

10 CFR 50.55a

RS-22-036

March 10, 2022

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

Braidwood Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456 and STN 50-457

Byron Station, Units 1 and 2
Renewed Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. STN 50-454 and STN 50-455

Subject: Supplemental Information - Proposed Alternative for
Examination of Pressurizer Circumferential and Longitudinal
Shell-to-Head Welds and Nozzle-to-Vessel Welds

- References:
- 1) Letter from D. Gudger (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Proposed Alternative for Examination of Pressurizer Circumferential and Longitudinal Shell-to-Head Welds and Nozzle-to-Vessel Welds," dated May 12, 2021 (ML21133A297)
 - 2) Email from A. Mayer (U.S. Nuclear Regulatory Commission) to T. Loomis (Exelon Generation Company, LLC), "Calvert Cliffs Nuclear Power Plant, Units 1 and 2 - Request for Additional Information re: Proposed Alternative for Pressurizer Circumferential and Longitudinal Shell-to-Head Welds and Nozzle-to-Vessel Welds (EPID L-2021-LLR-0037)," dated October 13, 2021 (ML21287A032)
 - 3) Letter from D. Helker (Exelon Generation Company, LLC) to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information - Proposed Alternative for Examination of Pressurizer Circumferential and Longitudinal Shell-to-Head Welds and Nozzle-to-Vessel Welds," dated November 16, 2021 (ML21320A242)

In the Reference 1 letter, Constellation Energy Generation, LLC (CEG) requested relief from the examination of pressurizer circumferential and longitudinal shell-to-head welds and nozzle-to-vessel welds for Braidwood Station, Units 1 and 2 and Byron Station, Units 1 and 2. Based on concerns identified by the U.S. Nuclear Regulatory Commission, CEG has developed a performance monitoring plan for the welds identified in this proposed

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alternative. As shown in Table 1 of Reference 1, Byron Station, Unit 2 requests the greatest length of time until the next inspection. Category B-B requested an extension of 32.1 years and Category B-D requested an extension of 27.6 years. As part of the performance monitoring plan, CEG will examine one Examination Category B-B, Item B2.11 shell-to-head weld and one Category B-D, B3.110 nozzle-to-vessel weld from the Byron Station, Unit 2 to the maximum extent possible. The components available for examination are provided in the table below for reference. Due to the limited examination volume (1 foot of 1 weld) no Category B-B, Item B2.12 longitudinal welds will be included in the sampling plan. The required examination will be completed by the end of 2034 to ensure that no more than 20 years elapses between the performance of an ASME XI examination for the Category B-B and B-D components at Byron Station, Unit 2. Due to similarities in design and operation strategies between Byron and Braidwood, this sampling plan is applicable to Byron Units 1 and 2 as well as Braidwood Units 1 and 2. Any unacceptable indications identified during these examinations will be evaluated as required by ASME Section XI and the corrective action program. Unacceptable indications may result in an accelerated examination schedule for the components covered by the alternative.

Unit	ASME Category	ASME Item	Component ID	Component Description
2	B-B	B2.11	2RY-01-S/PC-01	Shell – Bottom Head
2	B-B	B2.11	2RY-01-S/PC-05	Shell – Upper Head
2	B-B	B2.12	2RY-01-S/PL-01	Lower Longitudinal Weld
2	B-B	B2.12	2RY-01-S/PL-04	Upper Longitudinal Weld
2	B-D	B3.110	2RY-01-S/PN-01	Surge Nozzle
2	B-D	B3.110	2RY-01-S/PN-02	Spray Nozzle
2	B-D	B3.110	2RY-01-S/PN-03	Relief Nozzle
2	B-D	B3.110	2RY-01-S/PN-04	Safety Nozzle
2	B-D	B3.110	2RY-01-S/PN-05	Safety Nozzle
2	B-D	B3.110	2RY-01-S/PN-06	Safety Nozzle

A regulatory commitment is contained in the attachment.

Should you have any questions concerning this matter, please contact Tom Loomis at (610) 765-5510.

Respectfully,



David T. Gudger
Sr. Manager - Licensing
Constellation Energy Generation, LLC

Attachment: Summary of Commitments

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Circumferential and Longitudinal Shell-to-Head Welds
and Nozzle-to-Vessel Welds

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cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - Braidwood Station
NRC Senior Resident Inspector - Byron Station
NRC Project Manager - Braidwood Station
NRC Project Manager - Byron Station
Illinois Emergency Management Agency – Division of Nuclear Safety

Attachment

Summary of Commitments

Attachment

Summary of Commitments

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	Programmatic (Yes/No)
As part of the performance monitoring plan, CEG will examine one Examination Category B-B, Item B2.11 shell-to-head weld and one Category B-D, B3.110 nozzle-to-vessel weld from the Byron Station, Unit 2 to the maximum extent possible. The components available for examination are provided in the Table below.	The required examination will be completed by the end of 2034 to ensure that no more than 20 years elapses between the performance of an ASME XI examination for the Category B-B and B-D components at Byron Station, Unit 2.	Yes	No

Unit	ASME Category	ASME Item	Component ID	Component Description
2	B-B	B2.11	2RY-01-S/PC-01	Shell – Bottom Head
2	B-B	B2.11	2RY-01-S/PC-05	Shell – Upper Head
2	B-B	B2.12	2RY-01-S/PL-01	Lower Longitudinal Weld
2	B-B	B2.12	2RY-01-S/PL-04	Upper Longitudinal Weld
2	B-D	B3.110	2RY-01-S/PN-01	Surge Nozzle
2	B-D	B3.110	2RY-01-S/PN-02	Spray Nozzle
2	B-D	B3.110	2RY-01-S/PN-03	Relief Nozzle
2	B-D	B3.110	2RY-01-S/PN-04	Safety Nozzle
2	B-D	B3.110	2RY-01-S/PN-05	Safety Nozzle
2	B-D	B3.110	2RY-01-S/PN-06	Safety Nozzle