May 14, 2014

LICENSEE: Exelon Generation Company, LLC

FACILITY: Byron Station, Units 1 and 2
Braidwood Station, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 26, 2014, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND EXELON GENERATION COMPANY, LLC CONCERNING DRAFT REQUEST FOR ADDITIONAL INFORMATION, SET 21, PERTAINING TO THE BYRON STATION AND BRAIDWOOD STATION, LICENSE RENEWAL APPLICATION (TAC NOS. MF1879, MF1880, MF1881, AND MF1882)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Exelon Generation Company, LLC (Exelon or the applicant), held a telephone conference call on March 26, 2014, to discuss and clarify the staff's draft request for additional information (DRAI), Set 21, concerning the Byron Station, Units 1 and 2, and the Braidwood Station, Units 1 and 2, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's DRAIs.

Enclosure 1 provides a listing of the participants, and Enclosure 2 contains a listing of the DRAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

/RA/

Lindsay 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

Enclosures:
1. List of Participants
2. List of Draft Request for Additional Information

cc w/encls: Listserv

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SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 26, 2014, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND EXELON GENERATION COMPANY, LLC CONCERNING DRAFT REQUEST FOR ADDITIONAL INFORMATION, SET 21, PERTAINING TO THE BYRON STATION AND BRAIDWOOD STATION, LICENSE RENEWAL APPLICATION (TAC NOS. MF1879, MF1880, MF1881, MF1882)

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TELEPHONE CONFERENCE CALL
BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
March 26, 2014

PARTICIPANTS	**AFFILIATIONS**
Lindsay Robinson	U.S. Nuclear Regulatory Commission (NRC)
Bill Holston	NRC
Chris Wilson	Exelon Generating Company, LLC (Exelon)
Don Warfel	Exelon
Al Fulvio	Exelon
Dylan Cimock	Exelon
Casey Muggleston	Exelon
Greg Lupia	Exelon
Don Brindle	Exelon
Ralph Wolen	Exelon

ENCLOSURE 1

DRAFT REQUEST FOR ADDITIONAL INFORMATION
BYRON STATION, UNITS 1 AND 2, AND BRAIDWOOD STATION, UNITS 1 AND 2,
LICENSE RENEWAL APPLICATION

March 26, 2014

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Exelon Generation Company, LLC (Exelon or the applicant), held a telephone conference call on March 26, 2014, to discuss and clarify the following draft request for additional information (DRAI), Set 21, concerning the Byron Station, Units 1 and 2, and the Braidwood Station, Units 1 and 2, license renewal application (LRA).

DRAI B.2.1.28-3a

Applicability:

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

Background:

By letter dated January 13, 2014, you responded to the staff's request for additional information (RAI) regarding the use of cathodic protection for buried piping systems. With regard to Enhancement No. 9, Exelon provided additional information regarding the use of soil corrosion probes. Based on its review of the response, the staff has additional questions.

1. The response to RAI B.2.1.28-3 states that if soil corrosion probes indicate a material loss of 1 mil per year (mpy) or less, the cathodic protection system would be considered effective for that given surveillance year and no further evaluation would be required.

2. The response to RAI B.2.1.28-3 states that "[f]or each installation application, two (2) probes will be installed; one connected to the cathodic protection system and one left unprotected."

3. The response to RAI B.2.1.28-3 states that a "remaining life calculation will be based on previous volumetric wall thickness measurements, annual corrosion rates and cumulative total loss of material since the volumetric measurements, and the current years' measured corrosion rate extrapolated through the end of the life of the plant."

4. The response to RAI B.2.1.28-3 states that NACE International Publication 05107, "Report on Corrosion Probes in Soil or Concrete," along with input from vendor, manufacturer, and NACE qualified cathodic protection experts will be used to specify details on the installation and use of the soil corrosion probes.

Issue:

1. Although the 1 mpy acceptance criterion is a standard industry value used to demonstrate an effective cathodic protection system, the staff lacks sufficient information to conclude that there is reasonable assurance that all buried in-scope piping would be capable of meeting its current licensing basis intended function with 60 mils of corrosion that could occur through the end of the period of extended operation.

2. It is not clear to the staff whether the phrase, "for each installation application," applies to each cathodic protection survey data point that utilized the 100 mV polarization acceptance criterion during cathodic protection surveys.

3. It is not clear to the staff how the existing wall thickness will be determined when the specific location has not been volumetrically examined to determine the wall thickness. It is also not clear whether nominal wall thickness or maximum wall thickness (e.g., nominal wall thickness plus 12-1/2 percent) will be used to determine the as-found corrosion rate when volumetric examinations have been conducted to determine wall thickness.

4. Neither license renewal application (LRA) Section B.2.1.28 nor Enhancement No. 9 has been revised to include the information sources (described in the Background) on how the soil corrosion probes will be installed and used. The staff considers this information to be necessary to ensure that accurate corrosion rate data will be obtained by the soil corrosion probes.

Request:

1. State whether all buried in-scope components will be able to perform their current licensing basis intended function(s) if 60 mils loss of material were to occur by the end of the period of extended operation. If this is not the case, provide the basis for why the 1 mpy criterion is acceptable.

2. Clarify whether the two probes that will be installed (one connected to the cathodic protection system and one left unprotected) will be installed at each cathodic protection survey data point that utilizes the 100 mV polarization acceptance criterion during the evaluation cathodic protection survey results. If this is not the case, state the basis for how the cathodic protection system will be demonstrated effective at these locations when local probes are not used.

3. Explain:
    a. How the existing wall thickness of buried in-scope components will be determined when the component has not been volumetrically examined to determine the wall thickness.
    b. The basis for how as-found corrosion rates will be determined for buried in-scope piping components.

4. Revise LRA Section B.2.1.28 or Enhancement No. 9 to include pertinent information on installation and use of the soil corrosion probes.

Discussion: The applicant requested clarity on the staff's concern. The applicant noted an error in the Issue and Request section, which is indicated by the underlined portion; the underlined portion will be replaced with the following: "did not meet the negative 850mV polarization potential acceptance criterion." This question will be sent as part of the formal request titled: "RAI B.2.1.28-3a."

DRAI B.2.1.28-5a

Applicability:

Byron

Background:

RAI B.2.1.28-5 requested that, "[g]iven the plant-specific operating experience in relation to the quality of coatings, state the overall condition of coatings as a preventive action in relation to crediting them for the preventive action categories of LR-ISG-2011-03, Table 4a, 'Inspections of Buried Pipe.'"

Issue:

Although the RAI response did not state the overall condition of coatings as a preventive action in relation to crediting them for the Preventive Action Inspection categories (i.e., Category E or F) of LR-ISG-2011-03 Table 4a for any of the seven systems with in-scope buried piping, the staff found that the information provided was sufficient to resolve the staff's concern in RAI B.2.1.28-5 for all three systems at Braidwood that have buried in-scope piping and for the condensate and fire protection systems at Byron. However, given the results of service water and demineralized water systems inspections conducted at Byron, the staff cannot complete its evaluation of buried in-scope service water and demineralized water piping until it understands whether the existing coating conditions satisfy the criterion for Preventive Action inspection Category E or F. Although the staff considers the information provided for the condensate and fire protection systems at Byron acceptable, any inspections that revealed significant coating damage or metal loss should be included in the percentage computation in the request.

Request:

State whether more than 10 percent of the excavated direct visual inspections of in-scope buried piping at Byron have revealed significant coating damage regardless of whether the coating degradation is age-related (except for coating damage occurring during a current excavation), or metal loss. ~~In addition, if this percentage continues into and past the 10-year period prior to the period of extended operation, state what Preventive Action inspection category will be selected if the cathodic protection system does not meet the availability or effectiveness goals recommended in LR-ISG-2011-03.~~

Discussion: The applicant requested clarity on the staff's concern. After further review of the license renewal application, the staff realized that demineralized water piping was missing from the Issue section; the underlined portion indicates an addition to the original draft request. The applicant noted that it had previously submitted docketed information addressing the "Preventive Action inspection category;" after further review, the staff agreed with the applicant and decided to delete that portion of the request as indicated by the strikethrough in the Request section. This question will be sent as part of the formal request titled: "B.2.1.28-5a."