October 31, 1979

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 No. 1)	)))))	Docket No. 50289 (Restart)

LICENSEE'S RESPONSE TO FINAL CONTENTIONS
OF THREE MILE ISLAND ALERT, INC.

Contention No. 1. It is contended that the short term actions proposed by the licensee will not adequately protect the members of TMIA, whose members live within twenty (20) miles of the plant, from abnormal and unhealthy additional releases of radiation. As a result of the accident at TMI Unit #2, radioactive gases in excess of permissible limits were released into the atmosphere. These releases included:

(a) I-133, which was released over a thirty-four (34) day period following the accident in amounts in excess of 26.84 Ci;

(b) Krypton-88, which, during the first day of the accident alone, was discharged into the atmosphere in an amount of 6.1E + 4 Curies;

(c) Xenon releases of at least 10 million Curies, far in excess of NRC regulations. For example:

(i) Xenon 133M: 170,000 Curies over a ten day period
(ii) Xenon 135: 1.5 million Curies over a seven (7) day period
(iii) Xenon 135M: 140,000 Curies over a three (3) day period

Other radioactive gases released as a result of the accident at Unit #2 include Ruthenium -103, -106; Tritium; and Bromine -82, -83, -84, -85.

These releases will have long term health effects on the members of TMIA. If TMI Unit #1 were to be reopened, the adverse health effects to the members of TMIA would be magnified since Unit #1 will release additional amounts of radiation into the environment. Since radiation affects the body in a cumulative manner, the additional releases from Unit

#1 will have a direct adverse health effect on the members of TMIA.

In addition, the cleanup of Unit #2 will undoubtedly result in both planned and unplanned discharges of radiation into the environment. Since the members of TMIA have already received dosages of radiation far in excess of that which would have been received had there been no accident, the cumulative effect as described above may ultimately cause sickness and death to some members of TMIA.

It is contended that the short term actions proposed by licensee do not adequately deal with this problem.

Licensee's Response

Licensee objects to this contention as an attack on existing Commission regulations. Appendix I to 10 C.F.R. 50 sets forth the numerical guides on design objectives for reactor operation to meet the "as low as is reasonably achievable" criterion for radioactive effluents. Section II.B.I. of Appendix I specifies the basic design criterion for gaseous effluents "released from each light-water-cooled nuclear power reactor to the atmosphere" (emphasis supplied). The Commission's regulations thus provide for the individual consideration of the gaseous effluents of each reactor on a site, rather than for the joint consideration of the effluents from all reactors on a site, as Petitioner here seeks.

Contention No. 2. TMIA contends that the additional low-level radiological discharges from Unit #1, in addition to those high-level discharges that have and will be discharged as a result of the TMI accident, will have a significant adverse effect on the water quality in the Susquehanna. During decontamination, there exists the real possibility of discharges of radioactive wastewater into the Susquehanna. Even if decontamination is done according to present plan, the system, Epicore II, cannot remove radioactive tritium from the decontaminated water. This tritium will be discharged into the

Susquehanna River. If Unit #1 were to reopen while decontamination of Unit #2 was continuing, additional discharges of radiation into the Susquehanna will occur. Radioactive releases into the river as a result of the accident at TMI #2 have resulted in presently ascertainable damage to the fish and wildlife in and around the river, thereby increasing the probability of radiation in the food chain. Therefore, it is contended that no consideration be given to reopening Unit #1 until TMI Unit #2 is decontaminated to pre-March 28, 1979 levels, and the effects of the accident and subsequent decontamination on the water quality in the river have been thoroughly analyzed.

Licensee's Response

Licensee objects to this contention as an attack on existing Commission regulations. Section II.A. of Appendix I to 10 C.F.R. 50 sets forth the basic design criterion for liquid effluents "released from each light-water-cooled nuclear power reactor" (emphasis supplied). The Commission's regulations thus provide for the individual consideration of the liquid effluents of each reactor on a site, rather than for the joint consideration of the effluents from all reactors on a site, as Petitioner here seeks.

Contention No. 3. It is contended that if Unit #1 is reopened, fear of another Unit #2 type accident will cause mental health problems, in varying degrees, to many people living near the plant. This fear will also adversely affect the economy of the region because employees will be absent from work due to mental anxiety, people will leave their jobs and move from the area, and new businesses will refuse to locate in the area. It is contended, therefore, that the health and economic consequences brought about by the fear and anxiety which will occur, and increase, if Unit #1 is reopened, outweigh the benefits that will be obtained thereby.

716 122

Licensee's Response

Licensee understands this contention to refer to the alleged primary and secondary psychological distress resulting from the Unit 2 accident. For the reasons set forth in Licensee's accompanying brief on this issue (see Licensee's Brief Opposing Admission of Psychological Distress Contentions), such a contention is not cognizable under either the Atomic Energy Act of 1954 or the National Environmental Policy Act of 1969.

Contention No. 4. It is contended that if Unit #1 is reopened many people from all over the country will be fearful and angry. Many of these people will come to Middletown and attempt to keep Unit #1 closed by using both violent and non-violent means. As a result, considerable civil disruption will occur in the area surrounding the plant. Local and State authorities are not presently equipped to deal with the types of civil disruptions that may very well occur. It is contended that the additional costs which will have to be incurred by the State and the local municipalities involved, in order to deal with the civil disruptions, have not been evaluated at all. Furthermore, it is contended that this disruption, added to a crippled #2 reactor that will be contaminated with highly radioactive material for years to come, is an unreasonable and unacceptable cost not outweighed by the benefits of reopening Unit #1. The short term actions proposed by the licensee do not deal with this eventuality.

Licensee's Response

Licensee understands this contention to refer to the alleged impacts of psychological distress resulting from reopening Unit 1 after the Unit 2 accident. For the reasons set forth in Licensee's accompanying brief on this issue (see Licensee's Brief Opposing Admission of Psychological Distress

Contentions), such a contention is not cognizable under either the Atomic Energy Act of 1954 or the National Environmental Policy Act of 1969. Moreover, even if psychological distress is ruled to be an issue in this proceeding, Licensee objects to this contention on the grounds that Petitioner has failed to set forth an adequate basis for the belief that "considerable disruption will occur in the area surrounding the plant" when Unit 1 resumes operation.

Contention No. 5. It is contended that Met-Ed negligently, and on occasion, willfully violated NRC regulations concerning the safe operation of both Units #1 and #2, in that it has deferred necessary maintenance and repairs in order to minimize reactor downtime, to the detriment of the integrity of the nuclear facility itself. The licensee has, in the past, allowed work orders to go undone in order to avoid shutting Unit #1 down to perform necessary maintenance. The licensee would allow work orders to pile up until refueling, at which time the licensee would attempt to do all the work required. Just to complete essential maintenance in the short time available, employees were worked to a point where they were no longer effective because of fatigue. These actions, and actions of this type, reflect negatively upon the ability of the licensee to safely operate a nuclear facility. Consequently, it is contended that Met-Ed is incapable of safely operating TMI #1 and that its operating license should be revoked permanently.

Licensee's Response

Licensee understands this contention to be an attack on its management capability and has no objection to the contention.

Contention No. 6. It is contended that Met-Ed does not have the financial capability to:

(1) comply with technical changes that may be demanded as a result of the accident at Unit #2, and

(2) comply with regulations of the NRC requiring the expenditure of additional sums of money either for mandated design changes or changes in the financial protection requirements of 10 C.F.R. Part 140.

Because of the licensee's problems with Unit #2, it has been unable to meet its energy obligations to the PJM interconnect. As a consequence, the licensee's deferred energy balance owed PJM may very well exceed its short-term debt by February, 1980. If this occurs, the licensee's ability to borrow money will cease, and there is the real possibility of the licensee going bankrupt. It is contended, therefore, that the licensee does not presently, or for the foreseeable future, have the financial requirements necessary to operate a nuclear facility.

Licensee's Response

Licensee objects to the first paragraph of this contention insofar as it relates to "changes in the financial protection requirements of 10 C.F.R. Part 140," since the Commission's August 9 Order requires Licensee to demonstrate its financial qualifications only "to the extent relevant to . . . [its] ability to operate TMI-1 safely" (emphasis supplied). Thus, insofar as Petitioner's contention relates to financial protection requirements, it is beyond the limited scope of the hearing ordered by the Commission. Licensee further objects to the first paragraph of the contention as phrased, on the grounds that it is so speculative that Licensee cannot respond to it. As phrased, Petitioner's contention would require Licensee to attempt to prepare and present evidence

illustrating its financial capability to meet unspecified technical changes which may be required as a result of the Unit 2 accident as well as unspecified design changes which may be mandated at some undefined time in the future. However, Licensee would not object to this part of the contention to the extent that the Board limits the contention to Licensee's financial capability to comply with technical changes and mandated design changes which may be imposed in this proceeding as a result of the accident at Unit 2.

The second paragraph of the contention is based on the erroneous premise, for which no basis is provided, that Licensee is building up a deferred energy balance which it owes to the PJM pool. Further, it ignores the Commission's instruction in its August 9 Order (p. 12) that parties seeking to raise the issue of financial qualifications must clearly indicate why this Licensee's financial condition might undermine its ability to operate the plant. Licensee therefore objects to the second paragraph of this contention.

Contention No. 7. It is contended that the licensee will be unable to adequately deal with a design basis accident of class one through eight if one should occur at Unit #1 while decontamination continues at Unit #2. The Unit #2 containment building and vessel today house in excess of half a million gallons of highly contaminated wastewater, and another 250,000 gallons are stored in auxiliary storage buildings on the island. Presently, there is no approved timetable for the safe decontamination of Unit #2. It is contended that the wastewater storage capability of Unit #1 if an accident were to occur, would be insufficient, since a large portion of this capacity may ultimately be committed to the safe decontamination of Unit #2. Furthermore, even if no accident should occur

at Unit #1 there is a possibility of an accident occuring at Unit #2 during decontamination which would result in the diversion of all Unit #1 storage capacity to Unit #2, thereby leaving Unit #1 unable to cope with any type of accident that would produce abnormal amounts of radioactive wastewater. If an accident of the magnitude of that which occured at Unit #2 were to occur at Unit #1, wastewater storage facilities at Unit #2 would have to be borrowed, just as Unit #1 facilities have been borrowed to deal with the accident at Unit #2. Since there is presently insufficient storage capacity on the island to deal with a Unit #2 accident at Unit #1 it is an unreasonable and unacceptable risk to the public health and safety to reopen Unit #1 until Unit #2 has been safety decontaminated. The short term actions proposed by the Licensee do not adequately deal with the scenarios described herein.

Licensee's Response

Licensee does not object to this contention which is closely related to the requirement in the Commission's August 9 Order that Licensee "demonstrate that the waste management capability, including storage and processing, for solid, liquid, and gaseous wastes is adequate to assure safe operation of TMI-1, and that TMI-1 waste handling capacity is not relied on by operations at TMI-2." Order, pp. 6-7.

Contention No. 8. The involvement of the NRC in any decision to restart Unit #1 is critical. The plant cannot reopen without NRC approval. There can be no reasonable basis to deny that such actions are covered by the National Environmental Policy and it is contended therefore, that a decision to reopen Unit #1 is a major federal action significantly affecting the quality of the human environment. Accordingly, it is contended that an environmental impact statement must be filed prior to restarting Unit #1.

The FES must consider, among other things, the socio-economic costs of reopening the plant versus the benefits; whether the plant is necessary to the energy needs of the licensee's customers; and, finally, the costs of converting Unit No. 1 to a coal-fired plant.

Licensee's Response

Licensee objects to this contention on the grounds that the restart of Unit 1 requires neither a new environmental impact statement nor a supplement, for the reasons stated in the accompanying memorandum entitled Licensee's Brief On The Issue Of Preparing An FES Prior To TMI-1 Restart.

Dated: October 31, 1979.