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GNRO-2016/00037

August 24, 2016

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

SUBJECT: Entergy Mitigating Strategies Assessment (MSA) for New Seismic Hazard Information, NEI 12-06, Revision 2, Appendix H.4  
Grand Gulf Nuclear Station, Unit 1  
Docket No. 50-416  
License No. NPF-29

- REFERENCES:
1. NEI 12-06, *Diverse and Flexible Coping Strategies (FLEX) Implementation Guide*, Revision 2, December 2015 (ML16005A625)
  2. JLD-ISG-2012-01, *Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events*, Revision 1, February 2016 (ML15357A163)
  3. Entergy Letter to NRC, *Entergy Seismic and Hazard Screening Report (CEUS Sites), Response to 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 (ML14090A098)
  4. NRC Letter to Entergy, Grand Gulf Nuclear Station, Unit 1, *Staff Assessment 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*, dated 12/18/2015 (ML15348A379)

Dear Sir or Madam:

The purpose of this letter is to provide the results of the assessment for Grand Gulf Nuclear Station (GGNS) to determine if the FLEX strategies developed, implemented and maintained in accordance with NRC Order EA-12-049 can be implemented considering the impacts of the reevaluated seismic hazard. The assessment was performed in accordance with the guidance provided in Appendix H of NEI 12-06 Revision 2 (Reference 1) which was endorsed by the NRC (Reference 2).

The Mitigating Strategies Seismic Hazard Information (MSSHI) is the licensee's reevaluated

seismic hazard information at GGNS developed using Probabilistic Seismic Hazard Analysis (PSHA). The MSSHI includes a performance-based Ground Motion Response Spectrum (GMRS), Uniform Hazard Response Spectra (UHRS) at various annual probabilities of exceedance, and a family of seismic hazard curves at various frequencies and fractiles developed at the GGNS control point elevation. GGNS submitted the reevaluated seismic hazard information including the UHRS, GMRS and the hazard curves to the NRC on March 31, 2014 (Reference 3). The NRC staff concluded that the GMRS that was submitted adequately characterizes the reevaluated seismic hazard for the GGNS site (Reference 4).

Consistent with H.4.1, the GGNS is bounded by the SSE spectrum at frequencies 1 Hz and greater. Therefore, the FLEX strategies for GGNS have been implemented as designed and no further seismic evaluations are necessary.

This letter contains no new Regulatory Commitments.

If you have any questions or require additional information, please contact James Nadeau at 601-437-2103.

I declare under penalty of perjury that the foregoing is true and correct; Executed on the August 24, 2016.

Sincerely,

A handwritten signature in black ink, appearing to be 'VF/sas', with a long horizontal stroke extending to the right.

VF/sas

cc: U.S. Nuclear Regulatory Commission  
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NRC Senior Resident Inspector  
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