

TMI-1 PREREQUISITE PROGRAM SCOPE

APPENDIX NO. 2

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P PDR

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NOTE:

Each numbered item heading on the following pages includes in its description the last Flag (milestone) that the item was reviewed and signed off in formal fashion. Those items with flag designations prior to Flag 2B, were deemed resolved prior to the latest GPUNC Review and were not subject to sign off in the Flag 2B Program.

Appendix No. 2

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 2 - PLANT READINESS

° Item No. 2.1 - System Readiness Review - Flag 2B

Operations Dept.

For each system and procedure listed, the Manager of Operations will sign off when he is satisfied that:

- a. there is a procedure approved to support Flag 2B
- b. there is a current valve alignment in Control Room
- c. all outstanding system problems are on the work list, safety and tagging list, jumper list, etc. as identified in this Prerequisite List.

Tech Functions Div.

Tech Functions has reviewed their review program for operating procedures and concluded that the technical content of the procedures they have reviewed is acceptable for Flag No. 2B and there are no outstanding reviews which would effect Flag No. 2B.

° Item No. 2.2 - Electrical/Mechanical Jumper Lifted Lead Log Review - Flag 2B

The GPUNC, TMI-1 Electrical and Mechanical Jumper/Modification Logs have been reviewed and found acceptable to support Flag No. 2B safely.

° Item No. 2.3 - Open Switching/Tagging Review - Flag 2B

The + 40 open GPUNC, TMI-1 safety tagging applications have been reviewed and found acceptable to support Flag No. 2B safely.

° Item No. 2.4 - Fire Barrier Seals Breach Log Review - Flag 2B

The Fire Barrier Seals Breach log has been reviewed and the technical specification requirements have been met and found acceptable to support Flag No. 2B safely.

° Item No. 2.5 - Emergency/Abnormal/Alarm Response Procedure Review - Flag 2B

Operations

Sign off indicates that approved Emergency/Abnormal Alarm response procedures are in place in the Control Room which satisfy commitments related to testing prior to development of significant decay heat.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 2 - PLANT READINESS (cont'd)

° Item No. 2.5 - Emergency/Abnormal/Alarm Response Procedure Review - Flag 2B
(Cont'd)

Tech Functions

Sign off below indicates that Tech. Functions has performed a review of Emergency/Abnormal Alarm Response Procedures. The memo documenting this review including the scope has been attached. No procedure changes were identified requiring action prior to restart in this category.

° Item No. 2.6 - Surveillance Procedures Required for Flag No. 2B

Plant Operations, Plant Eng. and Plant Maint. have reviewed the Plant Surveillance Program as follows:

- ° Required Surveillances have been performed and documents are on file (verified by Operations).
- ° Outstanding Exceptions and Deficiencies have been reviewed by Operations, Maint. or Eng. and are acceptable to support heatup.
- ° Surveillance Procedures required for Criticality have been reviewed and based on Procedure Owner, Department Head, Independent Safety Review (ISR) Program and participation of procedure owner in field performance of their Surveillance Procedures, we conclude the Surveillance Procedures are technically adequate to support Final Heatup/Criticality Testing.
- ° The attached listing represents three categories which remain to be done:
 - A. Procedures to be performed prior to exceeding 200°F
 - B. Procedures to be performed prior to criticality
 - C. As part of controlled sequence which specify plant condition - 800/2

° Item No. 2.7 - Transient Monitoring System - Flag 2

The Transient Monitoring System is operable, correct sensors are connected to each point and each point is active and calibrated.

Each point to be used is identified in the individual test procedure.

° Item No. 2.8 - RMS System Upgrade - Flag 2A

The existing RMS System (including the High Range monitors) has been evaluated along with modifications and upgrades made, and has been found to support Flag No. 2A.

TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 2 - PLANT READINESS (cont'd)

° Item No. 2.9 - Combustible Review - Flag 2B

All combustibles in all areas of the plant shall be verified to be in a safe condition with respect to hot lines. All unnecessary wood scaffolding not needed for hot inspections and ongoing work removed and all untreated lumber removed.

° Item No. 2.10 - Bailey/Mod Comp Computers - Flag 2B

° Lead Responsibility - M. J. Ross

° Scope of Sign Off -

Operator interfaces with Bailey and mod comp computers have been tested and operator training has been completed. In addition the attached listing of computer tests will be performed prior to restart.

° Item No. 2.12 - Chemistry Program Upgrade Review - Flag 2B

Items outstanding in the Chemistry Program Upgrade Action Report have been reviewed for impact on Flag No. 2B and have been found to support this evolution. Also Chemistry procedures (scope defined by TF) have also been reviewed to support operation to 48% power.

° Item No. 2.13 - INPO Commitments Review - Flag 2

All open INPO Action Items have been reviewed for their possible impact on Flag No. 2 and those required for Restart have been attached.

° Item No. 2.14 - Staffing Adequate and Trained - Flag 2B

The staffs of the Operations, Maintenance, Chemistry Departments, STAs and QA Shift monitors have been reviewed and have been found to be adequately staffed and trained to support Flag No. 2B.

Qual cards are being reviewed monthly to insure the operators are receiving proper experience exposure.

° Item No. 2.15 - Plant Cleanliness - Flag 2B

The plant has been inspected for cleanliness on several occasions and will support the HFT/PET plant evolutions.

TMI-1 RESTART READINESS*
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 2 - PLANT READINESS (cont'd)

° Item No. 2.16 - Temp Lead Shielding - Flag 2B

All temporary lead shielding identified by the plant, Rad Con and Tech Functions as potentially adversely affecting pipe stress, will be removed for operations of Unit 1-Flag No. 2B or an engineering evaluation will be performed by Tech Functions allowing it to remain in place during operations.

° Item No. 2.17 - Loose Parts Vibration Monitoring - Flag 2

The Loose Parts Vibration Monitoring System has been inspected and has been found operable and will support Flag No. 2 with the exception of those items found on the following prerequisite listing.

° Item No. 2.18 - Rickover Report Review - Flag 2A

The Rickover TMI-1 Management Inspection Report has been reviewed by the undersigned and those actions required as a result of the inspection have been clearly identified and are being properly addressed.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 3 - REVIEW OF WORK CURRENTLY IN PROCESS

° Item No. 3.1 - Open Job Tickets/Retest Review - Flag 2B

The following reviews have been made:

1. All open job tickets have been reviewed to insure that correct priority coding has been applied.
2. All priority 1 and 2 job tickets have been reviewed for their potential impact on restart. If any job tickets needing to be completed prior to restart were identified they would be attached for future sign off. (See Section 4.3)
3. All open job ticket retests have been reviewed to insure they are scheduled to be completed during Flag 2B evolutions and have been verified to be on the Master Test Sequence.

° Item No. 3.2 - M&C Mod and Maint. Support Scheduled for Month of May 1985 (Flag 2B)

A review of all work released to M&C Division on site was made on 3/13/85 by those organizations represented below. Work that will be allowed to proceed through the end of May 1985 is contained within the pages of the attached Master List. All modification work at TMI-1 will be governed by AP-1043 restrictions. A final review of the status on each mod contained on the attached listing will be made again just prior to heat up and prior to sign off by the O&M Director below to insure that any work needing to be placed in a safe condition will be so dispositioned.

° Item No. 3.3 - IWL's on Plant Accepted Mods - Flag 2B

All Incomplete Work Items (IWL's) documented and still open against Plant Accepted Mods were reviewed on 3/13/85 by those organizations represented below. No heat up or criticality restraints were identified. A listing of those IWL's reviewed has been attached for information.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 4 - PREREQUISITE MOD/MAINTENANCE WORK

° Item No. 4.1 - Mods to be worked by 6/1/85 - Flag 2B

A review of modification work released to the site for work was made on 3/13/85 by those organizations represented below. All work required to be completed or satisfactorily dispositioned prior to 6/1/85 or heatup, was identified and listed on the attached Master List. The attached listing will require sign off prior to exceeding 200°F.

° Item No. 4.2 - Mods in Turnover Process - Flag 2B

A review of modification work currently in the turnover process was made on 3/13/85 by those organizations represented below. All work required to be completed or satisfactorily dispositioned prior to 6/1/85 or heat up, was identified and listed on the attached Master List. The attached listing will require sign off prior to exceeding 200°F.

° Item No. 4.3 - Maint. Job Tickets to be worked prior to 6/1/85 - Flag 2B

Plant Maintenance job tickets required to be completed prior to 6/1/85 have been listed on the attached Master List. The attached listing will require sign off prior to exceeding 200°F.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 5 - OTSG READINESS REVIEW FOR OPERABILITY

° Item No. 5.1 - OTSG Readiness for Operability - Flag 2B

This certifies that all repairs have been made to the generators in accordance with design and are ready for operation. This review and certification covers those repairs made during the period from August 1984 to March 1985.

° Item No. 5.2 - TP 600/2 Approved - Flag 1

Test Procedure 600/2, to be used for testing of the steam generators, has been approved at all required levels and is ready to use.

° Item No. 5.3 - Safety Evaluation Review - Flag 2B

All required OTSG repair related safety evaluations (NRC & GPUNC) have been reviewed. Those SE's required but not yet approved have been listed for signoff prior to final heat up to go critical. A listing of all GPUNC SE's issued to date has also been attached for information.

° Item No. 5.4 - Tech Spec. Change Request Status - Flag 2B

All Tech Spec. related issues that impact on our ability to proceed with use of both generators for operations, have been approved or waivers issued by the NRC and do not restrain Flag No. 2B evolutions.

° Item No. 5.5 - Emergency Response for OTSG Tube Rupture - Flag 2

The listing of procedures revised due to TDR 400 and 406 (related to OTSG tube rupture) is attached. Procedures were reviewed and revised through TDR's 400 Rev. 6 & 406 Rev. 3 with Tech. Functions involvement on task force. Training was conducted on the B&W simulator for all crews.

° Item No. 5.6 - G.O.R.B. OTSG Subcommittee Review - Flag 2B

The GORB OTSG Subcommittee comments have been reviewed for actions required prior to Flag No. 2B. All such items (if any) have been identified and dispositioned on the attached prerequisite sheet.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 5 - OTSG READINESS REVIEW FOR OPERABILITY (cont'd)

° Item No. 5.7 - Sulfur Contamination and Review/Evaluation for Total Plant -
Flag 1

All sulfur contamination data has been reviewed for impact on plant operability, and items (if any) found to be in conflict have been identified and dispositioned on the attached prerequisite sheet. (Exceptions and/or prerequisites, if any, noted)

° Item No. 5.8 - Results of OTSG Test and Subsequent Evaluation - Flag 2

All data taken during the test of both A/B generators (600/2) has been reviewed and has been found acceptable to support Flag No. 2 and operability. Any actions required to complete prior to this flag have been identified on the attached prerequisite listing.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 6 - OPEN ENGINEERING/LICENSING ISSUES

° Item No. 6.1 - Outstanding FQs, FCRs, DRFs and ECMS - Flag 2B

All open engineering (FQs, FCRs, DRFs and ECMS) has been reviewed for possible impact on plant operability and commitments. All items identified during this review, and are not located within another section of this prerequisite listing, requiring action prior to Flag No. 2B, (if any) have been listed.

° Item No. 6.2 - Outstanding TFWRs - Flag 2B

All open TMI-1 Tech Functions Work Requests (TFWRs) have been reviewed for their potential impact on plant operability. All items identified during this review requiring action prior to Flag No. 2B have been listed on the attached prerequisite sheets for disposition.

° Item No. 6.3 - Outstanding Engin. Eval. Review - Flag 2B

All open TMI-1 Engineering Evaluations have been reviewed for their potential impact on Flag No. 2B. Any and all Engineering Evaluations identified as potentially impacting plant operability or safe operation of the plant have been listed on the attached prerequisite sheet to be dispositioned prior to restart.

° Item No. 6.4 - Outstanding Change Mod Request Review - Flag 2B

All open TMI-1 Change Mod Requests have been reviewed for their potential impact on Flag No. 2B. Any and all Change Mod Requests identified as potentially impacting plant operability or safe operation of the plant have been listed on the attached prerequisite sheet.

° Item No. 6.5 - Open Licensing Action Items - Flag 2B

All open Licensing Action Items and commitments have been reviewed for their potential impact on Flag No. 2B. All Action Items identified as potentially impacting this milestone have been listed on the attached prerequisite sheet.

° Item No. 6.6 - Tech Spec. Change Status - Flag 2B

All Technical Specifications have been met or have an approved waiver through Licensing to support Flag No. 2B testing. Tech Spec. Change Requests (if any) still requiring GPUNC or NRC actions have been identified on the attached prerequisite sheet.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 6 - OPEN ENGINEERING/LICENSING ISSUES (cont'd)

° Item No. 6.7 - Outstanding Emergency Plan Items - Flag 2

All outstanding Emergency Plan Action Items and commitments have been reviewed for impact on Flag No. 2 plant evolutions and have been found acceptable.

° Item No. 6.8 - Drawing Update Status - Flag 2

The Drawing Update Program and Status has been reviewed and the progress made to date is satisfactory to support Flag No. 2 plant evolutions.

° Item No. 6.9 - Hanger/Snubber Check Program and Systems Balance - Flag 2

The Hanger/Snubber Check and Systems Balancing Programs have been reviewed and are satisfactory to support Flag No. 2.

° Item No. 6.10 - Misc. Engineering/Maintenance - Flag 2B

Additional engineering and maintenance issues have been identified, outside the scope of other Section sign off sheets and have been recorded for disposition on the attached Prerequisite List. Sign offs below will be made only after satisfactory resolution to the issues addressed.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 7 - OUTSTANDING DEFICIENCY REVIEWS

° **Item No. 7.1 - Start Up Problem Reports - Flag 2**

All Startup and Test Problem Reports have been reviewed and found acceptable for Flag No. 2.

° **Item No. 7.2 - Open MNCRs, QDRs, RDNs, Qualified Releases and Audit Findings-Flag 2B**

All open QA Mod/Ops MNCRs, QDRs, RDNs, Qualified Releases and Audit Findings have been reviewed for potential impact on the Restart of Unit 1. All items found to be in conflict (if any) with Flag No. 2B, have been identified on the attached prerequisite sheet(s).

° **Item No. 7.3 - Open RDRs and RIRs - Flag 2B**

All outstanding Radiological Deficiency Reports (RDRs) and Radiological Investigation Reports (RIRs) have been reviewed and found acceptable to support Flag No. 2B.

° **Item No. 7.4 - Restart Validation Problem Reports - Flag 2B**

All outstanding Quality Assurance Restart Validation Problem Summary Reports have been reviewed and found acceptable for Flag No. 2B. Remaining checkpoints in this program are listed on the attached prerequisite listing.

° **Item No. 7.5 - Post Mod Turnover Package Review - Flag 2A**

All open Post Mod Turnover Package Review Items have been reviewed and found acceptable to support Flag No. 2A.

"TMI-1 RESTART READINESS"
PREREQUISITE LIST SIGN OFF SCOPE
FLAG NO. 2B

SECTION 8 - STARTUP AND TEST GROUP READINESS

° Item No. 8.1 - Test Instrumentation/Equipment for Flag No. 2B

Test instrumentation, special tools, equipment and support systems to support those tests delineated in Section 8.2, have been verified available or installed as appropriate to support Flag No. 2B testing evolutions.

° Item No. 8.2 - Test Procedures to be Approved for Flag No. 2B

All test procedures needed to support Flag No. 2B plant testing have been identified and when signed off on the attached sheet(s) will be available for use.

° Item No. 8.3 - Functional Mods Testing Scheduled During Flag No. 2

All test procedures needed to support those functional mods tests to be performed during Flag 2 have been identified on the attached sheet. All functional tests attached have been scheduled in the Master Restart Sequences.

° Item No. 8.4 - Training/Dry Run for Restart Completed - Flag 2B

Training Program for Restart testing has been prepared and will be provided to participating operators as well as other test programs personnel as required. All required training will be completed satisfactorily including required briefings and dry run for Flag 2B plant evolutions. Briefings will be held at the beginning of each shift when testing is being performed and dry runs will be performed by the implementing crew just prior to test performance.

° Item No. 8.5 - Startup/Test Manpower Requirements - Flag 2B

A review of Startup and Test Manpower Requirements as well as availability of qualified personnel has been made and found to be satisfactory to support Flag No. 2B.