

ATTACHMENT 2
MDMP Deviation Form
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Utility: Constellation Energy Generation (CEG), LLC

Applicable Site(s) and Unit No.: Byron Units 1 and 2 and Braidwood Unit 2

Utility Contact(s):

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Issue Program (IP) activity or document:

Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines (MRP-227, Revision 1-A). EPRI, Palo Alto, CA: 2019. 3002017168.

Scope / Description of Deviation:

CEG is submitting this NEI 03-08 deviation for Byron Units 1 and 2 and Braidwood Unit 2 to perform the baseline volumetric examinations of Baffle-Former Bolts (BFBs) no later than 36 effective full power years (EFPY). Byron Units 1 and 2 and Braidwood Unit 2 are scheduled to perform the Reactor Vessel Internals (RVI) examinations in accordance with MRP-227, Revision 1-A during the Spring 2026, Fall 2026, and Fall 2027 refueling outages, respectively. These examinations include the volumetric examinations of the BFBs. These plants are considered Tier 4 plants per NSAL-16-1, Revision 1.

MRP-227, Revision 1-A, Table 4-3, Item W6: “Baffle-Former Assembly; Baffle-Former Bolts” requires that Tier 4 plants perform baseline volumetric examinations of BFBs no later than 35 effective full power years (EFPY), as stated in Table 4-3, Note 8. Based on the schedule of the RVI examinations for Byron Units 1 and 2 and Braidwood Unit 2, these plants will exceed the EFPY requirement for performing these baseline examinations. Per the implementation requirements under Subsection 7.3 of MRP-227, Revision 1-A, there is a NEI 03-08 “Needed” requirement which states, “*each commercial U.S. PWR unit shall implement the requirements of Tables 4-1 through 4-9 and Tables 5-1 through 5-3 for the applicable design*”. Per NEI 03-08, “Needed” requirements or guidance are “*to be implemented whenever possible but alternative approaches are acceptable.*” Technical justification has been developed under EC 639996 and 640160 to deviate from the “Needed” requirement above because it “*will not be implemented within the timeframe specified*” in MRP-227, Revision 1-A.

Reason for Deviation:

This deviation is being submitted to extend the current requirement of 35 EFPY to 36 EFPY to bundle the baseline volumetric examinations of BFBs with the rest of the RVI examinations to reduce person-rem exposure and outage complexity. The RVI examinations are being performed during outages with significantly longer durations than normally scheduled due to planned main turbine upgrades. These refueling outages are projected to occur at EFPYs greater than 35 but less than 36. As such, performing the volumetric examination of BFBs during those outages with longer duration will allow more time to perform any necessary evaluations or repairs on the BFBs, thereby reducing outage extension risks. Also, this provides site and vendor personnel with more time to complete the inspections, thereby reducing execution risks.

IR Number: 04712854

EC Number: 639996 (Byron) and 640160 (Braidwood)


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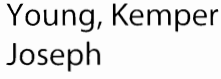
Time Frame the Deviation will be in Effect:

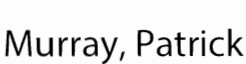
The deviation will be in effect until the completion of the following outages for Byron Units 1 and 2 and Braidwood Unit 2:

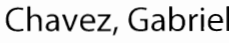
Plant	Outage	Projected EFPY
Byron Unit 1	B1R27 (Spring 2026)	35.951
Byron Unit 2	B2R26 (Fall 2026)	35.814
Braidwood Unit 2	A2R26 (Fall 2027)	35.775

Deviation to this IP document is classified as: NEEDED

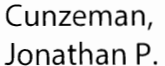
Prepared By: Osvaldo Cruz  2023.10.31
08:48:51 -05'00'
(sign/date)

Corporate IP Primary Representative: Kemper Young  Young, Kemper Joseph
Digitally signed by Young, Kemper Joseph
Date: 2023.10.31 09:51:38 -04'00'
(sign/date)

Byron and Braidwood Programs Manager: Patrick Murray  Murray, Patrick
Digitally signed by Murray, Patrick
Date: 2023.10.31 13:07:23 -05'00'
(sign/date)

Asset Management Senior Manager: Gabriel Chavez  Chavez, Gabriel
Digitally signed by Chavez, Gabriel
Date: 2023.10.31 13:59:12 -05'00'
(sign/date)

Centralized Programs Engineering Director: Lauren Coffey  Coffey, Lauren
Digitally signed by Coffey, Lauren
Date: 2023.11.01 15:48:41 -05'00'
(sign/date)


Byron Site Engineering Director: Jonathan Cunzeman  Cunzeman, Jonathan P.
Digitally signed by Cunzeman, Jonathan P.
Date: 2023.11.06 08:59:38 -06'00'
(sign/date)

Braidwood Site Engineering Director: Steven Macartney  MacArtney, Steven
Digitally signed by MacArtney, Steven
Date: 2023.11.06 17:37:08 -06'00'
(sign/date)

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Byron Site Vice President: Harris Welt Welt, Harris Digitally signed by Welt, Harris
Date: 2023.11.09 08:05:33
-06'00'
(sign/date)

Braidwood Site Vice President: Gregory Gugle Gugle, Greg Digitally signed by Gugle, Greg
Date: 2023.11.09 08:41:18 -06'00'
(sign/date)

Senior VP of Engineering & Technical Services: Mark Newcomer 
(sign/date)