ENCLOSURE 2 CONTAINS SENSITIVE PROPRIETARY INFORMATION

February 26, 2008

Mr. Robert E. Brown
Senior Vice President, Regulatory Affairs
GE-Hitachi Nuclear Energy Americas, LLC
3901 Castle Hayne Rd MC A-45
Wilmington NC 28401

SUBJECT: ESBWR CHAPTER 4 OPEN ITEMS

Dear Mr. Brown:

As you are aware, the U. S. Nuclear Regulatory Commission staff is preparing the safety evaluation report (SER) for the Economic Simplified Boiling Water Reactor (ESBWR) design certification application submitted by GE-Hitachi Nuclear Energy Americas, LLC (GEH) on August 24, 2005. The staff has identified 28 open items for SER Chapter 4, "Reactor," which are enclosed for your information. The staff is prepared to review your responses to the open items and have conference calls and meetings with your staff, as appropriate, to resolve these open items to support issuance of the SER.

If not already indicated, please provide a response date for the open items discussed in the enclosure.

Pursuant to 10 CFR 2.390, we have determined that the enclosed open items contains proprietary information. We have prepared a non-proprietary version (Enclosure 1) that does not contain proprietary information. The proprietary information is indicated in brackets and underlined in Enclosure 2. We will delay placing this document in the public document room for a period of ten (10) working days from the date of this letter to provide you with the opportunity to comment on the proprietary aspects only. If you believe that any additional information in the enclosure is proprietary, please identify such information line by line and define the basis pursuant to the criteria of 10 CFR 2.390 before the public release date.

This open item letter is based on the staff's review of the ESBWR Design Control Document (DCD) Revision 4, and Request for Additional Information (RAI) responses received to date. The staff will continue its review of the ESBWR design certification application. Several significant topical reports relating to this chapter are currently under review. The continuing review of the application and these topical reports is expected to result in changes to the enclosed list of open items.

ENCLOSURE 2 CONTAINS SENSITIVE PROPRIETARY INFORMATION

The staff will inform cognizant GEH staff of any resulting changes to the status of Chapter 4. If you have any questions, please contact Amy Cubbage at (301) 415-2875 or aec@nrc.gov or Bruce Bavol at (301) 415-6715 or BMB2@nrc.gov.

Sincerely,

/RA/

Mohammed A. Shuaibi, Chief
ESBWR/ABWR Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket No. 052-010

Enclosures: 1. (Non-Proprietary)
2. (Proprietary)

cc: See next page (w/o enclosure 2)

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Enclosures: 1. Request For Additional Information (Non-Proprietary)
2. Request For Additional Information (Proprietary)

cc: See next page (w/o enclosure 2)

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General Electric (GEH) ESBWR
Preliminary Open Items
Chapter 4, Reactor

RAI 4.2-2 and 4.2-4, Supplement No. 2, 9/13/07, ML072560700

As discussed during the July 2007 GEH Control Blade and Fuel Assembly Design Audit, please revise the fuel rod cladding strain Tier 2* requirement, Appendix 4B, and provide supporting documentation.

Status: GEH has not committed to a response date.

RAI 4.2-12 Supplement No. 2, 9/06/07, ML072410416

Parts 1 and 2 will remain open items until these issues are acceptably resolved by RAI 4.3-2.

Part 6: Provide any relevant data that would be indicative of discharge exposure. Namely, provide the core thermal power level, core size, and cycle duration. Using any additional relevant information, provide an estimate of the average cycle exposure. Alternatively qualitatively assess any design features of K5 relative to the ESBWR to determine if the discharge exposures are expected to be significantly different.

Part 8: Please provide greater clarification of what is meant by the "interim methodology." Does this interim methodology correspond to the interim methodology for expanded operating domain BWRs?

Part 10: The insight that the staff needs is to understand the impact on predicted power distributions for each adaption technique. Additionally, the staff was not aware that the uncertainty analysis for GT instrumentation is predicated on the [[ ]] methodology as opposed to the proposed methodology for the ESBWR (PANAC11). The ESBWR uncertainty analysis, it appears to the staff, may depend on the core simulator and the adaption technique employed. This adaption technique will also depend on the number of AFIPs or other [[ ]] methods.

Since the information regarding the K5 reactor is sparse, the core monitoring software was different, the number of AFIPs proposed for ESBWR and those employed at K5 are different, and no final adaption technique has been proposed; the staff does not have sufficient information regarding the numerical uncertainty analysis to make a determination regarding the applicability of the K5 data to the proposed ESBWR application.

To provide insight into the effects of adaption on power distribution uncertainty, please provide an analysis using a relevant reactor plant from the experience database. Using purely predictive methods (no adaption) perform a core follow analysis for a relevant (high power density, large core) reactor plant. The plant and cycle selected for reanalysis should be challenging from a reactor power distribution standpoint. [[
]]

Produce an MOC and an EOC radial power map (axially integrated four bundle power) and axial power shape curve. Please provide these curves in figures that are substantially similar in format to Figures 27-1 through 27-68 of MFN-05-029. Using LPRM adaption, perform the same core follow analysis and produce an MOC and an EOC radial power map and axial power shape curve. Provide additional figures using TIP adaption. Specify whether absolute or shape adaption is used.

When an adaption technique is finalized for the ESBWR, [[ ]] readings based on local TIP readings, perform a cycle follow analysis and associated radial and axial power distributions for the same plant using [[ ]] adaption with an arrangement that is similar to the ESBWR (i.e., [[ ]] instruments per string with similar spatial arrangement).

The staff understands that this will not help assess the [[ ]] uncertainty, but it will provide a quantitative comparison of core monitoring performance using discrete vs. continuous adaption. Comment on the differences in the radial and axial power distributions based on each adaption technique. Please also provide quantitative comments in regards to the expected uncertainty when using PANAC11 methods (including updates to TGBLA06) relative to the uncertainty analysis that is based on [[ ]] methods.

Part 11: The staff requires additional information in regards to the uncertainty analysis in order to determine the acceptability of the design to ensure SAFDLs are not exceeded. The OLMCPR and the MLHGR limits are predicated on uncertainty assessments (a demonstration that the pin power uncertainty is less than [[ ]] for the latter). The staff will keep RAI 4.2-12 open until an acceptable proper discussion or commitment is furnished.

Part 12: Provide the core thermal power and core flows for the other reactors described in NEDC-33197P, namely [[ ]] for the times of the respective tests. Compare the power to flow ratios for these plants during the tests to that for the ESBWR.

Part 16: The ESBWR uncertainty analysis, it appears to the staff, may depend on the adaption technique employed. This adaption technique will also depend on the number of AFIPs or other [[ ]] methods. If the adaption technique is not finalized, provide separate uncertainty analyses for each available technique, or each unique available combination of measurements, calibrations, [[ ]], intervals, and adaption techniques. For example using different adaption techniques, or [[ ]] for the [[ ]] cycle follow would generate different values for the [[ ]].

Part 17: Update the NEDC-33197P topical report to include an appendix that summarizes the available techniques described in the supplemental information request Part 16. In the appendix describe the uncertainty assessment methods that are used to obtain uncertainties which are used in downstream safety and operating limit determinations based on each available technique.

Part 19: The response states that the adaption technique is still under development. If a single adaption technique (as opposed to many alternatives) is developed, provide the information requested in Parts 16 and 17 for only that one technique.

Part 20: The staff does not find the response acceptable. If the adaption technique is based on discrete axial signals, perhaps 4 LPRM signals or [[ ]] GT signals, the axial power shape uncertainty would likely be a function of the resolution provided by those signals. [[ ]]. Once a single, or perhaps several alternative adaption techniques, are selected, provide a basis for each technique that the number of GTs is sufficient such that the uncertainty analysis results are applicable even if there are power shapes other than cosine, bottom-, or top- peaked.

Part 22: Provide the results of GEH14 corroborative MCNP/[[ ]] analyses that were performed for a representative [[ ]] lattice. Include at least one case that considered a spacer.

Part 25: See the supplemental request in Part 17.

Status: GEH has not committed to a response date.

<u>RAI 4.2-15, 01/10/08, ML080080592</u>

Please designate the following references as Tier 2* information in DCD, Revision 5:

4.2-4 GE Nuclear Energy, "GE14 for ESBWR Fuel Assembly Mechanical Design Report", NEDC-33240P, Class III (proprietary), January, 2006.

4.2-5 GE Nuclear Energy, "GE14 for ESBWR Fuel Rod Thermal-Mechanical Design Report", NEDC-33242P, Class III (proprietary), Revision 1, February, 2007.

4.2-8 GE Nuclear Energy, "ESBWR Marathon Control Rod Mechanical Design Report", NEDC-33244P, Class III (proprietary), Revision 1, November, 2007.

4.2-9 GE Nuclear Energy, "ESBWR Marathon Control Rod Nuclear Design Report", NEDE-33243P, Class III (proprietary), Revision 1, November, 2007.

4.3-8 Global Nuclear Fuel, "GE14 for ESBWR Nuclear Design Report", NEDC-33239-P, Class III (Proprietary), Revision 2, April, 2007, NEDO-33239, Class I (Non proprietary), Revision 2, April, 2007.

4.4-12 GE Nuclear Energy, "GE14 for ESBWR-Critical Power Correlation, Uncertainty, and OLMCPR Development", NEDC-33237P, Revision 2, Class III (proprietary), April, 2007.

4.3-10 Global Nuclear Fuel, "GE14E for ESBWR Initial Core Nuclear Design Report," NEDC-33326P, Class III (Proprietary), Revision 0, July, 2007, NEDO-33326, Class I (Nonproprietary), Revision 0, July, 2007.

Status: GEH has not committed to a response date.

<u>RAI 4.3-2 Supplement No. 2, 9/06/07, ML072410416</u>

A. Confirm that the [[ ]] peak rod power uncertainty bounds not only those lattices in the equilibrium ESBWR core, but also those in the initial core.

B. The response indicates that an SLMCPR analysis was performed for the ESBWR. Was this SLMCPR analysis performed according to the approved SLMCPR methodology for operating reactors? If so, please provide this analysis.

C. As discussed in RAI 4.2-12 and MFN-05-029, the uncertainty in gamma instrument measurement increases with increasing power to flow ratios.

   1. The ESBWR power to flow ratio is substantially higher than that for [[ ]]. Describe what approach is being taken to account for this phenomenon in the overall assessment of power distribution uncertainties. In other words the determination of the [[ ]] and may not be representative of a similar quantity determined for conditions of operation similar to the ESBWR.

   2. The response to RAI 4.4-39 S01 [[ ]], comments on the effect of bypass voiding due to high power to flow ratios on the sensitivity of the GT and the ability of the methodology as proposed to account for changes in sensitivity arising from bypass voiding. Please consider effects such as heat transfer from the jacket tube to the two-phase mixture (given the predicted bypass flow patterns) as well as gamma attenuation and streaming.

D. The foot note in Table 9-2 states that more data is required for application. Explain why [[ ]] results in Table 7-2 were not combined with the [[ ]] data in Tables 7-3 and 7-4 to assess this uncertainty. The information in Table 9-8 seems to indicate that the [[ ]] data would be applicable.

E. How are the [[ ]] uncertainties in Table 4.3-2S01-2 weighted to determine the total estimated uncertainty per GT string?

F. The GT strings used to assess the bundle power uncertainties each include [[ ]] instruments per string. The ESBWR design includes [[ ]] instruments per string. The staff does not understand how the same uncertainties will apply if there are [[ ]] instruments. In response to RAI 7.5-58 (MFN-07-162) the response states that it is "not realistic to conclude that the uncertainty is not dependent on the number of GT sensors per string . . . Table 9-8 indicates that having fewer GT sensors per string results in smaller uncertainties, this result arose only because the study was not realistic and was based only on simulated GT readings. In practice, the uncertainty will be larger with fewer GT sensors per string." This statement does not appear to be consistent with the numerical values provided in the uncertainty analysis in the response to RAI 4.3-2. Please update the uncertainty analysis to include a term that addresses the [[ ]] sensors. If the basis for determining this uncertainty is provided in a separate RAI response, please provide a specific reference.

G. The response indicates that the ESBWR generic R-factor uncertainty was determined in a manner that is conservatively relative to the prescription in the interim methods. Please provide an update to NEDC-33239P that confirms that the R-factor uncertainty is consistent with ESBWR pin power peaking and power allocation uncertainties as determined in a manner consistent with the prescription in the approved interim methods (NEDC-33173P-A). The staff understands that GEH will supplement this topical report with additional data for

review to support the historical R-uncertainty analysis inputs. The update may make reference the most recently approved version of NEDC-33173P-A.

Status: GEH has not committed to a response date.

RAI 4.3-7 Supplement No. 1, 2/14/08, ML080390211

Generic Letter No. 86-02 and Standard Review Plan 15.9 require that a stability long term solution must be implemented in any BWR.

In GEH's response to RAI 4.3-7, GEH proposed to use DSS-CD as a solution. It is clear that the applicability range of DSS-CD (Table 6.1 of NEDC-33075P-A) does not cover ESBWR or GE14E. The procedure for this methodology (Table 6.3 of NEDC-33075P-A) is geared for operating reactors by requiring a two-pump reactor pump trip, which is not possible for the ESBWR.

Provide in either the DCD or a supplement to NEDC-33075P an evaluation of the DSS-CD solution for use in ESBWR. Provide a table with the differences in recommended parameter settings (e.g., corner frequency, period tolerance) that are fixed by NEDC-33075P-A.

Status: GEH has not committed to a response date.

RAI 4.3-8, 5/10/07, ML071230389

All approved D&S solutions have an armed region. Typically, the solution is only armed for low-flow maneuvers, and this represents a small fraction of the cycle time. Since ESBWR operates at the equivalent of low-flow conditions at nominal conditions, one would expect that the D&S solution must remain armed for the complete cycle. Please provide a discussion of armed-region implications and the associated probability of false alarms.

Status: GEH committed to provide a response by 12/13/07.
No response has been submitted as of the date of this letter.

RAI 4.3-9, 5/10/07, ML071230389

A future licensee may have the flexibility to deviate from the standard certification and choose a different L/T stability solution. Please specify criteria that must be met by ESBWR for L/T stability solutions.

Status: GEH committed to provide a response by 11/29/07.
No response has been submitted as of the date of this letter.

RAI 4.4-1 Supplement No. 1, 5/31/07, ML071520027

The staff finds the response to RAI 4.4-1 in MFN 07-029 acceptable with the exception of the applicant's position on the need for new testing of the GEH14E ESBWR fuel. The staff agrees that the use of similar components to those used in the operating fleet, GEH14 fuel, will provide reasonable assurance that the critical power performance of the GEH14E fuel will be similar to that of the GEH14 fuel already in operation. However, the staff feels that the thermal hydraulic response characteristics of the shorter overall length of the GEH14E assemblies, and, in particular, the shorter part-length rod height, may contribute to variation in the critical power

correlation uncertainties which cannot be accurately determined by computer code (COBRAG) assessment alone. Therefore, GEH should submit a proposed Critical Heat Flux (CHF) (critical power performance) test matrix for the GEH14E fuel, and submit proposed ITAACs to ensure that CHF testing is conducted to validate the use of the GEXL14 correlation prior to initial core loading.

Status: GEH responded on 12/21/07, MFN-07-029, Supplement 1.
GEH's response is under staff review.

RAI 4.4-2 Supplement No. 2, 11/20/07, ML073230051

The staff feels that the indirect justification provided in the supplemental response for the void correlation at high void fractions using operating fleet GE14 pressure drop data is not a substitute for actual void fraction measurements. Additionally, the staff proposes to apply the same adder to the Operating Limit MCPR which has been imposed on the GE14 fuel (Reference MFN 06-435, November 3, 2006, and Supplement 1 to NEDC-33173P, *Void Fraction Error Based on 10x10 Fuel Pressure Drop Data*) as a penalty to account for the uncertainty in the void fraction correlation due to lack of high void fraction data until the data is acquired and assessed. Provide a revision to Topical Report NEDC-33237P which documents the proposed OLMCPR penalty.

Status: GEH has not committed to a response date.

RAI 4.4-5 Supplement No. 1, 01/08/07, ML070530060

The explanation provided in the response for the applicability of referenced Topical Report NEDO-10958-A for bundle critical power performance prediction is acceptable. However, the response refers to NEDC-33237P to address applicability to GEH14E fuel for the ESBWR. The NRC staff is currently evaluating this topical report, and cannot complete its assessment until the revision is submitted and confirmatory analyses have been performed. The proposed response includes a reference to Revision 1 to DCD Reference 4.4-12. The phrase 'scheduled October 2006' should be updated to reflect the actual publication date.

Status: GEH has committed to provide Critical Power Correlation Test Data
GEH has not committed to a response date.

RAI 4.4-23 Supplement No. 1, 6/15/07, ML070530060

The proposed response is not complete; the NRC staff requests that GEH submit the flow blockage calculation for the GEH14E fuel ("showing the critical power as a function of percent blockage)."

Status: GEH responded on 06/15/07, MFN-06-399, Supplement 1.
GEH's response is under staff review.

RAI 4.4-27 Supplement No. 2, 11/20/07, ML073230051

The NRC staff accepts the supplemental response provided, with the condition that the R-factor will be reassessed, and the methodology is satisfactorily confirmed when the new critical power performance data is collected for the ESBWR GE14E fuel assembly ITAAC.

Status: GEH has not committed to a response date.

RAI 4.4-39 Supplement No. 2, 9/06/07, ML072410416

The staff disagrees with the applicant's assertion that the TRACG and PANACEA calculations are independent based on information provided in the response to RAI 21.6-85.

It is the staff's understanding that [[

]]. Since the thermal hydraulic and neutronic solutions are tightly coupled by the void reactivity coefficient it is not unexpected that TRACG would converge on a thermal hydraulic solution that matches the axial void profile predicted by PANACEA.

However, as an inherent artifact of the methodology the power distribution will always be calculated predicated on a [[

]] the code system proposed in the original RAI response as an "independent" verification approach will artificially compensate through the nuclear feedback to the thermal hydraulic solution and therefore is not considered independent by the staff.
The staff questions the validity of the assumption for the following reasons:

1. The high power density of the ESBWR core will result in bypass voiding due to gamma heating below the TAF that is not insignificant.

2. The chimney partitions block thermal hydraulic communication above the top guide between super bundles.

Therefore, the staff requests that the applicant perform an analysis to determine the core outlet pressure distribution using an independent verification approach.

Status: GEH has not committed to a response date.

RAI 4.4-57, 05/29/07, ML071450138

DCD Tier 2, Rev. 3, Table 4D-4 shows that only core and channel decay ratios were calculated for the two limiting AOO's. Provide regional mode decay ratios for these two cases.

Status: GEH committed to provide a response by 11/20/07.
No response has been submitted as of the date of this letter.

RAI 4.4-58 Supplement No. 1, 2/14/08, ML080390211

A. Experiments conducted in the GENESIS facility have shown that the chimney can have an influence in the density-wave oscillations. Explain the applicability of this test, if any, to the ESBWR results.

B. In the response to RAI 4.4-58, GEH proposes to use the coarse nodalization in the chimney for all ESBWR stability TRACG calculations. Demonstrate the impact of chimney nodalization on ESBWR instability.

Status: GEH has not committed to a response date.

RAI 4.4-59, 05/29/07, ML071450138

Establish a maximum heat-up rate for the low pressure start-up in terms of MW per hour that will not be exceeded by the licensee. Show margin to instability by simulating the start-up path using a larger heat-up rate that bounds the established maximum. Use neutronic feedback.

Status: GEH committed to provide a response by 11/22/07.
No response has been submitted as of the date of this letter.

RAI 4.4-60, 05/29/07, ML071450138

Provide a calculation demonstrating margin through the ascension to full-pressure phase of the startup. Use the transient Xenon capability in TRACG/PANAC and add the relevant components of the balance of plant model to show plant response.

Status: GEH committed to provide a response by 11/22/07.
No response has been submitted as of the date of this letter.

RAI 4.4-62, 05/30/07, ML071490166

In DCD Tier 2, Rev. 3, Section 15.2, several Anticipated Operational Occurrences have been listed as potentially limiting with respect to Operating Limit MCPR determination. In previous revisions, the loss of feedwater heater with Selected Control Rod Run-in (SCRRI) failure was described as the worst case for OLMCPR determination. In Topical Report NEDC-33237P, Revision 2, Sections 5.12 and 6.0, the LFWH with SCRRI failure is still listed as the limiting event for OLMCPR determination. The DCD and the topical report should be consistent regarding the potentially limiting events.

Status: GEH responded on 01/02/08, MFN-07-696.
GEH's response is under staff review.

RAI 4.4-64, 01/09/08, ML080030246

The following information is requested for staff to confirm the results in "GE14 for ESBWR Nuclear Design Report", NEDC-33239P, Revision 2.

A. Provide the TRACG input and output files for the core thermal hydraulic data for steady state operation that is documented in the "GE14 for ESBWR Nuclear Design Report", NEDC-33239P, Revision 2.

B. Provide the assembly flows versus pressure drop in function power documentation. Note: It is sufficient to provide the 12 ft fuel data.

Status: GEH has not committed to a response date.

RAI 4.4-65, 01/09/08, ML080030246

The following information is requested for staff to confirm the results in "GE14 for ESBWR Nuclear Design Report", NEDC-33239P, Revision 2. Describe how the flow areas are used as input in TRACG (variable FA in CHAN).

Status: GEH has not committed to a response date.

RAI 4.4-66, 01/09/08, ML080030246

Provide input thermal-hydraulic boundary conditions and associated thermal hydraulic results used for the calculation of the core power distribution in NEDC-33239P, Revision 2, "GE14 for ESBWR Nuclear Design Report," April 2007. Specifically, provide inlet core flow rate, inlet coolant temperature, and inlet flows distribution for each channel, bypass flow rate, void fraction for each channel at 25 axial locations, and pressure drop for each channel at 25 axial locations.

The data should be provided in MS Excel spreadsheets similar to the format provided in MFN 06-295, Supplement No. 1, dated November 15, 2006. If applicable, data can be provided for symmetrical portion of the core (e.g., 1/4 core symmetry). Appropriate units should be included with the data values.

Status: GEH responded on 2/04/08, MFN-08-065.
GEH's response is under staff review.

RAI 4.4-67, 01/09/08, ML080030246

NEDC-33239P, Revision 2, "GE14 for ESBWR Nuclear Design Report," April 2007, Figure 3-26, (pages 3-39 through 3-41) provides control blade insertion positions as a function of burnup with values ranging from 0 to 98 without units along with "blanks" in some positions.

Please provide the definition of the units used for the control blade insertion, and the reference location to determine fully inserted and fully withdrawn positions relative to the active fuel.

Status: GEH responded on 2/04/08, MFN-08-065.
GEH's response is under staff review.

RAI 4.6-23 Supplement No. 2, 11/20/07, ML073230051

The staff has considered GEH's control rod drop event frequency evaluation provided in response to RAI 4.6-23 S01. Based upon the potential consequences of an unrestricted reactivity excursion and to ensure compliance with 10 CFR 50 Appendix A GDC 28, the staff

concludes that the ESBWR design must demonstrate reactor coolant pressure boundary integrity and acceptable radiological consequences for the control rod drop accident. More detailed regulatory criteria and guidance is provided in SRP Section 4.2 Appendix B. This regulatory position necessitates updates to ESBWR DCD Tier 1 Section 2.2.2, Tier 2 Section 4.6, and Tier 2 Section 15.4.6. Please provide these revised DCD sections.

Status: GEH has not committed to a response date.

RAI 4.6-28, 07/25/06, ML062060322

DCD Tier 2, Section 4.6.1.2 describes the CRD system functions including "provides for selected control rod run-in." An inadvertent control rod run-in would result in a redistribution of core power and potentially an approach to a fuel design limit. Please describe the core and plant systems' response to the limiting inadvertent control rod run-in event.

Status: GEH responded on 08/20/07, MFN-07-446.
GEH's response is under staff review.

RAI 4.6-38, 01/10/08, ML080080592

Provide the results of a control rod drop accident analysis for the initial core to demonstrate compliance with GDC 28.

In RAI 4.6-23 S02, staff requested that a control rod drop accident analysis be performed for the ESBWR equilibrium core.

From the review of LTR NEDC-33326 staff requests that the same analysis be performed for the initial core. It is sensitive to banked position withdrawal sequence (BPWS), core design, and rod worth. These are core/cycle dependent parameters. It would not be possible to draw conclusions regarding the initial core from the equilibrium core analysis.

Status: GEH has not committed to a response date.

RAI 4.8-6 Supplement No. 1, 9/13/07, ML072560700

As discussed during the July 2007 GEH Control Blade and Fuel Assembly Design Audit, the revised fuel rod cladding strain limit (RAI 4.2-2 supplement) will need to be captured in a revision to the original 4.8-6 response.

Status: GEH has not committed to a response date.

RAI 4.8-7 Supplement No. 2, 9/13/07, ML072560700

As discussed during the July 2007 GEH Control Blade and Fuel Assembly Design Audit, please capture plans to perform the Flow-induced Vibration Testing and submit the results. The GEH report should discuss ESBWR operating conditions and coolant quality relative to test conditions, steam acceleration effects, and disposition single-phase versus two-phase testing effects.

Status: GEH has not committed to a response date.

cc:

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