

# United States Senate

WASHINGTON, D.C. 20510

March 4, 1983

Dr. Nunzio Palladino  
Chairman  
United States Nuclear  
Regulatory Commission  
Washington, D.C. 20555

Dear Dr. Palladino:

I am writing to express my alarm and concern about the events that occurred at the Salem I nuclear generating station on February 22nd and 25th when manual shut downs of the reactor were required following the failures of the automatic safety system and its back-up. I believe the incident, while not posing any immediate hazard, demands the most exacting and severe scrutiny the Nuclear Regulatory Commission can muster prior to any restart of this plant, and in operation of nuclear plants nationwide.

Although this plant is geographically located in New Jersey, you are no doubt aware of its close proximity to the majority of the citizens of Delaware. In fact both Wilmington, Delaware and, to a lesser degree, Philadelphia, Pennsylvania sit in the shadow of the plant. I believe that this incident undermines the rather limited confidence or general uneasiness that the hundreds of thousands of people that reside in this area feel with a nuclear reactor in their back yard.

I also believe this incident demonstrates the extent to which this plant and others continue to rely on fallable "human" factors of potential mismanagement, improper maintenance and operational oversight. It would also seem to refute some of the apparent blind faith the industry places in its calculation of the laws of probability, given the extremely low probability ascribed to this type of incident.

Furthermore, I believe this incident should result in added emphasis by the Commission to propose tough standards dealing with the so-called "Anticipated Transient Without SCRAM" situation. It is very clear that the events at Salem reenforce the pressing need to resolve this decade old safety issue.

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PDR COMMS NRCC  
CORRESPONDENCE PDR

Even though I am not in a position to judge all the technical aspects of this incident, I would ask that you have the Commission respond to the following requests and/or questions:

- 1) Please provide me with a complete description of the event and its safety significance;
- 2) Please provide me with copies of all memoranda and internal studies that analyze this event;
- 3) Before restart, we would ask that you provide an assessment of whether NRC has reason to believe that either an operator during the incident or management action during or prior to the event acted inappropriately;
- 4) In this event, manual shut-down was achieved some twenty-four seconds after automatic controls and back-up failed; are there incidents of this kind where 30 seconds would not have provided for adequate public health and safety?;
- 5) I am informed that this type of event was calculated in the Reactor Safety Study (WASH 1400) as having an extremely low probability. What does the NRC currently calculate the probability of this type of event? How was it that the probability of occurrence was repeated in a three day time period at Salem I?;
- 6) What sequence of events would have followed the failure of a manual SCRAM, both within and outside the plant gate?;
- 7) What other backup system would have been available if the manual SCRAM would have been ineffective and/or incomplete?;
- 8) At the time of the event, the reactor was reported to be operating at 12% of its rated power. Of what consequence and severity would the failure of the automatic system have been had the plant been operating at near or full power? Specifically, what other problems besides core endangerment might have occurred? What differences would have been relevant in operator reaction time?
- 9) Are there other initiating events (i.e., besides low steam generator water level) in which operators would have had less time to respond?;
- 10) The Preliminary Notification of Event or Occurrence notes that an alert was "belatedly declared." What was the cause and effect of this delay? Given the relative urban proximity of the plant, of what consequence

would this delay have been?

11) Please detail the history of resolution of the unresolved safety issue of Anticipated Transient Without SCRAM and state the significance of this event in its eventual resolution?;

12) The report of this event indicates really two separate events; was the restart of the plant after the first event adequately and properly justified?;

13) What circumstances explain how the under-voltage trip breakers which are considered "Safety Grade Components" could have been mislabeled during recent maintenance?;

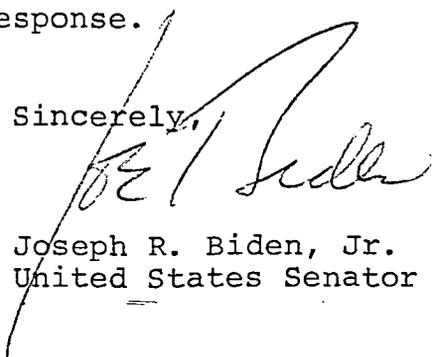
14) How is it possible that company officials were unaware of a 1974 safety circular from the vendor explaining special maintenance procedures?;

15) What remedial steps can the Commission outline that would prevent present and future notices from vendors going unimplemented?

Finally, Mr. Chairman, I want to state categorically that my intent in this letter is not to impede your work in arriving at answers explaining the cause of this event. I am rather more interested in prompting your careful scrutiny of the event. I am also sincerely interested in providing the citizens of Delaware with answers to their expected, and well-founded concerns in the aftermath of this incident. I expect however, that my concerns and questions will be answered prior to any decision to restart the Salem plant.

I look forward to your response.

Sincerely,



Joseph R. Biden, Jr.  
United States Senator