March 15, 2006

Mr. M. R. Blevins
Senior Vice President
& Chief Nuclear Officer
TXU Power
ATTN: Regulatory Affairs
P. O. Box 1002
Glen Rose, TX 76043

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES), UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS RE: TECHNICAL SPECIFICATION 3.8.1, "AC SOURCES – OPERATING," MODE RESTRICTION ON EMERGENCY DIESEL GENERATOR SURVEILLANCE (TAC NOS. MC4912 AND MC4913)

Dear Mr. Blevins:

The Commission has issued the enclosed Amendment No. 124 to Facility Operating License No. NPF-87 and Amendment No. 124 to Facility Operating License No. NPF-89 for CPSES, Units 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated October 6, 2004, as supplemented by letters dated September 16 and November 22, 2005.

The amendments revise the TS 3.8.1, "AC Sources – Operating," to remove mode restrictions on surveillance requirements.

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/

Mohan C. Thadani, 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. 124 to NPF-87
2. Amendment No. 124 to NPF-89
3. Safety Evaluation

cc w/encls: See next page

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OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	EEB/BC	TSB/BC	OGC	NRR/LPL4/BC
NAME	MThadani	DJohnson (By LAF)	RJenkins*	TBoyce	MSpencer NLO/WC	DTerao
DATE	2/21/06	2/21/06	12/28/2005	3/10/06	3/1/06	3/14/06

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TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1

DOCKET NO. 50-445

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 124
License No. NPF-87

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by TXU Generation Company LP dated October 6, 2004, as supplemented by letters dated September 16 and November 22, 2005, 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. 124, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Generation Company LP shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

/RA/

David Terao, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 15, 2006

TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2

DOCKET NO. 50-446

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 124
License No. NPF-89

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by TXU Generation Company LP dated October 6, 2004, as supplemented by letters dated September 16 and November 22, 2005, 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. 124, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TXU Generation Company LP 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

/RA/

David Terao, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: March 15, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 124

TO FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 124

TO FACILITY OPERATING LICENSE NO. NPF-89

DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the 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.

Remove	Insert
3.8-1	3.8-1
3.8-2	3.8-2
3.8-8	3.8-8
3.8-9	3.8-9
3.8-10	3.8-10
3.8-11	3.8-11
3.8-12	3.8-12
3.8-13	3.8-13
3.8-14	3.8-14
3.8-15	3.8-15

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 124 TO

FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 124 TO

FACILITY OPERATING LICENSE NO. NPF-89

TXU GENERATION COMPANY LP

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated October 6, 2004 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML042890050), as supplemented by letters dated September 16 (ADAMS Accession No. ML052690082) and November 22, 2005 (ADAMS Accession No. ML053360120), TXU Generation Company LP (the licensee) requested changes to the Technical Specifications (TSs) for Comanche Peak Steam Electric Station (CPSES), Units 1 and 2.

The supplements dated September 16 and November 22, 2005, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the Nuclear Regulatory Commission staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on March 15, 2005 (70 FR 12751).

The licensee proposed revisions to TS 3.8.1, AC [alternating current] Sources – Operating, for CPSES to allow surveillance testing of the onsite standby diesel generators (DGs) during power operation. Specifically, the licensee proposed removing the surveillance test mode restrictions from the following Surveillance Requirements (SRs): SR 3.8.1.10, Full Load Rejection Test; SR 3.8.1.12, Safety Injection (SI) Actuation Signal Test; SR 3.8.1.13, Non-Emergency Protective-Trip Bypass Test; and SR 3.8.1.14, Endurance and Margin Test. The licensee also proposed revising the mode restriction notes in SR 3.8.1.8, Transfer of AC Sources Test; SR 3.8.1.9, Load Rejection Test; SR 3.8.1.11, Simulated Loss of Offsite Power Test; SR 3.8.1.16, Restoration of Loads to Offsite Power Test; SR 3.8.1.17, Verification of Override Test; SR 3.8.1.18, Loading Interval Between Sequenced Load Blocks Test; and SR 3.8.1.19, Loss of Offsite Power with Simulated Safety Injection Signal Test. These changes will allow

performance (or partial performance) of these surveillances during restricted modes in order to reestablish operability following corrective maintenance, corrective modification, deficient or incomplete surveillance testing, and other unanticipated operability concerns during plant operation.

In addition, the licensee further proposes adding a new note to TS Section 3.8.1, Limiting Condition for Operation (LCO) that permits one DG to be connected in parallel with offsite power in order to conduct the required surveillance testing. The proposed note will clarify that one DG at a time may be operated in parallel with an offsite power source in order to perform testing required to demonstrate operability.

Requests for additional information (RAIs) were sent on July 28 and November 1, 2005. The licensee responses were received in letters dated September 16 and November 22, 2005, and provided responses to the NRC staff's RAIs.

2.0 REGULATORY EVALUATION

The regulatory requirements which the NRC staff applied in its review of the application include the following:

- General Design Criterion 17 (GDC 17) in Appendix A of Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR) requires that an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for offsite system (assuming the onsite system is not functioning) shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

- Criterion 18, "Inspection and testing of electric power systems," requires that electric power systems that are important to safety must be designed to permit appropriate periodic inspection and testing.

- 10 CFR 50.36, "Technical specifications," requires a licensee's TS to be derived from the analyses and evaluation included in the safety analysis report. The TS also include SRs relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that the facility operation will be within safety limits, and that the LCOs will be met.

- 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," requires that preventive maintenance activities must ensure the appropriate overall availability of the systems, structures, and components.

- Regulatory Guide (RG) 1.9, "Selection, Design, Qualification, and Testing of Emergency Diesel Generator (EDG) Units Used as Class 1E Onsite Electric Power Systems at Nuclear Power Plants," provides guidance regarding selection and testing of a diesel generator set.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's justification for the proposed license amendment request (LAR) as described in the licensee's application dated October 6, 2004, and the licensee's response to the NRC staff's RAIs. The NRC staff's evaluations of the proposed amendment are provided in the following sections.

3.1 Mode Restriction Elimination

The licensee proposed changes to the SR performance mode restrictions by completely removing the associated surveillance mode restriction note or by modifying the current notes to incorporate the standard TS mode restriction notes. Removing the notes would avoid a potential plant shutdown by allowing DG maintenance to be performed during unit power operation. The other changes, modifying the current notes, would allow performance of these surveillances during plant power operation in order to reestablish operability following corrective maintenance, corrective modification, deficient or incomplete surveillance testing, and other unanticipated operability concerns.

3.1.1 SR 3.8.1.10, Full Load Rejection Test

The historic method of conducting the SR 3.8.1.10, Full Load Rejection Test, has been to perform the test while the plant is shutdown (e.g., during an outage) when only one of the two DG trains is required to be operable. The test is performed typically by paralleling the DG that is not being credited as the operable DG with the offsite power source while the offsite source is supplying the associated bus, loading the DG to the required load, and then opening the DG output breaker. Opening the DG output breaker separates the DG from its associated emergency bus and allows the offsite circuit to continue to supply the emergency bus.

As described in the standard TS bases, the NRC staff is concerned that performing the full-load rejection test in Modes 1 and 2 may disconnect the DG while it is supplying power to the emergency bus. This may cause undesirable electrical perturbations on the bus and, thus, to plant loads. This is a concern because while paralleled with the offsite source, the DG under test is susceptible to grid disturbances and is potentially more susceptible to tripping due to the non-emergency DG protection trips during the test.

The proposed change would allow DG testing to be performed during unit power operation when both DGs are required to be operable in accordance with TS 3.8.1. This test will be performed in Modes 1 or 2 only, if the other DG and both offsite circuits are operable. This condition minimizes the time period that the DG is synchronized to the offsite power source. Further, in response to an RAI, the licensee stated that the EDG loading will be maintained between 0.80 and 0.85 power factor during the performance of these tests.

Grid Disturbances

There is a low probability of occurrence of a compounding grid disturbance during the relatively short time that a DG is under this SR test. The occurrence of a grid disturbance is independent of testing performed pursuant to this SR. The probability of a grid disturbance occurring while the DG is under test and paralleled to the offsite system is small, because the DG is paralleled

with the offsite source for only a limited period of time before the DG is isolated by opening its output circuit breaker. This conclusion is supported and reinforced by the fact that normal risk management practices are also in effect to ensure that SRs of this type are not scheduled during periods of increased potential for grid or bus disturbances (e.g., severe weather prevalence, maintenance activities in the switchyard, or when the independent system operator has identified potentially adverse grid conditions). Administrative procedures for the DG parallel operation require close monitoring of bus voltage and DG load, and the parallel operation is required to be terminated if bus voltage and DG loading exceed the limits defined in the administrative procedures. The NRC staff noted that the amount of time required for the DG to be paralleled to the offsite source for performance of this surveillance is much less than the time the DG is paralleled when performing the monthly test required by SR 3.8.1.3 (performed in conjunction with SR 3.8.1.2 or SR 3.8.1.7) for which the current TS provides no performance mode restrictions. In the event that a grid voltage disturbance should occur while the DG is paralleled to offsite power, under voltage (UV) protective relaying and instrumentation exist to mitigate the effects of such disturbances. For a sustained low grid-voltage condition, the protection instrumentation required by TS 3.3.5, "Loss of Power (LOP) Diesel Generator (DG) Start Instrumentation," is available to respond to such a condition for protection of the plant loads. During the degradation of grid voltage or an over-voltage condition the operators will have sufficient time to terminate the test by disconnecting the diesel from the offsite source. Also, should there be a design-basis accident (DBA) during these periods, a Safety Injection Actuation Signal (SIAS) automatically trips the DG breaker to separate the onsite and offsite power sources. In this event, the DG returns to standby status and continues to operate at the rated voltage frequency with no load. Therefore, for a degrading grid condition, both DGs will remain available to mitigate the consequences of an accident.

Electrical Perturbations

As noted above, opening of the DG breaker during the performance of this surveillance separates the DG from the associated safety bus and allows the offsite circuit to continue supplying the bus. This evolution has little impact on plant loads.

The power system loading during the testing is well within the rating of all transformers, switchgear, and breakers before and after the load rejection. Based on experience, this test generally has had little impact on the plant electrical distribution system. Results from tests at CPSES show that voltage changes during a full-load rejection test are not significant. Data recorded from past performances of this test at CPSES show that bus voltage during the "transient" remains well above the minimum required voltage for bus loads and typically recovers within one second. Further, industry experience with this test has shown that the voltage perturbation seen on the bus during and just after the load rejection is not significant (i.e., voltage fluctuations remain well within the 5 percent allowed during step load applications). Therefore, performing load reject tests in accordance with SR 3.8.1.10 during plant operation is not being expected to cause any significant voltage perturbation that could adversely affect the plant electrical system or plant loads.

The proposed change would allow DG testing to be performed during unit power operation when both DGs are required to be operable in accordance with TS 3.8.1. This test will be performed in Modes 1 or 2 only if the other DG and both offsite circuits are operable. This

proposed change is acceptable based on the above considerations and the fact that the remaining DG (i.e., the standby DG not under test) would remain operable and is independently capable of mitigating a DBA or providing for a safe shutdown of the associated unit.

3.1.2 SR 3.8.1.12, Safety Injection Actuation Signal Test

This test requires verification that the DG auto-starts from the standby condition on an SIAS, achieves proper voltage and frequency within the required time, and operates at least 5 minutes. The NRC staff noted that this test does not require the DG to be paralleled with offsite power, nor does it require verification of emergency load sequencing (SIS), which is addressed in other SRs. For these reasons, the concerns that the test could cause electrical perturbations as stated in the standard TS Bases do not apply to CPSES. It is current practice to combine the required slave relay test (on the specific relays that start the DG) with one of the DG starts for monthly testing per SR 3.8.1.2. Removal of the note will allow credit to be taken for this 18-month test and possibly avoid an additional test setup or engine start during shutdown testing. Additionally, in response to the RAI, the licensee stated that the DGs are designed to revert to emergency mode of operation whenever an SIAS signal is present.

The NRC staff believes that conducting this test along with another required test improves the availability of the DG and, therefore, finds it acceptable to remove the note that restricts the test to only specified plant modes.

3.1.3 SR 3.8.1.13, Non-Emergency Protective-Trip Bypass Test

This test requires verification that the non-emergency automatic protective-trip functions for each DG are bypassed on a loss-of-voltage signal on the emergency bus and on an SIAS.

This surveillance is presently performed during shutdown conditions. With the DG in emergency mode, the test is performed by simulating a non-emergency trip signal, such as “crankcase high-pressure” and verifying that the running DG does not trip. Because all the non-emergency trips are processed through one common circuit that is blocked by the emergency start signal, this demonstrates that none of the signals will trip the DG.

The standard TS bases for SR 3.8.1.13 currently restrict the surveillance from being performed during Modes 1 and 2 because the surveillance would remove a required DG from service. This concern may be put into perspective, however, when the actual amount of time that a DG is rendered unavailable for the performance of this surveillance is considered. An average unavailability time of 5 hours per DG per operating cycle, usually attributed to this test, is considered to be quite small, relative to the total time the DGs are available throughout the operating cycle. This is significantly less than the completion time (72 hours) currently specified in the TS for an inoperable DG. Also, it is recognized that availability of the other DG is maintained during such testing. Risk-management practices require the redundant, unaffected train (associated with the DG not under test) to be maintained in a protected status during such activities. Therefore, performing the non-emergency bypass test online is not a significant concern because the other operable DG is capable of mitigating a DBA. Based on the short time that a DG remains in this condition, this is considered an insignificant increase in unavailability and performance of the SR should not be restricted to shutdown conditions. It is

expected that the test would be performed during a DG work window when the DG was inoperable for other maintenance including tests to verify emergency trips.

Based on the short time that a DG remains unavailable for this test, the NRC staff believes that the probability of having an accident during this short time is very low and, therefore, finds this modification acceptable.

3.1.4 SR 3.8.1.14, Endurance and Margin Test

The current SR requires that this surveillance shall not be performed in Mode 1 or 2. The proposed amendment would delete the mode restriction. Performance of the endurance and margin test per SR 3.8.1.14 requires synchronizing (paralleling) and loading the DG with the offsite source (via the associated 6.9 kV safety bus) and then running it continuously while loaded to its full-load capability for not less than 24 hours. The electrical alignment for this test is similar to the existing monthly run of the DG (SR 3.8.1.3) for which there is no mode restriction. The proposed change would allow this surveillance test to be performed without restrictions during plant operation when both DGs are required to be operable, as opposed to the current mode restrictions that require this testing to be performed during shutdown conditions. The tested DG remains operable throughout performance of this surveillance (subject to the clarification in Section 4.3.1 of the application) and does not render any additional safety system or component inoperable. Current surveillance tests are performed in Modes 5 or 6, which require only one DG to be operable. Thus, current testing does not require the DG being tested to remain operable. This LAR proposes that this test also be allowed in Mode 1, 2, 3, or 4 when both DGs are required to be operable by TS 3.8.1. The concerns associated with performing the 24-hour endurance test while in Mode 1 and 2 are similar to those previously described for SR 3.8.1.10, Full Load Rejection Test. While a DG is paralleled to the offsite source, the DG is not independent of disturbances on the offsite power system, and the associated safety bus and train of equipment are not independent of any potential interaction between the DG and the offsite system.

In response to the NRC staff RAI, on the coordination of DG testing, the licensee stated that the Electric Reliability Council of Texas (ERCOT) uses a real time contingency analysis (RTCA) to identify any critical operating limits that could result from specific contingency events. The operating limits addressed in RTCA include CPSES bus voltage levels and maximum ratings for lines into CPSES. The contingency events include an outage of single or double circuit lines into CPSES. The licensee's procedure, STA-629, addresses communication with ERCOT for assessing the suitability of DG tests at any time and implementing remedial actions when conditions become undesirable.

The following evaluation shows that the increase in risk associated with paralleling a DG to offsite power for surveillance testing during plant operation is not significant.

Grid Disturbances

CPSES currently tests DGs paralleled to offsite power during required monthly surveillance test SR 3.8.1.3 while the unit is at power. SR 3.8.1.3 requires the DG to be fully loaded for a minimum of 60 minutes, but the DG is typically paralleled for approximately 4 hours to allow for DG loading and unloading. The DG 24-hour endurance test, SR 3.8.1.14, is identical in setup

and alignment to SR 3.8.1.3 and differs only in the required duration and the 2-hour peak loading of 110 percent of continuous rated load.

In response to the NRC staff RAI, the licensee stated the following:

> CPSES surveillance test procedures MSE-S1(2)-0880 and OPT-214A(b) for SR 3.8.1.10 and SR 3.1.14, respectively, require that EDG loading be maintained between 0.80 and 0.85 power factor during the performance of these tests. These procedures include corresponding Emergency DG operating limits that have been developed based on vendor recommendations and plant operating experience.

Consistent with the NUREG-1431 bases for these SRs, the intent of the power factor requirement is to test the DG under conditions that are as close as possible to design-basis conditions. The current CPSES operating practice achieves the stated intent of the TS power factor requirement by the operation of the DG within the procedure limits, because the volt-amperes reactive is adjusted by the operator throughout the period of load adjustments during testing to control them within the prescribed limits during the period of increasing and decreasing DG load.

While the time required for a DG being paralleled to offsite power for performance of the 24-hour endurance test is longer than the time a DG is paralleled for the performance of other SRs requiring parallel operation (such as the monthly SR 3.8.1.3), the required testing frequency of the 24-hour endurance test is only once per a 18-month cycle. The endurance test will substitute for one of the required monthly tests, thus making the increased time about 20 hours per operating cycle and only a fraction of the cumulative time incurred during the monthly testing. The additional time required in this configuration is on the order of only a few hours increase, and the total time remains small when compared to the thousands of hours per year that the DGs are required to be operable. The potential for occurrence of a compounding grid disturbance during the time that a DG is under test per this SR may, therefore, still be considered remote. Further, because there is only a remote probability that a grid disturbance will lead to DG unavailability, the likelihood of a DG being rendered unavailable as a result of a grid disturbance during testing is extremely remote.

During the degradation of grid voltage or an over-voltage condition the operators will have sufficient time to terminate the test by disconnecting the diesel from the offsite source. Also, should there be a DBA during these periods, an SIAS automatically trips the DG breaker to separate the onsite and offsite power sources. In this event, the DG returns to standby status and continues to operate at the rated voltage frequency with no load. Therefore, if degrading grid conditions occur, both DGs will remain available to mitigate the consequences of an accident.

As noted previously, in the event of a grid disturbance occurring while the DG is paralleled to offsite power, protective relaying and instrumentation (including the aforementioned LOP instrumentation) exist to respond to certain types of disturbances. Further, if a DG protective trip were to occur and if the DGs were not separated from the grid on degrading voltage in response to a disturbance in the offsite power system, operator action could be taken to manually reset the lockout relay of the DG under test (assuming that the condition which

caused the trip was promptly cleared or isolated) so that, if required, the DG could be restarted and its loads properly sequenced.

As a common practice at CPSES, risk management considerations ensure that this testing and other SRs would not be scheduled during periods where the potential for grid or bus disturbance exists (e.g., storms, grid emergencies). Online maintenance/testing scheduling and coordination of work activities at CPSES are controlled as required by 10 CFR 50.65(a)(4). Risk management practices are implemented at CPSES by the administrative requirements of the Configuration Risk Management Program (CRMP). The CRMP is used to assess the risk impacts of performing maintenance and testing work (including the non-emergency protective bypass test) to ensure that there is no significant increase in the risk of a severe accident while maintenance is being performed. The CRMP also includes the Safety Monitor for risk monitoring and contingency action planning. These practices, which are currently in existence at CPSES, provide acceptable assurance of continued safe reactor operation. The CRMP is prescribed by TS 5.5.18 and will be applied throughout the duration of testing.

Also, in accordance with the CRMP, equipment identified as important to loss-of-offsite power and station blackout (SBO) considerations will be administratively controlled and protected to ensure that the equipment remains operable and available for the duration of the testing. As previously mentioned, the CRMP also will ensure that SRs of this type are not scheduled during periods in which the potential for grid or bus disturbances exists (such as during severe weather or maintenance activities in the switchyard). As described in the final safety analysis report, Sections 8.3.1.1.8 and 8.3.1.1.11, paralleled testing is limited to only one DG at a time with heightened awareness and emphasis placed on “protecting” the standby train. This ensures sufficient independence of the onsite sources from the other train and from offsite power while still enabling testing to demonstrate DG operability for the affected train under test.

No potential risk significant switchyard activity will be allowed during this testing. All activity in the switchyards will be closely monitored and controlled. Heightened control of the swtichyards will be implemented. These actions will ensure that switchyard maintenance work will not be allowed that could challenge the operability of the offsite AC power sources. To minimize risk during the planned testing and maintenance, the testing of the other DG and the 6.9 kV AC safety buses will not be conducted. The results and assumptions used in the SBO analysis regarding the availability and reliability of the DGs are not significantly affected by the proposed change. In the case where internal faults potentially affect the DG being tested, protective devices (e.g., overcurrent relays, differential relays, and reverse power) would protect the DG from overcurrent or reverse power. These features ensure that the DG is protected by tripping the DG output breaker and separating the DG from its associated bus—assuming that the DG could be quickly restored— thereby making the DG available for restart via operator action. The DGs were designed for parallel testing, and design features such as protective devices were included. The change does not affect parallel testing design features, the consequences of postulated failures during parallel testing, and postulated interactions with offsite power during parallel testing. If problems are encountered during testing, the DG will separate from the bus allowing the offsite circuit to continue to supply the bus.

Electrical Perturbations

After the DG is synchronized and loaded, the test performed per SR 3.8.1.14 is essentially a continuous run involving little or no dynamic effects. Bus voltage and power factor, including

the effects of any changes in offsite power (such as the typical change in grid load that occurs in the course of a day), are monitored closely during the test because SR 3.8.1.14 requires the load to be maintained within a certain range. Electrical perturbations are thus minimized to the extent that they are monitored and can be controlled.

Additionally, the following text and four requirements will be added to the TS bases.

> Administrative controls for performing this SR in Mode 1 or 2, with the DG connected to an offsite circuit, ensure or require that:
>
> a. Weather conditions are conducive for performing this SR.
>
> b. The offsite power supply and switchyard conditions are conducive for performing this SR, which includes ensuring that switchyard access is restricted and no potential impactive maintenance within the switchyard is performed.
>
> c. No equipment or systems assumed to be available for supporting the performance of the SR are removed from service.
>
> d. Associated risks shall be managed in accordance with the TS 5.5.18, "Configuration Risk Management Program."

Only one DG per unit will be in parallel with the offsite source at a time in order to prevent any grid disturbances from potentially affecting more than one DG. During the test, the remaining DG will be available to respond normally to a start signal. The remaining DG is capable of supplying power to mitigate all DBAs. This test configuration is consistent with the configuration used during the monthly DG tests.

In addition, improved maintenance scheduling permitted by the more flexible SR will reduce the amount of time that the DGs will be inoperable. The flexibility allows for performing the 24-hour DG endurance run in other than shutdown conditions when heavy and complex maintenance activities occur resulting in unavailability of equipment. In addition, the capability to safely complete emergency shutdown procedures following a DBA coincident with a single failure is maintained throughout the performance of the surveillance. No actions will be taken to affect the operability of the remaining DG and its support systems throughout the surveillance test, and no actions will be taken to affect the capability of the onsite Class IE AC electrical distribution system and its support systems to complete a plant shutdown and maintain safe shutdown conditions following a DBA. Based on the above, although performance of the 24-hour DG endurance test during power operation deviates from the standard TS, the NRC staff finds that performance of this test during power operation is consistent with the design features of the plant.

The proposed change is acceptable based on the above considerations and the fact that the remaining DG (i.e., the standby DG not under test) would remain operable and is independently capable of mitigating a DBA or providing for a safe shutdown of the associated unit.

3.2 TSTF-283, Revision 3, Changes

The proposed changes modify the notes in SR 3.8.1.8, Transfer of AC Sources Test; SR 3.8.1.9, Load Rejection Test; SR 3.8.1.11, Simulated Loss of Offsite Power Test; SR 3.8.1.16, Restoration of Loads to Offsite Power Test; SR 3.8.1.17, Verification of Override Test; SR 3.8.1.18, Loading Interval Between Sequenced Load Blocks Test; and SR 3.8.1.19, Loss of Offsite Power with Simulated Safety Injection Signal Test. These changes allow performance of the surveillances, or in some cases only portions of the surveillances, in the currently prohibited modes in order to reestablish operability following corrective maintenance. The changes to these notes are consistent with the NRC-approved change in TSTF-283, Revision 3.

The TS bases will be revised to allow testing to reestablish operability provided an assessment is performed to assure that plant safety is maintained or enhanced. This update will be consistent with TSTF-283 and provides the following guidance relative to this assessment:

> This assessment shall consider the potential outcomes and transients associated with a failed Surveillance, a successful Surveillance, and a perturbation of the offsite or onsite system when they are tied together or operated independently for the Surveillance; as well as the operator procedures available to cope with these outcomes. These shall be measured against the avoided risk of a plant shutdown and startup to determine that plant safety is maintained or enhanced when the Surveillance, or portions of the Surveillance, is performed in these normally restricted modes. Risk insights or deterministic methods may be used for this assessment.

The following LCO and SR notes are modified so that certain operability determinations could be made during power operation.

3.2.1 LCO 3.8.1, Applicability Modes.

A Note has been added to LCO 3.8.1, stating that, “One DG may be synchronized with the offsite power source under administrative controls for the purpose of surveillance testing.”

As described in the final safety analysis report, Sections 8.3.1.1.8 and 8.3.1.1.11, paralleled testing is limited to only one DG at a time with heightened awareness and emphasis placed on “protecting” the standby train.

Based on the above, the NRC staff finds that the Note associated with LCO 3.8.1 is acceptable.

3.2.2 SR 3.8.1.8, Transfer of AC Sources Test

This surveillance shall not normally be performed in mode 1 or 2. However, this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.3 SR 3.8.1.9, Load Rejection Test

This surveillance shall not normally be performed in mode 1 or 2. However, this surveillance may be performed to reestablish operability provided an assessment determines the safety of

the plant is maintained or enhanced. The loading will reflect actual loading conditions of the largest emergency load in capacity and power factor.

3.2.4 SR 3.8.1.11, Simulated Loss of OffSite Power Test

This surveillance shall not normally be performed in mode 1 or 2. However, portions of this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.5 SR 3.8.1.16, Restoration of Loads to Offsite Power Test

This surveillance shall not normally be performed in mode 1 or 2. However, portions of this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.6 SR 3.8.1.17, Verification of Override Test

This surveillance shall not normally be performed in mode 1 or 2. However, portion of this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.7 SR 3.8.1.18, Loading Interval Between Sequenced Load Blocks Test

This surveillance shall not normally be performed in mode 1 or 2. However, this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.8 SR 3.8.1.19, Loss of Offsite Power with Simulated Safety Injection Signal Test

This surveillance shall not normally be performed in mode 1 or 2. However, this surveillance may be performed to reestablish operability provided an assessment determines that the safety of the plant is maintained or enhanced.

3.2.9 Assessment

Because (1) the surveillances are not being changed by the proposed amendment and can be conducted in the modes proposed after corrective maintenance by the amendment, (2) the proposed notes require a safety assessment to be performed by the licensee before conducting the surveillance to ensure that plant safety is maintained or enhanced, (3) the full or partial performance of the SR is to demonstrate operability of the DGs, and (4) the offsite power availability or capacity is not influenced or the periodic inspection schedule is not increased, the NRC staff concludes that an unsafe condition should not exist when the licensee performs any of these SRs. Allowing the licensee to make the determination that performance of these SRs in modes not currently allowed maintains or enhances the safety of the plant is similar to the regulation 10 CFR 50.59, in which the licensee is allowed to make changes to the plant as described in the Updated Safety Analysis Report if the changes meet the criteria given in the regulation. The criterion for this situation is that the licensee must determine that in conducting the SR the “safety of the plant is maintained or enhanced.”

Based on the above, the NRC staff concludes that the proposed changes are acceptable. In addition, the proposed note is consistent with the note in NUREG-1431 (Standard Technical Specifications for Westinghouse Plants).

3.3 Administrative Change

The licensee requested to remove an administrative change for TS LCO 3.8.1, "Required Action A.3," for the one-time allowance that granted 21 days to complete preventative maintenance for Startup Transformer XST2. This allowance has expired, and the proposed change to remove the note is acceptable.

Based on the above evaluation, the NRC staff concludes that the proposed changes associated with SR 3.8.1.10, Full Load Rejection Test; SR 3.8.1.12, Safety Injection Actuation Signal Test; SR 3.8.1.13, Non-Emergency Protective-Trip Bypass Test; SR 3.8.1.14, Endurance and Margin Test; SR 3.8.1.8, Transfer of AC Sources Test; SR 3.8.1.9, Load Rejection Test; SR 3.8.1.11, Simulated Loss of Offsite Power Test; SR 3.8.1.16, Restoration of Loads to Offsite Power Test, SR 3.8.1.17, Verification of Override Test; SR 3.8.1.18, Loading Interval Between Sequenced Load Blocks Test; and SR 3.8.1.19, Loss of Offsite Power with Simulated Safety Injection Signal Test will have no adverse effect on the availability or operability of the associated equipment and they have no adverse effect on plant operation. The approval of proposed changes does not affect CPSES complying with the requirements of GDC 17 and GDC 18. Therefore, the proposed changes are 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 and changes surveillance requirements. 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 March 15, 2005 (70 FR 12751). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 10 CFR 51.22(c)(10). 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.

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