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Generic Letter 83-11, Supplement 1

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United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/RENEWED LICENSE NO. DPR-23

**USE OF GOTHIC COMPUTER CODE FOR CONTAINMENT ANALYSIS
AT THE H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

Ladies and Gentlemen:

Per guidelines provided in Nuclear Regulatory Commission (NRC) Generic Letter (GL) 83-11, Supplement 1, H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP, Unit No. 2) is in the process of implementing a change from the Westinghouse COCO computer code to the GOTHIC computer code to perform containment pressure and temperature analyses. This change has been reviewed under the requirements of 10 CFR 50.59 and was determined not to require NRC prior approval. This notification fulfills the requirements of GL 83-11 to inform the NRC of our change to the GOTHIC computer code. Documentation related to this change is available for NRC audit.

Generic Letter 83-11 details the regulatory expectations for eligible methods or codes, application procedures, training/personnel qualifications, benchmarking, quality assurance, and change control processes. Aside from providing direct guidance to the licensee on the requirements when establishing an in-house program, one significant note is that the NRC supplement also removes the requirement of licensee topical submission to the NRC. Below is a discussion of how the criteria in the generic letter supplement were met.

Eligibility: Nuclear Regulatory Commission has reviewed the submittals of several utilities and vendors and determined that the GOTHIC computer code is applicable to resolve containment response licensing issues. These include submittals by Dominion, Omaha Public Power District, and AREVA.

Application: Use of the GOTHIC computer code for containment analysis is consistent with the code qualifications and the NRC-approved application of the code. The code application for HBRSEP, Unit No. 2 is consistent with the Qualification Report and all appropriate technical guidance (i.e., Technical Manual, Users Manual, Installation and Operation Manual, etc.). An independent review of the analysis will be performed as part of the normal Quality Assurance process.

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Training and Qualification of Licensee Personnel: The GOTHIC analysis for HBRSEP, UNIT No. 2 is being performed by personnel from Zachry's Numerical Applications Division (NAI); the analysis will be reviewed by HBRSEP, UNIT No. 2 personnel prior to approval of the engineering change scheduled for implementation by the end of the next refueling outage. NAI personnel developed GOTHIC and have many years of experience with the computer code in resolving a variety of safety-related issues. In addition to the code development and extensive familiarity with the code, NAI provides code support to other users. Procedures are in place for software quality assurance, verification, and validation of the code and the input data, as well as input file organization and training.

Comparison Calculation: A design calculation was prepared documenting extensive benchmarking of the GOTHIC computer code against the COCO code for the limiting case with excellent agreement, using consistent inputs.

Quality Assurance and Change Control: All GOTHIC calculations for HBRSEP, UNIT No. 2 developed under Zachry's Quality Assurance Program will be reviewed by HBRSEP, UNIT No. 2 personnel in accordance with the HBRSEP, UNIT No. 2 Quality Assurance Program.

This document contains no new Regulatory Commitments.

If you have any questions concerning this matter, please contact me at (843) 857-1329.

Sincerely,



Richard Hightower
Licensing/Regulatory Programs – Supervisor

WRH/msc

c: Mr. V. M. McCree, NRC, Region II
NRC Resident Inspector, HBRSEP
Ms. A. T. Billoch Colón, NRC