From: Lawrence Rossbach
To: Allan.haeger@Exeloncorp.com; Patrick.simpson@exeloncorp.com
Date: 8/24/01 4:34PM
Subject: Followup questions to 8/13 submittal

Our review of the 8/13 response to Plant Systems RAIs has identified the need for some additional information related to spent fuel pool cooling. These questions are attached. We did not identify any proprietary information in these questions. Please identify any information in these questions that you consider proprietary, otherwise they may be released to the public within one week. We would like to arrange a call to discuss these questions as soon as possible.

CC: Anthony Mendiola; Mohammed Shuaibi; Ralph Architzel; Steve Jones; Stewart Bailey

Docket Nos. 50-237, 50-249, 50-254, 50-265

In your response to a request for additional information supporting a license amendment request to permit uprated power operation dated August 13, 2001, you identified that cooling would be provided by the fuel pool cooling and cleanup system (FPCCS) and evaporation at Quad Cities, and by the FPCCS, the shutdown cooling system, and evaporation at Dresden. Your response also described capabilities to supply water to the spent fuel pools to makeup for evaporation. The following requests relate to the information you provided in these areas:

(1) Describe the bounding conditions used to evaluate heat removal by evaporation (e.g., air temperature, humidity level, and ventilation flow rate) and how operators verify that actual conditions are within these bounds prior to approaching the maximum spent fuel pool (SFP) decay heat rates.

(2) Describe how the configuration of the SFPs and interfacing systems at Dresden and Quad Cities are controlled to provide availability of SFP cooling and makeup systems consistent with the analysis applicable to each plant. This relates to the timing of closure of gates between the reactor cavity and the SFP, the availability of shutdown cooling at Dresden with the SFP isolated and fuel in the reactor vessel, and the position of gates between the SFPs during refueling outages at Quad Cities.

(3) Provide the actual capacity of makeup water sources for each SFP and how that capacity was established (e.g., test or calculation). Although the response dated August 13, 2001, describes makeup rates, the values presented match values described in each facility's UFSAR for the calculated boil-off rate rather than makeup capacity. For example, Section 9.1.3.3 of the Quad Cities UFSAR, Revision 5, June 1999, states that makeup water can be delivered, via the condensate transfer pumps and the skimmer surge tanks, to the SFP at a rate of 550 gpm and that the maximum boil-off rate is 51 gpm. The response dated August 13, 2001, states that Quad Cities has an existing system capacity of 51 gpm for each unit.

(4) Describe the methodology and acceptance criteria that Exelon commits to employ when evaluating planned refueling conditions that exceed the evaluated heat load for a partial-core offload during refueling, such as back-to-back partial-core offload refuelings at Quad Cities with the SFPs cross-tied or full-core offload refuelings at either facility.