

RS-09-069

June 4, 2009

U. S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Withdrawal of Request for License Amendment Regarding Spent Fuel Storage Pool Criticality

Reference: Letter from P. R. Simpson (Exelon Generation Company, LLC) to U. S. NRC, "License Amendment Request Regarding Spent Fuel Storage Pool Criticality," dated December 13, 2007

In the referenced letter, Exelon Generation Company, LLC (EGC) requested an amendment to Facility Operating License Nos. NPF-11 and NPF-18 for LaSalle County Station (LSCS), Units 1 and 2. The proposed change would revise Technical Specifications (TS) Section 4.3.1, "Criticality," to add a new requirement to use a blocking device in spent fuel storage rack cells that cannot maintain the effective neutron multiplication factor, K_{eff} , requirements specified in TS Section 4.3.1.1.a. In addition, the proposed change would revise TS Section 4.3.3 to reflect that the Unit 2 spent fuel storage capacity is limited to no more than a combination of 4078 fuel assemblies and blocking devices.

The proposed change was submitted to resolve a non-conservative TS, in accordance with NRC Administrative Letter (AL) 98-10, "Dispositioning of Technical Specifications that are Insufficient to Assure Plant Safety." Specifically, as a result of Boraflex degradation in the LSCS Unit 2 spent fuel storage racks, EGC has determined that some of the storage rack cells are unusable, and additional cells will become unusable in the future. Therefore, the existing fuel storage criticality requirements contained in TS Section 4.3.1 are not sufficient to ensure that K_{eff} is less than or equal to 0.95 if fully flooded with unborated water, as required by TS Section 4.3.1.1.a. In accordance with AL 98-10, EGC implemented administrative controls to prevent loading spent fuel in the unusable storage rack cells and submitted the referenced license amendment request to revise TS Sections 4.3.1 and 4.3.3 to address the non-conservative TS.

On May 5, 2009, the NRC requested additional information via electronic mail to support review of the referenced license amendment request. Specifically, the NRC requested EGC to provide

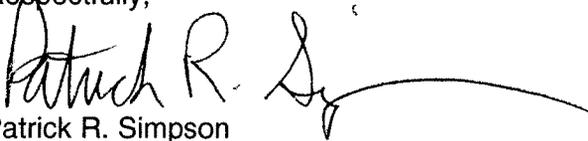
a Human Reliability Analysis that quantitatively evaluates the probability of occurrence of a fuel misloading event at LSCS, in order to support EGC's position that the event is not credible. The NRC provided clarifying information regarding this request in conference calls that were held on May 7 and May 18, 2009.

As discussed with the NRC on June 1, 2009, EGC has attempted to perform the quantitative Human Reliability Analysis as requested. However, EGC could not develop a suitable methodology to evaluate the probability of occurrence and to demonstrate satisfaction of the acceptance criteria specified by the NRC (i.e., less than 1E-6). EGC also evaluated additional options to resolve the NRC's question, but did not identify a viable success path. Therefore, EGC is withdrawing the referenced license amendment request.

Boraflex degradation in the Unit 2 spent fuel storage racks continues, and a license amendment is necessary to resolve the non-conservative TS. On January 29, 2009, and March 18, 2009, pre-application meetings were held between the NRC and EGC. The pre-application meetings provided an overview of the status of the Unit 2 SFP and Boraflex degradation, summarized the integrated approach to resolution, described the NETCO-SNAP-IN® rack inserts, discussed the associated criticality analysis, and described the scope of information to be included in a proposed license amendment request. As discussed with the NRC on June 1, 2009, EGC plans to request NRC review and approval of the license amendment that would allow use of the rack inserts within six months following submittal by EGC. The expedited review time is based on the need for prompt action to restore full core discharge capability at LSCS and to restore margin with respect to the TS requirements. In the interim, EGC plans to continue maintaining the administrative controls that were previously put in place to prevent loading spent fuel in the storage rack cells that are unusable.

There are no regulatory commitments contained in this letter. Should you have any questions concerning this letter, please contact Mr. Kenneth M. Nicely at (630) 657-2803.

Respectfully,


Patrick R. Simpson
Manager – Licensing