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Nuclear

June 11, 2002 BW020051

United States Nuclear Regulatory Commission ATTN: Document Control Desk Washington, D.C. 20555-0001

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

Subject:

Braidwood Station Unit 2 Response to Requested Action 5 of NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles"

Reference:

- 1) J. A. Benjamin to U. S. NRC letter, "Exelon/AmerGen Response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," dated August 31, 2001.
- 2) J. D. von Suskil to U. S. NRC letter, "Braidwood Station Unit 1 Response to Requested Action 5 of NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles", dated November 2, 2001.

Attachment 2 of Reference 1 contained the Braidwood Station response to NRC Bulletin 2001-01. In this response, Exelon confirmed that Braidwood Station, Units 1 and 2 were low susceptibility plants with a greater than 30 Effective Full Power Years for an Oconee Nuclear Station 3 condition. Because of this low susceptibility to reactor vessel head penetration (VHP) cracking, Braidwood Station was not required by the Bulletin to perform any visual or alternative inspections in the near term nor to develop any future VHP inspection plans.

In accordance with requested action 5 of the Bulletin, Braidwood Station is providing the results of activities related to Bulletin 2001-01 during the Unit 2 Spring refueling outage which concluded on May 12, 2002. The results are contained in the Attachment to this letter. With this report, the requested actions of Bulletin 2001-01 have been completed for Braidwood Station Unit 2. In addition, given that Reference 2 provided the response for Braidwood Station, Unit 1, Braidwood Station has now completed the required actions for NRC Bulletin 2001-01.

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Please direct any questions you may have regarding this submittal to Ms. Amy Ferko, Regulatory Assurance Manager, at (815) 417-2699.

Sincerely,

James D. von Suski Site Vice President Braidwood Station

Attachment: Response to NRC Bulletin 2001-01, Action 5, Braidwood Station, Unit 2

cc: Regional Administrator – NRC Region III NRC Senior Resident Inspector – Braidwood Station

STATE OF ILLINOIS COUNTY OF WILL		)	
IN THE MATTER OF		)	1
EXELON GENERATION COMPANY, LLC		)	Docket Number
BRAIDWOOD STATION - UNIT 2		)	STN 50-457
SUBJECT:	Braidwood Station Unit 2 Thirty-D 2001-01, "Circumferential Crackin Penetration Nozzles"		
	AFFIDAVIT		
	I affirm that the content of this transmy knowledge, information and believed.	ef.  Jame Site V	s D. von Suskil vice President wood Station
Subscribed a	and sworn to before me, a Notary Publi	ic in and	
for the State	above named, this tl day	of	
Jm	<u>مو</u> , 20 <u>02</u> .		
	y Groth		
N	otary Public		



## **Attachment**

## NRC Bulletin 2001-01 Requested Action 5

Addressees are requested to provide the following information within 30 days after plant restart following the next refueling outage:

- a. a description of the extent of VHP nozzle leakage and cracking detected at your plant, including the number, location, size, and nature of each crack identified;
- b. if cracking is identified, a description of the inspections (type, scope, qualification requirements, and acceptance criteria), repairs, and other corrective actions you have taken to satisfy applicable regulatory requirements. This information is requested only if there are any changes from prior information submitted in accordance with this bulletin.

## Response:

Braidwood Station, Unit 2 has a low susceptibility to primary water stress corrosion cracking of the reactor pressure vessel (RPV) top head nozzles. Based on the data reported to the NRC in MRP-48, "PWR Materials Reliability Program Response to NRC Bulletin 2001-01," Braidwood Station, Unit 2 ranks 65th out of 69 PWR plants. Therefore, inspections to demonstrate compliance with existing regulations were not required by this Bulletin. However, during the Spring 2002 refueling outage at Braidwood Station, Unit 2, a visual examination was performed in response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity." This examination is also applicable to NRC Bulletin 2001-01 issues. The examination consisted of a qualified, effective visual exam that covered 100% of the RPV surface including all 79 vessel head penetrations (VHPs). These VHPs include two Reactor Vessel Level Indication System (RVLIS) penetrations, 5 thermocouple penetrations, one vent pipe, 53 control rod drive mechanism penetrations, and 18 spare penetrations.

The examination included 100% of the RPV head surface and a 360 degree view of all VHPs with the exception of the head vent penetration which was obscured for approximately 90 degrees due to a section of angle iron which supports the head insulation. However, because of the slight clearance between the bottom of the support steel and the head surface, boric acid deposits around the head vent would have been detectable. There was no evidence of any VHP cracking, active leakage or leakage from VHPs.