



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

November 22, 2013

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

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
BYRON NUCLEAR STATION, UNITS 1 AND 2, AND BRAIDWOOD NUCLEAR
STATION, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION – SET 5
(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* (10 CFR) Part 54, to renew the operating licenses NPF-37, NPF-66, NPF-72, and NPF-77 for Byron Nuclear Station, Units 1 and 2, and Braidwood Nuclear Station, Units 1 and 2, respectfully, for review by the U.S. Nuclear Regulatory Commission 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 at Lindsay.Robinson@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Lindsay R. Robinson", with a long horizontal flourish extending to the right.

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:
Requests for Additional Information

cc w/encl: Listserv

November 22, 2013

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

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE BYRON NUCLEAR STATION, UNITS 1 AND 2, AND BRAIDWOOD NUCLEAR STATION, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION – SET 5 (TAC NOS. MF1879, MF1880, MF1881, AND MF 1882)

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* (10 CFR) Part 54, to renew the operating licenses NPF-37, NPF-66, NPF-72, and NPF-77 for Byron Nuclear Station, Units 1 and 2, and Braidwood Nuclear Station, Units 1 and 2, respectfully, for review by the U.S. Nuclear Regulatory Commission 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:
Requests for Additional Information

cc w/encl: Listserv

DISTRIBUTION: See following pages

ADAMS Accession No.:ML13310A576

OFFICE	LA:DLR:RPB2	PM:RPB1:DLR	BC:RPB1:DLR	PM:RPB1:DLR
NAME	IKing	LRobinson	YDiazSanabria	LRobinson
DATE	11/7/13	11/12/13	11/22/13	11/22/13

OFFICIAL RECORD COPY

Letter to M.P. Gallagher from Lindsay R. Robinson dated November 22, 2013

**SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE
 BYRON NUCLEAR STATION, UNITS 1 AND 2, AND BRAIDWOOD NUCLEAR
 STATION, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION – SET 5
 (TAC NOS. MF1879, MF1880, MF1881, AND MF 1882)**

DISTRIBUTION

EMAIL:

PUBLIC

RidsNrrDir Resource

RidsNrrDirRpb1 Resource

RidsNrrDirRasb Resource

RidsOgcMailCenter

LRobinson

JDaily

DMcIntyre, OPA

JWiebe, DORL

EDuncan, RIII

JBenjamin, RIII

AGarmoe, RIII

SR1, Byron Station, RIII

JRobbins, RIII

VMitlyng, RIII

PChandrathil, RIII

**BYRON NUCLEAR STATION, UNITS 1 AND 2
AND BRAIDWOOD NUCLEAR STATION, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION
REQUESTS FOR ADDITIONAL INFORMATION, SET 5
(TAC NOS. MF1879, MF1880, MF1881, AND MF1882)**

RAI 2.1-1

Applicability:

Byron Nuclear Station (Byron) and Braidwood Nuclear Station (Braidwood), all units

Background:

Title 10 of the *Code of Federal Regulations* (10 CFR) 54.4, "Scope," states, in part:

(a) Plant systems, structures and components [(SSCs)] within the scope of this part are –
(1) Safety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in 10 CFR 50.49 (b)(1)) to ensure the following functions –

- (i) The integrity of the reactor coolant pressure boundary;
- (ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11, as applicable.

Issue:

During the on-site scoping and screening methodology audit, the staff determined that the applicant had used a plant equipment database, which provides the component quality classification, as an information source to identify SSCs within the scope of license renewal. However, the staff determined that not all components identified as safety-related in the plant equipment database were included within the scope of license renewal in accordance with 10 CFR 54.4(a)(1).

Request:

The staff requests that the applicant provide a basis for not including components identified as safety-related within the scope of license renewal in accordance with 10 CFR 54.4(a)(1). Indicate if the review concludes that use of the scoping methodology precluded the identification of SSCs that should have been included within the scope of license renewal in accordance with 10 CFR 54.4(a). Describe any additional scoping evaluations performed to address the 10 CFR 54.4(a) criteria. List any additional SSCs included within the scope of license renewal as a result of the review, and any structures and components (SCs) for which aging management reviews are performed.

ENCLOSURE

RAI 2.1-2

Applicability:

Byron and Braidwood, all units

Background:

10 CFR 54.4, "Scope," states, in part,

(a) Plant systems, structures and components [(SSCs)] within the scope of this part are –

(1) Safety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in

10 CFR 50.49 (b)(1)) to ensure the following functions –

(i) The integrity of the reactor coolant pressure boundary;

(ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or

(iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11, as applicable.

(2) All nonsafety-related systems, structures and components whose failure could prevent satisfactory accomplishment of any of the functions identified in (a)(1)(i), (ii), or (iii) of this section.

Issue:

During the on-site scoping and screening methodology audit, the staff determined that certain equipment that was no longer required had been placed in an abandoned state. The applicant indicated that activities had been performed to confirm that abandoned equipment that initially contained fluids, and is in the proximity of safety-related SSCs, has been verified to be drained.

Request:

The staff requests that the applicant provide a basis for not including abandoned equipment within the scope of license renewal in accordance with 10 CFR 54.4(a). Indicate if the review concludes that use of the scoping methodology precluded the identification of SSCs that should have been included within the scope of license renewal in accordance with 10 CFR 54.4(a). Describe any additional scoping evaluations performed to address the 10 CFR 54.4(a) criteria. List any additional SSCs included within the scope of license renewal as a result of the review, and any structures and components (SCs) for which aging management reviews are performed.

RAI 2.1-3

Applicability:

Byron Nuclear Station, Units 1 and 2

Background:

10 CFR 54.4, "Scope," states, in part,

(a) Plant systems, structures and components [SSCs] within the scope of this part are –

(1) Safety-related systems, structures, and components which are those relied upon to remain functional during and following design-basis events (as defined in

10 CFR 50.49 (b)(1)) to ensure the following functions –

- (i) The integrity of the reactor coolant pressure boundary;
- (ii) The capability to shut down the reactor and maintain it in a safe shutdown condition; or
- (iii) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11, as applicable.

(2) All nonsafety-related systems, structures and components whose failure could prevent satisfactory accomplishment of any of the functions identified in (a)(1)(i), (ii), or (iii) of this section.

Issue:

During the on-site scoping and screening methodology audit, the staff reviewed the license renewal application, license renewal implementing documents, as-built drawings, and current licensing basis documentation. The staff determined that the containment access facility hallway structure that is immediately adjacent to the containment extension structure (within the scope of license renewal in accordance with 10 CFR 54.4(a)(1)) is not included within the scope of license renewal in accordance with 10 CFR 54.4(a)(2).

Request:

The staff requests that the applicant provide a basis for not including the containment access facility hallway structure, which is located adjacent to containment extension structure (within the scope of license renewal in accordance with 10 CFR 54.4(a)(1)), within the scope of license renewal in accordance with 10 CFR 54.4(a)(2). The staff requests that the applicant perform a review of this issue and indicate if the review concludes that use of the scoping methodology precluded the identification of SSCs that should have been included within the scope of license renewal in accordance with 10 CFR 54.4(a). Describe any additional scoping evaluations performed to address the 10 CFR 54.4(a) criteria. List any additional SSCs included within the scope of license renewal as a result of the review and SCs for which aging management reviews are performed.