

DISTRIBUTION:

DN 50-320
NRC PDR
Local PDR
DCS
THI Site r/f
THI HQ r/f
B. Snyder
W. Travers
T. Poindexter
M. Masnik
R. Weller
P. Grant
R. Cook
H. Denton
L. Chandler, ELD
I&E (3)
ACRS (16)
M-Town Office
Service List

January 17, 1985
NRC/THI-84-005

Docket No. 50-320

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

Dear Sir:

Subject: Three Mile Island Nuclear Station Unit 2
Operating License No. DPR-73
Docket No. 50-320
Recovery Operations Plan Change No. 24

Reference: Letter from F. R. Standerfer to W. D. Travers, 4410-84-L-0223
dated December 20, 1984 (ROP change request 26)

The referenced letter proposed changes to the Recovery Operations Plan requirements regarding exhaust flowrate requirements for the fuel handling building ventilation system. The change was submitted to support opening of the fuel transfer tubes for fuel transfer system alignment.

Based on our enclosed safety evaluation we have concluded that the proposed changes will not present an undue risk to the health and safety of the public. We therefore approve the proposed changes and are enclosing the avended pages for Recovery Operations Plan change No. 24.

- 5 -

William D. Travers
Deputy Program Director
THI Program Office

Attachments: As stated

cc: W. Rogan
R. Freese
A. Hiller
S. Levin
T. Demmitt
Service List
J. Byrne

8501290176 850117
PDR ADOCK 05000320
P PDR

OFFICE	THI HQ	THI HQ	THI HQ			
RECEIVED	1/17/85	1/17/85	1/17/85			
DATE	1/17/85	1/17/85	1/17/85			

Attachment
Safety Evaluation

Introduction

The Fuel Handling Building (FHB) Ventilation Exhaust System which takes suction on a network of ducts, passes the air through a series high efficiency particulate absolute (HEPA) filters and exhausts via the penthouse to the unit-II vent stack. The HEPA filters are tested prior to installation, after installation, and periodically thereafter to assure that any effluents are minimized. The exhaust system maintains the pressure within the FHB negative with respect to the environment to assure leakage is inward. The current flowrate requirement of 36,000 cfm provides for a changeover of building air on an approximately hourly basis. This provides for prompt recovery after an event which could cause airborne activity in the building.

Discussion

The proposed change to the surveillance requirement affects only the exhaust flowrate while the fuel transfer tube(s) are open. The surveillance requirement regarding negative pressure remains unchanged thereby assuring that leakage is inward also remains unchanged.

The system flowrate requirements for monthly surveillance tests will remain unchanged. When the fuel transfer tubes are open a portion of the airflow from the FHB will pass thru the tubes into the Reactor Building (RB) and be processed by the RB Purge Exhaust System. The flowrate requirement will be changed to 26,000 cfm to allow for up to 10,000 cfm being processed through the RB purge system. The rate of changeover of building (FHB) air will not be adversely affected due to a portion of the air being exhausted through the reactor building pathway. The filtration efficiency and test requirements for the RB Purge Exhaust Filters are the same as the FHB Exhaust Filters. Thus, any effluents will be maintained ALARA (as-low-as-reasonably-achievable).

Conclusion

The proposed change does not have an adverse effect on maintenance of negative pressure, building turnover rate or filtration efficiency. Thus it does not reduce safety margins or result in increased effluents to the environment. The proposed change in the FHB Exhaust flowrate will only be implemented during periods when one or both fuel transfer tubes are open for transfer system alignment. The impact of the proposed activity falls within the scope of consequence previously considered in the PEIS.

SURVEILLANCE REQUIREMENTS

4.9 LIQUID RADWASTE STORAGE

FUEL HANDLING BUILDING/AUXILIARY BUILDING AIR CLEANUP SYSTEMS

- 4.9.12.1 The Fuel Handling Building Air Cleanup Exhaust System shall be demonstrated OPERABLE:
- A. At least once per 31 days by verifying that the Air Cleanup Exhaust System in the normal operating mode meets the following conditions:
- ** 1. Exhaust Flow Rate: With two filter trains and two exhaust fans in operation in the Fuel Handling Building, flow rate shall be within the 36,000 cfm to 54,000 cfm operating band.
 - 2. Filter Pressure Drop: While operating within the flow rate specified in 4.9.12.1.A.1 above, the d/p across the combined HEPA filters and charcoal adsorbers shall not exceed 6 inches water gauge.
 - 3. Fuel Handling Building Pressure: Demonstrate that the system is capable of achieving a negative pressure within the building equal to or greater (more negative) than 1/8" water gauge with respect to atmospheric. It may be necessary to close doors and other building openings to achieve the required value.
- 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 flow and DOP tests 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. Flow through the filter train being tested shall be as prescribed for the flow test in Section 4.9.12.1.B.2 above.

NOTE: Installed system flow instrumentation is adequate for the test described in 4.9.12.1.B.3 above.

- ** with the fuel transfer tubes open and the Fuel Pool not flooded in accordance with NRC approved procedures, the FHB exhaust flowrate shall be maintained between 26,000 cfm and 54,000 cfm. This condition applies only during system operation (not during system surveillance testing) performed to the criteria of Tech Spec 4.9.12.1.A.

Dr. Thomas Hurley
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
621 Park Avenue
King of Prussia, PA 19406

John F. Wolfe, (Esq.), Chairman,
Administrative Judge
3429 Shephard St.
Inezy Chase, MD. 20616

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

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

Karin W. Corler
Assistant Attorney General
505 Executive House
P.O. Box 2357
Harrisburg, PA 17129

Dr. Judith M. Johnson
Environmental Coalition on
Nuclear Power
423 Brinkley Ave.
State College, PA 16801

George F. Troubridge, Esq.
Shaw, Pittman, Potts and
Troubridge
1800 M. St., NW,
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 Hochmeyer
Dauphin County Commissioner
P.O. Box 1295
Harrisburg, PA 17106-1295

John E. Wintich, 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 9
Front & Market Streets
Harrisburg, PA 17101

U.S. Environmental Protection Agency
Region III Office
ATTN: III Superintendent
Lutts Building (15th Floor)
614 & Walnut Streets
Philadelphia, PA 19106

Thomas W. Gervase, Director
Bureau of Radiation Protection
Department of Environmental Protection
P.O. Box 2000
Harrisburg, PA 17100

Willsie Blythe, Site Manager
U.S. Department of Energy
P.O. Box 88
Piedstown, PA 17057-0088

David J. McGuff
Division of Three Mile Island Program
ME-23
U.S. Dept. of Energy
Washington, D.C. 20545

William Lochtekt
104 Geary Laboratory
Pennsylvania State University
University Park, PA 16802

Randy Myers, Editorial
The Patriot
812 Market St.
Harrisburg, PA 17105

Robert S. Berman
Babcock & Wilcox
Nuclear Power Generation Division
Suite 220
7815 Woodmont Ave.
Bethesda, MD. 20814

Michael Churchhill, Esq.
PILCO
1218 Walnut St., Suite 1622
Philadelphia, PA 19107

Linda W. Little
8003 Hermitage Dr.
Galeton, PA 17122

Martin J. Lewis
6504 Bradford Terrace
Philadelphia, PA 19149

John Lee
182 Valley Rd.
Eilers, PA 17319

J.B. Liberman, Esquire
Berlack, Israel, Liberman
26 Spruway
New York, NY 10004

Walter W. Cohen, Consumer Advocate
Department of Justice
Strawberry Square, 14th Floor
Harrisburg, PA 17122

Edward D. Swartz
Board of Supervisors
Lonsberry Township
875 #1 Gayers Church Rd.
Piedstown, PA 17057

Robert L. Knapp, Esquire
Assistant Attorney
Knapp and Andrews
P.O. Box P
407 N. Front St.
Harrisburg, PA 17102

John Lertz, Esquire
Pennsylvania Public Utilities Comm.
P.O. Box 2285
Harrisburg, PA 17100

Honorable Mark Cohen
512 E. Main Capital Building
Harrisburg, PA 17100