

RS-13-202

August 12, 2013

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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: Response to Request for Additional Information Regarding License Amendment Request to Remove License Conditions Associated with Unit 2 Spent Fuel Pool

- References:**
1. Letter from P. R. Simpson (Exelon Generation Company, LLC) to U.S. NRC, "License Amendment Request Regarding the Removal of License Conditions Addressing Interim Configurations of the LaSalle County Station Unit 2 SFP," dated October 15, 2012
 2. Letter from N. J. DiFrancesco (U.S. NRC) to M. J. Pacilio (Exelon Generation Company, LLC), "LaSalle County Station, Unit 2 – Request for Additional Information Related to Administrative Change to Remove Obsolete License Condition Related to Boreflex Degradation (TAC NO. ME9799)," dated July 23, 2013

In Reference 1, Exelon Generation Company, LLC (EGC) requested an amendment to Facility Operating License No. NPF-18 for LaSalle County Station (LSCS), Unit 2. The proposed change removes License Conditions that controlled the spent fuel pool (SFP) configuration in the interim period until NETCO-SNAP-IN[®] rack inserts were installed into accessible SFP storage cell locations.

The NRC requested additional information to complete the review of the proposed license amendment in Reference 2. In response to this request, EGC is providing the attached information.

As discussed in Attachment 1, EGC has determined that Technical Specifications (TS) Section 4.3.1, "Criticality," should be modified to clarify that for the Unit 2 SFP, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert. A markup of the proposed TS change is provided in Attachment 2. Reference 1 was originally submitted for

Unit 2 only; however, with the additional change to TS Section 4.3.1, EGC has determined that the proposed change is applicable to both Units 1 and 2.

EGC has reviewed the information supporting a finding of no significant hazards consideration, and the environmental consideration, that were previously provided to the NRC in Attachment 1 of Reference 1. A revised no significant hazards consideration is provided in Attachment 3, which supersedes the no significant hazards consideration that was previously provided to the NRC in Attachment 1 of Reference 1. The revised no significant hazards consideration reflects the additional change to TS Section 4.3.1 discussed above, as well as the expanded applicability of the proposed change to both Units 1 and 2. Furthermore, the additional information provided in this submittal does not affect the bases for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is providing the revised analysis about no significant hazards consideration to the State of Illinois by transmitting a copy of this letter and its attachments to the designated State Official.

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.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 12th day of August 2013.

Respectfully,



Patrick R. Simpson
Manager – Licensing

Attachments:

1. Response to Request for Additional Information
2. Markup of Proposed Technical Specifications Page
3. Revised No Significant Hazards Consideration

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector – LaSalle County Station
Illinois Emergency Management Agency – Division of Nuclear Safety

ATTACHMENT 1
Response to Request for Additional Information

NRC Request 1

With the removal of the License Conditions 2.(C).30 and 2.(C).31, how will EGC maintain control and prevent storage of fuel or fissile material in inaccessible/non-insert cell locations?

Response

In Reference 1, Exelon Generation Company, LLC (EGC) notified the NRC that NETCO-SNAP-IN[®] inserts have been loaded into all accessible storage rack locations in the Unit 2 spent fuel pool. Inserts were not installed in inaccessible fuel storage rack cells. These locations are physically inaccessible primarily due to crane interference with piping above the fuel storage racks. The interference is such that neither a fuel assembly nor an insert can be placed into the fuel storage rack cell. All locations in the spent fuel storage pool in which a fuel assembly can be placed contain an insert.

Technical Specifications (TS) Section 4.3.1, "Criticality," describes design features of the spent fuel storage racks. EGC has determined that TS 4.3.1.1.c should be revised to clarify that for the Unit 2 spent fuel pool, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert. This TS change reflects the fact that inserts have been loaded into all accessible storage rack locations in the Unit 2 spent fuel pool, and prevents storage of fuel in non-insert cell locations.

A markup of the proposed TS change is provided in Attachment 2. A revised no significant hazards consideration is provided in Attachment 3. The revised no significant hazards consideration reflects the additional change to TS Section 4.3.1 discussed above, as well as the expanded applicability of the proposed change to both Units 1 and 2.

NRC Request 2

Does EGC plan to remove obsolete criticality methodologies which credit Boraflex material for LSCS Unit 2 as part of implementing this proposed request (or has EGC already removed the methods from its current UFSAR)?

Response

EGC plans to revise the Updated Final Safety Analysis Report (UFSAR) to remove discussion of criticality methodologies which credit Boraflex material for the Unit 2 spent fuel pool. This action is being tracked in the Corrective Action Program.

References

1. Letter from P. R. Simpson (Exelon Generation Company, LLC) to U.S. NRC, "Withdrawal of License Amendment Request Regarding the Use of Neutron Absorbing Inserts in Unit 2 Spent Fuel Pool Storage Racks and the Timeline for Implementation," dated January 6, 2012

ATTACHMENT 2
Markup of Proposed Technical Specifications Page

LaSalle County Station, Unit 2

Facility Operating License No. NPF-18

REVISED TECHNICAL SPECIFICATIONS PAGE

4.0-2

4.0 DESIGN FEATURES (continued)

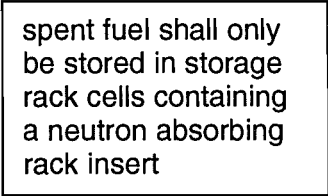
4.3 Fuel Storage

4.3.1 Criticality

4.3.1.1 The spent fuel storage racks are designed and shall be maintained with:

- a. $k_{eff} \leq 0.95$ if fully flooded with unborated water, which includes an allowance for uncertainties as described in either: (1) Section 9.1.2 of the UFSAR, or (2) AREVA NP Inc. Report No. ANP-2843(P), "LaSalle Unit 2 Nuclear Power Station Spent Fuel Storage Pool Criticality Safety Analysis with Neutron Absorbing Inserts and Without Boraflex," Revision 1, dated August 2009, for the Unit 2 spent fuel storage racks with rack inserts.
- b. A nominal 6.26 inch center to center distance between fuel assemblies placed in the storage racks.
- c. For Unit 2 only, ~~a neutron absorbing rack insert shall be installed in spent fuel storage rack cells prior to loading fuel assemblies in cells that cannot otherwise maintain the requirements of 4.3.1.1.a.~~ The neutron absorbing rack inserts shall have a minimum certified ^{10}B areal density greater than or equal to 0.0086 grams $^{10}\text{B}/\text{cm}^2$. The approved inserts are those described in Attachment 4 to the letter from P. Simpson to the NRC, dated October 5, 2009.
- d. The combination of U-235 enrichment and gadolinia loading shall be limited to ensure fuel assemblies have a maximum k-infinity of 0.9185 for all lattices in the top of the assembly, a maximum k-infinity of 0.8869 for all lattices in the intermediate portion of the assembly, and a maximum k-infinity of 0.8843 for all lattices in the bottom of the assembly as determined at 4°C in the normal spent fuel pool in-rack configuration. The bottom, intermediate, and top zones are between 0"-96", 96"-126", and greater than 126" above the bottom of the active fuel.

spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert



(continued)

ATTACHMENT 3
Revised No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (EGC) requests an amendment to Facility Operating License Nos. NPF-11 and NPF-18 for LaSalle County Station (LSCS), Units 1 and 2. The proposed change is necessary to reflect the completion of the NETCO-SNAP-IN[®] insert campaign. Specifically, the change removes License Conditions that are no longer necessary to address the interim configurations of the LSCS Unit 2 spent fuel pool (SFP), and revises Technical Specifications (TS) Section 4.3.1, "Criticality," to clarify that for the Unit 2 SFP, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert.

According to 10 CFR 50.92, "Issuance of amendment," paragraph (c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of any accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety.

EGC has evaluated the proposed change, using the criteria in 10 CFR 50.92, and has determined that the proposed change does not involve a significant hazards consideration. The following information is provided to support a finding of no significant hazards consideration.

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change removes License Conditions within the LSCS Unit 2 Operating License related to interim configurations of the SFP during the installation of the NETCO-SNAP-IN[®] inserts and the required completion date for installation. The proposed change also revises TS Section 4.3.1 to clarify that for the Unit 2 SFP, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert. All changes proposed by EGC in this license amendment request are administrative in nature because they remove License Conditions that have either been satisfied or that are no longer applicable, and the revision to TS Section 4.3.1 ensures spent fuel is stored only in cells that contain inserts. There are no physical changes to the facilities, nor any changes to the station operating procedures, limiting conditions for operation, or limiting safety system settings.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

ATTACHMENT 3
Revised No Significant Hazards Consideration

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed change removes License Conditions within the LSCS Unit 2 Operating License related to interim configurations of the SFP during the installation of the NETCO-SNAP-IN[®] inserts and the required completion date for installation. The proposed change also revises TS Section 4.3.1 to clarify that for the Unit 2 SFP, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert. There are no changes to the SFP criticality analysis associated with the proposed change. No physical changes to the plant are proposed, and there are no changes to the manner in which the plant is operated. Rather, the proposed change is administrative because it involves removing License Conditions that have either been satisfied or that are no longer applicable, and the revision to TS Section 4.3.1 ensures spent fuel is stored only in cells that contain inserts.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The proposed change removes License Conditions within the LSCS Unit 2 Operating License related to interim configurations of the SFP during the installation of the NETCO-SNAP-IN[®] inserts and the required completion date for installation. The proposed change also revises TS Section 4.3.1 to clarify that for the Unit 2 SFP, spent fuel shall only be stored in storage rack cells containing a neutron absorbing rack insert. Plant safety margins are established through limiting conditions for operation, limiting safety system settings, and safety limits specified in Technical Specifications. The proposed change does not alter these established safety margins. The proposed change does not alter the criticality analysis for the SFP and does not affect the SFP criticality safety margin. The proposed change is administrative because it involves removing License Conditions that have either been satisfied or that are no longer applicable, and the revision to TS Section 4.3.1 ensures spent fuel is stored only in cells that contain inserts.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above evaluation, EGC concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92, paragraph (c), and accordingly, a finding of no significant hazards consideration is justified.