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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 18, 2012

Vice President, Operations
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: GRAND GULF NUCLEAR STATION, UNIT 1 – REQUEST FOR ADDITIONAL INFORMATION REGARDING EXTENDED POWER UPRATE APPLICATION LICENSE AMENDMENT REQUEST (TAC NO. ME4679)

Dear Sir or Madam:

By application dated September 8, 2010 (Reference 1), as supplemented by letters dated November 18, 2010 (Reference 2), November 23, 2010 (Reference 3), February 23, 2011 (four letters, References 4, 5, 6, and 7), March 9, 2011 (two letters, References 8) and 9, March 22, 2011 (Reference 10), March 30, 2011 (Reference 11), March 31, 2011 (Reference 12), April 14, 2011 (Reference 13), April 21, 2011 (Reference 14), May 3, 2011 (Reference 15), May 5, 2011 (Reference 16), May 11, 2011 (Reference 17), June 8, 2011 (Reference 18), June 15, 2011 (Reference 19), June 21, 2011 (Reference 20) June 23, 2011 (Reference 21), July 6, 2011 (Reference 22), July 28, 2011 (Reference 23), August 25, 2011 (Reference 24), August 29, 2011 (Reference 25), August 30, 2011 (Reference 26), September 2, 2011 (Reference 27), September 9, 2011 (Reference 28), September 12, 2011 (Reference 29), September 15, 2011 (Reference 30), September 26, 2011 (Reference 31), October 10, 2011 (two letters, References 32 and 33), October 24, 2011 (Reference 34), November 14, 2011 (Reference 35), November 25, 2011 (Reference 36), November 28, 2011 (Reference 37), December 19, 2011 (Reference 38), February 6, 2012 (Reference 39), February 15, 2012 (Reference 40), February 20, 2012 (Reference 41), March 13, 2012 (Reference 42), March 21, 2012 (Reference 43), and April 5, 2012 (Reference 44), Entergy Operations, Inc. (Entergy, the licensee), submitted a license amendment request for Grand Gulf Nuclear Station, Unit 1 (GGNS). Portions of the letters dated September 8 and November 23, 2010, and February 23, April 21, May 11, July 6, July 28, September 2, October 10, November 14, November 25, and November 28, 2011, and February 6, February 15, February 20, March 13, March 21, and April 5, 2012, contain sensitive unclassified non-safeguards information (proprietary) and, accordingly, have been withheld from public disclosure. The proposed amendment requests an increase in the maximum steady-state power level at GGNS from 3898 megawatts thermal (MWt) to 4408 MWt. This represents an approximate 13 percent increase above the current licensed thermal power or an approximate 15 percent increase above the original licensed thermal power.

On September 19-20, 2011, the U.S. Nuclear Regulatory Commission (NRC) conducted an audit (Reference 45), to review the General Electric Hitachi (GEH) documents pertaining to the

NOTICE: Enclosure 1 to this letter contains Proprietary Information. Upon separation from Enclosure 1, this letter is DECONTROLLED.

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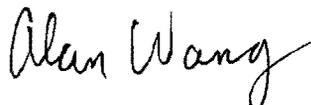
- 2 -

GGNS steam dryer evaluations. By two letters dated October 10, 2011 (References 32 and 33), Entergy submitted responses to the request for additional information (RAI) for GGNS. Based on a review of the licensee's responses, the NRC staff has identified areas for which additional information is required. This RAI was discussed with Mr. Jerry Burford of your staff it was agreed that a response would be provided within 30 days of receipt of this letter.

The NRC staff's proprietary version of the RAI is provided in Enclosure 1 and a nonproprietary version is provided in Enclosure 2. A list of references is provided in Enclosure 3. The proprietary information in Enclosure 1 is identified by text enclosed within double brackets.

If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1445 or via e-mail at Alan.Wang@nrc.gov.

Sincerely,



Alan B. Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:

1. Proprietary RAIs
2. Non-proprietary RAIs
3. References

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ENCLOSURE 2 (NON-PROPRIETARY)

REQUEST FOR ADDITIONAL INFORMATION

STEAM DRYER EVALUATION

GRAND GULF NUCLEAR STATION, UNIT NO. 1

EXTENDED POWER UPRATE LICENSE AMENDMENT REQUEST

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-416

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REQUEST FOR ADDITIONAL INFORMATION

GRAND GULF NUCLEAR STATION, UNIT NO. 1

EXTENDED POWER UPRATE LICENSE AMENDMENT REQUEST

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-416

By letter dated September 8, 2010, as supplemented (see Enclosure 3), Entergy Operations, Inc. (Entergy), submitted an extended power uprate (EPU) license amendment request for Grand Gulf Nuclear Station, Unit 1 (GGNS).

The proposed amendment requests an increase in the maximum steady-state power level at GGNS from 3898 megawatts thermal (MWt) to 4408 MWt. This represents an approximate 13 percent increase above the current licensed thermal power (CLTP) or an approximate 15 percent increase above the original licensed thermal power.

On September 19-20, 2011, the U.S. Nuclear Regulatory Commission (NRC) conducted an audit (Reference 45), to review the General Electric Hitachi (GEH) documents pertaining to the GGNS steam dryer evaluations. By two letters dated October 10, 2011 (References 32 and 33), Entergy submitted responses to the request for additional information (RAI) for GGNS. Based on a review of the licensee's responses, the NRC staff has identified the following areas for which additional information is required.

GGNS-SD-AA1-RAI-01

The response to the audit action item 1 did not provide updated data for frequency dependent Bias and Uncertainties (B&U) and GGNS dryer loads. The licensee is requested to provide this information.

GGNS-SD-AA3-RAI 2

In response to the audit action item 3, the licensee has assessed the potential errors and uncertainties associated with its load mapping algorithm, which projects pressures from its acoustic models to loads applied to its structural models. GEH subdivided its GGNS dryer model into

GEH computed

However, it is unclear whether the analyses include model regions where the load mapping procedure fails. The NRC staff notes that _____ may not capture the impacts of load mapping errors on the high-stress regions. The licensee has also not supplied some of the tables and figures discussed in its response. In addition, the licensee has not provided an assessment of load mapping errors on

Further, the NRC

Enclosure

staff is concerned that if load mapping errors are endemic to the current load mapping code, their effects may not be fully captured by a [redacted] The licensee is requested to provide:

- [redacted]
- Table 1 (cited on page 12 of 46, but not provided)
- Figures 5 and 6 (cited on page 13 of 46, but not provided)
- Contours of local load mapping errors (worst-case at peak loading frequencies) over the [redacted] and corresponding discussions of the potential impacts of the errors on high stress locations (from Table 2 on page 36 or 46).
- An assessment of load mapping errors on the [redacted]

[redacted] This should be based on projected effects on [redacted]

- A quantitative description of the load mapping errors – their root cause(s) and potential impacts on dryer components, and proof that the assessments made on the GGNS dryer [redacted] capture the worst-case potential impacts. The NRC staff notes that the corrective action report (CAR) seen by the staff during the audit specifically pointed out errors near the [redacted]. Therefore, the licensee is further requested to demonstrate that the [redacted] - [redacted] that were described in the internal CAR which seem to lead to the worst load mapping errors.
- The licensee is requested to provide GEH's plans on how it will resolve the load mapping error issue for GGNS and/or future plants.

GGNS-SD-AA5-RAI 3

In response to the audit action item 5, the licensee provided a plot (Figure 2) which gives appropriate [redacted]

However, the explanation is not clear about how the [redacted] is determined. Since the [redacted] appropriateness of the [redacted] greater than that given by Figure 2 would also provide analytically acceptable results for the [redacted] a criterion needs to be specified for determining the [redacted] appropriateness of the [redacted] The licensee is requested to clarify if (for Figure 1), [redacted]

The licensee is also requested to confirm if this criterion is utilized in preparing Figure 2.

Wf

GGNS-SD-AA7-RAI 4

In response to audit action item 7 pertaining to incorporating the _____ into the GGNS dryer analysis, the licensee did not provide the Figures 1 through 6 and Tables 1 and 2 referenced in its response. The licensee is requested to provide the accompanying figures and tables.

GGNS-SD-AA11-RAI 5

In response to audit action item 11, the licensee provided a summary of all adjustments made to its GGNS replacement dryer stress calculations, and a table updating the maximum stresses and stress ratios. The licensee also stated that based on the reanalysis,

_____ from the original submission. The licensee is requested to revise this table based on its responses to the follow-up questions for audit action items 1, 3, 5, and 7 noted above.

GGNS1-SD-New-RAI 6

In Section 3.3.2.4 of the GEH report NEDC-33601P, "Engineering Report - Grand Gulf Replacement Steam Dryer Fatigue Stress Analysis Using PBLE Methodology," the applicant discusses

(Section 3.3.2.4.5, see _____ in Table 3-22).

- (a) The licensee is requested to explain whether _____ and also explain how does one determine whether to perform sub-modeling at a given high stress location.
- (b) The licensee is requested to explain why the _____
- (c) It appears that the strength of materials approach determines the _____. The licensee is requested to explain whether this stress is compared with the _____

GGNS1-SD-New-RAI 7

In Appendix F (Section F.2) of the GEH report NEDC-33601P, Revision 0, it is stated that during power ascension from CLTP to EPU,

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However, this comparison does not confirm whether the projected loads are less than or equal to the design loads expected at that specific power level; these design loads may be determined by properly interpolating the EPU acceptance limits for the steam dryer pressures. The licensee is requested to revise or clarify the monitoring plan used during power ascension to confirm that the loads acting on the steam dryer at any given power level do not exceed the corresponding design loads.

GGNS1-SD-New-RAI 8

- (a) In the background section of topical report, BWRVIP-139, "Steam Dryer Inspection and Flaw Evaluation Guidelines," it is stated that for
 - (i) The licensee is requested to explain what the frequency of the low-frequency loading was and how long it might have taken to cause the failure.
 - (ii) Since the high-cycle fatigue cracking due to low frequency loading can potentially manifest after a longer period of operation (longer than few operating cycles) at EPU loading, the licensee is requested to describe the long-term inspection requirements for the GGNS replacement steam dryer.
- (b) In the "Results & Findings" section of topical report BWRVIP-139, it is stated that,

for the
dryer because the high-cycle fatigue cracking caused by the low-frequency pressure loading is not likely to be present in the baseline inspection results. The licensee is therefore requested to explain how the baseline inspection results would help in determining the re-inspection requirements for the GGNS replacement dryer operating at EPU.

GGNS1-SD-New-RAI 9

- (a) The licensee is requested to identify the American Society of Mechanical Engineers (ASME) Code requirements that are followed for the design and fabrication of the partial penetration welds in the GGNS replacement steam dryer.
- (b) The licensee is requested to describe how the fatigue assessment of the partial penetration weld is performed.
- (c) If the size of the partial penetration weld is smaller than that required by the ASME Code, the licensee is requested to describe how the undersize effect of

ENCLOSURE 3 - REFERENCES

1. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "License Amendment Request, Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 8, 2010 (GNRO-2010/00056) (ADAMS Accession No. ML102660409).
2. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental License Amendment Request, Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated November 18, 2010 (GNRO-2010/00071) (ADAMS Accession No. ML103260003).
3. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental License Amendment Request, Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated November 23, 2010 (GNRO-2010/00073) (ADAMS Accession No. ML103330146).
4. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 23, 2011 (GNRO-2011/00007) (ADAMS Accession No. ML110540534).
5. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 23, 2011 (GNRO-2011/00012) (ADAMS Accession No. ML110540540).
6. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 23, 2011 (GNRO-2011/00011) (ADAMS Accession No. ML110540545).
7. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 23, 2011 (GNRO-2011/00013) (ADAMS Accession No. ML110550318).
8. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 9, 2011 (GNRO-2011/00017) (ADAMS Accession No. ML110680507).
9. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 9, 2011 (GNRO-2011/00016) (ADAMS Accession No. ML110730025).



10. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 22, 2011 (GNRO-2011/00019) (ADAMS Accession No. ML110820262).
11. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 30, 2011 (GNRO-2011/00018) (ADAMS Accession No. ML110900275).
12. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 31, 2011 (GNRO-2011/00021) (ADAMS Accession No. ML110900586).
13. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated April 14, 2011 (GNRO-2011/00024) (ADAMS Accession No. ML111050134).
14. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated April 21, 2011 (GNRO-2011/00025) (ADAMS Accession No. ML111120329).
15. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated May 3, 2011 (GNRO-2011/00034) (ADAMS Accession No. ML111240288).
16. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated May 5, 2011 (GNRO-2011/00035) (ADAMS Accession No. ML111250552).
17. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated May 11, 2011 (GNRO-2011/00037) (ADAMS Accession No. ML111320263).
18. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated June 8, 2011 (GNRO-2011/00043) (ADAMS Accession No. ML111590836).
19. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated June 15, 2011 (GNRO-2011/00046) (ADAMS Accession No. ML111670059).



20. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated June 21, 2011 (GNRO-2011/00050) (ADAMS Accession No. ML111730235).
21. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated June 23, 2011 (GNRO-2011/00052) (ADAMS Accession No. ML111750244).
22. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated July 6, 2011 (GNRO-2011/00053) (ADAMS Accession No. ML111880138).
23. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated July 28, 2011 (GNRO-2011/00055) (ADAMS Accession No. ML112101485).
24. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated August 25, 2011 (GNRO-2011/00070) (ADAMS Accession No. ML112370770).
25. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated August 29, 2011 (GNRO-2011/00073) (ADAMS Accession No. ML112410566).
26. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated August 30, 2011 (GNRO-2011/00074) (ADAMS Accession No. ML112420169).
27. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental Information Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 2, 2011 (GNRO-2011/00075) (ADAMS Accession No. ML112490050).
28. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental Information Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 9, 2011 (GNRO-2011/00033) (ADAMS Accession No. ML112521284).
29. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 12, 2011 (GNRO-2011/00079) (ADAMS Accession No. ML112550495).

30. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 15, 2011 (GNRO-2011/00080) (ADAMS Accession No. ML112580223).
31. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated September 26, 2011 (GNRO-2011/00082) (ADAMS Accession No. ML112690143).
32. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated October 10, 2011 (GNRO-2011/00087) (ADAMS Accession No. ML112840155).
33. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated October 10, 2011 (GNRO-2011/00088) (ADAMS Accession No. ML112840171).
34. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Supplemental Information Pertaining to Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated October 24, 2011 (GNRO-2011/00092) (ADAMS Accession No. ML112980113).
35. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated November 14, 2011 (GNRO-2011/00101) (ADAMS Accession No. ML113190403).
36. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated November 25, 2011 (GNRO-2011/00105) (ADAMS Accession No. ML113290137).
37. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated November 28, 2011 (GNRO-2011/00107) (ADAMS Accession No. ML113320403).
38. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated December 19, 2011 (GNRO-2011/00111) (ADAMS Accession No. ML113530656).
39. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 6, 2012 (GNRO-2012/00006) (ADAMS Accession No. ML12039A071).

40. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 15, 2012 (GNRO-2012/00009) (ADAMS Accession No. ML120470138).
41. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated February 20, 2012 (GNRO-2012/00011) (ADAMS Accession No. ML120540043).
42. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 13, 2012 (GNRO-2012/00016) (ADAMS Accession No. ML120740083).
43. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated March 21, 2012 (GNRO-2012/00018) (ADAMS Accession No. ML120820025).
44. Krupa, M. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Response to Request for Additional Information Regarding Extended Power Uprate, Grand Gulf Nuclear Station, Unit 1," dated April 5, 2012 (GNRO-2012/00023) (ADAMS Accession No. ML12097A055).
45. Wang, A. B., U.S. Nuclear Regulatory Commission, letter to Entergy Operations, Inc., "Grand Gulf Nuclear Station, Unit 1 - Audit of Calculations Related to Extended Power Uprate (TAC No. ME4679)," dated October 19, 2011 (ADAMS Accession No. ML112790370).

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If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1445 or via e-mail at Alan.Wang@nrc.gov.

Sincerely,

/RA/

Alan B. Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:

- 1. Proprietary RAIs
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