



Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102-2247

January 31, 2014
LIC-14-0008

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

- References:
1. Docket No. 50-285
 2. 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 (ML12073A348) (NRC-12-0021)
 3. NRC Letter to Nuclear Energy Institute, Endorsement of Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012, (ML12144A142)
 4. Letter from OPPD (L. P. Cortopassi) to NRC (Document Control Desk), "OPPD 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 (ML12334A449) (LIC-12-0170)
 5. Letter from OPPD (L. P. Cortopassi) to NRC (Document Control Desk), "OPPD Supplemental Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Flooding Aspects of Recommendations 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated August 15, 2013 (ML13228A098) (LIC-13-0102)
 6. NRC Letter to OPPD, Request for Additional Information Associated with Near-Term Task Force Recommendation 2.3, Flooding Walkdowns; dated December 23, 2013 (ML13325A891) (NRC-13-0157)

Subject: OPPD Response to NRC 10 CFR 50.54(f) Request for Information Regarding Near-Term Task Force Recommendation 2.3, Flooding - Review of Available Physical Margin (APM) Assessments

On March 12, 2012, the NRC staff issued Reference 2 requesting information pursuant to Title 10 of the Code of Federal Regulations 50.54(f). Enclosure 4 of that letter contains specific requested information associated with Near-Term Task Force Recommendation 2.3 for Flooding. Per Reference 3, the NRC endorsed Nuclear Energy Institute (NEI) 12-07, "Guidelines for Performing Verification Walkdowns of Plant Flood Protection Features," dated May 31, 2012. In References 4 and 5, OPPD submitted responses to Reference 2.

One of the requirements of NEI 12-07 is to identify the available physical margin (APM) associated with each applicable flood protection feature, determine if the margin provided is small, and evaluate any small margins that have potentially significant consequences through the corrective action process. The results of this effort were to be maintained on site for future NRC audits.

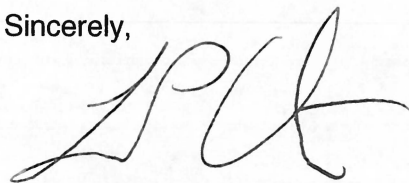
Following the NRC staff's initial review of the walkdown reports, regulatory site audits were conducted at a sampling of plants. Based on the walkdown reports, reviews, and site audits, the staff identified additional information necessary to allow them to complete their assessments. Accordingly, in Reference 6, the NRC issued a request for additional information (RAI) to a number of licensees including OPPD. OPPD's response is attached.

If you should have questions, please contact Mr. Bill Hansher at (402) 533-6894.

No commitments to the NRC are contained in this letter.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 31, 2014.

Sincerely,

A handwritten signature in black ink, appearing to read 'LPC', with a stylized flourish extending from the end.

Louis P. Cortopassi
Site Vice President and CNO

Attachment: Request for Additional Information Flooding Walkdowns

LPC/JKG/mle

c: M. L. Dapas, NRC Regional Administrator, Region IV
J. M. Sebrosky, NRC Senior Project Manager
J. C. Kirkland, NRC Senior Resident Inspector

Request for Additional Information

Flooding Walkdowns

Please provide the following:

1. Confirmation that the process for evaluating APM was reviewed;

OPPD Response

OPPD has completed a review of the process used at Fort Calhoun Station to evaluate the APM.

2. Confirmation that the APM process is now or was always consistent with the guidance in NEI 12-07 and discussed in this RAI;

OPPD Response

The APM process was always consistent with the guidance in FAQ-030 and NEI 12-07, and discussed in this RAI.

3. If changes are necessary, a general description of any process changes to establish this consistency;

OPPD Response

No changes were necessary

4. As a result of the audits and subsequent interactions with industry during public meetings, NRC staff recognized that evaluation of APM for seals (e.g., flood doors, penetrations, flood gates, etc.) was challenging for some licensees. Generally, licensees were expected to use either Approach A or Approach B (described below) to determine the APM for seals:

- a) If seal pressure ratings were known, the seal ratings were used to determine APM (similar to example 2 in Section 3.13 of NEI 12-07). A numerical value for APM was documented. No further action was performed if the APM value was greater than the pre-established small-margin threshold value. If the APM value was small, an assessment of "significant consequences" was performed and the guidance in NEI 12-07 Section 5.8 was followed.
- b) If the seal pressure rating was not known, the APM for seals in a flood barrier is assumed to be greater than the pre-established small-margin threshold value if the following conditions were met: (1) the APM for the barrier in which the seal is located is greater than the small-margin threshold value and there is evidence that the seals were designed/procured, installed, and controlled as flooding seals in accordance with the flooding licensing basis. Note that in order to determine that

the seal has been controlled as a flooding seal, it was only necessary to determine that the seal configuration has been governed by the plant's design control process since installation. In this case, the APM for the seal could have been documented as "not small".

As part of the RAI response, state if either Approach A or Approach B was used as part of the initial walkdowns or as part of actions taken in response to this RAI. No additional actions are necessary if either Approach A or B was used.

If neither Approach A or B was used to determine the APM values for seals (either as part of the walkdowns or as part of actions taken in response to this RAI), then perform the following two actions:

- Enter the condition into the CAP (note: it is acceptable to utilize a single CAP entry to capture this issue for multiple seals). CAP disposition of "undetermined" APM values for seals should consider the guidance provided in NEI 12-07, Section 5.8. The CAP disposition should confirm all seals can perform their intended safety function against floods up to the current licensing basis flood height. Disposition may occur as part of the Integrated Assessment. If an Integrated Assessment is not performed, determine whether there are significant consequences associated with exceeding the capacity of the seals and take interim action(s), if necessary, via the CAP processes. These actions do not need to be complete prior to the RAI response.
- Report the APM as "undetermined" and provide the CAP reference in the RAI response.

OPPD Response

The approach used to determine APM for Fort Calhoun Station most closely matches Approach A as described above. Seal pressure ratings were determined to be in accordance with the design basis and provide flood protection to 1,014 feet. As noted in Updated Safety Analysis Report (USAR), Section 2.7.1.2, flooding protection is provided by removable flood barriers that extend to 1,014 feet. USAR Section 2.7.1.2 also states:

The Corps of Engineers estimate of the flood level that might result from the failure of Oahe or Fort Randall dams coincident with the probable maximum flood that produces the 1,009.3 foot flood is 1,014 feet.

The numeric value of the difference between the height of the flood barriers and the height of the probable maximum flood was used. The APM value was small, an assessment of "significant consequences" was performed, and the guidance in NEI 12-07 Section 5.8 was followed.