



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 31, 2010

Vice President, Operations  
Entergy Operations, Inc.  
Waterford Steam Electric Station, Unit 3  
17265 River Road  
Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - REQUEST FOR  
ADDITIONAL INFORMATION RE: LICENSE AMENDMENT REQUEST TO  
MODIFY TECHNICAL SPECIFICATION 3/4.9.7, "CRANE TRAVEL - FUEL  
HANDLING BUILDING" (TAC NO. ME2221)

Dear Sir or Madam:

By letter dated September 9, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092540575), Entergy Operations, Inc. (the licensee), submitted an application for a license amendment request to the U.S. Nuclear Regulatory Commission (NRC) requesting an amendment to the license in the form of changes to the Technical Specification 3/4.9.7, "Crane Travel - Fuel Handling Building," to permit certain operations needed for dry cask storage of spent nuclear fuel.

The NRC staff has reviewed the application and has determined that additional information contained in the enclosure is needed to complete the review. The staff discussed the need for additional information on March 8, 2010, with Mr. W. Steelman of your staff. Mr. Steelman agreed to provide a response within 30 days of the receipt of this letter.

If you have any questions, please contact me at (301) 415-1480 or by electronic mail at [kaly.kalyanam@nrc.gov](mailto:kaly.kalyanam@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kaly Kalyanam", with a horizontal line underneath.

N. Kalyanam, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure:  
As stated

cc w/encl.: Distribution via ListServ

REQUEST FOR ADDITIONAL INFORMATION

LICENSE AMENDMENT REQUEST

MODIFY TS 3/4.9.7, "CRANE TRAVEL – FUEL HANDLING BUILDING"

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

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The guidelines of Section 5.1.6 of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," dated July 1980 (ADAMS Accession No. ML070250180), and Section III.4.C of NUREG-0800, Chapter 9.1.5, "Overhead Heavy Load Handling Systems" (ADAMS Accession No. ML062260190), specify that lifting devices in single failure handling systems should be selected to satisfy either of the following criteria:

- (1) A special lifting device that satisfies [American National Standards Institute] ANSI N14.6 should be used for recurrent load movements in critical areas (reactor head lifting, reactor vessel internals, spent fuel casks). The lifting device should have either dual, independent load paths or a single load path with twice the design safety factor specified by ANSI N14.6 for the load.
- (2) Slings should satisfy the criteria of [American Society of Mechanical Engineers] ASME B30.9 and be constructed of metallic material (chain or wire rope). The slings should be either (a) configured to provide dual or redundant load paths or (b) selected to support a load twice the weight of the handled load.

Request for Additional Information (RAI)-1

In Section 5.1 of its letter dated September 9, 2009, the licensee stated that the lifting devices should be selected to satisfy either of the above criteria. In Sections 3.0 and 4.0 of its letter, the licensee stated that the handling devices in its single-failure-proof handling system are designed per ANSI N14.6 and ASME B30.9. The NRC staff requests that the licensee verify that the crane and handling system meet the single-failure-proof handling criteria of ANSI N14.6 and ASME B30.9 (with devices constructed of metallic material (chain or wire rope)). In addition, please verify that the lifting devices will have either dual, independent load paths or a single

Enclosure

load path with twice the design safety factor specified by ANSI N14.6 for the load and slings should be either (a) configured to provide dual or redundant load paths or (b) selected to support a load twice the weight of the handled load.

RAI-2

- a. Please provide the weights of the old trolley and the new trolley.
- b. Please provide the weights of the lift yoke, the lift yoke extension, and the slings.

RAI-3

For the seismic analysis of the new trolley and qualification of the existing bridge, please provide confirmation that the bridge with the newly installed trolley and any additional weight, resulting from the single-failure-proof upgrade, will be seismically qualified to the requirements of ASME-NOG-1-2004, "Rules for Construction of Overhead and Gantry Cranes (Top Running Bridge, Multiple Girder)."

RAI-4

Please provide confirmation that the runway crane supporting structure will be seismically qualified in accordance with the current licensing basis criteria to support the crane with the new trolley and additional weight resulting from the single-failure-proof upgrade.

RAI-5

Please provide a simple sketch of the layout showing the arrangements for the Safe Load Path as per NUREG-0612, Control of Heavy loads at Nuclear Power Plants, July 1980.

March 31, 2010

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Sincerely,  
/RA/

N. Kalyanam, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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As stated

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**ADAMS Accession No. ML100680144**

\*Minor editorial changes only from staff RAI

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