

August 11, 2005

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: ONE-TIME EXTENSION OF CONTROL
ROOM BOUNDARY OPERABILITY FROM 24 HOURS TO 14 DAYS
(TAC NOS. MC6637 AND MC6638)

Dear Mr. Blevins:

The Commission has issued the enclosed Amendment No. 120 to Facility Operating License No. NPF-87 and Amendment No. 120 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 March 15, 2005.

The amendments revise the TS 3.7.10, "Control Room Emergency Filtration/Pressurization System (CREFS)."

The CONDITION B in TS 3.7.10 is revised to allow a one-time extension of the allowable duration of inoperability of the control room boundary from 24 hours to 14 days, and the Conditions A and E are incorporated to support the extension.

The extension is needed by the licensee to implement the proposed turbine generator protection system digital modification during the forthcoming refueling outage for Unit 1 (1RF11) in the fall of 2006, and for Unit 2 (2RF09) in the fall of 2005; respectively.

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, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 120 to NPF-87
2. Amendment No. 120 to NPF-89
3. Safety Evaluation

cc w/encls: See next page

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,

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Mohan C. Thadani, Senior Project Manager, Section 1
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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. 120
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 March 15, 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. 120, 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, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: August 11, 2005

TXU GENERATION COMPANY LP
COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2
DOCKET NO. 50-446
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.120
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 March 15, 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. 120, 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, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: August 11, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 120

TO FACILITY OPERATING LICENSE NO. NPF-87

AND AMENDMENT NO. 120

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.

<u>Remove</u>	<u>Insert</u>
3.7.23	3.7.23
3.7.24	3.7.24

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 120 TO
FACILITY OPERATING LICENSE NO. NPF-87
AND AMENDMENT NO. 120 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 March 15, 2005 (Agency Documents Access and Management System Accession No. ML050810298), TXU Generation Company LP (the licensee or TXU Power) requested changes to the Technical Specifications (TSs) for Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. The proposed change for each unit would revise TS 3.7.10, "Control Room Emergency Filtration/Pressurization System (CREFS)," to allow a one-time extension of the allowed completion time for ACTION B, from 24 hours to 14 days. In addition, the licensee proposed descriptions for CONDITIONS A and E in support of the change to ACTION B. The proposed changes are needed to facilitate implementation of a planned turbine generator protection system digital modification, currently scheduled during the eleventh refueling outage for Unit 1 (1RF11) and the ninth refueling outage for Unit 2 (2RF09). The proposed TS changes are requested to allow the control room boundary to be intermittently opened (and declared inoperable) during the installation of the turbine generator protection system digital modification.

2.0 REGULATORY EVALUATION

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed the licensee's application dated March 15, 2005, filed pursuant to Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR 50.90). The regulatory requirements and guidance that are directly related to the licensee's application, and upon which the NRC staff based its review of the application are outlined as follows:

1. 10 CFR Part 50, Appendix A, General Design Criterion (GDC) 19, "Control room," as it relates to maintaining the control room in a safe, habitable condition under accident conditions by providing adequate protection against radiation and toxic gases.

2. Technical Specifications Task Force (TSTF) Technical Specification Change Traveler 287, Revision 5, "Ventilation System Envelope Allowed Outage Time" (March 16, 2000).
3. Regulatory Guide (RG)1.189, "Fire Protection for Operating Nuclear Power Plants" (April 2001).
4. RG 1.196, "Control Room Habitability at Light-Water Nuclear Power Reactors" (May 2003).
5. NUREG-0700, Rev. 2, "Human-System Interface Design Review Guidelines" (May 2002).
6. NUREG-0800, Rev. 1, "Standard Review Plan," Chapter 18.0, "Human Factors Engineering" (February 2004).
7. NUREG-0711, Rev. 2, "Human Factors Engineering Program Review Model" (February 2004).
8. NUREG-1764, "Guidance for the Review of Human Actions (Final Report)" (February 2004).
9. Information Notice 97-78, "Crediting of Operator Actions in Place of Automatic Actions and Modifications of Operator Actions, Including Response Times" (October 1997).
10. NRC Generic Letter 91-18, Revision 1: Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions, October 8, 1997.

3.0 TECHNICAL EVALUATION

The CPSES control room is common to Units 1 and 2. It is expected that one unit will be operating and the other unit will be in an outage during implementation of the turbine generator protection system digital modification. The current TS 3.7.10 for the control room ventilation systems allows the main control room boundary to be inoperable for up to 24 hours. The limiting condition for operation (LCO) Note for TS 3.7.10 states that during the LCO, "The Control Room boundary may be opened intermittently under administrative controls."

The licensee plans to implement the turbine generator protection system digital modification for Unit 1 during its fall 2005 refueling outage (1RF011) and for Unit 2 during its fall 2006 refueling outage (2RF09); and will require that the floor penetrations in the control room boundary be opened in excess of the current completion time of 24 hours to implement the proposed modification. The planned opening of the control room boundary will span a period of several days and will require that 20, 8-inch x 9-inch, cable penetration "blockouts" be opened between the control room and cable spreading room. In addition, 4-inch conduits may also be opened to support the cable pulls. In some cases, multiple penetrations will be simultaneously open.

Commitment Number 27321 in the licensee's March 15, 2005, submittal states that, " In order to ensure that operator protection objectives will continue to be met during the IRF11 and 2RF09

planned boundary openings, TXU Power intends to implement the following measures: (1) administrative controls to provide a designated, readily available individual(s) who can be readily contacted by the Control Room (e.g., audible range or via radio, plant gaitronics system). The individual(s) will have a method to rapidly close the opening when needed for Control Room isolation; and (2) provisions for operator action to secure the Uncontrolled Access Area Ventilation supply and exhaust fans at the onset of an accident." The NRC staff's evaluation of this commitment is contained in Section 3.5.

The licensee also stated that this new commitment will be implemented "Prior to Entering Condition B of T.S. 3.7.10 for the purpose of implementing the Turbine Generator Protection System Digital Modification." In accordance with the licensee's March 15, 2005, submittal (Attachment 1, page 8 of 19), the designated individuals will be seal certified. The procedure MSG-018 (that addresses the installation and re-work of penetration seals), used to reseal the penetrations in the control room floor, will also be used in the process of pulling cables in the control room by onsite seal certified individual(s).

The licensee's conservative estimate of the time to seal all openings is 3 hours, with cables running through all 20, 8-inch x 9-inch, cable penetration blockouts. The licensee estimates that it could take up to 14 days to complete the installation for each unit. Therefore, the licensee requested a one-time extension of the required completion time associated with an inoperable control room boundary from 24 hours to 14 days.

Proposed Change:

The proposed one-time change for each unit revises the completion time for ACTION B, incorporates the description for CONDITION A, and incorporates a revised description of CONDITION E, as follows:

1. The revised ACTION is associated with CONDITION B of TS 3.7.10. ACTION B is revised to provide a 14-day completion time when two CREFS trains are inoperable due to an inoperable control room boundary during the installation of the turbine generator protection system digital modification during refueling outages 1RF11 and 2RF09.
2. The description for CONDITION E, "Two CREFS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies" is being revised by adding "except for up to 14 days for a one-time implementation for each unit of the Turbine Generator Protection System Digital Modification to be completed during refueling outages 1RF11 and 2RF09." This allows movement of irradiated fuel assemblies during implementation of the turbine generator protection system digital modification.

In its March 15, 2005, submittal, the licensee stated that "The description for CONDITION A was previously revised by License Amendment 108 to allow the operating unit to continue operating after 7 days with an inoperable control room boundary. CONDITION A remains valid and will be consistent with the change to CONDITIONS B and E proposed by this request."

The license amendment request also includes associated changes to the TS bases for information only, which are revised to reflect the above TS changes.

In the submittal dated March 15, 2005, the licensee stated the following in support of the one-time temporary changes to TS 3.7.10:

1. The CREFS design has zone isolation, with filtered recirculation air, and with a positive pressure in the control room boundary relative to adjacent areas. This design maximizes the iodine protection factors and minimizes the dose from iodine. The total unfiltered infiltration rate in the control room is conservatively assumed to be 12 cubic feet per minute (cfm), including 10 cfm due to ingress and egress, and 2 cfm leakages from the ductwork passing through the control room boundary.
2. The control room pressurization will not preclude 1) inleakage from adjacent areas that are at a higher pressure than that of the control room boundary, 2) inleakage from plant systems that penetrate the control room boundary and are maintained at a higher pressure than that of the surrounding control room environment (provided the system breach occurs within the control room boundary), and 3) entrainment of contaminants into the control room environment through the seals on the suction side of the CREFS equipment (ducts seams, fan shaft seals, housing inspection doors, etc.). It is noted that the above limitations of the pressurization test are under evaluation by CPSES, the NRC, and the industry through Nuclear Energy Institute, and are not specifically addressed in this request for a one-time extension of the completion time for CONDITION B.

The licensee interprets that the control room boundary is inoperable at the time it becomes known that there is a hole in the boundary that exceeds a pre-determined limit (as allowed by CONDITION B). The boundary is declared operable at the time when the opening is sufficiently sealed. The control room is sufficiently sealed when the determination can be made that the ability to pressurize the boundary to 0.125 inches water gauge, with less than or equal to 800 cfm of makeup air, is restored.

The licensee also interprets that a limiting set of control room boundary openings may exist and not render the control room boundary inoperable. In other words, if a hole in the boundary is less than a specified size in square inches, then one train of the control room pressurization system is capable of pressurizing the envelope to 0.125 inches water gauge with less than or equal to 800 cfm of makeup air. If planned maintenance or modifications will breach the boundary, the size of the opening is compared against the maximum allowable. If the breach exceeds the maximum allowable, the boundary is typically declared inoperable and must be restored within 24 hours.

3. During the period that any known breach exists, administrative controls will be in place to address the breach commensurate with the size, expected duration, and location of the breach. Administrative controls and compensatory measures, in some cases, extend beyond the TS pressurization requirement. For example, there may be different sets of actions to implement for security and fire protection measures, based on the size and location of the boundary breach. The need for administrative controls relative to control room boundary breaches is already established within existing site programs.
4. The one-time extension of the completion time for CONDITION B of TS 3.7.10 will not affect CPSES adherence to the use of any of the existing programs for these administrative controls and compensatory measures. It may be required that CPSES be in the LCO of TS 3.7.10 for one extended duration, or it may be that multiple entries and

exits from the LCO of TS 3.7.10 are required to implement the proposed modification. In either case, the amount of time that CPSES will be in the LCO for TS 3.7.10 exceeds the current time allowed (i.e., 24 hours).

5. This proposed one-time allowance in TS 3.7.10 would exist only for the purpose of supporting the planned turbine generator protection system digital modification. This modification will create a breach between the control room and the cable spreading room for the implementing unit, and the breach locations and magnitude are known prior to entering the LCO for TS 3.7.10.
6. The proposed one-time temporary changes to TS 3.7.10 will not alter the requirements of the CREFS or its function during accident conditions. The administrative controls and compensatory actions ensure that the CREFS will perform its safety function.
7. The proposed one-time temporary change to the TS 3.7.10 will not result in plant operation in a configuration outside the design basis for an unacceptable period of time without compensatory actions and administrative controls. Therefore, the proposed changes do not involve a reduction in a margin of safety.
8. The proposed one-time temporary change to TS 3.7.10 will ensure that the requirements contained in 10 CFR Part 50, Appendix A, GDC 19 are maintained based on the performed analyses for toxic gas and smoke and radiological impacts.
9. The proposed one-time change, "14-days completion time," for ACTION B to TS 3.7.10 LCO represents a total of 14-days (per unit) completion time to install turbine generator protection system digital modification during an outage. It is intended that the amendments will allow the option of 1) opening the control room boundary and leaving it open for 14 days, or 2) opening and closing the control room boundary entries and exits into the LCO multiple times during a modification but not exceeding a total time in the LCO of 14 days for each outage. In either case, the total time from first opening until the final closing is planned within 14 days for each modification. During modification activities there may be times when the control room boundary is not required to be opened; in this case the control room boundary will be sealed, if the opportunity exists to do so efficiently. The control room boundary will be left open for the duration of the turbine generator protection system digital modification (for each unit's outage), if the licensee determines that the opportunity to seal the control room boundary is not clearly advantageous.
10. The description for CONDITION A was previously revised by License Amendment 108 to allow the operating unit to continue operating after 7 days with an inoperable control room boundary. CONDITION A remains valid and will be consistent with the change to CONDITIONS B and E proposed by this request. The description for CONDITION E is being revised to allow movement of irradiated fuel assemblies during implementation of the turbine generator protection system digital modification. No changes to the CPSES final safety analysis report (FSAR) are anticipated at this time as a result of the license amendment request.

The NRC staff has reviewed the licensee's request for a one-time temporary TS change as discussed above. The NRC staff does not agree with the licensee's interpretations identified in Item 2 concerning the operability of the control room boundary. The NRC staff's position on this item is outlined in Regulatory Guide 1.196, Section C, Regulatory Position 2.7.1, under "Periodic Evaluations and Maintenance," and Regulatory Position 2.7.2, "Configuration Control and Training." However, the proposed one-time temporary TS change is found acceptable based on the following assessment.

The NRC staff reviewed the licensee's rationale for the proposed TS change. The proposed change to TS 3.7.10 is a, one-time, temporary change limited to refueling outages 2RF09 for Unit 2 and 1RF11 for Unit 1. The licensee has established administrative controls and performed technical evaluations concerning the impact of toxic gas and smoke, and radiological during the breaches in the control room while the installations of turbine generator protection system digital modification is in progress. The licensee's evaluations demonstrate that the requirements of GDC 19 of Appendix A to 10 CFR Part 50 are met in support of the proposed change.

In order to maintain defense-in-depth and to ensure a commensurate degree of protection to the operators during known breaches to the common control room envelope pressure boundary, the licensee's administrative measures, as described above, are considered adequate to protect the control room operators during accident conditions. The administrative measures called for in the proposed one-time temporary TS change are those that are already in place for the permanent TS 3.7.10, ACTION B with completion time of 24 hours. These controls are consistent with the controls that were approved by NRC staff for the adoption of the TSTF Traveler 287, Revision 5, regarding the operations with inoperable control room boundary.

The NRC staff finds that the proposed changes, which revise the completion time for ACTION B, will include the previously approved description for CONDITION A and revised description of CONDITION E, and are acceptable; because (1) both trains of the CREFS remain operational, (2) the known control room boundary breaches will be resealed in accordance with the implemented administrative controls prior to initiation of the CREFS, and (3) in the event of an accident in the operating unit (while the non-operating unit is in refueling outage to install the turbine generator protection system digital modification), one of the two trains of the CREFS will be aligned to provide protection to the control room operators, meeting the requirements of the GDC 19 of Appendix A to 10 CFR Part 50.

3.1 Human Factors Engineering Evaluation

Using the review guidance and acceptance criteria in NUREG-0800, Chapter 18.0, "Human Factors Engineering" (Revision 1, 2004), the NRC staff evaluated the information submitted by the licensee in its submittal dated March 15, 2005, and its July 10, 2003, previous amendment

CPSES indicated that it has a procedure, MSG-1018, for resealing the floor penetrations in the cable spreading room. The MSG-1018 procedure addresses the installation and re-work of penetration seals, which will be used in the process of pulling cables in the control room. The licensee stated that it also has technical evaluations (TE), EVAL-1999-002540-01-00, Evaluation 93-001752, and EVAL-2004-001328-01 specifying that a minimum of 4 inches of seal material in the penetrations will meet the pressure requirements of the control room. In addition, CPSES has TE 92-000974 and TE 93-001881 that establish cure times necessary to satisfactorily maintain the pressure boundary. The dedicated individual, who is in the control room at all times when the pressure boundary is inoperable, is seal certified. In addition, the seal machine will be in place before breaching the pressure boundary. As a backup to the machine, the licensee indicated that there will be a sufficient quantity of Sim Kits (hand pump up tubes of seal material) staged for use in the cable spreading room below the control room. The material that will be used to seal the penetrations is Dow Corning Corporation 3-6548 silicon RTV foam. The foam is self-adhering and sets up (snaps) in 30 seconds to 2 minutes, depending on temperature and humidity. If there are no cables in the penetrations, the breaches will be covered with visqueen material and taped down from the top side to seal off the breaches. Again this material will also be staged prior to any breaches.

Based on history and experience with seals of this size and nature, the licensee is confident that one qualified person utilizing the seal machine could install the seals within the 3-hour time, including cure time. The 20, 8-inch x 9-inch, blockouts are in a row, two per cabinet. The licensee states that it will take approximately 5 minutes to set the foam in each blockout, with a 15-minute cure time. As soon as one seal is installed, the next penetration will be sealed, etc. After all 20 seals are initially installed, the seals will be inspected and could require additional foam. The licensee states that this would take no more than 2 minutes per blockout. All 20 seals should be installed within 3 hours (20 seals times 5 minutes plus 20 seals times 2 minutes equals 140 minutes) and the control room boundary would be in place 15 minutes after the last seal was installed based on cure time. In the event the seal machine malfunctioned, the licensee states that two qualified people could manually install the seals utilizing Sim Kits in the time allotted including cure time.

Based on the information provided in its letter dated March 15, 2005, the licensee satisfactorily addressed the basis for allowing 3 hours to seal all the open penetrations.

The NRC staff evaluated the licensee's submittal that provided information regarding the worst-case credible accident and all 20 blockouts open with cables running through each including how much time it would take the dedicated individual to seal all the openings before the control room operators would experience adverse effects or the control room became uninhabitable. In its March 15, 2005, submittal, the licensee indicated that if the uncontrolled access area ventilation supply and exhaust fans are secured at the onset of a credible accident, then there is no path to the control room other than the intake of design pressurization flow which will be filtered and re-circulated as designed. In other words, the fact that the boundary is inoperable (for this specifically evaluated location) does not affect the conduct of the operators. The administrative action to seal the boundary is strictly to restore the control room envelope to operable status and provide a defense-in-depth compensatory measure. The only compensatory measures which ensure that a breach in the control room, which provides direct communication to the cable spreading room, will not adversely affect control room habitability are the actions needed to secure the uncontrolled access area ventilation supply and exhaust fans upon the onset of an accident or if there is a threat of smoke or toxic gas from sources

exterior to the plant. The licensee further indicated, in its March 15, 2005, submittal, that stopping the fans will likely not be required to prevent the control room from being uninhabitable, but was the only identified in-leakage vulnerability in the licensee's analysis.

Based on the evaluation of the information provided in its submittal dated March 15, 2005, the NRC staff concludes that the licensee has satisfactorily addressed the adequacy of time it would take the dedicated individual to seal all the openings before the control room operators experience adverse effects or the control room becomes uninhabitable.

The NRC staff also reviewed the licensee's submittal for the potential for interference with the operation of the operating unit while in the process of sealing the blockouts, because CPSES has a common control room design and one unit will be operating while the other unit is in an outage during the implementation of the turbine generator protection system digital modification. The NRC staff noted that, as shown by CPSES FSAR Figure 1.2-33, Primary Plant Electrical Control Building Floor Plan EI 830'-0", the distance is greater than 100 feet between the cabinets for the blockouts on one unit and the operating area of the other unit in the control room. The process of sealing the blockouts on one unit would not interfere with the operation of the operating unit. Therefore, the NRC staff concurs with the licensee's assessment that the process of sealing the blockouts on one unit would not interfere with the operation of the operating unit.

The NRC staff reviewed the licensee's March 15, 2005, submittal, which includes using a dedicated operator and associated measures to seal the cable penetration blockouts that will be opened during the installation of the turbine generator protection system digital modification. Based on a comparison of the NRC staff's guidance and review criteria for reviewing changes to human actions contained in NUREG-0800, Chapter 18.0, "Human Factors Engineering," to the information provided by the licensee in its analysis of crediting manual actions, the NRC staff accepts the licensee's proposed crediting of manual actions. The NRC staff finds that the licensee satisfactorily addressed the NRC staff's human factors engineering review criteria, as identified in Section 2.0 (Regulatory Evaluation), and there is reasonable assurance to conclude that the manual actions proposed by the licensee can be successfully performed without adverse safety consequence to the plant, plant personnel, or the public.

3.2 Toxic Gas and Smoke Assessment

In the submittal dated March 15, 2005, the licensee evaluated toxic gas and smoke concerns as stated below, in support of the above one-time temporary changes to TS 3.7.10 in order to implement the turbine generator protection system digital modification:

1. The threat of smoke or toxic gas from offsite sources is not credible based on location and layout of the facility. The chemicals and combustibles are controlled so that the threat of smoke or toxic gas from on-site sources is negligible.
2. In the event of a smoke or toxic gas threat to the control room, the control room ventilation would switch to the isolation mode (which does not pressurize the control room) and the control room heating, ventilation, and cooling system would recirculate the air within the control room boundary.

3. The control room boundary breach will not be in the exterior walls of the control room but will be in the floor of the control room and the ceiling of the cable spreading room. Thus, any intrusion of toxic gas or smoke into the control room due to this modification would come from the cable spreading room. As a part of the existing site programs, the provision of a continuous fire watch is to be implemented in the cable spreading room when the control room boundary is breached.
4. As stated above, the licensee intends to provide the measures consisting of (1) administrative controls to provide a designated, readily available onsite seal certified individual(s), who can be readily contacted by the control room (e.g., audible range or via radio, plant gaitronics system) and individual(s) will have a method (as described in CPSES Procedure MSG-1018, that addresses the installation and re-work of penetration seals, which will be used in the process of pulling cables in the control room) to rapidly close the openings when needed for control room isolation and (2) provisions for operator action to secure the uncontrolled access area ventilation supply and exhaust fans at the onset of an accident.

The NRC staff reviewed the licensee's rationale, above, concerning the impact of toxic gas and smoke for the proposed change to TS 3.7.10 to implement the turbine generator protection system digital modifications. The licensee established the administrative controls and performed a technical evaluation concerning toxic gas and smoke, in order to meet the requirements of GDC 19 of Appendix A to 10 CFR Part 50 and conform with the appropriate guidance such as RG 1.189, April 2001, in support of the proposed change.

The NRC staff finds that the proposed one-time temporary change to TS 3.7.10 is acceptable in the event of accident conditions involving toxic gas or smoke because: (1) both trains of the CREFS are operational; (2) the known control room boundary breaches will be resealed in accordance with the implemented administrative controls prior to initiation of the CREFS by a dedicated individual(s) with means and materials to close the openings on short notice and the licensee's Commitment No. 27321 that will be implemented prior to entering "Condition B of TS 3.7.10"; (3) a fire watch with appropriate training, such as defined by RG 1.189, in the cable spreading room; and (4) the requirements of GDC 19 of Appendix A to 10 CFR Part 50 continue to be met, with regard to protection of control room operators from smoke or toxic gas, due to the overall low potential of the threat. Therefore, the NRC staff concludes that a one-time extension of control room boundary breach closure completion time limitation is acceptable for each unit to permit the installation of the turbine generator protection system digital modification.

3.3 Radiological Consequence Analysis

The NRC staff reviewed the licensee's analyses and its proposed compensatory temporary measures including the Commitment No. 27321 that will be implemented prior to entering "Condition B of TS 3.7.10," and determined that there will continue to be emergency safety feature filtration through the intact CREFS to remove radioactive contaminants from the control room habitability envelope atmosphere and from the outside makeup air in the event of a design basis accident (DBA). The previously approved analyses of the dose consequences of DBAs continue to be applicable for conditions allowed by the proposed changes to TS 3.7.10. As noted in the March 15, 2005, letter, the licensee states that there are administrative controls in place including Commitment No. 27321 that will be implemented prior to entering

“Condition B of TS 3.7.10” to assure that GDC-19 continues to be met in accident conditions for the purpose of implementing the turbine generator protection system digital modification. Emergency procedures and other administrative controls provide for the use of potassium iodide and self-contained breathing apparatus to reduce the thyroid dose to the control room operators in the event of a DBA during the time the control room boundary is inoperable for installation of the turbine generator protection system digital modification. The licensee also provides for other measures to reduce radiological dose such as monitoring, protective clothing to guard against beta skin dose, special dosimetry, and evacuation of affected areas. Therefore, the NRC staff concludes that there is reasonable assurance that GDC 19 will be met for the proposed license amendment, allowing a one-time extension of the LCO completion time for TS 3.7.10 from 24 hours to 14 days for implementation of the turbine generator protection system digital modification. The NRC staff finds that there is a reasonable assurance that the CPSES control room will be habitable, with the administrative controls and compensatory measures in place, in the event of a DBA that could challenge the ability of the control room operators to carry out their functions.

3.4 Integrated Decisionmaking

The NRC staff has determined that this one-time completion time extension from 24 hours to 14 days for implementation of the turbine generator protection system digital modification is a viable and practical approach. Additionally, administrative controls and compensatory measures are provided to address the potential accident conditions during the intentionally created control room boundary breaches during the Unit 1 fall 2005 refueling outage (1RF11) and Unit 2 fall 2006 refueling outage (2RF09) to install the turbine generator protection system digital modification. This revision to TS 3.7.10 is designed to limit the intrusion of unfiltered in-leakage into the control room boundary by implementing administrative controls and the licensee’s Commitment No. 27321 which enhances pressurization of the space by sealing openings that can potentially leak unfiltered air into the control room boundary. The NRC staff finds this one-time temporary change to the TS 3.7.10 acceptable by balancing this one-time extension against the plant improvements provided by the CPSES turbine generator protection system digital modification.

Based on the above review, the NRC staff concludes that the proposed revisions to the TS are consistent with the requirements of GDC 19 and the intent of RG 1.189. In addition, the proposed revisions are similar to the guidance of TSTF-287 to the extent that the licensee’s establishing the administrative controls as identified in TSTF-287 and performing a technical evaluation concerning the toxic gas and smoke, and radiological impacts in order to comply with the requirements of GDC 19. The licensee has also satisfactorily addressed the NRC staff’s human factors engineering review criteria, as identified in Section 3.1 above, and there is reasonable assurance that the manual actions proposed by the licensee can be successfully performed without adverse safety consequence to the plant, plant personnel, or the public.

4.0 REGULATORY COMMITMENT

The licensee's submittal contained the following new commitment to be implemented prior to entering Condition B of TS 3.7.10 for the purpose of implementing the turbine generator protection system digital modification.

Number	Commitment
27321	In order to ensure that operator protection objectives will continue to be met during the 1RF11 and 2RF09 planned boundary openings, TXU Power intends to implement the following measures: (1) administrative controls to provide a designated, readily available individual(s) who can be readily contacted by the Control Room (e.g., audible range or via radio, plant gaitronics system). The individual(s) will have a method to rapidly close the opening when needed for Control Room isolation; and (2) provisions for operator action to secure the Uncontrolled Access Area Ventilation supply and exhaust fans at the onset of an accident.

In accordance with the licensee's March 15, 2005, submittal (Attachment 1, page 8 of 19), the designated individuals will be seal certified.

The NRC staff finds that (1) reasonable controls for the implementation and (2) subsequent evaluation of proposed changes pertaining to the above regulatory commitment are provided by the licensee's administrative processes, including its commitment management program. (See Regulatory Issue Summary 2000-017, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff"). The above regulatory commitment does not warrant the creation of regulatory requirements.

5.0 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.

6.0 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 May 24, 2005 (70 FR 29801). 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.

7.0 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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Comanche Peak Steam Electric Station

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