

December 19, 2007

MEMORANDUM TO: Luis A. Reyes  
Executive Director for Operations

THRU: James E. Dyer, Director */John A. Grobe Acting for/*  
Office of Nuclear Reactor Regulation

FROM: Samuel J. Collins */RA/*  
Regional Administrator  
Region I

SUBJECT: REQUEST FOR RENEWAL OF DEVIATION TO THE ACTION  
MATRIX TO PROVIDE HEIGHTENED NRC OVERSIGHT OF  
SPECIFIC ISSUES AT THE INDIAN POINT ENERGY CENTER

This memorandum requests your approval to continue to deviate from the Reactor Oversight Process (ROP) Action Matrix for the Indian Point Energy Center to provide heightened NRC oversight throughout calendar year 2008 (ROP 9). This action is requested to continue the deviation that was approved on October 28, 2005, and renewed on December 11, 2006, because the exit criteria for the existing deviation have not been met. We intend to continue to closely monitor the licensee's actions to address issues associated with on-site groundwater contamination characterization and mitigation, and the Alert and Notification System (ANS), including implementation and testing of the replacement ANS that Entergy is installing in response to the Energy Policy Act of 2005. The actions we propose in this memorandum for Indian Point Energy Center represent a customized approach that considers factors beyond each unit's Action Matrix categorization. This approach is consistent with underlying concepts of Inspection Manual Chapter 0305, "Operating Reactor Assessment Program."

### Background

#### Groundwater Contamination Issue

On September 1, 2005, the NRC was informed by Entergy that cracks in a Unit 2 spent fuel pool wall had been discovered during excavation work inside the spent fuel pool building. Low levels of radioactive contamination were found in the vicinity of the crack. Entergy's initial investigation of the issue revealed that groundwater in the vicinity was contaminated with tritium. On September 20, 2005, Region I initiated a special inspection of this matter to examine the licensee's performance and determine if the contaminated groundwater affected, or could affect, public health and safety. Subsequently, Entergy initiated actions to perform a comprehensive groundwater site characterization, identify the sources, and effect mitigation and remediation of the condition.

The NRC special inspection report, issued in March 2006, assessed Entergy's performance, achievements, and plans for more extensive site characterization, and reported that the groundwater contamination did not, nor was likely to, adversely affect public health and safety.

In the report, and subsequent public meetings, NRC indicated that a final conclusion would be reached after Entergy completed its groundwater characterization initiative.

NRC Region I has continued inspection and monitoring of Entergy's activities in accordance with an approved deviation to the normal Reactor Oversight Process for calendar years 2006 and 2007. The NRC staff has closely monitored Entergy's groundwater characterization efforts, performed independent inspection and testing, and evaluated radiological and hydrological conditions affecting groundwater onsite.

In November 2007, Entergy reported that it had completed its on-site characterization effort, and was preparing its final report, which is expected to include its plan for remediation and long-term monitoring of the on-site groundwater conditions, for NRC review. Entergy's final report is expected to be received by January 2008. Following a review of the completed report, NRC staff will issue an inspection report detailing our final conclusions on Entergy's performance and radiological assessment of the onsite groundwater contamination. The NRC communication plan for the inspection report will include initiatives such as a New York Government-to-Government meeting and a stakeholder public meeting.

#### ANS Issue

Entergy is required to comply with the Energy Policy Act of 2005, and the associated NRC Confirmatory Order dated January 31, 2006, to supply backup power to the ANS. Entergy was originally required by the January 2006 Confirmatory Order to have the new ANS in operation by the end of January 2007. This date was relaxed by the NRC to April 15, 2007, following a request from Entergy. Testing immediately prior to April 15 revealed that the ANS was not ready to be placed into service, and the NRC issued a Notice of Violation (NOV) to Entergy for failing to comply with the Confirmatory Order. In response to the violation, Entergy committed to having the system in service by August 24, 2007.

Entergy also failed to meet their August 24, 2007 commitment. As a result, the NRC issued a second NOV on August 30, 2007, to Entergy for failure to obtain necessary approvals so that the new ANS could be placed in service as the primary notification system by August 24, 2007. On September 12, 2007, FEMA concluded that the new ANS was not adequate due to its inability to produce a steady alerting tone capable of repetition; sound blocking from co-located sirens, tree limbs and foliage; and control system issues.

On October 25, 2007, Entergy met with FEMA to discuss the technical aspects of Entergy's proposed plans and to determine a mutually acceptable schedule for resolving the open items. Entergy and FEMA met again on November 9, 2007, to further discuss issues with the new ANS. The NRC will continue to monitor Entergy's progress in resolving the technical issues with FEMA. These activities are expected to continue through calendar year 2008 with system testing and final FEMA approval in 2009. Additionally, the NRC is evaluating the appropriate enforcement action for Entergy's not meeting the August 24, 2007 siren in-service date and providing appropriate stakeholder communication.

#### Deviation Basis

The ROP Action Matrix includes a range of licensee and NRC actions for each column of the Action Matrix. However, as discussed in Inspection Manual Chapter 0305, there may be instances in which the actions prescribed by the Action Matrix may not be appropriate. In the

case of Indian Point Energy Center, the actions associated with the Licensee Response Column do not provide for the specific focus and level of oversight needed to appropriately monitor licensee efforts to address the groundwater contamination issue or the improvements to the ANS. Therefore, Region I believes that continued heightened oversight as discussed in the following sections should be performed at a level of effort above that of the Licensee Response Column for Indian Point Energy Center throughout calendar year 2008.

Overall, Entergy's operation of both units at Indian Point Energy Center is acceptable, with both units currently in the Licensee Response column of the Action Matrix. However, ongoing issues associated with groundwater contamination and performance of the new ANS system present unique challenges to the NRC's regulatory oversight of Indian Point Energy Center. This inspection program deviation is needed to ensure that the NRC can continue to inspect Entergy's resolution of the groundwater remediation efforts, installation and testing of the new ANS, and communicate the issues to interested stakeholders.

### Planned Actions

#### A. Deviation Request

Region I requests your approval to continue to deviate from the ROP Action Matrix to provide the following oversight for Indian Point Energy Center throughout calendar year 2008. As discussed above, the NRC intends to perform the following actions to closely monitor Entergy's efforts.

#### Groundwater Contamination Inspection Effort

- The NRC Region I staff will inspect and assess Entergy's final site groundwater characterization effort and verify that Entergy has established effective procedures and processes to assure that remaining contaminated groundwater conditions continue to improve; and that the abnormal release through contaminated groundwater is effectively monitored and accounted for in accordance with NRC regulatory requirements.
- Continue split monitoring well water samples with Entergy and the State of New York for independent testing and assessment of contamination levels in groundwater on a sample basis. The Office of Nuclear Reactor Regulation (NRR) and Region I have agreed on the scope of the confirmatory sample in FY2008 and NRR has initiated actions to fund split sampling in support of this effort.

The proposed effort associated with enhanced monitoring of the Indian Point Energy Center groundwater contamination issue is estimated to involve approximately 0.5 full time equivalent staff (FTE) for calendar year 2008 with an additional 0.1 FTE for stakeholder communication and outreach activities. This effort represents a small fraction of the Region's budget for plant specific/supplemental inspection activities; and with current projections, can be accommodated within the existing budget projections for calendar year 2008. We will continue to identify efficiencies in order to be able to support emergent regional and agency-wide supplemental inspection needs. Similarly, NRR will reallocate existing contract funds in FY2008 to fund the limited scope confirmatory sampling.

#### Reliability, Availability, and Testing of the New Indian Point Energy Center ANS

- Continue to provide enhanced oversight of the current ANS until the replacement ANS has been tested, accepted, and placed in-service.





L. Reyes

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