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10 CFR 50.54(f)

LIC-14-0124

October 22, 2014

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

Fort Calhoun Station, Unit No. 1
Renewed Facility Operating License No. DPR-40
NRC Docket No. 50-285

Subject: Supplemental Information Related to the Seismic Hazard and Screening Report in Response to NRC Request for Information Pursuant to 10CFR 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident

References: See Page 4

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 1 of Reference 1 requested each addressee located in the Central and Eastern United States (CEUS) to submit a Seismic Hazard Evaluation and Screening Report within 1.5 years from the date of Reference 1. Omaha Public Power District (OPPD) submitted the Seismic Hazard and Screening Report for Fort Calhoun Station Unit No. 1 (FCS) to the NRC in Reference 4. The report provided the basis for FCS to screen out of performing seismic risk evaluations in accordance with the guidance in the SPID (Reference 2). This screening was based on demonstrating that the plant capacity spectra for FCS from the Individual Plant Examination for External Events (IPEEE) exceed the new ground motion response spectrum (GMRS) for all frequencies. Reference 4 also demonstrated IPEEE adequacy, in accordance with the criteria in the SPID. Consistent with the guidance contained in Reference 3, the Seismic Hazard and Screening Report (Reference 4) indicated that FCS screens-in for performance of the Expedited Seismic Evaluation Process (ESEP).

In Reference 1, the NRC requested interim evaluations and actions "... to address the higher seismic hazard....prior to completion of the risk evaluation." Section 1 of the Augmented Approach guidance (Reference 3) states that "...this report addresses interim evaluations...to be implemented prior to performing complete plant seismic risk evaluations." The NRC endorsement of the Augmented Approach guidance (Reference 5), states that the ESEP can demonstrate seismic margin "...while more detailed and comprehensive plant seismic risk evaluations are being performed."

Since the new GMRS for FCS has acceptably low spectral amplitudes and seismic risk evaluations are not required (References 4 and 6), OPPD considers that interim evaluations per the Augmented Approach guidance for ESEP, which were intended to address high seismic hazards prior to completion of a seismic risk evaluation, are not warranted. Also based upon Reference 6 the NRC staff determined that FCS screens out of conducting a seismic risk evaluation since the IPEEE demonstrates plant seismic capacity to levels higher than the GMRS in the 1-10 Hz range and that OPPD demonstrated that the IPEEE adequacy related screening criteria in the NRC approved industry guidance was met. The NRC also concluded in Reference 6, that FCS screened out of performing a high frequency evaluation because the IPEEE capacity exceeds the GMRS in the frequency ranges greater than 10 Hz range.

From a seismic safety perspective, the FCS IPEEE was performed using the EPRI Seismic Margin Assessment (SMA) fault based methodology (NUREG/CR-4334). The NRC issued a staff evaluation for the FCS IPEEE (Reference 7), as also noted in Reference 4 Appendix B. The results of the review documented in Reference 4 concluded that the IPEEE was adequate to support screening of the updated seismic hazard for FCS. In addition, the FCS GMRS is conservatively bound in the low and mid-range frequencies by the IPEEE spectra RLE and IHS (0.1 to 10 Hz). In the higher frequency ranges the IPEEE spectra still bound the GMRS (i.e. greater than 10 Hz). Therefore, a review of components in accordance with the ESEP guidance would not provide a significant increase in safety insight or margin beyond what was already provided by the IPEEE program.

OPPD has therefore concluded that for FCS there is an insignificant safety benefit from the performance of the ESEP since no long-term seismic risk evaluations are required based on the submitted screening results (Reference 4) and FCS has demonstrated seismic capacities above the GMRS.

In accordance with OPPD's commitment to nuclear safety, our resources are focused on activities that provide the most effective safety benefit. Therefore, OPPD does not intend to perform the ESEP for FCS. The commitment to perform a relay chatter review, and spent fuel pool evaluation per the guidance in References 2 and 3, as indicated in the Seismic Hazard and Screening Report (Reference 4), remains unchanged.

This letter contains no new regulatory commitments. This letter provides the basis for cancellation and closure of the interim action OPPD stated would be taken to perform an ESEP from FCS Seismic Hazard and Screening Report (noted in Reference 4 and 6, footnote 2). The commitment stated in Reference 6 (Commitment 4 in Confirmatory Action Letter (CAL) EA-13-243, dated December 17, 2013) to correct the condition noted remains unchanged.

If you have any questions regarding this report, please contact Bill Hansher at (402) 533-6894.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 22, 2014.

A handwritten signature in black ink, appearing to read 'LPC', written in a cursive style.

Louis P. Cortopassi
Site Vice President and CNO

LPC/JLB/brh

- c: W. M. Dean, Director of Office of Nuclear Reactor Regulation
N. J. DiFrancesco, NRC Lead Project Manager, Seismic
M. L. Dapas, NRC Regional Administrator, Region IV
C. F. Lyon, NRC Senior Project Manager
S. M. Schneider, NRC Senior Resident Inspector

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. EPRI Report 1025287, Seismic Evaluation Guidance, Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic
3. EPRI Technical Report 3002000704, "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic," dated May 2013
4. Letter from OPPD (L. P. Cortopassi) to NRC (Document Control Desk), *Omaha Public Power District (OPPD) Seismic Hazard and Screening Report (CEUS Sites), Response NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident*, dated March 31, 2014 (LIC-14-0047)
5. NRC Letter, Electric Power Research Institute Final Draft Report XXXXXX, "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic," as an Acceptable Alternative to the March 12, 2012, Information Request for Seismic Reevaluations, dated May 7, 2013
6. Letter from NRC (D. H. Dorman) to OPPD (L. P. Cortopassi), *Fort Calhoun Station, Unit 1 – Screening and Prioritization Results of Information Provided Pursuant to Title 10 of the Code of Federal Regulations Part 50, Section 50.54(f), Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident (TAC No. MF3735)*, dated September 22, 2014 (NRC-14-0109)
7. Letter from NRC (L. R. Wharton) to OPPD (S. K. Gambhir), *Review of Fort Calhoun Station Individual Plant Examination of External Events (IPEEE) Submittal (TAC No. M83623)*, dated May 6, 1999, (NRC-99-057)