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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

'84 OCT -1 P1:22

Before Administrative Judges:

Peter B. Bloch, Chairman
Dr. Kenneth A. McCollom
Dr. Walter H. Jordan

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

SERVED OCT 1 1984

Docket Nos. 50-445 OL
50-446 OL

In the Matter of

TEXAS UTILITIES ELECTRIC COMPANY, ET AL.

(Application for
Operating License)

(Comanche Peak Steam Electric Station,
Units 1 and 2)

October 1, 1984

MEMORANDUM
(Concerns About Start-up Quality Assurance)

In the companion proceeding (50-445-OL2 and 50-446-OL2), Texas Utilities Electric Company (Applicants) introduced evidence for the purpose of impeaching the credibility of Witness F¹. The Licensing Board in the companion proceeding then identified two witnesses that had prefiled testimony and called those witnesses for further testimony, delivered on September 21, 1984, in an in camera session. Evidence received in that session gives the Board serious concern about the adequacy of Applicants' program for quality assurance during its start-up testing activities, including activities related to the Reactor Protection System. We will await Staff evaluation of these concerns, which we set out below, before deciding whether to grant Applicants'

¹ Since the witness provided testimony to Nuclear Regulatory Commission investigators and has insisted on retaining confidentiality for his testimony, we will not release his name nor information about his identity.

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request for a license for precriticality testing and before deciding whether to reopen the phase of the hearing about operations quality assurance in order to assure an adequate record with respect to start-up quality assurance.

Our concerns are:

(1) Although Applicants are committed to implementing written start-up test procedures, their start-up test engineers and quality assurance technicians apparently have incorrectly interpreted the phrase "independent verification" in the test procedures. (See, e.g., Tr. 18,431.) The quality assurance technicians merely verify that there are numbers -- any numbers -- on test data sheets and they do not review whether the numbers are properly calculated, are within the test criteria, or are calculated pursuant to an adequately defined test procedure. Since there is no quality control check of these same sheets, the only independent review conducted is through occasional quality assurance audits, which do not appear to be a sufficient independent review for the importance of many of the tests that are conducted. Tr. 18,301-04; 18,400-03, 18,406.

(2) Apparent failure to document important deficiencies and to follow-up in an appropriate fashion. For example, two start-up test supervisors (Cheatham and London) who knew of charges that a start-up test engineer had intentionally falsified a test failed to initiate any deficiency paper concerning this personnel problem, even though a thorough review of the engineer's work has been undertaken by a start-up supervisor. Tr. 18,221-23, 18,224, 18,231, 18,405-06. Follow-up on

these deficiencies could have alerted Applicants to the need to review the adequacy of the implementation of procedures, as described in paragraph (1), above.

(3) Failure to document apparent design deficiencies in a vendor item in the Reactor Protection System, with the consequence that there may be undetected generic deficiencies in the design of an alarm circuit that was supposed to detect overloads affecting the inverters in the reactor protection system. Since the vendor had a generic problem in a related component (the saturation transformers), which had to be replaced, failure to follow-up on a deficiency in related circuitry appears to be egregious. Tr. 18,388-89 (apparent failure to follow site procedures concerning the use of an NCR to report a deficiency in a component), 18,219-20, 18,408-09. Compare 18,328-30 concerning the use of design change requests (TDCRs).

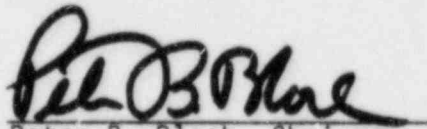
(4) Written startup procedures appear to have been affected by an oral directive (Tr. 18,373)² and by a written memorandum (Tr. 18,381-82)³. The written memorandum appears to have attempted to alter the written procedure governing the filing of NCRs.

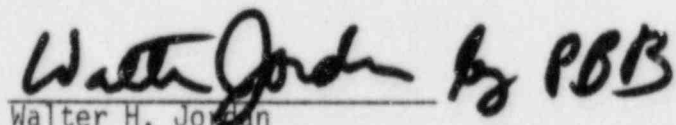
² Applicants were prevented from following-up on this matter because of previous assertions they had made to the Board that the testimony of this witness was not needed in the proceeding.

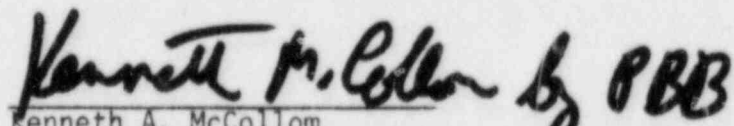
³ Applicants also were prevented from explaining this matter because of a similar procedural problem to that mentioned in the previous footnote.

(5) Defective test procedures were not detected during the first administration of those procedures in a test situation. Additionally, neither of the responsible Systems Test Engineers (STE's) detected, prior to testing, that the wiring diagram for the inverter annunciator system would not detect an overload. Since STE's are responsible for the adequacy of the procedures they administer and for being able to review the procedures in light of the wiring diagrams, these failures call STE qualifications into question. Tr. 18,182, 18,204-05, 18,208, 18,229-30, 18,183-85, 18,314-17, 18,334-35, 18,337-38.

THE ATOMIC SAFETY AND LICENSING BOARD


Peter B. Bloch, Chairman
ADMINISTRATIVE JUDGE


Walter H. Jordan
ADMINISTRATIVE JUDGE


Kenneth A. McCollom
ADMINISTRATIVE JUDGE

Bethesda, Maryland