



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

February 20, 2009

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 - CORRECTION TO  
PAGES ISSUED WITH AMENDMENT NO. 216 (TAC NO. MD5966)**

Dear Sir or Madam:

On July 30, 2008, the Nuclear Regulatory Commission (NRC) staff issued Amendment No. 216 to Facility Operating License No. NPF-38 for the Waterford Steam Electric Station, Unit 3.

An administrative error was discovered in the electronic version of the amended license and technical specification pages in the Agencywide Documents Access and Management System (ADAMS) Accession No. ML081990472 for Amendment No. 216. The error resulted in the omission of some of the pages from the attachment to the amendment document. The administrative error does not change the NRC staff's conclusions in Amendment No. 216.

We have enclosed copies of the corrected license and technical specification pages for this amendment. If you have questions, please contact me at me at 301-415-1480 or by email at [kaly.kalyanam@nrc.gov](mailto:kaly.kalyanam@nrc.gov).

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

Enclosure:  
As stated

cc w/encl: Distribution via Listserv

ENCLOSURE

Attachment to License Amendment No. 216, Issued July 30, 2008

ATTACHMENT TO LICENSE AMENDMENT NO.216

TO FACILITY OPERATING LICENSE NO. NPF-38

DOCKET NO. 50-382

Replace the following pages of the Facility Operating License and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

REMOVE

INSERT

-4-

-4-

Technical Specifications

REMOVE

INSERT

3/4 8-1

3/4 8-1

3/4 8-3

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3/4 8-6a

3/4 8-6a

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3/4 8-8

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6-8

or indirectly any control over (i) the facility, (ii) power or energy produced by the facility, or (iii) the licensees of the facility. Further, any rights acquired under this authorization may be exercised only in compliance with and subject to the requirements and restrictions of this operating license, the Atomic Energy Act of 1954, as amended, and the NRC's regulations. For purposes of this condition, the limitations of 10 CFR 50.81, as now in effect and as they may be subsequently amended, are fully applicable to the equity investors and any successors in interest to the equity investors, as long as the license for the facility remains in effect.

- (b) Entergy Louisiana, LLC (or its designee) to notify the NRC in writing prior to any change in (i) the terms or conditions of any lease agreements executed as part of the above authorized financial transactions, (ii) any facility operating agreement involving a licensee that is in effect now or will be in effect in the future, or (iii) the existing property insurance coverages for the facility, that would materially alter the representations and conditions, set forth in the staff's Safety Evaluation enclosed to the NRC letter dated September 18, 1989. In addition, Entergy Louisiana, LLC or its designee is required to notify the NRC of any action by equity investors or successors in interest to Entergy Louisiana, LLC that may have an effect on the operation of the facility.

- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

- 1. Maximum Power Level

EOI is authorized to operate the facility at reactor core power levels not in excess of 3716 megawatts thermal (100% power) in accordance with the conditions specified herein.

- 2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 216, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. EOI shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

## 3/4.8 ELECTRICAL POWER SYSTEMS

### 3/4.8.1 A.C. SOURCES

#### OPERATING

#### LIMITING CONDITION FOR OPERATION

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3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent diesel generators, each with:
  1. Diesel oil feed tanks containing a minimum volume of 339 gallons of fuel, and
  2. A separate diesel generator fuel oil storage tank, and
  3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3, and 4.

#### ACTION:

- a. With one offsite circuit of 3.8.1.1a inoperable, demonstrate the OPERABILITY of the remaining offsite A.C. circuit by performing Surveillance Requirement 4.8.1.1.1a within 1 hour and at least once per 8 hours thereafter. Restore the offsite A.C. circuit to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one diesel generator of 3.8.1.1b inoperable:
  - (1) Demonstrate the OPERABILITY of the remaining A.C. circuits by performing Surveillance Requirements 4.8.1.1.1a (separately for each offsite A.C. circuit) within 1 hour and at least once per 8 hours thereafter. If the diesel generator became inoperable due to any cause other than an inoperable support system, an independently testable component, or preplanned maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generator (unless it has been successfully tested in the last 24 hours) by performing Surveillance Requirement 4.8.1.1.2a.4 within 8 hours unless the absence of any potential common mode failure for the remaining diesel generator is demonstrated.
  - (2) Restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours, unless the following condition exists:

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS

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4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

- a. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments, indicated power availability, and
- b. Demonstrated OPERABLE at least once per 18 months by transferring manually and automatically unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE\*:

- a. At least once per 31 days on a STAGGERED TEST BASIS by:
  1. Verifying the fuel level in the diesel oil feed tank,
  2. Deleted,
  3. Verifying the fuel transfer pump can be started and transfers fuel from the storage system to the diesel oil feed tank,
  4. Verifying the diesel starts\*\*. The generator voltage and frequency shall be at least 3920 volts and 58.8 Hz in  $\leq 10$  seconds after the start signal. The steady state voltage and frequency shall be maintained at  $4160 + 420, -240$  volts and  $60 \pm 1.2$  Hz. The diesel generator shall be started for this test by using one of the following signals:
    - a) Manual.
    - b) Simulated loss-of-offsite power by itself.
    - c) Simulated loss-of-offsite power in conjunction with an ESF actuation test signal.
    - d) An ESF actuation test signal by itself.

\*All planned starts for the purpose of surveillance in this section may be preceded by a prelube period as recommended by the manufacturer.

\*\*A modified diesel generator start involving idling and gradual acceleration to synchronous speed may be used for this surveillance requirement as recommended by the manufacturer. When modified start procedures are not used, the time, speed, voltage, and frequency tolerances of this surveillance requirement must be met.

## ELECTRICAL POWER SYSTEM

### SURVEILLANCE REQUIREMENTS (Continued)

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5. Verifying the generator is synchronized, loaded to an indicated 4000-4400 Kw\* in accordance with the manufacturer's recommendation and operates for at least an additional 60 minutes#, and
  6. Verifying the diesel generator is aligned to provide standby power to the associated emergency busses.
- b. At least once per 31 days and after each operation of the diesel where the period of operation was greater than or equal to 1 hour by checking for and removing accumulated water from the diesel oil feed tanks.
  - c. Deleted

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\*This band is meant as guidance to avoid routine overloading of the engine. Loads in excess of this band for special testing under direct monitoring of the manufacturer or momentary variation due to changing bus loads shall not invalidate the test.

#This surveillance requirement shall be preceded by and immediately follow without shutdown a successful performance of 4.8.1.1.2a.4 or 4.8.1.1.2d.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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- d. At least once per 184 days a diesel generator fast start test shall be performed in accordance with TS 4.8.1.1.2a.4. Performance of the 184 day fast start test satisfies the 31 day testing requirements specified in TS 4.8.1.1.2a.4.
- e. At least once per 18 months by:
  - 1. Verifying the generator capability to reject a load of greater than or equal to 498 kW while maintaining voltage at 4160 +420, -240 volts and frequency at 60 +4.5, -1.2 Hz.
  - 2. Verifying the generator capability to reject a load of an indicated 4000-4400 kW without tripping. The generator voltage shall not exceed 5023 volts during and following the load rejection.
  - 3. During shutdown, simulating a loss-of-offsite power by itself, and:
    - a) Verifying deenergization of the emergency busses and load shedding from the emergency busses.
    - b) Verifying the diesel starts on the auto-start signal, energizes the emergency busses and the permanently connected loads within 10 seconds after the auto-start signal, energizes the auto-connected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 +420, -240 volts and 60 +1.2, -0.3 Hz during this test.
  - 4. Verifying that on an SIAS actuation test signal (without loss-of-offsite power) the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. The steady-state generator voltage and frequency shall be 4160 +420, -240 volts and  $60 \pm 1.2$  Hz within 10 seconds after the auto-start signal; the generator voltage and frequency shall be maintained within these limits during this test.

## ELECTRICAL POWER SYSTEMS

### SURVEILLANCE REQUIREMENTS (Continued)

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8. During shutdown, verifying the diesel generator's capability to:
  - a) Synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
  - b) Transfer its loads to the offsite power source, and
  - c) Be restored to its standby status.
9. During shutdown, verifying that with the diesel generator operating in a test mode (connected to its bus), a simulated safety injection signal overrides the test mode by (1) returning the diesel generator to standby operation and (2) automatically energizes the emergency loads with offsite power.
10. Verifying that each fuel transfer pump transfers fuel to its associated diesel oil feed tank by taking suction from the opposite train fuel oil storage tank via the installed cross connect.
11. During shutdown, verifying that the automatic load sequence timer is OPERABLE with the time of each load block within  $\pm 10\%$  of the sequenced load block time.
12. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:
  - a) turning gear engaged
  - b) emergency stop
  - c) loss of D.C. control power
  - d) governor fuel oil linkage tripped
- f. Deleted
- g. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting the diesel generators simultaneously, during shutdown, and verifying that the diesel generators accelerate to at least 600 rpm ( $60 \pm 1.2$  Hz) in less than or equal to 10 seconds.
- h. Deleted

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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i. Deleted

4.8.1.1.3 Reports - (Not Used)

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## ELECTRICAL POWER SYSTEMS

### A.C. SOURCES

#### SHUTDOWN

#### LIMITING CONDITION FOR OPERATION

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3.8.1.2 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. One circuit between the offsite transmission network and the onsite Class 1E distribution system, and
- b. One diesel generator with:
  1. A diesel oil feed tank containing a minimum volume of 339 gallons of fuel, and
  2. The diesel fuel oil storage tanks, and
  3. A fuel transfer pump.

APPLICABILITY: MODES 5 and 6.

#### ACTION:

With less than the above minimum required A.C. electrical power sources OPERABLE, immediately suspend all operations involving CORE ALTERATIONS, operations involving positive reactivity additions that could result in loss of required SHUTDOWN MARGIN or boron concentration, movement of irradiated fuel, or crane operation with loads over the fuel storage pool. In addition, when in MODE 5 with the reactor coolant loops not filled, or in MODE 6 with the water level less than 23 feet above the top of the fuel seated in the reactor pressure vessel, immediately initiate corrective action to restore the required sources to OPERABLE status.

#### SURVEILLANCE REQUIREMENTS

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4.8.1.2 The above required A.C. electrical power sources shall be demonstrated OPERABLE by the performance of each of the Surveillance Requirements of 4.8.1.1.1 and 4.8.1.1.2 (except for Surveillance Requirement 4.8.1.1.2a.5.)

## ELECTRICAL POWER SYSTEMS

### DIESEL FUEL OIL

#### LIMITING CONDITION FOR OPERATION

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3.8.1.3 The stored diesel fuel oil shall be within limits for each required diesel generator (DG).

APPLICABILITY: When associated DG is required to be OPERABLE.

ACTION: (Note: Separate ACTION entry is allowed for each DG.)

- a. With the fuel oil storage tank volume less than 39,300 gallons and greater than 37,000 gallons, restore fuel oil storage tank volume to greater than or equal to 39,300 gallons within 5 days (provided replacement fuel oil is onsite within the first 48 hours).
- b. With one or more DGs with stored fuel oil total particulates not within limits, restore fuel oil total particulates to within limits within 7 days.
- c. With one or more DGs with new fuel oil properties not within limits, restore stored fuel oil properties to within limits within 30 days.
- d. If any of the above ACTIONS cannot be met, or if the diesel fuel oil is not within limits for reasons other than the above ACTIONS, immediately declare the associated DG(s) inoperable.

#### SURVEILLANCE REQUIREMENTS

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4.8.1.3.1 At least once per 31 days on a STAGGERED TEST BASIS verify each fuel oil storage tank volume.

4.8.1.3.2 Verify fuel oil properties of new or stored fuel oil are tested in accordance with, and maintained within the limits of, the Diesel Fuel Oil Testing Program.

## ADMINISTRATIVE CONTROLS

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- 6.5.10 not used
- 6.5.11 not used
- 6.5.12 not used

### 6.5.13 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable ASTM Standards. The purpose of the program is to establish the following:

- a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:
  - 1. An API gravity or an absolute specific gravity within limits,
  - 2. A flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and
  - 3. A clear and bright appearance with proper color or a water and sediment content within limits,
- b. Within 31 days following addition of new fuel oil to storage tanks, verify that the properties of the new fuel oil, other than those addressed in a., above, are within limits for ASTM 2D fuel oil, and
- c. Total particulate concentration of the fuel oil is  $\leq 10$  mg/l when tested every 31 days.

The provisions of SR 4.0.2 and SR 4.0.3 are applicable to the Diesel Fuel Oil Testing Program surveillance frequencies.

Pages 6-9  
through  
page 6-13  
not used

February 20, 2009

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 - CORRECTION TO PAGES ISSUED WITH AMENDMENT NO. 216 (TAC NO. MD5966)**

Dear Sir or Madam:

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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

Enclosure:  
As stated

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