

JAN 18 1978

EVALUATION OF REQUEST FOR
EXTENSION OF PROVISIONAL CONSTRUCTION PERMIT CPPR-66
FOR THREE MILE ISLAND NUCLEAR STATION, UNIT 2

A. Introduction

Provisional Construction Permit No. CPPR-66 was issued by the Commission on November 4, 1969 for construction of Three Mile Island Nuclear Station, Unit 2, at the licensees' site in Dauphin County, Pennsylvania. By letter of March 28, 1977, Metropolitan Edison Company (MetEd) has requested that the latest completion date for the construction permit be extended from May 1, 1977 to January 15, 1978. By letter of December 12, 1977, MetEd amended their letter of March 28, 1977 to extend the completion date to February 28, 1978. Although fuel loading is presently scheduled for January 15, 1978, the requested extension to February 28 is to allow for additional unforeseen delays.

A previous request for an extension of the latest completion date to May 1, 1977 was granted on January 15, 1974. Since that time, we have been notified by letters dated December 3, 1976, July 3, 1974, and September 6, 1974, of delays totaling fifteen months.

MetEd states that delays since December 1973 are a result of many causes, the most significant of which are:

1. A direct craft force reduction of 15 percent in June 1976, resulting from budgeting restrictions;
2. Increased engineering (750,000 man-hours) and labor (1,170,000 man-hours) resulting from:
 - a. Significant increases in previously estimated quantities of electrical cabling, conduit and trays due to late availability of electrical drawings;
 - b. Increases in material quantities for process piping resulting from quantity re-evaluations;
3. Late receipt of valves due to casting difficulties and a strike at a nuclear valve manufacturing facility; and

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- 4. Late availability of cable pull slips as a result of a lack of electrical vendor drawing information.

MetEd has estimated in a separate communication that the causes listed above have resulted in approximately the following delays, respectively:

- 1. 1.5 months
- 2. 12.0 months
- 3. 0.75 months
- 4. 0.75 months.

The additional delay from January 15 to February 28 is due principally to the following factors:

- 5. A transition was made in construction management responsibilities from the construction manager to a maintenance contractor. The maintenance contractor, because of the unexpectedly large number of construction items left to be completed at the time of this turnover, was not capable of maintaining with assurance the previously requested January 15 construction completion date.
- 6. Repairs and repeated hydrostatic tests of the reactor cooling system were required. This effort delayed the start of the subsequent testing by approximately three weeks.
- 7. The reactor coolant pump shaft seals were replaced which effort took approximately two weeks.
- 8. Reactor coolant pump casing to stuffing box joints leaked and required gasket replacement. This effort took approximately five weeks and further disrupted the testing program.
- 9. An inspection program of the steam generator tubes has been undertaken. This effort will delay the test program by approximately two weeks.

These problems do not directly affect the construction critical path although they do disrupt the schedule and divert effort from the critical path items.

MetEd states that they believe that they have asked for a reasonable and justifiable extension of the latest completion date; that they have adequate reasons for delay of the project; that with construction of TH-2 97 percent complete, it is unlikely that they will encounter major contingency delays in the short period of time left until completion of the project; and that they should therefore be granted an extension to the construction permit in accordance with 10 CFR 50.55(c).

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B. Good Cause and Reasonable Time

The staff concurs that the events cited above as reasons for the construction delay were unforeseen, that these reasons constitute good cause for the requested extension, and that the delays caused by these factors are approximately as NetEd has indicated. Based on our estimate of the time required to perform the remaining work, supported by estimates of Office of Inspection and Enforcement personnel, we concur that the requested extension time to complete the work is not unreasonable.

However, the staff notes that:

1. Many items of construction remain to be performed;
2. A significant amount of system and preoperational testing has not yet been completed; and
3. Unexpected difficulties and delays have previously been encountered, requiring additional time beyond contingencies felt to be adequate at the time.

We therefore conclude that the requested extension of time to February 28, 1978 may not be adequate, and that a reasonable latest completion date would be April 30, 1978.

C. Significant Hazards Consideration

The staff finds that because the request is only for more time to complete work already reviewed and approved, the probability or consequences of accidents previously considered will not be increased, nor will any safety margins associated with this facility be decreased. Accordingly, no significant hazards consideration is involved in granting the request and prior public notice of this action is not required.

D. Conclusions and Recommendations

For the reasons stated herein, the staff concludes and recommends that the latest completion date for Provisional Construction Permit CPPR-66 should be extended from May 1, 1977 to April 30, 1978.

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H. Silver, Project Manager
Light Water Reactors Branch 4
Division of Project Management

Original signed by
Steven A. Varga

Steven A. Varga, Chief
Light Water Reactors Branch 4
Division of Project Management

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SURNAME →						
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 16 1978

Docket No. 50-320

Metropolitan Edison Company
Attn: Mr. J. G. Herbein
Vice President
P. O. Box 542
Reading, Pennsylvania 19603

Gentlemen:

Subject: ORDER EXTENDING CONSTRUCTION COMPLETION DATE

In response to your requests of March 28 and December 12, 1977, the Nuclear Regulatory Commission has issued an Order extending the construction completion date for Three Mile Island Nuclear Station, Unit 2. In lieu of the latest completion date of May 1, 1977, as specified previously in Provisional Construction Permit No. CPPR-66, the latest completion date has been extended to April 30, 1978.

A copy of the Order, the staff safety evaluation, negative declaration and environmental impact appraisal are enclosed for your information. The Order and the negative declaration have been transmitted to the Office of the Federal Register for publication.

Sincerely,

A handwritten signature in dark ink, appearing to read "Steven A. Varga".

Steven A. Varga, Chief
Light Water Reactors Branch 4
Division of Project Management

Enclosures:

1. Order Extending Completion Date
2. Staff Safety Evaluation
3. Negative Declaration
4. Environmental Impact Appraisal

ccs: See next page

60-245

Metropolitan Edison Company

CCS:

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U.S. Environmental Protection Agency
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Director, Office of Radiological Health
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Mr. Weldon B. Arehart, Chairman
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Mr. Harry B. Reese, Jr., Chairman
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JERSEY CENTRAL POWER & LIGHT COMPANY
AND
METROPOLITAN EDISON COMPANY

THREE MILE ISLAND NUCLEAR STATION, UNIT 2

DOCKET NO. 50-320

ORDER EXTENDING CONSTRUCTION COMPLETION DATE

Jersey Central Power & Light Company and Metropolitan Edison Company are the holders of Provisional Construction Permit No. CPPR-66 issued by the Atomic Energy Commission* on November 4, 1969, for construction of the Three Mile Island Nuclear Station, Unit 2, presently under construction at the licensees' site in Dauphin County, Pennsylvania.

On March 28, 1977, Metropolitan Edison Company filed a request for an extension of the completion date because construction has been delayed due to:

- (1) A direct craft force reduction of 15 percent in June 1976 resulting from budgeting restrictions;
- (2) Increased engineering (750,000 man-hours) and labor (1,170,000 man-hours) resulting from:
 - (a) Significant increases in previously estimated quantities of electrical cabling, conduit and trays due to late availability of electrical drawings;
 - (b) Increases in material quantities for process piping resulting from quantity re-evaluations;

*Effective January 20, 1975, the Atomic Energy Commission became the Nuclear Regulatory Commission and Permits in effect on that day were continued under the authority of the Nuclear Regulatory Commission.

- (3) Late receipt of valves due to casting difficulties and strike at a nuclear valve manufacturing facility; and
- (4) Late availability of cable pull slips as a result of a lack of electrical vendor drawing information.

On December 12, 1977, MetEd amended the request of March 28 to again extend the completion date for the following additional reasons:

- (5) A transition was made in construction management responsibilities from the construction manager to a maintenance contractor. The maintenance contractor, because of the unexpectedly large number of construction items left to be completed at the time of this turnover, was not capable of maintaining with assurance the previously requested January 15 construction completion date.
- (6) Repairs and repeated hydrostatic tests of the reactor cooling system were required.
- (7) The reactor coolant pump shaft seals were replaced.
- (8) Reactor coolant pump casing to stuffing box joints leaked and required gasket replacement.
- (9) An inspection program of the steam generator tubes has been undertaken.

This action involves no significant hazards consideration; good cause has been shown for the delay; and the extension is for a reasonable period, the bases for which are set forth in a staff evaluation dated January 16, 1978.

Copies of the above documents and other related material are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555, and at the State Library of Pennsylvania, Commonwealth & Walnut Street, Harrisburg, Pennsylvania 17126.

IT IS HEREBY ORDERED THAT the latest completion date for Provisional Construction Permit CPPR-66 is extended from May 1, 1977 to April 30, 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
D. B. Vassallo

D. B. Vassallo, Assistant Director
for Light Water Reactors
Division of Project Management

Date of Issuance:

January 16, 1978



Docket No. 50-320

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 16 1978

EVALUATION OF REQUEST FOR
EXTENSION OF PROVISIONAL CONSTRUCTION PERMIT CPPR-66
FOR THREE MILE ISLAND NUCLEAR STATION, UNIT 2

A. Introduction

Provisional Construction Permit No. CPPR-66 was issued by the Commission on November 4, 1969 for construction of Three Mile Island Nuclear Station, Unit 2, at the licensees' site in Dauphin County, Pennsylvania. By letter of March 28, 1977, Metropolitan Edison Company (MetEd) has requested that the latest completion date for the construction permit be extended from May 1, 1977 to January 15, 1978. By letter of December 12, 1977, MetEd amended their letter of March 28, 1977 to extend the completion date to February 28, 1978. Although fuel loading is presently scheduled for January 15, 1978, the requested extension to February 28 is to allow for additional unforeseen delays.

A previous request for an extension of the latest completion date to May 1, 1977 was granted on January 15, 1974. Since that time, we have been notified by letters dated December 3, 1976, July 3, 1974, and September 6, 1974, of delays totaling fifteen months.

MetEd states that delays since December 1973 are a result of many causes, the most significant of which are:

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 - b. Increases in material quantities for process piping resulting from quantity re-evaluations;
3. Late receipt of valves due to casting difficulties and a strike at a nuclear valve manufacturing facility; and

4. Late availability of cable pull slips as a result of a lack of electrical vendor drawing information.

MetEd has estimated in a separate communication that the causes listed above have resulted in approximately the following delays, respectively:

1. 1.5 months
2. 12.0 months
3. 0.75 months
4. 0.75 months.

The additional delay from January 15 to February 28 is due principally to the following factors:

5. A transition was made in construction management responsibilities from the construction manager to a maintenance contractor. The maintenance contractor, because of the unexpectedly large number of construction items left to be completed at the time of this turnover, was not capable of maintaining with assurance the previously requested January 15 construction completion date.
6. Repairs and repeated hydrostatic tests of the reactor cooling system were required. This effort delayed the start of the subsequent testing by approximately three weeks.
7. The reactor coolant pump shaft seals were replaced which effort took approximately two weeks.
8. Reactor coolant pump casing to stuffing box joints leaked and required gasket replacement. This effort took approximately five weeks and further disrupted the testing program.
9. An inspection program of the steam generator tubes has been undertaken. This effort will delay the test program by approximately two weeks.

These problems do not directly affect the construction critical path although they do disrupt the schedule and divert effort from the critical path items.

MetEd states that they believe that they have asked for a reasonable and justifiable extension of the latest completion date; that they have adequate reasons for delay of the project; that with construction of TMI-2 97 percent complete, it is unlikely that they will encounter major contingency delays in the short period of time left until completion of the project; and that they should therefore be granted an extension to the construction permit in accordance with 10 CFR §50.55(b).

B Good Cause and Reasonable Time

The staff concurs that the events cited above as reasons for the construction delay were unforeseen, that these reasons constitute good cause for the requested extension, and that the delays caused by these factors are approximately as MetEd has indicated. Based on our estimate of the time required to perform the remaining work, supported by estimates of Office of Inspection and Enforcement personnel, we concur that the requested extension time to complete the work is not unreasonable.

However, the staff notes that:

1. Many items of construction remain to be performed;
2. A significant amount of system and preoperational testing has not yet been completed; and
3. Unexpected difficulties and delays have previously been encountered, requiring additional time beyond contingencies felt to be adequate at the time.

We therefore conclude that the requested extension of time to February 28, 1978 may not be adequate, and that a reasonable latest completion date would be April 30, 1978.

C. Significant Hazards Consideration

The staff finds that because the request is only for more time to complete work already reviewed and approved, the probability or consequences of accidents previously considered will not be increased, nor will any safety margins associated with this facility be decreased. Accordingly, no significant hazards consideration is involved in granting the request and prior public notice of this action is not required.

D. Conclusions and Recommendations

For the reasons stated herein, the staff concludes and recommends that the latest completion date for Provisional Construction Permit CPPR-66 should be extended from May 1, 1977 to April 30, 1978.



H. Silver, Project Manager
Light Water Reactors Branch 4
Division of Project Management



Steven A. Varga, Chief
Light Water Reactors Branch 4
Division of Project Management

NEGATIVE DECLARATION

SUPPORTING: EXTENSION OF CONSTRUCTION PERMIT NO. CPPR-66

EXPIRATION DATE FOR THE

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2

DOCKET NO. 50-320

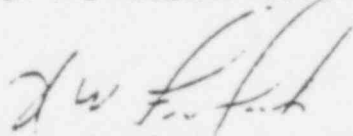
The U. S. Nuclear Regulatory Commission (the Commission) has reviewed Metropolitan Edison Company, Jersey Power and Light Company, and Pennsylvania Electric Company's (permittee) request to extend the expiration date of the construction permit for the Three Mile Island Nuclear Station, Unit No. 2 (CPPR-66) which is located in Dauphin County, Pennsylvania. The permittee requested a ten month extension to the permit through February 28, 1978, to allow for completion of construction of the Three Mile Island plant. The Commission, based on its analysis of the construction work and testing remaining to be done, concluded that a more reasonable latest completion date would be April 30, 1978.

The Commission's Division of Site Safety and Environmental Analysis has prepared an environmental impact appraisal relative to this change to CPPR-66. Based on this appraisal, the Commission has concluded that an environmental impact statement for this particular action is not warranted because there will be no environmental impact attributable to the proposed action other than that which has already been described in the Commission's Final Environmental Statement related to operation of Three Mile Island, Unit Nos. 1 and 2 and the Commission's Final Supplement to the Final Environmental Statement related to operation of Three Mile Island, Unit No. 2.

The environmental impact appraisal is available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. and at the Government Publications Section, State Library of Pennsylvania, Education Building, Harrisburg, Pennsylvania.

Dated at Bethesda, Maryland, this 27th day of December 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



R. W. Froelich, Acting Chief
Environmental Projects Branch 2
Division of Site Safety and
Environmental Analysis

ENVIRONMENTAL IMPACT APPRAISAL
BY THE DIVISION OF SITE SAFETY AND ENVIRONMENTAL ANALYSIS
SUPPORTING EXTENSION OF CONSTRUCTION PERMIT CPPR-66
THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 2
DOCKET NO. 50-320

ENVIRONMENTAL IMPACT APPRAISAL

Description of Proposed Action

By letter dated December 12, 1977 the applicant, Metropolitan Edison Company, Jersey Central Power and Light Company, and Pennsylvania Electric Company filed a request with the Nuclear Regulatory Commission (NRC) to extend the completion date specified in Construction Permit No. CPPR-66 for the Three Mile Island Nuclear Station, Unit No. 2. The action proposed is the issuance of an order providing for an extension of the latest completion date of the construction permit from May 1, 1977 to April 30, 1978. The NRC staff has reviewed the application and found that good cause has been shown for the requested extension of the completion date specified in Construction Permit No. CPPR-66 for Three Mile Island Nuclear Station, Unit No. 2 (see attached Safety Evaluation by the NRC staff).

Environmental Impact of the Proposed Action

A. Need for Power

The Three Mile Island Nuclear Station, Unit No. 2, is now scheduled to begin commercial operation in May 1978. This date is unchanged from the staff's last reappraisal of the need for the plant made in April 1977 in conjunction with the public hearings.

The discussion of the need for power presented in the Final Supplement to the Final Environmental Statement published in December 1976 is still valid. The overall staff's conclusion that the plant should be operated is unaffected by the extension of the construction permit.

B. Community and Economic Impacts

The Final Environmental Statement for the Three Mile Island, Unit No. 2 includes an assessment of potential environmental, economic and community impacts due to site preparation and plant construction.

In addition, staff's discussions with individuals and local and State officials held at the time of preparation of the Final Supplement to the Final Environmental Statement did not identify any substantial impacts on the surrounding community resulting from plant construction (Final Supplement to the Final Environmental Statement Section 4.5, p. 4-4). The Final Supplement to the FES further indicates that almost all major building activity has been completed and that the remaining construction activity will focus on building interiors. (Section 4.2) The only environmental impacts possibly resulting from the requested extension would be those due to transposing the impacts in time or extending the total time the local community is subjected to temporary construction impacts. However, due to the shortness of the extension period requested and the stage of construction, the staff does not believe that any additional impact will result. The staff concludes that environmental impacts associated with construction of the plant and described in the FES, are not affected by the proposed extension. Thus, no significant change in impact is expected to result from the extension.

Conclusion and Basis for Negative Declaration

On the basis of the foregoing analysis and the NRC staff evaluation, it is concluded that there will be no environmental impact attributable to the proposed action other than that already predicted and described in the Commission's FES issued December 1972 and in the Final Supplement to the Final Environmental Statement issued in December 1976. Having made this conclusion, the Commission has further concluded that no environmental impact statement for the proposed action need be prepared, and that a negative declaration to this effect is appropriate.