

Log # TXX-95289 File # 916 (3/4.9) 10010 Ref. # 10CFR50.90 10CFR50.36

November 21, 1995

C. Lance Terry Group Vice President, Nuclear

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNITS 1 AND 2 DOCKET NOS. 50-445 AND 50-446 SUBMITTAL OF LICENSE AMENDMENT REQUEST 95-007 REMOVAL OF REQUIREMENT TO MAINTAIN ONE PERSONNEL AIRLOCK DOOR CLOSED DURING REFUELING

Gentlemen:

Pursuant to 10CFR50.90. TU Electric 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 changes into the CPSES Units 1 and 2 Technical Specifications. These changes allow the containment personnel airlock doors to remain open during movement of irradiated fuel and during core alterations for CPSES Units 1 and 2.

Technical Specification Limiting Condition for Operation (LCO) 3.9.4 is revised to allow both doors of the personnel airlock (PAL) to remain open as long as one PAL door is capable of being closed. Also, Surveillance Requirement 4.9.4 is revised to specify that each containment penetration is in its "required condition."

Attachment 1 is the required affidavit. Attachment 2 provides a detailed description of the proposed changes, a safety analysis of the proposed changes and TU Electric's determination that the proposed changes do not involve a significant hazard consideration. Attachment 3 provides the affected technical specification pages marked-up to reflect the proposed changes.

TU Electric is planning refueling outages for Units 1 and 2 in September and February of 1996, respectively. TU Electric would like to apply these changes to the earlier outage if possible. Therefore, TU Electric requests that the License Amendment be approved on or before February 15, 1996, with implementation of the Technical Specification changes to occur within 30 days of approval.

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> In addition, this LAR is being submitted in parallel with three other similar LARs from Pacific Gas and Electric Co., Union Electric Co. and Wolf Creek Nuclear Operating Corp. The LARs above are being submitted in parallel to allow the NRR to review all four changes together and thereby reduce the amount of NRR resources required.

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

Should you have any questions, please contact Mr. Jimmy Seawright at (214) 812-4375 or Mr. Don Woodlan at (214) 812-8225.

Sincerely,

C. L Herry

C. L. Terry By: Of Ogg D. ( Roger D. Walker

Regulatory Affairs Manager

JDS/grp Attachments:

- 1. Affidavit
- 2. Description and Asessment
- Affected Technical Specification pages as revised by all approved license amendments

Mr. L. J. Callan, Region IV
Mr. T. J. Polich, NRR
Mr. W. D. Johnson, Region IV
Resident Inspectors, CPSES

Mr. Arthur C. Tate Bureau of Radiation Control Texas Department of Public Health 1100 West 49th Street Austin, Texas 78704 Attachment 1 to TXX-95289 Page 1 of 1

# UNITED STATES OF AMERICA

## NUCLEAR REGULATORY COMMISSION

In the Matter of	2
Texas Utilities Electric Company	) Gocket Nos. 50-445
(Comanche Peak Steam Electric Station, Units 1 & 2)	) License Nos. NPF-87 ) NPF-89

### AFFIDAVIT

Roger D. Walker being duly sworn, hereby deposes and says that he is Regulatory Affairs Manager of TU Electric. that he is duly authorized to sign and file with the Nuclear Regulatory Commission this License Amendment Request 95-007; that he is familiar with the content thereof; and that the matters set forth therein are true and correct to the best of his knowledge, information and belief.

Roger D. Walker Regulatory Affairs Manager

STATE OF TEXAS

COUNTY OF DALLAS

Subscribed and sworn to before me, a Notary Public, on this \_\_\_\_\_ day of \_November \_\_\_\_\_,1995.

Public

Notary



ATTACHMENT 2 TO TXX-95289 DESCRIPTION AND ASSESSMENT

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## DESCRIPTION AND ASSESSMENT

## 1. BACKGROUND

Comanche Peak Steam Electric Station (CPSES) Units 1 and 2 are each equipped with three (3) containment access penetrations; the equipment hatch, the emergency airlock, and the personnel airlock (PAL). The PAL consists of a cylinder breaching the containment wall, opening into the Safeguards Building at elevation 832'. The PAL is the normal means for personnel to access containment. Each end of the airlock has a nine (9) foot diameter door. The doors are held closed by hydraulically operated locking rings. Interlocks are provided to prevent inadvertent simultaneous opening of both doors. Currently, Technical Specification 3/4.9.4 requires that one personnel airlock door be closed during core alterations and movement of irradiated fuel within the containment. Because of the ongoing work in containment, a large number of people enter and exit through the PAL and the PAL doors are cycled frequently.

The frequent use of the PAL during outages has challenged the ability of the PAL doors to open and close in a reliable manner. This is due to the size and weight of the PAL doors and the complexity of the hydraulic system. The demands of outage entries into the containment have caused failures of the door and subsequent delays in containment egress. The recorded failures are primarily associated with components that have come out of adjustment or degraded due to the demands of outage service. Allowing the airlock to remain open rather than frequently cycling the components for the duration of mode 6 will improve the availability of the system.

The proposed change would allow both PAL doors to remain open during core alteration and irradiated fuel movement within the containment provided at least one PAL door is capable of being closed. The change is justified by plant specific analyses and, as such, are not included in NUREG-1431, Revision 1, "Standard Technical Specifications for Westinghouse Plants."

## II. DESCRIPTION OF TECHNICAL SPECIFICATIONS CHANGE REQUEST

The affected Technical Specification is 3/4.9.4, "CONTAINMENT BUILDING PENETRATIONS." The proposed change allows both doors of the containment personnel airlock to remain open during movement of irradiated fuel in the containment and during core alterations provided one airlock door is capable of being closed. In the associated surveillances, the description of the penetration status is changed from a "closed/isolated condition" to a "required condition" to allow for the revised requirement for the personnel airlock. Attachment 2 to TXX-95289
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#### III. ANALYSIS

Experience at Comanche Peak has shown that the frequent, repetitive usage of the PAL during outages degrades the system to the point where the door must be taken out of service during the outage for prolonged periods. Although this does not affect the safety function of the door, the delays caused by the unavailability of the door has significant impact on outage schedules.

The purpose of requiring a single door to remain closed at all times during refueling operations is to provide a barrier to limit the migration of fission product radioactivity due to a fuel handling accident. In order for the people in containment to exit following a fuel handling accident, the door would be cycled several times. Each cycling of the PAL doors could allow the release of some air from containment. While operating the PAL door and waiting to exit, workers would be exposed to the released activity.

FSAR Section 15.7.4 defines a design basis fuel handling accident as the dropping of a spent fuel assembly in the Containment Building or spent fuel pool resulting in the rupture of the cladding of all the fuel rods in the assembly despite many administrative controls and physical limitations imposed on fuel handling operations. All refueling operations are conducted in accordance with prescribed procedures under the direct surveillance of a Senior Reactor Operator.

The fuel handling accident analysis is postulated to occur in the fuel pool or Containment Building, but no credit is taken for the PAL barrier. Additionally, no credit is taken in the analysis for filtration by the primary plant filtration system. Note that the PAL opens into the same ventilation negative pressure envelope as the Fuel Handling Building. Therefore, regardless if a fuel handling accident were to occur in the Fuel Handling Building or in the Containment Building, releases from either accident scenario would be filtered through the same filtration system. All activity is considered to be released at ground level to the environment over a two-hour period. The proposed change is still bounded by the current fuel handling accident analysis described in the updated Final Safety Analysis Report Section 15.7.4.

The proposed change would allow for a more efficient evacuation of the Containment Building prior to sealing the PAL doors following a fuel handling accident. The initial group leaving containment would not have to wait for the door to be opened. This could reduce potential exposure to workers following a fuel handling accident as well as allow workers to egress freely during normal work activities to reduce routine occupational exposure (that exposure while waiting for use of the PAL).

# IV. SIGNIFICANT HAZARDS CONSIDERATION

TU Electric has evaluated whether or not a significant hazards consideration is involved with the proposed changes by focusing on the

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three standards set forth in 10CFR50.92 as discussed below:

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

> The proposed change allows the PAL doors for containment to remain open during the movement of irradiated fuel and core alterations. Whether or not the PAL doors are open does not effect the movement of fuel, the strict compliance with the procedures governing refueling operations, or the integrity of fuel assemblies. The position of the airlock doors cannot, in itself, be the initiating event in any accident. The probability of a fuel handling accident is not changed.

> The consequences of leaving the airlock doors open during this accident are bounded by the existing analysis, provided the fuel handling accident assumptions are maintained (e.g. 100 hours after reactor shutdown and the water level remains 23 feet above the fuel). The existing analysis postulates the limiting fuel handling accident to occur in the Fuel Building with no credit taken for barrier or filtration. This accident analysis envelopes the proposed change for a fuel handling accident occuring in the Containment Building.

> Were a fuel handling accident to occur with the PAL doors open, the impact would be minimal. Pressure is expected to be essentially equalized accross the door with little air flow either into or out of containment. Based on transport time from the location of the accident to the PAL, little. if any. radioactive material is expected to escape containment via the PAL. The amount that might escape would not necessarily be anymore than might escape as the door is cycled to evacuate personnel. What does escape will be filtered by the Primary Plant Ventilation System, the same as if the accident were to occur in the fuel building. In summary, not only is the accident clearly bounded by the existing analysis, the actual increase in release of radioactive material outside the plant will be insignificant if there is any measurable increase at all.

Based on the above, allowing the PAL doors to remain open during movement of irradiated fuel and core alterations, has no significant effect on the probability or consequences of an accident previously evaluated.

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

The change does not add new hardware. The only change in the operation of the plant is that the PAL doors will remain open during movement of irradiated fuel and core alterations. Because the current fuel handling accident analysis considers fuel handling accidents in either the Fuel Building or the Containment

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Building, the current fuel handling accident analysis remains bounding for the proposed change. Therefore, the proposed change does not create the possibility of a new or different type of accident from any accident previously evaluated.

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

> The assumptions used to calculate the offsite dose resulting from a fuel handling accident in Containment Building are equivalent to assuming that the PAL remains open for the entire accident and that no filtration occurs. Since no credit was taken for any containment barrier or ventilation system filtration, the dose to the public as calculated in the analysis is not affected by this change. Therefore, the proposed change does not involve a significant reduction in the margin of safety.

Based on the above evaluations. TU Electric concludes that the activities associated with the proposed changes satisfy the no significant hazards consideration standards of 10CFR50.92(c) and accordingly, a no significant hazards consideration finding is justified.

### V. ENVIRONMENTAL EVALUATION

TU Electric has determined that the proposed amendment would change requirements with respect to the installation or use of a facility component located within the restricted area, as defined in 10CFR20, or would change an inspection or surveillance requirement. TU Electric has determined that the proposed amendment 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 10CFR51.22(c)(9). Therefore, pursuant to 10CFR51.22(b), an environmental assessment of the proposed change is not required

### VII. PRECEDENTS

Similar license amendments have been approved or have been submitted and are awaiting approval. In particular, Baltimore Gas and Electric received a similar change (59 FR 47184) for the Calvert Cliffs Nuclear Power Plant. The significant differences between the Calvert Cliffs change and the change proposed herein is that the Calvert Cliffs technical specifications require that: 1) an individual be designated to close the operable airlock door in the event of a fuel handling accident, 2) the plant be in MODE 6, and 3) there is 23 feet of water above the fuel.

The requirement to have an individual designated to close the personnel airlock is not included in the CPSES proposed Technical Specification. The

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reason for the difference is that the stationing of an individual to close the door at Calvert Cliffs was considered a conservative measure to deal with the plant specific design feature that the airlock does not open into an area whose exhaust is filtered; at CPSES, the airlock opens into an area of the Safeguards Building which is exhausted through the charcoal filters in the Primary Plant Ventilation System.

The requirement to have the Plant in MODE 6 is not included in the CPSES proposed Technical Specification. The requirement is redundant since Specification 3/4.9.4 is applicable only during core alterations and movement of irradiated fuel. As a result, the plant by definition must be in MODE 6.

The requirement to maintain 23 feet of water above the fuel was not included in the CPSES proposed technical specification. The requirement is redundant since the specifications for control rod drive latching/unlatching and for movement of irradiated fuel already place restrictions on the required minimum water level.

ATTACHMENT 3 TO TXX-95289 AFFECTED TECHNICAL SPECIFICATION PAGES