January 27, 1984

Note to Ann Hodgdon

SUBJECT: HYDROGEN RECOMBINER ISOLATION VALVES

I suggest you forward to the Licensing Board, the Staff "Report on Hydrogen Isolation Valves", despite its weaknesses. The Staff obviously, in this case, is rejecting the Applicant's argument that the recombiner system is an adequate closed cycle system justified as an alternative for a specific class of lines justified on an "other defined basis". I agree with the Staff's assessment on that. The Applicant's evaluation of the capability of the system is based purely on an assumption that the failure of the in-board valves will be a leakage-type failure and that the out-board system will not be exposed to full containment pressure loading. However, the Staff's justification for accepting this is extremely weak, its a pure probablistic hope that the accident will not occur during the time between initial licensing and the first refueling outage. I doubt, on a probablistic basis, that the Staff can justify that this highly unique break-in period is not the most significant period of operation of a facility.

Similarly, their second justification relating to degradation of the interim isolation barrier (the physical structure, of the hydrogen recombiner system) is also fairly weak in that it, again, does not address the problem that the hydrogen recombiner system only provides a physical barrier if the failure of failure. If it is a full open failure then the limited pressure capability of the hydrogen recombiner system discussed on page 6-2 of the SER does not provide a containment barrier.

Lastly, I note that this report, in and of itself, is inadequate to justify the exemption from GDC-56 which the SER suggests will be granted. It is inadequate because it does not address the factors specified in 50.12 for the granting of exemptions. However, since you have a filing date of Monday and this is the best you can get from the Staff between now and Monday, you might as well send it to the Licensing Board but you should recognize its weaknesses.

prodoe Scinto

cc: A. Schwencer

D. Eisenhut

J. Rutberg