

STATE OF NEW YORK
ENERGY OFFICE
SWAN STREET BUILDING
CORE 1 - 2ND FLOOR
EMPIRE STATE PLAZA
ALBANY, N.Y. 12223
(518) 474-8313



January 10, 1977

Mr. Benard C. Rusche, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Rusche:

Re: Dockets 50-247 and 50-286

After Mr. Pollard announced his resignation from the Nuclear Regulatory Commission (NRC) and stated his allegations of safety shortcomings at the Indian Point plants, my staff initiated an independent evaluation of the allegations. This evaluation included: a review of all the documents available regarding Mr. Pollard's allegations and the components, systems and structures in question; a review of the applicable NRC General Design Criteria and Regulatory Guides; and discussions with representatives of the Consolidated Edison Company of New York, Inc., NRC and the Electric Power Research Institute regarding specific aspects of component and system design and operation.

With two exceptions we have concluded that, prior to Mr. Pollard's resignation, the NRC had adequately evaluated these contentions and that adequate safety margins exist on these plants with respect to the issues raised. The two exceptions relate to the probability of tornado damage to buildings containing safety related equipment in Indian Point Unit 2 and the containment isolation features of the two auxiliary steam lines in Indian Point Units 2 and 3. Comments on these two items follow.

Probability of Tornado Damage

Insufficient data were available to determine the adequacy of safety margins if a tornado strikes the site. Since many of the buildings (diesel generator, control room, fuel storage) were not designed specifically to resist a tornado, significant damage could be claused to safety related components by a tornado. The NRC evaluation determined that the probability

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Mr. Benard C.Rusche, Director - 2 - January 10, 1977

of a design basis tornado was 2 x 10^{-8} per year. However, no mention was made of the probability of having a less severe tornado which could cause significant damage to safety related components. This latter value is important because, as indicated by the NRC, these buildings may not be able to withstand a tornado which is substantially less severe than the current design basis tornado.

Containment Isolation

The two auxiliary steam lines in question (nos. 45 and 46 of figure 5.2-18 of the Indian Point Unit 2 FSAR) are the auxiliary steam supply and condensate return lines inside containment which are utilized during plant shutdowns. Each line has a single isolation valve and does not appear to satisfy any of the other requirements of the General Design Criteria, as these requirements have been interpreted by the NRC in the evaluation of the other containment isolation features of other lines.

Recommendations

We have concluded that the NRC should:

- 1. Evaluate, if it has not already done so, the magnitude of tornado which could cause substantial damage to safety related components at Indian Point Unit 2 and the probability that any tornado exceeding this magnitude will occur at this site. These studies should consider tornado induced missile effects as well as direct wind effects; and
- Re-evaluate the containment isolation features of the Indian Point Unit 2 and 3 auxiliary steam lines to ensure that the isolation requirements are indeed satisfied.

Please advise me of the results of the evaluation of these two items as soon as they become available.

Sincerely

T. K. DeBoer, Director

Technological Development Program

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