

File: TMI-I Startup

METROPOLITAN EDISON COMPANY Subsidiary of General Public Utilities Corporation

Subject MINUTES OF STARTUP AND TEST PROGRAM MEETING HELD DECEMBER 7, 1979 Location TMI Date December 10, 1979

To B. BALLARD N. C. KAZANAS  
 J. J. BARTON G. P. MILLER  
 T. G. BROUGHTON D. G. MITCHELL  
 J. J. COLITZ I. D. PORTER  
 J. T. FAULKNER M. J. ROSS  
 J. F. FRITZEN D. M. SHOVLIN  
 T. M. HAWKINS E. G. WALLACE  
 J. G. HERBEIN P. S. WALSH  
 S. KARKARLA

The purpose of the meeting was to review the basic concepts for the Startup and Test Program for the Unit 1 restart.

G. P. Miller pointed out that significant engineering help would be required from engineering to develop the procedures for the test program. He pointed out that many of the procedures to be developed are without precedent at TMI. It was agreed that we will have a test working group (TWG) and must develop the interface between the TWG and PORC.

Admin. Program

The Unit 1 Restart Program will be patterned after the Unit 2 construction startup and test program. SP-1047 will be used to establish policies and assign responsibilities. AP-1047 will list personnel and establish organizational relationship. It will provide a list of items for TWG control, an MTX, and an index and scope of test instruction (TI'S). AP-1047 is being written by the startup and test group to be signed by R. L. Williams and M. Coffey and be reviewed and signed by QA. The PORC review requirements will be satisfied by the signature of the TWG/PORC representative.

AP-1043 will provide the procedures and a flow chart for ECM's through the review and approval after being received by TMI. It will provide for field questionnaire (FQ) resolution on engineering design problems. AP-1043 will provide for resolution from either onsite or offsite. A forthcoming revision will permit supplements to specific revisions of the ECM's to become a permanent part of the ECM. It was agreed that the responsible (cognizant) engineer and D. G. Slear must sign and approve any changes to ECMs. PORC will review and sign ECM's as specified in AP-1043. The Quality Assurance review and

signature will be acceptable from either Mountain Lakes or TMI organizations. QA will review ECMs and ECM changes before WANS are issued.

Action

1. B. Ballard and J. T. Faulkner to jointly set-up arrangements for QA review.
2. J. T. Faulkner and Tom Hawkins to meet with R. W. Dubiel and W. E. Potts to determine ALARA requirements.

As-Built Drawings

The problems with our current as-built drawings and a lack of a program to update drawings to reflect the new change mods were discussed.

Action

1. J. T. Faulkner to complete the development of a formal as-built drawing procedure. J. T. Faulkner to conduct a formal meeting to develop an in-process control program for as-built drawings with representation as follows:

Architect Engineer  
Generation Group Technical Support  
Quality Assurance  
TMI Document Control (Weiser)  
TMI Engineering Support Group  
Startup and Test  
Unit 1 Superintendent  
Onsite Manager Unit 1 Restart

QA Interface

N. C. Kazanas stated that after the revision 8 to the OQA Plan is published in mid-January 1980 there will no longer be a need for the separate QA plan for restart mods to TMI Unit 1.

N. C. Kazanas pointed out that the new Reg 1.33, Rev. 2, Appendix A will require an expansion of the QA scope to cover certain areas in the secondary plant that are important to safety. He pointed out that it will be necessary to classify systems and component that are important to nuclear safety and that the single mode of failure analysis is no longer acceptable. It was pointed out that the schedule of the expansion is critical with respect to the impact on the startup and test program. It was agreed that Startup and Test will proceed on

course previously assigned until program changes are issued for this. J. J. Barton pointed out that he does not believe this will affect startup and test program, but only that which QA surveils and therefore perhaps leads to retest and rework.

Action

1. System Engineering Group to provide D. K. Croneberger with guidelines to implement NuReg 1.33.
2. T. M. Hawkins and I. D. Porter to meet with Blaine Ballard to develop the working relationship between TWG and QA and provisions for active QA participation in TWG.

Various gradations of QA application were agreed upon in principle. For example, it was agreed that Quality Assurance will apply to installation and then startup and test, but that the hardware can be commercial grade. This will be accomplished by checking the block on the ECM and WAN for "QA and installation, non-QA for procurement".

Action

1. J. F. Fritzen to convey the above point to D. G. Slear and initiate action so that ECMs can reflect several gradations of QA application.
2. J. F. Fritzen to initiate engineering review of each mod accomplished so far to determine whether to accept as is or direct new efforts to upgrade with respect to QA coverage.

B&W Participation in Chg/Mod and Test Program

Action

1. T. M. Hawkins to work with F. Faist to initiate B&W task for B&W participation in TWG activities of reviewing and approving test documents. The task will be phrased to insure that signature by the B&W TWG representative will constitute B&W concurrence.
2. J. F. Fritzen to pursue the matter of B&W participation in review and concurrence with ECM's already issued and those under development.

### PORC Review Scope

#### Action

N. C. Kazanas to assist J. R. Thorpe in approaching NRC to change Tech Specs to reflect only the PORC review requirements of NuReg 1.33 and ANSI 18.7.

### Testing Scope

It was agreed that although it is not necessary to rerun all of the construction startup and test it may well be desirable to rerun certain of the ES features tests. Surveillance procedures will provide coverage for much of the entire plant test program and duplication is not desired. I. D. Porter pointed out that wire to wire checks on some cabinets may be desirable. It was decided that when a modification is installed, functions of the system other than just those affected by the Chg/Mod will be checked, as directed by TWG.

#### Action

1. Startup and test to look at ES features and recommend what testing will be required.
2. TWG review the old MTX and see what tests should be rerun.
3. Startup and test to develop target list for TWG to approve.
4. Startup and test to review those mods that could lead to increased number of reactor trips and develop list of new tests to be run and old tests to be rerun to explore this problem.

### Power Escalation Test Program

#### Action

1. Startup and test to take first cut at developing test requirements. This will include a review of refueling history power escalation testing, ICS tuning requirements, runback testing, ES feature testing and main feed pump trip testing requirements.
2. J. T. Faulkner to determine schedule impact of power escalation test program and reflect in schedule.
3. G. P. Miller to obtain B&W (F. Faist) assistance to help develop power escalation test program that will reflect the long shut down of machinery problems.

Test Auditor

It was agreed that the function is desirable, but that a different title will be required. Gary Broughton agreed to arrange for the manpower to review the test documents vs all restart commitments.

  
G. J. Troffer  
Ext. 8005

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cc: R. Cutler  
D. Croneberger  
R. Williams  
D. Slear  
J. Thorpe  
R. Rogers (GAI)  
F. Faist (B&W)  
D. Havercamp (NRC) ✓