

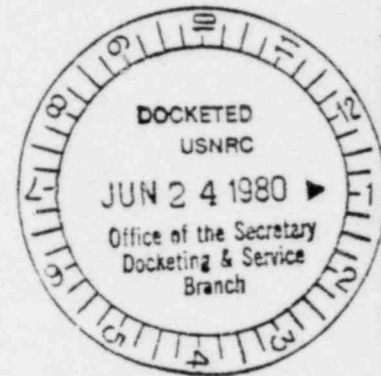
6/19/80

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 2))

Docket No. 50-320 OLA



CONTENTIONS OF STEVEN C. SHOLLY
(SUPPLEMENT TO PETITION TO INTER-
VENE, PURSUANT TO 10 CFR 2.714)

In an Order dated 23 May 1980, the Chairman established the date for the Special Prehearing Conference in this proceeding as 7 July 1980. Accordingly, the contentions of the petitioners are due 15 days before this date, specifically on or before 23 June 1980 (since 22 Jun 1980 is a Sunday). Herein are the final contentions of Steven C. Sholly, petitioner in this proceeding.

CONTENTION #1

It is contended that in the absence of data to support the proposed maximum Reactor Coolant System pressure (Technical Specifications, 2.1.3), the inherent assumption within the Technical Specifications that the reactor coolant pressure boundary is capable of withstanding the specified pressure of 2750 psig is not tenable. It is additionally contended that for the Reactor Coolant System pressure to approach the level suggested would require a severe transient situation, initiation of which would present significant hazards to the public health and safety. It is therefore contended that a much lower Safety Limit for the Reactor Coolant System pressure is required, and that the proposed limit of 2750 psig does not adequately protect the public health and safety.

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BASIS FOR CONTENTION #1

The accident of 23 March 1980 and continuing has subjected the reactor coolant pressure boundary to conditions which were not anticipated during the design of the system. The impacts of these conditions, including extremely high levels of radioactivity, temperatures in excess of design, and pressures in the high range, coupled with extended maintenance of conditions within the reactor building which far exceed the environmental qualifications for which most of the equipment therein was designed, lead to a measure of uncertainty as to the structural integrity of the reactor coolant pressure boundary, particularly in the instance of code safety valves and the PORV on the pressurizer. For the Reactor Coolant System pressure to reach the proposed limit of 2750 psig, a very large increase would have to take place from the pressure which theoretically will exist when the MDHR system is operating. Such a large increase could only come from a very severe transient, which has serious consequences not only for the stability of the reactor, but also for public health and safety. A pressure of 2750 psig is therefore not reasonable as a safety limit; it is not conservative. A lower limit is in order and should be required in the revised Technical Specifications.

CONTENTION #2

Technical Specification 3.3.1.1 Action provides that with no channels operable in the Neutron Monitoring Instrumentation, compliance with boron concentration requirements of Specification 3.1.1.2 be performed once per 24 hours by mass balance calculation and at least once per 7 days by a chemical analysis. It is contended that these provisions are insufficient to protect the public health and safety by assuring that a recriticality accident cannot

occur. It is therefore contended that more frequent assessment of compliance with boron concentration limits be performed when no operable neutron monitoring channels exist. It is further contended that an additional requirement to the Action statement should be added, namely that upon detection of the condition of no operable neutron monitoring instrumentation channel, the NRC must immediately be notified, and further that the Emergency Plan classification of Unusual Event be declared, with the result being that the Pennsylvania Emergency Management Agency be informed immediately.

BASIS FOR CONTENTION #2

Assuming that no operable neutron monitoring instrumentation channel exists, the only feasible means of assessing the chances of a recriticality incident is assuring that the boron concentration in the primary coolant is maintained at a sufficiently high level. A calculation of what the concentration should be on a mass balance calculation basis provides less assurance than a chemical analysis. In the event that the monitoring instrumentation is inoperable, this constitutes a serious situation. Reliance on calculational models when a direct chemical analysis means is available to determine the boron concentration is not conservative practice. Nor is it conservative to assume that if one test is taken per day, that particular test will be accurately carried out. Therefore, it is more conservative to perform a chemical analysis more than once per day when the neutron instrumentation is inoperable. A reasonable frequency, at a minimum, would be once per operating shift (i.e., three times per day). In the alternative, at least a confirmatory test should be performed to be more certain of the validity of the initial result. Further, when the situation of inoperable channels occurs, this is a serious situation which should result in the initiation of at least the lowest classification

of Licensee's Emergency Plan, namely the Unusual Event class. This would result in the notification of the Pennsylvania Emergency Management Agency. As a result, the Commonwealth would be required to be notified of this situation, which is clearly not normal, not desirable, and has an inherent degree of risk.

CONTENTION #3

It is contended that Technical Specification 6.2.2 does not provide adequate assurance of the protection of public health and safety because it references Table 6.2-1, which permits shift crew composition to be less than the minimum specified for a period of two hours, thus potentially permitting the plant to be without a licensed operator for two hours. It is contended that there must be in the control room at all times at least one licensed reactor operator who is licensed for TMI Unit #2.

BASIS FOR CONTENTION #3

Technical Specification 6.2.2 references Table 6.2-1 of the proposed Technical Specifications, which provides that, "Shift Crew composition may be less than the minimum requirements for a period not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2-1." This would appear to permit both the operator with the SOL and the operator with the OL to be absent for two hours, with the shift consisting solely of two non-licensed operators. This is clearly unacceptable. There must be at least one licensed operator in the control room at all times in order to be prepared to take whatever actions may be needed to protect the public health and safety.

CONTENTION #4

Technical Specification 6.10.1 provides that certain records be retained for at least five years. It is contended that this is an insufficient period of time for retention of such records, and that such records should be maintained until the facility is decommissioned. It is further contended that an additional requirement relating to such records should be added to this Specification in that any of the records required to be retained by this provision must be available for public inspection and copying upon request.

BASIS FOR CONTENTION #4

The records referenced in Specification 6.10.1 contain information that is potentially very significant from several standpoints, including legal, technical, and public health standpoints. To permit the disposal of such records after a five-year period is unwarranted and unnecessary. Further, public access to such records upon request is an entirely reasonable provision given the need to protect the public health and safety, a need which is viewed by the Commission and certainly by myself as being the paramount concern of the Commission.

CONTENTION #5

It is contended that the time limit permitted by Technical Specification 3.3.3.5 for returning inoperable remote shutdown monitoring instrumentation channels to operable status is unnecessarily lengthy at a period of 30 days, and that a requirement for a shorter time period of 7 days is more conservative and would therefore better protect the public health and safety.

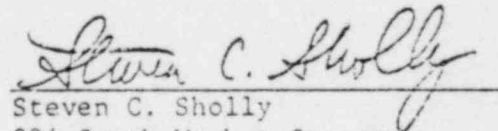
BASIS FOR CONTENTION #5

The period referenced in the language of the contention is unnecessarily long, considering the fact that the remote shutdown

location is necessary to ensure protection of public health and safety in the event that the control room becomes uninhabitable during the period of operation in the Recovery Mode. Such an eventuality cannot reasonably be excluded given the tenuous nature of many of the steps involved in the cleanup of the plant. Therefore, it would be more conservative and more protective of public health and safety to require a shorter period of time within which to restore instrumentation in the remote shutdown location to operable status. Ideally such restoration would be as immediate as possible, but this is probably not always feasible. However, 30 days does not take sufficient note of the seriousness of the situation as a limit for restoration to operable status. Therefore, a shorter period is specified.

DATED: 19 June 1980

Respectfully submitted,



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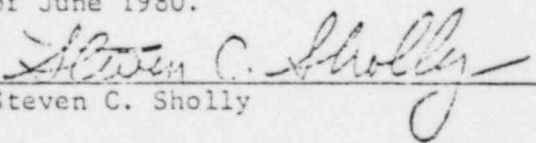
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CERTIFICATE OF SERVICE

I hereby certify that single copies of "Contentions of Steven C. Sholly (Supplement to Petition to Intervene, Pursuant to 10 CFR 2.714)" were served upon the parties below by deposit in the United States mail, first class, postage prepaid, this 20th day of June 1980.


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