

September 7, 2007

Mr. Kevin T. Walsh  
Vice President of Operations  
Entergy Operations, Inc.  
17265 River Road  
Killona, LA 70057-3093

SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3 - EVALUATION OF  
FINITE ELEMENT ANALYSIS IN SUPPORT OF ALLOY 82/182 PRESSURIZER  
BUTT WELD INSPECTIONS IN 2008 AS PROVIDED BY CONFIRMATORY  
ACTION LETTER NRR-07-006 (TAC NO. MD4196)

Dear Mr. Walsh:

On March 20, 2007, the U.S. Nuclear Regulatory Commission (NRC) issued Confirmatory Action Letter (CAL) No. NRR-07-006 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML070710563) regarding dissimilar metal welds in the pressurizer surge, spray, and safety/relief nozzle-to-safe end welds at Waterford Steam Electric Station, Unit 3 (Waterford 3). The CAL and the supporting commitment letter (ADAMS Accession No. ML070590205) indicate that inspection and mitigation actions may be conducted during your spring 2008 refueling outage, contingent on the industry providing an analysis that demonstrates an acceptable level of safety to the NRC for the operation of these welds until spring 2008. This letter acknowledges receipt of your letter dated August 7, 2007 (ADAMS Accession No. ML072410201), informing the NRC that the analysis referred to by this CAL and the supporting commitment letter has been completed, and that the analysis is applicable to your plant.

The NRC received MRP-216, Rev. 1, "Materials Reliability Program: Advanced FEA [Finite Element Analysis] Evaluation of Growth of Postulated Circumferential PWSCC [Primary Water Stress-Corrosion Cracking] Flaws in Pressurizer Nozzle Dissimilar Metal Welds" on August 13, 2007 (ADAMS Accession No. ML072410235). Based on our review of this report, the NRC concludes that the analysis provides adequate justification to permit inspections during your spring 2008 refueling outage, and that the analysis is applicable to Waterford 3. The results of the staff's review are contained in a safety assessment dated August 31, 2007 (ADAMS Accession No. ML072400199), and the associated contractor report (ADAMS Accession No. ML072470394).

Based on the above, the NRC concludes that a plant shutdown by December 31, 2007, is no longer required. Therefore, the pressurizer surge, spray, and safety/relief nozzle-to-safe end Alloy 82/182 butt weld inspections for Waterford 3 must be performed prior to exiting your scheduled spring 2008 refueling outage. All other requirements of the CAL and the supporting commitment letter regarding enhanced inspection and leakage monitoring requirements for the reactor coolant system and associated reports remain valid.

The CAL will remain open until all CAL commitments pertaining to Waterford 3 are complete.

Current NRC guidance regarding CALs is contained in the NRC Enforcement Policy and the NRC Enforcement Manual, which are available at the NRC web site at <http://www.nrc.gov/about-nrc/regulatory/enforcement.html> (click on Enforcement Policy or Enforcement Guidance) or by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 9:00 p.m. EST, Monday through Friday (except Federal holidays).

In accordance with Title 10 of the *Code of Federal Regulations*, Part 2, Section 390, of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm.html>.

Sincerely,

/RA/

Catherine Haney, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-382

cc: See next page

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Sincerely,

/RA/

Catherine Haney, Director  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

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May 2007