

TEXAS UTILITIES SERVICES INC.

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Log # TXX-3647
File # 10010
907.4

March 18, 1983

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
DOCKET NOS. 50-445 AND 50-446
ALTERNATE SHUTDOWN ASSOCIATED CIRCUITS

REF: (1) TXX-3515 of May 7, 1982, "Comanche
Peak Steam Electric Station Alternate
Shutdown"

Dear Sir:

Reference (1) submitted a description of the alternate shutdown design for Comanche Peak Steam Electric Station.

Alternate shutdown is provided for fires in the control room or cable spreading room. For both of these fire scenarios, shutdown is achieved through the use of Train A equipment which is operated at the Hot Shutdown Panel (HSP) and is isolated from the fire area at the Shutdown Transfer Panel (STP). The Train A equipment which provides this shutdown capability is independent of the cables, systems and components in either the cable spreading room or the control room, as described in reference (1).

Other Train A circuits or non-safety related circuits which are fed from Train A power supplies are either isolated from the alternate shutdown circuits by means of the transfer switches or, by design, are provided with electrical devices such as breakers or fuses which are coordinated to protect these power supplies. As described in reference (1), for the circuits that could cause spurious operations that would adversely affect the shutdown capability, the circuit breakers for this equipment are tripped to prevent such inadvertent operation. The position of essential valves is provided on the Hot Shutdown Panel via circuits which are independent of the cable spreading room and control room. Circuits that share a common enclosure with circuits required for alternate shutdown, such as the circuits from the control room that are connected to the Shutdown Transfer Panel, are electrically

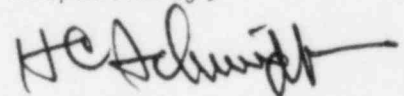
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protected by design via electrical devices such as circuit breakers or fuses and will not propagate the fire into the common enclosure since the cable is qualified as non-propagating via IEEE Std. 383-1974 and the circuit must pass through a fire stop between the fire and the enclosure.

A spurious operation of particular concern is the opening of isolation valves at a high to low pressure interface with the Reactor Coolant System (RCS). As described in reference (1), control of at least one of the valves in series with such a high to low pressure interface is isolated from the cable spreading room and the control room by transfer switches to ensure that proper isolation will not be lost due to the spurious operation of these valves. For the Residual Heat Removal System (RHR) to RCS interface, the series isolation valves, 1-8701 and 1-8702, are physically separated. Both valves are inside containment and 1-8702 is inside the Steam Generator Compartment while 1-8701 is not. The control and power cables for these valves have adequate separation as described in the fire hazards analyses for Comanche Peak Steam Electric Station. The possibility of spurious operation for one of the series isolation valves in each of the RHR lines is eliminated (for a fire in the cable spreading room or control room) by opening the supply breaker to remove power to these valves while the RCS is above 1000 psi.

As can be seen by this discussion and the information provided by reference (1), the alternate shutdown circuits are independent of the cables, systems, and components in the Cable Spreading Room and Control Room and have no associated circuits.

Respectfully,



H. C. Schmidt

DRW:tls