



Metropolitan Edison Company  
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November 27 , 1979  
GQL 1439

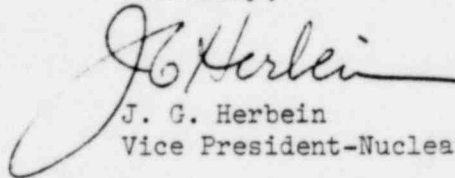
Director of Nuclear Reactor Regulation  
Attn: R. W. Reid, Chief  
Operating Reactors Branch No. 4  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
TMI-1 PORV Actuation

With regard to NRC letter of September 28, 1979, enclosed are the responses to the request for additional information. The enclosure addresses only Item 1 of your letter. Items 2 and 3 are not applicable to TMI-1, therefore, no response has been provided.

Sincerely,



J. G. Herbein  
Vice President-Nuclear Operations

JGH:DWR:tas

Enclosure

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Request No. 1

According to statements made by B&W, there are approximately 146 documented occasions where PORV actuation occurred at B&W facilities prior to the accident at Three Mile Island, Unit 2 (TMI-2). For each of these events which have occurred at your facility(ies) provide the following information:

- a. The cause of the event;
- b. The initial power level prior to the transient;
- c. Indicate which of these transients caused the reactor to trip on high RCS pressure and/or caused the safety valves to lift; and,
- d. If you assume that the present setpoints for high RCS pressure trip and PORV actuation were in effect at the time of each of these transients, estimate whether either of the following would have taken place:
  - 1) PORV actuation, and
  - 2) lifting of the safety valves.

Response

The following matrix provides information for parts a., b., and c., above:

<u>Event/Date</u>	<u>Cause of Event</u>	<u>Power Level %</u>	<u>Reactor Trip on High RCS Pressure</u>	<u>Code Safety Valve Actuate</u>
Reactor Trip #1/ 6/18/74	Partial loss of instrument air	7	No	No
Reactor Trip #6/ 7/12/74	Electrical problems with turbine	65	No	No
Reactor Trip #7/ 7/13/74	Loss of Feedwater	15	No	No
Reactor Trip #8/ 7/14/74	Inadvertent grounding of RCS Tave signal	76	No	No
Reactor Trip #10/ 8/13/74	Manual turbine trip for TP 800/34	98	Yes	No
Turbine Trip / 8/30/74	Turbine bearing failure	75	No	No
Turbine Trip / 1/23/75	High moisture separator drain tank level	100	No	No
Reactor Trip #12/ 3/30/75	Loss of 125 VDC power to EHC	100	No	No
Reactor Trip #13/ 5/09/75	High moisture separator level	100	Yes	No
Reactor Trip #14/ 6/18/75	Voltage spikes in turbine EHC system caused load transient	100	Yes	No

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<u>Event/Date</u>	<u>Cause of Event</u>	<u>Power Level %</u>	<u>Reactor Trip on High RCS Pressure</u>	<u>Code Safety Valve Actuate</u>
Turbine Trip / 12/22/75	Test on plant fire protection (switch)	80	No	No
Turbine Trip / 11/15/78	Loss of EHC-DC power to turbine generator	100	No	No

In response to Part d., if the modified setpoints were in effect at the time of the transients we do not believe PORV actuation would have occurred. Since the code safety valves did not actuate with the old set points they are not expected to actuate for the modified setpoints. As requested these assumptions did not take credit for the anticipatory control-grade reactor trip on loss of feedwater or turbine trip.

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