



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555

September 21, 1992

Docket No. 50-390

Tennessee Valley Authority  
Attn: Dr. Mark O. Medford, Vice President  
Nuclear Assurance, Licensing and Fuels  
3B Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

Dear Dr. Medford:

SUBJECT: INTEGRATED DESIGN INSPECTION AT WATTS BAR, UNIT 1  
(50-390/92-201)

We are forwarding the report of an Integrated Design Inspection (IDI) of the civil/structural area, performed July 13 through August 7, 1992, involving activities authorized by Construction License No. CPPR-91 for the Watts Bar Nuclear Plant Unit 1. The Nuclear Regulatory Commission (NRC) staff from the Special Inspection Branch of the Office of Nuclear Reactor Regulation conducted the inspection. An exit meeting was held on August 7, 1992, during which we discussed the team's findings with you and other members of your staff.

The primary focus of the inspection was to assess the adequacy of the design control process for selected structures, piping, and supports. The areas examined during the inspection are discussed in the enclosed inspection report. The inspection consisted of a review of design documentation, installed equipment, procedures, and interviews with the engineering and technical support staff.

The design process was found to be generally adequate. In most cases, NRC regulations and design commitments made in the FSAR were implemented. Strengths were identified in competence of technical support staff, programs and data bases for tracking design changes, and good housekeeping in the plant.

The team identified significant concerns that may have generic implications at Watts Bar. These are: (1) the use of U-bolts rather than clamps to support and restrain piping with pin connected supports, (2) missing and loose hardware in pipe and conduit supports, (3) the failure to consider the as-built weld sizes of the commodity supports in the ranking process for identification of critical cases for bounding calculations, and

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Mr. Mark O. Medford

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(4) a conduit support that was not installed, contrary to engineering documents that indicated the support was installed.

We understand you plan to conduct a single walkdown to address loose and missing parts toward the end of the construction; however, reliance upon a single walkdown to both identify and correct all untagged loose and missing parts is a concern to the team.

No response to this letter is required. It is our intention to follow up on the deficiencies and unresolved items during the mechanical systems followup IDI to be conducted in early 1993. At that time, we will review your corrective actions and evaluations of generic implications of the findings in this inspection report.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room. Any enforcement actions resulting from this inspection will be issued by Region II.

Should you have any questions concerning this inspection, please contact the NRR Project Manager, Peter Tam, or the inspection team members, Sam Malur or Hai-Boh Wang. Messrs. Malur and Wang can be reached at (301) 504-2963, and (301) 504-2958, respectively.

Sincerely,



Steven A. Varga, Director  
Division of Reactor Projects, I/II  
Office of Nuclear Reactor Regulation

Enclosure:  
Inspection Report 50-390/92-201

cc: See page 3

Tennessee Valley Authority

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Watts Bar Nuclear Plant

cc:

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