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Ref: 10CFR50.90

CPSES-200500343
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File # 00236

March 15, 2005

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
LICENSE AMENDMENT REQUEST LAR 04-05, SUPPLEMENT 1,
CHANGE TO TECHNICAL SPECIFICATION (TS) 3.7.10,
CONTROL ROOM EMERGENCY FILTRATION/PRESSURIZATION
SYSTEM (CREFS) (TAC NOS. MC3956 and MC3957)

REF: 1) TXU Power Letter, logged TXX-04102, from Mike Blevins to U. S. Nuclear Regulatory Commission dated August 5, 2004.

Gentlemen:

Pursuant to 10CFR50.90, TXU Generation Company LP (TXU Power) hereby requests an amendment to the CPSES Unit 1 Operating License (NPF-87) and CPSES Unit 2 Operating License (NPF-89) by incorporating the attached change into the CPSES Unit 1 and 2 Technical Specifications. This change request applies equally to both units.

In Reference 1 TXU Power submitted proposed changes to Technical Specification 3.7.10 entitled "Control Room Emergency Filtration / Pressurization System (CREFS)" to add conditions for an inoperable Control Room Boundary. Based on conversations with the NRC Staff, TXU Power is updating the licensing amendment request to request a one-time change to Technical Specification 3.7.10. This Supplement 1 replaces Reference 1.

The proposed one time change for each unit will revise TS 3.7.10 entitled "Control Room Emergency Filtration /Pressurization System (CREFS)" to extend the completion time for ACTION B, "Two CREFS Trains inoperable due to inoperable Control Room boundary" from 24 hours to 14 days for implementation of the Turbine Protection System Digital Modification currently scheduled during the eleventh refueling outage for Unit 1 (1RF11) and the ninth refueling outage for Unit 2 (2RF09) that requires an opening between the Cable Spread Room and the Control Room. The description of CONDITION E will also be revised for implementation of this modification.

A001

Attachment 1 provides a detailed description of the proposed change, a safety analysis of the proposed change, TXU Power's determination that the proposed change does not involve a significant hazard consideration, a regulatory analysis of the proposed change and an environmental evaluation. Attachment 2 provides the affected Technical Specification pages marked-up to reflect the proposed change. Attachment 3 provides a proposed change to the Technical Specification Bases for information only. Attachment 4 provides the retyped Technical Specification pages which incorporate the requested change. Attachment 5 provides the retyped Technical Specification Bases pages which incorporate the proposed change. These changes will be processed per CPSES site procedures.

TXU Power requests approval of the proposed license amendment by August 1, 2005, to be implemented within 120 days of the issuance of the amendment. The approval date was selected to support the implementation of the Turbine Generator Protection System Digital Modification during the eleventh refueling outage for Unit 1 (1RF11) currently scheduled to start in October, 2005. This modification will require opening the Control Room pressure boundary in excess of the current Completion Time of 24 hours. Other openings of the Control Room boundary to support modifications will be required during the ninth refueling outage for Unit 2 (2RF09 - Fall, 2006).

In accordance with 10CFR50.91(b), TXU Power is providing the State of Texas with a copy of this proposed amendment.

This communication contains the following new commitment which will be completed as noted:

Number	Commitment	Due Date / Event
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.	Prior to Entering Condition B of T.S. 3.7.10 for the purpose of implementing the Turbine Generator Protection System Digital Modification

Should you have any questions, please contact Mr. Carl Corbin at (254) 897-0121 or e-mail at ccorbin1@txu.com.

I state under penalty of perjury that the foregoing is true and correct.

Executed on March 15, 2005.

Sincerely,

TXU Generation Company LP

By: TXU Generation Management Company LLC
Its General Partner

Mike Blevins

By: 
Fred W. Madden
Director, Regulatory Affairs

CBC

Attachments
1. Description and Assessment
2. Markup of Technical Specification Pages
3. Markup of Technical Specification Bases Pages (for information only)
4. Retyped Technical Specification Pages
5. Retyped Technical Specification Bases Pages (for information only)

c - B. S. Mallett, Region IV
W. D. Johnson, Region IV
D. H. Jaffe, NRR
Resident Inspectors, CPSES

Ms. Alice Rogers
Bureau of Radiation Control
Texas Department of Public Health
1100 West 49th Street
Austin, Texas 78756-3189

DESCRIPTION AND ASSESSMENT

1.0 DESCRIPTION

By this letter, TXU Generation Company LP (TXU Power) requests an amendment to the CPSES Unit 1 Operating License (NPF-87) and CPSES Unit 2 Operating License (NPF-89) by incorporating the attached change into the CPSES Unit 1 and 2 Technical Specifications (TS). Proposed License Amendment Request (LAR) 04-05 is a request to revise Technical Specification (TS) 3.7.10, "Control Room Emergency Filtration/Pressurization System (CREFS)" for Comanche Peak Steam Electric Station (CPSES) Units 1 and 2.

CPSES has a common Control Room design and the specifications for the CPSES CREFS allow the Control Room boundary to be inoperable for up to 24 hours. In CPSES License Amendment Number 108 (Reference 8.1), the NRC approved a one-time alternative Completion Time for LCO 3.7.10, Condition B "Two CREFS Trains inoperable due to inoperable Control Room boundary," which extended the time the boundary could be inoperable to 14 days; however, this alternative 14 day Completion Time was conditional based on the information provided in TXU Power's application and was specifically approved only for the Turbine Generator Control Digital Modification that was scheduled during the Unit 2 Refueling Outage 2RF07 (Fall, 2003) and Unit 1 Refueling Outage 1RF10 (Spring, 2004). The Completion Time alternative allowed by the Amendment 108 change is no longer effective.

CPSES now has a need to implement additional upgrade modifications that will require opening the Control Room boundary for > 24 hours. Therefore, TXU Power proposes herein a one time extension of the required completion time associated with an inoperable Control Room Boundary change to LCO 3.7.10 to accommodate these modifications and required boundary openings. The current Completion Time of Required Action B.1 "Restore control room boundary to OPERABLE status" is 24 hours. TXU Power requests that LCO 3.7.10 be revised to add a new, plant specific Condition for an inoperable Control Room boundary as follows: Condition B "Two CREFS trains inoperable due to inoperable Control Room boundary involving an opening (breach) to the Cable Spreading Room." The associated Required Action B.1 "Restore control room boundary to OPERABLE status" has a Completion Time of 14 days. This proposed Condition is specific to an opening (breach) between the CPSES Control Room and the adjacent Cable Spreading Room. A technical analysis has been performed for this breach pathway (see Section 4.0) concerning toxic gas and smoke, and radiological impacts. The technical analysis has verified that this breach will not significantly affect existing accident analyses or control room habitability; the requirements of General Design Criterion (GDC) 19 of Appendix A to 10 CFR Part 50 will continue to be met.

In the upcoming Unit 1 Fall 2005 refueling outage (1RF11) and Unit 2 Fall 2006 refueling outage (2RF09) there is a planned Turbine Generator Protection System Digital Modification that will require floor penetrations in the Control Room boundary be opened to accommodate installation. The planned opening of the Control Room boundary

during 1RF11 and 2RF09 will span a period of several days and will require that twenty 8" X 9" cable penetration blockouts be opened between the Control Room and the Cable Spreading Room. In addition, 4" conduits may also be opened to accommodate cable pulls. In some cases, multiple penetrations will be open simultaneously. The analysis provided in Section 4.0 applies to these planned modifications and openings of the Control Room pressure boundary and supports (for these activities) the use of the proposed new TS 3.7.10 Condition B and 14 day Completion Time. In accordance with the revised TS 3.7.10 Bases proposed with this license amendment request, TXU Power has considered conservative, defense-in-depth administrative controls and/or compensatory measures for these Control Room boundary openings. 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. Under the administrative controls as noted above, conservative estimate of the time to seal all openings is three hours with cables running through all twenty 8' X 9" cable penetration blockouts. Therefore, CPSES requests a one time extension of the required completion time associated with an inoperable Control Room Boundary. The extension requested is from 24 hours to 14 days.

The COMPLETION TIME of CONDITION B.1 (Restore Control Room pressure boundary to OPERABLE status) was previously extended from 24 hours to 14 days. This previous change to CONDITION B was approved in License Amendment 108 to support the implementation of the Turbine Control Digital Modification 2RF07 and 1RF10.

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 revised to allow movement of irradiated fuel assemblies during implementation of the Turbine Generator Protection System Digital Modification.

An approval date of August 1, 2005 will accommodate this request. This change will also be needed for the Unit 2 refueling outage (2RF09) scheduled for Fall 2006.

No changes to the CPSES Final Safety Analysis Report are anticipated at this time as a result of this License Amendment Request.

2.0 PROPOSED CHANGE

The proposed change revises the Completion Time for ACTION B and the description for CONDITION E.

The 14 day COMPLETION TIME of T.S. 3.7.10, CONDITION B is changed from "Turbine Control Digital Modification to be completed during 2RF07 and 1RF10" to "Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09." This allows for two Control Room ventilation trains to be inoperable for 14 days due to an inoperable Control Room boundary during the installation of the Turbine Generator Protection System Digital Modification in 1RF11 and 2RF09.

The description of CONDITION E is changed from "Turbine Control Digital Modification to be completed during 2RF07 and 1RF10" to "Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09." This allows movement of irradiated fuel assemblies during implementation of the Turbine Generator Protection System Digital Modification.

In summary, a TS 3.7.10 change is 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 in 1RF11 and 2RF09 for a time not to exceed 14 days per outage. 14 days is requested because the current schedule shows that the Control Room pressure boundary will be declared inoperable approximately 11 days. Fourteen (14) days allows some margin that may be required due to unforeseen implementation schedule changes. The descriptions added in License Amendment 108 to CONDITIONS B and E are updated to reflect the new one time extension.

For Information only, this LAR includes proposed associated changes to the Technical Specification Bases. The Bases are revised to reflect the above TS changes.

3.0 BACKGROUND

Ongoing Control Room Habitability/Boundary Integrity Issues

With respect to related and ongoing Control Room habitability and boundary integrity issues for CPSES, TXU Power notes the following information: (1) Integrated Tracer Gas and Component tests conducted in 2001 determined that unfiltered inleakage into the CPSES Control Room Envelope was 0 scfm (see Reference 8.2 for more information); (2) CPSES is currently continuing periodic evaluations (i.e., Control Room habitability assessments and tests) consistent with guidance provided in Regulatory Guide 1.196, Regulatory Position 2.7.1"Periodic Evaluations and Maintenance" and Regulatory Guide 1.197, Regulatory Position 1.5 "Periodicity." Also, in response to Generic Letter 2003-01 (Reference 8.3), TXU Power has provided the following response, in part:

> "TXU Energy believes that the positive pressure surveillance does verify the operability of the CREFS train and provides an indication of Control Room boundary integrity, although not confirmation. In light of the ASTM E741 testing results reported in Generic Letter 2003-01, inleakage testing appears to be the best method to confirm boundary integrity. Therefore, TXU Energy plans to submit a Technical Specification change to include periodic verification of Control Room inleakage. This change will take into consideration the CPSES Control Room envelope design, the current CPSES Technical Specifications, Standard Technical Specification Traveler TSTF-448, and the inleakage testing previously performed at CPSES. TXU Energy is aware that the NRC is currently reviewing TSTF-448 and has not yet approved it. It is anticipated that any issues that the NRC may have with TSTF-448 will be resolved in the near future. TXU Energy plans to submit the Technical Specification change to include periodic verification of Control Room inleakage by September 30, 2004, or within 90 days after TSTF-448 is available for use, whichever is later."

Notwithstanding the above, the current anticipated schedule/availability for an approved TSTF-448 does not support TXU Power's schedule as described in Section 1.0 for requesting a CPSES TS change by August 1, 2005. Accordingly, TXU Power submits this License Amendment Request 04-005 based on the existing CPSES philosophy, the need for installing an upgrade modification in the CPSES Common Control Room, and the information/evaluation provided herein. When TSTF-448 is approved and available for use, TXU Power intends to assess the TSTF-448 provisions against the reasons for requesting this amendment, and revise CPSES TS 3.7.10 accordingly as stated above.

CPSES Control Room Design/Boundary Integrity Discussion

The CPSES Control Room Emergency Filtration/Pressurization System (CREFS) design is zone isolation, with filtered recirculation air, and with a positive pressure. This design maximizes the iodine protection factors and minimizes the dose from iodine. The total unfiltered infiltration rate into the Control Room is conservatively assumed to be 12 scfm, including 10 scfm due to ingress/egress and 2 scfm leakage from the ductwork passing through the Control Room pressure boundary. Filtered inleakage through the closed dampers due to the pressure differential is also included. The damper leakage air will be filtered by the recirculation filtration units.

Because the Control Room door ingress/egress is to a stairwell which is equivalent to a two-door vestibule, backflow will not occur with the CPSES CREFS design and the 10 scfm is not applicable per Standard Review Plan (SRP) 6.4. The ductwork has all welded joints which were leak tested prior to operation. Therefore, the assumed unfiltered inleakage from adjacent areas is conservative with respect to the SRP review criteria.

The Control Room Habitability is maintained by limiting the inleakage of potentially contaminated air into the Control Room envelope. The potential leakage paths for the Control Room Envelope include the Control Room enclosure (e.g., walls, penetrations, floors, ceilings, joints, etc.), and other potential paths such as pressurized ductwork from other HVAC systems, pressurized air systems (e.g., instrument air) or isolated HVAC intakes.

The CPSES Technical Specification surveillances require that the Control Room Ventilation System be capable of maintaining positive pressure in the Control Room relative to adjacent areas. The Bases for this surveillance states that it verifies the capability of the CREFS to pressurize the Control Room envelope. The Bases further state that a positive pressure of 0.125 inches water gauge in the Control Room with respect to adjacent areas helps to minimize the unfiltered inleakage into the Control Room boundary. This function was designed to ensure the integrity of the Control Room enclosure by limiting the actual unfiltered inleakage rate of the potentially contaminated air to a value below that assumed in the safety analyses. If the Control Room is at a positive pressure with respect to all interior and exterior areas adjacent to the boundary, leakage through the boundary from the low pressure adjacent areas to the higher pressure Control Room side is minimized. While this 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 still an integral safety feature relied upon to meet General Design Criterion (GDC) 19 (Reference 4) requirements. The inability to pressurize the Control Room boundary puts the plant and its operators in a vulnerable condition which may result in excessive dose to the operators as well as the general public. It is noted that the three limitations of the pressurization test (described above) are under evaluation by CPSES, the NRC, and the industry through NEI and are not specifically addressed in this request for a one time extension to completion time of Condition B.
The philosophy at CPSES has been to declare the boundary inoperable at the time it becomes known that there is a hole in the boundary that exceeds a pre-determined limit. 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 at less than or equal to 800 cfm of makeup air is restored.

The note that modifies the LCO has been typically only used for the opening and closing of the Control Room doors for normal ingress and egress. So, for normal ingress and egress, the boundary is not considered to be inoperable. Furthermore, CPSES has

determined a limiting set of Control Room boundary openings that may exist and not render the Control Room pressure boundary inoperable. In other words, if a hole in the boundary is less than a specified size (square inches) then one train of the Control Room pressurization units is capable of pressurizing the envelope to 0.125 inches water gauge at 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.

During the period that any known breach exists, administrative controls are 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, security and fire protection may have their own set of actions to implement based on the size and location of the boundary breach. The need for administrative controls relative to Control Room boundary breaches are already established within existing site programs. This application for a one time extension of the completion time for CONDITION B will not affect the CPSES adherence to the use of any of the existing programs for these administrative controls/compensatory measures. This license amendment request is to accommodate the implementation schedule of the planned one time modification described in Section 1.0. In other words, the boundary will be knowingly breached under administrative controls. 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 are required to implement the proposed modification. In either case, the amount of time that CPSES will be in the LCO for T.S. 3.7.10 exceeds the current time allowed (i.e., 24 hours). The proposed 14 day Completion Time for Required Action B.1 represents a total of 14 days based on the time required to install the modification during an outage. It is intended to 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 multiple times during a modification but not exceeding a total time in the LCO of 14 days. 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 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 modification if the opportunity to seal the boundary is not clearly advantageous.

For the planned 1RF11 and 2RF09 modifications, the basis of the three hours to seal all openings is as follows: The procedure used to reseal the penetrations in the Control Room floor is MSG-1018. Procedure MSG-1018 addresses the installation and re-work of penetration seals, which will be used in the process of pulling cables in the Control Room. CPSES also has Technical Evaluations (TE), EVAL-1999-002540-01-00, Evaluation 93-001752 and EVAL-2004-001328-01 specifying that a minimum of four

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 required to satisfactorily maintain the pressure boundary. The designated individual(s), who is readily available onsite, is seal certified. In addition, the seal machine will be in place and ready before breaching the boundary. As a backup to the machine, a sufficient quantity of Symkits (hand pump up tubes of seal material) will be staged for use in the Cable Spreading Room below the Control Room. The material being used to seal the penetrations is Dow Corning Corp. 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. Per TE 92 -000974, in fifteen minutes the material has cured enough to provide pressure boundary characteristics. If there are no cables in the penetrations they will be covered with visquen material and taped down from the top side to seal off the breach. Again this material will also be staged prior to any breaches.

Based on history and experience with seals of this size and nature, TXU Power is confident that one qualified person utilizing the seal machine could install the seals within three hours, including cure time. The twenty 8 inch by 9 inch blockouts are in a row, 2 per cabinet. It will take approximately five 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 seals are initially installed, the seals will be inspected and could require additional foam. This would take no more than two minutes per blockout. All twenty seals should be installed within three 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, two qualified people could manually install the seals utilizing Symkits in the time allotted including cure time. Based on the CPSES Common Control Room design, there is over 100 feet of separation between the cabinets for the blockouts on the outage unit and the operating area of the other unit (at power) in the Control Room. The process of sealing the blockouts would not interfere with the operation of the operating unit.

4.0 TECHNICAL ANALYSIS

The proposed change will modify Technical Specifications only during 1RF11 and 2RF09 to accommodate the implementation of the Turbine Generator Protection System Digital Modification. Specifically, the COMPLETION TIME for CONDITION B is extended from 24 hours to 14 days. The acceptability of this temporary change is addressed below in this section. It is important to note that the discussions below are applicable only to breaches in the Control Room boundary that are made to accommodate the Turbine Generator Protection System Control Modification. This modification will create a breach between the Control Room and the Cable Spreading Room for the implementing unit. Therefore the breach locations and magnitude are known prior to entering the LCO for T.S. 3.7.10. The Control Room habitability (GDC 19) aspects of

the described change are discussed in the following paragraphs. Toxic gas and smoke are addressed first followed by radiological impacts.

Toxic Gas and Smoke

The location and layout of the Comanche Peak Steam Electric Station (CPSES) is such that the threat of smoke or toxic gas from offsite sources is not credible. Chemicals and combustibles are controlled such that the threat of smoke and toxic gas from onsite sources is negligible. However, if the need for toxic gas or smoke protection arises, the CPSES Control Room ventilation line-up is the isolation mode which does not pressurize the boundary. In the isolation mode, the Control Room Heating, Ventilation and Air-Conditioning (HVAC) system is used to recirculate the air within the envelope. In this mode, the Control Room is not pressurized and the pressure boundary is not critical. For the particular modification the boundary breach will be in the floor of the Control Room/ceiling of the Cable Spreading Room. Given that this boundary breach pathway is not on the Control Room exterior that is exposed to outside atmosphere, there are only two ways for smoke or toxic gas to be drawn into the Control Room ventilation and circulated throughout the Control Room volume in the isolation mode: 1) if the location of a toxic gas or smoke source is in the Cable Spreading Room; or 2) if the toxic gas or smoke is discharged into the Cable Spreading Room via the Uncontrolled Access Area Ventilation (the intakes are exterior to the plant). The Cable Spreading Room is in the same fire safe shutdown area as the main Control Room; so, a fire in the Cable Spreading Room is no different than a fire in the Control Room. In this case, when the boundary between the Cable Spreading Room and Control Room is breached, fire protection requirements will cause a continuous fire watch to be implemented in the Cable Spreading Room. If the source is outside the Cable Spreading Room and it becomes necessary, the Uncontrolled Access Area Ventilation supply and exhaust could be secured to eliminate this potential source of smoke or toxic gas. However, as previously stated, onsite sources of chemicals and combustibles are administratively controlled and offsite sources are not credible, so a breach in this location will not significantly challenge Control Room habitability as it relates to smoke or toxic gas. It is also noted that if for some reason the Control Room becomes uninhabitable due to toxic gas or smoke, the operators would relocate to the remote shutdown panel in the Safeguards Building. Therefore, the time interval over which the boundary integrity in this particular location is lost is not relevant and the one time extension of the Completion Time from 24 hours to 14 days is acceptable from a smoke and toxic gas perspective. However, in the event that a toxic gas or smoke threat becomes apparent, it is prudent to take measures to close the boundary breach with readily available methods.

Radiological Impacts

The primary safety function of the Control Room Emergency Filtration/Pressurization System (CREFS) at CPSES is to limit the amount of radioactive contaminants that

infiltrate the Control Room prior to passing through filter banks. The largest source of potential radioactive contaminants is nuclear fuel/reactor core damage followed by a subsequent release to the atmosphere. The other significant source of potential radioactive contaminants is the failure of a radioactive waste system followed by a subsequent release to the atmosphere. At CPSES, Control Room habitability is evaluated for the following Design Basis events.

Large Break Loss of Coolant Accident
Main Steam Line Break Accident
Steam Generator Tube Rupture Accident
Small Break Loss of Coolant Accident (3" CVCS Line Break Outside Containment)
Rod Ejection Accident
RCP Locked Rotor Accident
Fuel Handling Accident
Gas Decay Tank Rupture Accident
Radioactive Liquid Waste Tank Rupture Accident

Administrative controls will be in place to restore the Control Room boundary to design status rapidly following the onset of any accident. Even though the dose analyses assume a large, instantaneous, ground level release of radioactivity, it is acceptable to account for 1) likelihood of the event, 2) expected delays in the release 3) realistic quantities of radioactivity when assessing the time requirements associated with the restoration of Control Room boundary operability.

The probability of any of the above Design Basis Accidents (DBAs) occurring during the time period when the Control Room boundary is degraded is very low. More specific justification for each individual accident is provided in the following paragraphs.

Large Break Loss of Coolant, Rod Ejection and RCP Locked Rotor Accidents

These accidents are applicable only to the operating unit(s).

Although the design basis Large Break Loss of Coolant Accident (LOCA) is typically the maximum credible accident, the DBAs were not intended to be actual event sequences, but rather, were intended to be surrogates to enable deterministic evaluation of the response of a facility's engineered safety features. These accident analyses were intentionally conservative in order to compensate for known uncertainties in accident progression, fission product transport, and atmospheric dispersion. The potential radioactive release paths for these accidents occur from leakage from the containment atmosphere and exhaust from buildings containing radioactive systems. In addition to these release paths, the Rod Ejection and Locked Rotor events result in a release path through the main steam system (Atmospheric Relief Valves (ARVs)/Main Steam Supply

Valves (MSSVs) and Condenser). The releases through the ARVs/MSSVs are addressed below for the Main Steam Line Break and Steam Generator Tube events. The release path through the Condenser is via the condenser offgas system which discharges to the atmosphere through the Primary Plant Ventilation Stack as addressed below in this section.

Based on Regulatory Guide 1.183, the alternate source term based on the post-Three Mile Island (TMI) accident, only the gap activity is assumed to be released in the first 30 minutes (i.e. 0.5 hours). Any radioactivity that is released in containment will be significantly held up and only a small fraction of what is assumed in the radiological analyses will actually be released to the atmosphere. The latest containment leak rate measurement results are tabulated below against the CPSES limits.

Unit	As left Value (sccm)	Limit (sccm)*
1	7532.70	151,000
2	7764.54	151,000

*The limit of 151,000 sccm is equivalent to 0.6 L_A and the TS limit is 1.0 L_A.

The Control Room pressure boundary is not adjacent to any rooms of the Auxiliary or Safeguards buildings at CPSES which contain containment penetrations or engineered safety feature (ESF) systems which recirculate reactor coolant before, during or after an accident. The Control Room HVAC System, which includes both the CREFS and the Control Room Air Conditioning System (CRACS), is located totally within the Control Room Envelope (i.e., pressure boundary). The Electrical and Control (E&C) Building and Control Room fresh air intakes are west of the primary plant buildings (Containment Buildings, Safeguards Buildings, Auxiliary Building, and Fuel Building). The distance from the Containment to the Control Room air intake is 94 feet, and the air intake is located 56 feet above ground. The distance from the primary plant vent stack (i.e., the ESF leakage release point) to the closest air intake is 138 feet.

The Cable Spreading Rooms, located below the Control Room, are served by the Uncontrolled Access Area Ventilation System described in CPSES Final Safety Analysis Report (FSAR) Section 9.4C.4. The Uncontrolled Access Area Ventilation System supply and exhaust are located in the Office and Service Area Equipment Room (X-151 at Elevation 854' in the E&C Building adjacent to the CREFS and CRACS equipment room). The fresh air intake is located on the West side of the E&C Building.

Any radioactivity that is released through leakage in the Emergency Core Cooling System and Containment Spray paths outside containment will be carried away through the Primary Plant Ventilation where it is filtered at a minimum efficiency of 95% and then discharged into the atmosphere approximately 100 feet East of and 140 feet above

the Control Room Ventilation intake ducts. The predominant wind direction at CPSES is from the South. As can be seen with the wind direction frequency distribution at CPSES (FSAR Figure 2.3-10), the predominate winds are at approximately 90 degree angles to the path from the ventilation exhaust to the Control Room intakes. By inspection of the building layout, it is evident that for either of the Primary Plant Ventilation exhausts to be directed towards either of the Control Room intakes, the wind must have an East to West component. Based on FSAR Table 2.3-25, the wind in this region of Texas blows from the easterly direction (Northeast through Southeast) only 26% of the time.

These accidents will not result in signals which will automatically trip Uncontrolled Access Area Ventilation. However, plant communications, indications, and alarms provide the operator with ample warning before radioactive releases could reach the intakes. Therefore, the supply and exhaust fans can be stopped using existing operating procedures well before any radiological hazard from accidents inside containment could reach the intake thus eliminating the path for significant unfiltered air to enter the Cable Spreading Room via the intake on the West side of the E&C Building. Stopping these fans will result in an alternate fresh air intake path to open into the Office and Service Area HVAC equipment room adjacent to the Control Room Envelope to supply the battery room exhaust fans; however, the Class 1E redundant battery room exhaust fans will ensure the Office and Service Area HVAC equipment room is at negative pressure with respect to the Control Room Envelope.

The ventilation supply to each of the two stairwells that connects to the Control Room Envelope is the Uncontrolled Access Area Ventilation supply which would be stopped as described above.

With exception of the Locked Rotor event, these accidents will automatically align the HVAC systems for the Auxiliary and Safeguards buildings and rooms adjacent to the Control Room such that the pressure in these buildings and rooms is negative relative to atmospheric pressure and therefore will also necessarily be at a lower pressure than the Control Room. As for the Locked Rotor event, the pressure in the Auxiliary and Safeguards buildings and rooms is normally negative relative to atmospheric pressure and thus are likely at a lower pressure than the Control Room. Even if the Control Room Ventilation cannot pressurize to 0.125 inches of water gauge there will still be no leakage into the Control Room Envelope from the adjacent buildings and rooms which contain radioactive systems and containment penetrations.
The Control Room boundary is well sealed as demonstrated by the fact that a pressure of 0.125 inches of water gauge can be maintained with far less than 800 cfm of makeup air. Even if the Control Room Ventilation can not pressurize to 0.125 inches of water gauge there will still be no radioactive leakage into the envelope through the exterior walls and the roof. For that leakage to occur, there would have to be a wind loading on the E&C Building which is physically impossible for an Easterly wind because the entire E&C Building is shielded by the primary plant structures. For a positive pressure to be exerted

on the exterior Control Room pressure boundary, the wind must be from the North, South or West. Therefore, the only way for radioactivity to get into the Control Room Envelope is if the exhaust from the primary plant vent stack is drawn through the CREFS fresh air intake. This air will be filtered and recirculated as designed. This path is not expected to introduce any significant amount of radioactivity given the elevation difference.

The above discussion and justification demonstrates that positive pressure is not necessary to prevent significant amounts of unfiltered inleakage into the Control Room Envelope from these design basis accidents. A breach in the boundary will not significantly affect the dose consequences to the operator.

Main Steam Line Break and Steam Generator Tube Rupture accidents

The thermal-hydraulic analyses associated with the Main Steam Line Break Accident and the Steam Generator Tube Rupture accident show that core damage is not expected to result from these events. Therefore, the only potential for Control Room Operator dose will result directly from the activity that exists in the primary and secondary coolant at the onset of the accident. Potential radiological release paths are from the atmospheric relief valves, the main steam and feedwater areas adjacent to the containment buildings and the Primary Plant Ventilation stack exhaust. These release points are essentially the same as for that for LOCA from containment. There would be no release via the Primary Plant Ventilation stack exhaust after the containment and Main Steam Isolation Valves are closed. Therefore, the discussion for LOCA release points above would also apply to these design basis accidents.

The main steam lines outside containment up to the main steam isolation valves are located above the E&C Building roof (Elevation 873'-4"). The Atmospheric Relief Valve (ARV) stacks are located above Elevation 896'-4".

The potential for these two accidents is only applicable to the operating unit(s). The activity in the primary and secondary coolant of both units is very small compared to those assumed in the Design Basis analyses. The ARV release, although not filtered, is emitted vertically by high energy steam. Any particles in this release will be carried high into the air and thus, taken away from the vicinity of the Control Room Ventilation intakes. Similarly, a main steam line break would tend to disperse radioactivity vertically. Similar to LOCA, it would be unlikely for both the radioactive plume from these accidents and a positive pressure due to wind loading on the E&C Building to exist at the same time.

This accident does not automatically trip Uncontrolled Access Area Ventilation off, thus this is a potential path for unfiltered air to enter the Cable Spreading Room via the intake on the West side of the E&C Building. However, the Control Room would have

notification of any steam line break or tube rupture accident well before significant radioactivity could be transported to the ventilation intakes and could secure Uncontrolled Access Area Ventilation as discussed for LOCA, above.

The above discussion and justification demonstrates that positive pressure is not necessary to prevent significant amounts of unfiltered inleakage into the Control Room Envelope from these design basis accidents. A breach in the boundary will not significantly affect the dose consequences to the operator.

Small Break Loss of Coolant Accident (3" CVCS Line Break Outside Containment)

The thermal-hydraulic analyses associated with this accident shows that core damage is not expected to result from this event. Therefore, the only potential for Control Room Operator dose will result directly from the activity that exists in the primary coolant at the onset of the accident. The potential radiological release path is from the Primary Plant Ventilation stack exhaust which is as described for LOCA above, except the normal exhaust is filtered at a minimum efficiency of 90%.

The potential for this accident is only applicable to the operating unit(s). The activity in the primary coolant of both units is very small compared to those assumed in the Design Basis analyses.

This accident will not automatically align the HVAC systems for the buildings and rooms in the Auxiliary Building adjacent to the Control Room; however, the pressure in these buildings and rooms is normally negative relative to atmospheric pressure. A pressure transient would occur within the primary plant buildings until the event is terminated by operator isolation of letdown. The operator response time to identify and isolate this break would be less than 10 minutes based on the CPSES FSAR Section 3.6B.1.3. The absence of the 0.125 inch positive pressure between the Control Room and the primary plant would not significantly alter the consequences of this event.

The above discussion and justification demonstrates that positive pressure is not necessary to prevent significant amounts of unfiltered inleakage into the Control Room Envelope from this design basis accident. A breach in the boundary will not significantly affect the dose consequences to the operator.

Fuel Handling Accident

This accident can occur in either the Fuel Building or the Containment and will result in the radiological effluent being drawn into the particular building's HVAC exhaust. The exhaust from these two buildings ultimately exhausts from the Plant Vent Stack. Therefore, the potential radiological release path is from the Primary Plant Ventilation stack exhaust which is normally filtered at a minimum efficiency of 90%. These release

points are essentially the same as for that for LOCA from containment. This accident will not automatically align the HVAC systems for the buildings and rooms in the Auxiliary Building adjacent to the Control Room, however, the pressure in these buildings and rooms is normally negative relative to atmospheric pressure.
The potential for this accident is only applicable during fuel handling operations.

This accident does not automatically trip Uncontrolled Access Area Ventilation off, thus this is a potential path for unfiltered air to enter the Cable Spreading Room via the intake on the West side of the Electrical and Controls building. However, the Control Room would have notification of any fuel handling accident as well as alarms from the ventilation exhaust radiation monitors well before significant radioactivity could be transported to the ventilation intakes and could secure Uncontrolled Access Area Ventilation as discussed for LOCA, above.

The above discussion and justification demonstrates that positive pressure is not necessary to prevent significant amounts of unfiltered inleakage into the Control Room Envelope from these design basis accidents. A breach in the boundary will not significantly affect the dose consequences to the operator.

Gas Decay Tank Rupture and Radioactive Liquid Waste Tank Rupture Accidents

These accidents occur in their respective tank rooms in the Auxiliary and Safeguards Buildings. The result of these accidents will be localized contamination as well as airborne activity. The airborne radiological effluent will be drawn into the HVAC exhaust which eventually ends up in the Plant Vent Stack. These release points are essentially the same as for that for LOCA from containment. This accident will not automatically align the HVAC systems for the buildings and rooms in the Auxiliary Building adjacent to the Control Room, however, the pressure in these buildings and rooms is normally negative relative to atmospheric pressure. Therefore, the potential radiological release path is from the Primary Plant Ventilation stack exhaust which is filtered at a minimum efficiency of 90%. The Control Room would have notification of any tank rupture via alarms from the ventilation exhaust radiation monitors well before significant radioactivity could be transported to the ventilation intakes and could secure Uncontrolled Access Area Ventilation as discussed for LOCA, above. Furthermore, the gas decay tank is primarily noble gas which will disperse away when discharged from the stack rather than fall to the Control Room intake. The actual activity in these tanks is well below the activity assumed in the design basis accident.

The above discussion and justification demonstrates that positive pressure is not necessary to prevent significant amounts of unfiltered inleakage into the Control Room Envelope from these design basis accidents. A breach in the boundary will not significantly affect the dose consequences to the operator.

Summary of Accidents

It is shown in the paragraphs above that a breach in the Control Room boundary will not significantly affect the dose consequences to the operator. By applying simple compensatory measures and administrative controls, a breach in the Control Room that provides direct communication to the Cable Spreading Room will not affect the habitability of the Control Room. The administrative action to seal the boundary is strictly to restore the Control Room Envelope to design status and provide a defense in depth compensatory measure. The only other compensatory measure that should be taken is to secure the Uncontrolled Access Area Ventilation supply and exhaust fans at the onset of an accident or if there is a threat of smoke or toxic gas from sources exterior to the plant. The administrative controls are to quickly begin sealing any breach in the boundary at the direction of the Control Room Operator. The resulting seal must be sufficient to restore the ability of one CREFS train to pressurize the boundary to 0.125 inches water gauge at less than or equal to 800 cfm. This can be accomplished with methods as simple as draping heavy duty plastic over the affected area and applying duct tape to seal the boundary. With respect to the breach pathway evaluated above, the administrative action to seal the boundary is strictly to restore the Control Room Envelope to design status and provide a defense in depth compensatory measure; there is no worst-case credible accident and associated required time to complete the boundary seal closure in order to still meet the operator protection objectives. Extension of the COMPLETION TIME for CONDITION B from 24 hours to 14 days for this specific case does not violate any GDC 19 requirement nor do they affect any radiological dose analysis.

Emergency Procedures and Administrative Controls to Assure GDC-19 Requirements

In addition to the above discussion of the breach pathway and Design Basis Accidents (DBAs), CPSES has administrative controls in place to assure that GDC-19 continues to be met during accident conditions. Emergency procedures are written (EPP-305 "Emergency Exposure Guidelines and Personnel Dosimetry"; EPP-306 "Use of Thyroid Blocking Agents"; EPP-309 "Onsite/In-Plant Radiological Surveys and Offsite Radiological Monitoring") that direct temporary compensatory measures and work in conjunction to protect all CPSES personnel during severe radiological conditions. These procedures, other administrative controls and pre-staged emergency response equipment/supplies 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. Other measures to reduce radiological dose such as monitoring, protective clothing to reduce beta skin dose, special dosimetry, and evacuation of affected areas are available and provided.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

TXU Power has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10CFR50.92, "Issuance of amendment," as discussed below:

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

   Response: No

   This is a revision to the Technical Specifications for the Control Room Emergency/Filtration System which is a mitigation system designed to minimize in leakage and to filter the Control Room atmosphere to protect the operator following accidents previously analyzed. An important part of the system is the Control Room boundary. The Control Room boundary integrity is not an initiator or precursor to any accident previously evaluated. Therefore, the probability of any accident previously evaluated is not increased. The analysis of the consequences of analyzed accident scenarios under the Control Room breach conditions along with the compensatory actions for restoration of Control Room integrity demonstrate that the consequences of any accident previously evaluated are not increased. Therefore, it is concluded that this change does not significantly increase the probability of an accident previously evaluated.

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

   Response: No

   The proposed change will not impact the accident analysis. The change will not alter the requirements of the Control Room Emergency/Filtration System or its function during accident conditions. The administrative controls and compensatory actions will ensure the Control Room emergency/filtration system will perform its safety function. No new or different accidents result from performing the new actions and surveillance required. The change does not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The change does not alter assumptions made in the safety analysis. The proposed change is consistent with the safety analysis assumptions and current plant operating practice. Therefore, the proposed change does not create

the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

The proposed change does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by these changes. The proposed change 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. The proposed change does not affect systems that respond to safely shutdown the plant and to maintain the plant in a safe shutdown condition. Therefore the proposed change does not involve a reduction in a margin of safety.

Based on the above evaluations, TXU Power concludes that the proposed amendment(s) present no significant hazards consideration under the standards set forth in 10CFR50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The proposed change to the CPSES Technical Specifications will ensure that the requirements contained in 10 CFR 50, Appendix A, GDC 19 are maintained, as described above in sections 1, 3 and 4.

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

6.0 ENVIRONMENTAL CONSIDERATION

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

7.0. PRECEDENTS

7.1. License Amendment Number 108 for CPSES Units 1 and 2 (Facility Operating Licenses No. NPF-87 and NPF-89) dated October 2, 2003.

8.0. REFERENCES

8.1. License Amendment Number 108 for CPSES Units 1 and 2 (Facility Operating Licenses No. NPF-87 and NPF-89) dated October 2, 2003.

8.2. Letter from D. R. Woodlan to the NRC Document Control Desk, "Strategic Teaming and Resource Sharing (STARS) Demonstration of the Component Test Method for Determining Control Room In-leakage" (STARS-02008) June 7, 2002

8.3. TXU Power letter from M. R. Blevins to the NRC Document Control Desk, "Response to Request For Information On Generic Letter 2003-01, Control Room Habitability" (TXX-03158) dated December 4, 2003

8.4. 10 CFR 50, Appendix A, General Design Criterion 19 "Control Room"

ATTACHMENT 2 TO TXX-05032

MARKED UP TECHNICAL SPECIFICATION PAGES

PAGES 3.7-23
3.7-24

3.7 PLANT SYSTEMS

3.7.10 Control Room Emergency Filtration/Pressurization System (CREFS)

LCO 3.7.10 Two CREFS trains shall be OPERABLE

---NOTE---
The Control Room boundary may be opened intermittently under administrative controls.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREFS train inoperable for reasons other than Condition B.	A.1	Restore CREFS train to OPERABLE status.	7 days
B. Two CREFS Trains inoperable due to inoperable Control Room boundary in MODES 1, 2, 3, and 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours OR 14 days for a one time implementation for each unit of the ~~Turbine Control Digital Modification to be completed during 2RF07 and 1RF10~~ Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	C.1 AND C.2	Be in MODE 3. Be in MODE 5.	6 hours 36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of irradiated fuel assemblies.	D.1	Place OPERABLE CREFS train in emergency recirculation mode.	Immediately
	OR		
	D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREFS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies except for up to 14 days for a one time implementation for each unit of the ~~Turbine Control Digital Modification to be completed during 2RF07 and 1RF10.~~ Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CREFS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1	Enter LCO 3.0.3.	Immediately

ATTACHMENT 3 TO TXX-05032

MARKED UP TECHNICAL SPECIFICATION BASES PAGES

PAGES B 3.7-58
B 3.7-59

BASES (continued)

APPLICABILITY

In MODES 1, 2, 3, 4, 5, 6, and during movement of irradiated fuel assemblies CREFS must be OPERABLE to control operator exposure during and following a DBA.

During movement of irradiated fuel assemblies the CREFS must be OPERABLE to cope with the release from a fuel handling accident.

ACTIONS

A.1

When one CREFS train is inoperable for reasons other than Condition B, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREFS train is adequate to perform the control room protection function. However, the overall reliability is reduced because a single failure in the OPERABLE CREFS train could result in loss of CREFS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, and 4 such that the CREFS trains can not establish or maintain the required pressure, action must be taken to restore an OPERABLE control room boundary within 24-hours. The 24 hour completion time is reasonable based on the low probability of a DBA occurring during this time period, and the availability of CREFs to provide a filtered environment (albeit with potential control room inleakage).

A temporary Completion Time is connected to the Completion Time requirements of 24 hours. The temporary Completion Time is 14 days and applies to the implementation of the ~~Turbine Control Digital Modification for each unit during 2RF07 and 1RF10.~~ Turbine Generator Protection System Digital Modification for each unit during 1RF11 and 2RF09.

(continued)

BASES

ACTIONS (continued)

C.1 and C.2

In MODE 1, 2, 3, or 4, if the inoperable CREFS train or control room boundary cannot be restored to OPERABLE status within the required Completion Time, the unit must be placed in a MODE that minimizes accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1, D.2.1, and D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if the inoperable CREFS train cannot be restored to OPERABLE status within the required Completion Time, action must be taken to immediately place the OPERABLE CREFS train in the emergency mode. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure would be readily detected.

An alternative to Required Action D.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk. This does not preclude the movement of fuel to a safe position.

E.1 and E.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, with two CREFS trains inoperable except for up to 14 days for a one time implementation for each unit of the ~~Turbine Control Digital Modification to be completed during 2RF07 and 1RF10~~ Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room. This places the unit in a condition that minimizes accident risk. This does not preclude the movement of fuel to a safe position.

(continued)

ATTACHMENT 4 TO TXX-05032

RETYPED TECHNICAL SPECIFICATION PAGES

PAGES 3.7-23
3.7-24

3.7 PLANT SYSTEMS

3.7.10 Control Room Emergency Filtration/Pressurization System (CREFS)

LCO 3.7.10 Two CREFS trains shall be OPERABLE

---NOTE---
The Control Room boundary may be opened intermittently under administrative controls.

APPLICABILITY: MODES 1, 2, 3, 4, 5, and 6,
During movement of irradiated fuel assemblies

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. One CREFS train inoperable for reasons other than Condition B.	A.1	Restore CREFS train to OPERABLE status.	7 days
B. Two CREFS Trains inoperable due to inoperable Control Room boundary in MODES 1, 2, 3, and 4.	B.1	Restore control room boundary to OPERABLE status.	24 hours OR 14 days for a one time implementation for each unit of the Turbine Generator Protection System Digital Modification to be completed during 1RF11 and 2RF09
C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, 3, or 4.	C.1 AND C.2	Be in MODE 3. Be in MODE 5.	6 hours 36 hours

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION		COMPLETION TIME
D. Required Action and associated Completion Time of Condition A not met in MODE 5 or 6, or during movement of irradiated fuel assemblies.	D.1	Place OPERABLE CREFS train in emergency recirculation mode.	Immediately
	OR		
	D.2.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	D.2.2	Suspend movement of irradiated fuel assemblies.	Immediately
E. Two CREFS trains inoperable in MODE 5 or 6, or during movement of irradiated fuel assemblies 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 1RF11 and 2RF09.	E.1	Suspend CORE ALTERATIONS.	Immediately
	AND		
	E.2	Suspend movement of irradiated fuel assemblies.	Immediately
F. Two CREFS trains inoperable in MODE 1, 2, 3, or 4 for reasons other than Condition B.	F.1	Enter LCO 3.0.3.	Immediately

ATTACHMENT 5 TO TXX-05032

RETYPED TECHNICAL SPECIFICATION PAGES

PAGES B 3.7-58
B 3.7-59

BASES (continued)

APPLICABILITY

In MODES 1, 2, 3, 4, 5, 6, and during movement of irradiated fuel assemblies CREFS must be OPERABLE to control operator exposure during and following a DBA.

During movement of irradiated fuel assemblies the CREFS must be OPERABLE to cope with the release from a fuel handling accident.

ACTIONS

A.1

When one CREFS train is inoperable for reasons other than Condition B, action must be taken to restore OPERABLE status within 7 days. In this Condition, the remaining OPERABLE CREFS train is adequate to perform the control room protection function. However, the overall reliability is reduced because a single failure in the OPERABLE CREFS train could result in loss of CREFS function. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and ability of the remaining train to provide the required capability.

B.1

If the control room boundary is inoperable in MODES 1, 2, 3, and 4 such that the CREFS trains can not establish or maintain the required pressure, action must be taken to restore an OPERABLE control room boundary within 24-hours. The 24 hour completion time is reasonable based on the low probability of a DBA occurring during this time period, and the availability of CREFs to provide a filtered environment (albeit with potential control room inleakage).

A temporary Completion Time is connected to the Completion Time requirements of 24 hours. The temporary Completion Time is 14 days and applies to the implementation of the Turbine Generator Protection System Digital Modification for each unit during 1RF11 and 2RF09.

(continued)

BASES

ACTIONS (continued)

C.1 and C.2

In MODE 1, 2, 3, or 4, if the inoperable CREFS train or control room boundary cannot be restored to OPERABLE status within the required Completion Time, the unit must be placed in a MODE that minimizes accident risk. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours, and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1, D.2.1, and D.2.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, if the inoperable CREFS train cannot be restored to OPERABLE status within the required Completion Time, action must be taken to immediately place the OPERABLE CREFS train in the emergency mode. This action ensures that the remaining train is OPERABLE, that no failures preventing automatic actuation will occur, and that any active failure would be readily detected.

An alternative to Required Action D.1 is to immediately suspend activities that could result in a release of radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk. This does not preclude the movement of fuel to a safe position.

E.1 and E.2

In MODE 5 or 6, or during movement of irradiated fuel assemblies, with two CREFS trains inoperable 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 1RF11 and 2RF09, action must be taken immediately to suspend activities that could result in a release of radioactivity that might enter the control room. This places the unit in a condition that minimizes accident risk. This does not preclude the movement of fuel to a safe position.

(continued)