

GPU Nuclear Corporation

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January 9 , 1989 4410-88-L-0188/0439P

US Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

Dear Sirs:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Technical Specifications for
Post-Defueling Monitored Storage

Attached for NRC information is a matrix which compares the proposed Technical Specifications included in the Post-Defueling Monitored Storage Safety Analysis Report (reference GPU Nuclear letter 4410-88-L-0068 dated August 16, 1988) with the current Recovery Technical Specifications. This matrix is provided to facilitate the NRC Staff review of our submittal.

Sincerely,

M. B. Roche
Director, TMI-2

RDW/emf

Attachment

cc: R. J. Conte - Senior Resident Inspector, TMI
W. T. Russell - Regional Administrator, Region I
J. F. Stolz - Director, Plant Directorate IV
L. H. Thonus - Project Manager, TMI Site

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		MODE 1	MODE 2	MODE 3	MODE 4	
TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	CURRENT	POST- DEFUELING	DEFUELING AND FUEL SHIPMENT COMPLETE	POST-DEFUELING MONITORED STORAGE (POMS)	COMMENTS
APPENDIX A TECH. SPECS.						
 Borated Cooling Water Injection and Boron Concentration - Reactor Coolant System 	3.1.1.1 & 3.1.1.2	х				
2. Minimum Boron Concen- tration - Fuel Transfer Canal	3.1.1.3	X				
3. Minimum Boron Concen- tration - Spent Fuel Pool	3.1.1.4	x	x			
4. Neutron Monitoring Instrumentation	3.3.1.1	x				
5. Radiation Monitoring	3.3.3.1	x	x	x		As required in Table 4.3-3 of the Recovery Operations Plan. Additional radiation monitoring requirements are addressed in the Appendix B Tech. Specs.
6. Meteorological Instrumentation	3.3.4.4	х	х			
7. Essential Parameters Monitoring Instrumen- tation	3.3.3.5	x				
8. Chlorine Detection System	3.3.3.7	х				
9. Fire Detection Instrumentation	3.3.3.8	×	X	×		Sect. 7.2.2.2.b of the PDMS SAR states that the zone detection system originally provided at IMI—will remain operational throughout operational areas of the plant during Mode 4. A common visual and audible alarm will be installed to provide monitoring capabilities and remote fire alarm indication in IMI-1.
10. Reactor Vessel Water Level Monitoring	3.4.2	x				
11. Pressure/Temperature Limits RCS	3.4.9	x				

TECHNICAL SPECIFICATION COMPARISON MATRIX

		MODE 1	MODE 2	MODE 3	MODE 4	
TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	CURRENT	POST- DEFUELING	DEFUELING AND FUEL SHIPMENT COMPLETE	POST-DEFUELING MONITORED STORAGE (PDMS)	COMMENTS
APPENDIX A TECH. SPECS.						
12. Communications - Control Room	3.5.1	x				
13. Containment Integrity (Double Valve and Airlock Door Isolation)	3.6.1.1 & 3.6.1.3	x				
14. Containment Isolation (Single Valve and Airlock Door Isolation)	3.6.1.2 & 3.6.1.6		×	x	X	
15. Reactor Building Internal Pressure Limits	3.6.1.4	x	x	x		During Mode 4, active pressure control of the RB will not be maintained. A Containment Atmospheric Breather will be added to provide passive pressure control of the RB relative to ambient atmospheric pressure (Ref. Sect. 1.2.3.3 of the PDMS SAR).
16. Reactor Building Air Temperature	3.6.1.5	х				
17. Containment Purge Exhaust System Operability	3.6.3.1	x	x	x		Sect. 7.2.1.3 of the PDMS SAR stated that the Containment Purge Exhaust System will be maintained in an operable condition to support Mode 4 activities (e.g., surveillance entries, maintenance).
18. Flood Protection	3.7.6.1	х	x	x		Sect. 1.4 of the PDMS SAR states that existing unit flood protection capabilities will be maintained for Mode 4. Specific design features are:
						-Reactor Bldg- No external openings in the RB below 305' elev. (ground level). -FH Bldg- No external openings in TMI-2 FHB that require flood protection. Railroad door in the IMI-1 por- portion of the FHB is designed to be watertight.
						-Control Bldg- Flood panels and doors providedAux Bldg- Shield door is watertightDG Bldg- Flood panels watertight.

		I_MODE 1	MODE 2	MODE 3	HODE 4	
TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	CURRENT	POST- DEFUELING	DEFUELING AND FUEL SHIPMENT COMPLETE	POST-DEFUELING MONITORED STORAGE (PDMS)	COMMENTS
APPENDIX A TECH. SPECS.						
19. Control Room Emergency Air Cleanup System	3.7.7.1	x				
20. Sealed Source Integrity	3.7,9.1	x	x	X		The PDMS SAR does not address sealed sources. There may be a limited need for sealed sources during Mode 4 for calibration of radiation monitors. Site procedures will address the use and calibration of sealed sources, if necessary.
21. Fire Suppression Water System	3.7.10.1	X	×	*		NRC approval of ISCR 57 will delete the IMI-2 required water sources. Sect. 7.2.2.2.a of the PDMS SAR stated that the yard fire main will be maintained pressurized using the station fire pumps in IMI-1. The IMI-2 Fire Protection System draws its supply water from the tie-in to the yard main.
22. Deluge/Sprinkler Systems	3.7.10.2	x	×	x		NRC approval of TSCR 57 will delete this specification. Sect. 7.2.2.2 of the PDMS SAR states that the fire service loop which runs through the Diesel Generator Bldg. AFHB. and Control Bldg will be isolated during Mode 4. Drain valves will be installed and ccapability will exist to quickly energize the systems. The deluge systems for the Aux. Transformers and east wall curtain are maintained in the Turbine Building.
23. Halon System	3.7.10.3	х				NRC approval of TSCR 57 will delete this specifi- cation. Halon system will be deactivated during Mode 4.
24. Fire Hose Stations	3.7.10.4	×	X	X		NRC approval of TSCR 57 will reduce the required fire hose stations to the Reactor Bldg only. Sect. 7.2.2.1 of the PDMS SAR states that hose reel and hose cabinet stations shall be provided in areas of the facility where systems or equipment are maintained operational for Mode 4.
25. Penetration Fire Barriers	3.7.1.1	x	×	*		NRC approval of TSCR 57 will delete this specifi- cation. PDMS SAR does not address this area. Fire protection organization does not plan to perform any routine surveillance of penetration fire barriers during Mode 4.

		MODE 1	MODE 2	MODE 3	MODE 4	
TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	CURRENT	POST- DEFUELING	DEFUELING AND FUEL SHIPMENT COMPLETE	POST-DEFUELING MONITORED STORAGE (POMS)	COMMENTS
APPENDIX A TECH. SPECS.						
26. Electrical Power System	3.8	x				
27. Spent Fuel Pool Water Level Monitoring	3.9.1 & 3.9.2	X	X			
28. Fuel Transfer Canal Water Level Monitoring	3.9.3 & 3.9.4	х				
29. Fuel Ha dling Building & Auxiliary Building Ventilation Systems Operability	3.9.12.1 & 3.9.12.2	x	x	X		Sects. 7.2.6.1 and 7.2.6.2 of the PDMS SAR state that the FHB and Aux Bldg ventilation systems will be maintained in an operational status to support Mode 4 activities.
30. Accident-Generated Water	3.9.13	X	X	X		Procedures require NRC approval. Sect. 1.1.3 of the PDMS SAR states that because the issue of disposal of AGW is a separate, well-bounded activity, it is not discussed in the PDMS SAR. Additionally, the PDMS SAR states that disposal of AGW will likely extend into Mode 4 but will not materially interefere with maintaining the TMI-2 plant in a safe, monitored PDMS condition.
31. Heavy Load Handling Restrictions in Reactor Building	3.10.1	x				
32. Heavy Load Handling Restrictions in Fuel Handling Building	3.10.2	x	X			
33. Responsibility	6.1.1	X	х	x	X	
34. GPUNC Organization	6.2.1	x	x	x	X	Reduced in scope for Mode 4. In addition, the Tech. Specs, refer to the PDMS SAR org, chart rather than a separate organization plan.
35. TMI-2 Organization	6.2.2		1800			
a. Minimum Shift Crew Composition	6.2.2.a	x		5 10 10		
b. Licensed Operator in Control Room When Fuel is in Reactor	6.2.2.b	x				

		MODE 1	MODE 2	MODE 3	MODE 4	
TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	CURRENT	POST- DEFUELING	DEFUELING AND FUEL SHIPMENT COMPLETE	POST-DEFUELING MONITORED STORAGE (POMS)	COMMENTS
APPENDIX A TECH. SPECS.						
c. Individual Qualified in Radiation Protec- tion Procedures When fuel is in Reactor	6.2.2.c	x				
d. Site Fire Brigade	6.2.2.d	x	х	x		Unit 1 is presently manning the Site Fire Brigade and will continue to do so during Mode 4.
e. Individual Qualified in Radiation Protec- tion Procedures When Radwaste Mangement Activities are in Progress	6.2.2.e	X	X	x		Figure 10.5-2 of the PDMS SAR notes that during Mode 4, TMI-2 will continue to have a department dedicated to Waste Management/Decontamination. It is currently planned that radiation protection personnel will be supplied on a site basis during Mode 4.
36. Unit Staff Qualifica- tions	6.3	x	X	x	x	
37. Training	6.4	x	x	X	X	There will be no IMI-2 Tech. Spec. training program requirement for Fire Brigade during Mode 4. Training of the Fire Brigade will continue to be required by the IMI-1 Tech. Specs.
38. Technical Review and Control	6.5.1	X	X	x	X	
39. Independent Review - Function	6.5.2.1 - 6.5.2.7	x	x	x	X	
40. Independent Safety Reviewers (ISRs)	6.5.2.8			X	×	This specification will become effective upon NRC approval of TSCR GO; the ISRs will perform similar functions to SRG but are not a full-time dedicated group.
41. Audits	6.5.3	x	x	х	X	The number of required audits are reduced during Mode 4.
42. Minimum Staffing Requirements for the Safety Review Group (SRG)	6.5.4	x	X			NRC approval of ISCR 60 will reduce the minimum staffing requirements by two (2) personnel in Mode 2 and delete the SRG in Mode 3.
43. Reportable Events per 10 CFR 50.73	6.6.1	x	x	x		Ouring Mode 4, violation of Tech. Spec. Action Statements will be included as part of the annual report.

TECH. SPEC. TITLE	TECH. SPEC. NUMBERS	MODE 1 CURRENT STATUS	MODE 2 POST- DEFUELING	MODE 3 DEFUELING AND FUEL SHIPMENT COMPLETE	MODE 4 POST-DEFUELING MONITORED STORAGE (POMS)	COMMENTS
APPENDIX A TECH. SPECS.						
44. Procedures	6.8	x	x	x	x	Reduced in scope for Mode 4.
45. Report Requirements	6.9	х	x	X	X	
46. Record Retention	6.10	x	X	x	x	
47. Radiation Protection Program	6.11	х	х	x	X	
48. High Radiation Area	6.12	х	X	x	X	
APPENDIX B TECH. SPECS.						
1. Liquid Effluents	2.1.1	x	x	x	X	Reduced in scope for Mode 4.
2. Gaseous Effluents	2.1.2	X	X	x	X	Reduced in scope for Mode 4.
3. Radioactive Gaseous Effluent Monitoring Instrumentation	2.1.3	х	x	x		This sect. applies to the EPICOR II ventilation system monitor only which is not a Mode 4 system
4. Environmental Monitoring (Non-radio- logical) Requirements	3.1	x	×	X		Neither the PDMS SAR nor the Environmental Evalu- ation proposes to continue this program.
5. Radiological Environ- mental Monitoring Program (REMP) Requirements	3.2	x	X	x		This program will continue as discussed in Sect. 3.5 of the PDMS Environmental Evaluation.