



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

JUN 17 1985

Docket Nos. 50-275/323

MEMORANDUM FOR: ~~Thomas H. Kovach, Assistant Director~~
for Licensing
Division of Licensing

FROM: William V. Johnston, Assistant Director
Materials, Chemical & Environmental Technology
Division of Engineering

SUBJECT: SAFETY EVALUATION OF ALLEGATIONS 1513 THRU 1518 (TAC
#54434) DIABLO CANYON (DCP), UNITS 1 AND 2

Plant Name: Diablo Canyon Power Plant, Units 1 and 2
Suppliers: Westinghouse Electric Company, Pacific Gas and Electric Company
Licensing State: OR/OL
Docket Nos. 50-275/323
Responsible Branch & Project Manager: LB #3; H. Schierling
CMEB Reviewer: D. J. Kubicki
Status: Safety Evaluation Complete

By letters dated February 22 and April 9, 1985, the licensee provided information concerning the subject allegations. Enclosed is our evaluation of the allegations. Based on our evaluation, we conclude that the design, installation and acceptance tests of the protection water supply system is in accordance with the appropriate provisions of the applicable National Fire Protection Association Standards and Sections C.2 and C.3 of Appendix A to BTP APCSB 9.5-1. Therefore none of the allegations 1513 through 1518 have been substantiated.

William V Johnston
William V. Johnston, Assistant Director
Materials, Chemical & Environmental Technology
Division of Engineering

Enclosure: As stated

cc: J. Knight
H. Thompson
T. Sullivan
V. Benaroya
R. Ferguson
H. Schierling
G. Knighton
M. Ley

ES06240153XA
SPP.

~~XXXXXXXXXX~~ B/33
~~XXXXXXXXXX~~

DIABLO CANYON
ALLEGATIONS 1513 THRU 1518

TASK: Allegation 1513

Characterization:

Water flow tests have not been conducted on the fire protection water distribution system.

Implied Significance to Plant Design, Construction, or Operation

If water flow tests were not conducted on the fire protection water distribution system there would not be reasonable assurance that the underground mains were free of obstruction or that the distribution system was capable of supplying the required quantity of water at sufficient pressure to supply sprinkler systems and fire hose stations.

Assessment of Safety Significance

By letter dated February 22, 1985, the licensee confirmed that fire protection water flow tests are conducted at Diablo Canyon in conjunction with system acceptance testing and as part of plant Technical Specification surveillance testing. In addition, fire flow tests of a type referred to in the allegation are conducted as part of DCP Surveillance Test Procedure (STP) M-71. These tests conform to the guidance presented in the National Fire Protection Association (NFPA) Handbook, 14th edition and NFPA Standard No. 13.

Staff Position

Sections C.2 and C.3 of Appendix A to BTP APCSB 9.5.1, establish that NFPA Standards Nos. 13, 14, 20 and 24 should be used in the design, installation and testing of fire protection water supply systems, sprinkler systems, and standpipe and hose systems. In Supplement Nos. 8 and 9 to the Diablo Canyon Safety Evaluation Report (SER), we concluded that these systems

confirmed to our fire protection guidelines and were, therefore acceptable. We also have approved the plant Technical Specifications concerning testing of fire protection systems. We, therefore, conclude that on the bases of our original safety evaluation and the approved technical specifications, the fire protection water distribution systems have been and are being tested in a satisfactory manner.

Action Required

No further action required on the allegation.

TASK: Allegations 1516, 1517, and 1518

Characterization:

The fire water distribution system piping is not designed and installed in accordance with NFPA Standard No. 13 with regard to pipe supports and clearances between piping and concrete penetrations.

Implied Significance to Plant Design, Construction, and Operation

If the water piping was not designed in accordance with this standard, the piping may be rendered inoperable due to support failure or stresses produced by building movement.

Assessment of Safety Significance

By letter dated April 9, 1985, the licensee confirmed that certain fire protection piping is supported in accordance with ANSI Standard B.31.1 and the "Hosgni Seismic Criteria". The licensee has concluded that, on the basis of a comparative analysis, these criteria meet or exceed the requirements of NFPA Standards Nos. 13 and 14. The remaining fire protection piping supports have been designed in accordance with the requirements of NFPA 13. The licensee has conducted a walkdown of the piping to confirm that these requirements have been met.

With regard to the clearances between piping and concrete penetrations, the licensee has conducted a pipe stress analysis to assure the integrity of the piping. This is in accordance with Section 1-2 of NFPA Standard No. 13. On the basis of this analysis, the licensee has concluded that the recommended clearances are not necessary.

Staff Position

Sections C.2 and C.3 of Appendix A to BTP APCS 9.5-1 establish that NFPA Standards Nos. 13, 14, 20, and 24 should be used in the design and installation of fire protection water supply systems, sprinkler systems, and standpipe and hose systems.

We have reviewed the fire protection program and fire hazards analysis submitted by the licensee. As part of the review, we visited the plant site to examine the relationship of safety-related components, systems, and structures in specific plant areas to both combustible materials and to associated fire detection and suppression systems. The overall objective of our review of the fire protection program was to ensure that, in the event of a fire at the facility, the units would be able to safely shut down and remain in a safe shutdown condition. Our review included an evaluation of the automatic and manually operated water fire suppression systems. Based on our evaluation, we concluded in Supplements Nos. 8 and 9 to the SER that the sprinkler and standpipe systems conformed with our protection guidelines and were, therefore, acceptable.

Action Required

No further action required on the allegation.

TASK: Allegations 1514 and 1515

Characterization:

The water storage capacity for fire protection is inadequate and the water

distribution piping for standpipe outlets is not large enough to accommodate the quantity of water required for fire fighting.

Implied Significance to Plant Design, Construction, and Operation

If the water storage capacity or pipe sizes were inadequate, a sufficient quantity of water may not be available to suppress a fire, if one should occur.

Assessment of Safety Significance

By letter dated February 22, 1985, the licensee confirmed that the water supply for fire fighting includes a 4.5 million gallon reservoir and a 300,000 gallon fire water tank. This supply exceeds the guidelines contained in Appendix A to BTP APCS 9.5-1. With regard to the size of fire protection piping, the licensee confirmed that the size of water supply pipes to standpipe and hose stations meets or exceeds the requirements of NFPA Standard No. 14.

Staff Position

(See response to Allegation 1516, 1517, 1518)

Action Required

No further action required on this allegation.