



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

January 7, 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 – SUMMARY OF
NOVEMBER 13 AND 17, 2009, DISCUSSIONS ON STEAM GENERATOR
TUBE INSPECTIONS (TAC NO. ME2619)

Dear Sir or Madam:

On November 13 and 17, 2009, the U.S. Nuclear Regulatory Commission (NRC) staff participated in conference calls with Entergy Operations, Inc. (Entergy, the licensee), representatives, K. Nichols, R. Murillo, R. Putnam, R. O'Quinn, et. al., regarding the fall 2009 steam generator tube inspections at Waterford Steam Electric Station, Unit 3. A summary of the November 2009 conference calls is enclosed. The e-mail and handouts provided by the licensee to support the conference calls are contained in Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML093210501, ML093210539, and ML093210544. The NRC staff did not identify any issues that would warrant preventing the plant from starting up following its 16th refueling outage.

If you have any questions, please call me at (301) 415-1480.

Sincerely,

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

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

SUMMARY OF NOVEMBER 13, AND 17, 2009, CONFERENCE CALLS WITH
ENTERGY OPERATIONS INC. REGARDING THE FALL 2009
STEAM GENERATOR TUBE INSPECTION AT
WATERFORD STEAM ELECTRIC STATION, UNIT 3
DOCKET NO. 50-382

On November 13, and 17, 2009, the U.S. Nuclear Regulatory Commission staff participated in a conference call with representatives of Entergy Operations, Inc. (Entergy, the licensee), regarding the ongoing steam generator (SG) tube inspections activities at Waterford Steam Electric Station, Unit 3 (Waterford 3). The e-mail and handouts provided by the licensee to support the conference calls are contained in Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML093210501, ML093210539, and ML093210544.

Waterford 3 has two Model 3410 SGs. Each SG contains 9,350 mill annealed Alloy 600 tubes. Each tube has a diameter of 0.750 inches and a nominal wall thickness of 0.048 inches. The tubes were explosively expanded at both ends for the full length of the tubesheet and are supported by a number of carbon steel lattice grid tube supports, diagonal bars and vertical straps.

Additional clarifying information, or information not included in the material provided by the licensee, is summarized below:

- One tube with an axial indication at the seventh eggcrate support was identified for in-situ pressure testing. The tube is located in row 18, column 112 in SG 31. The indication is approximately 1.22 inches long and its maximum depth was estimated as 66 percent through wall with an Electric Power Research Institute sizing technique and 53 percent through wall with a Westinghouse sizing technique.
- At the time of the calls, no crack-like indications were detected in dents, dings, or in the U-bend region.
- The licensee has administrative limits on the primary-to-secondary leak rate. The licensee indicated that if the leak rate exceeds 15 gallons per day, the plant would be shut down within 36 hours.
- The wall thickness of the J-nozzles is typically larger than the nominal pipe wall thickness.
- On November 17, 2009, the licensee reported that the in-situ pressure test on the tube in row 18, column 112 was completed and that there was no leakage or burst at 5500 pounds per square inch.

The NRC staff did not identify any issues that would warrant preventing the plant from starting up following its 16th refueling outage.

Enclosure

January 7, 2010

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Entergy Operations, Inc.
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Sincerely,
/RA/

N. Kalyanam, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
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ADAMS Accession No. ML100050664

*Memo dated

OFFICE	DORL/LPL4/PM	DORL/LPL4/LA	DCI/CSGB/BC	DORL/LPL4/BC	DORL/LPL4/PM
NAME	NKalyanam	JBurkhardt	RTaylor*	MMarkley	NKalyanam
DATE	1/6/10	1/6/10	12/29/09	1/6/10	1/7/10

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