



OFFICE OF THE
COMMISSIONER

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

November 28, 1983

MEMORANDUM TO SAMUEL J. CHILK
SECRETARY

FROM: William J. Manning *WJM*

SUBJECT: SECY-83-377 - REVIEW OF ALAB-728 (PACIFIC GAS
AND ELECTRIC COMPANY)

Attached are Commissioner Gilinsky's separate views on
SECY-83-377 (Review of ALAB-728). Please ensure that they
are served on the parties and are placed in the Commission
Issuances.

cc: W. Reamer
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SEPARATE VIEWS OF COMMISSIONER GILINSKY
(SECY-83-377; REVIEW OF ALAB-728, DIABLO CANYON)

I am disappointed that in the following three instances the Commission has failed to rise above giving participants in its proceedings the legal run-around.

1. The intervenors wanted to litigate the adequacy of the hydrogen control system, which is supposed to protect against the burning of the large quantities of hydrogen which might be generated during an accident. The Board refused to hear this contention on the grounds that this event is "not credible" and that the intervenors had not surmounted the artificial barriers which the Commission has placed in the way of considering this issue.

I should make clear at the outset that hydrogen control is not an acute problem at Diablo Canyon. The containment building, unlike that of certain plants, has a sufficiently large volume and high design pressure to withstand a hydrogen burn. While the effects of a hydrogen fire on the continued operability of safety equipment inside the containment are not yet clear, the situation here is the same as at other plants and the question is being considered in a rulemaking.

The problem in this case, as in prior cases where hydrogen control was a more significant safety issue, is that the Commission persists in pretending that the accident which actually occurred at TMI nearly five years ago is "not credible". The hydrogen control system required by NRC's pre-Three Mile Island regulations -- which are still in force -- is designed to cope with the small amount of hydrogen which was thought to be the maximum that could be generated in an accident. By contrast, it is estimated that during the 1979 Three Mile Island accident approximately ten times as much hydrogen as this maximum -- several hundred kilograms -- was in fact generated, released into the surrounding containment, and ignited.

In 1980, during the course of the proceeding on whether to permit Three Mile Island Unit 1 to restart, the Licensing Board asked the Commission two questions: (1) whether the regulation on hydrogen control should be waived since a prima facie case had been made that hydrogen generation at TMI-2 was well in excess of the design basis of the TMI-1 hydrogen control system; and, (2) whether post-accident hydrogen gas control should be an issue in the proceeding. The Commission's response was that the issue could be litigated but, instead of waiving the discredited regulation, it required any party wishing to discuss the hydrogen control system to first demonstrate that: (1) a "credible" loss-of-coolant accident could occur, (2) which

would entail the generation of hydrogen, (3) which would burn or explode, (4) causing the breach or leaking of the containment, (5) which, in turn, would result in off-site radiation doses in excess of Part 100 guideline values. The purpose seems to have been to keep this issue from being pursued here and elsewhere.

It is interesting that the Commission, a majority of whose members have persistently denounced NRC's excessive legalism, has consistently followed this most legalistic of precedents. The Commission should get on with the substantive task of deciding whether the various containments designs are strong enough to withstand a large hydrogen burn, and whether the equipment in the containment meets whatever environmental qualification standard the Commission chooses, and forget about this being an "incredible" accident.

2. The second issue is what consideration should be given in emergency planning to the effects of earthquakes on emergency preparedness. When this issue was first raised in the San Onofre operating license proceeding, the Commission quashed a quite limited inquiry into the problem by ruling that this issue was of such magnitude that it should be resolved in a "generic proceeding" rather than in case-by-case licensing reviews or hearings.

Now the NRC staff say that they will not undertake such a generic proceeding because they think that the probability of an earthquake severe enough to disrupt emergency preparedness occurring simultaneously with, or causing, a reactor accident is too low to justify a regulation. They want to deal with the problem, which affects only reactors on the West Coast, by doing plant-specific reviews. Nonetheless, the Appeal Board in Diablo Canyon followed the Commission's directives in San Onofre and affirmed the Licensing Board's decision to exclude the earthquake contention.

3. The third area of concern has to do with the Commission's policy on considering Class 9 accidents. These most serious accidents dominate the risk posed by nuclear power plants, even taking into account their very low probability. Indeed, it is pointless to look at the environmental consequences of reactor accidents in environmental statements unless Class 9 accidents are considered.

Prior to the Three Mile Island accident, the Commission's position was that Class 9 accidents were so improbable that they did not need to be considered in balancing the costs and benefits of a plant. After the accident (which was, in effect, a Class 9 accident), the Commission changed its policy to require that such accidents be considered in cases

in which the final Environmental Impact Statement had not yet been issued or, if the final EIS had been issued, in which "special circumstances" were shown to exist.

Since the Diablo Canyon final EIS had been issued before that change in policy, the controversy in this case was over whether "special circumstances" existed. The difficulty is that, instead of deciding this dispute, the Licensing Board resorted to the argument that, because the Appeal Board had found that Diablo Canyon meets the NRC's seismic design requirements, no special circumstances exist. Since no plant will receive a license unless it is found to meet NRC's requirements, the Licensing Board's approach amounts to defining away the "special circumstances" which might justify consideration of Class 9 accidents. This was not the result intended by the Commission when it adopted the new policy.