

*Chris Wayne*  
*ESD*

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SAC*

Dockets Nos.: 50-239-~~1~~ and 50-3207

Mr. J. G. Herbein  
Vice President  
Metropolitan Edison Company  
P. O. Box 542  
Reading, Pennsylvania 19603

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Dear Mr. Herbein:

During April 1978, you informed us of an error in your ECCS Small Break LOCA evaluation model analyses. We authorized continued operation of Three Mile Island Nuclear Station, Units Nos. 1 and 2 based in part on credit to be taken for prompt operator actions. You were issued an Order for TMI-2 and an Exemption for TMI-1 by which you were required to implement procedures and training necessary to assure that the required operator actions could be completed within ten minutes from initiation of the event. In addition, you were directed to submit reanalyses along with proposals for long-term modifications to eliminate the need for prompt operator actions including those from inside and from outside the control room.

Your proposal for long-term modifications relies on operator actions. It appears that "prompt" operator action may be required. We have also determined that the proposed modification would degrade the existing safety-related power supplies by introducing a single failure possibility via the Kirk key interlock actuation circuit.

The staff position regarding allowable operator actions for which credit may be taken following a Condition III event (small LOCA), is as follows:

1. No credit for operator actions required within ten minutes of the initiating event will be allowed.
2. Credit may be taken for operator actions from within the control room after at least ten minutes if accurate information is available and displayed, and if the operator has sufficient time to correctly analyze the situation, recognize any error or malfunction and to take a corrective action. The allowed operator actions are limited to "simple" actions which are characterized by the "pushing of a button" or the "flipping of a switch." Balancing of ECCS flows by adjusting valve positions is not considered a "simple" operator action.

ECCS S.

GD

OFFICER IN CHARGE	OPERATOR	TELETYPE	TELETYPE	TELETYPE	TELETYPE	TELETYPE
SURNAME						
DATE						

701000108

8002110 669

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3. Credit may be taken for more complex operator actions which may be assumed to begin after at least ten minutes. The credit assumed in the ECCS analysis should consider a reasonable time delay after initiation of the operator action for the system to respond to assure that design flows have been achieved. However, the credit for these complex actions cannot be assumed in less than 20 minutes after the accident.

If the emergency core cooling system analyses for your facilities, submitted May 3 and July 24, 1978, does not meet the position stated above, you should either: (1) provide a new analysis and a revision of the proposed modification, which eliminates the single failure capability and which demonstrates that with the revised modification you will meet the staff position with respect to allowable credit for coeration action or (2) propose a new modification and an analysis. If your submittals meet one of the above positions, identify the position that is met and the basis for your statement.

In your consideration of the above, you should be aware that we have approved use of the simplified FOMA code as proposed by Babcock & Wilcox in their letter dated Aug. 11, 1978.

It is requested that you inform us by telephone, confirmed by letter, within seven days of receipt of this letter which of the options you plan to pursue. This will allow us to determine whether or not to continue our review of the design of your proposed modification. Your response should include your schedule for submittal of the required analysis and/or modification.

Sincerely,

*[Signature]*

Robert W. Reid, Chief  
Operating Reactors Branch #4  
Division of Operating Reactors

cc: See next page

OFFICE ID	ORB#4:DOR	ORB#4:DOR	LWR#4:DOR	C-LWR#4:DOR	C-ORB#4:DOR	
BUCKMAN ID	GZwetzig:rf	WFairfile	HS11ver	SVarsa	RReid	
DATED	9/ 178	9/ 178-	9/ 178	9/ 178	9/ 178	

**Metropolitan Edison Company**

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