From: Vaidya, Bhalchandra
Sent: Monday, July 26, 2021 7:14 AM
To: Taken, Jason C.:(Exelon Nuclear); 'david.gullott@exeloncorp.com'
Subject: LA SALLE UNITS 1 AND 2 – REQUEST FOR ADDITIONAL INFORMATION (RAI) RE: License Amendment Request to Incorporate Licensing Topical Report NEDE-33885P-A, Revision 1, "GNF CRDA Application Methodology"(EPID-L-2021-LLA-0016)

SUBJECT: LASALLE UNITS 1 AND 2 –REQUEST FOR ADDITIONAL INFORMATION (RAI) RE: License Amendment Request to Incorporate Licensing Topical Report NEDE-33885P-A, Revision 1, "GNF CRDA Application Methodology" (EPID-L-2021-LLA-0016)

Jason and David,

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated February 10, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21041A490), Exelon Generation Company, LLC (EGC, the licensee) submitted a request to amend Technical Specification (TS) Sections TS 3.1.3, "Control Rod Operability," TS 3.1.6, "Rod Pattern Control," and TS 3.3.2.1, "Control Rod Block Instrumentation," to allow for greater flexibility in rod control operations during various stages of reactor power operation at LaSalle County Station, Units 1 and 2 (LSCS). The proposed amendment will incorporate NRC approved methodology described in Licensing Topical Report, 'GNF CRDA Application Methodology," NEDE-33885P-A, Revision 1 (ADAMS Package Accession No. ML20091K212).

The U.S. Nuclear Regulatory Commission (NRC) staff currently reviewing your submittals and has identified areas where additional information is needed to complete its review. The Request for Additional Information (RAI) is provided below.

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REQUEST FOR ADDITIONAL INFORMATION
OFFICE OF NUCLEAR REACTOR REGULATION

Exelon Generation Co., LLC
DOCKET NOS. 50-373, AND 50-374
EPID: L-2021-LLA-0016

RAI-SNSB-1:

By letter dated February 10, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21041A490), the Exelon Generation Company, LLC, the licensee for LaSalle County Station, Units 1 and 2 (LSCS), submitted a request to amend the Technical Specifications (TSs), as necessary, to implement new control rod TS requirements associated with the NRC approved methodology described in Licensing Topical Report, "GNF CRDA Application Methodology," NEDE-33885P-A, Revision 1 (ADAMS Package Accession No. ML20091K212).

Regulatory Requirement

LSCS were designed to comply with the Nuclear Regulatory Commission (NRC), General Design Criteria (GDC) for Nuclear Power Plant Construction Permits. The regulatory

requirements and guidance documents that the NRC staff considered in its review of the proposed amendment included the following:

> General Design Criterion *28, "Reactivity limits."* The reactivity control systems shall be designed with appropriate limits on the potential amount and rate of reactivity increase to assure that the effects of postulated reactivity accidents can neither (1) result in damage to the reactor coolant pressure boundary greater than limited local yielding nor (2) sufficiently disturb the core, its support structures or other reactor pressure vessel internals to impair significantly the capability to cool the core. These postulated reactivity accidents shall include consideration of rod ejection (unless prevented by positive means), rod dropout, steam line rupture, changes in reactor coolant temperature and pressure, and cold water addition.

The Issue of concern

In the February 10, 2021, letter, the licensee mentions Appendix B, "Interim Acceptance Criteria and Guidance for the Reactivity Initiated Accidents," to Chapter 4.2, "Fuel System Design," of the Standard Review Plan (NUREG-0800, or SRP), as well as a proposed draft guide, DG-1327, "USNRC Draft Regulatory Guide DG-1327, "Pressurized-Water Reactor Control Rod Ejection and Boiling-Water Reactor Control Drop Accidents." Both are referenced in NEDE-33885P-A, Revision 1. Since NEDE-33885P-A was issued, DG-1327 was revised and published as Regulatory Guide 1.236, "Pressurized-Water Reactor Control Rod Ejection and Boiling-Water Reactor Control Drop Accidents," June 2020. While the form of the acceptance criteria for determining fuel rod failures in all three documents are consistent with what the NRC staff considered as part of their review of NEDE-33885P-A, the actual failure thresholds differ somewhat in each document. The licensee does not specify which acceptance criteria it plans it use to determine whether fuel rod failure occurs as part of their use of NEDE-33885P-A.

Request for Additional Information

The licensee needs to explicitly clarify which acceptance criteria it plans to use in determining when fuel failure is expected to occur based on the results of the NEDE-33885P-A analyses, and as appropriate, justify the use of the specified acceptance criteria.

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A clarification telephone call was held between the NRC staff and licensee on July 23, 2021. The licensee agreed during the clarification call to respond to the RAI no later than 30 days from the date of this communication.

If you have any questions, please contact me at (301) 415-3308, or by email at bhalchandra.vaidya@nrc.gov

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Hearing Identifier: NRR_DRMA
Email Number: 1289

Mail Envelope Properties (SJ0PR09MB6415DFF799F78158CF55F9E68DE89)

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Sent Date: 7/26/2021 7:14:12 AM
Received Date: 7/26/2021 7:14:00 AM
From: Vaidya, Bhalchandra

Created By: Bhalchandra.Vaidya@nrc.gov

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Files	**Size**	**Date & Time**
MESSAGE	5319	7/26/2021 7:14:00 AM

Options
Priority: Normal
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date: