



Log # TXX-89820
File # 10110, 903.10
903.11
Ref. # 10CFR50.55(e)

November 27, 1989

William J. Cahill, Jr.
Executive Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
AFW PUMP TURBINE LOW LUBE OIL PRESSURE SWITCH
SDAR: CP-89-030 (FINAL REPORT FOR UNIT 1, INTERIM REPORT FOR UNIT 2)

Gentlemen:

On October 27, 1989, TU Electric informed the NRC of a deficiency involving Auxiliary Feedwater (AFW) Pump Turbine Low Lube Oil Pressure Switch electrical separation. After further evaluation, this condition has been determined to be reportable under the provisions of 10CFR50.55(e).

DESCRIPTION

Low lubricating oil pressure switch 1-PS-2452-... supplied as a component part of the seismically qualified Auxiliary Feedwater Pump Turbine skid. During design validation the electrical power supply for this switch was found to be from a Class 1E power source with single fuse isolation. Even though the lube oil switch does not provide a safety related function and could have been powered from a non-safety (Train C) source, a Class 1E power supply with a single fuse is acceptable provided the switch is fully qualified. Therefore, design validation identified the need for reconciliation with the qualification status for this component. Final reconciliation performed by the Equipment Qualification group found that the pressure switch was qualified for pressure boundary integrity, but supporting documentation for the internal electrical integrity of the switch was not available. Without the appropriate documentation to demonstrate qualification, TU Electric determined that the power supply from a Class 1E source with single fuse isolation does not meet the CPSES electrical separation design criteria. Failure to verify the qualification status of this switch prior to implementing the specified electrical arrangement is considered a deficiency in the original design for this component.

This deficiency was found as part of the structured program for design validation and reconciliation as described by the Equipment Qualification Project Status Report.

8912010146 891127
PDR ADOCK 05000445
S PDC

IE27
1/0

TXX-89820
November 27, 1989
Page 2 of 2

SAFETY IMPLICATIONS

Failure of the pressure switch could degrade the Class 1E instrument bus and affect the operation of other safety related instruments powered from the same bus. The described condition represents a significant deficiency in the final design as approved and released for construction.

In the event this condition had remained uncorrected, it may have adversely affected the safe operation of the plant, and therefore, is considered reportable pursuant to 10CFR50.55(e).

CORRECTIVE ACTION

The nonconformance report identifying this deficiency has been dispositioned to require two fuses in series in the pressure switch power supply circuit. This corrective action for Unit 1 is scheduled to be completed prior to Unit 1 fuel load.

The Unit 2 corrective action for this condition will be assessed after resumption of the balance of engineering activities for Unit 2.

Sincerely,

William J. Cahill, Jr.

By: John W. Beck
John W. Beck
Vice President,
Nuclear Engineering

WJH/smp

c - Mr. R. D. Martin, Region IV
Resident Inspectors, CPSES (3)