

October 31, 1979

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
METROPOLITAN EDISON COMPANY	)	Docket No. 50-289
	)	(Restart)
(Three Mile Island Nuclear	)	
Station, Unit No. 1)	)	

LICENSEE'S RESPONSE TO FINAL  
CONTENTIONS OF CHESAPEAKE  
ENERGY ALLIANCE, INC.

Contention No. 1. CEA contends that the Atomic Safety and Licensing Board's (ASLB) action in permitting the restart of TMI-1 would constitute a major Federal action significantly affecting the human environment, and that, therefore, an Environmental Impact Statement (EIS) is required pursuant to the provisions of the National Environmental Protection Act (NEPA) (42 U.S.C. Section 4332(2)(c)). CEA contends that the scope of the EIS should not be limited to psychological distress issues, but should also evaluate factors such as the impact of the restart on business decisions to relocate to, or remain in, the TMI area, the availability of alternative means to meet the energy needs supplied by TMI-1, and the impact of a decision to permit restart of TMI-1 on the overall climate of licensing and construction permit decisions involving nuclear power plants.

Licensee's Response

For the reasons stated in Licensee's accompanying memorandum on this issue, entitled "Licensee's Brief on the Issue of Preparing an FES Prior to TMI-1 Restart," Licensee's position is that no environmental impact statement is warranted in this proceeding. Accordingly, Licensee objects to this contention.

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Contention No. 2. CEA contends that the emergency preparations considered in the Commission's August 9 Order and Notice of Hearing are inadequate in that they do not provide for:

- (a) evacuation planning and exercises for the area within the one hundred (100) mile radius that can be threatened by immediate fatalities from radiation emanating from a core meltdown and breach of containment at TMI-1. CEA contends that such preparations are necessary prior to a restart of TMI-1 in light of the estimates of the 1965 revised edition of WASH 740 of the potential damage from such an accident, and of the possibility that such an accident might occur at TMI-1. In support of this contention, CEA submits that there was an imminent possibility of such an accident at TMI-2 during the 3/28/79 accident, and that the nexus between TMI-1 and TMI-2 is sufficiently strong due to their identical design, and common licensee, and that the NRC and licensee have failed to demonstrate that they have considered every possible sequence of events that could lead to an accident as severe or more serious than the 3/28/79 TMI-2 accident.
- (b) the provision of adequate emergency medical facilities equipped to handle large numbers of radioactively contaminated casualties from an accident at TMI-1 on a scale up to that noted in (a) above. CEA contends that the provision of such facilities is necessary prior to a restart of TMI-1 given the above stated nexus between TMI-1 and the 3/28/79 TMI-2 accident, and given the absence of such medical facilities in Baltimore, the closest major metropolitan area to TMI-1 and a natural location to which casualties from such an accident would be transported, as well as in other adjacent areas. CEA contends that the receipt and treatment of such radioactively contaminated casualties at a hospital that is not equipped to isolate and decontaminate them would have a major adverse impact on other patients and on critically needed medical equipment.
- (c) the provision of adequate emergency measures to prevent the possibility of dumping of highly radioactive water into the Susquehanna, and from there into the Chesapeake Bay, in

the event of an accident at TMI-1 such as described in (a) above. CEA contends that such provision prior to the restart of TMI-1 is necessary given the above stated nexus between TMI-1 and the 3/28/79 TMI-2 accident, and given the inestimable value of the Chesapeake Bay, including, but in no way limited to, its economic value of approximately \$100 million per year for the Maryland seafood industry sustained by the Bay, and given the irreversible harm that could befall the Bay were significant quantities of highly radioactive water to be dumped into the Susquehanna River, the principal tributary of the Bay, as the result of a TMI-1 accident such as described in (a) above. CEA contends that among the necessary provisions to protect water quality would be but would not be limited to the construction of substantially greater shielded auxiliary storage tanks at the TMI facility.

- (d) the provision of adequate emergency measures to protect livestock within a fifty mile radius of TMI. CEA contends that such provisions, including, but not limited to the preparation of evacuation contingency plans for livestock and the provision of adequate education to farmers in the above stated area for the optimal protection and management of livestock in the event of an accident as in (a) above, are necessary given the above stated nexus between TMI-1 and the 3/28/79 accident and given the prevalence of dairy farming in the TMI area and its importance in the local economy, and given the inadequate preparation, for the protection of livestock, that became evident during and after the 3/28/79 TMI-2 accident.

#### Licensee's Response

For the same reasons as those stated in Licensee's objections to UCS's final contention 16 (see Licensee's Response to Final Contentions of The Union of Concerned Scientists), emergency planning considerations based on a core meltdown and breach of containment at TMI-1 are beyond the requirements

established by the Commission. Accordingly, Licensee objects to Contention 2.

- \* Contention No. 3. CEA contends that the "short term actions" are inadequate in that they fail to specify the extent to which offsite monitoring is to be upgraded prior to restart of TMI-1, and hence no basis is provided for ascertaining the adequacy of the monitoring to be described by the Commission. CEA contends that the establishment of specifications for offsite monitoring by the Commission, or the submission of plans for upgrading monitoring by the licensee is necessary for CEA to determine or assess the adequacy of such monitoring. CEA contends that the offsite monitoring must provide for complete assessment of the extent pattern and density of dispersal of radiation, and must also provide for fully adequate monitoring of discharges into the Susquehanna River and for adequately monitoring the dispersal of such discharges, and that the monitoring devices must have the capability of alpha, beta, and gamma radiation directly, rather than only providing for the inference of levels of alpha and gamma radiation from the observed levels of beta radiation. CEA contends that the above stated provisions are necessary so that complete and accurate information on released radiation is available in the event of an accident at TMI-1 involving significant release of radiation into the environment, and that the absence of such information during the 3/28/79 TMI-2 accident denied the public information essential to ascertaining the risk to which it was exposed.

Licensee's Response

Licensee recognizes the right of CEA to raise contentions relating to offsite monitoring. In accordance with the position set forth at Section B of Licensee's covering memorandum, it is requested that the Board require CEA to revise and resubmit this contention with specific objections to Licensee's monitoring program following CEA's receipt of Licensee's description of its upgraded program.

Contention No. 4. CEA contends that there exists conflict of interest in the present arrangement whereby licensee is

responsible for monitoring offsite radiation, in that the public is not guaranteed independent and impartial measurement and reporting of released radiation. CEA further contends that given the present reputation of licensee -- a reputation established in substantial part by licensee's withholding or falsification of critical information from both the public and the Commission at the time of the 3/28/79 accident at TMI-2 -- that the public has sufficient reason to question the validity or credibility of information on observed radiation offsite in the absence of a monitoring agency independent of licensee, and that the public has an indisputable right to information that is both accurate and perceived to be accurate.

#### Licensee's Response

This contention essentially challenges Licensee's off-site monitoring as untruthful. No facts or specifics are furnished which would tend to support the allegations of the contention. Moreover, Petitioner fails to relate the contention to the bases for suspension, as set forth by the Commission in its August 9 Order. For these reasons, Licensee objects to this contention.

Contention No. 5. CEA contends that the short term actions are inadequate in that they do not include provisions for denying restart of TMI-1 until the radioactively contaminated water from TMI-2 is fully decontaminated and disposed of in a manner that provides for no possible interference from that contaminated water with storage space that might be required in the event of a TMI-1 accident (as in 2(a) above), and that also provides for no possible accident in the decontamination and disposal of the TMI-2 radioactive water that might impact on the operation and emergency provisions of TMI-1. CEA contends that there is sufficient controversy over the potential effectiveness of EPICOR-II (see for example Dr. Louis Kosarek's response to NUREG-0591, the Environmental Assessment of EPICOR-II), and over the possibility of an accident involving EPICOR-II, that the possibility of such an accident happening and impacting TMI-1 can not be dismissed. CEA further contends that the



existence of present civil litigation concerning the decontamination and disposal of the TMI-2 radioactive water brought by the City of Lancaster, Pa., and by the Susquehanna Valley Alliance, and the prospect of further such litigation that may involve the State of Maryland and/or Harford and Cecil Counties in Maryland opposing the disposal of "decontaminated" water into the Susquehanna River creates the distinct possibility of substantial delay in the disposal of the TMI-2 water such that it may interfere with emergency storage facilities that may be needed in the event of an accident at TMI-1. CEA further contends that, absent an Environmental Assessment Statement or an EIS concerning the planned treatment and disposal of the water presently in the TMI-2 containment building, it remains to be determined if such treatment will be safe and adequate, and whether such treatment and subsequent disposal will not be delayed in such a way that it interferes with the provision of adequate emergency water storage space for TMI-1.

#### Licensee's Response

This contention relates to item 4 on page 6 of the Commission's August 9 Order, and is, therefore, a proper subject for litigation in this proceeding. Licensee objects, for the reasons stated above, to the parenthetical reference to Petitioner's contention 2(a), which relates to an accident involving a core meltdown and breach of containment. In all other respects, Licensee does not object to this contention.

Contention No. 6. CEA contends that under no circumstances should TMI-1 be permitted to restart while TMI-2 continues to "leak" contaminated water. CEA contends that as long as TMI-2 continues to generate surplus radioactive water that TMI-2 continues to pose the threat of returning to an active emergency status, posing potentially severe conflict with the operation of TMI-1.

#### Licensee's Response

Although this contention appears to be related to the previous contention, Licensee does not object to its admission.

Contention No. 7. CEA contends that, absent specifications by the Commission, or plans prepared by the licensee, there is inadequate information to determine whether radiation monitoring provisions will be adequate to discriminate between effluents of TMI-1 and TMI-2. CEA contends that such specifications or plans must be made available to intervenors so that the plans or specifications can be evaluated to determine if they are adequate to discriminate between effluents of TMI-1 and TMI-2.

Licensee's Response

This contention seeks to address one of the Staff-recommended actions (included within item 4, page 6, of the Commission's August 9 Order). Although Licensee does not object to the contention at this time, Licensee notes that the information requested by CEA has been provided by Amendment 1 to Licensee's Restart Report (Section 7), a copy of which has recently been sent to CEA.

Contention No. 8. The history of licensee's management capability shows clear evidence of the inadequacy of licensee's management capability (see, for example, instances cited by Steven Sholly in Contention 14 of his Final Contentions). CEA contends that licensee has not shown any clear and convincing evidence of any significant changes in its management practices, and that the burden of proof rightfully lies with the licensee, given the 3/28/79 accident, to present such clear and convincing evidence. CEA contends that licensee must first be required to demonstrate its capability to clean up the damage from the accident of 3/28/79 before it is allowed to subject the public to the risk of another such accident. CEA contends further that licensee should show cause as to why its operating license should not be suspended as a result of its having allowed the 3/28/79 accident to have taken place.

Licensee's Response

Licensee objects to this contention. First, there is no specificity to Petitioner's statements regarding licensee's management capability. Petitioner's parenthetical reference

"for example" to another Petitioner's contention on the subject of management capability does not, in our view, cure this lack of specificity. Second, CEA's request that licensee demonstrate its capability to clean up the damage from the TMI-2 accident prior to restart of TMI-2 is premised on unspecified allegations of mismanagement for which, as just observed, no basis has been provided. Finally, licensee fails to understand the last sentence of the contention since operation of both TMI-1 and TMI-2 has already been suspended by NRC. To the extent the last sentence may be intended to be an argument on burden of proof it is a legal argument that does not belong in a contention.

Contention No. 9. CEA contends that licensee has inadequate financial resources to operate TMI-1 safely. In support of this contention, CEA submits that licensee has frequently raised publicly the specter of possible bankruptcy since the 3/28/79 accident, is faced with an estimated \$400 million clean up cost for TMI-2 (a figure that, based on the previous record of licensee in its containment of contract costs may well prove to be very substantially below the final clean up costs). CEA contends, however, that licensee's response to the Commission concerning its financial status will be required before CEA will be able to make final determination as to the adequacy of licensee's financial resources, as will the outcome of upcoming PUC hearings on whether TMI-1 should be taken out of licensee's rate base. CEA contends that a critical aspect of licensee's financial capability that must be investigated is licensee's ability to withstand an accident at TMI-1 commensurate with the 3/28/79 accident at TMI-2 (given the considerations elaborated in contention 2(a) above) and have adequate resources to cover all the costs of clean up, etc., emanating from such an accident.

Licensee's Response

This contention lacks the specificity required by the



Commission in its August 9 Order (page 12). Further, the last sentence of this contention is objectionable, in that it challenges the Commission's financial qualification regulations, as contained in 10 CFR Section 50.33 and Appendix C of Part 50, which do not extend to consideration of the costs of potential accidents. Furthermore, this part of the contention falls outside the scope of the Commission's August 9 Order, which speaks only to Licensee's "ability to operate" TMI-1 safely. (Order at pages 7 and 12) (emphasis added).

Contention No. 10. In consideration of the "long term actions" CEA contends that they are inadequate in that they fail to consider a number of factors that are also necessary to ensure the health and safety of the public. CEA contends that the following factors must be considered and evaluated for their impact on the health and safety of the public prior to the restart of TMI-1:

- (a) The danger to the health and safety of the public from spent fuel and other waste from TMI-1, given that no long term safe storage has yet been developed, and that Table S-3 formerly used by the Commission is no longer recognized as valid in this regard.
- (b) The danger to the health and safety of the public from the release of Radon-222 from the uranium mined and milled for TMI-1, given the estimated 1,220,000 deaths expected from radon emissions per reactor year of operation -- a figure that has not been disputed by the Commission -- and given the presently undetermined value for the impact of Radon-222 in Table S-3.
- (c) The danger to the health and safety of the public from the possible loss or theft of enriched uranium destined for TMI-1, given the unaccounted-for 240 lbs. of enriched uranium from the Nuclear Fuel Services Enrichment plant in Tennessee, and given the ready availability of information concerning the means of constructing a nuclear bomb,

and given furthermore the recent nature of the discovery of the missing uranium and the fact that such a possibility is not presently considered by the Commission in the granting of licenses.

Licensee's Response

Licensee objects to this contention, on the ground that the issues raised by this contention are unrelated to the bases for suspension of TMI-1 or to the issues specified for consideration in this hearing.

Contention No. 11. CEA contends that the extent of information concerning nuclear regulation in general, and TMI in particular, has become so immense that a state of information overload has been reached, so that it is becoming humanly impossible to absorb, digest, and understand all the pertinent information, and at the same time to place it in a proper perspective in relation to health and safety concerns and the probability of the possible sequence of events that could lead to an accident as serious or more so than the 3/28/79 accident. CEA contends that as a result of this, the regulatory process itself has become unreliable and inadequate, and indeed that the accident of 3/28/79 is in part attributable to the failure of the regulatory process. CEA contends that this breakdown has resulted from the increasing awareness that virtually every system (mechanical, electrical, human, etc.) involved in the operation of a nuclear plant is at some level critical to its safe operation. CEA further contends that the extent of regulation necessary for a nuclear reactor was not understood when the NRC, and before it the AEC were established, and that the regulatory mechanism conceived is not adequate for its purpose. CEA contends that the restart of TMI-1 should be delayed pending a complete review of the regulatory process, including consideration of the recommendations in this regard of the Kemeny Commission. In support of this contention, CEA submits as an example consideration of all the documents that have been submitted to parties in this proceeding.

Licensee's Response

Licensee objects to this contention. It is vague, and fails to relate in any understandable way to the Commission's

Order specifying the bases for suspension and issues to be addressed in this hearing. CEA suggests that the restart of TMI-1 "be delayed pending a complete review of the regulatory process . . ." but does not amplify on what is meant by this. It appears to be an attack, which this Board cannot entertain, on the entire scheme of NRC regulation. In addition, much of this contention appears to be taken from Petitioner's Motion, filed September 27, 1979 (and supplemented September 28, 1979), and to the extent that Petitioner is again requesting a delay of the proceeding, the Licensing Board has already denied this request in its Memorandum and Order dated October 15, 1979.

Contention No. 12. CEA contends that the Commission and licensee have failed to demonstrate that they have considered and evaluated all possible sequences of events that could occur at TMI-1, and that restart of TMI-1 should be denied until all such sequences have been considered and evaluated to determine if they could lead to an accident as serious as the 3/28/79 TMI-2 accident. CEA contends that such consideration and evaluation is necessary given that the 3/28/79 accident resulted from such a sequence of anticipated events, and given that other sequences of events that have as yet been unconsidered may have equally serious or more serious consequences. CEA contends that consideration and evaluation of all such sequences is necessary in order that operators can be adequately prepared for such contingencies, and also to determine if additional modifications to the design of the reactor and/or of the controls is necessary to prevent the adverse consequences of such sequences of events.

Licensee's Response

Licensee objects to this contention on the ground that it is so lacking in specificity as to the "sequence of events

that could occur at TMI-1" that Licensee can neither respond to the contention or determine its relevance to the bases for suspension.

Contention No. 13. CEA contends that there is a specific need for the establishment of training for operators that addresses the problem of a "mindset" that denies information indicative of serious reactor problems. In support of this contention, CEA submits that such a mindset contributed to the gravity of the 3/28/79 accident, as reported in NUREG-0600, and that the routine occurrence of abnormal transients will tend to condition operators to a mindset that underestimates the significance of (sequences of) abnormal transients. CEA contends that specific training provisions designed to address this "mindset" problem are necessary prior to the restart of TMI-1 in order to prevent the development or presence of such a mindset among TMI-1 operators from contributing to a serious accident at TMI-1.

Licensee's Response

Licensee does not object to this contention, which relates to the general issue of operator training -- an issue to be addressed in this proceeding, under the Commission's August 9 Order (page 5, item 1(e)).

Dated: October 31, 1979

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