Tera

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

August 14, 1980

Docket No. 50-320

Mr. R. C. Arnold
Senior Vice President
Metropolitan Edison Company
100 Interpace Parkway
Parsippany, New Jersey 07054

Dear Mr. Arnold:

Enclosed for your information and use are copies of Change No. 1 and Change No. 2 to the TMI-2 Recovery Operation Plan. The revised pages (4.1-2, 4.9-1 and 4.9-2) contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

Change No. 1 was approved on July 25, 1980 as noted in the letter to R. C. Arnold, Met. Ed/GPU from John T. Collins, USNRC (NRC/TMI-80-115). Change No. 2 was approved on July 31, 1980 as noted in the letter to R. C. Arnold, Met. Ed/GPU from John T. Collins, USNRC (NRC/TMI-80-118).

Sincerely,

William J. Travers for

Bernard J. Snyder, Program Director
Three Mile Island Program Office
Office of Nuclear Reactor Regulation

Enclosures:
1. Recovery Operation Plan
   Change No. 1
2. Recovery Operation Plan
   Change No. 2

cc w/enclosures:
See next page

8008260682

Mr. G. K. Hovey
Director, Unit 2
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylvania 17057

Mr. J. J. Barton
Manager, Site Operations, Unit 2
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylvania 17057

Mr. R. W. Heward
Manager, Radiological Control, Unit 2
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylania 17057

Mr. B. Elam
Manager, Plant Engineering, Unit 2
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylvania 17057

Mr. R. F. Wilson
Director, Technical Functions
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylvania 17057

Mr. L. W. Harding
Supervisor of Licensing
Metropolitan Edison Company
P.O. Box 480
Middletown, Pennsylvania 17057

Mr. E. G. Wallace
Licensing Manager
GPU Service Corporation
100 Interpace Parkway
Parsippany, New Jersey 07054

Mr. I. R. Finfrock, Jr.
Jersey Central Power & Light Company
Madison Avenue at Punch Bowl Road
Morristown, New Jersey 07950

Mr. R. W. Conrad
Pennsylvania Electric Company
1001 Broad Street
Johnstown, Pennsylvania 15907

J. B. Lieberman, Esquire
Berlock, Israel, Lieberman
26 Broadway
New York, New York 10004

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

Ms. Mary V. Southard, Chairperson
Citizens for a Safe Environment
P.O. Box 405
Harrisburg, Pennsylvania 17108

Dr. Walter H. Jordan
881 W. Outer Drive
Oak Ridge, TN 37830

Dr. Linda W. Little
5000 Hermitage Drive
Raleigh, NC 27612

Karin W. Carter, Esquire
505 Executive House
P.O. Box 2357
Harrisburg, Pennsylvania 17120

The Honorable Mark Cohen
512 E-3 Main Capital Building
Harrisburg, Pennsylvania 17120

Ellyn Weiss, Esquire
Sheldon, Harmon & Weiss
1725 I Street, N.W., Suite 506
Washington, D. C. 20006

Mr. Steven C. Sholly
304 S. Market Street
Mechanicsburg, Pennsylvania 17055

Mr. Thomas Gerusky
Bureau of Radiation Protection
P.O. Box 2063
Harrisburg, Pennsylvania 17120

Mr. Marvin I. Lewis
6504 Bradford Terrace
Philadelphia, Pennsylvania 19149

Ms. Jane Lee
R.D. 3, Box 3521
Etters, Pennsylvania 17319

Walter W. Cohen, Consumer Advocate
Department of Justice
Strawberry Square, 14th Floor
Harrisburg, Pennsylvania 17127

Robert L. Knupp, Esquire
Assistant Solicitor
Knupp and Andrews
P.O. Box P
407 N. Front Street
Harrisburg, Pennsylvania 17108

John E. Minnich, Chairperson
Dauphin Co. Board of Commissioners
Dauphin County Courthouse
Front and Market Streets
Harrisburg, Pennsylvania 17101

Robert Q. Pollard
Chesapeak Energy Alliance
609 Montpelier Street
Baltimore, Maryland 21218

Chauncey Kepford
Judith H. Johnsrud
Environmental Coalition on Nuclear Power
433 Orlando Avenue
State College, Pennsylvania 16801

Ms. Frieda Berryhill, Chairperson
Coalition for Nuclear Power Plant
Postponement
2610 Grendon Drive
Wilmington, Delaware 19808

Holly S. Keck
Anti-Nuclear Group Representing York
245 W. Philadelphia Street
York, Pennsylvania 17404

John Levin, Esquire
Pennsylvania Public Utilities Commission
P.O. Box 3265
Harrisburg, Pennsylvania 17120

Jordan D. Cunningham, Esquire
Fox, Farr and Cunningham
2320 N. Second Street
Harrisburg, Pennsylvania 17110

Ms. Kathy McCaughlin
Three Mile Island Alert, Inc.
23 South 21st Street
Harrisburg, Pennsylvania 17104

Ms. Marjorie M. Aamodt
R.D. #5
Coatesville, Pennsylvania 19320

Ms. Karen Sheldon
Sheldon, Harmon, Roisman & Weiss
1725 I Street, N.W., Suite 506
Washington, D. C. 20006

Earl B. Hoffman
Dauphin County Commissioner
Dauphin County Courthouse
Front and Market Street
Harrisburg, Pennsylvania 17101

Government Publications Section
State Library of Pennsylvania
Box 1601 Education Building
Harrisburg, Pennsylvania 17127

Dr. Edward O. Swartz
Board of Supervisors
Londonderry Township
RFD #1 Geyers Church Road
Middletown, Pennsylvania 17057

U.S. Environmental Protection Agency
Region III Office
ATTN: EIS COORDINATOR
Curtis Building (Sixth Floor)
6th and Walnut Streets
Philadelphia, Pennsylvania 19106

Dauphin County Office Emergency
Preparedness
Court House, Room 7
Front and Market Streets
Harrisburg, Pennsylvania 17101

Department of Environmental Resources
ATTN: Director, Office of
Radiological Health
P.O. Box 2063
Harrisburg, Pennsylvania 17105

Governor's Office of State
Planning and Development
ATTN: Coordinator, Pennsylvania
Clearinghouse
P.O. Box 1323
Harrisburg, Pennsylvania 17120

Mrs. Rhoda D. Carr
1432 Marene Drive
Harrisburg, Pennsylvania 17109

Mr. Richard Roberts
The Patriot
812 Market Street
Harrisburg, Pennsylvania 17105

Mr. Robert B. Borsum
Babcock & Wilcox
Nuclear Power Generation Division
Suite 420, 7735 Old Georgetown Road
Bethesda, Maryland 20014

Mr. William A. Lochstet
119 East Aaron Drive
State College, Pennsylvania 16801

Ivan W. Smith, Esquire
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

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
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

4.1 WATER INJECTION COOLING AND REACTIVITY CONTROL SYSTEMS

4.1.1 BORATION CONTROL

BORON INJECTION

4.1.1.1 Two systems capable of injecting borated cooling water into the Reactor Coolant System shall be demonstrated OPERABLE:

a. At least once per 7 days by verifying that the accessible (per occupational exposure considerations) heat traced portion of the flow path from the concentrated boric acid storage system is energized.

b. At least once per 31 days by verifying that each accessible (per occupational exposure considerations) valve (manual, power operated or automatic) in each flow path that is not locked, sealed, or otherwise secured in position, is in its correct position.

c. At least once per 31 days by verifying (per occupational exposure considerations), that on recirculation flow, the makeup pump required by Technical Specification 3.1.1.1 develops a discharge pressure of greater than or equal to 1125 psig and that each pump operates for at least 15 minutes.

d. At least once per 31 days by verifying (per occupational exposure considerations), that on recirculation flow, the decay heat removal pump required by Technical Specification 3.1.1.1 develops a discharge pressure of greater than or equal to 151 psig and that each pump operates for at least 15 minutes.

e. At least once per 31 days by:

1. Starting (unless already operating) the boric acid pump from the control room.

2. Verifying (per occupational exposure considerations) the boric acid pump develops a discharge pressure of greater than or equal to 65 psig and operates for at least 15 minutes.

3. Verifying that the boric acid pump is aligned to receive electrical power from an OPERABLE bus.

BORON INJECTION (Continued)

f. At least once per 7 days by:

1. Verifying the boron concentration in the concentrated boric acid storage system is between 7875 and 13,125 ppm.

2. Verifying the boron concentration in the BWST is between 3000 and 4500 ppm.

3. Verifying the contained borated water volume of the concentrated boric acid storage system is in accordance with Figure 3.1-1.

4. Verifying the contained borated water volume of the BWST is at least 100,000 gallons.

5. Verifying the concentrated boric acid storage system solution temperature is at least 105°F.

g. At least once per 24 hours by verifying the BWST temperature is at least 50°F when the outside air temperature is less than 50°F.

h. At least once per 12 hours (when system is in operation) by verifying that the standby reactor coolant system pressure control system:

1. Surge tank water volume is filled to between 55% and 80% of tank capacity and the tank is pressurized to the operating RCS pressure ± 25 psig but not higher than 600 psig.

2. Isolation valves on the discharge side of the water filled tank nearest the reactor coolant system are open.

3. The in-service nitrogen supply bank is pressurized to between 225 and 400 psig.

i. At least once per 7 days by verifying that the standby reactor coolant system pressure control system water filled tanks, the surge tank, and the degassed water supply tank contain borated water with:

1. A boron concentration of between 3000 and 4500 ppm.

2. A dissolved gas concentration of less than 15 scc/kg of water.

j. At least once per 31 days by verifying that the standby reactor coolant system pressure control system isolation valve on the discharge side of the water filled tank nearest the reactor coolant system closes automatically on a tank low level test signal.

4.9 LIQUID RADIOACTIVE WASTE STORAGE

FUEL HANDLING BUILDING/AUXILIARY BUILDING AIR CLEANUP SYSTEMS

4.9.12 The fuel handling building air cleanup system and the auxiliary building air cleanup system shall be demonstrated OPERABLE:

a. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that each filter train operates for at least 15 minutes.

b. Initially and at least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:

1. Verifying a flow rate of 23,000 cfm ± 10% for each fuel handling building exhaust filter train when tested in accordance with ANSI N510-1975.

2. Verifying a flow rate of 36,000 cfm ± 10% for each auxiliary building exhaust filter train when tested in accordance with ANSI N510-1975.

c. At least once per 18 months by:

1. Verifying an exhaust flow rate of at least 36,000 cfm for the fuel handling building air cleanup system with two fuel handling building supply fans and two fuel handling building exhaust fans in operation.

2. Verifying an exhaust flow rate of at least 65,000 cfm for the auxiliary building air cleanup system with two auxiliary building supply fans and two auxiliary building exhaust fans in operation.

3. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks of each fuel handling building filter train is less than 6 inches Water Gauge while it operates at a flow rate of 23,000 cfm ± 10%.

4. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks of each auxiliary building filter train is less than 6 inches Water Gauge while it operates at a flow rate of 36,000 cfm ± 10%.

5. Verifying that the fuel handling building air cleanup system maintains the fuel handling building at a negative pressure of greater than or equal to 1/8 inch Water Gauge relative to the outside atmosphere during system operation.

6. Verifying that the auxiliary building air cleanup system maintains the auxiliary building at a negative pressure of greater than or equal to 1/8 inch Water Gauge relative to the outside atmosphere during system operation.

7. Verifying that each fuel handling building filter train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 23,000 cfm ± 10%.

8. Verifying that each auxiliary building filter train satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a and C.5.c of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 36,000 cfm ± 10%.

d. After each complete or partial replacement of a HEPA filter bank in a fuel handling building filter train by verifying that the HEPA filter banks in this filter train remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the filter train at a flow rate of 23,000 cfm ± 10%.

e. After each complete or partial replacement of a HEPA filter bank in an auxiliary building filter train by verifying that the HEPA filter banks in this filter train remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the filter train at a flow rate of 36,000 cfm ± 10%.