

10 CFR 50.90

RS-08-103
September 2, 2008

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Subject: License Amendment Request to Adopt TSTF-2, "Relocate the 10 Year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control"

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," AmerGen Energy Company, LLC (AmerGen) requests an amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed change relocates Surveillance Requirement (SR) 3.8.3.6 from the TS to a licensee-controlled document. SR 3.8.3.6 requires the Emergency Diesel Generator (EDG) Fuel Oil Storage Tanks (FOSTs) to be drained, sediment removed, and cleaned on a 10-year interval. The change is consistent with the current revision (i.e., Revision 3) of the Improved Standard Technical Specifications (ISTS), NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6." The SR was removed from the ISTS under Technical Specification Task Force (TSTF) Traveler No. 2 (TSTF-2), "Relocate the 10 Year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control," approved by the NRC on July 16, 1998.

The attached amendment request is subdivided as follows.

Attachment 1 provides an evaluation supporting the proposed change.

Attachment 2 provides the marked-up TS pages, with the proposed changes indicated.

Attachment 3 includes the associated marked-up TS Bases pages. The TS Bases pages are provided for information only and do not require NRC approval.

The proposed change has been reviewed by the CPS Plant Operations Review Committee and approved by the Nuclear Safety Review Board in accordance with the requirements of the AmerGen Quality Assurance Program.

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AmerGen requests approval of the proposed change by September 2, 2009, with the amendment being implemented within 30 days of issuance.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," AmerGen is notifying the State of Illinois of this application for a change to the TS by sending a copy of this letter and its attachments to the designated State Official.

There are no regulatory commitments associated with the changes proposed by this request.

Should you have any questions concerning this letter, please contact Mr. Mitchel A. Mathews at (630) 657-2819.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 2nd day of September 2008.

Respectfully,

A handwritten signature in black ink that reads "Darin Benyak". The signature is written in a cursive style with a long horizontal line extending to the right.

Darin Benyak
Director - Licensing and Regulatory Affairs
AmerGen Energy Company

Attachments:

- Attachment 1: Evaluation of Proposed Changes
- Attachment 2: Mark-up of Proposed Technical Specification Pages
- Attachment 3: Mark-up of Technical Specification Bases Pages (For Information Only)

ATTACHMENT 1
Evaluation of Proposed Changes

Subject: License Amendment Request to Adopt TSTF-2, "Relocate the 10 Year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control"

- 1.0 SUMMARY DESCRIPTION**
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1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," AmerGen Energy Company, LLC (AmerGen) requests an amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed change relocates Surveillance Requirement (SR) 3.8.3.6 from the TS to a licensee-controlled document.

2.0 DETAILED DESCRIPTION

The proposed change deletes SR 3.8.3.6 from TS 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air."

SURVEILLANCE		FREQUENCY
SR 3.8.3.6	For each fuel oil storage tank: a. Drain the fuel oil; b. Remove the sediment; and c. Clean the tank.	10 years

A TS page mark-up showing the deletion is provided in Attachment 2. The deleted SR will be relocated to a licensee-controlled document. In addition, in support of this proposed TS change, the associated TS Bases Section for SR 3.8.3.6 will be deleted to reflect the change to TS Section 3.8.3. A mark-up reflecting the TS bases changes is provided in Attachment 3 for information only and does not require NRC approval.

SR 3.8.3.6 requires the Diesel Generator (DG) Fuel Oil Storage Tanks (FOSTs) to be drained, sediment removed, and cleaned on a 10-year interval. The purpose of this TS SR, as described in Section 3.0, is preventive maintenance. Preventive maintenance SRs have generally been relocated from the TS, and maintained in licensee-controlled documents. This proposed change is consistent with the current revision (i.e., Revision 3) of the Improved Standard Technical Specifications (ISTS), NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6." The SR was removed from the ISTS under Technical Specification Task Force (TSTF) Traveler No. 2 (TSTF-2) approved by the NRC on July 16, 1998.

3.0 TECHNICAL EVALUATION

The CPS Class 1E Alternating Current (AC) distribution system supplies electrical power to three divisional load groups, with each division powered by an independent Engineered Safety Feature (ESF) bus. Each ESF bus has two separate and independent offsite sources of power as well as a dedicated onsite Diesel Generator (DG). Each DG is provided with a storage tank having a fuel oil capacity sufficient to operate that DG for a period of seven days while the DG is

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supplying maximum post loss of coolant accident (LOCA) load demand. All tanks, pumps, and piping are located within the DG building. Fuel oil is transferred from each storage tank to its respective day tank by a transfer pump associated with each storage tank.

For proper operation of the DGs, it is necessary to ensure the proper quality of the fuel oil. The recommended fuel oil practices are based on Regulatory Guide (RG) 1.137, "Fuel Oil Systems for Standby Diesel Generators," Revision 0, January 13, 1978, Section C.2.f, which specifies that the fuel oil stored in the tanks should be removed, the accumulated sediment removed, and the tanks cleaned at 10-year intervals. TS 5.5.9, "Diesel Fuel Oil Testing Program," requires testing of both new fuel oil and stored fuel oil. CPS has historically complied with the requirements of RG 1.137 Section C.2.f through the completion of TS SR 3.8.3.6, which requires the fuel oil stored in the FOSTs to be drained, accumulated sediment removed, and the tank cleaned at 10 year intervals.

The NRC's regulatory requirements related to the content of the TS are set forth in 10 CFR 50.36, "Technical specifications." That regulation requires the TS to include items in five specific categories, including: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCO); (3) surveillance requirements; (4) design features; and (5) administrative controls. The regulation specifies criteria for certain requirements, but does not specify the particular requirements to be included in a plant's TS. As a result, existing TS requirements that fall within or satisfy any of the criteria in 10 CFR 50.36 must be retained in the TSs, while those TS requirements that do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

According to 10 CFR 50.36, SRs that are required to be included in the TS are those relating to test, calibration, or inspection which assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the LCO will be met. SR 3.8.3.6 is a preventive maintenance activity and is not a necessary surveillance to demonstrate operability of the diesel generators, and thus does not meet the criteria in 10 CFR 50.36 for retention in the TS. As stated in the Bases for SR 3.8.3.6, sediment in the tank, or failure to perform this SR, does not necessarily result in an inoperable storage tank.

Operability of the DG and its associated fuel oil system are assured by other TS SRs that remain unchanged. Fuel oil will continue to be maintained within the acceptable quantity and quality limits with the relocation of SR 3.8.3.6. The performance of SR 3.8.3.3 (i.e., fuel oil testing) and the limits of the Diesel Fuel Oil Testing Program, TS 5.5.9, will continue to maintain the quality of the fuel oil, and ensure that the diesel generators can perform their design safety function. The performance of SR 3.8.3.1 (i.e., fuel oil volume verification) once per 31 days ensures that any degradation of the tank wall surface that results in a fuel oil volume reduction is detected and corrected in a timely manner. As a result, adequate controls exist to relocate SR 3.8.3.6 to plant controlled documents consistent with TSTF-2 as approved by the NRC in Reference 1.

Once the SR is removed from the TS, the FOST cleaning requirement will be governed by the current CPS commitment to RG 1.137 as described in CPS Updated Safety Analysis Report (USAR) Section 1.8. Any changes regarding compliance with the RG must be evaluated pursuant to 10 CFR 50.59.

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Based on the above, it is appropriate to relocate SR 3.8.3.6 from the CPS TS to another licensee-controlled document. Adequate controls currently exist in plant-controlled documents to allow relocation of this requirement. Operability of the DG and its associated fuel oil system are assured by other TS SRs that remain unchanged. In addition, the FOST cleaning requirement will be governed by the current CPS commitment to RG 1.137 as described in CPS USAR Section 1.8.

4.0 REGULATORY ANALYSIS

4.1 Applicable Regulatory Requirements/Criteria

The proposed changes have been evaluated to determine whether applicable regulations and requirements continue to be met.

General Design Criterion (GDC) 17, "Electric Power Systems," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR 50, requires that an onsite electric power system and an offsite electric power system be provided to permit functioning of structures, systems, and components important to safety. GDC 17 also includes requirements concerning system capacity, capability, independence, redundancy, availability, testability, and reliability. The proposed change to the CPS TS does not reduce CPS's conformance with GDC 17.

CPS USAR Section 1.8 discusses compliance with Regulatory Guide (RG) 1.137, "Fuel-Oil Systems for Standby Diesel Generators," and does not take any exceptions to paragraph C.2.f regarding the 10-year FOST cleaning tasks. Therefore, CPS is committed to the regulatory guidance concerning cleaning of the FOSTs. Any changes to the CPS commitments to RG 1.137 must be evaluated pursuant to the requirements of 10 CFR 50.59.

AmerGen has determined that the proposed changes do not require any exemptions or relief from regulatory requirements, other than the TS, and do not affect conformance with any GDC differently than described in the USAR.

4.2 Precedent

The proposed change is consistent with the Improved Standard Technical Specifications (ISTS), NUREGs-1430 through 1434. In Reference 1, the NRC approved TSTF-2 and the ISTS was subsequently revised to remove the FOST cleaning requirement. Other plants have adopted this change through ISTS conversion amendments. CPS did not, however, adopt TSTF-2 in its ISTS conversion amendment in December 1994 because the NRC did not approve TSTF-2 until July 16, 1998. Entergy Operations, Inc., adopted this change for both Grand Gulf Nuclear and River Bend Stations, after ISTS conversion by TS Amendment Nos. 142 (Reference 2) and 160 (Reference 3) respectively. Duke Energy Corporation also adopted this change to the TS by Amendments 200 and 206 for Catawba Nuclear Station and Amendments 215 and 195 for McGuire Nuclear Stations, Units 1 and 2 (References 4 and 5) respectively.

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4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," AmerGen Energy Company, LLC (AmerGen) requests an amendment to Appendix A, Technical Specifications (TS), of Facility Operating License No. NPF-62 for Clinton Power Station (CPS), Unit 1. Specifically, the proposed change relocates Surveillance Requirement (SR) 3.8.3.6 from the TS to a licensee-controlled document. SR 3.8.3.6 requires the Emergency Diesel Generator (EDG) Fuel Oil Storage Tanks (FOSTs) to be drained, sediment removed, and cleaned on a 10-year interval. The change is consistent with the current revision (i.e., Revision 3) of the Improved Standard Technical Specifications (ISTS), NUREG-1434, "Standard Technical Specifications General Electric Plants, BWR/6." The SR was removed from the ISTS under Technical Specification Task Force (TSTF) Traveler No. 2 (TSTF-2), "Relocate the 10 Year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control," approved by the NRC on July 16, 1998.

AmerGen has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The FOSTs provide the storage for the DG fuel oil, assuring an adequate volume is available for each DG to operate for seven days in the event of a loss of offsite power concurrent with a loss of coolant accident. The relocation of the SR to drain and clean the FOSTs to a licensee-controlled document will not impact any of the previously analyzed accidents. Sediment in the tank, or failure to perform this SR, does not necessarily result in an inoperable storage tank. Fuel oil quantity and quality are assured by other TS SRs that remain unchanged. These SRs help ensure tank sediment is minimized and ensure that any degradation of the tank wall surface that results in a fuel oil volume reduction is detected and corrected in a timely manner. Future changes to the licensee-controlled document will be evaluated pursuant to the requirements of 10 CFR 50.59, "Changes, tests, and experiments," to ensure that such changes do not result in more than a minimal increase in the probability or consequences of an accident previously evaluated.

The proposed change does not adversely affect accident initiators or precursors nor alter the design assumptions, conditions, and configuration or the manner in which the plant is operated and maintained. The proposed change does not adversely affect the ability of structures, systems or components (SSCs) to perform their intended safety function to mitigate the consequences of an initiating event within the assumed acceptance limits.

The proposed change does not affect the source term, containment isolation, or radiological release assumptions used in evaluating the radiological consequences of any accident previously evaluated. Further, the proposed change does not increase the

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types and amounts of radioactive effluent that may be released offsite, nor significantly increase individual or cumulative occupational/public radiation exposures.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed TS change does not involve the addition or modification of any plant equipment. Also, the proposed change will not alter the design configuration, or method of operation of plant equipment beyond its normal functional capabilities. The requirements retained in the TS continue to require testing of the diesel fuel oil to ensure the proper functioning of the DGs. The proposed TS change does not create any new credible failure mechanisms, malfunctions or accident initiators.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed change does not alter or exceed a design basis or safety limit. The requirements retained in the TS continue to require testing of the diesel fuel oil to ensure the DGs are able to perform their intended function.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, AmerGen concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of no significant hazards consideration is justified.

4.4 Conclusions

In conclusion, based on the considerations discussed above, (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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

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5.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6.0 REFERENCES

1. Letter from Mr. William D. Beckner (NRC) to Mr. James Davis, Nuclear Energy Institute (NEI), dated July 16, 1998
2. Letter from Mr. S. Patrick Sekerak (NRC) to Mr. William A Eaton (Entergy Operations, Inc), "Grand Gulf Nuclear Station, Unit 1 - Issuance of Amendment Re: Generic changes to Improved Standard Technical Specifications (TAC No. MA6765)," dated June 30, 2000 (ADAMS Accession No. 003729556)
3. Letter from Mr. Jack N. Donohew (NRC) to Vice President, Operations (Entergy Operations, Inc.), "River Bend Station, Unit 1 – Issuance of Amendment Re: Adoption of Technical Specification Task Force (TSTF)-2, Relocate the 10-year Sediment Cleaning of the Fuel Oil Storage Tank to Licensee Control (TAC No. MD7380)," dated June 2, 2008 (ADAMS Accession No. ML081230525)
4. Letter from Mr. Robert E. Martin (NRC), to Mr. G. R. Peterson, (Duke Energy Corp.), "Catawba Nuclear Station, Units 1 and 2 Re: Issuance of Amendments (TAC Nos. MB6174 AND MB6175)," dated July 10, 2003 (ADAMS Accession No. ML031910598)
5. Letter from Mr. Robert E. Martin (NRC), to Mr. Dhiaa Jamil, (Duke Energy Corp.), "McGuire Nuclear Station, Units 1 and 2 Re: Issuance of Amendments (TAC Nos. MB6176 AND MB6177)," dated July 10, 2003 (ADAMS Accession No. ML031910756)

ATTACHMENT 2

Mark-up of Proposed Technical Specification Pages

Revised Technical Specifications Page

3.8-23

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
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 200 psig.	31 days
SR 3.8.3.5 Check for and remove accumulated water from each fuel oil storage tank.	92 days
SR 3.8.3.6 For each fuel oil storage tank: a. Drain the fuel oil, b. Remove the sediment, and c. Clean the tank.	10 years

ATTACHMENT 3

Mark-up of Technical Specification Bases Pages
(For Information Only)

Revised Technical Specifications Bases Page

B 3.8-48a

BASES

SURVEILLANCE
REQUIREMENTS

SR 3-8-3-6

~~Draining of the fuel oil stored in the supply tanks, removal of accumulated sediment, and tank cleaning are required at 10 year intervals by Regulatory Guide 1.137 (Ref. 2), paragraph 2.f. This SR is typically performed in conjunction with the ASME Boiler and Pressure Vessel Code, Section XI (Ref. 7), examinations of the tanks. To preclude the introduction of surfactants in the fuel oil system, the cleaning should be accomplished using sodium hypochlorite solutions, or their equivalent, rather than soap or detergents. This SR is for preventive maintenance. The presence of sediment does not necessarily represent a failure of this SR provided that accumulated sediment is removed during performance of the surveillance.~~

REFERENCES

1. USAR, Section 9.5.4.
2. Regulatory Guide 1.137.
3. ANSI N195, Appendix B, 1976.
4. USAR, Chapter 6.
5. USAR, Chapter 15.
6. ASTM Standards: D4057-95; D1298-99; D975-06b; D4176-93; D2276-88.
7. ~~ASME, Boiler and Pressure Vessel Code, Section XI.~~ Deleted
8. Calculation IP-0-0120.
9. Calculation IP-0-0121.
10. Calculation IP-0-0122.
11. Calculation IP-C-0111.