



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 19, 2024

David P. Rhoades  
Senior Vice President  
Constellation Energy Generation, LLC  
President and Chief Nuclear Officer  
Constellation Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: LIMERICK GENERATION STATION, UNIT NOS. 1 AND 2 - SCHEDULE UPDATE FOR LICENSE AMENDMENT REQUEST TO REPLACE EXISTING SAFETY-RELATED ANALOG CONTROL SYSTEMS WITH A SINGLE DIGITAL PLANT PROTECTION SYSTEM (EPID L-2022-LLA-0140)

Dear David Rhoades:

By letter dated September 26, 2022 (non-publicly available), as supplemented by letters dated August 12, 2022 (Agencywide Documents Access and Management System Accession No. ML22224A149), November 29, 2022 (ML22333A817), February 8, 2023 (ML23039A141), February 15, 2023 (ML23046A266), March 30, 2023 (ML23089A324), April 5, 2023 (ML23095A223), June 26, 2023 (ML23177A224), July 31, 2023 (ML23212B236), September 12, 2023 (ML23255A095), October 30, 2023 (ML23303A223), November 21, 2023 (ML23325A206), January 26, 2024 (ML24026A296), February 26, 2024 (ML24057A427), March 7, 2024 (ML24067A294), March 18, 2024 (ML24078A275), April 23, 2024 (ML24114A322), May 3, 2024 (ML24124A043), June 13, 2024 (ML24165A264), June 14, 2024 (ML24166A114), and June 28, 2024 (ML24180A157), Constellation Energy Generation, LLC (Constellation, the licensee) submitted license amendment requests (LARs) to replace the Limerick Generating Station, Units 1 and 2 (Limerick) existing safety-related analog control systems with a single digital control system called plant protection system. The supplement dated September 12, 2023, replaces in its entirety the original LARs dated September 26, 2022. The licensee replaced the original submittal because it had mistakenly included proprietary information in the non-proprietary parts of the request. The U.S. Nuclear Regulatory Commission (NRC) staff made all of the original submittal non-public. With the exceptions noted by the licensee in the letter dated September 12, 2023, the content of the replacement and the original are the same.

The purpose of this letter is to provide Constellation an update on the NRC staff's schedule for reviewing the Limerick digital instrumentation and controls (I&C) LARs. In previous letters concerning the review schedule (ML22339A064, ML23187A096, and ML24093A091), the NRC staff informed Constellation that any delays by the licensee in supplying information or emergent challenges may impact our estimated completion date, estimated level-of-effort, or both.

In its submittal of the Limerick digital I&C LARs on September 26, 2022, Constellation listed information missing from the LARs and provided a schedule for providing the missing

information. According to that schedule, all equipment (or environmental) qualification (EQ) test summaries were to be submitted to the NRC by June 16, 2023. By letter dated May 23, 2023 (ML23143A342), Constellation informed the NRC that it would be unable to meet the original schedule for submitting EQ test summaries and set a new target date of January 24, 2024. The EQ test summaries were submitted on January 24, 2024. However, the EQ test summaries were incomplete. Using a request for additional information (ML24079A292), the NRC staff requested the missing EQ information. Constellations' response, by letter dated May 3, 2024 (ML24124A043), to the request for additional information was incomplete. In its response, Constellation stated that "remaining activities will be completed per the project schedule," but did not provide a target date for submitting the missing EQ information to the NRC staff. As stated in earlier correspondence to Constellation, the missing EQ information is needed to complete the review of the Limerick digital I&C LARs.

The delays in supplying the missing EQ information have impacted our ability to complete the review by the current estimated completion schedule (ML24093A091). Additionally, an emergent challenge has been identified concerning fundamental design principles portion of the review involving the component interface module. This emergent challenge was discussed with your staff during a public meeting on September 6, 2024 (ML24250A009).

Because of repeated delays in providing the EQ information needed to complete the review and the emergent challenge involving the component interface module, the NRC staff will not complete the review by December 9, 2024. The NRC staff will continue the review work involving the EQ and fundamental design principles portions of the review and continue with routine communications concerning the Limerick digital I&C LARs. After Constellation has submitted the information to address EQ and the emergent challenge, the NRC staff will provide Constellation with an updated estimated completion schedule.

If you have any questions, please contact the NRC project managers for these LARs, Michael Marshall at [Michael.Marshall@nrc.gov](mailto:Michael.Marshall@nrc.gov) or (301) 415-2871, or Robert "Rob" Kuntz at [Robert.Kuntz@nrc.gov](mailto:Robert.Kuntz@nrc.gov) or (301) 415-3733.

Sincerely,

*/RA/*

Michael L. Marshall, Jr., Senior Project Manager  
Plant Licensing Branch 1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-352 and 50-353

cc: Listserv

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