



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

June 3, 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, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT - CORRECTION TO PAGES ISSUED FOR AMENDMENTS NOS. 225, 225, 227, 227, AND 148, RESPECTIVELY, REGARDING ISSUES IDENTIFIED IN WESTINGHOUSE DOCUMENTS (EPID L-2021-LLA-0066)

Dear Mr. Rhoades:

By letter dated March 22, 2022 (Agencywide Documents Access and Management System Accession Package No. ML22026A489), the U.S. Nuclear Regulatory Commission (NRC) issued Amendment No. 225 to Renewed Facility Operating License No. NPF-72 and Amendment No. 225 to Renewed Facility Operating License No. NPF-77 for the Braidwood Station, Units 1 and 2, (Braidwood) respectively; Amendment No. 227 to Renewed Facility Operating License No. NPF-37 and Amendment No. 227 to Renewed Facility Operating License No. NPF-66 for the Byron Station, Unit Nos. 1 and 2, (Byron) respectively; and Amendment No. 148 to Renewed Facility Operating License No. DPR-18 for the R. E. Ginna Nuclear Power Plant (Ginna). The amendments are in response to your application dated April 7, 2021 (ML21097A226), as supplemented by letter dated August 13, 2021 (ML21225A005).

During final processing to make the documents publicly available, a dark, thick, line was inadvertently introduced on the Braidwood technical specification (TS) pages 3.2.1 – 1 and 3.2.1 – 4. Page 3.2.1 – 4 of both the Braidwood and Byron TSs have dark brackets around the four equations. The amendment number font on all the Braidwood and Byron TS pages is not consistent with the font used for the page text. Ginna TS page 3.2.1 – 2 was inadvertently issued with a 4 hour completion time for B.3. Specifically, for:

- Braidwood TS page 3.2.1 – 1, the dark line is removed and the amendment number font is corrected.
- Braidwood TS page 3.2.1 – 2, the amendment number font is corrected.
- Braidwood TS page 3.2.1 – 4, the dark line is removed, the four equations are reformatted to remove the dark brackets, and the amendment number font is corrected

- Byron TS page 3.2.1 – 1, the amendment number font is corrected
- Byron TS page 3.2.1 – 2, the amendment number font is corrected
- Byron TS page 3.2.1 – 4, the four equations on the page are reformatted to remove the dark brackets and the amendment number font is corrected
- The attachment to license Amendment No. 148 for the Ginna provided instructions to remove page 3.2.1 – 5. This page is a new page and there is no current page to remove.
- Ginna TS page 3.2.1 – 2, corrects the B.3 completion time from 4 hours to 72 hours.

The NRC staff has determined that these were inadvertent typographical or formatting errors and are entirely editorial in nature. The corrections do not change any of the conclusions in the safety evaluation associated with the amendments and do not change the associated notice to the public.

The corrected pages are enclosed and should be replaced as follows:

<u>Remove</u>	<u>Insert</u>
Braidwood TS page 3.2.1 – 1	Braidwood TS page 3.2.1 – 1
Braidwood TS page 3.2.1 – 2	Braidwood TS page 3.2.1 – 2
Braidwood TS page 3.2.1 – 4	Braidwood TS page 3.2.1 – 4
Byron TS page 3.2.1 – 1	Byron TS page 3.2.1 – 1
Byron TS page 3.2.1 – 2	Byron TS page 3.2.1 – 2
Byron TS page 3.2.1 – 4	Byron TS page 3.2.1 – 4
Ginna page replacement instructions	Ginna page replacement instructions
Ginna TS page 3.2.1 – 2	Ginna TS page 3.2.1 - 2

If you have any questions concerning this action, please contact me at (301) 415-6066 or by e-mail to Joel.Wiebe@nrc.gov.

Sincerely,

/RA/

Joel S. Wiebe, Senior Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456, STN 50-457,
STN 50-454, STN 50-455, and 50-244

Enclosure:
Corrected Pages

cc: Listserv

ENCLOSURE 1

BRAIDWOOD STATION, UNITS 1 AND 2, DOCKET NOS. 50-456 AND 457

CORRECTED PAGES TO LICENSE AMENDMENT NOS. 225 AND 225

TECHNICAL SPECIFICATIONS

PAGES 3.2.1 – 1, 3.2.1 – 2, AND 3.2.1 – 4

3.2 POWER DISTRIBUTION LIMITS

3.2.1 Heat Flux Hot Channel Factor (F₀(Z))

LC0 3.2.1 F₀(Z), as approximated by F₀^C(Z) and F₀^W(Z), shall be within the limit specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. F ₀ ^C (Z) not within limit.	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% F ₀ ^C (Z) exceeds limit.	15 minutes
	<u>AND</u>	
	A.2 Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% F ₀ ^C (Z) exceeds limit.	72 hours
	<u>AND</u>	
	A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% F ₀ ^C (Z) exceeds limit.	72 hours
	<u>AND</u>	
	A.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the limit of Required Action A.1

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. F₀^w(Z) not within limit.</p>	<p>B.1 Reduce THERMAL POWER as specified in the COLR.</p>	<p>4 hours</p>
	<p><u>AND</u></p>	
	<p>B.2 Reduce AFD limits as specified in the COLR.</p>	<p>4 hours</p>
	<p><u>AND</u></p>	
	<p>B.3 Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p>	<p>72 hours</p>
	<p><u>AND</u></p>	
	<p>B.4 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p>	<p>72 hours</p>
	<p><u>AND</u></p> <p>B.5 Perform SR 3.2.1.1 and SR 3.2.1.2.</p>	<p>Prior to increasing THERMAL POWER and AFD limits above the limits of Required Actions B.1 and B.2</p>
<p>C. Required Action and associated Completion Time not met.</p>	<p>C.1 Be in MODE 2.</p>	<p>6 hours</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.2.1.2 -----NOTES-----</p> <ol style="list-style-type: none"> 1. During power escalation at the beginning of each cycle, THERMAL POWER may be increased until an equilibrium power level has been achieved, at which a power distribution map is obtained. 2. If $F_0^W(Z)$ measurements indicate that either the maximum over z [$F_0^C(Z) / K(Z)$] <u>OR</u> maximum over z [$F_0^W(Z) / K(Z)$] has increased since the previous evaluation of $F_0^C(Z)$ or if $F_0^W(Z)$ is expected to increase prior to the next evaluation of $F_0^C(Z)$: <ol style="list-style-type: none"> a. Increase $F_0^W(Z)$ by the appropriate factor specified in the COLR and reverify $F_0^W(Z)$ is within limits specified in the COLR; or b. Repeat SR 3.2.1.2 once per 7 EFPD until either a. above is met or two successive flux maps indicate that the maximum over z [$F_0^C(Z) / K(Z)$] and maximum over z [$F_0^W(Z) / K(Z)$] has not increased. <p>-----</p>	<p>(continued)</p>

ENCLOSURE 2

Byron STATION, UNIT Nos. 1 AND 2, DOCKET NOS. 50-454 AND 456

CORRECTED PAGES TO LICENSE AMENDMENT NOS. 227 AND 227

TECHNICAL SPECIFICATIONS

PAGES 3.2.1 – 1, 3.2.1 – 2, AND 3.2.1 – 4

3.2 POWER DISTRIBUTION LIMITS

3.2.1 Heat Flux Hot Channel Factor (F_q(Z))

LC0 3.2.1 F_q(Z), as approximated by F_q^C(Z) and F_q^W(Z), shall be within the limit specified in the COLR.

APPLICABILITY: MODE 1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. F _q ^C (Z) not within limit.	A.1 Reduce THERMAL POWER ≥ 1% RTP for each 1% F _q ^C (Z) exceeds limit.	15 minutes
	<u>AND</u>	
	A.2 Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% F _q ^C (Z) exceeds limit.	72 hours
	<u>AND</u>	
	A.3 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% F _q ^C (Z) exceeds limit.	72 hours
	<u>AND</u>	
	A.4 Perform SR 3.2.1.1 and SR 3.2.1.2.	Prior to increasing THERMAL POWER above the limit of Required Action A.1

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. F₀^w(Z) not within limit.</p>	<p>B.1 Reduce THERMAL POWER as specified in the COLR.</p>	<p>4 hours</p>
	<p><u>AND</u></p>	
	<p>B.2 Reduce AFD limits as specified in the COLR.</p>	<p>4 hours</p>
	<p><u>AND</u></p>	
	<p>B.3 Reduce Power Range Neutron Flux-High trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p>	<p>72 hours</p>
	<p><u>AND</u></p>	
	<p>B.4 Reduce Overpower ΔT trip setpoints ≥ 1% for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p>	<p>72 hours</p>
	<p><u>AND</u></p>	
	<p>B.5 Perform SR 3.2.1.1 and SR 3.2.1.2.</p>	<p>Prior to increasing THERMAL POWER and AFD limits above the limits of Required Actions B.1 and B.2</p>
<p>C. Required Action and associated Completion Time not met.</p>	<p>C.1 Be in MODE 2.</p>	<p>6 hours</p>

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.2.1.2 -----NOTES-----</p> <ol style="list-style-type: none"> 1. During power escalation at the beginning of each cycle, THERMAL POWER may be increased until an equilibrium power level has been achieved, at which a power distribution map is obtained. 2. If $F_0^W(Z)$ measurements indicate that either the maximum over z [$F_0^C(Z) / K(Z)$] <u>OR</u> maximum over z [$F_0^W(Z) / K(Z)$] has increased since the previous evaluation of $F_0^C(Z)$ or if $F_0^W(Z)$ is expected to increase prior to the next evaluation of $F_0^C(Z)$: <ol style="list-style-type: none"> a. Increase $F_0^W(Z)$ by the appropriate factor specified in the COLR and reverify $F_0^W(Z)$ is within limits specified in the COLR; or b. Repeat SR 3.2.1.2 once per 7 EFPD until either a. above is met or two successive flux maps indicate that the maximum over z [$F_0^C(Z) / K(Z)$] and maximum over z [$F_0^W(Z) / K(Z)$] has not increased. <p>-----</p>	<p>(continued)</p>

ENCLOSURE 3

R. E. GINNA NUCLEAR POWER PLANT, DOCKET NO. 50-244

CORRECTED PAGE TO LICENSE AMENDMENT NO. 148

PAGE REPLACEMENT INSTRUCTIONS AND

TECHNICAL SPECIFICATIONS

PAGE 3.2.1 – 2

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>----- - NOTE - Required Action B.5 shall be completed whenever this Condition is entered. -----</p> <p>B. $F_Q^w(Z)$ not within limits.</p>	<p>B.1 Reduce THERMAL POWER as specified in the COLR.</p> <p><u>AND</u></p>	4 hours
	<p>B.2 Reduce AFD limits as specified in the COLR.</p> <p><u>AND</u></p>	4 hours
	<p>B.3 Reduce Power Range Neutron Flux - High trip setpoints $\geq 1\%$ for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p> <p><u>AND</u></p>	72 hours
	<p>B.4 Reduce Overpower ΔT trip setpoints $\geq 1\%$ for each 1% that THERMAL POWER is limited below RATED THERMAL POWER by Required Action B.1.</p> <p><u>AND</u></p>	72 hours
	<p>B.5 Perform SR 3.2.1.1 and SR 3.2.1.2.</p>	Prior to increasing THERMAL POWER and AFD limits of Required Actions B.1 and B.2.
<p>C. Required Action and associated Completion Time not met.</p>	<p>C.1 Be in MODE 2.</p>	6 hours

ATTACHMENT TO LICENSE AMENDMENT NO. 148

RENEWED FACILITY OPERATING LICENSE NO. DPR-18

R. E. GINNA NUCLEAR POWER PLANT

DOCKET NO. 50-244

Replace the following pages of the Renewed Facility Operating License and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

License No. DPR-18
Page 4

TSs
3.2.1 - 2
3.2.1 - 4

INSERT

License No. DPR-18
Page 4

TSs
3.2.1 - 2
3.2.1 - 4
3.2.1 - 5

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2; BYRON STATION, UNIT NOS. 1 AND 2; AND R. E. GINNA NUCLEAR POWER PLANT - CORRECTION TO PAGES ISSUED FOR AMENDMENTS NOS. 225, 225, 227, 227, AND 148, RESPECTIVELY, REGARDING ISSUES IDENTIFIED IN WESTINGHOUSE DOCUMENTS (EPID L-2021-LLA-0066) DATED JUNE 3, 2022

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