



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

November 4, 2010

Mr. Rafael Flores
Senior Vice President and
Chief Nuclear Officer
Attention: Regulatory Affairs
Luminant Generation Company LLC
P.O. Box 1002
Glen Rose, TX 76043

**SUBJECT: COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2 - ISSUANCE
OF AMENDMENTS RE: ADOPTION OF TSTF-501, REVISION 1 TO
RELOCATE STORED FUEL OIL AND LUBE OIL VOLUME VALUES TO
LICENSEE CONTROL (TAC NOS. ME4026 AND ME4027)**

Dear Mr. Flores:

The Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 153 to Facility Operating License No. NPF-87 and Amendment No. 153 to Facility Operating License No. NPF-89 for Comanche Peak Nuclear Power Plant, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated May 27, 2010, as supplemented by letter dated August 26, 2010.

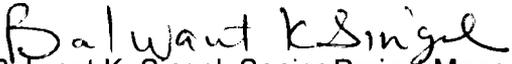
The amendments revise TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," by relocating the current stored diesel fuel oil volume and lube oil level numerical requirements from the TSs to TS Bases so that it can be modified under licensee control. The changes are consistent with NRC-approved Technical Specification Task Force (TSTF) Improved Technical Specification Change Traveler TSTF-501, Revision 1. The availability of this TS improvement was announced in the *Federal Register* on May 26, 2010, as part of the consolidated line item improvement process (CLIP).

R. Flores

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

Sincerely,


Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures:

1. Amendment No. 153 to NPF-87
2. Amendment No. 153 to NPF-89
3. Safety Evaluation

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

LUMINANT GENERATION COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 1
DOCKET NO. 50-445
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 153
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Luminant Generation Company LLC dated May 27, 2010, as supplemented by letter dated August 26, 2010, 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, as amended, 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 license 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.

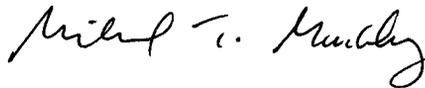
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-87 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A as revised through Amendment No. 153 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Luminant Generation Company LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan as indicated in the attachment to this license amendment.

3. The license amendment is effective as of its date of issuance and shall be implemented within 120 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility Operating
License No. NPF-87 and
Technical Specifications

Date of Issuance: November 4, 2010



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

LUMINANT GENERATION COMPANY LLC
COMANCHE PEAK NUCLEAR POWER PLANT, UNIT NO. 2
DOCKET NO. 50-446
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 153
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Luminant Generation Company LLC dated May 27, 2010, as supplemented by letter dated August 26, 2010, 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, as amended, 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 license 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.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. NPF-89 is hereby amended to read as follows:

- (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A as revised through Amendment No. 153 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Luminant Generation Company LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 120 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility Operating
License No. NPF-89 and
Technical Specifications

Date of Issuance: November 4, 2010

ATTACHMENT TO LICENSE AMENDMENT NO. 153

TO FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 153

TO FACILITY OPERATING LICENSE NO. NPF-89

DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the Facility Operating License Nos. NPF-87 and NPF-89, 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 No. NPF-87

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
| 3 | 3 |

Facility Operating License No. NPF-89

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
| 3 | 3 |

Technical Specifications

| <u>REMOVE</u> | <u>INSERT</u> |
|---------------|---------------|
| 3.8-20 | 3.8-20 |
| 3.8-22 | 3.8-22 |

- (3) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by 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

Luminant Generation Company LLC is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal through Cycle 13 and 3612 megawatts thermal starting with Cycle 14 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. 153 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Luminant Generation Company LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

- (3) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time, special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, and described in the Final Safety Analysis Report, as supplemented and amended;
- (4) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use, at any time, any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use in amounts as required, any byproduct, source, and special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) Luminant Generation Company LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by 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

Luminant Generation Company LLC is authorized to operate the facility at reactor core power levels not in excess of 3458 megawatts thermal through Cycle 11 and 3612 megawatts thermal starting with Cycle 12 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. 153 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. Luminant Generation Company LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

DELETED

3.8 ELECTRICAL POWER SYSTEMS

3.8.3 Diesel Fuel Oil, Lube Oil, and Starting Air

LCO 3.8.3 The stored diesel fuel oil, lube oil, and starting air subsystem shall be within limits for each required diesel generator (DG).

APPLICABILITY: When associated DG is required to be OPERABLE.

ACTIONS

-----NOTE-----
Separate Condition entry is allowed for each DG.

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|--|-----------------|
| A. One or more DGs with fuel level < a 7 day supply and > a 6 day supply in storage tank. | A.1 Restore fuel oil level to within limits. | 48 hours |
| B. One or more DGs with lube oil inventory < a 7 day supply and > a 2 day supply. | B.1 Restore lube oil inventory to within limits. | 48 hours |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE | | FREQUENCY |
|--------------|--|--|
| SR 3.8.3.1 | Verify each fuel oil storage tank contains \geq a 7 day supply of fuel. | 31 days |
| SR 3.8.3.2 | <p style="text-align: center;">-----NOTE-----</p> <p>Not required to be performed until the engine has been shutdown for > 10 hours.</p> <p>-----</p> <p>Verify lubricating oil inventory is \geq a 7 day supply</p> | 31 days |
| SR 3.8.3.3 | Verify fuel oil properties of new and stored fuel oil are tested in accordance with, and maintained within the limits of, the Diesel Fuel Oil Testing Program. | In accordance with the Diesel Fuel Oil Testing Program |
| SR 3.8.3.4 | Verify each required DG air start receiver pressure is \geq 180 psig. | 31 days |
| SR 3.8.3.5 | Check for and remove accumulated water from each fuel oil storage tank. | 31 days |



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 153 TO

FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 153 TO

FACILITY OPERATING LICENSE NO. NPF-89

LUMINANT GENERATION COMPANY LLC

COMANCHE PEAK NUCLEAR POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated May 27, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101540314), as supplemented by letter dated August 26, 2010 (ADAMS Accession No. ML102460027), Luminant Generation Company LLC (the licensee) requested changes to the Technical Specifications (TSs) for Comanche Peak Nuclear Power Plant (CPNPP), Units 1 and 2 to adopt Technical Specifications Task Force (TSTF) Improved Standard Technical Specifications (STS) Change Traveler TSTF-501, Revision 1, "Relocate Stored Fuel Oil and Lube Oil Volume Values to Licensee Control" (ADAMS Accession No. ML090510686). The licensee's current TSs contain the numerical volume requirement for stored diesel fuel oil and the numerical level requirement for lube oil. Any changes to these requirements currently require prior approval from the U.S. Nuclear Regulatory Commission (NRC). As an example, diesel fuel oil numerical volume requirements may need to be modified in order to take into account changes to the energy content (British Thermal Unit (BTU) per gallon) of available fuels in the market. Fluctuations in energy content could be caused by a variety of factors, including changes to regulatory requirements. By adopting TSTF-501, Revision 1, the numerical volume requirement for stored diesel fuel oil and numerical level requirement for lube oil are relocated from TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," to a licensee-controlled document. As a result, the numerical volume requirement for stored diesel fuel oil and numerical level requirement for lube oil may be modified under licensee control and, therefore, may not require prior NRC approval.

The proposed changes revise TS 3.8.3 by relocating the current stored diesel fuel oil volume and lube oil level numerical requirements from the TS to the TS Bases so that it may be

modified under licensee control. The TS is modified so that the stored diesel fuel oil and lube oil inventory will require that a 7-day supply be available for each diesel generator. As a result:

- Condition A and Condition B in the Action table for TS 3.8.3 are revised. Currently, Condition A and Condition B are entered when the stored diesel fuel oil volume and lube oil level numerical requirements are not met. As discussed in the current TS Bases, the numerical diesel fuel oil volume requirement in Condition A is based on a volume of less than a 7-day supply, but greater than a 6-day supply. The numerical diesel lube oil level requirement in Condition B is based on a volume (by dip stick level measurement) of less than a 7-day supply, but greater than a 2-day supply. The revision relocates the numerical requirements from TS 3.8.3 and places it in the TS Bases. The TS is modified so that Condition A is entered when the stored diesel fuel oil is less than a 7-day supply, but greater than a 6-day fuel oil supply for one or more diesel generators. Condition B is entered when stored diesel lube oil is less than a 7-day supply, but greater than a 2-day lube oil supply for one or more diesel generators.
- Surveillance Requirements (SRs) 3.8.3.1 and 3.8.3.2 are revised. Currently, SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel fuel oil volume and lube oil level numerical requirements are met. As discussed in the current TS Bases, the numerical requirements in SR 3.8.3.1 and SR 3.8.3.2 are based on maintaining at least a 7-day supply. The revision relocates the numerical volume requirement for diesel fuel oil and numerical level requirement for lube oil from the TS 3.8.3 and places it in the TS Bases. The TS is modified so that SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel fuel oil and lube oil inventories are greater than or equal to a 7-day supply for each diesel generator.
- The reference to Appendix B of the American National Standards Institute (ANSI) N195-1976 in the TS Bases is deleted. As a result, the only reference will be to ANSI N195-1976.

In its letter dated May 27, 2010, the licensee stated that the license amendment request (LAR) is consistent with NRC-approved TSTF-501, Revision 1. The availability of this TS improvement was announced in the *Federal Register* on May 26, 2010 (75 FR 29588) as part of the consolidated line item improvement process (CLIIP).

The supplemental letter dated August 26, 2010, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on August 10, 2010 (75 FR 48376).

2.0 REGULATORY EVALUATION

2.1 Modification to LCO 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," Requirements

The regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.36(c)(2)(i) state that TSs will include Limiting Conditions for Operation (LCO) which are "the lowest functional capability or performance levels of equipment required for safe operation of the facility."

The standby alternating current (AC) power sources are a part of the primary success path and function or actuate to mitigate a design-basis accident or transient that either assumes the

failure of or presents a challenge to the integrity of a fission product barrier. Diesel fuel oil and lube oil are retained in the TSs to satisfy 10 CFR 50.36(c)(2)(i) since they support the operation of the standby AC power sources. The proposed changes revise TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," by relocating the current stored diesel fuel oil volume and lube oil level numerical requirements from the TS to the TS Bases so that it may be modified under licensee control.

TS 3.8.3 is modified so that the stored diesel fuel oil and lube oil inventory will require that a 7-day supply be available for each diesel generator. As discussed in Section 3.0 of this safety evaluation (SE), this change still provides assurance that the lowest functional capability or performance levels of equipment required for safe operation of the facility will be continued to be met. The proposed change meets 10 CFR 50.36(c)(2)(i) and is, therefore, acceptable.

2.2 Modification to Action Table for TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air"

The regulations in 10 CFR 50.36(c)(2)(i) state that "when a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met." Condition A and Condition B in the Action table for TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," are revised to reflect the change in LCO requirements as discussed in Section 2.1 above. Currently, Condition A and Condition B are entered when the stored diesel fuel oil volume and lube oil level numerical requirements are not met. As discussed in the current TS Bases, the numerical volume requirement in Condition A (fuel oil) and numerical level requirement in Condition B (lube oil) are based on volumes less than 7-day supply, but greater than a 6-day (fuel oil) or 2-day (lube oil) supply. The proposed change relocates the volumetric and level requirements from TS 3.8.3 and places it in the TS Bases. The TS is modified so that Condition A and Condition B are entered when the stored diesel fuel oil and lube oil inventory is less than a 7-day supply, but greater than a 6-day (fuel oil), 2-day (lube oil), supply for one or more diesel generators. These remedial actions are permitted by 10 CFR 50.36(c)(2)(i), and the technical justification for allowing these remedial actions is discussed in Section 3.0 of this SE.

2.3 Modification to SR 3.8.3.1 and 3.8.3.2

The regulations in 10 CFR 50.36(c)(3) states TS will include SRs which are "requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met." Currently, SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel fuel oil volume and lube oil level numerical requirements are met. SR 3.8.3.1 and SR 3.8.3.2 are revised to reflect the change in LCO requirements as discussed in Section 2.1 above. As a result, the SRs are modified so that SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel fuel oil and lube oil inventory is greater than or equal to a 7-day supply for each diesel generator. As discussed in Section 3.0 of this SE, this change still provides assurance that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met. The proposed change meets 10 CFR 50.36(c)(3) and is, therefore, acceptable.

2.4 Deletion of Reference to Appendix B of ANSI N195-1976

As discussed in Section 2.1 above, LCO 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," is retained in the TS in order to satisfy 10 CFR 50.36(c)(2)(i). The staff notes that the licensee proposed change deletes the reference to Appendix B of ANSI N195-1976 in the TS Bases for TS 3.8.3. The proposed TS Bases change modifies a TS Bases reference which provides a basis for the TS LCO requirement. As a result, there will only be a reference to ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators." Although not a part of TS, the TS Bases contain amplifying and clarifying information on TS, and modification of the TS Bases can potentially impact TS requirements. This modification was evaluated in order to consider the potential change to LCO requirements associated with TS 3.8.3. As discussed in Section 3.0 of this SE, this change still provides assurance that the lowest functional capability or performance levels of equipment required for safe operation of the facility will be continued to be met. The proposed change meets 10 CFR 50.36(c)(2)(i) and is, therefore, acceptable.

3.0 TECHNICAL EVALUATION

3.1 Modification to LCO 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," Requirements

Each diesel generator is provided with a fuel oil capacity sufficient to operate that diesel for a period of 7 days while the diesel generator is supplying maximum load demand. This onsite fuel oil capacity is sufficient to operate the diesel generators for longer than the time to replenish the onsite supply from outside sources.

The diesel generator lubrication system is designed to provide sufficient lubrication to permit proper operation of its associated diesel generator under all loading conditions. The system is required to circulate the lube oil to the diesel engine working surfaces and to remove excess heat generated by friction during operation. Each diesel generator has a lube oil inventory capable of supporting a minimum of 7 days of operation. This supply is sufficient to allow the operator to replenish lube oil from outside sources.

Because CPNPP, Units 1 and 2, uses a dipstick level measurement method to determine the required diesel generator lube oil inventory, the licensee provided supplemental information by letter dated August 26, 2010, converting the current TS 3.8.3.B tank level values, in inches below the low static level, to the corresponding tank volume, in gallons. The licensee stated that the volumetric values are based on calculation ME-CA-0215-5114 and are as follows:

| <u>TANK LEVEL (below the low static level)</u> | <u>CALCULATED VOLUME</u> |
|--|--------------------------|
| 1.75" | 2,056 gallons |
| 5.5" | 1,816 gallons |

In order to meet a 7-day supply of stored diesel fuel oil and lube oil for each diesel generator, TS 3.8.3 currently contains diesel fuel oil volume and lube oil level numerical requirements associated with a 7-day supply for each diesel generator. The TS Bases currently state that these numerical values are based on meeting a 7-day supply. The proposed change revises TS 3.8.3 by relocating the current stored diesel fuel oil volume and lube oil level numerical

requirements from the TS to the TS Bases so that it may be modified under licensee control. The TS is modified so that the stored diesel fuel oil and lube oil inventory will require that a 7-day supply be available for each diesel generator. No changes to the current plant configuration, current numerical values, or current 7-day basis are proposed in the application; the licensee is merely relocating the current diesel fuel oil volume and lube oil level numerical requirements from the TS to the TS Bases and relocating the associated current 7-day basis from the TS Bases to the TS.

Section 3.3 below discusses the methodology on how the basis for stored diesel fuel oil volume and lube oil level in the TS Bases may be modified under licensee control. The use of this methodology will ensure that a 7-day supply of stored diesel fuel oil and lube oil for each diesel generator will be met, thereby providing assurance that the lowest functional capability or performance levels of the diesel generator required for safe operation of the facility will be continued to be met. This change meets the requirements of 10 CFR 50.36 and is, therefore, acceptable.

3.2 Modification to Action Table for TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air"

Currently, Condition A and Condition B are entered when the stored diesel fuel oil volume and lube oil level numerical requirements are not met. As discussed in the current TS Bases, the numerical diesel fuel oil volume and lube oil level requirements in Condition A and Condition B are based on volumes less than a 7-day supply, but greater than a 6-day fuel oil supply and greater than a 2-day lube oil supply. The proposed change relocates the volumetric and level requirements from the TS and places it in the TS Bases. TS 3.8.3 is modified so that Condition A and Condition B are entered when the stored diesel fuel oil and lube oil inventory is less than a 7-day supply, but greater than a 6-day supply for fuel oil and greater than a 2-day supply of lube oil for one or more diesel generators.

No other parts of Condition A and Condition B (i.e., Required Actions or Completion Times) are proposed to be modified in the application; the licensee is removing the current numerical volume and level requirements that dictate Condition entry from TS 3.8.3 to the TS Bases and relocating the associated current less than 7 days but greater than 6 days for fuel oil and greater than 2 days for lube oil basis for Condition entry from the TS Bases to the TS.

Section 3.3 below discusses the methodology on how the basis for stored diesel fuel oil volume and lube oil level in the TS Bases may be modified under licensee control. The use of this methodology will ensure that the 7- and 6-day supply of stored diesel fuel oil and the 7- and 2-day supply of lube oil for each diesel generator that dictate Condition entry will continue to be calculated in accordance with NRC guidance. This change meets the requirements of 10 CFR 50.36 and is, therefore, acceptable.

3.3 Modification to SRs 3.8.3.1 and 3.8.3.2

Currently, SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel fuel oil volume and lube oil level numerical requirements are met. SR 3.8.3.1 and SR 3.8.3.2 are revised to reflect the change in LCO requirements, namely that a 7-day supply be available for each diesel generator. As a result, the SRs are modified so that SR 3.8.3.1 and SR 3.8.3.2 verify that the stored diesel

fuel oil and lube oil inventory is greater than or equal to a 7-day supply for each diesel generator.

No other parts of the SRs (i.e., Frequencies) are proposed to be modified in the application; the licensee is merely relocating the current numerical volume and level requirement verification for diesel fuel oil and lube oil from TS 3.8.3 to the TS Bases and relocating the associated current 7-day basis for verification from the TS Bases to the TS.

The methodology for determining the 7-day stored diesel fuel oil supply for each diesel generator, as well as the 6-day supply associated with Condition A, is calculated in accordance with NRC Regulatory Guide (RG) 1.137, Revision 1, "Fuel-Oil Systems for Standby Diesel Generators" (ADAMS Accession No. ML003740180), and ANSI N195-1976. ANSI N195-1976 discusses how the stored diesel fuel oil requirement shall be calculated based upon the diesel generators operating at the minimum required capacity for the plant condition which is most limiting for the calculation of such capacity. One method for calculating the stored diesel fuel oil supply takes into account the time dependence of diesel generator loads. That is, if diesel generator loads increase or decrease during the event, the load changes shall be included in the required fuel storage calculation. If the design includes provisions for an operator to supply power to equipment other than the minimum required for the plant condition, such additional loads shall be included in the calculation of required fuel storage capacity. RG 1.137, Revision 1, supplements the above by stating that for the time-dependent load method, the minimum-required capacity should include the capacity to power the engineered safety features. A minimum margin of 10 percent shall be added to the calculated storage requirement if the alternate conservative calculation discussed next is not used. Another method for calculating the stored diesel fuel oil supply, which is more conservative than the time-dependent load method, is to calculate the storage capacity by assuming that the diesel operates continuously for 7 days at its rated capacity. Both calculation methods shall include an explicit allowance for fuel consumption required by periodic testing. This includes the fuel required for operation of the engine at the minimum loads specified by the engine manufacturer.

One variable used in both stored diesel fuel oil calculation methods is the fuel consumption rate. The property of diesel fuel oil having the most significant effect on the fuel consumption rate is the energy content (heating value) of the fuel. There are standards which correlate the energy content to the fuel's American Petroleum Institute (API) gravity or absolute specific gravity. At a minimum, plants calculate their required fuel storage values assuming the most limiting API gravity or absolute specific gravity, and therefore, the most limiting fuel energy content. As long as the fuel oil placed in the storage tank is within the API gravity range or absolute specific gravity range specified by the licensee, the calculations of fuel consumption and required stored volume remain valid. SR 3.8.3.3 will continue to require new fuel to be tested in order to verify that the new fuel API gravity or absolute specific gravity is within the range assumed in the diesel fuel oil consumption calculations.

The lube oil inventory equivalent to a 7-day supply, as well as the 2-day supply associated with Condition B, is based on the diesel generator manufacturer consumption values for the run time of the diesel generator.

The above methods still provide assurance that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCOs will be met. The change to SR 3.8.3.1 and SR 3.8.3.2 meets the requirements of 10 CFR 50.36 and is , therefore, acceptable.

3.4 Deletion of Reference to Appendix B of ANSI N195-1976

The staff notes that the licensee proposed change deletes the reference to Appendix B of ANSI N195-1976 in the TS Bases for TS 3.8.3. As a result, there will only be a reference to ANSI N195-1976. This TS Bases change was made in order to provide the basis for the LCO requirements associated with TS 3.8.3. LCO 3.8.3 requires, in part, that the stored diesel fuel oil and lube oil shall be within limits for each required diesel generator. The basis for these limits is derived from RG 1.137, Revision 1, and Appendix B of ANSI N195-1976.

For proper operation of the standby diesel generators, it is necessary to ensure the proper quality of the fuel oil. RG 1.137, Revision 1, addresses the recommended fuel oil practices as supplemented by ANSI N195-1976, Appendix B. The fuel oil properties that are checked to ensure the proper quality of the fuel oil are sediment content, the kinematic viscosity, specific gravity (or API gravity), and impurity level.

Although the current TS Bases reference to Appendix B of ANSI N195-1976 will be deleted, RG 1.137, Revision 1, is also currently referenced in the TS Bases., Regulatory Position 2 of RG 1.137 states, in part, "Appendix B to ANSI N195-1976 should be used as a basis for a program to ensure the initial and continuing quality of fuel oil." Therefore, the use of Appendix B of ANSI N195-1976, as referenced by RG 1.137, provide the basis for ensuring the proper quality of the fuel oil; namely, that water and sediment content, kinematic viscosity, specific gravity (or API gravity), and impurity level are within the specified limits. Current SR 3.8.3.3 verifies these limits. The change still provides assurance that the lowest functional capability or performance levels of equipment required for safe operation of the facility will be continued to be met. Therefore, this modification to LCO 3.8.3 is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on August 10, 2010 (75 FR 48376). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Gerald Waig, NRR/DIRS/ITSB

Date: November 4, 2010

R. Flores

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

Sincerely,

/RA/

Balwant K. Singal, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures:

1. Amendment No. 153 to NPF-87
2. Amendment No. 153 to NPF-89
3. Safety Evaluation

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GWaig, NRR/DIRS/ITSB

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