

From: Hughey, John
Sent: Thursday, February 23, 2012 6:56 AM
To: Kathy.Barnes@exeloncorp.com
Cc: 'kevin.borton@exeloncorp.com'
Subject: EPU Application Information

Kathy,

I have provided some information below regarding items that the NRC staff is interested in seeing included in EPU applications. We are not asking that any of these topics be included in upcoming pre-submittal meetings. I also want to mention that I am waiting on you to provide me with the proposed agenda for the 4/5 Peach Bottom pre-submittal meeting so that I can determine who needs to attend and send out meeting notices accordingly.

Thanks,
John

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Past EMCB RAIs can be found in ADAMS at ML11242A140. The clarification below also applies to these RAIs:

By letter dated August 25, 2011, "Crystal River Unit 3 - Response to Request for Additional Information to Support NRC Mechanical and Civil Branch Acceptance Review of the CR-3 Extended Power Uprate LAR (TAC No. ME6527)," Florida Power Corporation, doing business as Progress Energy Florida (PEF), Inc., provided a response to an NRC request for additional information, in part, related to the piping and support design and analyses for the Extended Power Uprate (EPU) plant modifications needed to support the Mechanical and Civil Branch acceptance review of the Crystal River Unit 3 (CR-3) EPU License Amendment Request. Based on an NRC-PEF teleconference on September 14, 2011, the following is provided as clarification to the response letter (3F0811-03) dated August 25, 2011.

Structural evaluations and required design calculations for pipe stress and pipe support evaluations associated with structures, systems, and components (SSCs) credited in the EPU safety analyses have been completed and controlled documentation exists which finds the applicable SSCs are structurally adequate to perform their intended design functions under EPU conditions. These structural evaluations and analyses were completed by PEF or by a vendor with an approved 10 CFR 50, Appendix B, Quality Assurance Program, were owner reviewed by PEF, and are vendor-issued controlled documents. These documents are controlled and maintained as part of the CR-3 EC package until modification installation and testing is complete, at which time these structural analysis documents will be placed in the CR-3 document control system.

The Environmental Review and Guidance Update Branch staff also provided a list of important information they would like to see included in EPU applications:

Description of Power Plant Modifications

- Provide a brief description of power plant modifications needed for the uprate (e.g., what needs to be modified and where).

Land Use, Socioeconomics, Environmental Justice

- Describe when plant modifications will take place (Are both units modified at the same time or is each unit modified separately?).
- Explain how long (days/weeks) will modifications take place (e.g. the normal amount of time for a refueling outage or an extended amount of time)
- Describe how many workers (in addition to the number of refueling outage workers) would be required to implement uprate modifications.
- Estimate the number of additional truck deliveries needed to bring materials, equipment, and components to the site to modify the units.
- Estimate the number of additional activities and refueling workers (if any) that will be required at the site after the uprate has been implemented.

Ecology

- List any species identified for protection by the Commonwealth of Pennsylvania or the Federal government that may occur in the area around the plant and in sections of transmission-line corridors between the plant and the regional power grid.
- Describe any recent programs Exelon has used to determine if protected species may be in the general vicinity or the plant site or in the transmission-line corridors between the plant and the regional power grid or in any other areas potentially affected by the uprate modification activities.
- Describe whether or not essential fish habitat as explained by the Magnuson-Stevens Act occurs near the plant. If it does, describe the habitat.
- Provide a copy of the National Pollutant Discharge Elimination System (NPDES) permit for the site.
- Under Section 316(a) of the Clean Water Act, thermal effluent, such as cooling water is considered a pollutant, and facilities wishing to discharge thermal effluent into a water source must apply for a NPDES permit. Clean Water Act Section 316(a) allows a thermal discharger to obtain a thermal effluent variance by demonstrating that less stringent thermal effluent

limitations would still protect aquatic life. Please provide a copy of the 316(a) variance for the plant and indicate whether an additional variance would be required as a result of the uprate.

- EPA regulations that implement 316(b) regulations of the Clean Water Act, seek to minimize mortality to fish, eggs, larvae and other aquatic organisms that come in contact with the cooling water intake structures. The two main causes of this mortality are from impingement (where the species are trapped against the cooling water intake screen by force of the intake water) and entrainment (where the species are drawn into the cooling system itself and passed through the heat exchangers). Please include a summary of documents related to 316(b) determinations completed the Supplemental Environmental Impact Statement for License Renewal.
- Fish kills occur below the Conowingo Dam, but we lack information for the Conowingo Pool where the plant sits. Please provide information about fish kills that have occurred in the pool.
- Include brief descriptions of any mitigation structures or procedures associated with plant ecological impacts, such as fish ladders, etc.

Hydrology/Water Resources

- Update surface water and groundwater demands by the site, since the 2003 Final Supplemental Environmental Impact Statement for Units 2 & 3 was issued.
- Describe any increased surface and groundwater consumption during plant modification activities.
- For uprate operating conditions, describe any increased surface and groundwater consumptive use. Also quantify any projected increase in cooling water demand.