

Entergy Operations, Inc. River Bend Station 5485 U.S. Highway 61N St. Francisville, LA 70775

December 8, 2015

RBG-47634

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

Subject:

High-frequency Supplement to Seismic Hazard Screening Report, 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 River Bend Station – Unit 1 Docket No. 50-458 License No. NPF-47

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, ADAMS Accession Number ML12053A340

2. NRC Letter, Electric Power Research Institute Report 3002000704, "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, ADAMS Accession Number ML 13106A331

3. NEI Letter, Final Draft of Industry Seismic Evaluation Guidance (EPRI 1025287), dated November 27, 2012, ADAMS Accession Number ML12333A168 and ML12333A170

4. NRC Letter, Endorsement of Electric Power Research Institute Final Draft Report 1025287, "Seismic Evaluation Guidance", dated February 15, 2013, ADAMS Accession Number ML12319A074

5. Entergy letter dated March 26, 2014, Seismic Hazard Reevaluations and Screening Report (ML 14091A429)

6. NRC Letter, Screening and Prioritization Results regarding information pursuant to Title 10 of the Code of Federal Regulations 50.54(f) regarding Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Reviews of Insights from the Fukushima Dai-ichi accident, dated May 9, 2014, (ML14111A147)

7. NEI Letter, Request for NRC Endorsement of High Frequency Program: Application Guidance for Functional Confirmation and Fragility Evaluation (EPRI 3002004396), dated July 30, 2015

8. NRC letter dated September 15, 2015, Endorsement of Electric Power Research Institute Final Draft Report 3002004396, "High Frequency Program: Application Guidance For Functional Confirmation And Fragility" (ML15218A569)

ADID

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Dear Sir or Madam:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued a Request for Information per 10 CFR 50.54(f) (Reference 1) to all power reactor licensees. The required response section of Enclosure 1 indicated that licensees should provide a seismic hazard evaluation and screening report within 1.5 years from the date of the letter for central and eastern United States (CEUS) nuclear power plants. By NRC letter dated May 7, 2013 (Reference 2), the date to submit the report was extended to March 31, 2014.

By letter dated May 9, 2014 (Reference 6), the NRC transmitted the results of the screening and prioritization review of the seismic hazards reevaluation submittal for River Bend Station (RBS)(Reference 4). In accordance with the screening, prioritization, and implementation details report (SPID) and augmented approach guidance (References 2, 3 and 4), the reevaluated seismic hazard is used to determine if additional seismic risk evaluations are warranted for a plant. Specifically, the reevaluated horizontal ground motion response spectrum (GMRS) at the control point elevation is compared to the existing safe shutdown earthquake (SSE) or Individual Plant Examination for External Events (IPEEE) High Capacity Low Probability of Failure (HCLPF) Spectrum (IHS) to determine if a plant is required to perform a high-frequency confirmation. As noted in the May 9, 2014 letter, River Bend Station is to conduct a limited scope high-frequency confirmation.

Within the May 9, 2014 letter (Reference 6), NRC acknowledged that these limited scope evaluations will require additional development of the assessment process. By Reference 7, Nuclear Energy Institute (NEI) submitted an Electric Power Research Institute (EPRI) report entitled "High Frequency Program: Application Guidance for Functional Confirmation and Fragility Evaluation" (EPRI 3002004396) for NRC review and endorsement. NRC endorsement was provided by Reference 8.

The high-frequency confirmation for RBS shows that the high-frequency spectral accelerations of the control point GMRS above 10Hz are within the limits identified in Section 3.1.1 of Reference 6 (less than or equal to 0.2g). Therefore, no additional evaluation is necessary. The attachment to this letter provides the SSE (or IHS) and GMRS information from Reference 5.

This transmittal completes commitments from Reference 4. This letter contains no new regulatory commitments. Should you have any questions regarding this submittal, please contact Joey Clark at 225-381-4177.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 8, 2015.

Sincerely,

Sergio Vazquez

Sergio Vazquez Director - Engineering

Attachment: High-frequency Confirmation for RBS

cc: U. S. Nuclear Regulatory Commission Region IV 1600 East Lamar Blvd. Arlington, TX 76011-4511 RBG-47634 December 8, 2015 Page 3 of 3

> NRC Sr. Resident Inspector P. O. Box 1050 St. Francisville, LA 70775

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High-frequency Confirmation for RBS

(Reference Figure 3-2 in EPRI 3002004396)

