UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

METROPOLITAN EDISON COMPANY, et al.,

(Three Mile Island Nuclear Station,

Unit No. 1)

Docket No. 50-289 (Restart)

UNION OF CONCERNED SCIENTISTS SPECIFICATION OF CONTENTIONS

UCS has been directed by the Board to provide specification of its contentions 9, 10 and 13. Memorandum and Order Requiring further Specification of Contentions, June 23, 1980. $\frac{1}{2}$ UCS Contention 9 is as follows:

9. The accident at TMI-2 was substantially aggravated by the fact that the plant was operated with a safety system inoperable, to wit: two auxiliary feedwater system valves were closed which should have been open. The principal reason why this condition existed was that TMI does not have an adequate system to inform the operator that a safety system has been deliberately disabled. To adequately protect the health and safety of the public, a system meeting the Regula-

^{1/} UCS's oral motion for an extension of time to specify contentions until August 11, 1980, agreed to by the staff and licensee, was granted by the Board orally on August 4, 1980.

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tory Position of Reg. Guide 1.47 or providing equivalent protection is required.

UCS specifies that its evidence on this contention will be directed toward the emergency core cooling system, the auxiliary feedwater system and their essential supporting systems such as electric power and service water.

We wish the Board to be aware, however, that in UCS's proposed findings of fact we will argue that failure of these specific systems to comply with or provide equivalent protection to Regulatory Guide 1.47 indicates a need to backfit the position of the Regulatory Guide to all systems to which it applies by its terms:

This guide describes an acceptable method of complying with the requirements of IEEE Std. 279-1971 and Appendix B to 10 CFR Part 50 with regard to indicating the unoperable status of a portion of the protection system (as defined in IEEE Std. 279-1971), systems actuated or controlled by the protection system, and auxiliary or supporting systems that must be operable for the protection system and the systems it actuates to perform their safety-related functions.

Regulatory Guide 1.47, Introduction, May 1973.

UCS Contention 10 is as follows:

The design of the safety system at TMI is such that the operator can prevent the completion of a safety function which is initiated automatically; to wit: the operator can (and did) shut off the emergency core cooling system prematurely. This violates §4.16 of IEEE 279 as incorporated in 10

CFR 50.55(a)(h) which states:

The protection system shall be so designed that, once initiated, a protection system action shall go to completion.

The design must be modified so that no operator action can prevent the completion of a safety function once initiated.

UCS specifies that its evidence on this contention will be directed toward the emergency core cooling system, auxiliary feedwater system and containment isolation system.

Again, we will take the position in our proposed findings that the fact that these specific systems are not designed so as to preclude premature operator over-ride indicates a broader need to review and backfit all safety systems to which §4.16 of IEEE Std. 279, incorporated in 10 CFR 50.55 (a)(h), applies.

UCS's Contention 13 is as follows:

The design of TMI does not provide protection against so-called "Class 9" accidents. There is no basis for concluding that such accidents are not credible. Indeed, the staff has conceded that the accident at Unit 2 falls within that classification. Therefore, there is not reasonable assurance that TMI-1 can be operated without endangering the health and safety of the public.

As the Board is aware, UCS believes that it is entitled to judgment as a matter of law on this contention and has filed a

Motion for Summary Judgment to that effect. We firmly believe that the contention is litigable as written. If the Board rules against UCS on the summary judgment motion, we intend to pursue the issue at the hearings. If the Board will not permit the contention to be litigated, UCS will make an offer of proof and pursue its appeal rights. Lowever, if the latter occurs, UCS would move the Board to allow it to litigate the following contention:

On June 2, 1980, the NRC staff filed a document entitled "TMI-1 Potential Core Damage Accident Sequences and Preventive and Mitigative Measures." Each of the sequences contained therein is credible and the measures proposed are insufficient to prevent or mitigate severe core damage or core melt. In addition, the staff's failure to include loss of AC electric power in the event trees is not justified, particularly since some actions mandated by the staff may compromise the reliability of emergency power and since the staff admits that the emergency feedwater system for TMI-1 may have dependencies on AC power which could lead to loss of system function in the event of loss of AC power. Therefore, such events are both credible and related to the TMI-2 accident. Until all credible TMI-related sequences leading to core damage or melt are identified (including those involving loss of AC electric power) and until measures to prevent or mitigate such sequences are implemented, TMI-1 cannot resume operation without posing an undue risk to public health and safety.

Respectfully submitted,

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