

NRR-PMDAPeM Resource

From: Mozafari, Brenda
Sent: Tuesday, October 21, 2014 5:16 PM
To: Nicely, Ken M.:(GenCo-Nuc) (ken.nicely@exeloncorp.com)
Cc: Simpson, Patrick R.:(GenCo-Nuc) (patrick.simpson@exeloncorp.com); Tate, Travis; Purnell, Blake
Subject: Draft QUAD CITIES, UNITS 1 AND 2- THIRD DRAFT RAI for LAR request re: battery surveillance SRs (TAC NOS. MF4589 AND MF4590)

Ken,

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 –THIRD DRAFT REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST TO REVISE BATTERY SURVEILLANCE REQUIREMENTS (TAC NOS. MF4589 AND MF4590)

By application dated June 10, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13161A315), Exelon Generation Company, LLC (EGC, the licensee) submitted an amendment to revise the Renewed Facility Operating License for Quad Cities Nuclear Power Station, Units 1 and 2. The proposed change would modify the Technical Specifications Surveillance Requirement (SR) 3.8.4.2 and SR 3.8.4.5 by adding new acceptance criteria for total battery connection resistance. In response to the NRC staff's requests for additional information (RAIs), the licensee provided supplemental information in letters dated October 24, 2013 and March 5, 2014 (ADAMS Accession Nos. ML13297A266 and ML14064A527).

During our September 11, 2014, clarification call for RAIs sent on January 24, 2014 (ADAMS ML14027A316), the NRC staff agreed to provide this revised draft RAI (attached below) which you agreed respond to within 45 days of receipt. Your written response should be provided to me within 45 days of this emailed RAI request.

REQUEST FOR ADDITIONAL INFORMATION
REGARDING QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 – LICENSE
AMENDMENT REQUEST TO REVISE BATTERY SURVEILLANCE REQUIREMENTS DOCKET NOS.
50-254 and 50-265

The NRC staff has the following questions based on its review of the Exelon Generation Company, LLC license amendment request (LAR) dated June 10, 2013, as supplemented by letters dated October 24, 2013 and March 5, 2014, regarding the proposed revision to battery Technical Specification (TS) surveillance requirements (SR).

The licensee proposed adding to TS SR 3.8.4.2 and SR 3.8.4.5 the following new acceptance criterion to verify that the total battery connection resistance is within pre-established limits, which ensures that the batteries can perform their specified safety functions by maintaining required battery terminal voltage under design-basis load conditions:

1. $\leq 2.4\text{E-}3$ ohms for each 125 VDC subsystem, and
2. $\leq 6.0\text{E-}3$ ohms for each 250 VDC subsystem.

In its response letter dated October 24, 2013, the licensee stated that the above proposed total battery connection resistance limits are the operability limits of the overall battery resistance.

To determine the acceptability of the proposed TS total battery connection resistance limits, the NRC staff requests that the licensee:

1. Provide a summary of the calculation which demonstrates that the proposed TS total connection resistance limiting values (i.e., $2.4\text{E-}3$ ohms and $6.0\text{E-}3$ ohms) will maintain the required minimum voltages (i.e., 105 VDC for the 125 VDC batteries and 210 VDC for the 250 VDC batteries) at the batteries' terminals under worst-case design basis loading conditions.

2. Provide the margins available between the proposed TS total connection resistance limiting values and the overall battery resistances for maintaining the required minimum voltages for the 125 VDC and 250 VDC batteries.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-2020.

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Dresden 2/3 and Quad Cities 1/2
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Subject: Draft QUAD CITIES, UNITS 1 AND 2- THIRD DRAFT RAI for LAR request re:
battery surveillance SRs (TAC NOS. MF4589 AND MF4590)
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