UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

DOCKETED

In the Matter of

METROPOLITAN EDISON COMPANY

(Three Mile Island Nuclear
Station, Unit No. 1)

DOCKETED

USNRC

JUL 8 1980

(Restart)

Office of the Secretary
Docketing & Service
Branch

Station, Unit No. 1)

TMIA'S FOLLOW-UP INTERROGATORIES BASED ON THE SER TO NRC STAFF

These follow-up interrogatories are promulgated pursuant to the Board's Order of June 23, 1980, requiring discovery requests based upon new information in the SER be served by July 1, 1980.

- 1. In the introductory paragraph of Order Item 6, the Staff concedes that "our evaluation . . . is incomplete" and that "an updated evaluation in a supplement" will be provided.
 - A. When will the completed SER be provided?

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- 2. The following interrogatories are based on the Management and Technical Capability section of Order Item 6.
 - A. When will the new "support organization" be staffed?
 - B. When will the NRC Staff evaluate the "support organization" staff?
 - C. Define "properly staffed" as used on page C6-3.
 - D. What criteria will be used in evaluating the "staff"?
 - E. Who will be evaluated?
 - F. Give each and every fact relied upon in reaching the conclusion that "when properly staffed, such an organization should be able to assure plant operation without endangering the health and safety of the public."
- G. The Staff notes a "significant increase in the number of maintenance personnel."
 - 1. How many people have been added to maintenance and in what capacity?
 - 2. Will the Staff evaluate the competence of the new personnel?
 - 3. If so, what criteria will be used?
 - 4. Has the NRC Staff evaluated past deficiencies in the quantity and quality of maintenance personnel?
 - a. If so, what information was evaluated?
 - b. Provide the results of this evaluation.

- H. The Staff notes that "(t) hese changes are expected to provide improved management capability and control and improved technical expertise on the Three Mile Island Station and on TMI-1" (emphasis added).
 - 1. What data was used in reaching this conclusion?
 - 2. Did the NRC Staff consider past maintenance practices of the Licensee?
 - a. Did it evaluate any work requests?
 - (1) If so, which ones?
 - (2) Did the NRC Staff consider the tremendous backlog of work requests in identifying the deficiencies of Licensee's maintenance practices?
 - (a) How will the new changes improve this situation?
 - b. Will the NRC Staff recommend the use of periodic outages (independent of refueling outages) to reduce the maintenance backlog?
 - (1) If not, what safeguards exist to p event the backlog problem?
 - 3. Did the NRC Staff evaluate the proposed maintenance budget cuts in determining Licensee's commitment to maintenance and repair?

- 4. Did the NRC staff consider the past and/or future role of independent contractors in Licensee's maintenance plans?
 - a. If so, what information was evaluated?
- 5. Define "are expected" as used in the above quote.
- 6. What checks, if any, will be required to:
 - a. assure compliance with the recommendations;
 - b. assure the new organization does what it is "expected" to do?
- The NRC Staff notes various revisions designed to improve "management information on and control over plant operational activities."
 - 1. Has the NRC Staff considered recommending revisions designed to improve the interface between operations and maintenance?
 - 2. Particularly, has the NRC Staff considered revisions improving the origination of work requests and the assignment of priorities by operations personnel?
- J. Please explain why TMIA's copy of page C6-4 ends with a completed sentence and C6-5 begins in mid-sentence (Attachment "A" contains TMIA's pages C6-4 and C6-5).
 - Please provide the correct pages C6-4 and C6-5.

- 3. The following interrogatories are based on the Operational Quality
 Assurance Program section of Order Item 6.
 - A. The NRC Staff notes that "the QA Staff has been increased."
 - 1. How much of this increase has been devoted to "on hands" personnel?
 - Were any past QA and QC practices evaluated in considering what would be a sufficient increase in personnel?
 - a. If so, which ones?
 - b. Did the NRC Staff evaluate any work requests or QC surveillance reports in determining QA deficiencies before the accident?
 - (1) Provide a copy of all data considered.
 - (2) If the above was not considered, what criteria were used in assessing pre-TMI-2 accident QA deficiencies?
 - 3. What is NRC Staff's assessment of the condition of QA before the TMI-2 accident?
 - B. Will the audit of "selected maintenance, inservice, health physics and QA procedures" be completed before the restart hearing begins?

- 4. The following interrogatories are based on the Plant Maintenance section of Order Item 6.
 - A. Did the NRC Staff evaluate the priority system defined in AP 1407 for deficiencies?
 - 1. If so, provide the documents evaluated.
 - B. Did the NRC Staff consider the backlog of work requests in evaluating Licensee's maintenance practices?
 - 1. If so, provide the documents evaluated.
 - C. Did the NRC Staff consider the amount of overtime worked by maintenance employees in determining the adequate number of maintenance personnel required?
 - 1. If so, provide the documents evaluated.

- 5. The NRC Staff mentions "Technical Specifications" in part 10 of IE Bulletin 79-05A.
 - A. Were the "Technical Specifications" evaluated by the NRC Staff for deficiencies in their appraisal of the amount of time a component can be nonfunctioning?
 - If so, provide all documents evaluated and all results gained from the evaluation.
 - Provide all "Technical Specifications" pertaining to TMI-Unit 1 for inspection.

Respectfully submitted,

WIDOFF, REAGER, SELKOWITZ & ADLER, P.C.

By:

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Dated: July 1, 1980

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing document, TMIA's Follow-Up Interrogatories Based On The SER to NRC Staff, to be placed in the United States mail, first-class, postage prepaid, addressed to the persons listed below:

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Dated: July 1, 1980

ATTACHMENT A

As a result of the TMI-2 accident, we are developing new criteria with respect to the management and technical resources needed by utilities with operating power reactors to prevent and respond to accidents like the TMI-2 accident. We expect these criteria to be completed during 1980. We will evaluate TMI-1 against these new criteria, and where appropriate will require Met-Ed to correct any deficiencies prior to restart of TMI-1. In the meantime, the staff has been using the draft criteria in a subjective fashion to evaluate several utilities applying for operating licenses. As reported herein, we also have used, and are using, these draft criteria in part for our subjective evaluation of the Met-Ed/GPU management and technical resources for operation of TMI-1.

The licensee has made extensive revisions to the management controls for plant operational activities. These include the following activities:

- (1) Shift relief turnover check lists which will require identification of control room valve and switch positions for all SFAS and EFW systems and state the required and actual valve and switch positions to fully indicate system status at time of transfer of responsibilities (see Order Item 8).
- (2) Periodic verification of all SFAS and EFW valve and switch positions for those valves and switch positions that are not indicated in the control room.
- (3) Independent verification of valve and breaker lineups for correct positions following maintenance, surveillance, or special operation on SFAS and EFW systems.
- (4) System checklists will be completed by the control room watch, primary plant, secondary plant, and out-building auxiliary operators during their shift. These system checklists will be reviewed and signed by the off-going and on-coming auxiliary operators and control room watch to assure knowledge of system status at shift turnover time.
- (5) Revisions to the operational quality assurance program (see below).
- (6) Revisions to the radiation protection program (see below).

These activites are expected to provide improved management information on and control over plant operational activities.

ANSI N18.7-1976, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants," and Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," which endorses ANSI N18.7-1976, are currently under revision, and are expected to be available by mid-1980. This standard and guide will cover upgraded managerial controls of plant activities. The licensee's upgraded managerial controls will be evaluated against these new management controls and additional changes will be required of TMI-1 as appropriate.

NEXT PAGE DOES NOT APDEAR TO FOLLOW and action a willingness to remedy these deficiencies. As described above, many actions taken by the licensee will improve their capabilities in these areas. However, because there still remain incomplete ___ions by Met-Ed to reach their management improvement goals, and because we still are in the process of developing new evaluation criteria in these areas, we cannot conclude at this time that Met Ed is in ompliance with the Order in the area of management ___technical capability, adequacy of groups providing safety review and operational advice, and capability of the plant maintenance organization.



To date, Met-Ed has taken several steps toward improving its site organization. It has revised that organization several times since the TMI-2 accident, including a major reorganization in November 1979 and a further revision in March 1980, as described above. We believe this November 1979 reorganization as modified in March 1980 will improve Met-Ed's management capability. To fully resolve the open issues discussed above, we will: require appropriate clarification of the Restart Report in this area and submittal of additional information on staffing and on the proposed new corporate organization; complete our review of that information; evalual TMI-1 organization, management, technical resources, qualification of staff members, and managerial controls against our newly developed criteria; and report on these matters in a supplement to this evaluation.

SAFETY REVIEW AND OPERATIONAL ADVICE

Met-Ed has established provisions for providing operational advice for TMI-1. These offsite provisions will be provided through the TMI Generation Group's Technical Functions and Nuclear Assurance organizations (see Figure 6-1). The Technical functions group will provide a centralized technical capability to support the plant staff in the areas of general mechanical, civil, electrical and instrument and controls support, and in the areas of fuel management, process computer, control and safety analysis and plant operational analysis. The Nuclear Assurance Group will provide technical capability in nuclear quality assurance, radiation control, emergency planning coordination, technical training, chemistry and metallurgy. In accordance with Commission requirements, onsite operational support will be provided by the assignment of a shift Technical Advisor to the site at all times the plant is in operation.

Safety review of operating activities will be provided by the offsite Generation Review Committee (GRC) and the onsite Plant Operations Review Committee (PORC). The GRC will be composed of at least five members and a full time chairman and will provide a review of activities such as safety evaluations, procedure changes, and conformance with regulations. The PORC is a plant-level group that will pruvide reviews of operational activities.

TRAINING OF OPERATING STAFF

The licensee was directed in item 1(a) of the Order to augment the retraining of all Reactor Operators and Senior Reactor Operators. Additional requirements for operator training are found in Parts 6 and 7 of Order Item 1(a). Items 3, 4, 5, 7, 8, 9 and 10