



**Entergy Nuclear Northeast**  
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November 3, 2005

Re: Indian Point Unit Nos. 1 and 2  
Docket Nos. 50-003 and 50-247  
NL-05-129

Regional Administrator, Region 1  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406-1415

Subject: **Monitoring Well MW-111 Tritium 30 Day Special Report**

Reference: 1) Offsite Dose Calculation Manual, Revision 9, Section D 3.5;  
"Radiological Environmental Monitoring"

Dear Mr. Collins:

This report is being provided in accordance with Section D 3.5 of the Indian Point 2 Offsite Dose Calculation Manual (ODCM) (reference 1). On October 5, 2005, the measured tritium activity from groundwater monitoring well MW-111 was found to be  $2.11 \text{ E}+5 \text{ pCi/L}$  ( $2.11\text{E}-4 \text{ uCi/ml}$ ), which is above the ODCM reporting limit of  $3.0 \text{ E}+4 \text{ pCi/L}$  ( $3.0\text{E}-5 \text{ uCi/ml}$ ). MW-111 was initially installed in the year 2000 to evaluate the possibility of contaminants such as oil and PCB's in preparation for the sale of Indian Point Unit 2 to Entergy. MW-111 is located in the Protected Area, in the Unit 2 transformer yard, an area that is relatively close to both the Unit 1 and Unit 2 Spent Fuel Pools. Although this sample was not part of the station's Radiological Environmental Monitoring Program (REMP), this report is being provided since the level of tritium is above the REMF reporting level.

The groundwater from this well was analyzed for tritium content when it was installed in the year 2000 and no tritium was detected. Since that time no other samples have been taken. As part of the ongoing investigation into the Indian Point 2 fuel pool south wall leak, samples were taken from three on-site wells and analyzed for radiological content. Only monitoring well MW-111 indicated the presence of tritium.

During the continuing efforts to investigate the Unit 2 spent fuel pool south wall leak, samples from five additional existing shallow wells located in the vicinity of the Indian Point 3 Turbine Building were taken in mid-October. When analyzed, the only radionuclide identified was tritium

(H-3) in the following concentrations:

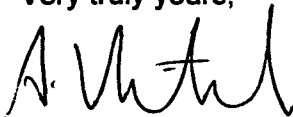
T-1 (inside Turbine Building, NE corner) 1.6 E-6 uCi/ml (1600 pCi/L);  
T-2 (inside Turbine Building, SW corner) 7.7 E-7 uCi/ml (770 pCi/L);  
U-3-1 (outside Turbine Building, NW corner) 4 E-7 uCi/m (400 pCi/L);  
U-3-2 (outside Turbine Building, NW corner) 9.6 E-7 uCi/ml (960 pCi/L);  
U-3-3 (outside Turbine Building, NW corner) 4.4 E-7 uCi/ml (440 pCi/L).

For perspective, the Federal Environmental Protection Agency (EPA) regulation, 40 CFR 141 limits tritium concentration in drinking water to 20,000 pCi/L (or 2 E-5 uCi/ml). The highest of these five samples (T-1) contained a tritium concentration that was less than 10% of the tritium concentration permitted by EPA standards for drinking water. It is noted that there are no drinking water sources in the vicinity of any of these wells.

Entergy is currently working with a hydrologist and other consultants to design and implement a groundwater monitoring study to determine the source(s) of the tritium. This information will be used to determine any necessary corrective actions. The NRC is inspecting this effort. The cause of exceeding the limits and corrective action will be provided in the annual REMP report when available.

There are no new commitments made by Entergy contained in this letter. If you have any questions, please contact Patric W. Conroy, Manager, Licensing at (914)734-6668.

Very truly yours,

 FOR

Paul W. Rubin  
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Indian Point Energy Center

cc: Mr. John P. Boska, Senior Project Manager, Section 1  
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