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TEXAS UTILITIES GENERATING COMPANY

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June 7, 1985

JOHN W. BECK
VICE PRESIDENT

Director of Nuclear Reactor Regulation
Attention: Mr. Vince S. Noonan, Director
Comanche Peak Project
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)
DOCKET NOS. 50-445 AND 50-446
NRC GENERIC LETTER 83-28

REF: 1) V. S. Noonan letter to M. D. Spence
dated April 12, 1985

2) V. S. Noonan letter to M. D. Spence
dated May 1, 1985

Dear Mr. Noonan:

The referenced letters requested additional information concerning the CPSES response to Generic Letter 83-28, "Required Action Based on Generic Implications of Salem ATWS Events". Attached are the responses to both NRC letters.

Sincerely,

John W. Beck

John W. Beck

RWH:grr
Attachment

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NRC GENERIC LETTER 83-28

EQUIPMENT CLASSIFICATION AND VENDOR INTERFACE
(PROGRAMS FOR ALL SAFETY-RELATED COMPONENTS)

Item 2.2.1.3

NRC Comment: Applicant should provide additional information on how station operational personnel use available information to identify safety-related equipment and how this impacts the procedures (e.g., maintenance procedures) which relate to that equipment.

CPSES Response: A procedure will be implemented specifying methods and providing guidance to the CPSES operating staff for the identification of equipment which has quality assurance requirements. When determining safety classification for maintenance, repair, or replacement activities on any systems, structures, components, sub-components or parts, this procedure will require the operating staff to consult CPSES/FSAR Appendix 17A or the CPSES Q-List, as appropriate. If the equipment to be worked on is quality related, it is so designated on the work order, Quality Control is notified, and personnel are required to use approved procedures and/or instructions in performing the work.

Item 2.2.1.6

NRC Comment: Provide a statement that equipment which may be classified as important-to-safety is included in your program responding to Generic Letter 83-28.

CPSES Response: The additional quality requirements for equipment in excess of good commercial grade requirements are specifically delineated in CPSES/FSAR Appendix 17A and the CPSES Q-List. Moreover, Appendix 17A and the Q-List include safety-related items and those non-safety items which have additional quality requirements. The non-safety items are designed, constructed and are being maintained in a manner commensurate with their importance to safety. If new quality requirements are identified for non-safety items, these items will be added to Appendix 17A and the Q-List.

Item 2.2.2

NRC Comment: The staff found the NUTAC program fails to address the concern about establishing and maintaining an interface between all vendors of safety-related equipment and the utility. Accordingly, you will need to supplement your

response to address this concern. Additional information should describe how current procedures will be modified and new ones initiated to meet the elements of this concern.

CPSES Response: In meetings between Mr. R. P. McDonald, Senior Vice President of Nuclear Generation, Alabama Power and the NRC, it was agreed that further review of the NUTAC program is warranted. The Vendor Equipment Technical Information Program (VETIP) as defined in the March 1984 NUTAC document provides a valid response to Item 2.2.2 of Generic Letter 83-28 and CPSES has implemented the program as described therein. Accordingly, Texas Utilities requests that the NRC reanalyze and reconsider the NUTAC program for vendor interface.

(POST-MAINTENANCE TESTING (REACTOR TRIP SYSTEM COMPONENTS)

Item 3.1.3

NRC Comment: Results of review of test and maintenance programs shall identify any post-maintenance testing that may degrade rather than enhance safety and shall describe action to be taken including submitting needed Technical Specification changes.

CPSES Response: CPSES endorses the findings of the Westinghouse Owner's Group (WOG) as presented in WCAP-10271 and its Supplement #1. Changes to the Technical Specifications are being withheld pending CPSES review of the NRC Safety Evaluation Report (SER) for the WCAP. After this review, any changes to CPSES Technical Specifications will be requested by letter through NRR.

REACTOR TRIP SYSTEM RELIABILITY (VENDOR-RELATED MODIFICATIONS)

Item 4.1

NRC Comment: The applicant states that he will replace the existing undervoltage trip attachments on all reactor trip breakers as soon as these are made available by Westinghouse.

The applicant did not refer to the vendor recommendations for the DS-416 breakers as delineated in Westinghouse April 21, 1983 letter to Mr. R. C. DeYoung of NRC. In this letter, Westinghouse committed to replace UVTAs on DS-416. The new attachments have modified (widened) grooves to accomodate the new retaining rings. Quality Control and field installation procedures are also provided to ensure proper critical design dimensions and alignment. The applicant is to submit to the NRC either:

1. A statement confirming that all vendor-recommended DS-416 modifications have been implemented; or

2. A written evaluation of the technical reasons for not implementing any vendor recommended modifications.

CPSES Response: The undervoltage trip attachment replacement of Reactor trip and bypass breakers as delineated in the Westinghouse April 21, 1983 letter, has been implemented. The installations and testings were completed on June 15, 1984 with the full involvement of Westinghouse representatives.

REACTOR TRIP SYSTEM RELIABILITY (PREVENTATIVE MAINTENANCE AND SURVEILLANCE FOR REACTOR TRIP BREAKERS)

Item 4.2.1

NRC Comment: The Comanche Peak Steam Electric Station, Units 1 and 2 Reactor Trip Systems utilize Westinghouse DS-416 circuit breakers. The primary criteria for an acceptable maintenance program for the DS-416 Reactor Trip Breaker (RTB) are contained in Westinghouse Maintenance Manual for the DS-416 Reactor Trip Circuit Breaker, Revision 0, October 1984. The NRC staff, Equipment Qualification Branch, has reviewed this document and endorsed the maintenance program described in it. More specifically, the criteria used to evaluate compliance include those items in this document that relate to the safety function of the breaker, supplemented by those measures that must be taken to accumulate data for trending.

The applicant's response states that his electrical maintenance instructions and testing are addressed in the two documents, EMI-302 and EGI-706A. These documents are not included in the applicant's submittal and could not be evaluated. The applicant also stated that his Maintenance Service Engineering will review Westinghouse maintenance recommendations to incorporate steps necessary for ensuring the reactor trip breakers operability to his current maintenance program.

The Comanche Peak Steam Electric Station Units 1 and 2 periodic maintenance program for the reactor trip breakers should include, on a six-month basis (or when 500 breaker operations have been counted, whichever comes first):

1. General inspection to include checking of breaker's cleanliness, all bolts and nuts, pole bases, arc chutes, insulating link, wiring and auxiliary switches;

2. The retaining rings inspection, including those on the under-voltage trip attachment (UVTA) and shunt trip attachment (STA);

3. Arcing and main contacts inspection as specified by the Westinghouse Maintenance Manual;

4. UVTA check as specified by the Westinghouse Maintenance Manual, including replacement of UVTA if dropout voltage is greater than 60% or less than 30% of rated UVTA coil voltage;

5. STA check as specified by the Westinghouse Maintenance Manual;

6. Lubrication as specified by the Westinghouse Maintenance Manual;

7. Functional check of the breaker's operation prior to returning it to service.

The Comanche Peak Steam Electric Station Units 1 and 2 Periodic Maintenance Program for the reactor trip breakers should include, on a refueling interval basis (or when 500 breaker operations have been counted, whichever comes first):

1. Pre-cleaning insulation resistance measurement and recording;

2. RTB dusting and cleaning;

3. Post-cleaning insulation resistance measurement and recording, as specified by the Westinghouse Maintenance Manual;

4. Inspection of main and secondary disconnecting contacts, bolt tightness, secondary wiring, mechanical parts, cell switches, instruments, relays and other panel mounted devices;

5. UVTA trip force and breaker load check as specified by the Westinghouse Maintenance Manual;

6. Measurement and recording RTB response time for the undervoltage trip;

7. Functional test of the breaker prior to returning to service as specified by the Westinghouse Maintenance Manual.

The maintenance procedure should include a caution to the maintenance personnel against undocumented adjustments or modifications to RTBs.

The applicant is to confirm that the periodic maintenance program includes these fourteen items at the specified intervals or commit to their inclusion.

CPSES Response: The CPSES Maintenance Department, in recognizing that the reactor trip switchgear is important to safety, is preparing a new Electrical Maintenance Instruction (EMI) specifically for the reactor trip switchgear. This new instruction will be based on the Westinghouse Maintenance Manual For DS-416 Reactor Trip Circuit Breakers, Rev. 0, October 1984, and will include maintenance activities for the items identified above except for UVTA trip force (See CPSES Response to Item 4.2.2). Maintenance will be performed on a schedule consistent with the Westinghouse manual.

Item 4.2.2

NRC Comment: Four parameters have been identified as trendable and are included in the criteria for evaluation. These are (a) undervoltage trip attachment dropout voltage, (b) trip force, (c) breaker response time for undervoltage trip, and (d) breaker insulation resistance.

The applicant states that "The Technical Specifications for CPSES Unit 1 do not currently require maintenance activities on these breakers and CPSES Procedure EMI-302, discussed above, does not require data to be trended. However, this procedure does have acceptance criteria to which the parameters measured during testing are compared. Maintenance Services Engineering will review Westinghouse recommendations and evaluate the value of trending parameters.

The NRC requires trending to forecast the reactor trip breakers degradation of operability. The applicant is to commit to inclusion of trip force, breaker response time and dropout voltage for undervoltage trip and breaker insulation resistance as trending parameters. The licensee should also identify how often the analysis will be performed and how the information derived from the analysis will be used to affect periodic maintenance.

CPSES Response: The Westinghouse Maintenance Manual For DS-416 Reactor Trip Circuit Breakers, Rev. 0, October 1984 provides guidance to adequately maintain the Reactor Trip Breakers (RTBs) through periodic maintenance procedures, performance tests and checks, as well as performance tolerance measurements to detect degradation. CPSES will record data for (a) undervoltage trip attachment dropout voltage, (c) breaker response time for undervoltage trip and (d) breaker insulation resistance. This data will be recorded on procedural data record sheets and attached to work order authorizations, which are maintained as permanent plant records in accordance with approved station procedures. Review of the data sheets and the work order instructions is accomplished procedurally by a Maintenance Supervisor. Item (b), trip force is not

measured at CPSES. CPSES has reviewed the Westinghouse Owners Group (WOG) Life Cycle Test Report (Draft), December 1984. This report indicates that measurement of the UVTA trip force is only an approximation of the trip force margin. The tests indicated that there were no significant degradation trends in the margin of trip force over the 2500 trip operations performed. Also, the tests indicated that slight changes in the positioning of the devices, as might occur during normal maintenance activities, could substantially affect the readings. Based on the CPSES use of the Westinghouse maintenance manual and the results of the WOG life cycle testing discussed above, CPSES has an effective program for maintenance of the RTBs including the detection of RTB degradation.

REACTOR TRIP SYSTEM RELIABILITY (SYSTEM FUNCTIONAL TESTING)

Item 4.5.2

NRC Comment: State if the plant is currently designed to permit on-line testing of the RTS. If not, either design modifications that will permit such testing shall be described along with an implementation schedule or justification for not providing on-line testing capability should be provided.

CPSES Response: CPSES has been modified to allow periodic on-line testing of the Reactor Trip System. The design is based on the generic information as presented in WCAP-10271. The plant specific design was previously submitted to the NRC by CPSES letters TXX-4071 of 11/3/83 and TXX-4361 of 11/15/84.

Items 4.5.3

NRC Comment: Submit a description of the specific implementation plan for Comanche Peak 1 and 2 after NRC reviews the WCAP-10271 and Supplement 1.

CPSES Response: Changes to the CPSES Technical Specifications are being withheld pending CPSES review of the NRC Safety Evaluation Report (SER) for WCAP-10271 and its Supplement #1. After this review, any changes to CPSES Technical Specifications will be requested by letter through NRR.