

July 9, 2009

Dear Plant Neighbor:

Now that its Root Cause Analysis is complete, Exelon is able to provide the public with a summary of its findings.

Exelon has been forthcoming about this issue since its inception. When tritium was discovered on April 15, the company immediately reported it to the Nuclear Regulatory Commission and NJ Department of Environmental Protection and sent out two news releases within 72 hours to the media. At each step, Exelon has called elected officials and community leaders to provide regular updates. Since April 15, Exelon has distributed five news releases, held tours of the spill and excavation site for government officials and members of the public, and hosted more than 130 people who attended an open information session at the plant on June 18 at which they discussed tritium and plant operations with station and independent experts. Exelon employees also discussed tritium with the public at the NRC annual assessment meeting.

In addition, federal and state regulators have closely followed this issue, and they have performed additional inspections because of it. The plant also provides water samples to the NJ DEP so that they can perform their own analysis. Plant water samples continue to show no detectable levels of tritium off-site.

### **Oyster Creek Tritium Source Summary**

Confidentiality of internal root cause documents is maintained to ensure the ability of station personnel to be intrusive and self-critical with commentary and conclusions. A root cause evaluation report is a technical and comprehensive document that contains such things as a timeline of events, review of industry operating experience and a list of team members who performed the analysis. The analysis discusses root causes and contributing causes to help Exelon better understand the issue and prevent it from occurring again. Root cause documents can contain security-related, proprietary and personal information and therefore it is our general practice to keep these documents internal. However, in this case of tritium findings at Oyster Creek Station, providing key information regarding root cause findings is helpful to explain the technical actions the site is taking to manage this issue.

Our findings indicate this issue was specific to our non-safety related buried piping, and we are addressing this matter aggressively. At no time has there been a threat to public or employee health and safety.

First it is important to note that our monitoring program works. The leaks were found quickly, and just as quickly they were stopped and the pipes replaced. As part of our rigorous environmental program, Exelon has continued to excavate and examine piping in the area to ensure its integrity. While this piping is not considered vital to the safety of the plant, it is clearly important that we maintain its integrity from an environmental perspective.

A key component of the root cause is to identify opportunities to improve our buried piping program. Our commitment to excellence drives us to thoroughly review and critique our own performance and identify corrective actions for improvement.

### **Root Cause Conclusion**

1. Localized corrosion caused the two leaks in 8-inch and 10-inch underground pipes. Improperly applied coatings during maintenance in the early 1990s allowed moisture to come in contact with both pipes.

## **Oyster Creek Root Cause Summary – cont'd**

2. An engineering document on the piping program contained errors for the two buried pipes. The document correctly recorded that these two lines had been excavated in 1991, but incorrectly stated that both pipes had been completely recoated and the 8-inch line replaced with stainless steel. The recoating activity performed in 1991 did not replace all existing coating, leaving some adjoining areas vulnerable to corrosion.

In addition to the root causes, there were other contributing issues that were identified as part of the review, including changes in the management of the buried piping program, and challenges of achieving complete assessment of buried pipe using available technology.

### **Root Cause Corrective Actions Planned or Under Way**

1. The leaking pipes have been replaced.
2. Exelon is implementing a strategic plan for moving direct buried piping either above ground or into monitored trenches, or some alternate protective measure.
3. Exelon has performed a thorough review of Oyster Creek's buried piping program and is in the process of correcting all identified deficiencies.
4. Exelon has reviewed all previous work on buried piping, including inspection and testing results.
5. Exelon will update design drawings and its buried pipe database to eliminate identified discrepancies.

The purpose of the buried piping inspection program is to regularly assess the condition of the pipes.

In addition to the corrective actions discussed above, Oyster Creek is frequently testing on-site monitoring wells to ensure that any other issues are promptly identified and corrected.

### **Background**

On April 15, 2009, in preparation for work inside a concrete vault, water was found inside the vault. As part of our environmental monitoring program for water removal, the water was pumped into drums and sampled for tritium. Sample analysis identified elevated tritium levels. The station provided a report to the NJ DEP within 15 minutes.

A follow up study determined that the release of tritiated water was caused by leaks in an 8-inch and 10-inch carbon steel condensate system pipes.

If you have questions, please contact David Benson, Site Communications Manager at (609) 971-2185 or [david.benson@exeloncorp.com](mailto:david.benson@exeloncorp.com). More information can also be found at [http://www.exeloncorp.com/ourcompanies/powergen/nuclear/oyster\\_creek/](http://www.exeloncorp.com/ourcompanies/powergen/nuclear/oyster_creek/).

Sincerely,



Mike Massaro  
Site Vice President  
Oyster Creek Generating Station  
Exelon Nuclear