

From: Gray, Mel
Sent: Friday, May 03, 2013 1:29 PM
To: 'aceactivists@comcast.net'
Subject: Response to Your Email dated April 5, 2013 regarding the Limerick Station

Dr. Cuthbert,

I am in receipt of your email dated April 5, 2013 involving spent fuel and low level waste disposal at the Limerick Generating Station. You provided questions that you indicated resulted from discussions you had in the past with personnel from Exelon Corporation. While I cannot speak to your discussions with Exelon employees, my staff developed the following responses based on our regulatory requirements and the results of our independent inspections at the Limerick Station.

1. Exelon employee said: "Fuel rods stay in fuel pools 6-10 years." We were previously given 3 different answers about required cooling time from NRC. (1) 5 years (2) 1 year (3) 3 years
What is NRC's exact required time rods must cool in pools at Limerick before removal?

At most nuclear power plants, fuel is typically cooled at least 5 years in the pool before transfer to cask. NRC has authorized transfer as early as 3 years; the industry norm is about 10 years. Limerick uses the NUHOMS 61-BT dry shielded canister (DSC) that has a specified minimum cooling time in the spent fuel pool of 5 years and a maximum required cooling time of 10 years depending on fuel burn up. The Technical Specification applicable to the dry cask system used at the Limerick Station is available in ADAMS under ML0628300067. (Table 1-1c). Information on this and other cask systems can be found at:

<http://www.nrc.gov/waste/spent-fuel-storage/designs.html>. The NRC periodically inspects licensee actions to ensure that they are consistent with the manufacturer's requirements. The most recent Limerick independent spent fuel storage facility inspection (ISFSI) is documented in NRC Inspection Report 05000353/2011004 (<http://pbadupws.nrc.gov/docs/ML1130/ML11308B146.pdf>).

2. At a previous meeting an Exelon employee said: "Exelon is taking 1-year-old rods and wrapping older rods around them to bundle for cask storage." **Is That True? How does NRC know if hottest rods are removed in a year or not if others are bundled around them?**

No. As was previously mentioned, each DSC has technical specifications (TS) which restrict the conditions on the type and burn-up of fuel that is loaded into the cask. These TS must be followed by all licensees using this cask system and compliance with the TS is reviewed during NRC inspections. This ensures that the DSC remains within the physical parameters to which it was licensed by the NRC. During the NRC's most recent Limerick ISFSI inspections, the NRC reviewed the spent fuel loading plan and assembly specifications to ensure fuel selected meets the DSC TS. No violations were identified.

3. Exelon employee said today: "Exelon leases fuel rods from the federal government and that the government, not Exelon, owns them." **Is that true? Who does Exelon pay and have the lease agreement with?**

No. Exelon purchases fuel from a commercial fuel supplier. The federal government does not sell or lease fuel to Exelon.

4. The Exelon employee said: "Limerick's low-level waste is going to South Dakota and Peach Bottom in 4 shipments a year." **NRC records on Limerick's LLRW do not reflect that. When did Limerick's LLRW start going to each location? Scott Barber sent us information for 2005 thru 2011, but that information did not show volume nor mention either as a destination. How can we find the volume that is sent in each shipment? We were told today these shipments need special haz-mat permits and are all approved by PENN DOT and marked. Please send us those records.**

Regarding LLRW records, these are not NRC records. The annual effluents report is required by the NRC and generated by each licensee. In Limerick's case, Exelon compiles and generates the data and various aspects of it are reviewed during NRC inspections. Regarding locations and volumes of shipments, specific details of the LLRW generated and subsequently shipped offsite from Limerick Generating Station was provided to you in our March 22, 2013 response to your February 27, 2013 email. The total volume of waste being shipped (in cubic meters) and its intermediate (Duratek, now Energy Solutions) and final location (Energy Solutions, Clive, UT) is mentioned in Appendix B of the annual effluents reports. South Dakota is not one of those locations. Regarding special permits, the shipping of LLRW must comply with NRC and Department of Transportation (DOT) requirements which include various permits and postings. NRC inspectors periodically review licensee compliance with these requirements. While NRC inspectors review these licensee records during inspections, the NRC does not routinely retain these records as a matter of policy. Hence, these records are not typically available from the NRC.

Notwithstanding, you may request the NRC to search and retrieve any document in its possession under the Freedom of Information Act (FOIA). Guidance for requesting documents from the NRC under the FOIA is available on the NRC public website at <http://www.nrc.gov/reading-rm/foia/foia-privacy.html>.

I trust this information is responsive to your questions.

I did receive your email yesterday asking that answers be provided to the package of information you gave me at our public annual assessment meeting on March 21, 2013. Due to the number of questions and statements, my staff is still developing responses. We are working toward a mid-May response. If there are certain issues that are of higher priority to you, please contact me and we will work to communicate earlier regarding these issues.

Sincerely,

Mel Gray