

TEXAS UTILITIES GENERATING COMPANY

2001 BRYAN TOWER - DALLAS, TEXAS 75201

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File # 909.5

R. J. GARY  
EXECUTIVE VICE PRESIDENT  
AND GENERAL MANAGER

April 7, 1982

Mr. Darrell G. Eisenhut  
Director, Division of Licensing  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555



SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION  
DOCKET NOS. 50-445 AND 50-446  
DOCUMENTATION OF APPENDIX R NONCOMPLIANCES

Dear Mr. Eisenhut:

In response to the NRC letter from Darrell G. Eisenhut to R. J. Gary dated October 21, 1982, we offer the attached table which lists those areas of the CPSES fire protection design which differ from, but satisfies the intent of 10CFR50 Appendix R. Additional details, should they be necessary, are available in Section 9.5.1 of the CPSES FSAR.

The CPSES fire hazards analysis is currently under review to assess the impact of all design changes issued since the completion of the analysis. Should other differences be discovered as a result of the review, documentation will be provided.

Should you have additional questions, please contact this office.

Sincerely,

*R. J. Gary*  
R. J. Gary

RJG:tls  
Attachment  
cc: S. B. Burwell

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COMPARISON OF CPSES FIRE PROTECTION PROGRAM TO APPENDIX R OF 10-CFR-PART 50 FOR COMPLIANCE

APPENDIX R

CPSES

I. INTRODUCTION AND SCOPE

II. GENERAL REQUIREMENTS

- A. Fire Protection Program
- B. Fire Hazard Analysis
- C. Fire Prevention Features
- D. Alternative or Dedicated Shutdown Capability

- A. In Compliance
- B. In Compliance
- C. In Compliance
- D. In Compliance

III. SPECIFIC REQUIREMENTS

- A. Water Supplies for Fire Suppression Systems
- B. Sectional Isolation Valves
- C. Hydrant Isolation Valves
- D. Manual Fire Suppression
- E. Hydrostatic Hose Tests
- F. Automatic Fire Detection
- G. Fire Protection of Safe Shutdown Capability

- A. In Compliance
- B. In Compliance
- C. In Compliance
- D. In Compliance
- E. In Compliance
- F. In Compliance
- G. A summary of areas which do not fully meet requirements of Appendix R Section III.G is listed below. During the Fire Protection Walk Down conducted by the NRC in April of 1981, CPSES personnel identified all known areas that contained redundant essential equipment/cables but did not fully meet the requirements of Appendix R. Most of these areas were reviewed and judged to be adequate to the satisfaction of the NRC reviewer. The

## APPENDIX R

## CPSSES

G.

detailed information is contained in the Fire Hazards Analysis and engineering drawings which are currently undergoing review. Should additional details be required, the analysis and drawings will be made available on site for NRC review.

### EQUIPMENT SEPARATION NON-COMPLIANCES

#### Chiller Units and Chiller Pumps (Fire Area 43) -

This equipment shall have one-hour rated fire barriers installed between redundant equipment trains to provide separation. The barriers, although not completely enclosing each train, will adequately separate the equipment. Fire detection and automatic fire suppression are provided. The installed and transient combustible loading in this area would produce a fire duration of less than one hour.

#### Boric Acid Transfer Pumps (Fire Area 21a) -

This equipment shall have a one-hour rated barrier installed between redundant trains. As in the case of the chiller units, this barrier does not completely enclose the equipment but it does offer adequate separation. Fire detection and automatic suppression are provided. The installed and transient combustibles loading in this area would produce a fire duration of less than 30 minutes.

#### Component Cooling Water Heat Exchangers

(Fire Area 21a) - Since this equipment is considered non-combustible, a fire barrier between redundant trains has not been installed. Fire detection and automatic fire suppression are provided. Installed and transient combustibles in this area would produce a fire duration of less than 30 minutes.

APPENDIX R

CPSES

G.

Service Water Pumps (Fire Area 104b) -

Although these pumps are not separated by 20 feet, they do have a three-hour rated fire barrier between them. While not completely enclosing the redundant trains, this barrier does afford adequate separation. Fire detection and automatic suppression are provided. The installed and transient combustibles in this area would produce a fire duration of less than 10 minutes.

CABLE SEPARATION NON-COMPLIANCES

Auxiliary Feed Pump Rooms (Fire Areas 5, 6 and 7 [Unit 1] and 80, 81 and 82 [Unit 2]) A small amount of redundant essential electrical cabling associated with the operation of these auxiliary feed pumps is located in these areas. These areas have fire detection but no automatic fire suppression. One of the redundant trains of essential cables and associated non-safety circuits shall be protected by a one-hour rated fire barrier. The installed and transient combustibles in these areas would produce a fire duration of less than 10 minutes.

Elevation 854'-4" of the E & C Buildings (Fire Area 75) This area has fire detection but no automatic fire suppression. One train of essential cables and associated non-safety circuits shall be protected by a one-hour rated fire barrier. The installed and transient combustibles in this area would produce a fire duration of less than 30 minutes.

G.

Elevation 852'-6" Auxiliary Building (Fire Area 21)

- The area by the chiller transformer has fire detection but no automatic fire suppression. One train of redundant essential cables and associated non-safety cables and associated non-safety circuits shall be protected by a one-hour rated fire barrier. The installed and transient combustibles in this area would have a fire duration of less than one hour. Sensitive and expensive electrical equipment precludes the use of sprinklers.

Switch Gear Rooms A and B (Fire Areas 9 and 18

[Unit 1] and 84 and 93 [Unit 2]) - These areas have fire detection but no automatic suppression systems installed. However, the east end of the Train A switchgear area has sprinkler protection where redundant trains are in close proximity, and there are cable tray concentration sprinklers in the form of directional nozzles into the trays for these high-concentration areas. Sprinklers are not provided everywhere due to the sensitive and expensive electrical equipment in these rooms. One train of redundant essential cables and associated non-safety circuits shall have a one-hour rated fire barriers applied. The installed and transient combustibles in these areas would produce a fire of less than one-hour duration.

Containment Buildings (Fire Areas 101 and 102)

The containment area fire hazard analysis does not require use of transient combustibles as an ignition source. The credible sources of ignition, safety related charcoal filter beds and reactor coolant lube oil piping has specific protection provided (i.e., automatic detection and suppression for charcoal filters and, oil

## APPENDIX R

- G.
- H. Fire Brigade
- I. Fire Brigade Training
- J. Emergency Lighting
- K. Administrative Controls
- L. Alternative and Dedicated Shutdown Capability
- M. Fire Barrier Cable Penetration Seal
- N. Fire Doors

## CPSES

- collection system for RCP oil system). All other areas contain only automatic detection. Several areas contain redundant essential equipment/cables that do not meet Appendix "R" separation criteria, however, all these areas meet R.G. 1.75 separation criteria. It is the CPSES position that R.G. 1.75 separation criteria, and the use of non-propagating (IEEE 383) cabling, adequately protect redundant essential equipment and cables in the absence of transient combustibles.
- H. In Compliance
  - I. In Compliance
  - J. CPSES is in compliance except for 8 hour battery packs required in the control room. The control room is provided emergency a-c lighting from Trains A and B having access to diesel generators and, as such, the emergency lighting provided in the control room is more reliable and its availability is ensured at any time the control room is operative. In addition, the control room has Train A and Train B d-c emergency lighting powered from the Class 1E station batteries.
  - K. In Compliance
  - L. In Compliance
  - M. In Compliance
  - N. There are some non-fire rated doors in the plant that are installed in fire rated walls. For compliance in these instances CPSES is planning to install water curtains over these unrated doors to ensure equivalent protection.

APPENDIX R

CPSES

0. Oil Collection System for Reactor Coolant Pump

0. A lube oil collection system for these pumps is being provided.