

MILLSTONE UNIT 2

STARTUP ASSESSMENT TEAM (SAT) REVIEW FINAL REPORT

INTRODUCTION

The Startup Assessment Team (SAT) review was performed to provide an in-depth and independent assessment to the Executive Vice President of the readiness of Millstone Unit 2 to restart and operate successfully following the current RFO 12. The details of the purpose, mission, schedule and composition of the Team are contained in the SAT charter dated January 9, 1995, and addendum dated January 23, 1995 (Attachment 1).

The assessment was divided into five broad categories, discussed below, which were each reviewed by two team members. The composition of the team is detailed in Attachment 2.

SAT- Implementation Plan

The SAT plan was developed based on a set of Northeast Utilities, INPO, NRC, and industry documents (see Attachment 3). These sources addressed plant outage and restart activities. Generic information was combined with Millstone specific plans and processes to focus Team activities in five (5) functional areas:

- Management and Organization
- Maintenance and Work Control
- Operations and Training
- Engineering and Technical Support
- Corrective Action and Self-Assessment

The SAT review assessed outage performance against a stated "Startup Expectation" contained in the charter as follows:

"Operations, with the full cooperation and support of all Millstone Unit 2 personnel, will control startup and subsequent operations such that high standards of nuclear and industrial safety are consistently achieved.

In practical terms, this equates to conduct of plant activities which is exemplified by rigorous configuration control, minimal rework, few operator work-arounds, a manageable maintenance backlog, proactive engineering involvement to ensure optimal system performance, absolute control of reactivity, no unplanned radioactive releases, no significant operational or industrial safety events, and strict adherence to the ALARA principles in all of our activities."

The assessment was divided into three major segments as follows:

- Week 1 - (1/23-1/27) Information gathering, interviews, and team meetings focused on factfinding of issues related to outage completion and plant startup, and begin to assemble "test" conclusions.
- Week 2 - (1/30-2/3) Conclusions from Week 1 were validated and verified with specific emphasis on their relationship to startup readiness. The assessment and review process continued for new issues. Although startup was scheduled for March 15, the SAT concluded that startup was further away, therefore, preliminary findings and conclusions were presented to management and documented in a draft interim report to NU executive management, dated February 10, 1995. This report identified and outlined areas where more progress was necessary to be able to judge restart readiness.
- Week 3 - (4/10-4/14) The team returned to the site to assess progress toward restart since the startup was scheduled for May 15, 1995. This date was chosen because a major milestone in the published schedule was entry into Mode 6 - core reload. Several important activities were to have occurred which would give the SAT a measure of the effectiveness of improvement initiatives which were not yet underway during our January visit. Programs and processes, as well as outage performance improvements were assessed for readiness to support restart in accordance with the team charter. Core reload did not occur during this week, and the SAT concluded that the Millstone 2 restart was over one month away and that much of the work in process and programmatic changes planned for restart were not complete. The Team Leader and NU executive management agreed to schedule a fourth week to further assess final progress and readiness for restart. A second interim progress report (dated May 2, 1995) was generated to advise Millstone 2 management of the significant issues which the SAT believed warranted additional work.
- Week 4 - (5/15 - 5/19) The SAT Team Leader and one member returned to the site to assess restart readiness. The startup was scheduled for June 13, 1995. The interim report and responses prepared by the Unit 2 Directors, dated 5/12/95 and updated 5/18/95, were used to focus the reviews. Although the startup has been delayed beyond June 13, 1995, a final report has been generated as the result of the previous Team reviews and the MP2 responses to the second interim report. The final report and conclusions were reviewed with several members of the SAT prior to issuance. As specified in the original charter, this report will be transmitted to the Executive Vice President for final disposition.

SUMMARY OF RESULTS

The following is a summary of the SAT findings and observations developed as a result of document reviews, observation of work in progress, personnel interactions and interviews, and attendance at meetings. This summary is not all inclusive, and there are many activities and items involved with the plant outage or restart activities which are not addressed. This indicates that the Team had no specific comments or concerns and expects that such items will be satisfactorily resolved as a normal part of ongoing activities.

MANAGEMENT AND ORGANIZATION

The Millstone 2 organization is not yet mature and fully functional as an integrated Team.

- With few exceptions, most MP2 managers and supervisors are relatively new and working relationships are still being developed. Further, significant cultural changes have been and continue to be made, including numerous new policies, processes, and procedures. There have been numerous initiatives to improve teamwork and management involvement and leadership, and specific examples of teamwork, such as the recent LNP test. The plant recognizes however that, overall, teamwork, individual accountability, problem solving and corrective action implementation is still not at the desired and needed level.
- MP2 has instituted a comprehensive self-assessment program. This important initiative has already defined the way toward achieving greater organizational and department improvements, and is expected to be a vital and integral component of continued improvement activities. The SAT reviewed examples of self-assessments from the Maintenance, Radiation Protection, and I&C Departments. These assessments were good initial efforts and were generally honest, self-critical approaches to issues facing these departments. Continued management support of this initiative and followup on issues identified by these self-assessments are critical to achieving the desired performance in this area. Further, efforts to standardize the programs and processes for the three Millstone plants and to share knowledge and resources among the three units should provide a greater sense of teamwork and increased personnel efficiency at the site that at times seems lacking today.
- Communications between department and individuals have not always been effective. For example, individuals named in the restart plan as responsible for various areas, when originally interviewed by the SAT in April, indicated that they were not aware how this information was to be used. Three of them had not seen the plan, and most did not know the plan was an NRC commitment. During our May visit the restart plan was discussed by the management team during the readiness assessment meeting on May 16 and the Senior Vice President specifically asked if everyone knew the plan and

their part of the plan to which he received an affirmative response. It was not clear, however, that top level management objectives for startup were being uniformly and routinely implemented in all department decision-making. Further, there is a tendency for departments to develop new initiatives without strong involvement of the other parts of the organization potentially affected during the development phase. Development of the system engineer program and the system readiness reviews by Engineering are examples where it is not apparent that interactive involvement and input from other departments was originally actively solicited.

The Millstone Unit 2 staff and supporting organizations are not performing at a level which gives confidence that the outage can be brought to a predicable and timely completion.

- There is a history of establishing and revising schedules for this outage, and of insufficient accountability for schedule performance. While the ability to plan and schedule in a detailed, complete, and realistic manner and execute such plans in a quality manner with adequate resources and margins for unexpected events are improving, additional improvement is necessary before high levels of confidence are justified in predicting outage end-dates.
- Unexpected equipment problems and design issues continue to be identified. Such problems usually put the plant in a reactionary mode, and available resources often do not allow for the timely resolution of such issues. For example, unexpected problems with the facility 1 ESAS sequencer has resulted in a new critical path activity to troubleshoot, correct and retest (both facility 1 and 2) this important safety-related equipment. The schedule impact of this work cannot yet be accurately assessed. The SAT did observe, however, that the unit response to this event indicates a better understanding of outage control. The mode change prerequisites were immediately known and management strongly stated both a plan for recovery and the expectation that the transition to Mode 5 would not occur until high confidence was restored regarding the relationship of this equipment.
- The MP2 Startup Plan (Revision 2 dated May 17, 1995) does not contain management expectations in terms of RFO 12 and plant startup and return to service. Such expectations are contained in the SAT Charter, and other expectations are expressed as criteria to be used in the System Readiness Reviews. It would seem necessary to have management's expectations clearly stated in Startup Plan in order to assure consistent decision-making and provide higher confidence that these expectations will be achieved. (See prerequisite No. 1.)
- There is still a large population of work remaining to be completed during the outage. Two indexes illustrate this situation:

- A. There are more than 3500 AWOs currently in progress (including post-work and retest) and about 500 AWOs planned but not started that are associated with this outage. Even with the strong management commitment (announced on April 13) to have all physical work completed for the outage and to enter Mode 4 by May 18, only 403 AWOs were completed in the period April 10 through May 12, 1995.
- B. The startup punchlist currently has a total of 391 items remaining to be completed as of May 16, 1995. The rate of closeout over the past few weeks is on the order of 8 items per week, although a reduction rate of 32 items per week was obtained during the pre-Mode 6 period.

The rate of closeout for both AWOs and punchlist items are not yet at levels consistent with announced turbine on-line dates.

Notwithstanding the work production rates discussed above, the SAT believes that there has been a fundamental change in the approach to outage work and that, regardless of the final startup date, the remaining work will be performed in a manner which is consistent with startup expectations of maintaining a high priority for plant safety and minimizing outage risk.

Planning for RFO 12 was recognized within the MP2 staff as incomplete and not systematic. The scope of the outage was not well defined and not frozen prior to entering the outage. As a result, the identification of needed engineering products did not have consensus within the MP2 departments and was not prioritized in a formal disciplined manner. This situation contributed greatly to the evolving nature and extended duration of RFO 12.

- Initial interviews of the MP2 management and supervisory staff by the SAT on this situation characterized the outage planning as "terrible," "lousy," and "at least 3 months from being ready."
- The scope of PDCR packages was not frozen 14 months in advance in accordance with MP2 procedures, and PDCR packages were sent for PORC review 90 days (and some even less) rather than 6 months before the outage (Reference: Procedure OM-1). Further, some PDCR packages were sent for PORC approval with key drawings and information missing which is not consistent with established practice. As of May 16, 1995, there are a number of PDCR packages which have not received PORC review and approval.
- The procedure for prioritization process was not effective for this outage. Initial prioritization efforts were informal; available resources were not effectively considered; decisions did not reflect consensus; and criteria for judgments seem to vary between departments.
- The RFO 12 planning process was impacted by the unplanned outages in Cycle 12, a number of operating events during Cycle 12, management

changes and a number of new people. Further, the "stand down" early in the outage caused an interruption in on-going work and a loss of momentum, confidence, and continuity.

- As a result, the definition of the outage scope in terms of major work items, correction of long-standing problems, correction of operator burdens, needed plant modifications, and identification of commitments continued to evolve during the outage.

Prerequisite Item for Mode 4 - Management and Organization

1. Management's expectations are important in terms of guiding consistent decision-making and judging the adequacy and success of ongoing work. The MP2 Startup Plan is deficient in this regard since no expectations or overall objectives and criteria are provided. Expectations have been expressed in other documents, although not in a consistent manner. The MP2 Startup Plan needs to be revised to clearly state management's expectations for this outage and the return of the unit to service.

OPERATIONS AND TRAINING

The Operations Department had not taken, nor was it apparent that it had been given, unequivocal control of the day-to-day activities, priorities, and needs of the Unit. There is evidence that this trend is changing; however, initiatives begun during RFO 12 and planned for the operating cycle must be given a high priority by management.

- The resolution of the scope and training requirements for EOP revisions brought to light a major difference in approach to resolution of EOP issues between the Operations and Training Departments. Resolution of the EOP revision plan and scheduling of the required training were not resolved efficiently. This late change in plans will impact the operating crews, and management must focus on the success of these crews during this difficult process. The SAT notes that the training began on schedule, with most of the procedures approved or in final draft form. Operations and unit management should formally assess overall crew readiness and level of preparation prior to restart of the Unit. (See prerequisite No. 2.)
- The number of licensed operators at Millstone 2 has been a long-standing concern. The SAT has reviewed the Unit's staffing plans and concurs that actions in place with respect to initial licenses, SRO additions and STA additions should alleviate this situation over the next 18-24 months. At this time, the SAT is not able to conclude that the current number of licensed operators, with an acceptable amount of overtime, are able to meet all requirements and responsibilities until the long-term plan can be fully implemented. (See prerequisite No. 3.)

- Direct observations of operating crews by the SAT indicate adequate performance to support plant restart and operation in the areas of shift communication, shift turnover pre-job briefing, and use of procedures. Operations management must continue to stress high standards in these areas and hold personnel to those standards in order to sustain this level of performance.
- Trends in personnel error rates, configuration control, and tagout errors continue to improve. However, there have been specific instances of failures and errors in tagout and configuration control which raise a concern that there may be generic weakness in the procedures being used, training provided to staff involved, plant documentation, drawings or labelling that may result in additional and perhaps more serious errors. These errors must be used by plant management to determine root causes and to aggressively seek improvements in staff performance. (See prerequisite No. 4.)
- There is evidence that the other departments at Millstone 2 are being oriented towards their role in support of Operations. This relationship is critical for the support organizations such as Maintenance and Engineering and Work Planning Control to ensure that decisions about plant operations and safety always consider Operations' impacts, needs, and priorities first. This is an important relationship during startup evolutions when plant systems and conditions are changing and additional issues are encountered as systems are brought into operation. Issues raised and questions asked by the line organization and management during the Unit 2 restart readiness self-assessment held on May 17, 1995 give the SAT further indication that unit managers understand this concept and are implementing it in daily activities.

Prerequisites Items for Mode 4 - Operations and Training:

2. The acceptability for restart of the revised EOPs and associated training needs to be confirmed. This would include such aspects as (a) revisions are consistent with appropriate guidelines and verified for technical accuracy; (b) instrument uncertainties issues have been resolved by involved organizations; (c) deferred work associated with human factor upgrades, basis package for each item, and full verification and validation of all legs have been confirmed as acceptable; and (d) training of necessary personnel has been satisfactorily completed.
3. Millstone management must carefully review the number of MP2 licensed operators (particularly SROs), and the planned use of overtime, to confirm that sufficient resources are available to: implement startup activities and all operational modes; conduct and receive training; and support work control and outage planning activities.
4. In view of the possible safety consequences (particularly for personnel safety) and the potential for generic weaknesses in tag out procedures, a review of

inadequate tag outs associated with ACR 1027 and 365 should be conducted to determine why electrical breakers in these two cases were not properly tagged out. Any needed corrective actions involving procedures, training or plant documentation and labelling should be completed prior to Mode 4.

MAINTENANCE AND WORK CONTROL

Millstone 2 performance during RFO 12 with regard to schedule adherence, control of emergent work, and scope control of existing work has not been consistent or predictable. After deliberation, the SAT decided to isolate schedule issues, and to judge only those activities which directly support the safe restart and operation of the unit, including control of the work and quality of work. This philosophy is also discussed under the Management and Organization topic.

- Based on recent experience at Unit 2, there are indications that work control has captured the outage scope and is proceeding in a orderly fashion with the remaining work. There is a considerable amount of work in progress and not yet started; however, this workload is being worked in a more logical, planned manner than previously experienced in this outage.

The SAT is concerned with the amount of work remaining (as discussed previously); however, there is no longer a concern that potential work items will be missed. This is based on reviews of the AWOs, the startup punchlist, and the process of deferring work to the operating cycle or the next refueling outage.

- Based on direct observations, the SAT is satisfied with the implementation of the Work Observation Program, the pre- and post-job briefing process, and new initiatives on procedure adherence by the Maintenance and I&C organizations. These efforts are recognized by the organization as necessary to improve performance, although they are also acknowledged to take additional time. Management should continue to stress the importance of these initiatives after startup to ensure that the improvements in these areas are not lost.

ENGINEERING AND TECHNICAL SUPPORT

The engineering and technical support activities have been generally effective in achieving outage goals, but integration of the engineering resources within the unit and, particularly, with the operating organization needs additional reinforcement.

- The system readiness reviews are being greatly improved from their initial issuance in support of Mode 6. Guidance on their preparation was significantly revised; restart items are now clear; the reports are being reviewed outside of engineering; a PORC subcommittee was established to review these reports in detail; systems selected for formal review were assessed based on PRA significance; and the review conclusions have been

clarified. As of May 17, none of the revised system readiness reviews had been through the new approval cycle. The SAT did review final drafts of some reviews performed under the new guidance and was impressed with the detailed and comprehensive nature of the reviews. (See prerequisite No. 5.)

- One of the highest priority activities during this outage was the reduction of operator burdens. Substantial progress has been achieved in this regard. Reports dated May 12 indicate that of the 14 bypass jumpers (BJs) imposing an operator burden, only 3 minor burden BJ's are expected to be in place at startup. Of the 26 control panel deficiencies identified as imposing an operator burden, seven burden-related deficiencies are expected to be in place at startup. However, the 18 items identified by operators as burden items are not expected to be resolved prior to startup. Engineering work requests have been written for 4 of these items, and assignments are pending on the remaining items. Since the outage goals have always been stated as percents of items as of 12/31/94 or an absolute number, it has not been possible to confirm that the remaining operator burdens do not pose an overall or cumulative burden that may adversely affect plant safety or reliability, or otherwise not be consistent with the "highest priority" category for burden reduction. (See Prerequisite No. 6.)
- The scope of the engineering tasks to be accomplished during the current outage continued to evolve for a number of months. As noted previously, the process used to initially select and prioritize tasks was often informal and not well documented. It is not clear that criteria to determine RFO 12 scope and items for deferral were established and consistently used. As a result, engineering priorities and deferral decisions made prior to the outage may not have been consistent with the priority of operations or other unit departments, and a final check of open PDCRs and EWRs would be appropriate. (See prerequisite No. 7.)

Prerequisite Items for Mode 4 - Engineering and Technical Support:

5. The system readiness reviews need to be completed and approved, coordinated with and reviewed by interfacing departments and reviewed by PORC. These reviews must assure that all required open items are completed prior to entering each successive mode.
6. Operations needs to review the cumulative operator burden and impacts associated with the annunciator alarms, equipment deficiencies, control room panel deficiencies, and bypass jumpers that may be present at startup. Operations should confirm that the resulting cumulative burden is acceptable and consistent with the "high priority" that has been assigned to reducing this burden, and poses no adverse impact on plant safety or reliability.
7. Outstanding Plant Design Change Requests (PDCRs) and Engineering Work Requests (EWRs) need to be reviewed by Operations and PORC to provide

confidence that there are no issues or problems individually or in combination that met the criteria defining startup items and that all items can be properly deferred to the next operating cycle or RFO 13.

CORRECTIVE ACTION AND SELF-ASSESSMENT

The MP2 Corrective Action and Event Analysis programs are recognized as historically weak. Improvement initiatives are in progress, but their adequacy in achieving and sustaining effective programs has not yet been demonstrated.

- The identification of generic issues and adverse trends, requiring corrective action has begun by the Events Analysis Department (EAD), but results are not yet available. Past event reviews completed before the EAD was fully established, such as the service water spill and EAL misclassification, were superficial in nature and did not result in the type of analysis or corrective action that would preclude re-occurrence.
- The MP2 Corrective Action system effectiveness continues to suffer because the Action Item Tracking and Trending System (AITTS) is not being utilized by MP2 management. Therefore, information is not reviewed and individuals are able to defer assignments and miss dates, or to provide inadequate responses. Management has stated clear expectations (J. F. Opeka memos dated November 21, 1994, and December 2, 1994) regarding the nature and use of this system and continued management emphasis is being placed on the need to expedite improvement in this area (D. B. Miller Jr. Action Item identified in May 17 meeting).
- The Adverse Condition Report (ACR) process was developed to provide improvements over the previous Plant Information Reports (PIR) system in the identification of abnormal and adverse conditions. ACR process implementation is in an early stage and efforts continue to obtain greater participation in preparing reports and improved timeliness of reports. The current ACR backlog is growing and the generation rate currently exceeds the closeout rate by 7 to 1. While the ACR system has the potential to be effective in identifying important lessons and needed changes, the system is not yet being implemented or used to achieve real improvement opportunities by the organization. (See prerequisite No. 8.)

Prerequisite Item for Mode 4 - Corrective Action and Self-Assessment

8. Configuration control issues continue to be identified, including errors which could compromise safety-related equipment function or personnel safety. The recent trend in such numbers and significance of errors has been improving, yet a continued review is needed to provide confidence that the root causes of past errors are known and adequately reflected in any needed procedure, training, or labelling upgrades prior to Mode 4.

CONCLUSION

There have been numerous and significant changes over the past year in the MP2 organization, processes, culture and plant. In many cases, these changes have continued to evolve and the combination of: many new people; numerous self-improvement initiatives; new and revised programs and processes; the creation of a new culture; and the desire for improved plant material condition; coupled with a refueling outage and a stand down early in the outage have imposed a heavy burden on MP2 staff and management. Overall, however, the SAT has observed an increased focus and dedication of the MP2 staff on needed plant and operational improvements and in "doing the job right" during this outage.

A number of issues and concerns were identified by the SAT as a result of its review. These have been discussed with Northeast Utilities and MP2 management following onsite SAT activities in January, April, and May 1995. Those concerns considered by the SAT as having the potential to impact a successful startup have been individually identified in the report as prerequisites for entering Mode 4. The SAT believes that these items warrant specific management attention.

With the exceptions and cautions noted previously, the SAT has identified no issue that would prevent the plant from proceeding with plant startup activities or that would raise a serious threat to plant safety or reliable plant operation during Cycle 13. The SAT believes that if the current plans, initiatives, and programs, modified to address the prerequisite outlined by the SAT are properly implemented as now defined, the plant will be ready for safe and reliable operation.

SUGGESTIONS FOR CONTINUED MANAGEMENT ATTENTION AND EMPHASIS

1. A priority effort is needed to understand the lessons from RFO 12 and to define and plan for RFO 13. Dedicated staff, management involvement, and clear lines of responsibility and accountability are needed. The scope of activities needs to be defined as soon as practical during the operating cycle, consistent with operations priorities, and implemented in accordance with established procedures.
2. A "continuous improvement plan" specific to MP2 is needed for the operating cycle. The plan needs to be a "living" document and a focal point to establish long-term improvements to achieve the level of operating excellence desired by MP2 staff and management. It requires specific management oversight and vigilance and cannot be allowed to be just another initiative.
3. Continued emphasis is needed to assure a proper operations role, integrate the staff, and build teamwork. A large number of initiatives have been conducted or are in progress toward this end, although the desired end results have not

yet been achieved. The development of trust, close working relationships, and a integrated approach will take time, energy, and continued management attention.

ATTACHMENT 1

STARTUP ASSESSMENT TEAM CHARTER

TEAM MEMBERS:

Jay Thayer - Team Leader (YAEC)
Mike Breault (NAESCO)
Bill Corcoran (Independent Consultant)
Mark Crosby (INPO)
Robert Day (ANO)
Jane Grant (YAEC)
Joe Grillo (NAESCO)
Jack Hellemes (Independent Consultant)
Rick Jacobs (INPO)
Bob Mitchell (YAEC)
Joe Solymossy (NU)

1.0 Purpose:

The purpose of the Millstone 2 - Startup Assessment Team (SAT) is to (1) perform an in-depth assessment of the Millstone Unit No. 2 readiness for plant start-up, (2) assess the effectiveness of improvement actions taken by NNECO to date, and (3) indicate any actions the SAT believes are necessary to complete before restart. The SAT will report directly to the Executive Vice President - Nuclear.

2.0 Reason:

To ensure Millstone Unit No. 2 is prepared for a safe startup and a reliable cycle of operation.

3.0 Review Categories:

The scope of the assessment is to include the following categories

- I. Management and Organization
- II. Operations and Training
- III. Maintenance and Work Control
- IV. Engineering and Technical Support
- V. Corrective Action Effectiveness and Self Assessment Programs

4.0 Assessment Methodology:

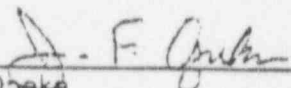
The SAT may perform direct observations of operating crews, maintenance and I&C personnel, as well as other support personnel. In addition, interviews of key personnel and review of relevant documents (e.g., NRC Inspection Reports, INPO Reports, PIRs, QAS Reports, SALP Reports, MOP data, NRB Reports) will be conducted at the discretion of the SAT. The SAT will have access to any documentation and personnel necessary to fulfill their charter.

5.0 Deliverables:

The SAT will document its conclusions including recommendations within approximately five working days of completion of its assessment activities.

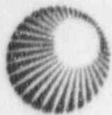
6.0 Schedule:

The SAT is currently scheduled to commence its work on-site starting Monday, January 23, and target completion of a final report for Friday, February 10, 1995.



J. F. Obeke
Executive Vice President - Nuclear

January 1995

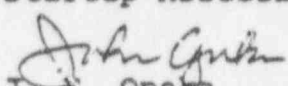


Northeast
Utilities System

January 23, 1995
JFO-95-G-025

Memo

TO: Startup Assessment Team

FROM: 
J. F. Opeka
(Millstone Ext. 5302)

SUBJECT: Addendum to the SAT Charter

Clarification of Section 2.0 - Reason

Although the SAT Charter may be read to focus on the preparations for Millstone Unit No. 2 startup and the readiness to safely operate the plant in the near term, the Team should be alert for and address any issues which may impact safe or reliable operations during the current or future operation cycles.

It is also important that the SAT not only review the Millstone Unit No. 2 policies, programs, processes, and procedures, but also do sufficient implementation review to determine their effectiveness. This may entail additional review effort by the SAT, or a subset thereof, at a date later than contemplated in the Charter. Your report should identify whether such a follow up review is appropriate, the recommended composition of the Team, the review scope, and schedule.

Startup Expectations

Operations, with the full cooperation and support of all Millstone Unit No. 2 personnel, will control startup and subsequent operations such that high standards of nuclear and industrial safety are consistently achieved.

In practical terms, this equates to conduct of plant activities which is exemplified by rigorous configuration control, minimal rework, few operator work arounds, a manageable maintenance backlog, proactive Engineering involvement to ensure optimal system performance, absolute control of reactivity, no unplanned radioactive releases, no significant operational or industrial safety events, and strict adherence to the ALARA principles in all our activities.

Startup Assessment Team
Addendum to the SAT Charter
January 23, 1995
Page 2

In order to achieve these expectations, I expect Millstone Unit No. 2 and support personnel to exemplify our Quick, Responsible, Smart, Tough culture. As we build on this culture, my expectation is to have a safe, reliable and productive operating cycle following startup. This would be demonstrated by steady improvement in the INPO performance index for Millstone Unit No. 2 for the upcoming cycle of operation.

JFO:bl

cc: D. B. Miller, Jr.

ATTACHMENT 2

ATTACHMENT 2

STARTUP ASSESSMENT TEAM MEMBERS

Team Leader

Jay Thayer (Vice President and Manager of Operations, Yankee Atomic Electric Company)

Management and Organization

Rick Jacobs (Team Manager, INPO)

Jane Grant (Regulatory and Industry Affairs Manager, Yankee Atomic Electric Company)

Operations and Training

Joe Grillo (Operations Manager, NAESCO)

Mark Crosby (Operations and Training Evaluator, INPO)

Lee Giles (Team Manager, INPO)

Maintenance and Work Control

Mike Breault (Independent Review Team Project Specialist, NAESCO)

Bob Mitchell (Plant Support Manager, Yankee Atomic Electric Company)

Engineering and Technical Support

Jack Heltemes (Independent Consultant)

Bobby Day (Manager Engineering Support - Arkansas Nuclear One, Entergy Operations, Inc.)

Corrective Action Effectiveness and Self-Assessment Programs

Bill Corcoran (Independent Consultant)

Joe Solymossy (Director - QAS, Northeast Utilities)

ATTACHMENT 3

ATTACHMENT 3

SOURCE DOCUMENT LIST

1. NU letter to NRC, Summary of Millstone 3 Management Meeting - November 17, 1994, dated December 1, 1994.
2. NYPA Startup Evaluation of Readiness Team (SERT) Report, January 6, 1995.
3. Cooper Station Diagnostic Self-Assessment, August 1994.
4. NU Millstone 2 Staff Performance Evaluation (NRB) Item 1, dated 12/8/94.
5. NRC Inspection Manual - Operations Safety Team Inspection (OSTI)1.0.