



Entergy Operations, Inc.  
P. O. Box 756  
Port Gibson, MS 39150

**Michael A. Krupa**  
Director, Extended Power Uprate  
Grand Gulf Nuclear Station  
Tel. (601) 437-6694

**The attachment contains PROPRIETARY information.**

GNRO-2012/00075

July 5, 2012

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

SUBJECT: Summary Report of Replacement Steam Dryer Data

Grand Gulf Nuclear Station, Unit 1  
Docket No. 50-416  
License No. NPF-29

- REFERENCES:
1. Entergy Operations, Inc. letter to the NRC (GNRO-2010/00056), *License Amendment Request - Extended Power Uprate*, September 8, 2010 (ADAMS Accession No. ML102660403)
  2. Entergy Operations, Inc. letter to the NRC (GNRO-2012/00031), *Supplemental Information – License Conditions - Extended Power Uprate*, April 26, 2012 (ADAMS Accession No. ML12118A145)
  3. NRC e-mail to Entergy Operations, Inc., June 11, 2012

Dear Sir or Madam:

Via Reference 1, Entergy Operations, Inc. (Entergy) submitted to the NRC staff a license amendment request (LAR) for an extended power uprate (EPU) for Grand Gulf Nuclear Station, Unit 1 (GGNS). In support of that LAR, Entergy submitted Reference 2, which compiled the applicable Operating License (OL) conditions for the EPU, including a new condition with requirements for replacement steam dryer testing during power ascension. Two of the requirements of new OL Condition 2.C.(46)(a) are as follows:

2. GGNS shall monitor the main steam line (MSL) strain gages and on-dryer instrumentation at a minimum of three power levels up to 3898 MWt. Based on a comparison of projected and measured strains and accelerations, GGNS will assess whether the dryer acoustic and structural models have adequately captured the response significant to peak stress projections. If the measured strains and accelerations are not within the CLTP acceptance limits, the new measured data will be used to re-perform the full structural re-analysis for the purposes of generating modified EPU acceptance limits.

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NON-PROPRIETARY.**

3. GGNS shall provide a summary of the data and evaluation of predicted and measured pressures, strains, and accelerations. This data will include the GGNS-specific bias and uncertainty data and transfer function, revised peak stress table and any revised acceptance limits. The predicted pressures shall include those using both PBLE methods (that is, Method 1 using on-dryer data, and Method 2 using MSL data). It shall be provided to the NRC Project Manager upon completion of the evaluation. GGNS shall not increase power above 3898 MWt until the NRC PM notifies GGNS the NRC accepts the evaluation or NRC questions regarding the evaluation have been addressed. If no questions are identified within 240 hours after the NRC receives the evaluation, power ascension may continue.

In accordance with OL Condition 2.C.(46)(a)2, above, Entergy has completed monitoring the MSL and on-dryer instrumentation. Using this data, Entergy assessed the dryer acoustic and structural models and has determined:

1. These models have adequately captured the response significant to peak stress projections; and
2. The measured strains and accelerations are within the Current Licensed Thermal Power (CLTP) acceptance limits.

Pursuant to OL Condition 2.C.(46)(a)3 and in support of the conclusions stated above, Entergy is providing a summary of the data and evaluation of predicted and measured pressures, strains, and accelerations. This report, General Electric – Hitachi Nuclear Energy (GEH) Report NEDC-33765P, *Grand Gulf Nuclear Station Replacement Steam Dryer Power Ascension Monitoring – Current Licensed Thermal Power Test Report*, is provided in the attachment to this letter.

In addition to OL Condition 2.C.(46), Entergy committed via Reference 3 to provide additional information pertaining to the replacement steam dryer analysis. This information is provided in Appendices J and K of NEDC-33765P.

GEH considers information contained in NEDC-33765P to be proprietary and, therefore, exempt from public disclosure pursuant to 10 CFR 2.390. An affidavit for withholding information, executed by GEH, is provided in NEDC-33765P. NEDC-33765P was provided to Entergy in a GEH transmittal that is referenced in the affidavit. Therefore, on behalf of GEH, Entergy requests the attachment be withheld from public disclosure in accordance with 10 CFR 2.390(b)(1).

In accordance with NRC Information Notice 2009-07, *Withholding of Proprietary Information from Public Disclosure*, a non-proprietary version of NEDC-33765P is not being provided since the vast majority of the information contained in the report is proprietary and a non-proprietary version would be of little or no value.

As specified in OL Condition 2.C.(46)(a)3 and as a condition of the regulatory commitments documented in Reference 3, GGNS shall not increase power above 3898 MWt until the NRC Project Manager notifies GGNS the NRC accepts the requested information or NRC questions regarding the information have been addressed. If no questions are identified within 240 hours after the NRC receives NEDC-33765P, Entergy will consider the requirements of OL Conditions 2.C(46)(a)2 and 3 and the regulatory commitments specified in Reference 3 satisfied and may

continue power ascension beyond 3898 MWt once the NRC has approved the EPU LAR and issued the applicable license amendment.

If you have any questions or require additional information, please contact Guy Davant at (601) 368-5756.

This letter contains no regulatory commitments.

I declare under penalty of perjury that the foregoing is true and correct; executed on July 5, 2012.

Sincerely,



MAK/ghd

Attachment: GEH Report NEDC-33765P, *Grand Gulf Nuclear Station Replacement Steam Dryer Power Ascension Monitoring – Current Licensed Thermal Power Test Report* (GEH Proprietary Information)

cc: Mr. Elmo E. Collins, Jr.  
Regional Administrator, Region IV  
U. S. Nuclear Regulatory Commission  
612 East Lamar Blvd., Suite 400  
Arlington, TX 76011-4005

U. S. Nuclear Regulatory Commission  
ATTN: Mr. A. B. Wang, NRR/DORL (w/2)  
**ATTN: ADDRESSEE ONLY**  
ATTN: Courier Delivery Only  
Mail Stop OWFN/8 B1  
11555 Rockville Pike  
Rockville, MD 20852-2378

State Health Officer  
Mississippi Department of Health  
P. O. Box 1700  
Jackson, MS 39215-1700

NRC Senior Resident Inspector  
Grand Gulf Nuclear Station  
Port Gibson, MS 39150

**ATTACHMENT**

**GRAND GULF NUCLEAR STATION**

**GNRO-2012/00075**

**GEH REPORT NEDC-33765P**

**GRAND GULF NUCLEAR STATION**  
**REPLACEMENT STEAM DRYER POWER ASCENSION MONITORING –**  
**CURRENT LICENSED THERMAL POWER TEST REPORT**

**(GEH PROPRIETARY INFORMATION)**

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