DISTRIBUTION:
DN 50-320
NRC PDR
Local PDR
TMI Site r/f
TMI HQ r/f
BJSnyder
WDTravers
TCPoindexter
MMasnik
RWEller
PGrant
RCook
CCowgill
LChandler
ACRS
HRDenton
I&E
Service List
M-Town Office

April 12, 1985
NRC/TMI 85-027

Docket No. 50-320

GPU Nuclear Corporation
ATTN: Mr. F. R. Standerfer
Vice President/Director, TMI-2
P.O. Box 480
Middletown, PA 17057

Dear Sir:

Subject: Recovery Operations Plan Change No. 28

Reference: Letter from F. R. Standerfer, 4410--84-L-0200 to W. D. Travers dated April 5, 1985 (ROP Change Request 30)

The referenced letter proposed changes to Section 4.6.1.4 of the Recovery Operations Plan to allow an alternate method of verifying that containment building pressure is below atmospheric pressure when the building is open to the atmosphere.

Based on our enclosed safety evaluation we have concluded that the proposed change is justified and will not present an undue risk to the health and safety of the public. We therefore approve the proposed change and are enclosing the amended page for Recovery Operations Plan Change No. 28. We also reviewed your current reactor building entry procedure 4210-OPS-3240.01 "Reactor Building Entry" and verified that whenever airlocks are open, procedural controls are in place which require continuous indication of pressure differential between the reactor building and the atmosphere.

Sincerely,

ORIGINAL SIGNED BY:
William D. Travers

William D. Travers
Deputy Program Director
TMI Program Office

Enclosure: As stated

cc: T. F. Demmitt
R. E. Rogan
S. Levin
W. H. Linton
J. J. Byrne
A. W. Miller

	TMIPO	TMIPO
	GKalman:wa	WDTravers
	4/12/85	4/12/85

ATTACHMENT

SAFETY EVALUATION

Introduction

When the containment (reactor building) is closed to the environment, it is maintained several inches water gauge negative with respect to the outside atmosphere. Reactor building negative pressure is required to ensure that any airflow or leakage will be into containment. This ensures that any airborne radiation in containment will not be released to the environment inadvertently. The negative pressure is maintained by the reactor building purge system which discharges air from the reactor building to the environment through filters and a monitored pathway. Periodic verification of negative pressure is readily achieved using instrument readouts in the control room. When both doors of a containment airlock are opened to facilitate specific tasks, the negative containment pressure is decreased to a point where control room instrumentation sensitivity is insufficient to determine whether reactor building pressure is negative with respect to the environment. This evaluation reviews the licensee proposal to use an alternate means to monitor reactor building pressure during periods when airlocks are open.

Evaluation

The reference point for the control room instrumentation is located in the auxiliary building, an area which is maintained at a slightly negative pressure with respect to the environment. This arrangement introduces a degree of conservatism to the control room indicators. It is possible for the control room instruments to indicate a positive reactor building pressure (with respect to the auxiliary building) when, in fact, the reactor building pressure is negative with respect to the environment. Whenever reactor building airlocks are open, the purge system maintains a negative pressure in the reactor building. However, the pressure is only slightly negative and comparable to the negative pressure in the auxiliary building. In this condition, the control room pressure monitors do not provide satisfactory indication of reactor building negative pressure.

The operation of reactor building airlocks is controlled by Operating Procedure 4210-OPS-3240.01. This procedure is approved by the NRC TMI Program Office per Technical Specification requirements listed in section 6.8.2. The airlock operating procedure requires that during periods when the airlock is open, continuous local air flow indicators are in service. Personnel are stationed at the airlock continuously to monitor air flow and to close the airlock if air flow is observed outward from the building. As additional precautions, the procedure requires a reactor building air sample to be taken and analyzed prior to opening the airlock. During the time the airlock is open, a continuous airborne radiation monitor is in service outside the airlock.

Conclusion

Based on the above evaluation, procedural control of reactor building pressure is desirable during periods when the airlock is open. The proposed change allows an alternate method to verify that containment pressure is negative with respect to the environment. It does not reduce any safety margins or result in increased effluents to the environment. The proposed change falls within the scope of activities previously considered in the Programmatic Environment Impact Statement (PEIS).

SURVEILLANCE REQUIREMENTS

INTERNAL PRESSURE

4.6.1.4.a The primary containment internal pressure shall be determined to be within the limits at least once per 12 hours, via the instrumentation listed in Table 4.3-7, except during periods when the containment building is open to the atmosphere.

4.6.1.4.b During periods when the containment building is open to the atmoshpere, methods to ensure airflow into the containment building shall be implemented in accordance with procedures approved pursuant to Specification 6.8.2.

AIR TEMPERATURE

4.6.1.5 The primary containment average air temperature shall be the arithmetical average of the temperatures at the following locations and shall be determined at least once per 24 hours.

Location

a. RB nominal Elev. 350' (1 temperature indication)
b. RB nominal Elev. 350' (1 temperature indication)
c. RB nominal Elev. 350' (1 temperature indication)

CONTAINMENT PURGE EXHAUST SYSTEM

4.6.3 The Containment Purge Exhaust System shall be demonstrated OPERABLE:

a. At least once per 31 days during operation by verifying that the Purge Exhaust System in the normal operating mode meets the following conditions:

   1. Filter Pressure Drop: The d/p across the combined HEPA filters shall not exceed 6 inches water gauge while the system is operating.

b. At least once per 18 months by verifying that the ventilation system meets the following conditions:

   1. Visually inspect each filter train and associated components in accordance with Section 5 of ANSI N510-1980, as required by Regulatory Position C.5.a of Regulatory Guide 1.52, Revision 2, March 1978. The inspection should be performed prior to the DOP test of this section.

   2. Flow Test: Exhaust flow rate shall be within 18,000 cfm to 27,000 cfm operating band for each filter train with one filter train and one exhaust fan operating. Testing shall be in accordance with ANSI N510-1980, Section 8.3.1, paragraphs 3 and 4.

   3. DOP Test: Each filter train shall be tested in accordance with Section 10 of ANSI N510-1980, as required by Regulatory Position C.5.c of Regulatory Guide 1.52, Revision 2, March 1978.

NOTE: Installed system flow instrumentation is adequate for the test described in Section 4.6.3.b.3 above.