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TU ELECTRIC

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Group Vice President

January 5, 1996

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES) - UNIT 2
DOCKET NUMBER 50-446
ENFORCEMENT DISCRETION FOR WIDE RANGE RCS TEMPERATURE-T_h
REMOTE SHUTDOWN INDICATION FOR ONE RCS LOOP

REF: 1. NUREG-1600, "General Statement of Policy and Procedures for NRC Enforcement Actions," dated June 1995
2. NRC Inspection Manual, Part 9900, "Operations - Enforcement Discretion," dated November 2, 1995
3. TU Electric letter logged TXX-96009 from C. L. Terry to the NRC dated January 4, 1996

Gentlemen:

In accordance with the guidance provided by reference 1, Texas Utilities Electric Company (TU Electric) requests that the Nuclear Regulatory Commission (NRC) exercise enforcement discretion to allow CPSES Unit 2 to continue to operate with the normal Wide Range RCS (Reactor Coolant System) Temp.(Temperature)-T_h Remote Shutdown Indication for 1 of 4 loops inoperable. Without the requested enforcement discretion, compliance with CPSES Technical Specification 3.3.3.2.1 would require that TU Electric initiate unnecessary mode changes without a corresponding safety benefit, thus resulting in an unnecessary plant transient and unnecessary system realignments. This request was initially made via reference 3 and is hereby clarified to respond to NRC questions.

The referenced section of the NRC Inspection Manual (reference 2) provides guidance on the information to be included in a request for enforcement discretion. The sections below are arranged to correspond to that guidance.

1. REQUIREMENT/REQUEST:

Limiting Condition for Operation (LCO) 3.3.3.2.1, "Remote Shutdown Instrumentation," requires, in part, that one Wide Range RCS Temp.-T_h per RCS Loop be OPERABLE in MODES 1, 2, and 3. ACTION Statement "a" requires that an inoperable instrument be restored to OPERABLE status within 7 days or be in at least MODE 4, HOT SHUTDOWN, within the next 12 hours. TU Electric requests enforcement discretion not to enforce the shutdown requirement following the 7 day Allowed Outage Time (AOT) for the failed

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Wide Range RCS Temp.-T_h Remote Shutdown Indication instrument channel for RCS Loop 1.

2. CIRCUMSTANCES:

On December 31, 1995, at 2:10 a.m. the Wide Range RCS Temp.-T_h for RCS Loop one was discovered to be inoperable. Troubleshooting efforts indicate a ground. Location of the ground has been isolated to an area inside containment that is normally only accessible during periods of a reactor shutdown. Radiation levels, temperature and personnel safety considerations preclude further trouble shooting and corrective actions without performing a plant shutdown and a possible cooldown.

CPSES Unit 2 is scheduled to commence a refueling outage on February 22, 1996. CPSES Unit 2 has no other outages planned during the 7 weeks prior to the scheduled start of the refueling outage.

3. SAFETY SIGNIFICANCE AND POTENTIAL CONSEQUENCES:

The subject instrument is part of the CPSES design for shutdown from outside the control room (see CPSES Final Safety Analysis Report (FSAR) section 7.4.1.3). The Hot Shutdown Panel (HSP) and the Shutdown Transfer Panel (STP) are provided as part of the CPSES unit design for shutdown outside the control room. Wide Range RCS Temperature indications are provided on the HSP for the RCS Loops. RCS temperature is used for the cooldown of the RCS and for the switch-over to Residual Heat Removal (RHR). In the unlikely event that shutdown from outside the control room (during the duration of the enforcement discretion) is required, the inoperability of Wide Range Temp.-T_h for a single RCS Loop is expected to have no measurable impact on the ability of the operators to safely cooldown the RCS and switch-over to RHR.

The T_h indication is used primarily for natural circulation cooldown. Steam Generator Pressure is the primary means of temperature control based on the saturated steam conditions in the Steam Generator. Under low steam flow conditions, the Steam Generator temperature closely approximates cold leg temperature. Knowledge of the saturation temperature corresponding to the observed steam pressure provides the best indicator of RCS conditions. T_c and T_h indications lags behind the steam pressure indication, particularly under natural circulation conditions due to the loop transit time. For this reason, the T_h indication is secondary indication to Steam Generator pressure. For the situation of cooldown when there is forced RCS flow, there is a small differential temperature across the Steam Generator and T_c is nearly the same as the T_h and provides the same information as the inoperable T_h. For the situation of natural circulation, there is a larger differential temperature. However, the T_h of the loop without indication is approximately the same as that indicated in the other active loop with T_h indication. Abnormal operating procedures for shutdown from outside the Control Room address the use of Steam Pressure as the primary indicator of RCS temperature for comparison to the RCS Pressure (also available on the HSP) to confirm adequate subcooling margin exists during the cooldown. The

procedure specifically calls for the use of steam generator pressure in the determination of subcooling margin, cooldown rate and RCS temperature. The operators are trained on these procedures and also to use all available instrumentation. With the operator training being refreshed (see compensatory actions below), and the recently confirmed availability of the other remote shutdown indications, one T_h indication in an active loop provides sufficient confirmation for the operator to perform a controlled shutdown of the reactor.

The worst case scenario for shutdown from outside the control room is for those instances involving a fire in either the control room or the cable spreading room. The failed T_h indication is one of two which have been analyzed to remain available for operation at the HSP following a fire per the Fire Safe Shutdown Analysis. Only two have been analyzed, as only those Steam Generators fed by the Train A Auxiliary Feedwater Pump are used for plant cooldown following a fire. If this event were to occur during the duration of this NOED, the operator would retain indication of RCS hot leg temperature from the remaining T_h indication and use the correlations previously stated. For shutdowns other than post fire shutdown, the remaining T_h indicators (3) allow for plant cooldown.

Therefore loss of a single loop T_h indicator should have minimal safety significance with no potential for negative consequences should use of the HSP be required.

4. <u>UNREVIEWED SAFETY QUESTION / NO SIGNIFICANT HAZARDS CONSIDERATION:</u>

TU Electric has evaluated whether the use of discretion in enforcing the MINIMUM CHANNELS OPERABLE requirements of Technical Specification 3.3.3.2.1 for Loop 1 T_h or continued operation with the Loop 1 T_h constitutes a significant hazard or results in an unreviewed safety question. In evaluating if discretion in enforcement constitutes a significant hazard the criteria of 10CFR50.92(c) is discussed below:

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

   The unavailability of the Loop 1 T_h indication at the HSP cannot be an initiating event for nor affect the progression or mitigation of any licensing basis accident; therefore the probability of occurrence of any licensing accident cannot be affected.

   The request proposes to change the minimum channels operable for wide range hot leg RCS temperature T_h indication at the HSP. Sufficient alternate indication is available at the HSP to provide the information normally directly obtained from T_h. The current technical specifications acknowledge the need to and allow for operation with one T_h inoperable for the AOT in the action statement. The current technical specifications have an AOT of seven days. Further, the improved STS allows an AOT of 30 days. The duration of this request is not significantly different from these time periods. Thus the

consequences of a remote shutdown with the affected instrument inoperable have already been considered and this change will not increase the consequences 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?

   Operation for a period of time, beyond the existing AOT, with the Loop 1 T_h unavailable will not create the possibility of a new or different kind of accident from any accident previously evaluated. No hardware modifications are being made and no plant procedures are being revised that would alter normal plant operations.

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

   The wide range hot leg RCS temperature indication at the HSP is only required in the event that a remote shutdown from outside the control room is needed. The availability of other remote shutdown indications (including T_c, T_h in other RCS Loops, and steam generator pressure) in combination with licensed operators who have been briefed on how to compensate for the inoperable T_h for RCS Loop one using these other indications, assures that the unavailability of the instrument will not have a significant effect in the margin of safety.

TU Electric has performed a safety evaluation, and has determined, in accordance with 10 CFR 50.59 that continued operation with the Loop 1 T_h inoperable does not constitute an unreviewed safety question.

In summary, using 10CFR 50.59 and 10CFR50.92 TU Electric has determined that operation with the temperature instrument inoperable does not constitute an unreviewed safety question nor a significant hazard consideration.

5. ENVIRONMENTAL CONSEQUENCES:

The request only involves activities within the plant. These activities and their potential consequences are limited to the plant and will not result in any unplanned release that could impact the environment.

6. COMPENSATORY ACTIONS:

Operations has procedures in place to address the Control Room evacuation scenarios. Operations personnel have been trained on these procedures, including plant walk-throughs and simulator exercises. Additionally, adequacy of these procedures was demonstrated through actual performance as part of the startup test program. Shift licensed personnel will be briefed on the loss of RCS Loop 1 T_h remote shutdown indication, the alternate indications that exist, and the impact on the procedures.

The adequacy and reliability of the remaining instrumentation have been verified by satisfactory completion of surveillance testing within the past two weeks. Additionally, investigations have not indicated any external cause of the RCS Loop 1 T_h instrument failure (e.g., power supply, fluid intrusion, etc.). There is no indication that this failure is common cause or a symptom of a larger problem.

7. DURATION:

The requested duration is based upon the time required for the NRC to process a proposed change to the technical specifications. The requested duration is about 24 days, to commence upon expiration of the existing AOT (2:10 am January 7, 1996) and to expire at 11:59 pm February 2, 1996, or upon disposition of the proposed license amendment.

8. SORC REVIEW:

This activity has been reviewed and approved by the Station Operations Review Committee (SORC).

9. CRITERIA FOR EXERCISING ENFORCEMENT DISCRETION:

Reference 2, section B item 1(a) provides the criterion for exercising enforcement discretion for an operating plant as follows:

> For an operating plant, the NOED is intended to (a) avoid undesirable transients as a result of forcing compliance with the license condition and, thus minimize potential safety consequences and operational risk....

This criterion reflects the NRC's policy as provided in reference 1.

Initiating a shutdown to comply with the subject technical specification and then, shortly thereafter returning to power when OPERABILITY is restored, would subject CPSES to an undesirable transient.

10. PROPOSED TECHNICAL SPECIFICATION CHANGES:

A separate license amendment request, LAR 96-001, is being submitted under a different letter and a copy of the proposed marked up page(s) are attached. This LAR will request a temporary Technical Specification change which removes the requirement for the instrument until the upcoming Unit 2 refueling outage.

11. APPROVED LINE ITEM IMPROVEMENTS:

Prior adoption of approved line-item improvements to the Technical Specifications or the improved Standard Technical Specifications (STS) would not have obviated the need for this enforcement discretion request. The improved STS (NUREG-1431 Rev.1) does allow a 30 day AOT for the equivalent action condition (see specification 3.3.4 Condition A).

TU Electric is in the process of preparing a License Amendment Request to convert to the improved STS and submittal of the request is scheduled for December of 1996. Although the LAR associated with this request for enforcement discretion proposes a temporary change to the technical specifications, the LAR associated with the conversion of the technical specifications will re-evaluate the instrumentation requirements for remote shutdown and may propose permanent changes to the technical specifications.

Though a NOED would still be required under the improved STS, the 30 day AOT and the fact that the ACTION applies for the inoperability of one or more remote shutdown functions indicate a minimal safety impact due to the inoperability of a single temperature indicator on a single RCS Loop for approximately 53 days.

12. ADDITIONAL INFORMATION REQUESTED BY THE NRC STAFF:

Subsequent to the initial letter requesting enforcement discretion, the NRC asked several questions or provide comments on the content of the request. The request is hereby clarified and expanded to address these questions and comments.

CONCLUSION:

TU Electric requests the NRC grant the requested enforcement discretion to allow Unit 2 to continue to operate while the NRC processes a proposed change to the technical specifications. If there is a significant change in the circumstances (e.g., if CPSES Unit 2 entered an unplanned cold shutdown for other reasons) associated with this exercising of enforcement discretion, TU Electric will notify the NRC. A response is requested by 2:00 p.m. on January 6, 1996.

Sincerely,

C. L. Terry

DRW/gp
Attachment

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

TABLE 3.3-5
REMOTE SHUTDOWN MONITORING INSTRUMENTATION

INSTRUMENT	READOUT LOCATION	TOTAL NO. OF CHANNELS	MINIMUM CHANNELS OPERABLE
1. Neutron Flux Monitors	HSP	2	1
2. Wide Range RCS Temp.-T_c	HSP	1/Loop	1/Loop
3. Wide Range RCS Temp.-T_h	HSP	1/Loop	1/Loop *
4. Pressurizer Pressure	HSP	1	1
5. Pressurizer Level	HSP	2	1
6. Steam Generator Pressure	HSP	1/SG	1/SG
7. Steam Generator Level	HSP	1/SG	1/SG
8. Auxiliary Feedwater Flow Rate to Steam Generator	HSP	2/SG	1/SG
9. Condensate Storage Tank Level	HSP	2	1
10. Charging Pump to CVCS Charging and RCP Seals - Flow Indication	HSP	1	1

HSP = Hot Shutdown Panel
SG = Steam Generator
* - The requirements for Minimum Channels OPERABLE for Wide Range RCS Temp.-T_h remote shutdown indication for Unit 2 are revised to 1/Loop for three (3) of the four (4) RCS Loops. This revision is to remain in effect until CPSES Unit 2 enters MODE 4 at the beginning of the second refueling outage for Unit 2.