

APR 15 1985

Memorandum For: John B. Martin, Regional Administrator
From: D. F. Kirsch, Acting Director
Division of Reactor Safety and Projects
Subject: Results of Diablo Canyon Unit 2 (DN 50-323) Operating
License Review Panel Considerations

A review panel met on March 18, 1985 to consider the status of Diablo Canyon Unit 2 and the basis for recommending issuance of the operating license for fuel loading and low power testing. The attendance was as follows:

D. F. Kirsch, Chairman
A. Chaffee
R. T. Dodds
T. Young, Jr.
R. E. Fish
E. M. Garcia
L. R. Norderhaug
C. Shiraki
R. J. Pate
T. W. Crowley
J. F. Burdoin
M. K. Cillis
M. M. Mendonca (Telephone)
M. L. Padovan (Telephone)
T. Ross (Telephone)
T. Polich (Telephone)

Information considered by the panel included:

1. Status of the inspection program, construction, testing program and enforcement actions.
2. Status of allegations.

The panel and the Senior Resident Inspector (SRI) concluded that the state of readiness for the operating license for initial fuel loading and low power testing is essentially adequate and recommends issuance of the operating license once those items listed in attachment 2 have been resolved to the staff's satisfaction and/or the operating license conditioned to reflect performance milestones.

Attachment 1 is a listing of the panels considerations and conclusions.

Original signed by

D. F. Kirsch
D. F. Kirsch, Acting Director
Division of Reactor Safety and
Projects

RV *K*
KIRSCH/dot
4/14/85

8504220103 850415
PDR ADOCK 05000323
A PDR

Attachment 1

Readiness for Operating License Review

1. Manual Chapter 94300B (Operating License Issuance)

a. Inspection Program

The status of the inspection program prescribed by MC2512, 2513 and 2514 was reviewed. The panel concluded that the inspections prescribed by MC2512 were complete and that inspections prescribed by MC2513 and 2514 were current, consistent with present plant and testing status.

Regarding emergency preparedness, NRC and FEMA have determined that emergency planning for Diablo Canyon is acceptable. The FEMA findings are "interim" because the State of California has not formally submitted their plan. The last emergency preparedness exercise was conducted on October 30, 1984. The NRC had no adverse findings. FEMA unofficially found a few items that needed corrective action but were not considered significant. On March 19, 1985, FEMA received a satisfactory reply addressing the items needing corrective action.

The Emergency Operations Facility (EOF) is operational and was used during the 1983 and 1984 emergency preparedness exercises. An Emergency Response Facility Appraisal to assure the facility meets the requirements of supplement 1 to NUREG-0737 and NUREG-0695 is scheduled for the first week of June 1985. This appraisal will include the EOF.

Safeguards and security inspections have been conducted for the implementation of Unit 2 operations. While there are a number of open (followup) items, none are considered significant enough to place a restraint on license issuance.

Radiation protection inspections have centered on the licensee completion of preoperational test program to support the initial fuel loading and low power ascension testing. Five preoperational tests still need to be completed and accepted by the licensee and results examined and verified by the Region's inspector before issuance of the operating license:

- ° Test 11.1 "NSSSS Functional Test" (Fuel Load)
- ° Test 11.5 "Post LOCA Sampling System Preop" (Criticality)
- ° Test 23.3 "Auxiliary and Fuel Handling HVAC" (Criticality)
- ° Test 24.2R2 "Gaseous Radwaste System" (Criticality)
- ° Test 38.4 "Radiation Monitoring System" (Fuel Load/Criticality)

There are currently 59 licensed senior and reactor operators at Diablo Canyon, 55 of which hold dual licenses for both Units. Of these 55, 44 are SROs and 11 are ROs. We do not visualize this to be a problem area. The licensee will satisfy the requirements of Generic Letter 84-16 with respect to no longer needing shift

advisors by late May 1985. The licensee has been supplementing the shift complement with senior management and this is expected to continue during special activities to provide additional assurance for control of operations.

b. Preoperational/Startup Test Program

The licensee has implemented a Startup Open Items List (SOIL) to track testing and work activities during final preparations for plant operation of Unit 2. This list also identified which problems affect system operability and require resolution prior to turnover from General Construction (GC) to the Nuclear Plant Operations (NPO) department. The licensee has also established the systems and startup tests that are required for fuel load.

The established goal to complete all systems prior to fuel load has been encouraged so that system operability can be more readily controlled and assured. During the past several weeks, a substantial quantity of SOIL items have been resolved. At this time, SOIL provides a reasonable tabulation of testing and work yet required for fuel load and subsequent operation.

System operability requirements have been established by NPO. Mode transition checklists are used to ensure all the technical specification required systems will be operable as necessary in each mode of operation. These measures by the licensee have established a program of system operability verification in accordance with the technical specifications and are identical to those implemented on Unit 1.

As of March 31, 1985, NPO has accepted seven systems for Unit 2: diesel generators, hydrogen/nitrogen, nuclear instrumentation, plant computer and annunciator, 12 KV power, 120 V instrument AC, and reactor control rod systems. Also, startup has released 11 additional systems, i.e., sent completed turnover packages to NPO for review and acceptance. The intent of this slow, methodical, turnover procedure has been to essentially complete all open SOIL items with particular emphasis given to those systems necessary for support of licensing and fuel load.

The inspectors will continue to follow the resolution of SOIL items and preparations for Unit 2 fuel load and power ascension under the routine inspection program for startup.

c. Enforcement Actions

There are only two minor outstanding Unit 2 enforcement items. Closure of these items is not considered necessary prior to issuance of the license.

d. Construction

The construction of all safety related systems is essentially complete with the exception of items identified on the SOIL as discussed above.

2. Quality Verification Inspections Performed by Lawrence Livermore Laboratory

LLL personnel were utilized as third party inspectors to provide additional assurance of the quality of construction at Diablo Canyon Units 1 and 2. During the past nineteen months thirteen engineers of varied disciplines performed 3,311 hours of on-site inspection related to mechanical systems, structural connection and electrical raceway supports. While a number of discrepancies were identified, all were satisfactorily resolved. These did result in fourteen violations being cited, representing isolated instances. None of the violations were considered to be generic in nature or of having a significant program or safety impact.

3. Status of Allegations

Allegations

Allegations regarding design, construction, operation and management have been submitted to the NRC since early 1983, the majority being submitted since late 1983. A specific evaluation effort for allegations was initiated in late 1983, under the Diablo Canyon Allegation Management Program (DCAMP). As of early March 1984, approximately 200 allegations had been submitted by various sources. The staff's evaluation of these allegations is presented in SSER 21 (December 1983) and SSER 22 (March 1984). The Government Accountability Project (GAP) submitted approximately 300 allegations in February and March 1984 in support of a petition, in accordance with 10 CFR 2.206, to defer any licensing action. Another approximately 1100 allegations have since been submitted in letters by GAP and Joint Intervenors. Most of all the allegations are identical or very similar. Some of the allegations are being investigated by the office of Investigations.

As discussed in SSER 22, the staff applied certain criteria for determining which allegations must be resolved on a priority basis. The staff has evaluated each allegation in sufficient detail and concluded that none are of such safety significance to preclude issuance of the operating license.

SSER 28, currently in the final stages of preparation, presents a tabulation, characterization and status of resolution of all allegations received as of February 28, 1985.

GAP submitted another supplement to the 2.206 petition on March 15, 1985 that contained approximately another 80 concerns/allegations that highlighted Cardinal as a problem supplier. The staff considers that only those dealing with Cardinal Industrial Products (i.e. a major supplier of bolts and fasteners) needed to be addressed prior to issuance

of the operating license. Our inspection conducted on March 25-28, 1985 indicates that the licensee was very responsive to the IE Information Notice. The licensee is in the process of identifying materials purchased from Cardinal and conducting "user" tests, as necessary, to provide assurance of material acceptability. These tests are still being performed and no failures have been identified to date. However, an inspection conducted by the Vendor Inspection Branch on April 1-5, 1985, indicates that it may not be possible to certify certain materials because of a loss of material traceability and/or failure to comply with lot sample size testing requirements. The licensee has stated that the bonnet flange bolts on the four Main Steam Isolation valves will be replaced due to loss of material traceability. The licensee is in the process of evaluating A490 bolting materials installed in rupture restraints and on the end caps of the steam generator snubbers. The staff will closely follow this issue.

A review board was held on April 11, 1985 to examine the status and significance of inquiries and cases being considered by OI. OI has 3 inquiries and 42 cases involving 185 allegations under investigation for potential wrong doing. The review board determined that the outstanding issues in these cases do not represent circumstances sufficient to preclude licensing of Unit 2.

Attachment 2

Items to be Resolved or Conditioned by Operating License

1. Preoperational/Acceptance Tests

The licensee shall, prior to loading of fuel in the core, complete preoperational test no. 38.4 to assure that those monitors required for fuel load fully meet the Technical Specification requirements without reliance on action statements.

2. Hangers Supports, and Restraints

All QI-SI and QII-SI hangers, supports, and restraints needing installation and/or modification will be completed prior to exceeding 5% power.

3. Startup Open Items List (Master Completion List Schedule)

The licensee shall restrain fuel loading, plant operation, and commercial operation* by prerequisite completion of the associated categories of items in accordance with the schedule shown on the Startup Open Items List dated April 24, 1985. The licensee shall not extend the completion categories for individual items on the list without prior notification and individual concurrence by a representative of the NRC Regional Office.

- * Commercial operation is defined as power operation following completion of the 100% power warranty run or January 1, 1986, whichever occurs first.