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**Subject:** Fwd: Indian Point Groundwater Status

FYI

Regards,

Jim

*B-114*

Indian Point Groundwater Contamination Project Status - 11/3/2006

JDN

1. Recovery well pump test to conclude today. Initial indications indicate successful local drain suppression will encompass the entire footprint of the Unit 2 SFP and could serve as an effective remediation point for SFP leakage and serve as a future leak detection system. To serve as a future leak detection system, either the levels of tritium concentration would need to be reduced (to enable detection of any new leaks), which could be accomplished by periodic remediation pumping and then sampling; or find and fix the current leak in the SFP. Current evidence indicates the fuel transfer canal may be a success path in that regard. Eddy current testing of the visual indications and subsequent repair will occur during the first quarter 2007. The Unit 1 leaking spent fuel pool Sr-90 levels have been reduced by demineralization to 2900 pCi/L and the spent fuel is scheduled to be removed during the fourth quarter 2007 with subsequent draining of the leaking spent fuel pool during the first quarter of 2008.

2. Final monitoring well installation still requires drilling MW-61, and developing and installing Waterloo packer units in 9 remaining wells. This will be completed by the end of 2006. The final site characterization evaluation report is currently projected to be published by April 30, 2007.

Monitoring well groundwater sampling data indicates a tritium plume leading from the Unit 2 SFP directly to the Hudson River (220,000 at the source MW down to 45,000 pCi/L at MW by the river). Associated with Unit 1, there is a Sr-90 and H-3, two-part plume. There is a tritium plume associated with Unit 1 from the north curtain drain from 13,000 pCi/L and extending toward the discharge canal down to 2,000 pCi/L and a corresponding Sr-90 plume from 110 pCi/L down to 19 pCi/L by the river. Since cleanup of the leaking Unit 1 SFP water in June 2006, the Sr-90 plume level has dropped to 13 pCi/L near the source down to 8 pCi/L by the river. A secondary Unit 1 groundwater plume is narrow extending towards the Unit 3 auxiliary building. This linear plume is 3,000 pCi/L tritium and 2.8 - 1 pCi/L Sr-90. The licensee believes this plume is directly in line with a storm drain discharge pipe from the north curtain drain system that was rerouted in 1994 and may still be providing a discharge path in the associated pipe trench. They believe this is still an active leak, because the Sr-90 level has decreased since reducing the Sr-90 concentration in the leaking Unit 1 SFP in June. The licensee is investigating confirmation of the cause and mitigation of this Unit 1 plume source.

3. Other remaining licensee action items include:

The licensee will conduct a tracer test from two Unit 1 locations (on the north and south sides of the Unit 1 SFP) and 1 Unit 2 location (MW-30) beginning in early December 2006, and will require monitoring for up to 13 weeks to allow natural groundwater migration and detection in the monitoring wells. This test should confirm the site characterization model or indicate other areas of investigation. Results from this test will be part of the final geo-hydrology report expected by April 30, 2007.

A long term site monitoring plan has been under development and should be approved by the end of November 2006. Changes to the REMP and RETS program are also included in this plan which provides for offsite dose calculations from current or future monitored releases.

The Unit 2 PAB sump is planned to be lined with a stainless steel liner to preclude any releases from this location as a preventative measure. The Unit 1 containment spray sump will be outfitted with a sampling port and transducer to measure groundwater level to provide intelligence on any future water intrusion to this currently drained sump.