples had been taken but had not been timely entered into the database. Subsequently, in response to questions from IP staff about why no paperwork from the offsite laboratory that usually analyzes such samples existed for the resamples, the Chemistry Manager wrote a condition report indicating that the resamples had been analyzed in-house.

The Chemistry Manager, who retired at the time the licensee requested to interview him as part of its own investigation, admitted during an interview with the NRC Office of Investigations, that re-samples had not been obtained and he had, instead, simply created values based on historical sample results. The Manager testified that he believed the results of the original June 17, 2011, and December 1, 2011, samples were incorrect because IP was, at the time, obtaining samples from the bottom of the RFOST and shipping them in a tin-coated can, both practices that were specifically not recommended by newer American Society for Testing and Materials (ASTM) guidance. The Manager said that he falsified the data because he needed more time to prove his theory and incorporate new test methods, and he had not wanted the plant to unnecessarily shut down. The Manager also admitted to OI that, during this same timeframe, he had similarly provided false information for one of the onsite fuel oil storage tanks (the 22 EDG FOST) after learning that the TS particulate for a November 18, 2011, sample had been exceeded, by indicating a re-sample had been taken that was within limits when, in fact, no re-sampling was performed. The Manager further admitted that the information pertaining to the supposed resamples that he had entered into the aforementioned condition reports had been false.

## **Apparent Violations Being Considered for Escalated Enforcement**

1. Indian Point Nuclear Generating Unit 2 (IP2) Technical Specifications (TS) 5.5.11 and Indian Point Nuclear Generating Unit 3 (IP3) TS 5.5.12, "Diesel Fuel Oil Testing Program," in part, require verification every 92 days that total particulate concentration of the fuel oil in the onsite and reserve storage tanks is less than or equal to 10 mg/l.

IP2/3 TS 3.8, "Electrical Power Systems," Section 3.8.3, "Diesel Fuel Oil and Starting Air," requires that whenever the total particulate concentration of fuel oil in the fuel oil storage tanks (FOSTs) exceeds the limit, it must be restored within limits within 7 days (30 days for the reserve fuel oil storage tank (RFOST)), otherwise, the associated diesel generators must be immediately declared inoperable.

IP 2/3 TS 3.0.3 states that when a TS Limiting Condition of Operation is not met and the associated Actions are not met, action shall be initiated within 1 hour to place the unit, as applicable, in: MODE 3 within 7 hours, MODE 4 within 13 hours, and MODE 5 within 37 hours.

Contrary to the above, on or about February 2, 2012, Entergy Nuclear Operations (ENO) identified that test results for a November 18, 2011, fuel oil sample from the IP 22 FOST and for a December 1, 2011, fuel oil sample from the IP RFOST, indicated total particulate concentration for both tanks was in excess of the Technical Specification limits of 10 mg/l. Although the total particulate concentration for these systems had not been demonstrated to be within limits within 7 days and 30 days, respectively, ENO did not declare the associated diesel generators inoperable and did not place the units in MODE 3 within 7 hours, MODE 4 within 13 hours, and MODE 5 within 37 hours.

2. 10 CFR 50.73(a)(2)(B) requires the holder of an operating license to, within 60 days after discovery, submit a Licensee Event Report to the NRC for any operation or condition which was prohibited by the plant's Technical Specifications.

IP2 TS 5.5.11/IP3 TS 5.5.12, "Diesel Fuel Oil Testing Program," in part, require verification every 92 days that total particulate concentration of the fuel oil in the onsite and reserve storage tanks is less than or equal to 10 mg/l.

IP2/3 TS 3.8, "Electrical Power Systems," Section 3.8.3, "Diesel Fuel Oil and Starting Air," requires that whenever the total particulate concentration of fuel oil in the reserve fuel oil storage tank (RFOST) exceeds the limit, it must be restored within limits within 30 days, otherwise, the associated diesel generators must be immediately declared inoperable.

IP 2/3 TS 3.0.3 states that when a TS Limiting Condition of Operation is not met and the associated Actions are not met, action shall be initiated within 1 hour to place the unit, as applicable, in: MODE 3 within 7 hours, MODE 4 within 13 hours, and MODE 5 within 37 hours.

TS 5.4, "Procedures," Section 5.4.1, states, in part, that written procedures shall be established, implemented, and maintained covering the applicable requirements and recommendations of Appendix A of Regulatory Guide 1.33, Revision 2 (except as provided in the quality assurance program described or referenced in the Updated FSAR for Unit 2).

RG 1.33, Rev.2, App A recommends chemical and radiochemical control procedures to prescribe the nature and frequency of sampling and analyses. Implementing Procedure ENCY-101, "Chemistry Activities," includes guidance related to chemistry sampling and analysis. Section 5.5 states that out of specification conditions should be identified and corrective actions initiated as quickly as possible. Implementing Procedure 0-CY-1210, "Organization and Responsibilities of the Chemistry Department," includes guidance related to chemistry sampling and analysis. Step 4.1.4 requires a condition report to be initiated to report any condition exceeding any procedural limits.

Contrary to the above, on or about February 2, 2012, ENO staff identified that, on two occasions: 1) fuel oil sample test results had been received indicating total particulate concentrations that exceeded TS limits of 10 mg/l; 2) the total particulate concentration for these systems had not been returned to within limits within the TS-required timeframe; and 3) the associated diesel generators had not been declared inoperable or the units placed in the appropriate operating modes. However, the ENO staff did not initiate condition reports or otherwise report the condition such that a Licensee Event Report could be written. Specifically the ENO staff identified that: 1) on July 13, 2011, Entergy received an RFOST sample result indicating total particulate concentration of 13.4 mg/l, and the parameter was not restored to within limits until September 2, 2011; and, 2) on December 30, 2011, Entergy received an RFOST sample result indicating total particulate concentration of 13.2 mg/l, and, as of February 5, the parameter had not been restored to within limits. The NRC was not informed via an LER that the plant was operating in a condition prohibited by its TS until August 20, 2012, more than 60 days after discovery by the ENO staff.