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RS-06-117

10 CFR 50.55a

August 28, 2006

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

Braidwood Station, Unit 2  
Facility Operating License No. NPF-77  
NRC Docket No. 50-457

Byron Station, Units 1  
Facility Operating License No. NPF-37  
NRC Docket Nos. 50-454

**Subject:** Clarification to Relaxation Request for First Revised Order (EA-03-009)

**Reference:** Letter from J. A. Bauer (Exelon Generation Company, LLC) to NRC, "Relaxation Request for First Revised Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," dated March 31, 2006 (ADAMS Accession No. 051730156)

The above listed reference (the Submittal) provided a request by Exelon Generation Company, LLC (EGC) for relaxation from selected portions of First Revised Order EA-03-009 (the Order). The Order specified requirements for reactor pressure vessel (RPV) head inspections at pressurized water reactor (PWR) facilities. The Submittal requested relaxation from inspection coverage requirements specified in Section IV.C.(5)(b)(i) of the Order for specific Braidwood Station Unit 2 and Byron Station Unit 1 RPV head penetrations.

As a clarification, EGC is formally committing to the following actions as a condition of the "Proposed Alternative and Basis for Use" statements proposed in Attachment 1 and Attachment 2 of the Submittal. If the NRC finds that the crack-growth formula in industry report MRP-55 is unacceptable, then EGC will revise its analysis that justifies relaxation of the Order within 30 days after the NRC notifies EGC by written correspondence of an NRC-approved crack-growth formula. If the EGC revised analysis for Braidwood Station Unit 2 and Byron Station Unit 1 shows that the crack-growth acceptance criteria are exceeded prior to the end of the current operating cycle, the relaxation request will be rescinded and the EGC will, within 72 hours, submit to the NRC written justification for continued operation.

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If the revised analysis shows that the crack-growth acceptance criteria are exceeded during the subsequent operating cycle, EGC will, within 30 days, submit the revised analysis for NRC review. If the revised analysis shows that the crack-growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle, EGC will, within 30 days, submit a letter to the NRC confirming that its analysis has been revised. Any future crack-growth analyses performed for this and future cycles for RPV head penetrations must be based on an acceptable crack-growth rate formula.

The Submittal was originally docketed for Braidwood Station Units 1 and 2 and Byron Station Units 1 and 2 because the structural integrity evaluation of RPV head penetrations provided in Attachment 4 of the Submittal is applicable to all Braidwood Station and Byron Station Units; however, the current commitments are being identified on the Braidwood Station Unit 2 and Byron Station Unit 1 dockets only since these are the Units for which relaxation is currently being requested. Order relaxation request submittals for Braidwood Station Unit 1 and Byron Station Unit 2 which may be submitted in the future will identify the necessary commitments for their respective Units.

The formal identification of these commitments is provided in the attachment to this letter. If you have any questions regarding this letter, please contact David Chrzanowski at (630) 657-2816.

Respectfully,

  
Darin M. Benyak  
Manager – Licensing

Attachment: Braidwood Station Unit 2 and Byron Station Unit 1 – List of Commitments  
Regarding First Revised Order EA-03-009 Relaxation Request

**Attachment**

**Braidwood Station Unit 2 and Byron Station Unit 1**

**List of Commitments Regarding First Revised Order EA-03-009 Relaxation Request**

Attachment

Braidwood Station Unit 2 and Byron Station Unit 1  
List of Commitments Regarding First Revised Order EA-03-009 Relaxation Request

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
If the NRC finds that the crack-growth formula in industry report MRP-55 is unacceptable, then EGC will revise its analysis for Braidwood Station Unit 2 and Byron Station Unit 1 that justifies relaxation of the Order using the new NRC-approved crack-growth formula.	Within 30 days after the NRC notifies EGC by written correspondence of an NRC-approved crack-growth formula.	Yes	No
If the EGC revised analysis for Braidwood Station Unit 2 shows that the crack-growth acceptance criteria are exceeded prior to the end of the current operating cycle, the relaxation request will be rescinded and EGC will submit to the NRC written justification for continued operation of Braidwood Station Unit 2.	Within 72 hours of determining that the crack growth acceptance criteria are exceeded prior to the end of the current Braidwood Station Unit 2 operating cycle.	Yes	No
If the EGC revised analysis for Byron Station Unit 1 shows that the crack-growth acceptance criteria are exceeded prior to the end of the current operating cycle, the relaxation request will be rescinded and the EGC will submit to the NRC written justification for continued operation of Byron Station Unit 1.	Within 72 hours of determining that the crack growth acceptance criteria are exceeded prior to the end of the current Byron Station Unit 1 operating cycle.	Yes	No
If the EGC revised analysis for Braidwood Station Unit 2 shows that the crack-growth acceptance criteria, while acceptable for the current operating cycle, are exceeded during the subsequent operating cycle, EGC will submit the revised analysis for NRC review.	Within 30 days of determining that the crack growth acceptance criteria are exceeded during the subsequent Braidwood Station Unit 2 operating cycle.	Yes	No
If the EGC revised analysis for Byron Station Unit 1 shows that the crack-growth acceptance criteria, while acceptable for the current operating cycle, are exceeded during the subsequent operating cycle, EGC will submit the revised analysis for NRC review.	Within 30 days of determining that the crack growth acceptance criteria are exceeded during the subsequent Byron Station Unit 1 operating cycle.	Yes	No

# Attachment

## Braidwood Station Unit 2 and Byron Station Unit 1 List of Commitments Regarding First Revised Order EA-03-009 Relaxation Request

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		ONE-TIME ACTION (Yes/No)	PROGRAMMATIC (Yes/No)
If the EGC revised analysis shows that the crack-growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle for Braidwood Station Unit 2, EGC will submit a letter to the NRC confirming that its analysis has been revised.	Within 30 days of the approval of the EGC revised analysis for Braidwood Station Unit 2.	Yes	No
If the EGC revised analysis shows that the crack-growth acceptance criteria are not exceeded during either the current operating cycle or the subsequent operating cycle for Byron Station Unit 1, EGC will submit a letter to the NRC confirming that its analysis has been revised.	Within 30 days of the approval of the EGC revised analysis for Byron Station Unit 1.	Yes	No
Any future crack-growth analyses performed for this and future cycles for Braidwood Station Unit 2 RPV head penetrations must be based on an acceptable crack-growth rate formula.	Whenever crack-growth analyses for Braidwood Station Unit 2 RPV head penetrations are revised.	No	Yes
Any future crack-growth analyses performed for this and future cycles for Byron Station Unit 1 RPV head penetrations must be based on an acceptable crack-growth rate formula.	Whenever crack-growth analyses for Byron Station Unit 1 RPV head penetrations are revised.	No	Yes

Note: The terms "this cycle" or "current operating cycle" refer to the Braidwood Station Unit 2 and Byron Station Unit 1 operating cycles in effect when the NRC notifies EGC by written correspondence that the flaw-growth rate formula in industry report MRP-55 is no longer acceptable and an alternate NRC-approved crack-growth formula is to be used.