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AUG 18 1982

NRC/TMI-82-047

Docket No. 50-320

Mr. Bahman Kanga
Director, TMI-2
GPU Nuclear Corporation
P.O. Box 480
Middletown, PA 17057

Dear Mr. Barton:

Subject: Recovery Operations Plan Change No. 15 (Recovery Operations Plan Change Request No. 12)

References: (a) Letter from J.J. Barton to L.H. Barrett, same subject, dated April 21, 1982, 4400-82-L-0052.
(b) Letter from J.J. Barton to L.H. Barrett, same subject, dated July 2, 1982, 4400-82-L-0087.

The Nuclear Regulatory Commission Staff has reviewed your Recovery Operations Plan Change Request No. 12 forwarded in reference (a) and your amended Recovery Operations Plan Change Request No. 12 forwarded in reference (b). The change contains, in part, various editoral changes in the sections concerning the Control Room Emergency Air Cleanup System, the Fuel Handling Building Air Cleanup System, and the Auxiliary Building Air Cleanup System. In addition, the change revises the surveillance requirements for the above systems to more nearly reflect actual system requirements, updates references to the most recently issued ANSI Standards and, in general, clarifies the surveillance requirements.

The staff approves your change request since the changes do not represent a reduction in safety and in some cases more stringent requirements are imposed to insure the systems are operating properly. In addition, the clarification of the requirements will allow less chance for misinterpreting the requirements which also enhances safety.

We therefore, are enclosing the amended sections (ROP Change No. 15) to the Plan.

original signed by

Lake H. Barrett
Deputy Program Director
TMI Program Office

Enclosure: As stated

cc: J. Barton
J. Larson
L. King
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4.7.6.1.3 A Special Report shall be prepared and submitted to the Commission within 10 days if evidence of degradation is noted during an inspection. This report shall describe the extent and nature of the degradation and the plans and schedule for restoring the dike and errosion protection to a status equivalent to the original design provisions.

4.7.7 CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM

4.7.7.1 The Control Room Emergency Air Cleanup System shall be demonstrated OPERABLE:

a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 100°F.

b. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes; and the pressure drop across the combined HEPA filters and charcoal adsorbers banks is less than six (6) inches water gauge while operating.

c. 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 that the cleanup system satisfies the in-place testing acceptance criteria and uses the test procedures of Regulatory Positions C.5.a, C.5.c* and C.5.d* of Regulatory Guide 1.52, Revision 2, March 1978, and the system flow rate is 14,350 cfm ± 10%.

   2. Verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Guide 1.52, Revision 2, March 1978, when performing Methyl Iodide, 30°C, 95% RH testing per Table 5-1 of ANSI N509-1980 meets an acceptable criteria of 5% penetration maximum.

   3. Verifying a system flow rate of 14,350 cfm + 10% during system operation when tested in accordance with ANSI N510-1980, Section 8.3.1 Paragraphs 3 and 4.

d. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, when performing Methyl Iodide, 30°C, 95% RH testing per Table 5-1 of ANSI N509-1980 meets an acceptance criteria of 5% penetration maximum.

*The prerequisites of Section 10.3 and 12.3 of ANSI-N510-1980 do not apply.

CONTROL ROOM EMERGENCY AIR CLEANUP SYSTEM (Continued)

e. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filter and charcoal adsorber banks is less than 6 inches water gauge while operating the system at a flow rate of 14,350 cfm ± 10%.

2. Verifying that on a control room air inlet radiation test signal or chlorine detection test signal, the system automatically switches into a recirculation mode of operation with flow through the HEPA filters and charcoal adsorber banks.

3. Verifying that the system maintains the control room at a positive pressure of greater than or equal to 1/10 inch water gauge relative to the outside atmosphere during system operation.

f. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1980* Section 10 while operating the system at a flow rate of 14,350 cfm ± 10%.

g. After each complete or partial replacement of a charcoal adsorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1980,* Section 12, while operating the system at a flow rate of 14,350 cfm ± 10%.

*The prerequisites of Section 10.3 and 12.3 of ANSI-510-1980 do no apply.

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 inch 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.

4. 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 inch water gauge with respect to atmospheric. It may be necessary to close doors and other building openings to achieve the required value. A test instrument, such as an inclined manometer or equivalent, shall be used in the performance of this test.

c. After structural maintenance of the HEPA filter or charcoal adsorber housings, or following fire or chemical release in any ventilation zone communicating with the system by verifying that the ventilation system meets the following conditions:

1. Flow Test: Reverify exhaust flow rate for the affected filter train(s) per Section 4.9.12.1.b.2.

2. Filter Pressure Drop: Reverify the filter pressure drop surveillance prescribed in Section 4.9.12.1.a.2 for the affected filter train(s)

3. DOP Test: Each affected filter train shall be retested in accordance with Section 4.9.12.1.b.3.

d. After each complete or partial replacement of a HEPA filter bank by verifying that the ventilation system meets the following conditions:

1. DOP Test: Each affected filter train shall be retested in accordance with Section 4.9.12.1.b.3.

NOTE: Supply fans may be operated as desired except that the number of operating supply fans shall not exceed the number of operating exhaust fans.

4.9.12.2 The Auxiliary 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 Auxiliary building flow rate shall be within the 54,000 cfm to 80,000 cfm operating band.

2. Filter Pressure Drop: While operating within the flow rate specified in 4.9.12.2.a.1 above, the d/p across the combined HEPA filters and charcoal adsorbers shall not exceed 6 inches water gauge.

3. Auxiliary Building Pressure: Demonstrate that the system is capable of achieving negative pressure within the building equal to or greater (more negative) than 1/8 inch 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 27,000 cfm to 40,000 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 4.9.12.2.b.2 above.

NOTE: Installed system flow instrumentation is adequate for the test described in 4.9.12.2.b.3. above.

4. Auxiliary 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 inch water gauge with respect to atmospheric. It may be necessary to close doors and other building openings to achieve the required value. A test instrument, such as an inclined manometer or equivalent, shall be used in the performance of this test.

c. After structural maintenance of the HEPA filter or charcoal adsorber housing, or following fire or chemical release in any ventilation zone communicating with the system by verifying that the ventilation system meets the following conditions:

1. Flow Test: Reverify exhaust flow rate for the affected filter train(s) per Section 4.9.12.2.b.2.

2. Filter Pressure Drop: Reverify the filter pressure drop surveillance prescribed in Section 4.9.12.2.a.2 for the affected filter train(s).

3. DOP Test: Each affected filter train shall be retested in accordance with Section 4.9.12.2.b.3.

d. After each complete or partial replacement of a HEPA filter bank by verifying that the ventilation system meets the following conditions:

1. DOP Test: Each affected filter train shall be retested in accordance with Section 4.9.12.2.b.3.

NOTE: Supply fans may be operated as desired except that the number of operating supply fans shall not exceed the number of operating exhaust fans.