



RS-14-133

10 CFR 50.54(f)

June 4, 2014

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
11555 Rockville Pike,  
Rockville, MD 20852

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: Updated Supplemental Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident

References:

1. NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated March 12, 2012
2. Exelon Generation Company, LLC letter to USNRC, Response to March 12, 2012, Request for Information Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flooding Hazard Reevaluation Report, dated March 12, 2013 (RS-13-047)
3. Exelon Generation Company, LLC letter to USNRC, Supplemental Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated August 28, 2013 (RS-13-211)

On March 12, 2012, the NRC issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 2 of Reference 1 requested that each licensee perform a reevaluation of external flooding sources and report the results in accordance with the NRC's prioritization plan. Exelon Generation Company, LLC (EGC) submitted the flood reevaluation for Quad Cities Nuclear Power Station, Units 1 and 2 in Reference 2. Reference 2 contains the interim actions that EGC has taken or plans to take to address higher flooding hazards relative to the design basis until the integrated assessment is completed. Reference 3 provided additional information regarding the list of the interim actions taken or planned to be taken, as identified in Reference 2, and converted these interim actions into regulatory commitments along with the dates by which the actions were to be implemented.

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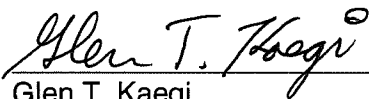
The purpose of this letter is to provide an update to the regulatory commitments contained in Reference 3, as discussed with NRC staff on April 4, 2014. The enclosed table updates completed Commitment Items 3, 7, 8, 9, and 10 to describe in the Additional Information column the specific actions taken as a result of the completed evaluations. All regulatory commitments have been completed.

This letter contains no new or revised regulatory commitments.

Should you have any questions concerning the content of this letter, please contact Ron Gaston at (630) 657-3359.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 4<sup>th</sup> day of June 2014.

Respectfully submitted,



Glen T. Kaegi  
Director - Licensing & Regulatory Affairs  
Exelon Generation Company, LLC

Enclosure:

1. Quad Cities Nuclear Power Station, Units 1 and 2 – Flood Hazard Reevaluation Report Interim Action Commitments

cc: Director, Office of Nuclear Reactor Regulation  
Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - Quad Cities Nuclear Power Station  
NRC Project Manager, NRR - Quad Cities Nuclear Power Station  
Mr. Blake A. Purnell, NRR/DORL/LPL3-2, NRC  
Ms. Jessica A. Kratchman, NRR/JLD/PMB, NRC  
Mr. Eric E. Bowman, NRR/DPR/PGCB, NRC or Ms. Eileen M. McKenna, NRO/DSRA/BPTS,  
NRC  
Illinois Emergency Management Agency - Division of Nuclear Safety

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bcc: Site Vice President - Quad Cities Nuclear Power Station  
Vice President Operations Support  
Regulatory Affairs Manager  
Regulatory Assurance Manager - Quad Cities Nuclear Power Station  
Severe Accident Management Director  
Site Operations Director - Quad Cities Nuclear Power Station  
Corporate Licensing Managers – West  
Corporate Licensing Director – West  
Exelon Records Management  
Commitment Tracking Coordinator – West  
Vinod Aggarwal  
Joe Bellini  
Dustin Damhoff

**Enclosure 1: Quad Cities Nuclear Power Station, Units 1 and 2 – Flood Hazard Reevaluation Report Interim Action Commitments\* (“Commitments” are bolded header columns)**

Item Number	Interim Actions Taken or Planned to Take as Included in the Reevaluation Report (Commitment*)	Report Reference	Additional Information	Implementation Date (Committed* Date or Outage)	Commitment Type One-Time Action* (Yes/No)	Commitment Type Programmatic* (Yes/No)
The local intense precipitation interim evaluation will include:						
1.	A visual inspection of plant grade level doors to confirm proper operation and assess seal condition.	Report Cover Letter, Section d.ii	Some of the plant grade level doors do not have seals, as seals are not required by the current design basis requirements. The results of this action are being evaluated under Interim Action Item Number 3.	March 18, 2013 Completed	Yes	No
2.	A visual inspection of plant drainage system components to confirm functionality.	Report Cover Letter, Section d.ii	The overall drainage system condition was found acceptable.	March 14, 2013 Completed	Yes	No

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3.	<p>An evaluation of the effects of local intense precipitation event on the plant, with respect to:</p> <ul style="list-style-type: none"> <li>- Building structures and doors and amount of leakage the doors would allow;</li> <li>- How the leakage through the doors affect plant equipment;</li> <li>- Recommended actions based on the results of the evaluations; and</li> <li>- Prioritizing actions for high risk areas.</li> </ul>	Report Cover Letter, Section d.ii	<p>Evaluation determined existing plant design has margin for the river flood event.</p> <p>Evaluation recommended upgrades to some doors, penetrations, openings and building interfaces for mitigating the LIP event.</p> <p>Subsequent to completion of this committed evaluation, modifications have been started and installation is planned to occur consistent with the FLEX plan implementation schedule.</p>	April 4, 2014 Completed	Yes	No
4.	Develop and implement appropriate operational response procedures to mitigate the effects of the LIP Event.	Report Cover Letter, Section d.ii	Procedure QCOA 0010-22 (Local Intense Precipitation Procedure) was developed.	March 14, 2013 Completed	Yes	No

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5.	Perform additional local intense precipitation calculations to further explore site drainage affects.	Report Cover Letter, Section d.ii	Calculations LIP-QDC-002 and LIP-QDC-003 were developed in accordance with Appendix B of NUREG/CR-7046, Case 1 and Case 2, respectively.	June 27, 2013 Completed	Yes	No
6.	Obtaining a site survey so that the results of the local intense precipitation analysis can be directly correlated to the door sill elevations.	Report Cover Letter, Section d.ii	The results of this action are being evaluated under Interim Action Item Number 3.	August 8, 2013 Completed	Yes	No
7.	Determine if interim flood barriers are warranted until the 2-Year Integrated Assessment Report is complete.	Report Cover Letter, Section d.ii	Interim flood barriers were determined to provide negligible benefit for protection from the new LIP event. Permanent flood barriers are being installed on an accelerated schedule consistent with the FLEX plan implementation schedule.	May 30, 2014 Completed	Yes	No
The river flood and combined-effects flood interim evaluation will include:						

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8.	Evaluate the effects of wind-generated waves on the plant.	Report Cover Letter, Section d.ii	Evaluation determined that the effects of wind generated waves have negligible impact on the station’s ability to reach and maintain safe shutdown.	November 15, 2013 Completed	Yes	No
9.	Evaluate the effects of hydrodynamic and debris impact loading on the plant.	Report Cover Letter, Section d.ii	Evaluation determined that the effects of hydrodynamic and debris impact loading on the plant have negligible impact on the station’s ability to reach and maintain safe shutdown.	November 15, 2013 Completed	Yes	No

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10.	Revise Flooding Procedures to incorporate new issues (as appropriate) in accordance with updated river flood calculations.	Report Cover Letter, Section d.ii	<p>Revisions to QCOA 0010-16 (Flood Emergency Procedure) have been made to address evaluations completed to date.</p> <p>All above Interim Actions have been completed. Flood Emergency Procedure has been updated to incorporate additional considerations based on the results of the completed Interim Actions.</p> <p>Subsequent to completion of this committed incorporation of new issues, additional revisions may be considered as identified during development of the Integrated Assessment Report.</p>	July 18, 2014 Completed	Yes	No