

## **UNITED STATES** NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 10, 2014

Mr. Michael J. Pacilio Senior Vice President Exelon Generation Company, LLC President and Chief Nuclear Officer Exelon Generation Company, LLC 4300 Winfield Road Warrenville, IL 60555

SUBJECT:

LASALLE COUNTY STATION, UNITS 1 AND 2 - REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST TO REVISE

CONTAINMENT PEAK PRESSURE (TAC NOS. MF2690 AND MF2691)

Dear Mr. Pacilio:

By letter dated September 5, 2013, Exelon Generation Company, LLC submitted a license amendment request for LaSalle County Station, Units 1 and 2, to revise the peak calculated primary containment internal pressure. The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has determined that additional information is needed to complete its review.

A response to the enclosed request for additional information is requested by May 28, 2014. This request was discussed with Ms. Lisa Simpson and Mr. David Gullott of your staff on March 31, 2014. Should you have any questions, please contact me at 301-415-1380 or by email at blake.purnell@nrc.gov.

Sincerely.

Blake Purnell, Project Manager

Of for

Plant Licensing III-2 and

Planning and Analysis Branch

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Enclosure: Request for Additional Information

Docket Nos. 50-373 and 50-374

cc w/encl: Listserv

<sup>&</sup>lt;sup>1</sup> Agencywide Documents Access and Management System (ADAMS) Accession No. ML13249A231

## REQUEST FOR ADDITIONAL INFORMATION

### LICENSE AMENDMENT REQUEST TO REVISE PEAK CALCULATED PRIMARY

## CONTAINMENT PRESSURE

## LASALLE COUNTY STATION, UNITS 1 AND 2

### DOCKET NOS. 50-373 AND 50-374

By letter¹ dated September 5, 2013, Exelon Generation Company, LLC (EGC) submitted a license amendment request (LAR) for LaSalle County Station, Units 1 and 2, to revise the peak calculated primary containment internal pressure (P<sub>a</sub>). The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has determined that the additional information below is needed to complete its review.

#### RAI-1

Describe the containment models used in the revised analysis for mass and energy release and containment response. The response should identify the models used: (1) describe the differences, if any, between these models and those in the analysis of record (AOR) and (2) identify if the models are NRC-approved. Clarify whether the analyses were performed for short-term only or for both short-term and long-term, and if both loss-of-coolant accident and main steamline break were analyzed.

#### RAI-2

Describe any other input changes to the containment response models between the AOR and the revised analysis which are not already identified in the LAR.

#### RAI-3

The LAR provides the contribution to the increased P<sub>a</sub> from initial drywell temperature as 1.3 pounds per square inch gauge (psig), and from the secondary issues as 1.4 psig. However, the LAR does not describe how the P<sub>a</sub> increase from the change in initial drywell temperature was determined. The AOR used a thermal power of 3789 megawatts-thermal (MWt) and the revised analysis used a thermal power of 3559 MWt, but the LAR does not state which thermal power was used to determine the increase in P<sub>a</sub> from the initial drywell temperature.

Describe how the contribution to the  $P_a$  increase from the change in initial drywell temperature was determined.

# RAI-4

The LAR states that containment leak rate testing based on the higher P<sub>a</sub> would increase the measured leakage, and that "EGC Operability Evaluation OE 11-002 demonstrates that there is adequate margin to accommodate this increase." However, the LAR does not provide

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information to support this statement. The NRC staff needs the following information to reach a conclusion regarding the adequacy of containment leak tightness:

- A. Provide the last two integrated leak rate test results for each unit, as a percentage of the maximum allowable primary leakage rate, and the test pressures.
- B. Provide the latest combined Types B and C test summation at the new P<sub>a</sub>. Identify when all these tests are scheduled to be completed at the new calculated maximum accident pressure. If all past tests were done at a pressure exceeding the new calculated P<sub>a</sub>, a simple statement to that effect would suffice.
- C. Provide the margins available to the leakage rate acceptance criteria (Types A, B, and C), for both the current P<sub>a</sub> and the new P<sub>a</sub>. Explain how it was determined that there is adequate margin to accommodate the P<sub>a</sub> increase (e.g., identify extrapolation methods).

#### RAI-5

Technical specification (TS) limits on drywell air temperature are necessary because the parameter satisfies Criterion 2 of Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36(c)(2)(ii). Specifically, the drywell air temperature is a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Traditionally, the maximum temperature in the drywell is included in the TS to ensure that the  $P_a$  value for containment and the environmental qualification temperatures for equipment located in the drywell are not exceeded during design-basis accidents. Since the LAR proposes to incorporate the effect of a lower initial containment temperature on  $P_a$ , a minimum drywell temperature is required in the TSs. The LAR did not include any proposed TS changes in this regard.

Provide proposed TS changes to add a minimum drywell temperature requirement, and provide a summary statement of the bases or reasons for such specification. Alternatively, explain why a minimum drywell temperature TS requirement is not necessary for the TS to meet the requirements of 10 CFR 50.36, "Technical Specifications".

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Sincerely,

### /RA/

Blake Purnell, Project Manager
Plant Licensing III-2 and
Planning and Analysis Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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