



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

August 20, 2014

Mr. Michael P. Gallagher
Vice President, License Renewal Projects
Exelon Generation Company, LLC
200 Exelon Way
Kennett Square, PA 19348

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1
AND 2, LICENSE RENEWAL APPLICATION, SET 40 (TAC NOS. MF1879,
MF1880, MF1881, AND MF1882)

Dear Mr. Gallagher:

By letter dated May 29, 2013, Exelon Generation Company, LLC, submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses NPF-37, NPF-66, NPF-72, and NPF-77 for Byron Station, Units 1 and 2, and Braidwood Station, Units 1 and 2, respectively, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with John Hufnagel, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-4115 or e-mail Lindsay.Robinson@nrc.gov.

Sincerely,

/RA/

Lindsay R. Robinson, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-454, 50-455, 50-456, and 50-457

Enclosure:
Request for Additional Information

cc w/encl: Listserv

Mr. Michael P. Gallagher

August 20, 2014

Vice President, License Renewal Projects
Exelon Generation Company, LLC
200 Exelon Way
Kennett Square, PA 19348

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Letter to M.P. Gallagher from Lindsay R. Robinson dated August 20, 2014

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BYRON STATION, UNITS 1 AND 2,
AND BRAIDWOOD STATION, UNITS 1 AND 2,
LICENSE RENEWAL APPLICATION
REQUEST FOR ADDITIONAL INFORMATION, SET 40
(TAC NOS. MF1879, MF1880, MF1881, MF1882)

RAI 4.7.8-2

Applicable:

Byron Station and Braidwood Station (BBS), all units

Background:

License renewal application (LRA) Section 4.7.8 states that BBS, Units 1 and 2, performed pre-emptive flaw evaluations based on crack growth rate analyses on reactor vessel, pressurizer, primary steam generator sub-components, and primary coolant components. The LRA further states that flaw evaluations, which use fracture toughness as an input, were performed on reactor vessels. The applicant defines these analyses supporting flaw evaluations as plant-specific time limited aging analyses (TLAAs).

Issue:

The applicant's TLAAs evaluation basis discussion in the "Fatigue Crack Growth Analyses" subsection of LRA Section 4.7.8, "Analyses Supporting Flaw Evaluations of Primary System Components," does not clearly identify which reactor pressurizer vessel (RPV), steam generator (SG), pressurizer, or reactor coolant pressure boundary (RCPB) piping components had contained flaws and were analyzed in accordance with the generic flaw evaluation methodology in WCAP-11063, "Handbook on Flaw Evaluations For Byron Unit 1 and 2 Steam Generators and Pressurizers" (LRA Reference 4.8.27) and which RPV, SG, pressurizer, or RCPB piping components had contained flaws and were analyzed in accordance with the generic flaw evaluation methodology in WCAP-12046, "Handbook on Flaw Evaluations for the Byron and Braidwood Units 1 and 2 Reactor Vessels" (LRA Reference 4.8.28).

Request:

Describe the RPV, SG, pressurizer, and RCPB flaws that were evaluated in accordance with the flaw evaluation criteria in WCAP-11063 and the RPV, SG, pressurizer, or RCPB flaws that were analyzed in accordance with the generic flaw evaluation methodology in WCAP-12046. Identify the NRC safety evaluation references that were issued in approval of these flaw evaluations.

ENCLOSURE