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

January 19, 2016

Mr. Bryan C. Hanson
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2 – REVIEW OF THE 2015 STEAM GENERATOR TUBE INSPECTIONS (CAC NO. MF6677)

Dear Mr. Hanson,

By letters dated August 25, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15239A292), and November 6, 2015 (ADAMS Accession No. ML15314A079), Exelon Generation Company, LLC (the licensee), submitted information summarizing the results of the spring 2015 steam generator (SG) tube inspections performed at the Calvert Cliffs Nuclear Power Plant, Unit No. 2.

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

If you have any questions please contact me at 301-415-2549, or alexander.chereskin@nrc.gov.

Sincerely,

Alexander N. Chereskin, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-318

Enclosure:
As stated

cc w/encl: Listserv

U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF THE 2015 STEAM GENERATOR TUBE INSPECTIONS

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2

CALVERT CLIFFS NUCLEAR POWER PLANT, LLC

EXELON, GENERATION, LLC

DOCKET NO. 50-318

By letters dated August 25, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15239A292), and November 6, 2015 (ADAMS Accession No. ML15314A079), Exelon Generation Company, LLC (the licensee), submitted information summarizing the results of the spring 2015 steam generator (SG) tube inspections performed at Calvert Cliffs Nuclear Power Plant, Unit No. 2. These inspections were performed during refueling outage 21 (RFO 21) for Unit No. 2.

Calvert Cliffs Nuclear Power Plant, Unit No. 2, has two Babcock and Wilcox International SGs. Each SG contains 8,471 tubes made from thermally treated Alloy 690 material. Each tube has a nominal outside diameter of 0.75 inches and a nominal wall thickness of 0.042 inches. The SGs have a triangular tube pitch arrangement with 1-inch spacing between tube centers. The tubes are hydraulically expanded the entire depth of the tubesheet. Rows 1-18 of the U-bend received stress relief treatment after bending.

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

After reviewing the information provided by the licensee, the staff has the following comments or observations:

- The licensee reported 154 indications (in approximately 123 tubes) of tube wear from fan bars in SG 21, and 293 indications (in approximately 223 tubes) of tube wear from fan bars in SG 22.

- The licensee reported tube wear from lattice grid supports for the first time in Calvert Cliffs, Unit No. 2, during RFO 21. There were two indications in two tubes in SG 21 and one indication in one tube in SG 22. This wear was not unexpected because it had already been experienced and reported in the SGs in Calvert Cliffs, Unit No. 1.

- Thirteen loose part wear indications were reported in 10 tubes in SG 21, while eight loose part wear indications were reported in seven tubes in SG 22.

- No tubes were plugged during RFO 21.

Enclosure

Based on a review of the information provided, the staff concludes that the licensee provided the information required by the 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 that inspection results appear to be consistent with industry operating experience at similarly designed and operated units.

January 19, 2016

Mr. Bryan C. Hanson
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NO. 2 – REVIEW OF THE 2015 STEAM GENERATOR TUBE INSPECTIONS (CAC NO. MF6677)

Dear Mr. Hanson,

By letters dated August 25, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15239A292), and November 6, 2015 (ADAMS Accession No. ML15314A079), Exelon Generation Company, LLC (the licensee), submitted information summarizing the results of the spring 2015 steam generator (SG) tube inspections performed at the Calvert Cliffs Nuclear Power Plant, Unit No. 2.

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

If you have any questions please contact me at 301-415-2549, or alexander.chereskin@nrc.gov.

Sincerely,
/RA/

Alexander N. Chereskin, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-318

Enclosure:
As stated

cc w/encl: Listserv

DISTRIBUTION:

PUBLIC	RidsNrrPMCalvertCliffs	RidsRgn1MailCenter	G. Kulesa, NRR
LPLI-1 R/F	RidsNrrLAKGoldstein	RidsAcrsAcnwMail_CTR	
RidsNrrDorlDpr	RidsNrrDeEsgb	A. Johnson, NRR	
RidsNrrDorlLpII-1	A. Dimitriadis, RI	K. Karwoski, NRR	

ADAMS Accession No.: ML15350A108 *via dated memo

OFFICE	LPLI-1/PM	LPLI-1/LA	ESGB/BC	LPLI-1/BC	LPLI-1/PM
NAME	AChereskin	KGoldstein	GKulesa*	TTate	AChereskin
DATE	12/ 17 /15	12/16/15	12/03/2015	1/ 15 /16	1/19/16

OFFICIAL RECORD COPY