Met-Ed / GPU

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April 18, 1980
TLL 191

TMI Program Office
Attn: J. T. Collins, Deputy Manager
U. S. Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, Pa. 17057

Dear Sir:

Three Mile Island Nuclear Station, Unit II (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Comments Concerning NUREG 0662

Enclosed, please find the Metropolitan Edison Company comments on NUREG 0662, Environmental Assessment for Decontamination of the Three Mile Island Unit II Reactor Building Atmosphere and Addenda. These comments are submitted to meet the close of comments date of April 18, 1980.

Sincerely,

/s/ G. K. Hovey

G. K. Hovey
Director, TMI-II

GKH:LJL:hah

Enclosure

cc: [redacted]

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METROPOLITAN EDISON COMMENTS ON NUREG-0662

1. Page 1-3, paragraph 2, line 11: In addition to accidental small releases, there will be small releases associated with each airlock entry and with each reactor building entry.

2. Page 1-5, Table 1-1: Occupational dose for the selective absorption process system is approximately the same as for the cryogenic processing system, since both systems separate and store the Krypton 85 for a period of time.

3. Page 3-1, paragraph 1, line 8: The average concentration of Krypton 85 based on analyses taken since the November 13, 1979 submittal is about 1.04 μCi/cc.

4. Page 3-2, paragraph 1, line 2: Less restricted access to the reactor building is definitely required.

5. Page 4-5, Table 4-1: For accidental releases, Reg Guide 1.145 requires the use of 0.5% or 5% probable meteorological conditions. The appropriate number for TMI is 6.8×10^{-4} sec/m^3.

6. Page 6-1, paragraph 1, line 3: The system modification will allow throttling of flow from about 50 CFM to 1000 CFM, not just stepwise flow increases.

7. Page 6-3, paragraph 2, line 7: Only periodic entry into the auxiliary building is required during purge. Continuous stationing of an auxiliary operator in the auxiliary building is not required, since all major components associated with the purge are controlled from the control room.

8. Page 6-4, paragraph 3, lines 4-9: 6.7×10^{-6} sec/m^3 does not represent the average annual meteorological dispersion condition at TMI. This number was imposed by the NRC as a Technical Specification condition and is conservative by at least a factor of two (2).

9. Page 6-5, paragraph 1, line 6: Maximum skin dose off-site may not occur at the site boundary, but at a distance to about 2 miles.

10. Page 6-26, paragraph 1, line 12: Metropolitan Edison agrees that extra steps may be able to be taken during design, engineering, and construction stages to reduce worker exposure from a cryogenic processing system. The extent of these changes could, however, significantly increase the already lengthy 20-30 month time period estimated for system implementation.

11. Page 6-33, line 23: Metropolitan Edison does not believe that a selective absorption system can be installed in one and one-half years, unless all NRC Regulatory Guide and Code Requirements are waived. It is assumed that the NRC agrees, since this paragraph mentions imposing only "standard industrial criteria."

12. Page 6-35, paragraph 2, line 10: Metropolitan Edison believes that any Krypton 85 storage system would have significant surveillance

12. and maintenance requirements. For this reason, occupational exposure associated with the selective absorption process should be approximately the same as for the cryogenic processing system.

13. Page 6-37, paragraph 2, line 5: The absorber/stripper column is not likely to be available "off-the-shelf." Special construction of this column would be required.

METROPOLITAN EDISON COMMENTS ON NuREG-0662 Addendum 2

1. Page 6-39, paragraph 1, line 6: The purging alternative using the hydrogen control subsystem also was planned for use only under meteorological conditions favorable to atmospheric dispersion.

2. Page 6-39, paragraph 1, line 8: The reactor building purge system is not capable of low rates of 5,000 - 50,000 CFM unless modifications are made. Even after a modification is made to allow manual throttling of the fan vortex dampers, Metropolitan Edison is not certain that flow rates as low as 5,000 CFM can be attained. This concern was expressed to NRC representatives at a meeting on March 20, 1980.

3. Page 6-40, paragraph 2, line 4: Each train is capable of a single 25,000 CFM flow rate. By modifying the fan vortex damper control, lower flow rates may be obtained. Flow rates as low as 5,000 CFM may be possible, but the lower flow throttling limit will not be known until the system is modified and tested. Metropolitan Edison is proceeding with modifications and with procedure writing to support use of the reactor building purge system. The procedure is being written to use only the "B" reactor building purge train.

4. Page 6-41, paragraph 2, line 4: The hydrogen control system must be used until purging at the minimum reactor building purge system flow rate can be accomplished without exceeding the range of the stack radiation monitor (HPR-219a). Based on not exceeding a stack Krypton 85 concentration of 2×10^{-2} µCi/cc and using 5,000 CFM flow, use of the reactor building purge system can start when reactor building air Krypton concentration is 0.46 µCi/cc. The lower flow limit capability of the reactor building purge system will determine the point at which a shift to this system can be accomplished. As a result, the time of purge using the 1000 CFM is not necessarily fixed at 50 hours.

5. Page 6-45, paragraph 1, line 3: Metropolitan Edison agrees that instantaneous off-site concentrations of Krypton 85 will exceed the concentration specified in 10CFR20, Table B. However, the Table B concentrations are limits for average concentration. Therefore, the requirements and intent of 10CFR20 will be met.

6. Page 6-46, note b, line 3: The last five words should read " and t is in hours."

7. Page 6-46, note d: The units of "3" in the numerator should be mrem/hr.

8. Page 6-47, paragraph 1, line 13: Although the April/May meteorological conditions are historically more favorable than summer conditions, Metropolitan Edison believes that the purge could be conducted safely and expeditiously during the summer. However, we agree that it is prudent to complete the purge as soon as possible.