



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

July 1985

MEMORANDUM FOR: R. F. Warnick, Assistant Director  
for Inspection Programs  
Comanche Peak Project Division  
Office of Nuclear Reactor Regulation

FROM: H. S. Phillips, Senior Resident Inspector  
for Inspection Programs  
Comanche Peak Project Division  
Office of Nuclear Reactor Regulation

SUBJECT: SYSTEMATIC ANALYSIS OF LICENSEE PERFORMANCE

You requested an input relative to the licensee's performance. My input is provided in narrative form and is based on each report during the SALP period. The standard evaluation criteria was used to assess the licensee's performance.

I am encouraged by the licensee's progress since 1984 and have concluded that their corrective action was comprehensive relative to hardware. Prior to operations, I believe that any additional problems with hardware will be identified during testing provided such testing is rigorous.

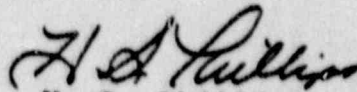
On the other hand, I have been continuously concerned with the licensee's attitude. It is easier to identify hardware problems and know when they are fixed, but it is much more difficult to determine the same about the licensee's attitude toward regulations and safety. From 1984 to the present, I have been concerned because of: (1) a disregard for committing to and following proven methods for meeting regulatory requirements (Regulatory Guides) and a determination to do it the "Texas Utilities Way," (2) a tendency to work ten times harder and longer to prove an NRC finding wrong rather than simply fix the problem, (3) a policy of applying narrow corrective action rather than considering generic implications to prevent recurrence, (4) a practice of trying to talk their way out of problems instead of simply fixing them, and (5) several instances when the licensee did not provide complete and accurate information to the NRC (which is unacceptable whether intentional or inadvertent). I believe these matters are somehow deeply rooted in the Texas Utilities pride that advocates they can do any job and do it well - without government or bureaucratic interference.

I hope these perceptions are not true, however, almost every inspector and consultant that I have talked to shares one or more of these perceptions. TU Electric's attitude toward regulations

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and safety is most important during the operation of a nuclear plant. I believe this area is due close scrutiny by the NRC inspectors.



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for Inspection Programs  
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Attachments:

- (1) Narrative
- (2) Table of Evaluation Criteria

cc: SBurris, Senior Resident Operations (Less Criteria)  
HLivermore, Senior Resident Construction  
JWiebe, Senior Project Inspector

### SALP EVALUATION

The following is a narrative which justifies each Category 1 and 3 rating for the standard evaluation criteria for 12 months of inspection.

Report 50-445/87-20; 50-446/87-16 - No justification necessary.

Report 50-445/87-27; 50-446/87-20 - TU Electric found the AFW motors fans to be reversed while testing Unit 2 motors. The engineering evaluation was inadequate because it simply assumed that Unit 1 fans could not be reversed. Although, TU Electric evaluated the deficient Unit 2 motors, they concluded that the deficiency was not potentially reportable and were not reported from July 1986 until July 1987. The engineering evaluation of Test Deficiency Report (4870 dated June 20, 1986) was inadequate because Gibbs & Hill (GHCP-1814) was principally concerned with fixing Unit 2 motors. This addressed the symptoms and not the root cause.

In the enforcement conference on the violations in this report, TU Electric appeared to not rely on self-assessment to ensure quality concerning the AFW pump motor activities. They appear to spend much more time and energy to find defenses and excuses than finding the real cause of deficiencies. They have defined safety significance narrowly when evaluating 50.55(e) deficiencies. This is evidenced by the following:

- . The 50.55(e) evaluation in 1986 was inadequate because safety significance was not confirmed until 1987.
- . The conclusion that the deficient motors were not reportable because they were not significant ignores a breakdown in a portion of the QA program, that is, this problem was identified by an Ingersoll Rand letter in June 1978, but Gibbs and Hill, Brown and Root, and TU Electric failed to take corrective action. When the deficient condition surfaced again in 1986 during testing, Gibbs and Hill and TU Electric again failed to take adequate corrective action. This met the criteria for reportability.
- . Management agreed with these positions in the 50.55(e) letter and the enforcement conference handout. The enforcement position was that the deficiency was not technically significant, but this was without sufficient engineering basis until many months later when the manufacturer's engineering evaluation was obtained. The NRC had to wait a considerable time on this issue. The

corrective action (reverse the fans) caused another problem that was not analyzed. That is, the unauthorized substitution of carbon steel for silicon bronze bolts. This was not analyzed as a part of the overall problem, but was subsequently reported as a 10 CFR 50.55(e) deficiency. The safety significance is still not known.

TU Electric agreed with the NRC violation that showed that the test engineer did not follow procedures, but failed to acknowledge that the reversed condition was caused by inadequate instructions. That is, the cable termination cord referred to site drawing E2-0031-3H40, Revision 0, but this drawing did not include necessary precautions relative to phase changes that were described on the manufacturer's drawing W 8972D75.

Report 50-445/87-36; 50-446/87-27 - No justification necessary.

Report 50-445/88-03; 50-446/88-02 - Weaknesses in the TU Electric nonconformance reporting system were pointed out. That is, nonconformances are not reported if the item is reworked or scrapped. TU Electric refused to change the system and maintained that their system met requirements. This approach was viable and lacked an indepth self-assessment, but met minimum requirements.

Report 50-445/88-12; 50-446/88-10 - Documentation in TU Electric's file for Bulletin 80-11 indicated that all masonry walls had been removed, replaced, or modified. An NRC inspection of the walls revealed that the "as-built" condition and the FSAR drawing conflicted. That is, two walls had not been modified as stated in FSAR Amendment 59 dated June 1986. DCA 23040 revealed further conflicts and the block on the DCA requiring changes to the FSAR was marked no effect on the licensing document. Even though work was in progress concerning masonry walls, the bulletin was closed. The engineering evaluation was inadequate and ~~that~~ in the FSAR data was not accurate. ✓

Management defended the conflict, ~~by stating that~~ The FSAR states that engineering changes and work is complete when in reality only a design change has been processed and work is yet to be completed. It was further stated that this is an industry practice. To stretch the truth and defend it is not a viable approach, lacks in self-assessment, and did not meet the minimum requirements. TU Electric procedures were violated.

Report 50-445/88-17; 50-445/88-14 - In 1986, TU Electric was informed of deficiencies in the traveler system used to control work on NAMCO switch installation. The violation was denied. In 1988, the same violation was identified with more substantiating data. The recent violation was identified while reviewing NRC Bulletins related to NAMCO switches. These switches had been worked on so many times that it was very difficult to determine the

sequence of work event and compliance with NRC regulations and the Bulletin. It took TU Electric several months to unravel the sequence of work. They were finally able to show that all actions were taken on Bulletin 78-04 and 79-28. TU Electric denied this violation concerning instructions and hold points that were missing from the traveler. Without such information on the traveler the honoring of hold points could not be verified. Since the site has always had violations of QC hold points by craftsmen, this made the finding more important.

Corrective action described in responses to this violation made it appear as though corporate management and engineering evaluations did not understand the issue, addressed the symptoms rather than root causes and was not capable of self-assessment. It appeared that they were careful to commit to the NRC to do no more than the minimum requirements. Resolution of these issues was delayed and it took considerable NRC effort to obtain acceptable resolution. As it turned out, TU Electric understood the issue as evidenced by a stop work order which was issued to correct work packages in general, including travelers. The new travelers for NAMCO switches were adequate in all respects and addressed each point in the 1986 and 1987 violations against the traveler system.

During the 1987 inspection, potential violations were identified with the use of Inspected Removal Notices (IRN) which appeared to allow disassembly without requiring the use of a traveler. This practice appeared to be less than desirable and was discontinued when the IRN procedure was cancelled.

Although TU Electric's procedures were inadequate (before revision) and they were not always followed; it appears that the problem was finally addressed and corrected.

Report 50-445/88-26; 50-445/88-22 - No justification necessary.

Report 50-445/88-34; 50-446/88-30 - TU Electric was informed of the perceived lack of controls for the Service water coating removal project. The NRC was concerned with poorly stated requirements, inadequate engineering evaluations, and a lack of QA involvement. The project manager frequently did not understand the issues and maintained that all activities were adequately controlled. Corporate QA management did little to identify the real problems, but spent most of their time defending project actions and doing damage control. These approaches were not viable and did not meet minimum requirements. There is little evidence of training of the vendor personnel to comply with TU Electric's QA program, as the vendor had none.

Report 50-445/88-47; 50-446/88-42 - The comment above apply to this report as this was the final report on all SWS deficiencies that led to an enforcement conference and the Notice of Violation. TU Electric made statements in the Public Meeting and Enforcement

Conference that appeared to be inaccurate, however, at this time there was no way to absolutely refute these statements. Subsequent follow-up inspection showed that complete and accurate information was not furnished to the NRC. Accordingly, NRC management did not have sufficient information to determine the proper enforcement action. Additional enforcement action is being considered.

Report 50-445/88-67; 50-446/88-63 - No justification necessary.

Report 50-445/88-67; 50-446/88-63 - No justification necessary.

NRC reviews of engineering and technical support activities generally arise during performance of other NRC inspections; such as, construction/CAP, plant operations, and reviews of applicant responses to NRC findings or initiatives. As a result of these NRC actions, ~~two~~<sup>eight</sup> violations were issued. ~~Each~~ of these violations appeared to be isolated occurrences while ~~one~~ were programmatic in nature. For example, engineering inappropriately allowed the use of low strength bolting (A-307) in snubbers; also, ~~the failure of~~<sup>fail to</sup> design reviews to identify and correct numerous minor deficiencies found in pipe support calculations. In another area, the applicant inappropriately accepted certain welds based on stress analyses provided by engineering in lieu of required nondestructive examinations. In addition, the NRC AIT performed a detailed inspection of activities related to backleakage problems of Borg-Warner check valves installed in the AFW system. As a result of that inspection, four violations were ~~issued~~<sup>identified</sup>, two for deficiencies in plant operations and two for the failure of engineering and technical support to take appropriate and timely corrective actions. ~~an assessment of the applicant's performance for this functional area follows~~

Procedures for control of activities are stated and defined; however, when the initial Startup Technical Support group was transferred to the manager of Technical Support, procedures were not in place to control the applicable actions of the new organization. In addition, there was little evidence of management involvement, prior planning, and assignment of priorities during the initial technical evaluation of the AFW check valve leakage event. Corporate management is frequently involved in site activities as evidenced by actions <sup>showing</sup> ~~showing~~ their interest in and knowledge of FSAR commitments.

~~Foot number~~

~~Corrective actions for certain pools - developed preoperational test procedures have not been timely or effective. In addition, investigation and corrective action for the AFW check valve leakage was not proceeding in a timely ~~manner~~ or focused until prompted by the NRC. Corrective action was not taken for several precursor events to the AFW check valve leakage events, ~~as was industry experience with these valves adequately evaluated which could have prevented repetition.~~~~

Response to NRC requests for information are usually timely and technically supported. However, during