Dear Mr. Hovey:

The Nuclear Regulatory Commission has issued the enclosed Amendment of Order for the Three Mile Island Nuclear Station, Unit 2. This Amendment of Order is the result of issues raised by Intervenors Steven Sholly and William Lochstet (Reference 1). The revised requirements had originally been set forth by the February 11, 1980 Order issued by the Director of Nuclear Reactor Regulation. These parties raised concerns regarding the reactor coolant pressure safety limit, remote shutdown monitoring instrumentation, reactor coolant system pressure/temperature limits, and record retention. An agreement was reached among the parties by which all of the issues advanced by Mr. Sholly and one of the issues advanced by Mr. Lochstet have been settled and are hereby addressed in this Amendment of Order. These revisions to the Technical Specifications are effective immediately.

By this amendment of Order, the proposed Technical Specifications pending before the Atomic Safety and Licensing Board are also being revised in accordance with the Board's "Order Granting Joint Motion to Approve Stipulation," dated April 10, 1981.

Copies of the related Safety Evaluation and revised pages for the Safety Limits, Limiting Conditions for Operation, and Administrative Controls are enclosed.

Sincerely,

[Signature]

Bernard J. Snyder, Program Director
TMI Program Office
Office of Nuclear Reactor Regulation

Enclosures:
1. Amendment of Order
2. Safety Evaluation
3. Proposed Technical Specifications
   pages: 2-1, B2-1, 3.3-7, 3.4-1, 6-15, 6-16

Reference: Order Granting Joint Motion to Approve Stipulation April 10, 1981, John F. Wolfe, Esq., Administrative Judge, ASLB
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of
METROPOLITAN EDISON COMPANY, et al
(Three Mile Island Nuclear Station, Unit 2)

Docket No. 50-320 OLA

AMENDMENT OF ORDER

I.

Metropolitan Edison Company, Jersey Central Power and Light Company and Pennsylvania Electric Company (collectively, the Licensee) are the holders of Facility Operating License No. DPR-73, which had authorized operation of the Three Mile Island Nuclear Station, Unit 2 (TMI-2) at power levels up to 2772 megawatts thermal. The facility, which is located in Londonderry Township, Dauphin County, Pennsylvania, is a pressurized water reactor previously used for the commercial generation of electricity.

By Order for Modification of License, dated July 20, 1979, the Licensee's authority to operate the facility was suspended and the Licensee's authority was limited to maintenance of the facility in the present shutdown cooling mode (44 Fed. Reg. 45271). By further Order of the Director, Office of Nuclear Reactor Regulation, dated February 11, 1980, a new set of formal license requirements were imposed to reflect the post-accident condition of the facility and to assure the continued maintenance of the current safe,
stable, long-term cooling condition of the facility (45 Fed. Reg. 11292). These requirements were memorialized in the form of proposed Technical Specifications set forth in an attachment to the Order.

II.

Several requests for a hearing have been filed in connection with the Order. An Atomic Safety and Licensing Board established to rule on such requests and to preside over the proceeding in the event that a hearing is ordered has, by Memorandum and Order, dated August 29, 1980, admitted Messrs. Steven Sholly and William Lochstet, and another, as intervenors. Mr. Sholly has sought to introduce as contentions a number of issues involving the proposed Technical Specifications. These include concerns regarding the reactor coolant system pressure safety limit (proposed Technical Specification 2.1.3), remote shutdown monitoring instrumentation (proposed Technical Specification 3.3.3.5), reactor coolant system pressure temperature limits (proposed Technical Specification 3.4.9.1), and record retention (proposed Technical Specifications 6.10.1 and 6.10.2). Mr. Lochstet has also sought to introduce a contention regarding proposed Technical Specification 2.1.3. Consistent with the Commission's position with respect to settlement of matters without resort to a formal adjudicatory process, the Licensee, NRC Staff and Messrs. Sholly and Lochstet have met in an effort to resolve their concerns in the above areas. As a result, the parties jointly propose to modify the proposed Technical Specifications in a manner agreed upon and described hereafter. The proposed modifications have been reviewed by the Staff and are consistent with the objective of providing reasonable assurance
that the activities authorized can be conducted without undue risk to the public health and safety.

First, proposed Technical Specification 2.1.3 has been eliminated. This provision had established a maximum pressure of 2750 psig as a safety limit for the reactor coolant system. This conformed to the design criteria and associated ASME code requirements which were applicable for the reactor pressure vessel and other components of the reactor coolant system prior to the March 28, 1979 accident. However, the accident subjected portions of the reactor coolant system to unknown environmental conditions and, therefore, the upper limit of the pressure retaining ability of the reactor coolant system is uncertain.

Section 50.36(c)(1)(ii)(A) of the Commission's regulations provides, in part, that "[w]here a limiting safety system setting is specified for a variable on which a safety limit has been placed, the setting shall be so chosen that automatic protective action will correct the abnormal situation before a safety limit is exceeded."

Furthermore, access to the reactor coolant system valves cannot be obtained in order to reset the valves to a lower pressure limit. Since the valves cannot be reset to lower the pressure limit to a point at which "automatic protective action" can be taken under the existing conditions, a safety limit lower than 2750 psig cannot be established without contravening 10 C.F.R. § 50.36(c)(1)(ii)(A). Therefore, proposed Technical Specification 2.1.3 has
been eliminated. At the same time, proposed Technical Specification 3.4.9.1 has been modified to explicitly identify the responsive action which must be taken if the pressure limit established for the reactor coolant system, 600 psig, is exceeded. A description of this action was previously found in a separate proposed Technical Specification which had been referenced in proposed Technical Specification 3.4.9.1.

Second, proposed Technical Specification 3.3.3.5 has been modified to add a requirement to report the inoperability of a remote shutdown monitoring channel to the NRC within 24 hours. The requirement to restore the inoperable channel to operable status within 30 days is unchanged.

Lastly, it was contended that the time periods provided in proposed Technical Specifications 5.10.1 and 5.10.2 for the retention of certain records by the licensee were inadequate given the historical value some of these records might possess. As a consequence, proposed Technical Specifications 5.10.1 and 5.10.2 have been modified to extend the time for which certain records must be retained by the Licensee. Records specified in proposed Technical Specification 6.10.2 must now be retained as long as the licensee has an NRC license to operate or possess the TMI facility.

The Staff's safety assessment of this matter is set forth in the concurrently issued Safety Evaluation. This evaluation concluded, in material part, that these modifications do not involve a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered thereby.
It was further determined that the modification does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. In light of this determination, it was concluded that the instant action is insignificant from the standpoint of environmental impact and, pursuant to 10 C.F.R. § 51.5(d)(4), that an environmental impact statement or environmental impact appraisal need not be prepared herewith.

III.

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, the requirements imposed by the Director's Order of February 11, 1980 are modified by elimination of proposed Technical Specification 2.1.3 and revision of proposed Technical Specifications 2.1.3, 3.3.3.5, 3.4.9.1, 6.10.1, and 6.10.2 attached thereto in the manner described in Section II of this Order and as set forth specifically in Attachment A hereto.

For further details with respect to this action, see (1) Request for hearing from Steven C. Sholly, dated March 21, 1980; (2) NRC Staff answer to request for hearing by Steven C. Sholly, dated April 10, 1980; (3) Contentions of Steven C. Sholly, dated June 19, 1980; (4) Supplement to Request for Hearing and Petition for Leave to Intervene by William A. Lochstet, dated June 17, 1980; and (5) the Director's Order of February 11, 1980. All of the above documents are available for inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Commission's Local

FOR THE NUCLEAR REGULATORY COMMISSION

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Effective date: April 28, 1981

Dated at Bethesda, Maryland
this 28th day of April , 1981
SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER AND LIGHT COMPANY
PENNSYLVANIA ELECTRIC COMPANY

DOCKET NO. 50-320
THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

Introduction

Metropolitan Edison Company, Jersey Central Power and Light Company and Pennsylvania Electric Company (collectively, the Licensee) are the holders of Facility Operating License No. DPR-73, which had authorized operation of the Three Mile Island Nuclear Station, Unit 2 (TMI-2) at power levels up to 2772 megawatts thermal. By Order for Modification of License, dated July 20, 1979, the Licensee's authority to operate the facility was suspended and the Licensee's authority was limited to maintenance of the facility in the present shutdown cooling mode (44 Fed. Reg. 45271). By further Order of the Director, Office of Nuclear Reactor Regulation, dated February 11, 1980, a new set of formal license requirements were imposed to reflect the post-accident condition of the facility and to assure the continued maintenance of the current safe, stable, long-term cooling condition of the facility (45 Fed. Reg. 11282). These requirements were memorialized in the form of proposed Technical Specifications set forth in an attachment to the Order.
Several requests for a hearing have been filed in connection with the Order and granted by the presiding Atomic Safety and Licensing Board established to rule on such requests and to preside over any eventual hearings.

These parties have sought to introduce a number of issues involving the proposed Technical Specifications. These include concerns regarding the reactor coolant system pressure safety limit (proposed Technical Specification 2.1.3), remote shutdown monitoring instrumentation (proposed Technical Specification 3.3.3.5), reactor coolant system pressure/temperature limits (proposed Technical Specification 3.4.9.1), and record retention (proposed Technical Specifications 6.10.1 and 6.10.2). Consistent with the Commission's regulations which encourage settlement of potential issues in a proceeding (see 10 CFR §2.759), the Staff has modified the proposed Technical Specifications in a manner agreed upon by the principals and described hereafter.

Evaluation

The February 11, 1980 Order established, in the form of proposed Technical Specification 2.1.3, a reactor coolant system pressure safety limit of 2750 psig. The basis for this safety limit was the design criteria and associated ASME Boiler and Pressure Vessel Code requirements applicable to the reactor coolant system prior to the March 23, 1979 accident. This Order also set a reactor coolant system limiting condition for operation of 500 psig contained in proposed Technical Specification 3.4.9.1. The basis for this limiting condition for operation was to preclude the possibility of a nonductile failure of the reactor coolant system. The accident
subjected portions of the reactor coolant system to unknown environmental conditions and, therefore, the pressure retaining ability of the reactor coolant system is somewhat uncertain. However, the ability of the reactor coolant system to withstand a pressure of 600 psig was demonstrated by its operation for extended time intervals at 800-1050 psig during April 1979 (Reference 1). Furthermore, 10 CFR 50.36(c)(1)(i)(A) of the Commission's regulation requires, in part, that, in the event a safety limit is exceeded, the reactor shall be shut down and that operation shall not be resumed until authorized by the Commission. Since the TMI-2 reactor is already shut down, and since the licensee's authority to operate TMI-2 in other than its present shutdown condition was suspended by the Order for Modification of License dated July 20, 1979, a reactor coolant system safety limit is not required and can be eliminated from the proposed Technical Specifications. Along with eliminating this safety limit, and to clarify the actions to be taken by the licensee in the event the 600 psig limit is exceeded, we have also modified the Action statement for proposed Technical Specification 3.4.9.1 to explicitly identify the responsive action which must be taken if the pressure limit established for the reactor coolant system, 600 psig, is exceeded.

One of the parties in this matter contended that the allowable out-of-service time in the Action statement of proposed Technical Specification 3.3.3.5 was excessively long at 30 days and should be shortened to 7 days. We have not changed this allowable out-of-service time since it is consistent with the requirements of the Standard Technical Specifications for Babcock and Wilcox Pressurized Water Reactors (NUREG-0103). However, we have supplemented the Action statement for proposed Technical Specification 3.3.3.5 to require the licensee to report the inoperability of
one of these channels to the NRC within 24 hours. This additional provision will ensure that the NRC is promptly notified if one or more of the Remote Shutdown Instrumentation channels becomes inoperable. The NRC could then initiate any additional actions which may be appropriate.

Two of the parties seeking a hearing contended that the record retention requirements of proposed Technical Specifications 6.10.1 and 6.10.2 were inadequate and that the subject records should be retained for longer than the requirements of these proposed Technical Specifications. Since some of these records may have historical value, proposed Technical Specification 6.10.2 has been augmented to include most of the records previously included in proposed Technical Specification 6.10.1. The records designated in proposed Technical Specification 6.10.2 must be retained as long as the Licensee has a NRC license to operate or possess the TMI facility.

Environmental Consideration

We have determined that the modification does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the modification involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d) (4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the modification.
Conclusion

As discussed above, the modification to proposed Technical Specifications 3.3.3.5, 3.4.9.1, 6.10.1 and 6.10.2 and the deletion of proposed Technical Specification 2.1.3 do not lessen (and in some cases augment) the affected requirements of the Director's February 11, 1980, Order. Therefore, we have concluded that:
(1) the modifications do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the modified manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this modification will not be inimical to the common defense and security or to the health and safety of the public.
REFERENCES

1. Graph attached to letter from Steven C. Goldberg, USNRC, to William A. Lochnstet, dated August 13, 1980.
FACILITY OPERATING LICENSE NO. DPR-73
DOCKET NO. 50-320

Replace the following pages of the proposed Appendix "A" Technical Specifications with the enclosed pages as indicated. The revised pages contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Pages

2-1
B2-1
3.3-7
3.4-1
6-15
6-16
2.0 SAFETY LIMITS

2.1 SAFETY LIMITS
REACTOR COOLANT SYSTEM PRESSURE

2.1.3 Not applicable.
2.1 SAFETY LIMITS

2.1.3 REACTOR COOLANT SYSTEM PRESSURE

As a result of the March 28, 1979 accident, the pressure retaining ability of the reactor coolant system is uncertain. Therefore, a meaningful reactor coolant system pressure Safety Limit can not be established. However, the reactor coolant system pressure has been reduced to approximately 90 psig. Furthermore, since Technical Specification 3.4.9.1 establishes 600 psig as a Limiting Condition for Operation for the reactor coolant system, no further limitations are required.
LIMITING CONDITIONS FOR OPERATION

REMOTE SHUTDOWN INSTRUMENTATION

3.3.3.5 The remote shutdown monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE with readouts displayed external to the control room.

APPLICABILITY: RECOVERY MODE.

ACTION:

With the number of OPERABLE remote shutdown monitoring channels less than required by Table 3.3-9, notify the NRC within 24 hours and restore the inoperable channel to OPERABLE status within 30 days.

POST-ACCIDENT INSTRUMENTATION

3.3.3.6 The post-accident monitoring instrumentation channels shown in Table 3.3-10 shall be OPERABLE.

APPLICABILITY: RECOVERY MODE.

ACTION:

With the number of OPERABLE post-accident monitoring channels less than required by Table 3.3-10, restore the inoperable channel(s) to OPERABLE status within 8 hours.

CHLORINE DETECTION SYSTEMS

3.3.3.7 Two chlorine detection systems, with their alarm/trip setpoints adjusted to actuate at a chlorine concentration of less than or equal to 5 ppm, shall be OPERABLE:

a. One at the air intake tunnel, and

b. One at the control room air supply duct.

APPLICABILITY: RECOVERY MODE.

ACTION:

With one or more chlorine detection systems inoperable, within 1 hour initiate and maintain operation of the control room emergency ventilation system in the recirculation mode of operation; restore the inoperable detection system to OPERABLE status within 30 days.
ADMINISTRATIVE CONTROLS

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:
   a. Records of sealed source and fission detector leak tests and results.
   b. Records of annual physical inventory of all sealed source material of record.
   c. Records of changes made to the procedures required by Specifications 6.8.1 d. and e.

6.10.2 The following records shall be retained as long as the Licensee has an NRC license to operate or possess the Three Mile Island facility.
   a. Records and logs of unit operation covering time interval at each power level.
   b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety and radioactive waste systems.
   c. ALL REPORTABLE OCCURRENCES submitted to the Commission.
   d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.
   e. Records of changes made to the procedures required by Specifications 6.8.1 a., b., c., f. and g.
   f. Reports required by 6.9.1.6 and 6.9.1.10.
   g. Records of radioactive shipments.
   h. Records and logs of radioactive waste systems operations.
   i. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Safety Analysis Report.
   j. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
LIMITING CONDITIONS FOR OPERATION

3.4 REACTOR COOLANT SYSTEM

REACTOR COOLANT LOOPS

3.4.1 The Reactor Coolant System shall be operated in accordance with procedures approved pursuant to Specification 6.8.2.

APPLICABILITY: RECOVERY MODE.

ACTION:
None except as provided in Specification 3.0.3.

SAFETY VALVES

3.4.3 All pressurizer code safety valves shall be OPERABLE with a lift setting of 2435 PSIG ± 1%.*

APPLICABILITY: RECOVERY MODE.

ACTION:
None except as provided in Specification 3.0.3.

3.4.9 PRESSURE/TEMPERATURE LIMITS

REACTOR COOLANT SYSTEM

3.4.9.1 The Reactor Coolant System shall be maintained at a $T_{\text{avg}}$ of less than 280°F and at a pressure of less than 600 psig.

APPLICABILITY: When fuel is in the reactor pressure vessel.

ACTION:
With the Reactor Coolant System pressure exceeding 600 psig, immediately reduce the Reactor Coolant System pressure to within its limit.

*The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.
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

ORDER GRANTING JOINT MOTION
TO APPROVE STIPULATION

April 3, 1981, this Atomic Safety and Licensing Board was served a Joint Motion filed by several parties to the captioned proceeding requesting approval of the "Stipulation Regarding Settlement of Issues" attached thereto. According to the Joint Motion, the subject stipulation was entered into by Intervenors Steven Sholly and William Lochstet, the NRC Staff and the Licensee for the purpose of resolving all of the issues advanced by Mr. Sholly and one of the issues advanced by Mr. Lochstet relative to this proceeding. The stipulation contains the basis upon which an agreement was reached among the parties by which the issues in question are deemed settled.

The Licensing Board regards the Joint Motion and subject Stipulation as furthering the principles of settlement and compromise of NRC litigation. Accordingly, it is hereby ORDERED that:

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1. The Joint Motion is granted;

2. The "Request for Hearing" of Steven C. Sholly dated March 21, 1980, and supplement thereto, dated June 19, 1980, are deemed withdrawn and Mr. Sholly thereby dismissed from the proceeding;

3. Proposed Contention 1 contained in the supplement to the request for hearing of Mr. William Lochstet, dated June 17, 1980, is deemed withdrawn; and

4. Proposed Technical Specifications 2.1.3, 3.3.3.5, 3.4.9.1, 6.10.1, and 5.10.2 set forth in an attachment to the February 11, 1980 Order issued by the Director, Nuclear Reactor Regulation, shall be modified in accordance with the revisions specified in the proposed Amendment of Order attached to the "Stipulation Regarding Settlement of Issues" upon entry of that Amendment of Order.

FOR THE ATOMIC SAFETY AND LICENSING BOARD

[Signature]

John F. Wolf, Esq., Chairman

Dated at Bethesda, Maryland
this 9th day of April, 1981.