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TU ELECTRIC

April 22, 1994

William J. Cahill, Jr.
 Group Vice President

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

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
 DOCKET NOS. 50-445 AND 50-446
 SUBMITTAL OF LICENSE AMENDMENT REQUEST 94-011
 AUXILIARY FEEDWATER SYSTEM

Gentlemen:

Pursuant to 10CFR50.90, TU Electric hereby requests an amendment to the CPSES Unit 1 facility operating license (NPF-87) and Unit 2 facility operating licenses (NPF-89) by incorporating the attached change into the CPSES Units 1 and 2 Technical Specifications. The purpose of this request is to change Auxiliary Feedwater Pump operational testing frequency from monthly to a quarterly basis.

TU Electric has prepared the proposed change to be consistent with 10CFR50.36a and requests that the proposed change be incorporated into the Technical Specifications as described in the attachments of this submittal. Attachment 1 is an affidavit; Attachment 2 provides a detailed description and assessment of the proposed change; Attachment 3 provides the proposed change to the Technical Specification.

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

Upon approval of the proposed changes; TU Electric requests a 30 day implementation period following the date of license amendment issuance.

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Should you have any questions, please contact Mr. Richard S. Berk at
(214) 812-8952.

Sincerely,

William J. Cahill, Jr.

William J. Cahill, Jr.

By: *Roger D. Walker*

Roger D. Walker
Regulatory Affairs Manager

RSB/rsb

Attachments:

1. Affidavit
2. Description and Assessment
3. Affected Technical Specification page
(NUREG 1468) as revised by all approved
license amendments

Enclosures:

1. NUREG 1366, "Improvements to Technical Specification
Surveillance Requirements"
2. Generic Letter 93-05, "Line-Item Technical Specification
Improvements to Reduce Surveillance Requirements for
Testing During Power Operation"
3. NUREG 1431, "Standard Technical Specifications,
Westinghouse Plants"

c - Mr. L. J. Callan, Region IV
Mr. T. A. Bergman, NRR
Mr. L. A. Yandal, Region IV
Resident Inspectors, CPSES (2)

Mr. D. K. Lacker
Bureau of Radiation Control
Texas Department of Public Health
1100 West 49th Street
Austin, Texas 78704

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
)	
Texas Utilities Electric Company)	Docket Nos. 50-445
)	50-446
(Comanche Peak Steam Electric)	License Nos. NPF-87
Station, Units 1 & 2))	NPF-89

AFFIDAVIT

Roger D. Walker being duly sworn, hereby deposes and says that he is Regulatory Affairs Manager of TU Electric, the licensee herein; that he is duly authorized to sign and file with the Nuclear Regulatory Commission this License Amendment Request 94-011; 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

Roger D. Walker
Regulatory Affairs Manager

STATE OF TEXAS)
)
COUNTY OF DALLAS)

Subscribed and sworn to before me, on this 22nd day of April,
1994.

Gayle R. Peck

Notary Public



DESCRIPTION AND ASSESSMENT

I. BACKGROUND

The Auxiliary Feedwater System is designed to provide a supply of high-pressure feedwater to the secondary side of steam generators for removal of decay heat from the reactor coolant system. The Auxiliary Feedwater System consists of two motor driven pumps and one turbine driven pump with dedicated flow paths to the four steam generators. To ensure operability of the Auxiliary Feedwater System, the pumps are currently tested on a monthly basis as required by the CPSES Technical Specifications (NUREG 1468) and Westinghouse Standard Technical Specifications (NUREG 1431).

In the past, the NRC has required monthly testing of the auxiliary feedwater pumps to ensure that these pumps will perform their intended function. The NRC has recently completed a comprehensive examination of surveillance requirements in technical specifications that require testing at power. The evaluation is documented in NUREG 1366, "Improvements to Technical Specification Surveillance Requirements," dated December 1992. The NRC staff found, that while the majority of testing at power is important, safety can be improved, equipment degradation decreased, and unnecessary burden on personnel resources eliminated by reducing the amount of testing at power that is required by technical specifications. Based on the results of the evaluations documented in NUREG 1366, the NRC issued Generic Letter (GL) 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operations," dated September 27, 1993, which stated that operating and testing experience has indicated that the monthly testing requirement of the auxiliary feedwater pumps is not necessary to adequately ensure that these pumps will perform their intended function. Additionally, the ASME Boiler and Pressure Vessel Code, Section XI, requires the testing of Class 1, 2 and 3 centrifugal pumps "normally every three months." CPSES follows the 1989 version of Section XI for pump testing, which implements the requirements of OM-6. This later version of Section XI is more vibration oriented than earlier versions because industry experience has shown this to be the most sensitive and earliest indication of pump degradation. CPSES experience confirms that vibration measurement has been the most effective indicator of pump degradation and typically well in advance of pump failure. Vibration testing is performed as part of the quarterly Section XI test.

The proposed change to the CPSES Technical Specifications will require the auxiliary feedwater pumps be surveillance tested quarterly on a staggered basis. The proposed change is consistent with ASME Section XI requirements and GL 93-05.

II. DESCRIPTION OF TECHNICAL SPECIFICATION CHANGE REQUEST

The Technical Specification surveillance requirements for the Auxiliary Feedwater System are specified in section 4.7.1.2. The proposed revision to this section consists of changing the operational test frequency of the Motor Driven and Turbine Driven pumps from "at least once per 31 days on a STAGGERED TEST BASIS" to "at least once per 92 days on a STAGGERED TEST BASIS." As a result of this change, the format of these surveillance requirements have been revised as indicated in Attachment 3.

The requested change is based directly on the recommendations of NUREG 1366 (Enclosure 1, Item 9.1) and GL 93-05 (Enclosure 2, Item 9.1). The other changes contained in NUREG 1431 (Enclosure 3, T/S 3.7.5) have been reviewed and TU Electric has chosen not to request the changes at this time. Those other changes will be reconsidered by TU Electric as part of a project to convert to the specification and bases format of the improved Standard Technical Specification (Reference 1).

III. ANALYSIS

As detailed in GL 93-05, the NRC staff has completed a comprehensive examination of surveillance requirements in Technical Specifications that require testing during power operation. The effort is a part of the NRC Technical Specifications Improvement Program. The results of this work are reported in NUREG-1366. In performing the study, the NRC found that, while the majority of the testing at power is important, safety can be improved, equipment degradation decreased, and an unnecessary burden on personnel resources eliminated by reducing the amount of testing that the Technical Specifications require during power operation. Included in this Generic Letter is the following: "Recommendation: Change frequency of testing AFW pumps to quarterly on a staggered basis."

Licensee action for Technical Specification changes to adopt recommendation of GL 93-05 is voluntary. For CPSES, a reduction in the frequency of operational testing of the Auxiliary Feedwater pumps from monthly to quarterly on a staggered basis is a reasonable step to reduce the rate of wear for these pumps, to decrease the burden on CPSES personnel resources, and to increase Auxiliary Feedwater System availability. The reduction in wear results directly from deleting approximately eight starts per year for each pump. Likewise, the decrease in burden on CPSES personnel resources results from not having to schedule, set up for and perform eight surveillance per pump per year. The CPSES plant specific design alters the impact of this change on Auxiliary Feedwater System pump availability when compared to GL 93-05. The

supporting material for GL 93-05 noted that Auxiliary Feedwater System pump availability problems resulted from frequent pump tests using reduced flow test lines. These reduced flow test lines generally allowed testing while the pump remained available for service but caused accelerated degradation. CPSES has full flow test lines which avoids this accelerated degradation; however, the CPSES Auxiliary Feedwater System pumps must be taken out of service to perform the system line-ups needed for testing. Reducing testing will reduce the out-of-service time due to testing for these pumps.

The conclusion in GL 93-5, that monthly testing is not required and that quarterly testing is adequate to ensure that the pumps can perform their intended function, is applicable to CPSES. A review of CPSES operating experience found no indications that testing more frequently than quarterly is necessary. The proposed change is thus considered consistent with the plant operating experience at CPSES. In fact, enhanced vibration monitoring performed by CPSES on these pumps on a quarterly basis, per the 1989 version of the ASME Section XI code, provides additional assurance beyond that assumed in GL 93-05, that the Auxiliary Feedwater System pumps will be adequately tested to ensure that they can perform their intended safety function.

IV. SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The following is an evaluation whether or not a significant hazards consideration is involved with the proposed change by focusing on the three standards set forth in 10CFR50.92(c) as discussed below:

Does the proposed change:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated?

Because the Auxiliary Feedwater System pumps are provided to mitigate certain accidents, altering the test frequency of the pumps will not impact the probability of an accident. The Auxiliary Feedwater System pumps will continue to be tested quarterly on a staggered basis to the same standards applied to safety-related pumps as defined by ASME Section XI. Satisfactory completion of the testing in accordance with the Code is used as verification that safety-related pumps will be available to perform their intended function. Quarterly testing of the Auxiliary Feedwater System pumps on a staggered basis, therefore, will continue to assure that the Auxiliary Feedwater System will be capable of performing its intended

function. It is thus concluded that the requested change will not involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated?

Changing the surveillance test frequency of the Auxiliary Feedwater Pumps does not involve any physical modification of the plant or result in a change in a method of operation. Therefore, it is concluded that the requested change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety?

Changing the surveillance testing frequency of the Auxiliary Feedwater System pumps does not affect any safety limits or any limiting safety system settings. System operating parameters are unaffected. The availability of equipment required to mitigate or assess the consequence of an accident is not reduced; in fact the availability is increased because the system is rendered inoperable on a quarterly basis to perform pump testing, rather than a monthly basis. Further, vibration testing being the most effective early indication of gradual pump degradation continues to be performed on the same frequency. Quarterly testing of the Auxiliary Feedwater pumps on a staggered basis in accordance with the criteria specified in the ASME Section XI code provides adequate assurance that the Auxiliary Feedwater System pumps are capable of performing their intended function. Thus, it is concluded that the requested change does not involve a significant reduction in a margin of safety.

On the basis of the above evaluations, TU Electric concludes that the activities associated with the requested change satisfy the no significant hazards consideration standards of 10CFR50.92(c) and according a no significant hazards consideration is justified. In addition, the requested change is consistent with NUREG 1366 and GL 93-05, and, as such, have already been generically addressed by the NRC.

V. ENVIRONMENTAL EVALUATION

An evaluation of the proposed changes has determined that the changes do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase

in the amounts of any effluents that may be released off site, or (iii) a significant increasing 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 10CFR50.22(b), and environmental assessment of the proposed change is not required.

VI. REFERENCES

1. NUREG 1431, "Standard Technical Specifications, Westinghouse Plants"
2. NUREG 1366, "Improvements to Technical Specification Surveillance Requirements," Section 9.1
3. Generic Letter 93-05, "Line-Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," Section 9.1, September 27, 1993

VII. PRECEDENTS

Similar changes were made at other nuclear power plants which included changing the frequency of testing Auxiliary Feedwater Pumps to quarterly on a staggered basis, such as:

Three Mile Island Nuclear Station, Unit No. 1 (see 57FR61113 dated December 23, 1992)

North Anna Power Stations, Units No. 1 and No. 2 (see 59FR631 dated January 5, 1994)

Surry Power Stations, Units No. 1 and No. 2 (see 59FR2873 dated January 19, 1994)