

10 CFR 50.90

December 11, 2020

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Limerick Generating Station, Units 1 and 2  
Renewed Facility Operating License Nos. NPF-39 and NPF-85  
NRC Docket Nos. 50-352 and 50-353

Subject: Letter-of-Intent to Submit a License Amendment Request for the Limerick Digital Modernization Project

Reference: 1. U.S. NRC Digital Instrumentation and Control Interim Staff Guidance-(ISG)-06, "Licensing Process," Revision 2 (ADAMS Accession No. ML18269A259)

2. Limerick Generating Station - Digital Modernization Project LAR Presubmittal Meeting, dated June 12, 2020 (ADAMS Accession No. ML20160A053)

3. Summary of June 12, 2020 Public Teleconference with Exelon Generation Company, LLC Regarding Planned Digital Modernization License Amendment Request for Limerick Generating Station, Units 1 and 2 (EPID L-2020-LRM-0016), dated June 30, 2020 (ADAMS Accession No. ML20175A240)

The purpose of this letter is to inform the U.S. Nuclear Regulatory Commission (NRC) that Exelon Generation Company, LLC (Exelon) intends to submit a license amendment request (LAR) for a digital instrumentation and control (DI&C) modification at Limerick Generating Station, Units 1 and 2 (Limerick). This Limerick Digital Modernization Project LAR will be developed and submitted in accordance with the Alternate Review Process (ARP) guidance in NRC DI&C Interim Staff Guidance-(ISG)-06, "Licensing Process," Revision 2 (Reference 1).

The Limerick Digital Modernization Project will replace the existing control logic hardware of the Reactor Protection System (RPS), Nuclear Steam Supply Shutoff System (NSSSS) and the Emergency Core Cooling System (ECCS). Concurrently, the Redundant Reactivity Control System (RRCS) will be upgraded and may be added to the scope of this LAR later depending on the final evaluation of the changes. The new digital system (RPS/NSSSS/ECCS) will be renamed the Plant Protection System (PPS).

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Westinghouse Electric Company has been selected to provide the new digital system. The new digital system will be based on the Common Q platform, which has been approved by NRC (Common Qualified Platform Topical Report, WCAP-16097-P-A).

On June 12, 2020, Exelon and the NRC conducted a public teleconference (first pre-submittal meeting) with stakeholders to discuss the status of the proposed project. The Exelon presentation was documented in Reference 2. The teleconference was documented in an internal NRC memorandum dated June 30, 2020 (Reference 3).

Exelon expects to submit this LAR in the third quarter of 2022 after the presubmittal meetings have concluded. This time frame will support the installation of the modification during the Limerick Refueling Outages starting with Unit 1 in Spring of 2024 and Unit 2 in Spring of 2025.

In addition, Exelon will be requesting in a separate submittal to the NRC Chief Financial Officer an exemption request for review fees associated with the NRC evaluation of this LAR in accordance with 10 CFR 170.11(b) on the basis that the review of the LAR will be in the public interest as the lead plant and first in the U.S. domestic industry for such a major digital modernization. In addition, the project will be a full-scale exercise of all aspects of the Alternate Review Process in DI&C-ISG-06, Revision 2 and will represent a significant generic regulatory improvement in efficiency of reviewing and approving subsequent similar digital modernization licensing submittals.

There are no regulatory commitments contained within this letter.

If you have any questions concerning this submittal, please contact Frank Mascitelli at (610) 765-5512.

Respectfully,

  
Glen T. Kaegi  
Vice President - Nuclear Security, Licensing and Regulatory  
Exelon Generation Company, LLC

cc: USNRC Region I, Regional Administrator  
USNRC Project Manager, LGS  
USNRC Senior Resident Inspector, LGS  
Wade DeHaas, Pennsylvania Bureau of Radiation Protection