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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
before the
ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY
DOCKETING & SERVICE
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In the Matter of)	Docket Nos. 50-445-OL
)	50-446-OL
TEXAS UTILITIES ELECTRIC)	
COMPANY et al.)	
(Comanche Peak Steam Electric)	(Application for an
Station, Units 1 and 2))	Operating License)

APPLICANTS' MOTION FOR AN ORDER RESOLVING
ALL PIPING AND PIPE SUPPORT DESIGN ISSUES

On November 3, 1987, Applicants issued the Project Status Reports ("PSR") on large and small bore piping and pipe supports (collectively the "Piping/Pipe Support PSRs"). ^{1/} The NRC Staff reviewed those PSRs and supporting documentation and on March 9, 1988, issued its corresponding Supplement to the Safety Evaluation Report ("SSER-14"). On April 28, 1988, CASE filed its "Identification of Piping/Pipe Support Issues." Based on

^{1/} See supporting Affidavit of R.P. Klause. Also supporting this Motion are the Affidavits of J.W. Muffett and Howard A. Levin. Attached to these affidavits are the PSRs on large and small bore piping and pipe supports, Discipline Specific Action Plan IX, the "Discipline Specific Results Report: Piping and Supports" and the Review Issues Lists for Pipe Supports and Pipe Stress issued by Cygna Energy Services ("Cygna").

Applicants' review of CASE's recent filing, it is apparent that CASE has not raised any issues as to the design of piping and pipe supports addressed in the Piping/Pipe Support PSRs. 2/

Accordingly, Applicants respectfully request that the Atomic Safety and Licensing Board ("ASLB" or "Board") issue a ruling declaring that, because CASE has not identified any issue regarding the design matters addressed by the Piping/Pipe Support PSRs:

1. No hearing will be held as to such matters; and
2. Such matters are resolved in favor of Applicants and are no longer in controversy in this proceeding.

2/ That CASE chose not to raise any issues regarding the design of piping and pipe supports is not surprising. As we believe CASE would acknowledge, Applicants have made extensive efforts to apprise CASE of the resolution of those issues. Beginning in March 1987, a series of technical meetings was held between TU Electric and CASE and its technical consultant, Mr. Doyle, in which Stone & Webster Engineering Company ("SWEC") presented, among other things, its approach to and resolution of the design issues raised by Mr. Doyle dealing with piping and pipe supports. The intent of those meetings was to apprise CASE and its consultant of the activities being conducted by SWEC, to obtain any suggestions or answer any questions CASE or its consultant might have and to obtain CASE's technical consultant's concurrence in the approach to and resolution of the design issues relating to piping and pipe supports. During those meetings, CASE's consultant noted his technical concurrence in the resolution of virtually all the piping and pipe support design issues.

Procedural Background

Following a prehearing conference on November 2-3, 1987, the Board issued an order establishing a litigation schedule to resolve all issues in the operating license dockets. ^{3/} The Board's schedule is predicated on the issuance of certain milestone reports by the Applicants and the issuance by the NRC Staff of Supplements to the Safety Evaluation Report addressing the areas covered by Applicants' milestone reports. Specifically, the schedule divides the hearing process on each milestone report into three phases. Phase I begins upon the issuance by Applicants of a Notice of Availability of a Project Status Report ("PSR") or the Collective Significance Report ("CSR"). Discovery by CASE on a particular PSR or the CSR begins the next day.

Phase II of the schedule begins on the date the NRC Staff files its SSER on the issued PSR (or CSR). CASE is then required to complete discovery and, thereafter, "CASE specifies the issues in which it is interested and the basis for its interest." Memorandum and Order (Litigation Schedule) at 5 (Nov. 18, 1987).

During the prehearing conference the Board described CASE's obligation to specify issues in the following terms:

Ten days after discovery is closed, CASE will file a notice stating whether it wishes to contest all or portions of the particular

^{3/} Texas Utilities Electric Company, (Comanche Peak Steam Electric Station, Units 1 and 2) Docket Nos. 50-445-OL2 and 50-446-OL2, Memorandum and Order (Litigation Schedule) (Nov. 18, 1987).

report and the related reports. And it should specify what it wishes to contest with clarity so that we understand what is being contested and should make a brief statement of the reasons it intends to rely on and some statement of the basis for challenging that particular area. 4/

The Board also stressed that, as each PSR is issued, all documents and reports underlying or related to the PSR were also to be encompassed within the Board's Order. As Judge Bloch noted:

I think it has to be understood that for each of the project status reports that the trigger occurs for that entire area of interest including the predecessor reports from the prior documents prepared by applicants under the CPRT program and whatever other documents are relevant. 5/

Thus, based on the Board's scheduling Order and the Board's statements at the prehearing conference on November 2-3, 1987, CASE was required to specify clearly and with supporting basis the precise issues relating to each PSR which it desired to litigate. Equally important, in specifying issues, CASE was required to examine not only the PSR but also all other existing documents available to it relating to a particular PSR, such as Issue Specific Action Plans ("ISAP"), Discipline Specific Action Plans ("DSAP"), Design Basis Documents ("DBD") and the like. 6/

4/ Tr. 25143-44.

5/ Tr. 25142-43. The Board also stated that CASE should communicate with the Staff "so that it will not be surprising the staff with its concerns. So, that is a kind of a good will test. We expect that the issues that CASE sees will be surfaced early rather than waiting."
Tr. 25143.

6/ In this regard, it should also be noted that the Board's
(footnote continued)

The concept underlying the Board's scheduling is that any aspect of a triggering document (including underlying or related documents) left unchallenged by CASE would not be regarded as controverted and hence would not become the subject of a public hearing.

I. THE LICENSING BOARD SHOULD ISSUE AN ORDER RESOLVING ALL PIPING AND PIPE SUPPORT ISSUES

A. The PSRs

Before addressing the specific matters discussed in CASE's Identification of Piping/Pipe Support Issues, Applicants believe it is important to briefly describe the scope of the PSRs and the matters resolved by the PSRs.

Each PSR documents the culmination of the design validation program undertaken by the Project as a major portion of the Project's Corrective Action Program ("CAP") for a particular discipline. ^{7/} Briefly stated, the design validation

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scheduling Order required Applicants to provide notice "that a Project Status Report or the Collective Significance Report and reports and documents relied on in the report, are available for review." Memorandum and Order (Litigation Schedule) at 5 (Nov. 18, 1987). In response to the Board's Order, Applicants have noticed the availability of each PSR, all documents specifically referenced in each PSR, and all of the primary documents relied upon in preparing each PSR. In addition, Applicants made available to CASE indices of underlying calculations and drawings and established a computer link to the onsite document center to provide CASE access to underlying documents. In the case of the Piping/Pipe Support PSRs, a large number of these documents had previously been provided to CASE.

^{7/} The CAP also includes a program of inspections, walkdowns and evaluations to validate that CPSES hardware conforms
(footnote continued)

consists of three steps: (1) identification of all design related licensing commitments; (2) development of design criteria that ensure compliance with licensing commitments; and (3) validation that the existing design complies with the design criteria, including the identification of resolutions of external source, Comanche Peak Response Team ("CPRT") and CAP issues. This last step includes identification of any necessary design modifications or changes to assure that the design complies with the design criteria and also includes reviewing and updating the piping installation specifications, construction procedures and inspection procedures to reflect the validated design.

Stone & Webster Engineering Corporation ("SWEC") was tasked with the responsibility for validating the design of both large and small bore piping and pipe supports. As documented in the Piping/Pipe Support PSRs, SWEC identified the licensing commitments based on a review of piping-related documentation, such as the Final Safety Analysis Report ("FSAR"), the NRC Safety Evaluation Report and Supplements, applicable NRC Regulatory Guides, NRC Inspection and Enforcement Bulletins, applicable codes and standards and NRC/TU Electric correspondence. Based on the licensing commitments, SWEC developed design criteria to assure compliance with the licensing commitments and documented those criteria which were then incorporated in DBDs.

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with the validated design (the Post Construction Hardware Validation Program ("PCHVP")) and reconciliation of differences between the as-built plant and the validated design.

After completing the development of the design criteria, SWEC then prepared technical and design control procedures which reflected the design criteria, regulatory and industry guidance and SWEC experience in the design of piping and pipe supports. Appropriate engineering methodology was also incorporated into the procedures. Finally, SWEC evaluated all external source issues relating to piping and pipe supports, such as design issues identified by Messrs. Walsh and Doyle, the Board or Cygna, all issues identified by CPRT and all issues identified by CAP, and developed technical and design control procedures to resolve those issues. 8/

In the case of large bore piping and pipe supports, 9/ an overview of the licensing commitments, design criteria and technical and design control procedures was conducted by Tenera, L.P. ("Tenera"), under the charter of the CPRT and documented in the "Discipline Specific Results Report: Piping and Supports" Rev. 1 (Aug. 27, 1987). In its report, Tenera reached the following conclusion:

8/ SWEC also undertook separate walkdowns of samples of Unit 1 as-built piping systems to verify and refine the design methodology and to assure that no additional technical issues existed. The external source issues, CPRT issues and CAP issues are identified in Appendices A and B to the Piping/Pipe Support PSRs. These Appendices also identify the resolution of these design issues.

9/ "The small bore piping and pipe supports Corrective Action Program (CAP) used the same technical and design control procedures as [were] used in the large bore piping and pipe supports CAP." See Project Status Report, Small Bore Piping and Pipe Supports, Rev. 0, § 5.1.1 at 5-2 (Nov. 3, 1987).

SWEC [technical and design control] procedures were reviewed for compliance with applicable CPSES FSAR and licensing criteria. Licensing commitments applicable to CPSES were used to establish a listing of criteria which were then used to check SWEC procedures. The procedures were determined to be in compliance either with the existing criteria or criteria changes that were accepted by the NRC for submittal as FSAR amendments. 10/

Based on the technical and design control procedures, SWEC performed an in-depth review of the design and either validated the design to be in conformance with the design criteria or initiated modifications to establish conformance with the design criteria. 11/ These activities were audited under the SWEC Corporate Quality Assurance Program. As part of its design validation activities, SWEC also reviewed and revised the CPSES piping-related installation specifications and reviewed the revised construction procedures and quality control inspection procedures to assure that the validated design requirements are properly implemented. 12/

10/ Id. at §1.C.

11/ As described in the PSRs, SWEC developed inputs and analytical methods to perform the necessary pipe stress analyses. The results of these analyses were then used to provide the pipe support design loads and to determine that the pipe stress results were within the ASME Section III Code allowables. SWEC then evaluated the design of pipe supports, the local stresses in piping, equipment nozzle and containment penetration loads, valve accelerations, pipe break locations, and floor-to-ceiling/wall-to-wall supports. Any discrepancies are resolved by support modifications or further analysis.

12/ SWEC also prepared procedures for the conduct of engineering walkdowns and QC inspections where as-built data were needed
(footnote continued)

As a result of the activities undertaken by SWEC as described and documented in the PSRs, as discussed in the attached affidavit of J.W. Muffett, the design validation with respect to large and small bore piping and pipe supports accomplished the following:

1. Resolved all design-related external source issues, including issues raised by Messrs. Walsh and Doyle, Cygna and the Board;
2. Resolved all CPRT identified design-related issues;
3. Resolved all CAP identified design-related issues;
4. Prescribed the corrective and preventive actions necessary to resolve the foregoing issues;
5. Assured that all calculations and drawings related to piping and pipe supports are validated;
6. Assured that the validated design is reflected in the validated calculations and drawings;
7. Assured that the piping and pipe support hardware installation specifications, construction procedures and quality control inspection procedures are validated and contain the requirements necessary to assure hardware compliance with the validated design; and
8. Assured that the validated design complies with CPSES licensing commitments.

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as input to the design validation or where as-built attributes are subject to physical validation under PCHVP. These procedures are contained in the Field Verification Methods ("FVMS").

In summary, the Piping/Pipe Support PSRs contain a description of not only the design validation process but also of the results of that process, including resolution of design-related issues, corrective and preventive actions and the requirements necessary to assure that the hardware complies with the validated design.

B. CASE's Identification of Piping/Pipe Support Issues

In its Identification of Piping/Pipe Support Issues, CASE discusses three "categories" of issues which it describes as "1. Applicants' Plan; 2. Implementation of Applicants' Plan; and 3. Analysis of the Results from the Reinspection Corrective Action Work." CASE's Identification of Piping/Pipe Support Issues at 3-10. ^{13/} As discussed below, in none of the categories does CASE raise any "issue" as to the design matters addressed in the Piping/Pipe Support PSRs and underlying or related documents.

^{13/} CASE also included an introductory section entitled "Preliminary Discussion" in which CASE stated that it was "premature" to identify issues for two reasons. CASE's Identification of Piping/Pipe Support Issues at 2-3. First, according to CASE "much of the information which CASE believes is essential to reach a decision is not yet complete and is simply unavailable at this time." *Id.* at 2. However, CASE does not specify what additional information is required. Moreover, all of the information underlying the PSRs has been available to CASE for some time. Second, CASE states that there has been slippage in the estimated date for fuel load and also points to the suspension of work on Unit 2 as evidence that there is no need for CASE to identify issues at the present time. *Id.* There is no necessary linkage between fuel loading or the suspension of work on Unit 2 and the readiness of certain issues for litigation, and CASE does not explain why there should be any such linkage. Nor is the Board's litigation schedule in any way linked to either fuel loading or work on Unit 2.

1. "Applicants' Plan"

Of the three categories discussed in CASE's pleading, only the first category, denominated "Applicants' Plan", deals with the Piping/Pipe Support PSRs. In discussing "Applicants' Plan" (i.e. the PSRs), CASE characterizes the PSRs as "Applicants' promise of what they are going to do and how they are going to do it" ^{14/} As summarized above, however, the PSRs represent much more than simply a "promise" of future action; they document, inter alia, the completed design validation process and its results, the resolution of design-related issues, corrective and preventive actions and the requirements necessary to assure that the hardware complies with the validated design. CASE could have raised issues as to all matters addressed by the PSRs and underlying or related documents ^{15/} but did not do so.

In fact, to the extent that CASE discussed design-related matters, CASE largely conceded that the PSRs adequately resolve all design related issues and that litigation of those issues is unnecessary:

^{14/} CASE's Identification of Piping/Pipe Support Issues at 3.

^{15/} Under the Board's scheduling Order, Memorandum and Order (Litigation Schedule) at 5 (Nov. 18, 1987), the issuance of a PSR (the Notice of Availability) "triggers" the procedural schedule for "the entire area of interest including the predecessor reports from the prior documents prepared by Applicants under the CPRT program and whatever other documents are relevant." Tr. 25143. Thus, CASE's obligation to specify issues includes, among other things, issues arising from Design Basis Documents, Design Validation Packages, DSAPs and ISAPs, Results Reports, underlying calculations, procedures or other analyses, reports or documents referred to or relied upon in the PSRs.

CASE has been favorably impressed by Applicants' commitments, especially those of Stone & Webster and its identification and proposed corrective action regarding the Walsh/Doyle issues Based on what we know at this time, we would not anticipate that it will be necessary to litigate Applicants' plan regarding those issues. ^{16/}

Having failed to specify any such issues, CASE is foreclosed from litigating not only the adequacy of the matters covered in the PSRs, but also any issues which it might have raised with regard to the reports, analyses, calculations and procedures, relevant to, supporting or referenced in the PSRs. ^{17/}

2. "Implementation of Applicants' Plan"

Although the focus of CASE's discussion of "implementation" is not clear, it plainly does not identify issues relating to the Piping/Pipe Support PSRs, but at most mentions concerns that might be litigable, if at all, in subsequent hearings.

^{16/} CASE's Identification of Piping/Pipe Support Issues at 3.

^{17/} CASE concludes its discussion of "Applicants' Plan" with the statement that it is not clear "what documents Applicants plan to rely upon regarding the piping/pipe support issues" but suggests that "it may well be possible to arrive at stipulations regarding the plan itself" if CASE is "satisfied with the documents Applicants agree to submit into evidence" CASE's Identification of Piping/Pipe Support Issues at 4. Because CASE has not specified any issues which need to be litigated there are no issues upon which stipulations could be based nor is there any need to specify the documents Applicants would rely on or would introduce into evidence if such issues were being litigated.

CASE's undefined concerns regarding implementation of the PSRs apparently refer to the ongoing Post Construction Hardware Validation Program ("PCHVP") in which the hardware is evaluated to assure its compliance with the validated design. The PCHVP is discussed at length in the CSR 18/ and is also discussed in the CER 19/ and can be addressed if a hearing is held on the CSR. Any issues regarding implementation of PCHVP should be raised, if at all, in connection with those reports. At the same time, it should be emphasized that an integral part of the design validation of piping and pipe supports included the review and revision of installation specifications, construction procedures and the Quality Control ("QC") inspection procedures. As to those matters, CASE has effectively acknowledged it has no concerns. 20/

In discussing implementation, CASE also states that it "may wish to litigate part or all of the Cygna report(s) when it is issued." CASE's Identification of Piping/Pipe Support Issues at 6. Specifically, CASE suggests that piping and pipe support issues will not be "ripe for consideration" until such reports

18/ Collective Significance Report, Part V, § 2, Rev. 0 (Feb. 29, 1988).

19/ Collective Evaluation Report, Part I, Rev. 0 (Dec. 23, 1987).

20/ In discussing implementation, CASE acknowledges that it believes "'Applicants' plan for addressing the piping/pipe support issues, for the most part, has the capability for adequately addressing and eventually resolving the technical engineering-type issues" CASE's Identification of Piping/Pipe Supports Issues at 5.

are available. Id. In making that suggestion, CASE ignores the fact that Cygna's Review Issue Lists ("RILs") issued on September 16 and 18, 1987 (and provided to CASE), closed out all Cygna piping and pipe support design issues and documented the basis for such closure. 21/ Thus, CASE (which received copies of those RILs) has had ample opportunity to "engage in discovery," "analyze the results" and "formulate opinions, etc." regarding Cygna's review of piping and pipe supports design issues. CASE's Identification of Piping/Pipe Support Issues at 6.

CASE concludes its section on implementation by noting that it may decide to raise issues regarding "harassment and intimidation" including the question of whether Cygna was pressured "to do or not to do certain things." Id. at 6-7. CASE notes, however, that the "recent events" noted in its pleading raise questions "regarding the areas of Applicants program other than piping/pipe supports" Id. at 7. (Emphasis added). To the extent CASE wishes to raise issues of harassment and intimidation, those issues are not properly part of any hearing on the Piping/Pipe Support PSRs, whether or not they may otherwise be subject to consideration in other hearing rounds.

In summary, CASE's discussion of "implementation" fails to raise any issues regarding the matters addressed and resolved in the Piping/Pipe Support PSRs.

21/ Copies of the Cygna RILs are attached to the Affidavit of J.W. Muffett submitted with this motion.

3. "Analysis of The Results From The Reinspection Corrective Action Work"

In its final section, CASE again fails to specify any issue arising out of the Piping/Pipe Support PSRs and instead simply claims that the root cause analysis submitted by TU Electric to the NRC Staff on March 16, 1988, is deficient. 22/ Whatever the merits of CASE's concern, any issues regarding such root cause analysis should clearly not be litigated in the limited context of the Piping/Pipe Support PSRs. The root cause evaluation of design issues, submitted by Applicants in response to the NRC Staff's request (and cited by CASE), covers design issues for all the PSRs. Moreover, the CSR contains an evaluation of the current design program and concludes that it has addressed the list of bounding root causes of design problems identified by the CPRT. 23/ Finally, each ISAP Results Report contains a root cause evaluation of CPRT's identified findings relating to construction, Quality Assurance ("QA") and testing. In addition, the CER contains a collective evaluation of those

22/ CASE brings up the unrelated point that Applicants have not accepted the ASLB's assumption that there has been a historical QA design and QA construction breakdown. CASE's Identification of Piping/Pipe Support Issues at 9. Applicants' position should have been no surprise to anyone; even the ASLB's Order specifically contemplated that TU Electric might show otherwise in the course of the hearing. In any event, this point has no direct relationship to litigation of the contents of the PSRs. If CASE believed that any alleged QA breakdown adversely affected any aspect of design validation, they should have raised it as a specific issue.

23/ Collective Significance Report, Part III, § 5.2, Rev. 0 (Feb. 29, 1988).

findings and root causes. 24/ Thus, not only has CASE not identified a specific issue relating to the Piping/Pipe Support PSRs, but any issues CASE wishes to raise concerning root cause or generic implications might be subject to consideration in conjunction with subsequent hearings on the CSR.

Conclusion

Based on its review of CASE's Identification of Piping/Pipe Support Issues, Applicants submit that CASE has identified no issues to be heard regarding the validation of the design of piping and pipe supports. The design matters addressed in the Piping/Pipe Support PSRs and underlying and related documents as to which there is thus no controversy include:

1. All design-related external source issues, including issues raised by Messrs. Walsh and Doyle, Cygna and the Board;
2. All CPRT identified design-related issues;
3. All CAP identified design-related issues;
4. The corrective and preventive actions necessary to resolve the foregoing issues;
5. The validation of calculations and drawings related to piping and pipe supports;
6. The incorporation of the validated design in the validated calculations and drawings;

24/ See, e.g., Collective Evaluation Report, Parts III, IV, and V, Rev. 0 (Dec. 23, 1987).

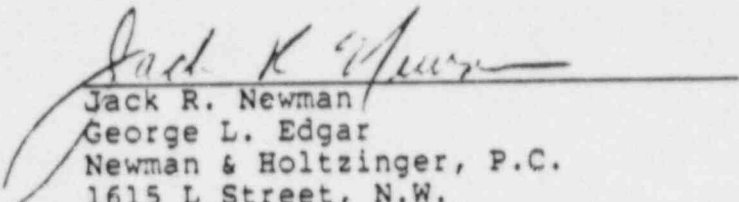
7. The validated piping and pipe support hardware installation specifications, construction procedures and quality control inspection procedures which contain the requirements necessary to assure hardware compliance with the validated design; and
8. Compliance of the validated design with CPSES licensing commitments.

Accordingly, Applicants respectfully request that the Board issue a ruling declaring that:

- (1) No hearing will be held as to the design matters addressed in the Piping/Pipe Support PSRs and underlying and related documents, including the matters identified above; and

(2) Such design matters are resolved in favor of Applicants and are no longer in controversy in this proceeding.

RESPECTFULLY SUBMITTED,
TEXAS UTILITIES ELECTRIC COMPANY
For The Owners Of The CPSES



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