



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

April 11, 2016

Mr. Bryan C. Hanson  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO)  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNIT NO. 1 - REVIEW OF THE FALL 2015 STEAM  
GENERATOR TUBE INSERVICE INSPECTIONS DURING REFUELING  
OUTAGE 20 (CAC NO. MF7348)

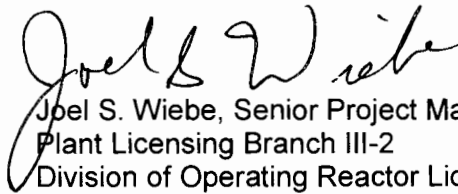
Dear Mr. Hanson:

By letter dated February 5, 2016 (Agencywide Documents Access Management System (ADAMS) Accession No. ML16036A061), Exelon Generation Company, LLC (the licensee) submitted information summarizing the results of its 2015 steam generator tube inspections performed during refueling outage 20 at Byron Nuclear Power Station, Unit No. 1 (Byron 1).

The U.S. Nuclear Regulatory Commission staff has completed its review of the report and concludes that the licensee provided the information required by the Byron 1 technical specifications. No additional follow up is required at this time. The staff's review is enclosed.

If you have questions regarding this review please contact me at (301) 415-6606 or [Joel.Wiebe@nrc.gov](mailto:Joel.Wiebe@nrc.gov).

Sincerely,

  
Joel S. Wiebe, Senior Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. STN 50-454

Enclosure:  
Review of Steam Generator Tube Inspections

cc w/encl: Distribution via Listserv

SUMMARY OF THE NRC STAFF REVIEW OF THE STEAM GENERATOR

TUBE INSERVICE INSPECTIONS FOR REFUELING OUTAGE 20 FOR

BYRON NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-454

By letter dated February 5, 2016 (Agencywide Documents Access Management System (ADAMS) Accession No. ML16036A061), Exelon Generation Company, LLC (the licensee) submitted information summarizing the results of their 2015 steam generator (SG) tube inspections performed during refueling outage 20 at Byron Nuclear Power Station, Unit No. 1 (Byron 1).

Byron 1 has four Babcock & Wilcox SGs. Each contains 6,633 thermally treated Alloy 690 tubes. Each tube has a nominal wall thickness of 0.040 inches. The tubes were hydraulically expanded at both ends for the full length of the tubesheet and are supported by a number of stainless steel lattice grid structures and fan bars.

The licensee provided the scope, extent, methods, and results of its SG tube inspections in the document referenced above. In addition, the licensee described corrective actions taken in response to the inspection findings. The tubes in all four SGs were inspected this outage.

The following observation is noted regarding the 2015 inspections:

- The licensee noted that during the visual inspections of SG 1A, some deposit accumulation was identified at the lattice-grids and on the tube surfaces at the uppermost (9<sup>th</sup>) support location on the hot-leg side.

Based on a review of the information provided, the U.S. Nuclear Regulatory Commission staff concludes that the licensee provided the information required by the Byron 1 technical specifications. In addition, the staff concludes that there are no technical issues that warrant follow-up action at this time since the inspections appear to be consistent with the objective of detecting potential tube degradation and the inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

Enclosure

April 11, 2016

Mr. Bryan C. Hanson  
Senior Vice President  
Exelon Generation Company, LLC  
President and Chief Nuclear Officer (CNO)  
Exelon Nuclear  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNIT NO. 1 - REVIEW OF THE FALL 2015 STEAM  
GENERATOR TUBE INSERVICE INSPECTIONS DURING REFUELING  
OUTAGE 20 (CAC NO. MF7348)

Dear Mr. Hanson:

By letter dated February 5, 2016 (Agencywide Documents Access Management System (ADAMS) Accession No. ML16036A061), Exelon Generation Company, LLC (the licensee) submitted information summarizing the results of its 2015 steam generator tube inspections performed during refueling outage 20 at Byron Nuclear Power Station, Unit No. 1 (Byron 1).

The U.S. Nuclear Regulatory Commission staff has completed its review of the report and concludes that the licensee provided the information required by the Byron 1 technical specifications. No additional follow up is required at this time. The staff's review is enclosed.

If you have questions regarding this review please contact me at (301) 415-6606 or [Joel.Wiebe@nrc.gov](mailto:Joel.Wiebe@nrc.gov).

Sincerely,

/RA/

Joel S. Wiebe, Senior Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. STN 50-454

Enclosure:  
Review of Steam Generator Tube Inspections

cc w/encl: Distribution via Listserv

**DISTRIBUTION:**

PUBLIC

RidsNrrDorlLpl3-2 Resource  
RidsNrrPMBYRON Resource  
RidsNrrLASRohrer Resource  
RidsNrrDorlDpr Resource

LPL3-2 R/F  
G Kulesa, NRR  
K Karwoski, NRR  
RidsRgn3MailCenter Resource  
RidsAcrs\_MailCTR Resource

ADAMS Accession No. ML16096A352

\*via Memorandum

OFFICE	NRR/DORL/LPL3-PM	NRR/DORL/LPL3-2/LA	NRR/DE/ESGB/BC*
NAME	JWiebe	SRohrer	GKulesa
DATE	4/7/16	4/6/16	3/24/16
OFFICE	NRR/DORL/LPL3-2/PM	NRR/DORL/LPL3-2/PM	
NAME	JPoole	JWiebe	
DATE	4/8/16	4/11/16	

OFFICIAL RECORD COPY