

RELATED CORRESPONDENCE

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

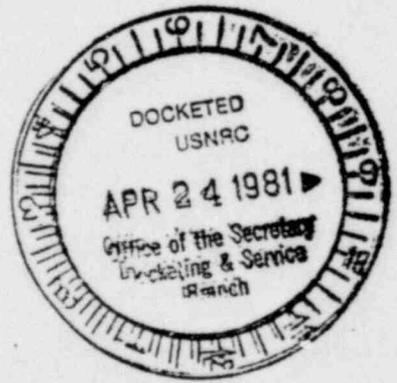
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
METROPOLITAN EDISON COMPANY)
(Three Mile Island Nuclear)
Station, Unit 1))

Docket No. 50-289
(Restart)

UNION OF CONCERNED SCIENTIST'S REPLY TO MET ED
AND STAFF SUBMISSIONS ON VALVE TESTING

April 22, 1981



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UNION OF CONCERNED SCIENTISTS'S REPLY TO MET ED
AND STAFF SUBMISSIONS ON VALVE TESTING

The enclosed affidavit of Robert D. Pollard establishes that the valve failures reported to date raise a serious question about the ability of the TMI-1 block valve to close under the conditions covered by the test, that is steam flow. To summarize, all of the failures of block valves to fully close involved a mismatch between the valve closing force needed and the size of the motor operator or an incorrect torque switch setting. Thus, the fact that a Velan valve has not failed is not dispositive. At least one of the test failures involved a Westinghouse valve with a motor operator similar or identical to that used with the Velan valve at TMI-1. Finally, the particular valve/operator combination used at TMI-1 has not been tested. Furthermore, the manufacturer of the motor operator in question uses the same methodology to match the operator to the Velan valve as it does for the Westinghouse valve. Thus, it is far premature to conclude that the TMI-1 valve would close against the appropriate steam flow; on the contrary, the evidence to date raises serious questions.

We note that the staff's witness, Mr. Hemminger, conceded virtually as much when he noted that, in his opinion, "the EPRI tests on the Velan block valves are more relevant than the tests conducted on the Westinghouse block valves." He did not say that the Westinghouse failure is irrelevant, although his statements were transmogrified into such a conclusion by the staff attorneys in their accompanying pleading.

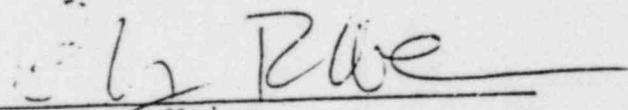
Both the staff and licensee have taken internally inconsistent positions with respect to the weight of the test failures to date. While they have no hesitation at claiming that the results of tests of similar valves with different operators are applicable to TMI-1 when they are successful, they completely deny the applicability of failures of similar operators with different valves. There is no justification for this.

Finally, NUREG-0737, p.3-73 requires a demonstration that the block valve/motor operator combination "can be operated, closed and opened for all fluid conditions expected under operating and accident conditions." Thus far, no such demonstration has been made. Although 0737 does not make this a restart requirement, we find it inconceivable that the Commission would authorize restart if there were a reasonable basis upon which to conclude that the TMI-1

block valve will not function. It is a far different proposition to claim that the plant is safe enough to restart pending confirmatory tests than to argue that it is safe enough to restart in the face of test failures. UCS believes that the evidence to date raises a question of sufficient seriousness about the ability of the TMI-1 block valve to function as to require proof that the valve can be relied upon.

We have today received a copy of IE Bulletin No. 81-02: Failure of Gate Type Valves to Close Against Differential Pressure. Although we have not yet had the opportunity to review it in detail, we are enclosing a copy for the Board's consideration in reviewing this matter.

Respectfully submitted,


Ellyn R. Weiss
Counsel for the Union of Concerned
Scientists