



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 7, 2006

MEMORANDUM TO: File

FROM: Lawrence W. Rossbach, Project Manager  
New Reactor Licensing Branch  
Division of New Reactor Licensing  
Office of Nuclear Reactor Regulation

A handwritten signature in cursive script, appearing to read "Lawrence W. Rossbach", is written over the typed name.

Subject: ESBWR DESIGN CERTIFICATION REVIEW - SUMMARIES OF  
TELEPHONE CALLS HELD ON JANUARY 17 AND JANUARY 24, 2006

This memorandum documents actions to be taken as result of telephone conferences between the NRC staff and General Electric on these dates:

January 17, 2006, call on plans for NRC audit of ESBWR piping analysis.

January 24, 2006, call on plans for NRC audit of ESBWR seismic analysis.

Summaries of calls held on these dates are attached.

Attachment: As stated

Docket 52-010

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## Telephone Call Summary

**Subject:** Plans for NRC audit of ESBWR piping analysis

**Date of Call:** January 17, 2006

### Participants

#### NRC

Amy Cubbage  
John Fair  
Larry Rossbach

#### GE

David Hinds  
Jerry Deaver  
Wayne Massie

### Referenced documents

<u>Accession Number</u>	<u>Title</u>	<u>Date</u>
ML003707942	SECY 92-053	02/19/92
ML051040322	Summary of March 9, 2005, meeting	04/19/05

### Actions

#### Topic

#### NRC

#### GE

Piping analysis  
completion

GE will inform NRC by the end of April 2006, if the main steam and SRV lines piping analysis has been completed and verified or not.

Piping audit

NRC will audit the main steam and SRV lines piping analysis at GE, Wilmington NC. The audit will be from May 8 to 12, 2006.

### Other Discussion

NRC stated that it will audit the dynamic analysis of the ESBWR main steam lines including the safety-relief valves (SRVs) discharge lines. During the audit NRC will also collect design information from General Electric (GE) so that we can do a confirmatory analysis of the main steam and SRV discharge lines. GE explained that there are four main steam lines and they are analyzing two lines since two sets of lines are mirror images of each other. GE has completed the thermal analysis of one line up to the containment penetration. GE is preparing the model and defining the inputs to do the dynamic analysis. NRC explained that we want to do the audit in the spring and that we do not want to review preliminary analyses. The dynamic analysis is being done for GE by Empresarios Agrupados Internacional in Spain. GE expects to have reviewed and verified the dynamic analysis by the end of April 2006. GE agreed to inform NRC by the end of April 2006 if the analysis has been completed and verified or not. Based on the planned completion date for the main steam and SRV line analysis, we agreed to hold the audit from May 8 to 12, 2006, at GE in Wilmington, North Carolina.

Attachment

## Telephone Call Summary

Subject: Plans for NRC audit of ESBWR seismic analysis

Date of Call: January 24, 2006

### Participants

#### NRC

Larry Rossbach  
Thomas Cheng

#### GE

David Hinds  
Wayne Massie  
Hugh Upton  
Ai-Shen Liu

### Actions

#### Topic

#### NRC

#### GE

Seismic audit

NRC will audit the ESBWR seismic analysis at GE, San Jose CA. The audit will be the week of June 5, 2006.

Provide model input information to NRC before the audit.

### Other Discussion

NRC stated that it will audit the ESBWR seismic analysis including design calculations. NRC will send Requests for Additional Information (RAIs) to General Electric (GE) based on our review of the ESBWR Design Control Document (DCD) in areas related to their seismic analysis. Our audit will also follow up on their responses to these RAIs. NRC requested that GE provide model input information so that we can do confirmatory analyses. GE agreed to provide this information before the audit to help us prepare for the audit. NRC is using the SASSI computer code and GE is using the Shimizu code, a code which NRC has not reviewed. NRC asked about the validation of the Shimizu code and GE stated that they had compared SASSI with Shimizu on their Lungmen ABWR project. GE stated that this comparison would be available to NRC at the audit. GE stated that the audit should take place at their San Jose, California offices because the calculations and most of the seismic team are there. We discussed if this seismic audit could be combined with a structural audit. GE preferred that the audits be done separately because the same staff from GE would be needed to support both audits. We agreed to hold the seismic audit the week of June 5 and the structural audit would follow. We plan to have additional discussions with GE on preparations for this audit as we get closer to the audit and when we receive their response to our RAIs.