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Exelon Nuclear

April 26, 2002

LTR: BYRON 2002-0051
File: 1.10.0101

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Byron Station Unit 1
Facility Operating License No. NPF-37
NRC Docket No. STN 50-454

Subject: Byron Station Unit 1 Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity"

On March 18, 2002, the NRC issued NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity." This bulletin requires that the following information be submitted to the NRC within 30 days after plant restart following the next inspection of the reactor pressure vessel head to identify any degradation:

- the inspection scope and results, including the location, size, and nature of any degradation detected; and

- the corrective actions taken and the root cause of the degradation.

Pursuant to 10 CFR 50.54, "Conditions of Licenses," paragraph (f), Attachment 1 to this letter provides the Byron Station Unit 1 30-day response. This response is due to the NRC by April 29, 2002.

A095

If you have any questions or desire additional information regarding this letter, please contact William Grundmann, Regulatory Assurance Manager, at (815) 406-2800.

Respectfully,

Richard P. Lopriore
Site Vice President
Byron Nuclear Generating Station

RPL/MR/dpk

Enclosures: Attachment 1, Byron Station Unit 1 Response to NRC Bulletin 2002-01

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Byron Station
NRC Project Manager – NRR – Byron Station
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS **COUNTY OF OGLE**	))	
IN THE MATTER OF	)	
EXELON GENERATION COMPANY, LLC	)	**Docket Numbers**
BYRON STATION UNIT 1	)	**STN 50-454**

SUBJECT: **Byron Station Unit 1 Response to NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity"**

AFFIDAVIT

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

Richard P. Lopriore
Site Vice President
Byron Nuclear Generating Station

Subscribed and sworn to before me, a Notary Public in and

for the State above named, this 26th day of

April, 2002

Notary Public

OFFICIAL SEAL
TRACEY L. PLUCK
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES 01/04

ATTACHMENT 1

Byron Station Unit 1

Response to NRC Bulletin 2002-01

"Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity"

Attachment 1

Byron Station Unit 1

Response to NRC Bulletin 2002-01

On March 18, 2002, the NRC issued NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Pressure Boundary Integrity." This bulletin requires that the following information be submitted to the NRC within 30 days after plant restart following the next inspection of the reactor pressure vessel (RPV) head to identify any degradation:

2. *Within 30 days after plant restart following the next inspection of the reactor pressure vessel head to identify any degradation, all PWR addressees are required to submit to the NRC the following information:*

   a. *the inspection scope and results, including the location, size, and nature of any degradation detected,*

   b. *the corrective actions taken and the root cause of the degradation.*

Byron Station Unit 1 Response

a. *the inspection scope and results, including the location, size, and nature of any degradation detected,*

Response

The following inspections were performed on the reactor pressure vessel (RPV) during refueling outage B1R11 in March 2002:

- Pre and post-outage VT-2 examinations of the accessible areas on top of the RPV head (i.e., control rod drive mechanism housings) were performed at normal reactor coolant system pressure. No evidence of leakage, boric acid residue, or degradation of material due to corrosion was identified during these inspections.

- VT-1 examinations were performed on the core exit thermocouple clamp assemblies. There was no evidence of erosion, corrosion, or wear of the bolting material, and there were no instances of bolting material degradation due to corrosion. These connections, which are disassembled each refueling outage, were specifically examined for leakage by VT-2 qualified personnel during unit startup and no abnormal conditions were identified.

- Approximately 20% of the bare metal RPV surface was visually inspected to confirm the inspection results of a previous leak on the reactor head vent valve discovered during refueling outage B1R03 in 1990; no boric acid accumulation or head wastage was observed.

b. the corrective actions taken and the root cause of the degradation.

Response

There were no corrective actions taken or root cause investigations performed as no RPV degradation was identified.