

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	Docket Nos. 50-445
TEXAS UTILITIES GENERATING)	50-446
COMPANY, <u>et al.</u>)	
)	(Application for
(Comanche Peak Steam Electric)	Operating Licenses)
Station, Units 1 and 2))	

TESTIMONY OF RONALD G. TOLSON AND
GORDON R. PURDY REGARDING NRC INSPECTION
OF FUEL BUILDING AND DESIGN CHANGE VERIFICATION

Q1. Mr. Tolson, please state your full name, residence, job title and educational and professional qualifications.

A1. My name is Ronald G. Tolson. I reside in DeSoto, Texas. I am the Site QA Supervisor for Comanche Peak. My educational and professional qualifications were received into evidence as Applicants' Exhibit 20.

Q2. Mr. Purdy, please state your full name, residence, job title and educational and professional qualifications.

A2. My name is Gordon R. Purdy. I reside in Granbury, Texas. I am employed as the Brown & Root ASME Site Quality Assurance Manager at Comanche Peak. A statement of my educational and professional qualifications was received into evidence as Applicants' Exhibit 141B.

Q3. What is the purpose of your testimony?

A3. (Tolson and Purdy) The purpose of this testimony is to respond to the findings of the NRC set forth in I&E Report 83-23, dated July 27, 1983, regarding the results of an inspection of the Fuel Building at Comanche Peak. In addition, we address a statement made by the NRC in I&E Report 83-24/83-15, dated August 24, 1983, regarding our experimentation with the use of computer based data to verify that design changes have been incorporated into the plant.

FUEL BUILDING INSPECTION

Large Bore ASME Pipe Supports

Q4. Mr. Purdy, what is Applicants' response to the finding in I&E Report 83-23 regarding an undersized weld on a pipe support?

A4. (Purdy) The single undersized weld identified by the NRC was a fillet weld that was less than 1/16" undersized from the 1/2" weld specified on the support drawing. Applicants evaluated this undersized condition and determined it not to be significant for that support. Accordingly, the support drawing was revised to indicate the existing weld size. I would note that this weld was a single, four-inch weld out of over 500 individual welds on large bore supports, totalling more than 3000 linear inches of weld, inspected by the NRC.

Q5. Mr. Purdy, please describe Applicants' response to the finding of the NRC regarding dimensions on vendor certified drawings?

A5. (Purdy) The NRC identified two supports on which discrepancies (one measurement on each support) were identified between the design drawing dimension and the as-built configuration (I&E Report 83-23, Appendix B at 5). Applicants investigated both of these items, and confirmed for ourselves the NRC's conclusion that neither raised any safety concern. The first example involved a design dimension of 2' 3" from a member of the support to the centerline of the pipe. Applicants determined that the actual dimension was 2' 4-9/16". In that this variance from design dimension is within the specified pipe location tolerances ($\pm 2"$), no further evaluation was necessary. The other support involved a variation in dimension between wall plates of 3' 0-3/4" (actual) versus a 2' 4-3/8" dimension specified on the drawing. Applicants' engineering evaluation determined that this as-built condition was acceptable, as it was more conservative than the original design, and the drawing was revised to reflect the as-built condition.

Q6. Mr. Purdy, what is Applicants' response to the findings of the NRC regarding certain materials not being in accordance with the vendor certified drawing?

A6. (Purdy) The Staff identified two supports on which an item was found not to comply with material specified on the drawing. These items involved a variation in tube steel member thickness and the length of a threaded rod (I&E Report 83-23, Appendix B at 5). Both items were evaluated by Applicants' engineers and found to raise no safety concern regarding the adequacy of the supports. In the first example, the draftsman had incorrectly transferred the identified dimension. As the change was not an Engineering initiated change, he did not annotate the drawing to trigger the QC reinspection to confirm the dimension. Applicants consider this instance to be an isolated drafting anomaly not warranting further action. Accordingly, the drawing was corrected to reflect the as-built condition. On the other support, it was determined that the installed threaded rod was longer than required by design. However, although acceptable for the application, the installed rod was removed, and the rod specified on the drawing was installed. In addition, Applicants revised the inspection checklist to assure inspector attention to these type of details.

Q7. Mr. Purdy, what is your response to the NRC Staff's finding regarding a broken cotter pin?

A7. (Purdy) The NRC identified a broken cotter pin on one support, a condition contrary to applicable inspection procedures (I&E Report 83-23, Appendix B at 6). In response to this finding, Applicants replaced the broken cotter pin and revised the procedure applicable to final ASME certification inspections to include documented verification of installed hardware, i.e., nuts, bolts, cotter pins, etc. These items will continue to be the subject of in-process inspections.

Q8. Mr. Purdy, what is Applicants' response to the finding of the NRC regarding loose jam nuts?

A8. (Purdy) In its inspection of large bore ASME pipe supports, the Staff identified five supports which had loose jam nuts, contrary to the provisions of applicable inspection procedures (I&E Report 83-23, Appendix B at 6). In response to this finding, Applicants tightened the nuts identified in the inspection and revised the inspection checklist to include specific criteria for inspecting snug tight conditions for these nuts. The checklist will be used during the final ASME certification inspection, which had not been performed in the Fuel Building at the time of the NRC inspection.

Small Bore ASME Pipe Supports

Q9. Mr. Purdy, what is Applicants' response to the NRC's finding regarding dimensions on a support not being consistent with the final review drawing?

A9. (Purdy) The NRC identified a support as having a 1' 6" spacing between 11/16" holes, rather than the 1' 6.5" indicated on the drawing (I&E Report 83-23, Appendix B at 6). Applicants performed an Engineering evaluation of this discrepancy and found it not to raise any safety concerns. Accordingly, the drawing was revised to reflect the as-built condition.

Q10. Mr. Purdy, what is your response to the NRC's finding regarding a shim on an ASME small bore pipe support not being in accordance with the final review drawing?

A10. (Purdy) The NRC identified a single shim on small bore ASME pipe support as not being in conformance with the drawing (I&E Report 83-23, Appendix B at 6). The actual location of shims is not specified by Engineering on the design drawing, other than the annotation of "field shim to suit". QC indicates actual shim location during walkdown inspection only for verification of material compatibility and weld acceptability. QC revised the drawing annotation to properly show shim location on the support, and no further action was necessary.

Q11. Mr. Purdy, what is Applicants' response to the NRC's finding that a base plate on a small bore ASME pipe support was not in accordance with the final review drawing?

A11. (Purdy) One support was identified to have a base plate dimension of 7/8" thickness rather than the 1" thickness specified by the design drawing (I&E Report 83-23, Appendix B at 6). Applicants performed an engineering evaluation of this discrepancy and found the support to be acceptable without modification. In addition, Applicants revised their inspection checklist to include specific verification of base plate dimensions. Applicants also traced the 7/8" material and determined that its use as 1" material was an isolated occurrence.

Conduit Raceways

Q12. Mr. Tolson, what is Applicants' response to the NRC's finding regarding the spacing between an unused anchor bolt and an installed Hilti bolt?

A12. (Tolson) The NRC identified one instance in which an installed Hilti bolt was less than 1" from an unused cutoff embedded anchor bolt, contrary to the procedure which specified a 1" separation (I&E Report 83-23, Appendix B at 8). Applicants' reinspection of this support determined that the separation was 7/8" between the installed bolt and the cutoff embedded bolt. This condition was identified on an unsatisfactory Inspection Report and evaluated by Project

Engineering. That evaluation determined that no safety function of the support was impaired by this spacing. Applicants also determined that the particular bolt in question was partially obscured by components on the support and thus was difficult to inspect. In any event, Applicants agree with the Staff (I&E Report 83-23, Appendix B at 12) that this is an isolated case and believe that it has no systemic implications. Accordingly, Applicants concluded that no programmatic change was necessary as a result of this finding.

Cable Tray Supports

Q13. Mr. Tolson, what is Applicants' response regarding the NRC's finding concerning compliance of installed supports with final designs?

A13. (Tolson) Two findings were made regarding particular components of two cable tray supports. These findings concerned the size of a steel angle wall connection and the size of a horizontal support member on another support. (I&E Report 83-23, Appendix B at 11-12). In response to these findings, Applicants conducted an evaluation of the specific determinations made by the Staff.

With respect to the steel angle wall connection, it was determined that the original design of the hanger utilizing this connection permitted either a 5x5 or 6x6 connection angle. The drawing to which the support was inspected by

the Staff incorrectly referenced the 6x6 connection as having been installed. A revision to the drawing was issued to reflect the installed connection.

As for the horizontal support member, Applicants determined that the specification for this support member calls for a "Detail L" support, "similar to an SP-7 w/brace". The basic difference between a Detail L and an SP-7 member is the material (channel) size. An SP-7 utilizes a 6" channel (as used here), while a Detail L employs a 4" channel (reflected on the drawing). In response to this finding, the support drawing was revised to reflect the existing condition.

Q14. Messrs. Tolson and Purdy, what do the findings of the NRC in I&E Report 83-23 indicate with respect to the adequacy of the QA/QC program for Comanche Peak?

A14. (Tolson and Purdy) The NRC's findings indicate that Applicants' Quality Assurance/Quality Control Program has been effective in identifying and correcting conditions of safety significance. The NRC inspection involved more than two man-months of inspection work in thirteen areas. In these thirteen areas, only the above described deficiencies were identified. These matters raise no significant adverse implications for the QA/QC program. Rather, they indicate an effective process which can be made more effective with

minor adjustments to inspection checklists to provide greater assurance of identifying these type of discrepancies, and we have made those adjustments.

DESIGN CHANGE VERIFICATION

Q15. Mr. Tolson, what is your response to the discussion at pages 12-13 in I&E Report 83-24/83-15 on the use of computerized data reflecting design changes?

A15. (Tolson) The discussion in the I&E Report is basically accurate. We did experiment in one instance with the usefulness of computer-based data in verifying that design changes have been incorporated into the plant. We found that the computer-based data was not current due to the backlog of coding and indexing. Accordingly, we are continuing to use hard copy records for this verification process in accordance with established procedures. Further, we have focussed more attention on the coding and indexing of this information.