



Indian Point Energy Center  
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Joseph E. Pollock  
Site Vice President  
Administration

May 15, 2008

Re: Indian Point Units 1, 2 and 3  
Dockets 50-003, 50-247 and 50-286  
NL-08-079

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Mail Stop O-P1-17  
Washington, DC 20555-0001

Subject: **Remediation and Long Term Monitoring of Site Groundwater**

Reference: Entergy letter dated January 11, 2008, J. E. Pollock to Document Control Desk,  
"Results of Ground Water Contamination Investigation" (NL-08-152)

Dear Sir or Madam:

Entergy Nuclear Operations, Inc. (Entergy) provided the results of the comprehensive groundwater investigation conducted at the Indian Point Energy Center (IPEC) during the period October 2005 through October 2007, per the referenced letter. In that letter and the attached investigation report, the scope of the investigation, which included all three reactor units and all areas of the site where credible potential sources of leakage could exist, was described.

The investigation identified the sources of leakage responsible for the radioactive contaminants that have been found in groundwater at the IPEC site. The effected ground water regime has been characterized and modeled, the sources of the leakage identified and the radiological impacts resulting from this leakage determined. Entergy has begun implementation of a long term ground water monitoring program and initiated a remediation program to address the site groundwater conditions described in the report.

During the course of the groundwater investigation, radiological dose impact assessments have been performed and continue to be reported in the Annual Radiological Effluent Release Report to the NRC and changes and enhancements to our Radiological Environmental Monitoring Program (REMP) have been implemented. The only noteworthy pathway resulting from groundwater migration to the river is through consumption of fish and invertebrates from the Hudson River, the calculated doses of which are well below 1/100 of the federal limits.

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Notwithstanding the low dose, Entergy has made the determination to apply a remedial strategy that incorporates source term control and elimination, along with monitored natural attenuation, to address the identified groundwater contamination at the site.

Additionally Entergy is committing to the long term monitoring of site groundwater with the objectives of assuring proper assessment and reporting of dose impact, the identification of potential new leaks to ground water, and the ongoing assessment of the long term monitored attenuation strategy. Attachment 1 lists the commitments associated with this letter.

Implementation plans associated with these objectives include:

1. Continued source term control in the Unit 1 fuel pools via the installed demineralization system, removal of the remaining Unit 1 fuel and draining of the Unit 1 pools by year end 2008.
2. A long term site ground water monitoring program institutionalized via the IPEC Offsite Dose Calculation Manual and associated implementing procedures.

If you should have any questions, please contact Mr. Robert Walpole, Manager, Licensing, Indian Point Energy Center, at 914-734-6710.

Sincerely yours,



J. E. Pollock  
Site Vice President  
Indian Point Energy Center

cc: See Page 3

Attachment 1: List of Commitments

cc: NRC Resident Inspector's Office  
Mr. John Boska, Senior Project Manager, NRC NRR DORL  
Mr. Ted Smith, Project Manager, NRC FSME DWMEP  
Mr. Samuel Collins, Regional Administrator, NRC Region 1  
Mr. Paul D. Tonko, President, NYSERDA  
Mr. Paul Eddy, New York State Dept. of Public Service  
Mr. John White, Branch Chief, NRC Region 1  
Mr. Tim Rice, New York State DEC

**ATTACHMENT TO NL-08-079**

**List of Commitments**

**ENERGY NUCLEAR OPERATIONS, INC.  
INDIAN POINT UNITS 1, 2 and 3  
DOCKET NOS. 50-003, 50-247 and 50-286**

**List of Commitments**

<b>Number</b>	<b>Commitment</b>	<b>Due Date</b>
NL-08-079-1	Entergy will remove the fuel from the Unit 1 pool to the existing ISFSI and drain the associated fuel pools to a level low enough to allow final cleaning and sludge removal as necessary.	12/31/08
NL-08-079-2	Process remaining Unit 1 pool bottoms/water for cleanup.	4/30/09
NL-08-079-3	Report to USNRC Region 1 schedule deviations which jeopardize the overall Unit 1 fuel removal and draining schedule.	Ongoing until Unit 1 fuel removal to the existing ISFSI and draining of associated Unit 1 fuel pools
NL-08-079-4	Entergy will incorporate the institutional controls and objectives associated with the long term groundwater monitoring program into the IPEC Offsite Dose Calculation Manual and associated implementing procedures.	7/30/08