

10 CFR 50.54(f)

RS-13-079

March 11, 2013

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

> Dresden Nuclear Power Station, Units 2 and 3 Renewed Facility Operating License Nos. DPR-19 and DPR-25 NRC Docket Nos. 50-237 and 50-249

**Subject:** Extension Request - Response to March 12, 2012, Request for Information Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flooding Hazard Reevaluation Report

## References:

- 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
- NRC Letter, Prioritization of Response Due Dates for Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendations 2.1 of the Near-Term Task Force Review of Insights From the Fukushima Dai-ichi Accident, dated May 11, 2012
- 3. NRC Letter, Supplemental Information Related to Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident, dated March 1, 2013
- Letter from Exelon Generation Company, LLC (EGC), to U.S. Nuclear Regulatory Commission, "180-day Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident", dated November 27, 2012 (RS-12-168)

On March 12, 2012, the NRC issued Reference 1 to request information associated with Near-Term Task Force (NTTF) Recommendation 2.1 for Flooding. One of the required responses in this letter directed licensees to submit a Hazard Reevaluation Report, including the interim action plan requested in Item 1.d of Reference 1, Enclosure 2, if appropriate. On May 11, 2012, the NRC issued the prioritization plan developed by the NRC and resultant Flooding Hazard

Reevaluation due dates for all sites. Reference 2, Enclosure 1 identified the Dresden Nuclear Power Station, Units 2 and 3 (DNPS) site as a Category 1 Site requiring a Flooding Hazard Reevaluation Report submittal due date of March 12, 2013.

The purpose of this letter is to request an extension to the scheduled submittal date for the DNPS Flooding Hazard Reevaluation Report to May 10, 2013. EGC is performing a detailed 2D model of the flooding hazard for the DNPS site, and additional time is required to complete the DNPS 2D model, and the verification and validation of the calculation assumptions, input data, and results. This request for extension addresses the NRC staff positions provided in Reference 3.

This extension request is justified on the following basis:

- As recognized in the NRC's March 2012 50.54(f) letter, the current regulatory approach
  and the resultant plant capabilities provide confidence that an accident with
  consequences similar to the Fukushima accident is unlikely to occur in the United
  States, and that continued plant operation does not pose an imminent risk to public
  health and safety. Therefore, the duration of this extension request has no impact on
  safe plant operation.
- The DNPS recently completed walkdowns which verified its current flooding licensing basis (Reference 4). The DNPS current licensing basis is being met. Therefore, DNPS is protected from current design basis flood events.
- The events being analyzed in the DNPS Flooding Hazard Reevaluation are beyond the plant's design and licensing basis. Therefore, the reevaluation results based on beyond design basis events do not constitute an operability concern. This is consistent with the NRC supplemental information letter dated March 1, 2013 (Reference 3).
- The reevaluated flooding hazard (Probable Maximum Flood (PMF)) is a very low probability event, and the time frame represented by the extension request would result in an insignificant contribution to the overall risk. The PMF event at DNPS is considered to have a very low likelihood of occurrence. The water surface elevation (WSE) was estimated to be below 513 ft. with a return period of 1000 years, which demonstrates considerable margin from the plant grade of 517 ft. and even more from the design basis PMF WSE of 528 ft (with wind-generated waves). The data is consistent with a recent Army Corps of Engineers (ACOE) study that supports the conclusion that the frequency of occurrence of the PMF at the DNPS site is very low. Furthermore, the frequency estimates used in this ACOE analysis were expressed in terms of 'annual exceedance probability'. While historical records indicate that instantaneous annual peak flows frequently occur in the spring months, annual peaks from the summer and early fall months are also included in the estimate. This would result in the exceedance probability for the requested extension period being even less when compared to the annual exceedance.

- The following flood hazard mitigation interim actions have been taken at the DNPS site beyond those required by the current design basis:
  - Enhanced river and rainfall forecasting information in flood emergency procedures
  - Installed river level markers to support enhancements to procedures
  - Installed permanent flood barriers to protect the isolation condenser makeup pump building
  - Mobilized floatable platform to raise diesel driven pump
  - Acquired Aqua Dam (portable dam) to protect power block to elevation 523 ft.
     MSL

These actions provide a sufficient level of flood hazard protection for the period of the extension request. No additional flood hazard mitigation or protection actions beyond those identified above are warranted for the period of the extension request.

Based on the above determinations, EGC has concluded that the requested extension to the scheduled submittal date for the DNPS Flooding Hazard Reevaluation Report does not impact safe plant operation or represent an undue risk to public health and safety. Accordingly, EGC requests NRC approval to extend the scheduled submittal date for the DNPS Flooding Hazard Reevaluation Report to May 10, 2013.

A list of regulatory commitments contained in this letter is provided in Enclosure 1.

If you have any questions regarding this submittal, please contact Ron Gaston at (630) 657-3359.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 11<sup>th</sup> day of March 2013.

Respectfully submitted,

Glen T. Kaegi

Director - Licensing & Regulatory Affairs Exelon Generation Company, LLC

## Enclosure:

1. Summary of Regulatory Commitments

cc: Director, Office of Nuclear Reactor Regulation

Regional Administrator - NRC Region III

NRC Senior Resident Inspector – Dresden Nuclear Power Station NRC Project Manager, NRR - Dresden Nuclear Power Station

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

## **Enclosure 1**

## **SUMMARY OF REGULATORY COMMITMENTS**

The following table identifies commitments made in this document. (Any other actions discussed in the submittal represent intended or planned actions. They are described to the NRC for the NRC's information and are not regulatory commitments.)

COMMITMENT	COMMITTED DATE OR "OUTAGE"	COMMITMENT TYPE	
		One-Time Action (Yes/No)	PROGRAMMATIC (Yes/No)
Dresden Nuclear Power Station, Units 2 and 3 will submit the Flooding Hazard Reevaluation Report, including interim action plan, requested in Item 1.d of Enclosure 2 of 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.	May 10, 2013	Yes	No