



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

September 27, 2022

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

SUBJECT: BRAIDWOOD STATION, UNIT 1 AND BYRON STATION, UNIT 1 – STEAM  
GENERATOR LICENSE RENEWAL RESPONSE TO COMMITMENT 10 –  
ONLINE REFERENCE PORTAL

Dear Mr. Rhoades,

By letter dated June 7, 2022 (Agencywide Documents Access and Management System Package Accession No. ML22158A294), Constellation Energy Generation, LLC (CEG), submitted to the U.S. Nuclear Regulatory Commission (NRC or staff) a response to the Commitment 10 of the Braidwood Station, Unit 1 and Bryon Station, Unit 1 license renewal. In December 2015, the NRC published the final “Safety Evaluation Report Related to the License Renewal of Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2,” as NUREG-2190, Volume 1 (ML15350A038) and NUREG-2190, Volume 2 (ML15350A041). License renewal commitments are documented in NUREG-2190, Volume 2, Appendix A, “Byron Station Units 1 and 2, and Braidwood Station, Units 1 and 2, License Renewal Commitments.”

In NUREG-2190, Volume 2, Appendix A, Commitment 10 part 1) gave the stations three options to fulfill this commitment to “[v]alidate that [primary water stress corrosion cracking] of the divider plate welds to the primary head and tubesheet cladding is not occurring.”

Braidwood Unit 1 and Byron Unit 1 have chosen Option 2: Analysis. This option requires the Braidwood and Byron units to:

Perform an analytical evaluation of the steam generator divider plate welds in order to establish a technical basis which concludes that the steam generator [reactor coolant pressure boundary] is adequately maintained with the presence of steam generator divider plate weld cracking. The analytical evaluation will be submitted to the NRC for review and approval two (2) years prior to entering the associated period of extended operation.

Braidwood and Byron License Renewal Commitment 10 part 2) gave the stations three options to fulfill this commitment to “[v]alidate that PWSCC of the tube-to-tubesheet welds is not occurring on [Byron and Braidwood Stations] Unit 1.” Braidwood Unit 1 and Byron Unit 1 have chosen Option 2: Analysis - Susceptibility. This option requires the Braidwood and Byron units to:

Perform an analytical evaluation of the steam generator tube-to-tubesheet welds to determine that the welds are not susceptible to [primary water stress corrosion cracking]. The evaluation for determining that the tube-to-tubesheet welds are not susceptible to [primary water stress corrosion cracking] will be submitted to the NRC for review and approval two (2) years prior to entering the associated period of extended operation.

The NRC staff continues to seek approaches to improve efficiency and support an effective review. One method to increase efficiency of the NRC staff's review of the response to Commitment 10 of the Braidwood Station, Unit 1 and Bryon Station, Unit 1 license renewal is the use of an online reference portal that will allow the NRC staff limited, read-only access to the documents and other reference materials cited in and in support of response. The online reference portal will allow the review of documents referenced in the submittal. In cases where the NRC staff identifies documents as necessary to support its determination in the safety evaluation, the NRC staff will request that those documents be submitted on the docket.

The use of the online reference portal will be in accordance with the following restrictions:

- The online reference portal will be password-protected, and passwords will be distributed only to NRC staff members directly involved in the review on a need-to-know basis.
- The online reference portal will not support any printing, saving, or downloading functions.
- The NRC staff members given password access to the online reference portal will be informed of the conditions related to the use of the online reference portal by NRC project managers.
- The conditions associated with the online reference portal will be maintained throughout its use during the review process.
- Documents posted to the online reference portal will be limited to basis material and other reference material cited in the response, unless otherwise agreed upon by CEG and NRC management.
- It is requested that the portal be fully populated with plant documents and well organized to facilitate efficient search capability and ease of use from October to December 2022, unless otherwise agreed upon between CEG and NRC management, for all NRC staff members directly involved in the review.

D. Rhoades

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If you have any questions on this matter, please contact Ms. Angela Wu at [Angela.Wu@nrc.gov](mailto:Angela.Wu@nrc.gov) or Christopher Tyree at [Christopher.Tyree@nrc.gov](mailto:Christopher.Tyree@nrc.gov).

Sincerely,

*/RA/*

Lauren K. Gibson, Chief  
License Renewal Projects Branch  
Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-454

cc: Listserv

SUBJECT: BRAIDWOOD STATION, UNIT 1 AND BYRON STATION, UNIT 1 – STEAM  
GENERATOR LICENSE RENEWAL RESPONSE TO COMMITMENT 10 –  
ONLINE REFERENCE PORTAL  
DATED: SEPTEMBER 27, 2022

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