



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

April 27, 2011

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

SUBJECT: WATERFORD STEAM ELECTRIC STATION. UNIT 3 - CORRECTION TO
AMENDMENT NO. 233 RE: TECHNICAL SPECIFICATION TABLE 3.4-1
ISOLATION VALVE ADDITION (TAC NO. ME3421)

Dear Sir or Madam:

By letter dated March 23, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML110630259), the U.S. Nuclear Regulatory Commission (NRC) issued Amendment No. 233 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. This amendment consisted of changes to the Technical Specifications (TSs) in response to Entergy Operations, Inc.'s (Entergy's, the licensee's) application dated February 22, 2010, as supplemented by letters dated June 8 and August 12, 2010, and January 4 and March 7, and March 18, 2011.

The amendment added valve SI-4052A (Reactor Coolant Loop (RCL) 2 Shutdown Cooling (SDC) suction inside containment bypass isolation) and valve SI-4052B (RCL 1 SDC suction inside containment bypass isolation) to TS Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves." This bypass line equalizes the SDC system pressure downstream of valve SI-405A(B) (RCL 2(1) SDC suction inside containment isolation) in order to minimize the pressure transient in the system when valves SI-405A(B) are opened.

The NRC staff has now noticed that Entergy's letter dated March 18, 2011, was not identified as a supplement in the NRC's letter dated March 23, 2011. The NRC staff has corrected the transmittal letter, page 1 of the amendment letter, pages 1 and 8 of the SE, and the Notice of Issuance referencing the March 18, 2011 letter (ADAMS Accession No. ML11115A159). The location of the correction is identified by the revision bar on the right. The corrected documents are enclosed.

The Commission has forwarded the corrected Notice of Issuance of Amendment to Facility Operating License to the Office of the Federal Register for publication.

Please note that Enclosure 1 to Entergy's letter dated March 18, 2011, "Valcor Engineering Corporation's Similarity Report MR526-6040-22-3 Revision B," is declared to be proprietary in nature and not available to the public.

This correction does not change the NRC staff's conclusions regarding Amendment No. 233 for Waterford Steam Electric Station, Unit 3. We regret any inconvenience caused by this error.

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

A handwritten signature in black ink, appearing to read "N. Kaly Kalyanam". The signature is fluid and cursive, with a horizontal line underlining the name.

N. Kaly 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

ENCLOSURE

CORRECTION TO AMENDMENT NO. 233 DATED MARCH 23, 2011

REVISED TRANSMITTAL LETTER, AMENDMENT LETTER PAGE 1,
SAFETY EVALUATION PAGES 1 AND 8, AND
CORRECTION NOTICE OF ISSUANCE



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

March 23, 2011

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 - ISSUANCE OF
AMENDMENT RE: TECHNICAL SPECIFICATION TABLE 3.4-1 ISOLATION
VALVE ADDITION (TAC NO. ME3421)

Dear Sir or Madam:

The Commission has issued the enclosed Amendment No. 233 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated February 22, 2010, as supplemented by letters dated June 8 and August 12, 2010, and January 4, March 7, and March 18, 2011.

The amendment adds valve SI-4052A (Reactor Coolant Loop (RCL) 2 Shutdown Cooling (SDC) suction inside containment bypass isolation) and valve SI-4052B (RCL 1 SDC suction inside containment bypass isolation) to TS Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves." This bypass line equalizes the SDC system pressure downstream of valve SI-405A (RCL 2 SDC suction inside containment isolation) and valve SI-405B (RCL 1 SDC suction inside containment isolation) in order to minimize the pressure transient in the system when valves SI-405A(B) are opened.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "N. 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

Enclosures:

1. Amendment No. 233 to NPF-38
2. Safety Evaluation

cc w/encls: Distribution via Listserv

March 23, 2011

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 - ISSUANCE OF
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Sincerely,
/RA/

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

Docket No. 50-382

Enclosures:

1. Amendment No. 233 to NPF-38
2. Safety Evaluation

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ADAMS Accession No. ML110630259

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NAME	NKalyanam	JBurkhardt	RMathew	GWilson	MKhanna	RElliott
DATE		3/10/11	1/28/11	3/16/11	1/10/11	3/15/11
OFFICE	NRR/DRA/AFP/BC	NRR/DSS/SCVB/BC	NRR/DSS/SRXB/BC	OGC NLO	NRR/LPL4/BC	NRR/LPL4/PM
NAME	AKlein	RDennig	AUises	BMizuno	MMarkley	NKalyanam
DATE	1/21/11	1/24/11	Not Required	3/18/11	3/23/11	3/23/11

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

ENTERGY OPERATIONS, INC.

DOCKET NO. 50-382

WATERFORD STEAM ELECTRIC STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 233
License No. NPF-38

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Operations, Inc. (EOI), dated February 22, 2010, as supplemented by letters dated June 8 and August 12, 2010, and January 4, March 7, and March 18, 2011, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 233 TO

FACILITY OPERATING LICENSE NO. NPF-38

ENTERGY OPERATIONS, INC.

WATERFORD STEAM ELECTRIC STATION, UNIT 3

DOCKET NO. 50-382

1.0 INTRODUCTION

By application dated February 22, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100550463), as supplemented by letters dated June 8 and August 12, 2010, and January 4, March 7 and March 18, 2011 (ADAMS Accession Nos. ML101620462, ML102300177, ML110070026, ML110670210, and ML11115A159, respectively), Entergy Operations, Inc. (Entergy, the licensee), requested changes to the Technical Specifications (TSs) for Waterford Steam Electric Station, Unit 3 (Waterford 3). The supplemental letters dated June 8 and August 12, 2010, January 4, March 7, and March 18, 2011, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on April 20, 2010 (75 FR 20633).

The amendment would add valve SI-4052A (Reactor Coolant Loop (RCL) 2 Shutdown Cooling (SDC) suction inside containment bypass isolation) and valve SI-4052B (RCL 1 SDC suction inside containment bypass isolation) to TS Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves." This bypass line equalizes the SDC system pressure downstream of valve SI-405A (RCL 2 SDC suction inside containment isolation) and valve SI-405B (RCL 1 SDC suction inside containment isolation) in order to minimize the pressure transient in the system when valves SI-405A(B) are opened.

2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to include TSs as part of the license. The TSs ensure the operational capability of structures, systems, and components that are required to protect the health and safety of the public. The NRC's regulatory requirements related to the content of the TSs are contained in Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.36, "Technical specifications,"

battery capacity calculations verified that the Class 1 E batteries have sufficient capacity to support SBO for 4 hours. Offsite power or the emergency diesel generator is credited for restoration of AC power to the plant ending the 4-hour SBO event. Once AC power is restored, the safety-related battery chargers provide DC power to the DC buses and loads.

The NRC staff concludes that Waterford 3's response for SBO coping is in accordance with 10 CFR 50.63 and consistent with the guidance provided in NUMARC 87-00 and RG 1.155; and is, therefore, acceptable.

3.3.1.2 Evaluation of the Environmental Qualification of the Valves SI-4052A(B) and Associated Components

In its letters dated January 4 and March 7, 2011, the licensee provided details on the environmental qualification (EQ) of valves SI-4052A(B) and the associated components. The licensee also provided a Valcor (valve vendor) similarity report, titled "Similarity Qualification Test Report on Solenoid Valve, Part Number 214167301, Model Number V526-6040-22."¹

For Waterford 3, valves SI-4052A(B) will be procured to withstand the environmental and accident conditions inside containment as shown in the Waterford 3 FSAR Table 3.11-1, "Environmental Condition Summary." The proposed valves have not been tested for qualification but a similarity report has been submitted by the licensee that describes the similarities and differences between the proposed valve and similar valves which have been previously tested and qualified. This is consistent with 10 CFR 50.49(f)(2), which states,

Testing a similar item of equipment with a supporting analysis to show that the equipment to be qualified is acceptable.

The NRC staff reviewed the similarity analysis and the staff's observations are as follows:

The licensee has procured Valcor (the vendor of the proposed valves) valves with Model Number V526-6040-22, for Waterford 3. The licensee stated that these valves are specified as Class 1E, qualified to IEEE Standard 323-1974, "IEEE Standard for Qualifying Class 1E Equipment for Nuclear Power Generating Stations," Seismic Category 1, Borated Water Service, EGS (another vendor) type Conduit Seal, Radiation Environment 5.1×10^7 Rads, and with independent limit switches (2) normally open and (2) normally closed. To qualify this model, Valcor used two comparable valves to evaluate for similarity using the following items:

- Type of technology used in design and manufacture
- Type of critical components
- Mounting/orientation and type of connections
- Service conditions
- Safety functions

The similarities for various type tests for qualifications, such as Design Basis Event environmental and seismic qualification, are extended to the Waterford 3 model because of

¹ Kowalewski, J. A., Entergy Operations, Inc., letter to U.S. Nuclear Regulatory Commission, "Waterford 3 Transmittal of Proprietary Valcor Report," dated March 18, 2011 (ADAMS Accession No. ML11115A159); Attachment 1 is non-publicly available.

Nuclear Regulatory Commission

[NRC-2011-XXXX]

Docket No. 50-382

Entergy Operations, Inc.

**Biweekly Notice; Notice of Issuance of Amendment
to Facility Operating License; Correction**

AGENCY: Nuclear Regulatory Commission

ACTION: Notice of Issuance of Amendment; Correction

SUMMARY: This document corrects a notice appearing in the *Federal Register* on April 5, 2011 (76 FR 18806) that incorrectly excluded the date of a supplement to the amendment request. This action is necessary to correct a missing date on the notice of issuance of amendment.

FOR FURTHER INFORMATION CONTACT: Nageswaran Kalyanam, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone (301) 415-1480, e-mail: kaly.kalyanam@nrc.gov.

SUPPLEMENTARY INFORMATION: On page 18806, appearing near the top of the first column under the subheading "*Date of amendment request*," fourth line, it is corrected to read from "January 4 and March 7, 2011" to "January 4, March 7, and March 18, 2011".

Dated in Rockville, Maryland, this 27th day of April 2011.

FOR THE NUCLEAR REGULATORY COMMISSION



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

This correction does not change the NRC staff's conclusions regarding Amendment No. 233 for Waterford Steam Electric Station, Unit 3. We regret any inconvenience caused by this error.

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

/RA/

N. Kaly Kalyanam, Project Manager
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Docket No. 50-382

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NAME	NKalyanam	JBurkhardt	MMarkley (BSingal for)	NKalyanam
DATE	4/26/11	4/26/11	4/27/11	4/27/11

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