

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
METROPOLITAN EDISON COMPANY,)	Docket No. 50-320
<u>ET AL.</u>)	
)	
(Three Mile Island Nuclear Station,)	
Unit 2))	

SUPPLEMENTARY PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE FORM OF AN INITIAL DECISION

The NRC Staff, in accordance with 10 CFR § 2.754, proposes the following revisions to "NRC Staff's Proposed Findings of Fact and Conclusions of Law in the Form of An Initial Decision," dated August 19, 1977.

1. On Page 18, before paragraph 24, add paragraph 23a, as follows:

Finally, the Staff has provided the Board with an evaluation^{48a/} of the thermal effluent limitations imposed on TMI-2 by the Commonwealth of Pennsylvania in the November 9, 1977 401 Certification. The Staff has concluded, and the Board agrees, that operation of the facility pursuant to those limitations assures that the effects of the thermal discharge will not pose an unacceptable adverse impact on the aquatic ecosystem of the river.

48 a /

Affidavit of Clarence R. Hickey, Jr., dated December 6, 1977.

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2. Replace paragraph 82 found on pages 47-51 with the following:

C. Compliance with the Federal Water Pollution Control Act Amendments of 1972

82. On June 22, 1977, the Commonwealth of Pennsylvania, through its Department of Environmental Resources, certified, pursuant to § 401(a)(1) of the Federal Water Pollution Control Act Amendments of 1972 (FWPCA)^{135/} that any discharge from the construction and operation of TMI-2 will comply with the applicable provisions of §§ 301, 302, 306, and 307 of the FWPCA and will not violate the applicable water quality standards of the Commonwealth of Pennsylvania as approved by the United States Environmental Protection Agency.^{136/} On November 9, 1977, the Commonwealth of Pennsylvania revised the 401 Certification previously issued on June 22, 1977. The revised sections pertained to thermal effluent limitations.^{136a/} The Board finds that this certification satisfies the requirement of Section 401 of the FWPCA. Pursuant to § 401(d) of the FWPCA, this Commission is required to include in any NRC license or permit such conditions or effluent limitations set forth in the § 401 Certification. The § 401 Certification issued by the Commonwealth of Pennsylvania for this station included the following conditions and/or limitations:

^{135/} 33 U.S.C. § 1251, et seq.

^{136/} Applicants' Exhibit 9.

^{136a/} Affidavit of Clarence R. Hickey, Jr., dated December 6, 1977. A copy of the revised 401 Certification dated November 9, 1977 is an attachment to the Affidavit.

- a. That the Applicants comply with Pennsylvania's Clean Streams Law.
- b. That the Applicants comply with Industrial Waster Permits 2270204 and 2272202, and Sewerage Permit 2275419 issued by the Department of Environmental Resources.
- c. The following effluent limitations should be imposed:
 1. Discharge 101 - Effluent of sewage treatment facilities.

Total phosphorous shall not exceed 2 mg/l on an average basis, nor 4 mg/l at any time.
 2. Discharge 001 - Combined Mechanical Draft Cooling Tower Blowdown.
 - a. The Applicants shall at all times maintain in good working order and operate the Mechanical Draft Cooling Towers (MDCT's) as efficiently as possible so as to minimize temperature differential between ambient river temperature and the temperature of the discharge; provided, however, the MDCT's may be shut down when in the judgment of the responsible TMINS personnel a combination of atmospheric conditions and river temperature may exist which causes the waste

water to be heated as it passes through the MDCT's or ice formation is observed to occur within the MDCT's.

- b. The temperature of the discharge shall never exceed a maximum of 87°F, except when the ambient river temperature exceeds 87°F, in which case, the discharge temperature shall not exceed the ambient river temperature; the temperature of the discharge shall not change by more than 5°F during any one hour period.

Ambient river temperature is the temperature of the river upstream of the heated waste discharge. The ambient temperature sampling point should be unaffected by any sources of waste heat. The temperature of the intake water will be considered as ambient river temperature so long as the intake water is unaffected by TMI's or any other nearby heated water discharge.

- c. The following temperature limitations shall never be exceeded:

1. During the period November 1 through April 30, the temperature of the discharge shall not exceed 12°F above ambient river temperature.
 2. During the period May 1 through October 31, the temperature of the discharge shall not exceed 7°F above ambient river temperature.
 3. During plant cooldown operations the temperature of the discharge shall not exceed 12°F above ambient river temperature.
- d. At no time shall the discharge exceed the rate of 150 million gallons per day.
- e. The Chief of the Operations Section of the Harrisburg Regional Office of the Bureau of Water Quality Management shall be advised by telephone within hours when the MDCT's are shut down for reasons other than those specified in condition 2(a) above again when tower operation is resumed; shall be notified within 24 hours when the discharge limitations specified in paragraph 2(c) above are exceeded and again when the discharge is in compliance with such limitations; and shall be notified, at least thirty (30) days in advance, whenever possible of all scheduled plant cooldown operations.

- f. Within two years after both nuclear reactor units are in commercial operation, the Metropolitan-Edison Company will collect and submit to the Department of Environmental Resources stream data which accurately defines the thermal plume or zone of impact from the TMINS heated waste discharge. As a minimum, thermal plume mapping data collected to meet the Nuclear Regulatory Commission's requirements shall be submitted to Pennsylvania Department of Environmental Resources.
 - g. That the Applicants submit to the Pennsylvania Department of Environmental Resources within ninety (90) days of issuance of Amendment No. 1 to the NPDES permit, an application for a new Pennsylvania Water Quality Management permit for the facilities associated with the thermal component of discharge 001.
3. Replace condition 2 found at pages 116-119 with the following:

Pursuant to § 401(d) of the FWPCA, this Commission is required to include in any NRC license or permit such conditions or effluent

limitations set forth in the § 401 Certification. This § 401 Certification issued by the Commonwealth of Pennsylvania for this station included the following conditions and/or limitations:

a. That the Applicants comply with Pennsylvania's Clean Streams Law.

b. That the Applicants comply with Industrial Waster Permits 2270204 and 2272202, and Sewerage Permit 2275419 issued by the Department of Environmental Resources.

c. The following effluent limitations should be imposed:

1. Discharge 101 - Effluent of sewage treatment facilities.

Total phosphorous shall not exceed 2 mg/l on an average basis, nor 4 mg/l at any time.

2. Discharge 001 - Combined Mechanical Draft Cooling Tower Blowdown.

a. The Applicants shall at all times maintain in good working order and operate the Mechanical Draft Cooling Towers (MDCT's) as efficiently as possible so as to minimize temperature differential between ambient river temperature and the temperature of the discharge; provided, however,

the MDCT's may be shut down when in the judgment of the responsible TMINs personnel a combination of atmospheric conditions and river temperature may exist which causes the waste water to be heated as it passes through the MDCT's or ice formation is observed to occur within the MDCT's.

- b. The temperature of the discharge shall never exceed a maximum of 87°F, except when the ambient river temperature exceeds 87°F, in which case, the discharge temperature shall not exceed the ambient river temperature; the temperature of the discharge shall not change by more than 5°F during any one hour period.

Ambient river temperature is the temperature of the river upstream of the heated waste discharge. The ambient temperature sampling point should be unaffected by any sources of waste heat. The temperature of the intake water will be considered as ambient river temperature so long as the intake water is unaffected by TMI's or any other nearby heated water discharge.

c. The following temperature limitations shall never be exceeded:

1. During the period November 1 through April 30, the temperature of the discharge shall not exceed 12°F above ambient river temperature.
2. During the period May 1 through October 31, the temperature of the discharge shall not exceed 7°F above ambient river temperature.
3. During plant cooldown operations the temperature of the discharge shall not exceed 12°F above ambient river temperature.

d. At no time shall the discharge exceed the rate of 150 million gallons per day.

e. The Chief of the Operations Section of the Harrisburg Regional Office of the Bureau of Water Quality Management shall be advised by telephone within hours when the MDCT's are shut down for reasons other than those specified in condition 2(a) above again when tower operation is resumed; shall be notified within 24 hours when the discharge limitations specified in paragraph 2(c) above are exceeded

and again when the discharge is in compliance with such limitations; and shall be notified, at least thirty (30) days in advance, whenever possible of all scheduled plant cooldown operations.

f. Within two years after both nuclear reactor units are in commercial operation, the Metropolitan-Edison Company will collect and submit to the Department of Environmental Resources stream data which accurately defines the thermal plume or zone of impact from the TMINS heated waste discharge. As a minimum, thermal plume mapping data collected to meet the Nuclear Regulatory Commission's requirements shall be submitted to Pennsylvania Department of Environmental Resources.

g. That the Applicants submit to the Pennsylvania Department of Environmental Resources within ninety (90) days of issuance of Amendment No. 1 to the NPDES permit, an application for a new

Pennsylvania Water Quality Management permit
for the facilities associated with the thermal compo-
nent of discharge 001.

Respectfully submitted

for Stuart A. Treby
Gregory Fess
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 7th day of December, 1977

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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(Three Mile Island Nuclear Station,)	
Unit 2))	

CERTIFICATE OF SERVICE

I hereby certify that copies of:

- 1.) "NRC STAFF'S MOTION FOR RECEIPT INTO EVIDENCE THE AFFIDAVIT OF CLARENCE R. HICKEY, JR. AND LEAVE TO FILE SUPPLEMENTING PROPOSED FINDINGS;
- 2.) SUPPLEMENTARY PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW IN THE FORM OF AN INITIAL DECISION; and
- 3.) AFFIDAVIT OF CLARENCE R. HICKEY, JR.", with the following attachments:
 - a. NRC Staff's Assessment of revised 401 Certification; and
 - b. November 9, 1977 401 Certification

in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class or air mail, or as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 7th day of December, 1977:

Edward Luton, Esq., Chairman *
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Gustave A. Linenberger*
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Karin W. Carter, Assistant
Attorney General
Office of Enforcement
Department of Environmental
Resources
709 Health and Welfare Building
Harrisburg, Pennsylvania 17120

George F. Trowbridge, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N. W.
Washington, D. C. 20036

Dr. Ernest O. Salo
Professor, Fisheries Research
Institute, WH-10
College of Fisheries
University of Washington
Seattle, Washington 98195

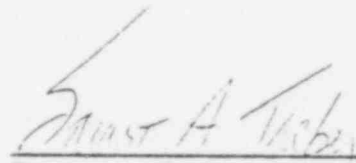
Dr. Chauncey R. Kepford
Citizens for a Safe Environment
433 Orlando Avenue
State College, Pennsylvania 16801

Ms. Judith H. Johnsrud
433 Orlando Avenue
State College, Pennsylvania 16801

Atomic Safety and Licensing Board
Panel*
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Atomic Safety and Licensing Appeal
Panel*
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555



Stuart A. Treby
Assistant Chief Hearing Counsel