



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NRC INSPECTION MANUAL

ILPB

TEMPORARY INSTRUCTION 2515/065, REVISION 2

TMI ACTION PLAN REQUIREMENT FOLLOWUP

2515/065-01 PURPOSE

To provide updated information to the regions so that the TMI Action Plan Items, which require inspection verification for closeout, can be completed and to provide a record of that verification in the SIMS database.

2515/065-02 BACKGROUND

R. C. DeYoung's memorandum of April 29, 1980 to IE Directors defined the TMI Action Plan items which would likely involve inspection followup. To provide guidance for inspection followup, a series of TIs was developed as the license requirements came due. A significant portion of these inspections has now been completed. For many of the TMI Action Plan items remaining to be inspected, license requirements and due dates have been established on a plant specific basis. Therefore, the information contained in the original TIs on clarification of requirements, due dates, and specific inspection guidance has, in many cases, become obsolete. However, there still remains a need to coordinate and track completion of inspections of TMI Action Plan items at each operating plant. This TI, therefore, replaces all previous TIs for inspection followup. It is meant to be a "closeout" procedure and to consolidate all TMI inspection requirements into one procedure. It adds no new inspection requirements.

When this TI was first issued in March 5, 1984, the status of completion of each item was entered into the "Wylbur" database and tracked as required by TI 2500/5, "TMI Action Plan Tracking IE Verification of Licensee Actions." TI 2500/5, was deleted by change notice 88-19 in December 6, 1988 since the tracking of licensee actions on TMI issues had been shifted to SIMS. The SIMS database has recently been reviewed to ensure its accuracy with respect to listing all the TMI action items identified in this revised TI. To complete the TMI action item inspection requirements, the region should first review its records against the inspection completion status and requirements of the SIMS report, and update the SIMS report to reflect the current status of the region's records. The SIMS report for this TI can be obtained by requesting Option 3 of the SIMS "Main Reports Menu." The SIMS report is entitled, "Generic Issues with TI Guidance Available."

Issue Date: 07/10/90

Appendix A identifies those TMI Action Plan Items for which inspection may be required. Not all items are applicable to each facility. Since the database for this TI has been transferred from "Wylbur" to SIMS, the region should obtain the current SIMS report for each unit to determine the scope of inspection effort remaining to close items that the SIMS report indicates are still open. The region should enter any data into the SIMS report for which a record exists, but no entry has been made.

Appendix D identifies those TMI Action Plan Items for which the licensee has not implemented the specific action required. The item along with the estimated implementation date is listed. Where a "completed" is entered for the item, inspection for that item can be accomplished by the region. This information is updated on a quarterly basis and is entered into the SIMS database. The updated information is available in the SIMS report identified in Section 02 above. If the region has any problems in obtaining this information, they should contact the person identified in Section 07 of this TI.

When the licensee completes a TMI Action Item, associated procedures and equipment should be in conformance with NRC requirements and licensee commitments. For the most part, inspection will consist of procedure verification and equipment inspection. Appendix A identifies (in the footnotes) what type of inspection is required and cross-references additional information and guidance listed in Appendix C. Appendix B identifies those TMI Action Plan Items where unique inspection requirements apply. Appendix C provides a list of references for the convenience of the inspector.

The following sections specify the inspection effort for each type of inspection required.

03.01 Program/Procedure Verification

For new or revised programs/procedures:

a. Development

Verify that the programs/procedures are developed and are in conformance with licensee commitments and NRC requirements. Standard inspection procedures in Part 4200 of the NRC Inspection Manual, with emphasis on inspection procedures 42400, 42451, and 42700, can be used as guides to verify that procedures have been developed as necessary for each TMI Action Plan Item.

b. Approvals

Verify that programs/procedures are properly approved by the licensee before implementation.

c. Distribution and Availability

Verify that up-to-date programs/procedures are available for use as guides at the appropriate work stations.

d. Implementation

Verify that personnel have been trained, understand and are using the new programs/procedures. Standard inspection procedures for training, (see Part 4100) can be used as guides to verify training completion.

03.02 Equipment Inspection

a. Equipment Installation/Modification

1. Verify that the installation/modification of equipment meets licensee commitments and NRC requirements.
2. Verify that equipment changes are properly approved and controlled.
3. Verify that as-built drawings are changed to show the equipment changes.
4. Verify that the necessary procedure changes are made and that the necessary personnel training has been accomplished.

b. Operation

1. Verify that preoperational testing is complete.
2. Verify that equipment is calibrated.
3. Verify that equipment is operable, and that operational procedures are being used.

2515/065-04 GUIDANCE

04.01 TMI Action Verification

a. NRC Requirements and Licensee Commitments

References identified in Appendix A and listed in Appendix C should help guide the inspector toward the requirements associated with individual task action plan items. However, licensee requirements and commitments on specific items may vary subject to specific licensee requests and NRC approval of these requests. This information should be available in docketed correspondence.

If the inspector is not cognizant of the NRC requirements or licensee commitments for specific TMI Action Plan Items, he should contact the Licensing Project Manager (LPM) in NRR for this information. In some cases, NRR may have issued letters of clarification. The inspector should ask the LPM about these and use them in the inspections. In all cases, the licensee's commitments made in correspondence with the NRC (such as responses to NUREG-0737) will be the fundamental basis for determining acceptability.

However, the inspector should also be aware that in some cases, the licensee may have committed to do one thing, but was ordered to do something else. This information should also be available. Definitive acceptance criteria may not be available or established for all items, thus considerable inspector judgment may be required.

b. Approvals

Licensee approvals should be in accordance with technical specifications and established QA/QC controls. Therefore, the inspector should consult these references as necessary.

2515/065-05 REPORTING REQUIREMENTS

Document inspection findings in a routine inspection report, which should contain, as a minimum, the TMI Action Plan Item inspected, inspection criteria, licensee documents reviewed, and size of representative samples where appropriate.

2515/065-06 SIMS DATA ENTRY

For each TMI Action Plan Item inspected and completed, enter in SIMS database, under the "Verify Complete" column, the completion date for that item followed by the letter "C", and enter the report number in the column labeled "Inspection Report Number." There may be an instance where the region has determined that inspection for an item is not applicable at a particular unit. In that instance, the region will document the basis for the decision not to inspect that item by issuing a memorandum to file with a copy to be entered in the NRC Central Files. Then the region can enter an "NA" in both the verification and report number fields along with the accession number (obtained from Central Files) that identifies the memorandum documenting that decision. An NA entry shall be entered in the SIMS database only if it has a accession number associated with it. R
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2515/065-07 EXPIRATION

This TI will remain in effect until July 30, 1993.

2515/065-08 CONTACT

Questions regarding this TI should be addressed to Gerald Klingler (FTS 492-3077), Inspection and Licensing Program Branch, NRR.

The Licensing Project Manager for this TI is Ray Scholl, FTS 492-3021.

2515/065-09 STATISTICAL DATA REPORTING

Time spent on this TI should be entered against 2515/065 on RITS.

END

Enclosures:

1. Appendix A - TMI Action Plan Inspection Requirements
2. Appendix B - Special Instructions
3. Appendix C - References
4. Appendix D - Licensee TMI Action Plan Issue Status

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APPENDIX A

TMI ACTION PLAN INSPECTION REQUIREMENTS

<u>Current⁵ TMI Action Plan Item</u>	<u>Title</u>	<u>Required Inspection Effort (See Foot- notes)</u>	<u>References (See Foot- note 4)</u>
I.A.1.1	Shift Technical Advisor		2, 3, 7, 17, 37, 45, 46, 49, 53, 55
.1.1	On Duty	1	
.1.3	Training	1	
I.A.1.2	Shift Supervisor Admin. Duties	1	18, 33, 49
I.A.1.3	Shift Manning		1, 2, 20, 45 49, 50, 55, 57
.3.1	Limit Overtime	3	
.3.2.*	Min. Shift Crew/ Implement. Reqmt.	3	
I.A.2.1.4	Upgrade RO & SRO Training & Qual./ Modify Training	1	13, 49, 66 67, 68, 69

Footnotes:

1. Verify program/procedure development and implementation. See Section 03.01 of this Temporary Instruction.
2. Verify completion of work and operational status of equipment. See Section 03.02 of this Temporary Instruction.
3. See Special Instructions, Appendix B of this Temporary Instruction.
4. Additional information and guidance for inspection applicable to TMI Action Items is cross-referenced by the numerical list in Appendix C of this Temporary Instruction.
5. TMI Action Plan Items marked with * have been changed to agree with the number system in SIMS. Enclosure 1 to this appendix lists the TMI action number that was modified along with the number used in the original issue of this TI.

<u>TMI Action Plan Item</u>	<u>Title</u>	<u>Required Inspection Effort (See Foot- notes)</u>	<u>References (See Foot- note 4)</u>
I.C.1	Short-Term Accident & Proced. Review		3, 4, 5, 7, 9 10, 37, 49, 50
.1.1	Small-Break LOCA	1	
.1.2.B	Inadequate Core Cooling/ Revise Procedures	3	
.1.3.B	Transients & Accidents/ Revise Procedures	3	
I.C.2	Shift Relief & Turnove Proced./Implement Shift Turnover Checklist	1	49
I.C.3	Shift Supervisor Responsib. Define Supvr. & Oper. Responsibilities	1	49
I.C.4	Control Room Acces/Estab- lish Authority Limit Access	1	49
I.C.5	Feedback of Operating Experience/License to Implement Procedures	1	16, 46, 49
I.C.6	Verify Perf. of Operating Activities/Revise Perform- ance Procedures	1	26, 38, 46, 49
I.D.2	Plant Safety Parameter Display Console		20, 32, 46, 48 49, 50, 52
.2.2	Installed	3	
.2.3	Fully Implemented	3	
II.B.1	Reactor Coolant System Vents		3, 4, 7, 30 32, 34, 46, 49
.1.2	Install Vents	2	
.1.3	Procedures	1	
II.B.2	Planting Shielding		3, 7, 16, 23, 24, 25, 37, 46, 49
.2.3*	Plant Modifications/Modify	2	

<u>TMI Action Plan Item</u>	<u>Title</u>	<u>Required Inspection Effort (See Foot- notes)</u>	<u>References (See Foot- note 4)</u>
II.B.3	Post-accident Sampling		3, 7, 23, 24, 25, 32, 37, 46, 49
.3.1	Interim System	3	
.3.4*	Plant Modification/Modify	3	
II.B.4	Training for Mitigation Core Damage		13, 49
.4.2.A	Implement - Initial	1	
.4.2.B	Implement - Complete	3	
II.D.3.1	Valve Position Indication Install DF Indic. of Valve Position	2	4, 9, 37, 46, 47, 49
II.E.1.1	Auxiliary Feedwater System Eval.		12, 14, 46, 49
.1.2*	Short Term	2	
.1.3*	Long Term	2	
II.E.1.2	Aux. F/W Initiation & Flow		7, 32, 37, 46, 49
.2.1.A	Control Grade	2	
.2.1.B	Safety Grade/Implement	2	
.2.2.A	Control Grade	2	
.2.2.C	Safety Grade/Implement	2	
II.E.3.1.1	Emergency Power for Pressurizer Htrs/Upgrade Power Supply	2	7, 32, 28, 37 46, 47, 49
II.E.4.1	Dedicated Hydrogen Penetration		7, 37, 49
.4.1.2*	Recombined Procedures Reviewed & Upgraded	1	
.4.1.3*	Install	2	
II.E.4.2	Containment Isolation Dependability		32, 35, 37 46, 49
.2.1-4	Imp. Diverse Isolation	2	
.2.5.B*	Containment Pressure Setpoint/ Modifications	2	
.2.6	Containment Purge Valves/Impl.	2	
.2.7	Radiation Signal on Purge Valves	2	

<u>TMI Action Plan Item</u>	<u>Title</u>	<u>Required Inspection Effort (See Foot- notes)</u>	<u>References (See Foot- note 4)</u>
II.F.1	Accident Monitoring		21, 32, 37, 46, 49, 54
.1.2.A*	Noble Gas Monitor/Interim	3	
.1.2.B*	Iodine/Particulate Sampling (Interim)	3	
.1.2.C*	Containment High Range Monitor	3	
.1.2.D*	Containment Pressure	2	
.1.2.E*	Containment Water Level	2	
.1.2.F*	Containment Hydrogen	2	
II.F.2	Instr. for Detect. of Inadeq. Core Cooling		7, 28, 32, 37, 49
.2.2*	Subcooling Meter	1,2	
.2.4*	Install Add'l Instrumentation	2	
II.G.1.1	Power Suppl. for Press. R/V, B/V, LVL Ind./Upgrade to Emergency Sources	2	7, 32, 37, 46 47, 49
II.K.2	Orders on B&W Plants		8, 11, 32, 44, 46, 47, 49, 65
.2.8	Upgrade AFW System	2	
.2.9	FEMA on ICS	2	
.2.10	Safety-Grade Trip/Implement	2	
.2.11	Operator Training	1	
II.K.3	Final Recommendations, B&O Task Force		16, 19, 20, 22, 32, 39, 40, 41, 42, 43, 46, 49, 56
.3.1.B	Auto PORV Isolation-Test/Install	2	
.3.5.B	Auto Trip of RCPS/Modify	2	
.3.9	PIC Controller	2	
.3.10	Proposed Anticipatory Trip Modification	2	
.3.12.B	Anticipatory Trip on Turb. Trip/ Modify	2	
.3.13.B	HPCI & RCIC Initiation Levels/ Modify	2	
.3.14	ISO condenser ISO Mod.	2	
.3.15	ISO of HPIC & RCIC Mod.	2	
.3.16.B*	Challenges & Failures of R/V- Modify	2	
.3.18C	ADS Actuation/Mod.	2	
.3.19	Interlock Recir. Pump Mod. (BWR W/O JP)	2	
.3.20	Loss of Service Water (Big Rock) Point)	1	

<u>TMI Action Plan Item</u>	<u>Title</u>	<u>Required Inspection Effort (See Foot- notes)</u>	<u>References (See Foot- note 4)</u>
.3.21.B	Restart of CSS and LPCI/ Modifications	1	
.3.24	Spacing Cooling for HPCI/RCIC-Mod.	2	
.3.25.B*	Power on Pump Seals	2	
.3.27	Common Ref. Level	2	
.3.28	Qual. of ADS Accumulators	1	
.3.57	Manual Actuation of ADS	1	
III.D.1.1.1	Primary Coolant Outside Contain- ment/Leak Reduction	1	6, 37, 46, 47, 49
III.D.3.3	Inplant Radiation Monitoring		3, 7, 32, 37, 46, 49
.3.1	Provide Means to Detect Radio- Iodine	3	
.3.2	Mod. to Accurately Measure Iodine	3	
III.D.3.4.3*	Control Room Habitability Modification	3	16, 19, 31, 32,46,47,49

END

ENCLOSURE 1
NUMBER COMPARISON

<u>OLD NUMBER</u>	<u>NEW NUMBER</u>
I.A.1.3.2.A	I.A.1.3.2
II.B.2.2	II.B.2.3
II.B.3.2	II.B.3.4
II.E.1.1	II.E.1.2
II.E.1.2	II.E.1.3
II.E.4.1.1.B	II.E.4.1.2
II.E.4.1.2	II.E.4.1.3
II.E.4.2.4.B	II.E.4.2.5.B
II.F.1.1.A	II.F.1.2.A
II.F.1.2.A	II.F.1.2.B
II.F.1.3	II.F.1.2.C
II.F.1.4	II.F.1.2.D
II.F.1.5	II.F.1.2.E
II.F.1.6	II.F.1.2.F
II.F.2	II.F.2.2
II.F.2.3	II.F.2.4
II.K.3.16	II.K.3.16.B
II.K.3.25	II.K.3.25.B
III.D.3.4	III.D.3.4.3

APPENDIX B
SPECIAL INSTRUCTIONS

INSPECTION REQUIREMENTS

Current
TMI Action
Plan Item

- | | |
|------------|--|
| I.A.1.3.1 | Review and evaluate the licensee's program and policy for overtime work to assure conformance with Generic Letter 82-12. |
| I.A.1.3.2 | Review the licensee's administrative procedures to verify conformance with 10 CFR 50.54m. Review implementation. |
| I.C.1.2.B | Review procedures and verify implementation to assure conformance with Generic Letter 82-33. |
| I.C.1.3.B | Review procedures and verify implementation to assure conformance with Generic Letter 82-33. |
| I.D.2.2 | Verify installation and inspect equipment to assure conformance with Supplement 1 to NUREG-0737. |
| I.D.2.3 | Review operating procedures and verify implementation to assure conformance with Supplement 1 to NUREG-0737. |
| II.B.3.1 | Requirements for this item are specified in NUREG-0737. If portions of the requirements have been inspected using Inspection Procedures 84523, 84524, 84525, 84723, 84724, and/or 84725, the remaining requirements are to be inspected using instructions specified in Footnote 2, Appendix A, of this TI. Portions inspected under the above modules should be reported against those module numbers. All other inspection efforts should be reported against this TI. |
| II.B.3.4 | Same as II.B.3.1, above. |
| II.B.4.2.B | Covered in Inspection Procedures 41400 and 41701. No special inspection required. |
| II.F.1.2.A | Requirements for this item are specified in NUREG-0737. If portions of the requirements have been inspected using Inspection Procedures 84524, 84525, 84724, and/or 84725, the remaining requirements are to be inspected using instructions specified in Footnote 2, Appendix A, of this TI. Portions inspected under the above modules should be reported against those module numbers. All other inspection efforts should be reported against this TI. |

II.F.1.1.B.2 Same as II.F.1.1.A, above.

II.F.1.2.C Requirements for this item are specified in NUREG-0737. If portions of the requirements have been inspected using Inspection Procedures 83526 and/or 83726, the remaining requirements are to be inspected using instructions specified in Footnote 2, Appendix A, of this TI. Portions inspected under the above modules should be reported against those module numbers. All other inspection efforts should be reported against this TI.

III.D.3.3 Requirements for this item are specified in NUREG-0737. If portions of the requirements have been inspected using Inspection Procedures 83526, 83726, 84525, and/or 84725, the remaining requirements are to be inspected using instructions specified in Footnote 2, Appendix A, of this TI. Portions inspected under the above modules should be reported against those module numbers. All other inspection efforts should be reported against this TI.

END

ENCLOSURE 1

COMPLETED ERF APPRAISALS AND REGIONAL INSPECTION REPORTS

<u>Plant Site</u>	<u>ERFA Date</u>	<u>Report Nos.</u>	<u>Report Date</u>
1. San Onofre 2&3 San Onofre 1	3/26-30/84 7/22-23/86	50-362/84-07 50-206/86-23	7/9/84 10/31/86
2. Kewaunee	9/23-28/84	50-305/84-14(DRSS)	12/19/84
3. Arkansas Nuclear One 1&2	5/20-24/84	50-313/85-11	4/1/86
4. Washington Nuclear Project No. 2	3/25-29/85	50-397/85-10	7/4/85
5. Diablo Canyon 1&2	6/3-7/85	50-275/85-24	8/14/85
6. Catawba 1&2	9/3-11/85	50-413/85-39 50-414/85-36	12/23/85
7. McGuire 1&2	9/3-11/85	50-369/85-29 50-370/85-29	12/23/85
8. Palo Verde 1&2	5/19-23/86	50-528/86-15 50-529/86-15	8/22/86
9. Susquehanna	5/12-16/86	50-387/86-10 50-388/86-10	8/14/86
10. Fort Calhoun	7/7-11/86	50-285/86-20	12/22/86
11. Duane Arnold	11/17-21/86	50-331/86-20(DRSS)	2/6/87
12. Yankee Rowe	3/30-4/3/87	50-29/87-05	6/2/87
13. Hatch 1&2	12/7-10/87	50-321/87-32 50-366/87-32	3/8/88
14. Turkey Point 1&2	2/22-25/88	50-250/88-01 50-251/88-01	4/12/88
15. Summer	3/15-18/88	50-395/88-06	5/5/88
16. Clinton	4/25-28/88	50-461/88-08(DRSS)	6/21/88
17. Perry 1&2	5/2-5/88	50-440/88-06(DRSS) 50-441/88-03(DRSS)	6/22/88
18. Harris	5/16-19/88	50-400/88-12	7/27/88

<u>Plant Site</u>	<u>ERFA Date</u>	<u>Report Nos.</u>	<u>Report Date</u>
19. Fitzpatrick	5/16-20/88	50-333/88-07	7/7/88
20. Callaway	6/6-9/88	50-483/88-09(DRSS)	7/13/88
21. North Anna 1&2	6/27-30/88	50-338/88-14 50-339/88-14	8/22/88
22. Nine Mile Point 1&2	8/1-4/88	50-410/88-24 50-220/88-25	9/26/88

END

APPENDIX C

REFERENCES

This reference list and cross-references, while not all inclusive, provide additional information and guidance for inspection if needed.

1. NEW RULE - Change to 10 CFR 50.54m, "Licensed Operator Staffing at Nuclear Power Units," 48 FR 31611, published 7/11/83, effective 1/1/84.
2. COMMISSION POLICY - "Draft Commission Policy Statement on Engineering Expertise on Shift," 48 FR 33781, published 7/25/83.
3. 9/13/79 Letter from D. G. Eisenhut, NRC, to all Operating Nuclear Power Plants, dated September 13, 1979, Subject: Followup Actions Resulting from the NRC Staff Reviews Regarding the Three Mile Island Unit 2 Accident.
4. 9/27/79 Letter from D. B. Vassallo, NRC, to All Pending Operating License Applicants, dated September 27, 1979, Subject: Followup Actions Resulting from the NRC Staff Reviews Regarding the Three Mile Island Unit 2 Accident.
5. 10/10/79 Letter from D. G. Eisenhut, NRC, to All Power Reactor Licensees, dated October 10, 1979, Subject: Emergency Planning.
6. 10/17/79 Letter from D. G. Eisenhut, NRC, to All Operating Nuclear Power Plants, dated October 17, 1979, Subject: Radioactive Release at North Anna Unit 1 and Lessons Learned.
7. 10/30/79 Letter from H. R. Denton, NRC, to All Operating Nuclear Power Plants, dated October 30, 1979, Subject: Discussion of Lessons Learned Short-Term Requirements.
8. 11/7/79 Letter from R. W. Reid, NRC, to All B&W Operating Plants, dated November 7, 1979, Subject: Request for Additional Information - BAW Report 1564, "Integrated Control System Reliability Analysis."
9. 11/9/79 Letter from D. B. Vassallo, NRC, to All Pending Operating License Applicants, dated November 9, 1979, Subject: Discussion of Lessons Learned Short-Term Requirements.

10. 11/21/79 Letter from R. W. Reid, NRC, to All B&W Operating Plants, dated November 21, 1979, Subject: Request for Additional Information on Small-Break Loss-of Coolant Accident.
11. 12/20/79 Letter from R. W. Reid, NRC, to All B&W Licensees, dated December 20, 1979, Subject: Preliminary Design Approval for the Safety-Grade Anticipatory Reactor Trip (ART) on Loss-of-Feedwater and Turbine Trip.
12. 3/20/80 Letter from D. F. Ross, Jr., NRC, to All Pending W and C-E License Applicants, dated March 10, 1980, Subject: Actions Required from Operating License Applicants of Nuclear Steam Supply Systems Designed by W and C-E Resulting from the NRC Bulletins and Orders Task Force Review Regarding TMI-2 Accident.
13. 3/28/80 Letter from H. R. Denton, NRC, to All Power Reactor Applicants and Licensees, dated March 28, 1980, Subject: Qualifications of Reactor Operators.
14. 4/24/80 Letter from D. F. Ross, Jr., NRC, to All Pending B&W License Applicants, dated April 24, 1980, Subject: Actions Required from Operating License Applicants of Nuclear Steam Supply Systems Designed by B&W Resulting from the NRC Bulletins and Orders Task Force Review Regarding TMI-2 Accident.
15. 4/25/80 Letter from D. G. Eisenhut, NRC, to All Power Reactor Licensees, dated April 25, 1980, Subject: Clarification of NRC Site Requirements for Emergency Response Facilities at Each Site.
16. 5/7/80 Letter from D. G. Eisenhut, NRC, to All Operating Reactor Licensees, dated May 7, 1980, Subject: Five Additional TMI-2 Related Requirements to Operating Reactors.
17. 7/31/80 Letter from D. G. Eisenhut, NRC, to All Operating Reactor Licensees, dated July 31, 1980, Subject: Interim Criteria for Shift Staffing: Administrative Provisions for Emergency and overtime Work.
18. 11/25/80 Letter from D. G. Eisenhut to All Operating Reactor Licensees, dated November 25, 1980, Subject: Shift Staffing and Shift Supervisor Administrative Duties.
19. 4/6/81 Letter from D. G. Eisenhut to All B&W Operating Plants, dated April 6, 1981, Subject: Staff Evaluation of BWR Owners Group Report.
20. 7/20/82 Memo from Samuel J. Chilk to William J. Dircks, SECY-82-111, dated July 20, 1982, Subject: Staff Requirements for Emergency Response Capability.
21. 8/16/82 Memo from D. G. Eisenhut to Regional Administrators, dated August 16, 1982, Subject: Proposed Guidance for Calibration and Surveillance Requirements for Equipment to Meet Item II.F.1, Attachments 1, 2, and 3, NUREG-0737.

22. 2/8/83 Letter from D. G. Eisenhut to All Operating Reactor Licensees, Generic Letter 83-10, dated February 8, 1983, Subject: Resolution of TMI Action Item II.K.3.5.
23. Regulatory Guide 1.3, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors", Revision 2, June 1974.
24. Regulatory Guide 1.4, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors," Rev. 2, June 1974.
25. Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a Loss of Coolant Accident" Revision 2, December 1978.
26. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2, December 1978.
27. Regulatory Guide 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants," Revision 3, November 1978.
28. Regulatory Guide 1.75, "Physical Independence of Electric Systems," Revision 2, September 1978.
29. Regulatory Guide 1.78, "Assumption for Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Chemical Release," June 1974.
30. Regulatory Guide 1.92, "Combining Modal Responses and Spatial Components in Seismic Response Analysis," Revision 1, February 1976.
31. Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release," Revision 1, February 1977.
32. Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident," Revision 3, May 1983.
33. Regulatory Guide 1.100, "Seismic Qualifications of Electric Equipment for Nuclear Power Plants," Revision 1, August 1977.
34. Regulatory Guide 1.101, "Emergency Planning and Preparedness for Nuclear Power Reactors," Revision 2, October 1981.
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64. IE Bulletin, B-79-08 (BWR), "Events Relevant to BWRs Identified During TMI Incident," April 14, 1979.
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END

APPENDIX D

LICENSEE TMI ACTION PLAN ISSUE STATUS

<u>PLANT NAME</u>	<u>ISSUE NUMBER</u>	<u>TITLE/DESCRIPTION</u>	<u>LICENSEE IMPLEMENTATION DATE/STATUS*</u>
BEAVER VALLEY 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/31/90
BIG ROCK POINT	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	11/01/90
BIG ROCK POINT	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	11/01/90
BRAIDWOOD 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED
BRAIDWOOD 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED
BROWNS FERRY 1	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	12/31/92
BROWNS FERRY 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/31/92
BROWNS FERRY 1	II.B.3.4	PAS-PLANT MODS (LL CAT B)	12/31/92
BROWNS FERRY 1	II.E.4.2.1-4	CONTAIN ISOL DEPENDABILITY-IMPLEMENT DIVERSE ISOL	12/31/92
BROWNS FERRY 1	II.F.1.2.A	ACCIDENT MONITORING-NOBLE GAS MONITOR	12/31/92
BROWNS FERRY 1	II.F.1.2.B	ACCIDENT MONITORING-IODINE/PARTICULATE SAMPLING	12/31/92
BROWNS FERRY 1	II.F.1.2.C	ACCIDENT MONITORING-CONTAIN HIGH RANGE MONITOR	12/31/92
BROWNS FERRY 1	II.F.1.2.D	ACCIDENT MONITORING-CONTAINMENT PRESS	COMPLETED
BROWNS FERRY 1	II.F.1.2.F	ACCIDENT MONITORING-CONTAIN H2	COMPLETED
BROWNS FERRY 1	II.K.3.13.B	B&O TASK FORCE-HPCI & RCIC SYS INIT LEVEL - MODS	12/31/92
BROWNS FERRY 1	II.K.3.18.C	B&O TASK FORCE-ADS MODS	12/31/92
BROWNS FERRY 1	II.K.3.27	B&O TASK FORCE-COMMON REFERENCE LEVEL FOR BWRS	12/31/92
BROWNS FERRY 1	II.K.3.28	B&O TASK FORCE-QUAL OF ADS ACCUMULATORS	12/31/92
BROWNS FERRY 2	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	12/01/91
BROWNS FERRY 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/01/91
BROWNS FERRY 2	II.B.3.4	PAS-PLANT MODS (LL CAT B)	06/30/90
BROWNS FERRY 2	II.E.4.2.1-4	CONTAIN ISOL DEPENDABILITY-IMPLEMENT DIVERSE ISOL	04/01/90

* Information current as of 01/24/90

<u>PLANT NAME</u>	<u>ISSUE NUMBER</u>	<u>TITLE/DESCRIPTION</u>	<u>LICENSEE IMPLEMENTATION DATE/STATUS</u>
BROWNS FERRY 2	II.F.1.2.A	ACCIDENT MONITORING-NOBLE GAS MONITOR	04/01/90
BROWNS FERRY 2	II.F.1.2.B	ACCIDENT MONITORING-IODINE/PARTICULATE SAMPLING	04/01/90
BROWNS FERRY 2	II.F.1.2.C	ACCIDENT MONITORING-CONTAIN HIGH RANGE MONITOR	04/01/90
BROWNS FERRY 2	II.F.1.2.D	ACCIDENT MONITORING-CONTAINMENT PRESS	04/01/90
BROWNS FERRY 2	II.F.1.2.F	ACCIDENT MONITORING-CONTAIN H2	COMPLETED
BROWNS FERRY 2	II.K.3.13.B	B&O TASK FORCE-HPCI & RCIC SYS INIT LEVEL - MODS	COMPLETED
BROWNS FERRY 2	II.K.3.18.C	B&O TASK FORCE-ADS MODS	04/01/90
BROWNS FERRY 2	II.K.3.27	B&O TASK FORCE-COMMON REFERENCE LEVEL FOR BWRS	04/01/90
BROWNS FERRY 2	II.K.3.28	B&O TASK FORCE-QUAL OF ADS ACCUMULATORS	12/01/91
BROWNS FERRY 3	I.D.2.1	PLANT SPDS CONSOLE DESCRIPTION	06/30/91
BROWNS FERRY 3	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	06/30/91
BROWNS FERRY 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/30/91
BROWNS FERRY 3	II.B.3.2	PAS-CORRECTIVE ACTIONS	06/30/91
BROWNS FERRY 3	II.B.3.4	PAS-PLANT MODS (LL CAT B)	06/30/91
BROWNS FERRY 3	II.E.4.2.1-4	CONTAIN ISOL DEPENDABILITY-IMPLEMENT DIVERSE ISOL	06/30/91
BROWNS FERRY 3	II.E.4.2.6	CONTAIN ISOL DEPENDABILITY-CONTAIN PURGE VALVES	06/30/91
BROWNS FERRY 3	II.F.1.2.A	ACCIDENT MONITORING-NOBLE GAS MONITOR	06/30/90
BROWNS FERRY 3	II.F.1.2.B	MONITORING-IODINE/PARTICULATE SAMPLING	06/30/91
BROWNS FERRY 3	II.F.1.2.C	ACCIDENT MONITORING-CONTAIN HIGH RANGE MONITOR	06/30/91
BROWNS FERRY 3	II.F.1.2.D	ACCIDENT MONITORING-CONTAINMENT PRESS	06/30/91
BROWNS FERRY 3	II.F.1.2.E	ACCIDENT MONITORING-CONTAIN WATER LEVEL	06/30/91
BROWNS FERRY 3	II.F.1.2.F	ACCIDENT MONITORING-CONTAIN H2	COMPLETED
BROWNS FERRY 3	II.K.3.13.B	B&O TASK FORCE-HPCI & RCIC SYS INIT LEVEL - MODS	06/30/91
BROWNS FERRY 3	II.K.3.18.C	B&O TASK FORCE-ADS MODS	06/30/91
BROWNS FERRY 3	II.K.3.27	B&O TASK FORCE-COMMON REFERENCE LEVEL FOR BWRS	06/30/91
BROWNS FERRY 3	II.K.3.28	B&O TASK FORCE-QUAL OF ADS ACCUMULATORS	06/30/91
CATAWBA 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED

<u>PLANT NAME</u>	<u>ISSUE NUMBER</u>	<u>TITLE/DESCRIPTION</u>	<u>LICENSEE IMPLEMENTATION DATE/STATUS</u>
CATAWBA 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED
CRYSTAL RIVER	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	06/30/90
CRYSTAL RIVER	II.E.4.2.6	CONTAINMENT ISOL DEPENDABILITY-CONTAIN PURGE VALVES	COMPLETED
CRYSTAL RIVER	III.D.3.4.3	CONTROL ROOM HABITABILITY- IMPLEMENT MODS	05/30/90
D. C. COOK 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	11/30/90
D. C. COOK 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	08/31/90
FERMI 2	II.F.1.2.B	ACCIDENT MONITORING-IODINE/ PARTICULATE SAMPLING	COMPLETED
FERMI 2	II.K.3.18.C	B&O TASK FORCE-ADS MODS	COMPLETED
FERMI 2	III.D.3.4.3	CONTROL ROOM HABITABILITY- IMPLEMENT MODS	06/30/90
FT. CALHOUN	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	06/30/90
FT. ST. VRAIN	I.C.1.2.B	SHORT-TERM ACCIDENT & PROCEDURE REV-INAD CORE COOL-REVISE PROC	COMPLETED
FT. ST. VRAIN	I.C.1.3.B	SHORT-TERM ACCIDENT & PROCEDURE REV-TRANSIENTS & ACC-REVISE PROC	COMPLETED
GINNA	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED
HADDAM NECK	II.F.1.2.F	ACCIDENT MONITORING-CONTAIN H2	COMPLETED
HADDAM NECK	II.K.3.25.B	B&O TASK FORCE-POWER ON PUMP SEALS - MODS	NO DATE
HADDAM NECK	III.D.3.4.3	CONTROL ROOM HABITABILITY- IMPLEMENT MODS	12/31/93
INDIAN POINT 2	II.F.2.2	INST FOR DETECT OF INAD CORE COOLING-SUBCOOL METER	04/30/91
KEWAUNEE	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/31/91
MCGUIRE 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	05/31/90
MCGUIRE 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	05/31/90
MILLSTONE 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	COMPLETED
NINE MILE POINT 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	12/30/90
OCONEE 1	III.D.3.4.3	CONTROL ROOM HABITABILITY- IMPLEMENT MODS	COMPLETED
OCONEE 2	III.D.3.4.3	CONTROL ROOM HABITABILITY- IMPLEMENT MODS	COMPLETED
OCONEE 3	III.D.3.4.3	CONTROL ROOM HABITABILITY-IMPLEMENT MODS	COMPLETED
PALO VERDE 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	10/31/92

<u>PLANT NAME</u>	<u>ISSUE NUMBER</u>	<u>TITLE/DESCRIPTION</u>	<u>LICENSEE IMPLEMENTATION DATE/STATUS</u>
PALO VERDE 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	10/31/92
PALO VERDE 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	10/31/92
PEACH BOTTOM 2	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	07/31/90
PEACH BOTTOM 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	07/31/92
PEACH BOTTOM 3	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	COMPLETED
PEACH BOTTOM 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	06/30/91
PILGRIM	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	07/31/90
POINT BEACH 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	07/31/91
POINT BEACH 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	07/31/91
RANCHO SECO	III.D.3.4.3	CONTROL ROOM HABITABILITY-IMPLEMENT MODS	NO DATE
ROBINSON	III.D.3.4.3	CONTROL ROOM HABITABILITY-IMPLEMENT MODS	12/31/90
SALEM 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	03/30/90
SALEM 1	II.F.2.2	INST FOR DETECT OF INAD CORE COOLING-SUBCOOL METER	10/31/90
SALEM 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	03/30/90
SALEM 2	II.F.2.2	INST FOR DETECT OF INAD CORE COOLING-SUBCOOL METER	03/30/90
SAN ONOFRE 1	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	02/09/93
SAN ONOFRE 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	02/09/93
SAN ONOFRE 1	II.F.2.4	INST FOR DETECT OF INAD CORE COOLING-INSTALL ADD'L INST	02/09/93
SAN ONOFRE 1	III.D.3.4.3	CONTROL ROOM HABITABILITY-IMPLEMENT MODS	02/09/93
SAN ONOFRE 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	01/31/92
SAN ONOFRE 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	01/31/92
SEABROOK 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	02/15/91
SEABROOK 1	III.D.3.4.3	CONTROL ROOM HABITABILITY-IMPLEMENT MODS	02/15/91
SEQUOYAH 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	07/31/90
SEQUOYAH 2	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	10/31/90
SHOREHAM	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	NO DATE
SHOREHAM	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	NO DATE

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<u>PLANT NAME</u>	<u>ISSUE NUMBER</u>	<u>TITLE/DESCRIPTION</u>	<u>LICENSEE IMPLEMENTATION DATE/STATUS</u>
SUMMER 1	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	08/31/90
TURKEY POINT 3	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	04/30/91
TURKEY POINT 4	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	04/30/91
VERMONT YANKEE	I.D.2.2	PLANT SPDS CONSOLE INSTALLED	COMPLETED
VERMONT YANKEE	I.D.2.3	PLANT SPDS CONSOLE FULLY IMPLEMENTED	10/31/90

Completed means item was determined to be fully implemented at the particular plant or the staff found acceptable technical alternatives proposed and implemented by licensees.

END

