

From: Balwant Singal
To: timothy.hope@txu.com
Date: 07/25/2007 5:20:34 PM
Subject: Revision to TS 3.8.1 - Extension of Completion Times for Diesel G, MD4066 and MD4067

Tim:

Our electrical engineering branch has completed the review of the subject amendment request and has requested for additional information to complete the review. The attached file provides the details of Request for Additional Information (RAIs) needed for completing our review. Please review the RAI questions and let us know if a conference call is needed to discuss these questions.

Thanks.

Ref.: Application dated January 18, 2007

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CC: fred.madden@txu.com; Hiltz, Thomas; Markley, Michael; McConnell, Matthew; Thadani, Mohan

REQUEST FOR ADDITIONAL INFORMATION

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

REVISION TO TECHNICAL SPECIFICATION (TS) 3.8.1, "AC SOURCES - OPERATING,"

EXTENSION OF COMPLETION TIMES FOR DIESEL GENERATORS

By letter dated January 18, 2007 (Agencywide Documents Access and Management System Accession No. ML070230493), TXU Generation Company LP (the licensee) requested an amendment to Facility Operating License Nos. NPF-87 and NPF-89 for Comanche Peak Steam Electric Station (CPSES), Units 1 and 2, and Appendix A, Technical Specifications (TSs), of the Facility Operating Licenses. The proposed changes would revise TS 3.8.1 for "AC Sources - Operating" by extending the allowable Completion Time (CT) associated with the restoration of an inoperable diesel generator (DG) from 72 hours to 14 days. Specifically, the extended CT would establish a 14-day allowable out-of-service time when one DG is inoperable provided an alternate alternating current power source (AACPS) is available.

In order for the staff to proceed with its review of the proposed changes, the following additional information is needed:

1. Describe the design, capability, capacity, and reliability of the AACPS. Describe the testing and maintenance program for the AACPS and its associated components.
2. The staff believes that certain compensatory measures in the form of regulatory commitments are needed during the extended DG CT to assure continued safe operation of the plant. In the past, other licensees have provided the following regulatory commitments in their DG CT extension requests. Provide a discussion as to how you would address each commitment listed below as it relates to CPSES:
 - The extended CT will be typically used to perform infrequent (i.e., no more frequently than once every 24 months) diesel manufacturer's recommended inspections and preventive maintenance activities.
 - No maintenance or testing that affects the reliability of the train associated with the OPERABLE DG will be scheduled during the extended CT. If any testing and maintenance activities must be performed while the extended CT is in effect, an evaluation will be performed in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.65(a)(4).
 - AACPS with capacity equal to or greater than the capacity of the inoperable DG will be available as a backup to the inoperable DG. After entering the extended CT, availability of the AACPS will be verified every 8 hours and treated as protected equipment.

- The scheduling of DG preplanned maintenance will be avoided during seasons when the probability of severe weather or grid stress conditions are high or forecasted to be high.

-

The system load dispatcher will be contacted once per day to ensure no significant grid perturbations are expected during the extended CT. Also, the system load dispatcher should inform the plant operator if conditions change during the extended CT (e.g., unacceptable voltages could result due to a trip of the nuclear unit).

- Component testing or maintenance of safety systems and important non-safety equipment including offsite power systems (auxiliary and startup transformers) that increase the likelihood of a plant transient or loss-of-offsite power will be avoided. In addition, no discretionary switchyard maintenance will be allowed.

- TS requirements of verification that the required systems, subsystems, trains, components, and devices that depend on the remaining DG(s) are operable and positive measures will be provided to preclude subsequent testing or maintenance activities on these systems, subsystems, trains, components, and devices.

- Turbine-driven auxiliary feedwater pump will be controlled as “protected equipment,” and will not be taken out of service for planned maintenance while an DG is out of service for extended maintenance.

- Any component testing or maintenance that increases the likelihood of a plant transient would be avoided; plant operation should be stable during the DG CT.

3. In the past, the staff expects TS requirements to demonstrate that the AACPS is available and functional prior to removing a DG from service for an extended period. The TS requirements should also address the AACPS availability during the extended DG maintenance period including actions to be taken if the AACPS becomes unavailable during the extended DG outage. Discuss how the above staff expectations would be satisfied.

4. It is the staff's understanding that the purpose of the requested amendment is to allow an increased DG outage time during power operation for performing DG inspection, maintenance, and overhaul, which would include disassembly of the DG. DG operability verification after a major maintenance or overhaul may require a full-load rejection test. If a full-load rejection test is performed at power, please address the following:

a.What would be the typical and worst-case voltage transients on the 6.9 kilo-volt safety buses as a result of a full-load rejection?

b.If a full-load rejection test is used to test the DG governor after maintenance, provide assurance that an unsafe transient condition on the safety bus (i.e., load swing or voltage transient) due to improperly performed maintenance or repair of a governor would not occur.

c.Using maintenance and testing experience on the DG, identify possible transient conditions caused by improperly performed maintenance on the DG governor and voltage regulator. Discuss the electrical system response to these transients.

d.Provide the tests to be performed after overhaul to declare the DG operable and provide justification of performing those tests at power.

5. Due to the importance of the offsite power system:

a.Discuss the considerations given to not performing extended DG maintenance when the offsite grid condition or configuration is degraded or when adverse or extreme weather conditions (i.e., high winds, lightning, etc.) are expected.

b.Discuss how you consider the amount of time needed to complete the extended DG maintenance and the ability to accurately forecast weather conditions that are expected to occur during the maintenance.

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