

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Environmental Regulation

Acting Commissioner

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November 19, 2009

Joseph Grimes, Senior Vice President Mid Atlantic Operations Exelon Generation 200 Exelon Way Kennett Square, PA 19348

Dear Mr. Grimes:

This is to follow up to the meeting held September 24, 2009 regarding Oyster Creek Nuclear Generating Station's releases of tritium contaminated water. At the meeting we discussed a number of issues and concerns associated with the leaks including laboratory testing, aquifer monitoring, potential impacts to the groundwater and bay and the integrity of the piping. In addition, the New Jersey Department of Environmental Protection (Department) expressed its concern about the resulting groundwater contamination. As explained at our meeting, we have received hundreds of inquiries from the public regarding these releases of tritium. We must provide timely and accurate data to respond to these concerns.

The first release became apparent in April 2009 from holes, up to an inch in diameter, in two underground pipes. Tritium concentrations from that release were in the range of 6 Million picoCuries per liter (compared to New Jersey's ground water standard of 20,000 picoCuries per liter). The second release occurred in August 2009 with tritium concentrations in the range of 10 Million picoCuries per liter (500 times New Jersey's groundwater standard) from a pipe that had been excavated in April, checked for integrity, and re-buried. Well monitoring data has confirmed that as a result of these leaks, two aquifers have been contaminated – the Cape May and the Cohansey.

Groundwater monitoring data shows that the tritium contamination has been slowly migrating through the aquifer into the intake and discharge canals. All samples taken at the Route 9 Bridge (the closest public access point) have been below the level of detection due to the dilution provided in the canal. Based on modeling of potential routes of exposure there appears to be no current public health impact and no samples have exceeded New Jersey's surface water standard. Yet, there is an ongoing, slow migration of tritium. Exelon has been proud to be a "zero discharge" plant releasing no radioactivity into the canal from any pipes; however, achieving this distinction through an unmonitored release through the aquifer seems disingenuous.

The Department has requested these split samples be tested in an independent certified laboratory. We have posted this data on our website in an effort to keep the public informed about the tritium migration. However, there have been extensive delays in providing split samples to the Department, especially since the August release. We remain concerned that our ability to provide transparency on the migration of the tritium through the groundwater and into the canal is limited by your shipping schedule.

Part of the impetus for the independent lab analysis of these samples has been Exelon's continued reluctance to certify their on-site laboratory for tritium analysis. Exelon's laboratory is currently certified for total organic carbon, pH, temperature, and chlorine, making your reluctance to add tritium analysis even more perplexing. As stated in a letter to Tim Rauch dated October 10, 2008, the Department does not have confidence in the tritium data generated by Oyster Creek's on site analytical laboratory.

The Barnegat Bay is critical to the economic and ecological well-being of our state. The New Jersey DEP and its partners are committed to ensuring that Barnegat Bay remain a viable and healthy multi-use ecosystem that all can enjoy for many years to come. As we have not been able to provide the transparency nor the data that we would have liked regarding the tritium releases, we suggest that Exelon provide a presentation to the Barnegat Bay National Estuary Program on the tritium leaks. The Barnegat Bay Estuary program through its federal enabling legislation has the responsibility of coordinating use issues on the Bay. An invitation will be forthcoming.

New Jersey will continue to insist on the highest scrutiny for nuclear power plants with the potential to affect our citizens. We remain concerned about the radioactive contamination discharging into and migrating through the waters of New Jersey.

NJDEP expects Exelon to fully and promptly provide data and samples which will allow NJDEP to understand the concentrations and locations of the Oyster Creek contamination. We are appreciative of the action that Mike Massaro described at the meeting on September 24, 2009, to put all of Oyster Creek's underground piping carrying tritiated water into pipe vaults within one year.

We appreciate the time you have spent discussing this matter with us. We look forward to receiving your stated commitments for capital improvements to prevent further releases in writing.

Nancy Wittenberg

c: Samuel Collins, Administrator, NRC Region 1
Wolfgang Skacel, Assistant Commissioner, Compliance & Enforcement