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**Date:** 2/27/06 5:10PM  
**Subject:** IPEC status report for Feb. 27

Indian Point Energy Center

Status Report

A/86

February 27, 2006

#### Operational Status

Indian Point Unit 2 is operating at 100% and has been online 67 days.

Indian Point Unit 3 is operating at 100% reactor power and has been on-line for 146 days. Operations and maintenance crews are making plans for 2R17 refueling outage at IP2 scheduled to begin in April.

#### Tritium Investigation - Progress Report

Indian Point completes installation of phase 1 monitoring wells

Test results from a monitoring well installed at Indian Point near the discharge canal show elevated levels of tritium. The monitoring well (MW-37) is located adjacent to the discharge canal within the IP2 turbine building on the river side of the canal. Sample results were 30,000 pCi/L as compared to the Environmental Protection Agency drinking water standard of 20,000 pCi/L. The EPA standard is a reference level only since the Hudson River is not used as a source of drinking water for this area.

All samples of drinking water supplies and monitoring wells off-site continue to show no detectable levels of tritium or any other radionuclides from the plant.

"This latest result suggests that ground water containing tritium is migrating from the IP2 transformer yard under the discharge canal and into the Hudson River," said Don Mayer, director, special projects. Samples taken in the river along the shoreline and in the discharge canal have shown no detectable tritium activity.

"We are continuing to press ahead with the drilling program on site so that we have a full understanding of how water flows on site. Ground water characterization will be an important element in developing a mitigation or remediation strategy," Mayer said.

Conservative bounding calculations using higher concentrations of tritium indicate that the radiological dose impact to the public from this pathway is an extremely small fraction of permissible levels and a small fraction of the dose impact from routine, permitted discharges.

The tritium investigation followed the discovery of moist, hairline cracks on the south face of the IP2 spent fuel pool in September last year. The highest levels of tritium have been found in the IP2 spent fuel pool loading bay and in the adjacent transformer yard. The latest sample well is directly west of the IP2

transformer yard in the direction of the Hudson River.

Two monitoring wells (MW-38 and MW-48) have been installed on the south end of the Indian Point property near IP3. Test results from these two wells have shown slightly elevated levels of tritium, range from 1400 pCi/L to about 250 pCi/L, respectively. The last test result was from a sample taken by the New York State DEC. MW-48 is part of the phase 2 well program to determine if these levels of tritium are connected to the tritium plume near IP2.

#### Split Sampling Program

As part of the investigation, New York State, the Nuclear Regulatory Commission and Entergy have taken split samples from off-site locations and the phase 1 monitoring wells.

Test results from all off-site locations have shown no detectable tritium activity as well as negative results for all other radionuclides characteristic of spent fuel pool water. Samples taken from phase 1 wells have generally shown consistent results among the three parties for tritium.

A split sample from one of the monitoring wells (MW-111) in the IP2 transformer yard has shown a low level for Sr-90, a radioactive isotope found in the spent fuel pool and other primary water systems. Tests results from a New York State DEC sample, analyzed at the Department of Health's Wadsworth Laboratories in Albany, N.Y. showed trace levels of Sr-90 (3 pCi/L) while comparable samples analyzed by the NRC and Entergy did not show detectable activity. Depending upon the analytical technique used and the sensitivity of the equipment, different radiochemistry laboratories will have varying detection limits. The DOH uses a very low limit of detection for its samples. This level of Sr-90 is close to background environmental levels, which range from 0.7 pCi/L to 1.3 pCi/L. As a point of reference, the EPA drinking water standard for Sr-90 is 8 pCi/L. Split samples were taken from this well on February 7 and will be analyzed for Sr-90 in addition to tritium. As there is no indication of tritium or any other radionuclide in off-site drinking water supplies, there is no health or safety impact from these sample results.

#### Spent Fuel Pool Liner Inspection

Underwater Construction, a specialty diving company operating out of Essex, Connecticut, performed two dives in the IP2 spent fuel pool last week. The divers leak tested, using a vacuum box, three anomalies on the north and west wall of the spent fuel pool but did not get any indication of leakage through the spent fuel pool liner. The divers did apply an epoxy like sealant suitable for underwater use to six locations in the spent fuel pool-the three locations that were vacuum box tested and three locations near the cask loading pit on the southwest corner of the spent fuel pool. Those three locations were previously leak tested.

Status Report Available on JIC Website

The Indian Point status report is now available on the new Joint Information Center web site. The web site is part of the virtual news room concept that is being developed for public emergency information. Starting next week, the status report will be sent to the distribution list via the web site. The web site will also include the latest radiological release information for Indian Point.

To preview the web site follow the link to Indian Point  
<<http://jic.semo.state.ny.us/PlantStatus/PlantStatusMain.aspx>> Status Page

#### Educational Outreach

Entergy Nuclear Northeast provides customized outreach education programs for schools, youth groups, and civic organizations. The topics we cover include Emergency Planning, Understanding Radiation, Nuclear Fuel and a general overview of the operations of Indian Point Energy Center. If you would like a brochure or are interested in scheduling a program, contact IPEC Communications at 914-271-7441.

If you have any questions or need clarification of the information provided, please contact Kathy McMullin, manager of communications, Indian Point Energy Center, at 914-271-7132.

## **Indian Point Energy Center**

### **Status Report**

**February 27, 2006**

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