

RS-13-101

May 8, 2013

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

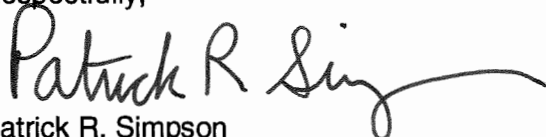
Subject: Response to Request for Additional Information Regarding Commitment for License Renewal

- References:
1. Letter from T. Hanley (Exelon Generation Company, LLC) to U.S. NRC, "License Renewal – Commitment Change in Accordance with NEI 99-04," dated May 18, 2012
 2. Letter from H. M. Jones (U.S. NRC) to M. J. Pacilio (Exelon Generation Company, LLC), "Quad Cities Nuclear Power Station, Units 1 and 2, Follow-up Request for Additional Information Regarding Change to Commitment for License Renewal (TAC Nos. ME8961 and ME8962)," dated March 21, 2013

In Reference 1, Exelon Generation Company, LLC (EGC) submitted information to clarify commitments regarding visual examinations credited for identifying aging effects. In Reference 2, the NRC requested additional information that is required to complete the review. In response to this request, EGC is providing the attached information.

There are no regulatory commitments contained in this letter. Should you have any questions concerning this letter, please contact Mr. Kenneth M. Nicely at (630) 657-2803.

Respectfully,



Patrick R. Simpson
Manager – Licensing

Attachment: Response to Request for Additional Information

cc: NRC Regional Administrator, Region III
NRC Senior Resident Inspector, Quad Cities Nuclear Power Station

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Response to Request for Additional Information

NRC Request 1

State what plant document(s) will include the following specific critical inspection parameters to ensure consistent performance of each examination throughout the period of extended operation:

- a) Minimum examination coverage area
- b) Maximum distance from the subject SSC for which the examiner can conduct the examination
- c) Angle of observation
- d) Minimum lighting requirements and how they are verified

Response

Exelon Generation Company, LLC (EGC) will implement formally approved inspection procedures to delineate the requirements for ongoing aging management programs (AMPs) that specify non-code credited visual examinations. These procedures will be specified as documents that implement license renewal commitments associated with AMPs B.2.8 and B.2.9 in the EGC PassPort commitment tracking database. For inspections performed prior to entry into the period of extended operation (PEO), some critical inspection parameters were documented in the work order instructions associated with the examinations. These instructions, combined with the formal qualifications of the individuals performing the inspections, were effective in identifying aging effects, but it is recognized that documenting the critical inspection parameters (i.e., items a through d above) more formally will provide additional assurance of consistent performance of each inspection throughout the 20-year PEO. As such, EGC intends to implement inspection procedures for the ongoing AMPs that specify visual examinations, listed below:

- B.2.8, "Periodic Inspection of Plant Heating Steam," and
- B.2.9, "Periodic Inspection of Components Subject to Moist Environments."

Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2, entered the PEO on December 14, 2012. Since then, no inspections have been completed for AMP B.2.8, and one inspection has been completed for AMP B.2.9. The one AMP B.2.9 inspection was completed on the Unit 1 High Pressure Coolant Injection system turbine in March 2013 during the last refueling outage. This inspection was performed using work order instructions with direction to follow the inspection requirements related to the four critical inspection parameters (i.e., items a through d above) contained in the procedure for code-related visual inspection of pump and valve internals.

The next inspections to be performed for AMP B.2.8 are scheduled to start in 2015, and the next inspections to be performed for AMP B.2.9 are scheduled to start in 2014. EGC intends to implement the specific procedures discussed above, that delineate inspection requirements for ongoing AMPs, prior to performing the inspections scheduled for 2014 and 2015 for AMPs B.2.9 and B.2.8, respectively. The procedures will document the critical inspection parameters (i.e.,

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items a through d above) to ensure consistent performance of future inspections to be performed throughout the PEO.

NRC Request 2

If the plant documents do not cite specific inspection parameters, but rather rely on the knowledge base of the inspector and individual conducting the pre-job brief, state the basis for how inspections are consistently effectively conducted.

Response

As discussed above, for future inspections performed throughout the 20-year PEO, EGC will establish procedures that ensure that the specific critical inspection parameters cited in NRC Request 1 are met during inspections associated with AMPs B.2.8 and B.2.9.

NRC Request 3

State how engineers that are not certified as Level II or Level III personnel are trained in regard to inspection and examination activities such that they can appropriately evaluate the conditions identified by the examiner.

Response

The focus of the qualified inspectors is on identification of an aging effect, and the focus of the engineers is on evaluation of the potential long-term impact of the identified aging effect. It is appropriate for engineers to evaluate the inspection results and determine the potential for long-term impact because they are qualified to perform trending and analysis (e.g., such as an evaluation of future piping integrity in a situation where wall thickness has been reduced).

Engineers are trained using an accredited program that includes formal requirements for both initial and ongoing training. Initial training includes topics associated with aging management, such as corrosion control. New engineers must complete initial training requirements prior to independently evaluating aging effects.

In addition, continuing training provided to engineers in 2010 and 2012 included a module on License Renewal and Aging Management. This module included topics such as:

- Requirements of 10 CFR 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants,"
- NUREG-1801, "Generic Aging Lessons Learned (GALL) Report,"
- AMP requirements including their alignment with NUREG-1796, "Safety Evaluation Report Related to the License Renewal of the Dresden Nuclear Power Station, Units 2 and 3 and Quad Cities Nuclear Power Station, Units 1 and 2," and
- Aging management industry operating experience, including lessons learned from sources such as completed NRC license renewal inspections.

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Based on the information above, the training provided to engineers is adequate to ensure that they can appropriately evaluate aging effects identified by qualified inspectors.

NRC Request 4

For future periodic inspections, verify that all of the details in Section A, "Overview," and program-specific details in Section B, "Program Specific Information Related to the Effectiveness of Visual Examinations," in the RAI response apply, or identify which statements do not apply.

Response

With respect to Section A, the primary focus of the visual examinations, as discussed in the previous RAI response, is unchanged for future periodic inspections. A non-destructive examination (NDE) Level III individual qualified/certified in VT-1 and VT-3 examinations will work with engineering personnel to generate the new procedures discussed above. Personnel with training, qualification, and certification for Level II or Level III VT examinations will continue to perform the future periodic inspections.

With respect to Section B, the ongoing AMPs that specify visual examinations include B.2.8 and B.2.9. As discussed in the response to NRC Request 1 above, future inspections performed for these AMPs will be controlled using a new procedure that documents critical inspection parameters. Also, as discussed in the response to NRC Request 1, one inspection has already been completed for B.2.9 since entering the PEO, and that inspection was performed using work order instructions with direction to follow the inspection requirements related to the four critical inspection parameters contained in the procedure for code-related visual inspection of pump and valve internals.