

497

06/05/84

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DOCKETED
USNRC

'84 JUN -6 11:33

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

In the Matter of)
TEXAS UTILITIES ELECTRIC)
COMPANY, et al.)
(Comanche Peak Steam Electric)
Station, Units 1 and 2)

Docket Nos. 50-445
50-446

NRC STAFF RESPONSE TO APPLICANTS' RESPONSE ON
TRANSAMERICA DELAVAL DIESEL GENERATORS

I. INTRODUCTION

On May 15, 1984, the NRC Staff ("Staff") received the "Applicants' Response to January 21, 1984 Board Memorandum Requesting Information Concerning Delaval Diesel Generators" ("Applicants' Response"). Applicants' Response provides the Board with information on Transamerica Delaval Inc. ("TDI") diesel generators, which the Atomic Safety and Licensing Board ("Board") requested in a January 31, 1984 "Memorandum (Adequacy of Record: Delaval Diesel Generators) ("Diesel Generator Memorandum)". The Staff hereby provides its comments on the Applicants' Response.

II. BACKGROUND

The Staff first notified the Commission and the Board of potential problems with TDI diesel generators in Board Notifications ("BN") 83-160 and 83-160a. The Staff's inquiry into TDI diesel generators was precipitated by the main crankshaft failure on a diesel generator at the Shoreham

DESIGNATED ORIGINAL

Certified By AS 0507

B406060427 B40605
PDR ADOCK 05000445
PDR

Nuclear Power Plant. After a preliminary review, the Staff became aware of QA problems at TDI, see IE Inspection Report No. 99900334/83-01 (Enclosure 5 to BN 83-160), as well as history of operational problems with TDI diesels. See Enclosures 2 and 4 to BN 83-160. Accordingly, the Staff concluded that there was "reduced...confidence in the reliability of all TDI diesel generators." BN-83-160, p. 2. The Staff also stated that it will "require, on a case-by-case basis, a demonstration that these concerns are not applicable to specific diesel generators because of subsequent inspections or testing performed specifically to address the above matters." Id. The Staff has continued to provide additional information to the Commission and the Board on the status of the Staff's inquiry on TDI diesel generators.^{1/}

On January 31, 1984, the Board issued its Diesel Generator Memorandum which directed the Staff and Applicants to file, "with reasonable speed," information addressing three Board inquiries on TDI diesel generators:

- (1) the adequacy of the quality assurance program to detect design or construction problems in Delaval generators;
- (2) the frequency and seriousness of problems with these generators at Comanche Peak;
- (3) whether the generators are adequate to assure the public safety.

The Board stated that since its concern with TDI diesel generators was a serious safety matter and directly related to an admitted contention, the Board did not think it appropriate to identify the concern as a sua sponte issue pursuant to 10 C.F.R. § 2.760a. Diesel Generator Memorandum, p.2.

^{1/} The Staff has provided, to date, a number of Board Notifications on diesel generators, including BN 84-021, 84-044, 84-047, 84-051, 84-052, 84-063, 84-072, 84-098.

III. DISCUSSION

Applicants contend that it was improper for the Board to request information on TDI diesel generators without making a sua sponte finding pursuant to 10 C.F.R. § 2.760a. Applicants' Response, pp. 2, 3-9. Despite this argument (and without waiving their right to pursue their position that the Board's inquiry was improper), Applicants provided general information on their QA program for vendors (Applicants' Response, pp. 9-13), a statement on how that program was implemented in the case of TDI (Id., pp. 14-15), and a brief discussion of diesel generator deficiencies discovered at CPSES, the efforts of the TDI Owner's Group, and Applicants' diesel generator reinspection plan. Id., pp. 15-21. The Staff will address these two lines of discussion separately.

A. Appropriateness of Board's Inquiry Into Diesel Generators

The Staff disagrees with the Applicants' position that TDI diesel generators may not be considered as an issue in this proceeding without a 10 C.F.R. § 2.760a sua sponte finding. The Board has repeatedly indicated that Contention 5 is "broadly worded" and that the scope of the contention is likewise broad. See, e.g., Memorandum and Order (Quality Assurance for Design) (December 28, 1983), pp. 7-8; Tr. 714.

Applicants imply that the TDI diesel generator concerns (including concerns with Applicants' QA program for vendors) are only "remotely related to quality assurance and therefore should not be considered to be within the sweep of Contention 5." Applicants' Response, p. 5. On the contrary, the Staff submits that there is sufficient information in the numerous Board Notifications on TDI diesel generators to permit the

Board to conclude that that there are substantial questions regarding: (1) the adequacy of the design and fabrication of TDI diesel generators; (2) the adequacy of TDI's QA program; and (3) possible concerns regarding the adequacy of Applicants' own QA program for vendors. These questions are relevant to matters covered by Contention 5, which directly alleges the Applicants' "failure to adhere to the quality assurance/quality control provisions required by... Appendix B of 10 C.F.R. Part 50..."

To summarize, the Staff agrees with the Board that the issues concerning TDI diesel generators are within the scope of Contention 5. Accordingly, the Staff regards Applicants' discussions of 10 C.F.R. § 2.760a and the authority of the Board to review the record for possible safety matters (Applicants' Response, pp. 5-9) to be irrelevant.

B. Adequacy of Applicants' Response

The Staff does not regard the information submitted by Applicants on TDI diesel generators at CPSES, their vendor QA program, and implementation of that program in connection with TDI to be fully responsive to each of the three areas of inquiry identified by the Board in its Diesel Generator Memorandum. Indeed, the Staff has not yet received from Applicants sufficient information for the Staff to properly evaluate the adequacy of TDI diesel generators at CPSES. Accordingly, the Staff submits that further evidence is necessary on the adequacy of TDI diesel generator at CPSES.

Applicants state that their QA program at CPSES has been "developed and implemented to conform to 10 C.F.R. Part 50, Appendix B," citing Criterion VII in particular.^{2/}

The Board's first inquiry was the adequacy of the QA program at CPSES to detect design or construction problems in TDI diesel generators. To respond to this Board inquiry, Applicants first generally described their QA program for vendors. Applicants' Response, pp. 11-13. After outlining this vendor QA program, Applicants provided a sketchy discussion of how this QA program was implemented in the area of TDI diesel generators. Id., pp. 14-15. According to Applicants, a "pre-award audit of TDI" was conducted by Gibbs and Hill in which "several programmatic weaknesses were identified" and subsequently corrected by TDI, as verified by Applicants. Id., p.14. The Staff notes that these "programmatic weaknesses" are not further identified by Applicants. Following TDI's fabrication of the diesel generators, but prior to shipping, inspections were conducted by Applicants' vendor QA program personnel. Id., pp. 14-15. Additional inspections were conducted at the CPSES site, which resulted in identification of a problem with inadequate skid welds.^{3/} Id., p.15.

^{2/} Applicants also assert that Appendix B does not require that the Applicants "perform duplicative QA efforts." Applicants' Response, pp. 9-10. In regard to this discussion, the Staff first points out that Criteria I, II and IV, as well as VII, are relevant to the adequacy of Applicants' QA program for vendors. See also, Commonwealth Edison Company (Byron Nuclear Power Station, Units 1 and 2), LBP-84-2, pp. 126-127 (slip op.) (January 13, 1984) (Criteria I relevant to QA concerns with utility contractors). While Applicants are correct that Appendix B does not require "duplicative QA efforts", it is nonetheless clear that Applicants retain ultimate responsibility for the adequacy of systems and components designed and/or fabricated by vendors or contractors.

^{3/} These inadequate welds were in the testimony of Mrs. Stiner at the September 1982 hearing session. CASE Exhibit 667, pp. 6-16.

To address the Board's inquiries regarding the problems with and adequacy of CPSES diesel generators, Applicants indicate that testing of the diesel generators resulted in the identification of 37 diesel generator testing deficiencies during the period of June 1982 through November 1983. Applicants represent that these deficiencies have been "addressed and successfully resolved." Id.

Applicants state that they are actively participating in the TDI Owner's Group, and have decided to conduct a "detailed disassembly, inspection, component replacement..., reassembly and testing program"^{4/} (Id., p. 17, 21). According to Applicants, this program will result in "virtually all the remaining components in the Comanche Peak diesels will undergo design review of quality reverification, or both"^{5/} (Id., p. 19). Applicants commit to repeating the pre-operational testing of the diesel generators. Id., pp. 17, 20. Finally, Applicants state that the TDI Owner's Group Program Plan was transmitted to the Staff on March 2, 1984, and that the CPSES Requalification Program Plan was transmitted to the Staff on April 20, 1984.^{6/}

While this information is essential to understanding the TDI diesel generator concern in the context of CPSES, the Staff does not consider

^{4/} It is unclear from Applicants' submission whether this program is the same as the "Diesel Generator Requalification Program" described on pp. 18-19 of the Applicants' Response.

^{5/} Applicants are somewhat ambiguous as to whether the Applicants, or the TDI Owner's Group will be performing these design reviews and quality reverification actions.

^{6/} The Board's and parties' review of the Applicants' Response would have been somewhat facilitated if Applicants had provided copies of their Requalification Program Plan along with their Response.

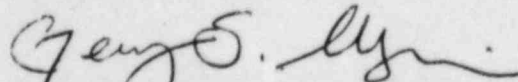
this information to be dispositive of either the Board's or the Staff's concerns regarding TDI diesel generators at CPSES. As Applicants admit in their Response, TDI diesels (including diesels with the configuration used at CPSES) have experienced generic deficiencies, and that Applicants have detected some of these deficiencies during disassembly and inspection of the Train A diesel engine. Although Applicants relate that their tests and analyses lead them to believe that these deficiencies would not have prevented the diesel generators from "operating sufficiently well to perform their function during emergency conditions" (Applicants' Response, pp. 16-17), Applicants do not present the factual bases for their conclusion in this regard.

Moreover, neither the TDI Owner's Group Plan or the CPSES Requalification Program Plan have been completely evaluated and accepted by the Staff as of the date of this pleading. The NRC Staff will inform the Licensing Board upon Staff approval of the relevant plans.

IV. CONCLUSION

For the reasons set forth above, the Staff is not in the position to state whether the actions proposed by Applicants are sufficient to resolve the concerns with TDI diesel generators' adequacy. As discussed above, additional information is required to complete the record on the adequacy of TDI diesel generators at CPSES.

Respectfully submitted,



Geary S. Mizuno
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 5th day of June, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

TEXAS UTILITIES ELECTRIC
COMPANY, et al.

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

)
)
)
)
)
)

Docket Nos. 50-445
50-446

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO APPLICANTS' RESPONSE ON TRANSAMERICA DELAVAL DIESEL GENERATORS" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class, or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 5th day of June, 1984:

Peter B. Bloch, Esq., Chairman*
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. Kenneth A. McCollom
Administrative Judge
Dean, Division of Engineering,
Architecture and Technology
Oklahoma State University
Stillwater, OK 74078

Dr. Walter H. Jordan
Administrative Judge
881 W. Outer Drive
Oak Ridge, TN 37830

Atomic Safety and Licensing Board
Panel*
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mrs. Juanita Ellis
President, CASE
1426 South Polk Street
Dallas, TX 75224

Renea Hicks, Esq.
Assistant Attorney General
Environmental Protection Division
P. O. Box 12548, Capital Station
Austin, TX 78711

Nicholas S. Reynolds, Esq.
William A. Horin, Esq.
Bishop, Liberman, Cook,
Purcell & Reynolds
1200 17th Street, N.W.
Washington, DC 20036

Docketing and Service Section*
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Atomic Safety and Licensing Appeal
Board Panel*
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Lanny Alan Sinkin
114 W. 7th, Suite 220
Austin, TX 78701

Mr. Michael D. Spence, President
Texas Utilities Generating Company
Skyway Tower
400 North Olive Street, L.B. 81
Dallas, TX 75201

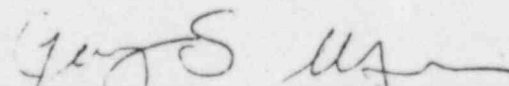
Robert A. Wooldridge
Worsham, Forsythe, Sampels & Wooldridge
2001 Bryan Tower, Suite 2500
Dallas, TX 75201

Mr. James E. Cummins
Resident Inspector/Comanche Peak
Steam Electric Station
c/o U.S. Nuclear Regulatory Commission
P. O. Box 38
Glen Rose, TX 76043

John T. Collins
William L. Brown
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Billie Pirner Garde
Citizens Clinic Director
Government Accountability Project
1901 Que Street, Northwest
Washington, DC 20009

Ellen Ginsberg, Esq.*
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Geary S. Mizuno
Counsel for NRC Staff