June 26, 1986 NRC/TMI-86-062

Docket No. 50-320

Mr. F.R. Standerfer Vice President/Director Three Mile Island Unit 2 GPU Nuclear Corporation P.O. Box 480 Middletown, PA 17057

Local PDR DCS TMI HQ r/f TMI Site r/f **WDTravers** MTMasnik RHa11 CCowqi11 JWhite TMos lak LChandler IE **ACRS** M-Town Office

DISTRIBUTION DN 50-320 NRC PDR

Dear Mr. Standerfer.

Subject: Recovery Operations Plan Change Request No. 35

By letter dated December 16, 1985, GPU Nuclear requested modifications to Tables 4.3-1 and 4.3-7 of the Recovery Operations Plan (ROP) for TMI Unit 2. Further clarification of proposed changes to Table 4.3-1 of the ROP was provided in a discussion with your staff on March 27, 1986. We have completed our review, and we approve the proposed changes as documented in our enclosed safety evaluation. Our approval of your ROP Change Request No. 35 is our Change Approval No. 32. The revised pages of the ROP are also enclosed. These changes shall become effective as of the date of this letter.

> original signed by Curt Cowgill for:

William D. Travers, Director TMI-2 Cleanup Project Directorate Office of Nuclear Reactor Regulation

Enclosures: As stated

cc: T. F. Demmitt R. E. Rogan S. Levin W. H. Linton A. W. Miller J. J. Byrne Service Distribution List (see attached)

8607080377 860626 ADDCK 05000320

OFFICE>	TMICPO/	TMICPD U.S.	
BURNAME	RHall:jes	WTravers O'	
DATE	6/06/86	6/4 /86	

NRC FORM 318 (10-80) NRCM 0240

#### SAFETY EVALUATION

## BY THE OFFICE OF NUCLEAR REACTOR REGULATION FOR RECOVERY OPERATIONS PLAN CHANGE REQUEST 35

#### INTRODUCTION

By letter dated December 16, 1985, the licensee requested approval for modifications to the TMI-2 Recovery Operations Plan (ROP). This request was supplemented in a discussion with the licensee's staff held on March 27, 1986. These changes involve revisions to Tables 4.3-1 and 4.3-7 of the ROP, as discussed below.

#### EVALUATION

The licensee proposes to make several changes to Table 4.3-1, to correct administrative errors arising from NRC ROP Change No. 31, issued October 21. 1985 (GPUNC ROP Change Request No. 29). In ROP Change No. 31, the neutron monitoring instrumentation surveillance requirements were listed solely in Table 4.3-1; previously, some requirements were also specified in Table 4.3-7. Consolidating the requirements resulted in some administrative errors to Table 4.3-1. The current request corrects these errors by making the following changes to Table 4.3-1:

- The addition of a note which states "Intermediate and Source Range and Rate is not required at Cabinet 217."
- 2) Changing the frequency of channel checks from once per 12 hours to monthly for Cabinet 217, with a note to that effect. The channel check frequency will remain once per 12 hours for the control room readout channels.

8607080383 860526 PDR ADDCK 05000320 PDR

SURNAME)  DATE	NRC FORM 318 (10 80	0) NRCM 0240	OFFICIAL BECORD	CORV	
SURNAME	DATE				
OFFICE					
물레보다면서 문화되었다면서 [문화되어] [문화되어] [문화문화사] [문화문화사] [문화문화사] [문화문화사] [문화문화사] [문화사] [모화사] [문화사] [모화사] [문화사] [모화사] [문화사] [문화사] [문화사] [문화사] [문화사] [문화사] [문화사] [문화사] [문화사] [모화사] [모화	OFFICE				

OFFICIAL RECORD COPY

The first change is necessary because prior to ROP Change No. 31, Table 4.3-7 specified the surveillance requirements for the Intermediate and Source Range Neutron Flux level monitors, including the readout locations in the control room and at Cabinet 217. Table 4.3-1 also specified surveillance requirements for the neutron flux level monitors, and, additionally, the neutron flux rate monitors; however, this table did not identify readout locations. In ROP Change No. 31, Table 4.3-1 was revised to include the neutron flux level monitor readout locations previously listed in Table 4.3-7, however, the neutron flux rate monitors were incorrectly identified as having readout capability at Cabinet 217. This oversight will be corrected by the proposed change.

The second correction to Table 4.3-1 is related to the first. Prior to ROP Change No. 31, Table 4.3-7 required monthly channel checks for the neutron flux level monitors at the control room and Cabinet 217 readout locations.

Table 4.3-1 required channel checks every 12 hours for the neutron flux level and rate monitors at the control room readout locations only. The proposed change will restore the monthly channel check frequency for the neutron flux level monitoring instrumentation in Cabinet 217. This frequency is consistent with the original intent of the requirement and will minimize the wear and tear on the equipment in Cabinet 217. The channel check frequency will remain at once per 12 hours for the neutron monitoring instrumentation control room readout locations. These two changes are administrative in nature and will correct discrepancies found in an earlier revision to the ROP, therefore the staff finds them acceptable.

The licensee also proposes to modify Table 4.3-7 by adding an alternate readout location for Reactor Building Water Level indication. The licensee has installed this alternate level indication, consisting of a probe and level indicating transmitter with readout in the Hot Instrument Shop. The proposed change will improve Reactor Building Water Level monitoring reliability by providing an additional capability for surveillance, thus allowing greater operational flexibility.

The staff concludes that the proposed changes to the ROP do not pose a significant risk to the health and safety of the public and that the proposed changes are within the scope of activities and events analyzed in the PEIS. We therefore approve the proposed changes to the THI-2 Recovery Operations Plan as discussed herein. Our approval of GPU ROP Change Request No. 35 is NRC ROP Change Approval No. 32.

#### Enclosure

# FACILITY OPERATING LICENSE NO. DPR-73

### DOCKET NO. 50-320

Replace the following pages of the THI-2 Recovery Operations Plan with the enclosed pages as indicated:

4.3-2

4.3-10

OFFICE SURNAME DATE NRC FORM 318 (10 80) NRCM 0240

OFFICIAL RECORD COPY

TABLE 4.3-1
NEUTRON MONITORING INSTRUMENTATION

FUN	ICTIONAL UNIT	CHANNEL CHECK	CHANNEL CALIBRATION	CHANNEL FUNCTIONAL TEST	TOTAL NO. OF CHANNELS	CHANNELS TO TRIP	MINIMUM CHANNELS OPERABLE	READ OUT LOCATIONS
1.	Intermediate Range, Neutron Flux Rate	S/M <sup>(4)</sup>	R(1)	М	2	0	1	Cab 217 + (283 Control Room
2.	Source Range, Neutron Flux and Rate	S/M <sup>(4)</sup>	R <sup>(1)</sup>	М	2	0	2	Cab 217 + (283 Control Room

#### NOTES

- Neutron detectors and all channel components located inside containment may be excluded from CHANNEL CALI-BRATION.
- 2) Only one readout required at Cabinet 217.
- 3) Intermediate and Source Range is not required at Cabinet 217.
- 4) Monthly channel check applies only to Cabinet 217.

TABLE 4.3-7

ESSENTIAL PARAMETERS MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENT		CHANNEL CHECK	CHANNEL (1) CALIBRATION	READOUT LOCATION(S)	MINIMUM OPERABLE CHANNELS	
1.	Reactor Building Pressure	S	R	Control Room	2	
2.	Reactor Vessel Water Level	S/W(2)	SA	Control Room(2)	2 <sup>(2)</sup>	
3.	Incore Thermocouples/RCS Temperature Detectors	S	R	Control Room or Cable Room	2 <sup>(3)</sup>	
4.	Reactor Building Water Level	NA	SA	Control Bldg. Area West or Hot Instrument Shop	1	
5.	Borated Water Storage Tank Level	S	R	Control Room	1	
5.	Steam Generator Level	NA	NA	NA	1/Generator	
7.	Spent Fuel Storage Pool "A" Water Level	S/W <sup>(2)</sup>	SA	Control Room <sup>(2)</sup> or Fuel Handling Bldg.	2(2)	
в.	Fuel Transfer Canal (deep end) Water Level	S/W <sup>(2)</sup>	SA	Control Room or Reactor Bldg.	2 <sup>(2)</sup>	
(See	following page for notes)					

Dr. Thomas Murley Regional Administrator, Region I U.S. Muclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406

John F. Wolfe, Esq., Chairman, Administrative Judge 3409 Shepherd St. Chevy Chase, MD. 20015

Dr. Oscar M. Paris
Administrative Judge
Atomic Safety and Licensing
Board Panel
U.S. Huclear Regulatory Commission
Washington, D.C. 20555

Dr. Frederick H. Shon Administrative Judge Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Karin W. Carter Assistant Attorney General 505 Esecutive House P.O. Box 2357 Harrisburg, PA 17120

Dr. Judith M. Johnsrud Environmental Coalition on Nuclear Power 433 Orlando Ave. State College, PA 16801

George F. Trowbridge, Esq. Shaw, Pittman, Potts and Trowbridge 1800 M. St., NV. Washington, D.C. 20036

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

Secretary U.S. Nuclear Regulatory Commission ATTN: Chief, Docketing & Service Branch Washington, D.C. 20555

Mr. Larry Hochendoner Dauphin County Commissioner P.O. Box 1295 Harrisburg, PA 17108-1295

Fred Rice, Chairperson Dauphin County Board of Commissioners Dauphin County Courthouse Front and Market Streets Harrisburg, PA 17101

Dauphin County Office of Emergency Preparedness Court House, Room 7 Front & Market Streets Harrisburg, PA 17101

U.S. Environmental Protection Agency Region 111 Office ATTN: [13 Coordinator Curtis Building (Sixth Floor) 6th & Walnut Streets Philadelphia, PA 19106

Thomas M. Gerusky, Director Bureau of Radiation Protection Department of Environmental Resources P.O. box 2063 Parrisburg, PA 17120

Dan Kennedy Office of Environmental Planning Department of Environmental Resources P. O. Box 2063 Harrisburg, PA 17120 Willis Biaby, Site Manager U.S. Department of Energy P.O. Box 88 Middletown, PA 17057-0311

David J. McGoff Division of Three Mile Island Programs NC-23 U.S. Department of Energy Washington, D.C. 20545 1

William Lochstet 104 Davey Laboratory Pennsylvania State University University Park, PA 16802

Randy Myers, [ditorial The Patriot B12 Market St. Marrisburg, PA 17105

Robert B. Borsum Babcock & Wilcox Nuclear Power Generation Division Suite 220 7910 Woodmount Ave. Bethesda, MD. 20814

Michael Churchhill, Esq. PILCOP 1315 Walnut St., Suite 1632 Philadelphia, PA 19107

Linda W. Little 5000 Hermitage DR. Raleigh,NC 27612

Marvin I. Lewis 6504 Bradford Terrace Philadelphia, PA 19149

Jane Lee 183 Valley Rd. Ecters.PA 17319

Bishop, Lieberman & Cook ATIN: J. Lieberman, Esquire 1155 Avenue of the Americas New York, New York 10036

Walter W. Cohen, Consumer Ad-ocate Department of Justice Strawberry Square, 14th Floor Harrisburg, PA 17127

Edward O. Swartz Board of Supervisors Londonderry Township RFD #1 Geyers Church Rd. Middletown, PA 17057

Robert L. Knupp, Esquire Assistant Solicitor Enupp and Andrews P.O. Box P 407 N. Front St. Harrisburg, PA 17108

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

Mr. Edwin Kintner Eaecutive Vice President General Public Utilities Nuclear Corp. 100 Interpace Parkway Parsippeny, NJ 07054

Ad Crable Lancaster New Era 8 West King Street Lancaster, PA 17601