



OFFICE OF THE SECRETARY

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

August 1, 1984

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MEMORANDUM FOR: William J. Dircks, Executive Director for Operations

George Messenger, Acting Director Office of Inspector and Auditor

Herzel H.E. Plaine, General Counsel

FROM: Samuel J. Chilk, Secretary

SUBJECT: STAFF REQUIREMENTS - STATUS OF PENDING INVESTIGATIONS ON DIABLO CANYON, 10:00 A.M., MONDAY, JULY 30, 1984, COMMISSIONERS' CONFERENCE ROOM, D.C. OFFICE (CLOSED--EX. 5 AND 7)

The Commission* was briefed by the Office of Investigations (OI) on the status of investigations concerning the Diablo Canyon plant, and separately by the Office of Inspector and Auditor (OIA) regarding allegations pending before it that pertain to Diablo Canyon.

The Commission requested an outline indicating where technical aspects of allegations are addressed in the documented reviews and a summary of the conclusions reached in the investigations in the form of quotations from the staff's documented reviews. The Commission requested that these documents be available no later than Wednesday morning, August 1.

(EDO) (SECY Suspense: 8/1/84)

(Subsequently, the EDO provided the Commission with a cross reference on Diablo Canyon allegations. Time did not allow the inclusion of a summary of staff dispositions.)

The Commission requested the OIA report on allegations be available prior to close of business on Wednesday, August 1.

(OIA) (SECY Suspense: 8/1/84)

The Commission requested that the Office of the General Counsel (OGC) respond to the 2.206 petition submitted by the Government Accountability Project (GAP), subject to review by the Commission.

(OGC) (SECY Suspense: 8/17/84)

* Commissioner Roberts was not present

The Commission requested that staff and OIA be available to brief the Commission on the disposition of the investigations concerning Diablo Canyon during the Commission meeting to consider the full power operating license for Diablo Canyon, currently scheduled for 10:00 a.m., Thursday, August 2, 1984. Specifically, the Commission requested that OIA summarize what its action has been in these investigations and what results it has.

(EDO/OIA)

(SECY Suspense: 8/2/84)

cc: Chairman Palladino
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Zech
Commission Staff Offices

Statement of James K. Asselstine
Commissioner, U.S. Nuclear Regulatory Commission

before the

Subcommittee on Energy and the Environment
Committee on Interior and Insular Affairs

August 30, 1984

Mr. Chairman and members of the Committee, I have a prepared statement from my colleagues on the Commission which I would like to submit for the record. In addition, I would like to offer a few comments of my own on the Commission's handling of the full-power operating license proceeding for the Diablo Canyon nuclear power plant.

I was unable to vote in favor of the issuance of a full power operating license for Diablo Canyon Unit 1 because of the Commission's treatment of two issues: the complicating effects of earthquakes on emergency planning, and the re-evaluation of the adequacy of seismic design for small and large bore piping in the plant. With regard to seismic design, the record of this proceeding, allegations filed by former workers at the site and subsequent NRC inspections, including those performed by NRC inspector Isa Yin, all document a widespread quality assurance breakdown in the seismic design work for small bore piping in the plant. This quality assurance breakdown raises serious questions regarding both the adequacy of quality assurance for other design activities for the plant and the adequacy of the Independent Design Verification Program (IDVP). Those questions are of special importance for the IDVP, which was established to verify that the

seismic design problems that led to the Commission's suspension of the Diablo Canyon low power license had been identified and corrected.

These questions existed at the time that the Commission authorized the reinstatement of the low power license for Diablo Canyon, Unit 1. When I voted to permit low power operation, it was with the understanding that Mr. Yin and other elements of the NRC staff were in agreement on the measures needed to resolve those questions prior to a Commission decision authorizing full power operation. I was particularly disappointed in the staff's subsequent handling of Mr. Yin's concerns. Given the special significance of seismic design for this plant and the extent of the quality assurance breakdown in the seismic design program for portions of the plant, it was incumbent on the NRC staff to make every effort to verify that all significant design errors had in fact been identified and corrected.

Based upon the continuing concerns expressed by Mr. Yin regarding the adequacy of the staff's verification efforts and the extent of the seismic design quality assurance breakdown in the case, I am not yet satisfied that the Commission has the information needed to conclude, with a high degree of confidence, that all significant seismic design errors for this plant have been identified and corrected. In that regard, it is important to keep in mind that the seismic design problems identified at this plant over the past several years indicate a failure on the part of the utility to meet the requirements of our quality assurance regulations. Given this failure to comply with our quality

assurance regulations, the applicant must make a particularly strong and convincing showing that the design work for the plant has in fact been done correctly. Indeed, that was the intended purpose of the IDVP and the other design verification programs undertaken by the utility. Thus, it is particularly important to resolve fully these issues relating to the adequacy of the seismic design work for the plant and the seismic design verification efforts. The Agency's handling of these questions has been particularly unfortunate since the adequacy of the seismic design of the plant is a matter of serious public concern and since it appears that a further design verification program sufficient to resolve Mr. Yin's concerns could have been completed in a matter of a few weeks from the time the Commission issued the full-power license.

With regard to the complicating effects of earthquakes on emergency planning, I disagreed with the Commission's conclusion that our regulations do not require consideration of this issue for the Diablo Canyon plant. In its apparent determination to avoid adjudicating an issue that the agency itself has acknowledged to be material to emergency planning, the Commission has repeatedly changed its mind about how to treat this issue only to end up right back where it started three years ago--promising a generic rulemaking. In the meantime, the Commission's only accomplishment has been to deny parties the right to adjudicate the issue and to delay any action on this issue until the only two plants for which this issue probably has any real significance -- Diablo Canyon and San Onofre -- have been licensed. I would have recognized the obvious--that earthquakes ought to be considered for plants located in

areas of high seismicity such as California, and let the parties adjudicate the specifics in individual cases. In my view, the Commission should have provided the parties to the Diablo Canyon proceeding an opportunity for a hearing and let them litigate whether the Diablo Canyon emergency plan is flexible enough to deal with the complicating effects of earthquakes on emergency planning.

The cornerstone of the Commission's decision on this issue is the Commission's conclusion that the probability of an earthquake disrupting an emergency response is so low that it need not be considered in emergency planning. The basis for the Commission's conclusion is its determination that for various reasons, there is unlikely to be a radiological release and an earthquake at the same time. The Commission's arguments on this score ignore one of the fundamental precepts of emergency planning: we plan for low probability occurrences because no matter how safe we try to make nuclear power plants there is always a possibility that some event will occur which will require use of one or more aspects of emergency planning. The probability arguments used by the Commission are really arguments that we do not need any emergency planning, rather than that we need not consider earthquakes in emergency planning.

Unfortunately, the Commission has ignored the fact that safety calculations are subject to some uncertainties. The philosophy behind emergency planning is to recognize this uncertainty and to provide defense in depth in protecting the public. Indeed, the Commission's

emergency planning regulations are founded on the judgment that adequate emergency planning is an essential element in protecting the public health and safety, independent of the Commission's other regulations and safety reviews focusing on the design of the plant itself.

A key element of the Commission's argument in this case was that the probability of an earthquake disrupting an emergency response in an Emergency Planning Zone (EPZ) is too low even to be considered. To apply this argument to California, where almost 90 percent of the seismic activity in the United States occurs and where earthquakes which damage, obstruct or disrupt roads, buildings, bridges and communications networks occur with some regularity, simply ignores common sense. In support of this assertion, my colleagues argued that the Diablo Canyon site is located in an area of low to moderate seismicity. However, the only plant in the country with a comparable Safe Shutdown Earthquake and Operating Basis Earthquake -- the two key bases for the seismic design of the plant--is San Onofre. In fact, the SSE's and OBE's for plants in other parts of the country are significantly lower than those for Diablo Canyon. Clearly, by requiring the plant to be designed to withstand an earthquake with ground motions almost twice those of other plants in the country, the Commission has explicitly made the technical judgment that the earthquake risk for the Diablo Canyon area is not comparable to other areas of the country, and is, in fact, much higher. The Commission's decision on this issue must also be considered in light of the other natural phenomena the Commission includes in its consideration of emergency planning. If the probability of an earthquake disrupting

an emergency response in an Emergency Planning Zone in California is too unlikely to be considered, that probability must by definition be much lower than the probability of disruption caused by the other natural phenomena which the Commission does consider. It must, for example, be less likely than the probability that a tornado will disrupt an emergency response in an EPZ in the Midwest or that a hurricane will disrupt an emergency response in a California EPZ. I see no factual basis for concluding that earthquakes in California are so much more unlikely than either of these events that earthquakes need not be considered.

The Commission's decision also ignores the fact that the staff has been requiring licensees for plants located in California to consider the effects of earthquakes on emergency planning. The complicating effects of earthquakes on emergency planning were formally considered by the staff in the San Onofre proceeding, and were informally considered by the staff for Diablo Canyon. Thus, by their own actions, the agency's technical experts have demonstrated that they consider this issue to be material to the Commission's licensing decisions in these two cases. Given the fact that the staff experts on this issue have been concerned enough to consider it, I see no basis for the Commission's argument that in the cases of Diablo Canyon and San Onofre, seismic effects on emergency planning are irrelevant. Since the issue is clearly material to the agency's licensing decision in those two cases, the Commission is required by law to grant the parties an opportunity to litigate that issue. For these reasons, I would have required that the

record of the Diablo Canyon licensing proceeding be reopened to consider the complicating effects of earthquakes on emergency planning for this plant.

Mr. Chairman, as you know, on August 17, the United States Court of Appeals for the District of Columbia issued a stay of the effectiveness of the full-power license for Diablo Canyon pending the Court's review of the Commission's decision in this case. This action by the Court is unprecedented and indicates serious flaws in the Commission's decisions. As it now stands, the Court's stay is likely to remain in effect for at least the next three or four months. This action provides an opportunity for the Commission to reconsider some of its previous positions and to take actions to minimize the potential for further delays in this case. I believe that the Commission should do four things. First, it should reopen the hearing record to permit litigation of the complicating effects of earthquakes on emergency planning for this plant. If the Court decides that a hearing is required on this issue prior to full-power operation, as I believe it will, this step will avoid still further delays in this case. Second, the Commission should establish a further special review of the small and large bore piping seismic design adequacy. This review should be under the direction of NRC staff members who have not been directly involved in the previous design review efforts and should have as its objective achieving a consensus resolution of the concerns identified by Isa Yin and the allegations relating to the seismic design work at the plant. I would have Mr. Yin play a significant role in this review effort. Given

the utility's failure to comply with our quality assurance regulations, we should insist on as thorough a review as possible in order to provide ourselves, you and the public a high degree of confidence that the seismic design work for the plant has now been performed properly. Third, the Commission should reopen the investigation of the NRC staff's conduct during the Commission meetings prior to the issuance of the low power license for the plant with the objective of assuring a thorough and complete investigation of the allegations that have been submitted to the Commission regarding the staff's conduct. Such an investigation should include interviews with those who have submitted the allegations to assure that we have all the facts. Finally, the Commission should take a careful look at the need to reopen the record of this proceeding to consider other design and construction quality assurance issues. Now is the time to decide whether the Appeal Board rulings on these questions are correct so that any further hearings which may be required can proceed expeditiously. Mr. Chairman, I believe that these four measures would do much to correct the problems in the Commission's handling of the Diablo Canyon full-power operating license proceeding and to minimize the potential for further unnecessary licensing delays in this case.

Thank you.