# February 3, 2005

MEMORANDUM TO: File

FROM: Amy E. Cubbage, Project Manager /RA/

New, Research and Test Reactors Program
Division of Regulatory Improvement Programs

Office of Nuclear Reactor Regulation

SUBJECT: ESBWR PRE-APPLICATION REVIEW - SUMMARY OF

TELEPHONE CALL HELD ON JANUARY 27, 2005

This memorandum documents the results of a telephone conference between the NRC staff and General Electric (GE) on January 27, 2005.

A summary of the call is attached.

Project No. 717

## Telephone Call Summary

Subject: Piping Analysis for ESBWR Design Certification

Date of Call: January 27, 2005

## **Participants**

NRC Pre-Applicant

Amy Cubbage Robert Gamble
Jerry Wilson Kathy Sedney
Davis Terao Gerald Deaver
Kamal Manoly Kirti Doshi
Mark Hartzman J. Alan Beard

George Thomas Gin-Sien Guo Steve Jones

### Referenced documents

Accession Number Title Date

ML050320316 ESBWR Piping Analysis handouts January 27, 2005

#### **Actions**

Topic NRC **Applicant** Public Meeting Schedule public meeting in Propose date for public meeting regarding piping February analysis Submit handouts in advance Provide draft schematic of ESBWR Design Control Document (DCD) control rod drive (CRD) system level of detail and schematic of ABWR CRD system for comparison of the level of detail proposed

### Other Discussion:

The staff requested a public meeting to discuss the topic of piping analysis in more detail. The staff requested that General Electric (GE) discuss the piping analysis that would be provided in the DCD on a system by system basis including the rationale for what analysis would be completed for each system. The staff asked GE to provide additional information from the Lungmen Advanced Boiling Water Reactor (ABWR) project to demonstrate that thermal stresses were limiting for the Lungmen piping design and that the Lungmen experience is applicable to the ESBWR design. Lastly, the staff stated that GE should consider the impact of environmental effects on the Class 1 piping fatigue analyses, similar to what is required for license renewal of current GE plants. Hatch, Dresden/Quad Cities and Browns Ferry are examples of plants where environmental effects were considered in the Class 1 piping fatigue calculations for license extension.