

July 29, 1997

SECY-97-166

FOR: The Commissioners

FROM: L. Joseph Callan /s/  
Executive Director for Operations

SUBJECT: RECOVERY OF MILLSTONE NUCLEAR POWER STATION

PURPOSE:

To provide the Commission with a quarterly summary status of the ongoing activities in the Restart Assessment Plan for the Millstone Nuclear Power Station, in response to a Staff Requirements Memorandum dated May 7, 1997.

The summary status includes the status of the NRC oversight of the Independent Corrective Action Verification Program, an assessment of licensing issues for restart, a summary of significant inspection activities and results, and an updated project planning schedule.

BACKGROUND:

On November 4, 1995, the licensee (Northeast Utilities) shut down Millstone Unit 1 for a planned refueling outage. During an NRC investigation of licensed activities at Millstone Unit 1, in the fall of 1995, the NRC staff identified potential violations regarding refueling practices and operation of the spent fuel pool cooling systems that were inconsistent with the Updated Final Safety Analysis Report (UFSAR). The NRC issued a letter to the licensee on December 13, 1995, requiring that, before the restart of Millstone Unit 1, it inform the NRC, pursuant to Section 182a of the Atomic Energy Act of 1954, as amended, and Section 50.54(f) of Title 10 of the Code of Federal Regulations (10 CFR 50.54(f)), of the actions taken to ensure that in the future it would operate that facility according to the terms and conditions of the plant's operating license, the Commission's regulations, and the plant's UFSAR.

Contact:

William D. Travers, NRR  
301-415-1200

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In January 1996, the NRC designated the units at Millstone as Category 2 plants on the NRC's watch list. Plants in this category have weaknesses that warrant increased NRC attention until the licensee demonstrates a period of improved performance. On February 20, 1996, the licensee shut down Millstone Unit 2 when it declared both trains of the high pressure safety injection (HPSI) system inoperable because of a design issue (there was a potential that the HPSI throttle valves could become plugged with debris when in the sump recirculation mode). On March 30, 1996, the licensee shut down Millstone Unit 3 after it found that containment isolation valves for the auxiliary feedwater turbine-driven pump were inoperable because the valves did not meet NRC requirements. In response to (1) a licensee root-cause analysis of Millstone Unit 1 UFSAR inaccuracies that identified the potential for similar configuration-management conditions at Millstone Units 2 and 3, and (2) design configuration issues identified at these units, the NRC issued 10 CFR 50.54(f) letters to the licensee on March 7 and April 4, 1996. These letters required that the licensee inform the NRC of the corrective actions taken regarding design configuration issues at Millstone Units 2 and 3 before the restart of each unit.

In June 1996, the NRC designated the units at Millstone as Category 3 plants on the NRC's watch list. Plants in this category have significant weaknesses that warrant maintaining them in a shutdown condition until the licensee can demonstrate to the NRC that it has both established and implemented adequate programs to ensure substantial improvement. Plants in this category require Commission authorization to resume operations.

On August 14, 1996, the NRC issued a Confirmatory Order directing the licensee to contract with a third party to implement an Independent Corrective Action Verification Program (ICAVP) to verify the adequacy of its efforts to establish adequate design bases and design controls. The ICAVP is

intended to provide additional assurance, before unit restart, that the licensee has identified and corrected existing problems in the design and configuration control processes.

On October 24, 1996, the NRC issued an Order directing that, before the restart of any Millstone unit, the licensee develop and submit to the NRC a comprehensive plan for reviewing and dispositioning safety issues raised by its employees and ensuring that employees who raise safety concerns can do so without fear of retaliation. The Order also directs the licensee to retain an independent third party to oversee implementation of its comprehensive plan.

On November 3, 1996, the NRC created a new organization, the Special Projects Office (SPO), within the Office of Nuclear Reactor Regulation (NRR), to provide a specific management focus on future NRC activities associated with the Millstone units. The SPO's responsibility for activities at Millstone includes all licensing and inspection activities required to support an NRC decision on restart of the Millstone units. -

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In SECY-97-003, "Millstone Restart Review Process," dated January 3, 1997, the staff provided to the Commission the NRC staff's processes and approaches that will be used to oversee the corrective action programs at Millstone Nuclear Power Station, Units 1, 2, and 3. The staff is applying the guidelines of NRC Manual Chapter (MC) 0350, "Staff Guidelines for Restart Approval," to the restart approvals of Millstone Units 1, 2, and 3.

On January 30, 1997, the staff, along with the licensee, briefed the Commission concerning the oversight activities in regard to the recovery of the three Millstone units. Subsequently, on April 23, 1997, the staff, along with the licensee, provided the Commission with a quarterly update regarding these same oversight activities. The staff is continuing to brief the Commission on Millstone activities on a quarterly basis.

DISCUSSION:

In a Staff Requirements Memorandum (SRM) dated May 7, 1997, the Commission directed the staff to provide the Commission, prior to each quarterly meeting with the Commission, a summarized written status of the ongoing activities in the Restart Assessment Plan, including, but not limited to, the status of NRC oversight of the ICAVP, an assessment of licensing issues required for restart, a summary of significant inspection activities and results, and an updated project planning schedule.

The staff has identified in the Restart Assessment Plan several major elements that require resolution before plant restart. These elements include the corrective action programs, work planning and control improvements, procedure upgrade programs, employee concerns, and quality assurance and management oversight improvements. The plan also includes staff activities to evaluate the licensee's response to NRC's 10 CFR 50.54(f) letters regarding Millstone Units 1, 2, and 3, and the completion of the ICAVP. The actions listed in the generic MC 0350 restart checklist that are applicable to Millstone, such as those regarding management effectiveness and self-assessment capability, are also included in the plan. The plan provides for the conduct of an operational safety team inspection (OSTI), which is normally carried out to assess the overall readiness of the plant for restart after a prolonged shutdown. Other issues that require NRC review before restart are pending 10 CFR 2.206 petitions, enforcement actions, and allegations. Attachment 1 is a summary status of the Restart Assessment Plan major elements. Attachment 2 is the current Restart Assessment Plan for Millstone Units 1, 2, and 3.

A copy of the project planning schedules for Units 3 and 2 is provided as Attachment 3. The licensee has focused its recovery/restart efforts on Units 3 and 2 and has delayed activities at Unit 1. The OSTI for Unit 3 is scheduled to begin on or about October 13, 1997, provided the licensee has implemented all necessary corrective actions to have the plant and personnel ready for power operations. Based on the current schedule, a Commission briefing for a Unit 3 restart decision could occur in December 1997. The OSTI

for Unit 2 is scheduled to begin on or about January 5, 1998, provided the

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licensee has implemented all necessary corrective actions to have the plant and personnel ready for power operations. Based on the current schedule, a Commission briefing for a Unit 2 restart decision could occur in March 1998.

L. Joseph Callan

Executive Director

for Operations

Attachments:

1. Restart Assessment Plan Major Elements
2. Millstone Restart Assessment Plan
3. Project Planning Schedule

#### Restart Assessment Plan Major Elements

1. Manual Chapter 0350 and Restart Assessment Plan
2. Independent Corrective Action Verification Program
3. Handling of Safety Concerns Raised by Licensee Employees
4. Licensing Issues
5. 10 CFR 50.54(f) Activities
6. Corrective Action Program
7. Oversight
8. Enforcement Status

9. Work Planning and Controls
10. Procedure Upgrade Program
11. Inspection Activities and Results
12. Operational Safety Team Inspection

Attachment 1

ISSUE: NRC Manual Chapter 0350 and Restart Assessment Plan

DISCUSSION: NRC Inspection Manual Chapter (MC) 0350, "Staff Guidelines for Restart Approval," establishes the guidelines for approving the restart of a nuclear power plant after a shutdown resulting from a significant event, complex hardware problem, or for which serious management deficiencies have been identified. The primary objective of the guidelines in MC 0350 is to ensure that NRC's restart review efforts are appropriate for the individual circumstances, are reviewed and approved by the appropriate NRC management levels, and provide objective measures of restart readiness. As a result of NRC concerns regarding the overall effectiveness of the licensee's management, the staff is applying the guidelines of MC 0350 to the restart approvals of Millstone Units 1, 2, and 3. MC 0350 states that the staff should develop a plant-specific restart assessment plan for NRC oversight of each plant startup.

NRC The restart assessment plan is to include all expected actions required to be taken before the NRC approves a plant for restart.

NRC ACTION: The staff has developed a Restart Assessment Plan (RAP) for each of the Millstone units to incorporate the appropriate aspects of MC 0350 and to address site-specific and unit-

elements related performance. work includes to 1, unit-specific and safety/regulatory 0350 Millstone, self-assessment capability,

specific issues. The RAP consists of several major that require resolution before plant restart and are to the root causes for the decline in licensee performance. These elements include the corrective action programs, planning and control improvements, procedure upgrade programs, employee concerns, and quality assurance and management oversight improvements. The plan also staff activities to evaluate the licensee's responses to NRC's 10 CFR 50.54(f) letters regarding Millstone Units 1, 2, and 3, and completion of the Independent Corrective Action Verification Program. The RAP also contains a unit-specific Significant Items List (SIL), which contains specific items that are being used by the NRC to audit and evaluate licensee programs and significant safety/regulatory issues. Additionally, the actions listed in the MC 0350 generic restart checklist that are applicable to Millstone, such as those regarding management effectiveness and self-assessment capability, are also included in the plan.

STATUS: closure units.

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The review for schedule 1997, and

STATUS: closure units.

The review for schedule 1997, and

As a result of the licensee's decision to focus its recovery/restart efforts on Units 3 and 2, the NRC RAP activities are also being directed to these units. The licensee is providing SIL closure packages for NRC and has scheduled the SIL closure package submittals for Units 2 and 3. There has been some slippage in the schedule for these closure package submittals. As of July 16, 1997, the NRC staff has closed 23 of the 86 items for Unit 3 and four of the 51 items for Unit 2.

ISSUE: Independent Corrective Action Verification Progra

DISCUSSION: On August 14, 1996, the NRC issued a Confirmatory Order

Verification by a contractor approved by the NRC, will verify the adequacy of Northeast Utilities' efforts to establish adequate design bases and design controls, including translation of the design bases into operating procedures and maintenance testing practices, verification of system performance, and implementation of modifications since issuance of the initial facility operating licenses. The ICAVP is intended to provide additional assurance, before unit restart, that the licensee has identified and corrected existing problems in the design and configuration control processes. It includes a three-tiered approach, as described in SECY-97-003, "Millstone Restart Review Process," dated January 3, 1997, for a sample evaluation of the licensee's activities. The NRC oversight of the ICAVP is one of many activities that make up the Restart Assessment Plan (RAP).

The results from this program will be considered as a significant part of the decision regarding recommended restart.

Management future conducted regulations. and recurrence of the the risk-

The licensee is implementing its Configuration Plan (CMP), which is intended to confirm that the operation of Millstone Units 1, 2, and 3 will be in accordance with the terms and conditions of their applicable operating licenses, UFSARs, and NRC regulations. The CMP includes efforts to understand the licensing design bases issues, which led to issuance of the 10 CFR 50.54(f) letters and actions to prevent those issues. The Unit 3 CMP includes a review of the licensing basis requirements for the 88 systems that the licensee has categorized through the implementation of maintenance rule as either Group 1 (safety-related and

significant) or Group 2 (safety-related or risk-significant). Following completion of problem identification of one-half of the Group 1 systems, the ICAVP contractor can begin its review. The licensee is scheduled to complete the problem identification phase of the CMP for Unit 3 on July 14, 1997, and on September 5, 1997, for Unit 2.

NRC ACTION: The staff's oversight objectives are to ensure that the review by the ICAVP contractor is independent of the licensee and its design contractors, is performed by qualified individuals, and is comprehensive, incorporating appropriate engineering discipline and operational reviews.

In accordance with the Confirmatory Order, the NRC will review and approve the proposed ICAVP contractor for each unit and the contractor's audit plan for each review. The staff will select the specific systems to be evaluated in the ICAVP, with input from the Connecticut Nuclear Energy Advisory Council (NEAC). The NEAC is expected to select some of the systems to be reviewed by the ICAVP contractor.

While key design aspects of many of the systems being evaluated by the licensee will be assessed in the ICAVP, four systems will be examined in detail by the contractor. The scope of the ICAVP will be increased if issues are identified in the assessment of the licensee's corrective actions.

In addition to overseeing the activities of the ICAVP contractor, the staff will perform its own independent inspections. The staff plans to conduct independent vertical-slice inspections of at least two systems; one within the scope of the ICAVP and one outside the scope.

The staff will evaluate the final results of the ICAVP contractor's audit and assess the licensee's corrective actions. The details about the staff oversight plans are contained in SECY-97-003.

STATUS: The staff approved Sargent & Lundy for the conduct of

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Refueling  
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Millstone Units 1 and 3 ICAVP on April 7, 1997. The licensee completed problem identification on one-half Group 1 systems for Unit 3 on May 27, 1997. The staff approved the Sargent & Lundy audit plan on June 3, 1997, and selected the first two systems for ICAVP review (Service Water System and the Quench Spray/Recirculation Spray System).

The staff approved Parsons Power Group Inc., for the of the Millstone Unit 2 ICAVP on May 28, 1997. The plan remains under review. The licensee completed identification on one-half of the Group 1 systems June 30, 1997. The staff selected the first two systems for review (High Pressure Safety Injection System and the Water Storage Tank as one system and Auxiliary the Condensate Storage Tank as the other system).

ISSUE:  
Employees

Handling of Safety Concerns Raised by Licensee

DISCUSSION:  
Review

In its September 1996 report, "Millstone Independent Group Regarding Millstone Station and NRC Handling of Employee Concerns and Allegations," the NRC staff determined that, in general, an unhealthy work environment, which did not tolerate dissenting views and did not welcome nor promote a questioning attitude, has existed at Millstone plants for the past several years. This poor environment has resulted in repeated instances of discrimination and ineffective handling of employee concerns.

Reactor

On October 24, 1996, the Director, Office of Nuclear Regulation, issued an Order to Northeast Utilities (NU) requiring the licensee to take specific actions to resolve problems in the process for handling employee safety

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NRC ACTION:  
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concerns at the Millstone station. The October 24,  
Order required the licensee to develop, submit for NRC  
review, and begin implementation of a comprehensive  
(a) reviewing and dispositioning safety issues raised  
employees, and (b) ensuring that employees who raise  
concerns are not subject to discrimination. The  
submitted the plan to the NRC on January 31, 1997, and  
begun implementation of completed plan sub-elements.  
The Order further required the licensee to submit, for  
approval, a proposed independent, third-party  
to oversee implementation of the above comprehensive  
The licensee submitted the proposed third-party  
organization, Little Harbor Consultants, Inc. (LHC), to  
NRC on December 23, 1996. On April 7, 1997, the NRC  
approved LHC as the third-party organization. The  
specified that once approved, the third-party  
develop and submit for NRC approval an oversight plan  
conduct of their activities. The third-party oversight  
was submitted by LHC to the NRC for approval on May 2,  
The plan for independent, third-party oversight will  
continue to be implemented until the licensee  
by its performance, that the conditions, which led to  
requirements of that oversight, have been corrected to  
satisfaction of the NRC.  
The NRC staff will perform the following functions  
employee concerns: (1) review and comment on the  
comprehensive plan, (2) review and approve the  
organization for oversight of the comprehensive plan,  
review and approve the third-party organization

plan, and (4) assess effectiveness of licensee  
implementation of its programs for handling employee  
safety concerns. STATUS: The staff has reviewed and  
provided comments to the licensee  
on the comprehensive plan. At a May 13, 1997, meeting  
between the NRC and the licensee, the licensee gave a  
detailed presentation on the content and implementation  
of its comprehensive plan. The presentation included  
responses to staff comments on the plan. Written responses to  
NRC comments on the plan were provided by the licensee at a  
May 21, 1997, meeting with the NRC.

By letter dated April 7, 1997, the staff approved  
Little Harbor Consultants, Inc. (LHC), as the third-party  
organization to provide oversight of the licensee's  
the implementation of its plans. The staff is reviewing  
submitted by acceptability of the oversight plan, which was  
LHC on May 2, 1997.

The NRC staff is developing a plan for monitoring the  
LHC licensee's implementation of the comprehensive plan and  
will oversight of that implementation. Further, the staff  
implementation conduct a team inspection of the licensee's  
of its programs for handling employee concerns prior to  
the restart of any of the Millstone units.

ISSUE: Licensing Issue

DISCUSSION: Each unit plans to or has submitted licensing issues  
requests, (amendments, unresolved safety questions, relief  
to etc.) that will need to be reviewed and approved prior  
restart.

NRC ACTION: The staff will process and review licensing actions as  
they are identified and submitted by the licensee. The  
staff will follow the normal processes for these actions.

STATUS: Unit 3: As of July 2, 1997, the licensee has  
identified 23 licensing actions that need to be completed prior to

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have

restart. Twenty-one have been submitted to the NRC  
other two licensing actions scheduled to be submitted  
end of July 1997. Of the 21 submitted to the NRC, six  
been issued and the other 15 are under NRC review.

identified 16

Unit 2: As of July 2, 1997, the licensee has  
licensing actions that need to be completed prior to  
restart. Eight have been submitted to the NRC. One  
licensing action has been completed by the NRC staff

and the

other seven are under staff review.

identified six

Unit 1: As of July 2, 1997, the licensee has  
licensing actions that need to be completed prior to  
restart. Five have been submitted to the NRC with the  
remaining licensing action scheduled to be submitted by

the

end of July 1997. Of the five submitted to the NRC,

one

license amendment has been issued and the other four

license

amendments are currently under NRC review. The

majority of

the license amendments deal with verbatim compliance

issues

or clarifications. However, the licensee is currently  
reviewing three additional issues that may require

license

amendments prior to startup.

projected

The amendments submitted to date and the staff's

the

review schedule do not appear to impact the licensee's  
ability to restart on its current schedule. However,

information on

staff has requested additional or clarifying

lengthened the

several license amendment requests, which has

issues,

review process. Future submittals or new emerging

which require extensive staff review, may impact the  
licensee's projected schedule. ISSUE: 10 CFR

50.54(f) Activities

DISCUSSION:  
Northeast

On December 13, 1995, the NRC issued a letter to

50.54(f),

Utilities (NU) requesting NU, pursuant to 10 CFR

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to provide information describing actions taken to  
that future operations of Millstone Unit 1 will be  
in accordance with the terms and conditions of the  
Unit 1 operating license, the Commission's regulations,  
including 10 CFR 50.59, and the Millstone Unit 1  
Final Safety Analysis Report (UFSAR). Similar letters  
issued to NU for Millstone Unit 2 on March 7, 1996, and  
Unit 3 on April 4, 1996. In those letters, the NRC  
requested that the information be submitted no later  
7 days before restart of the respective Millstone  
By letter dated May 21, 1996, the NRC further  
pursuant to 10 CFR 50.54(f), a comprehensive list of  
and configuration deficiencies identified after the  
December 13, 1995, letter for Millstone Unit 1 and  
ACR 7007 - Event Response Team Report was issued for  
Millstone Units 2 and 3.  
Due to the increased level of NRC oversight, the units  
Millstone being classified as Category 3 plants, the  
previously mentioned Orders, and the creation of the  
Projects Office, the information needed by the NRC  
plant restart has changed. Therefore, by letter dated  
April 16, 1997, the NRC superseded the requests  
the previously mentioned 10 CFR 50.54(f) letters and  
requested the following items: (1) the significant  
that are needed to be accomplished before restart, (2)  
list of items to be deferred until after restart, (3)  
process and rationale NU is using to defer items until  
restart, and (4) a description of the actions taken to  
ensure that future operation of the unit(s) will be  
conducted in accordance with the license, regulations,  
UFSAR. Items 1, 2, and 3 were requested to be

within 45 days of the letter and items 1 and 2 were to be updated approximately 45 days thereafter. Item 4 was requested to be submitted 14 days prior to the Commission meeting for each individual unit.

By letter dated May 29, 1997, the licensee submitted the requested information (Items 1, 2, and 3) for Millstone Units 2 and 3. The licensee did not submit the information for Millstone Unit 1 due to a recent decision to scale back work and minimize resource expenditures during 1997.

The licensee committed to include the information for Millstone Unit 1, as well as an update for Millstone Units 2 and 3 in its next submittal (approximately July 13, 1997). NRC ACTION: The NRC staff will review the licensee's submittal and will conduct an inspection, for each unit, of the licensee's process for deferring items until after restart. The deferred inspection will include a review of the list of items and an audit of a representative sample.

STATUS: The NRC staff is reviewing the licensee's submittal and plans to conduct an inspection of the licensee's process for deferring items until after restart. The inspection is scheduled for the July-August 1997 timeframe for Millstone Unit 3. The inspection for Millstone Unit 2 has not yet been scheduled.

ISSUE: Corrective Action Progra

DISCUSSION: The NU corrective action program has been weak in ensuring comprehensive and effective corrective actions. There have been many instances of narrowly focused corrective actions that failed to resolve all aspects of the underlying problem. Additionally, the licensee has failed to follow up on corrective actions to ensure effectiveness.

NRC ACTION: The NRC inspection staff will concentrate on issues for each unit identified by the licensee's Condition Reports

(CRs)

process and audit the licensees corrective actions for completeness. The staff is periodically selecting CRs

for

review, based on the licensee's assigned level of importance, or their risk significance, as perceived by

the

NRC staff. Additionally, other CRs will be examined by

the

staff to provide a broader spectrum of corrective

action

issues.

The primary intent is to assess the corrective action program while evaluating safety significant technical issues. Additional insights will be gained from the MC 40500 inspection, closure of the significant items

list

issues, closure of licensee event reports, and the

normal

inspection program where valuable insights regarding

the

effectiveness of corrective actions are routinely

collected.

Additionally, the NRC staff, through oversight of the Independent Corrective Action Verification Program,

will

assess the licensee's corrective actions for degraded

and

nonconforming conditions.

A team inspection, using NRC Inspection Manual Chapter 40500, "Effectiveness of Licensee Controls in

Identifying,

Resolving, and Preventing Problems," is planned for

early

October. It will look primarily at the corrective

action

program, licensee resolution of problems, operating experience feedback, self assessment activities, and

on-site

and off-site safety review committees. Finally, the Operational Safety Team Inspection (OSTI) will audit portions of the corrective action process during the

course

of its activities.

STATUS:

The inspections performed to date indicate increased management focus on the corrective action program

problem at

Units 2 and 3. The staff has noted improvements in the quality of the Significant Items List closure packages provided by the licensee. The

inspection results of 16 open items {Licensee Event Reports (LERs), Escalated Enforcement Items (EEl)s, Violations, and Unresolved Items (URIs)} at Unit 2, reviewed in NRC Inspection Report 96-08, were compared to inspection results of 15 open items in NRC Inspection Report 97-02. The results of this comparison indicate that the licensee has made some progress regarding the quality of corrective actions. In the recent report, the corrective actions for 12 of 15 open items were acceptable to the NRC while only four of 16 were acceptable in Inspection Report 96-08. In the recent report, a violation was issued for one of 15 open items, while in the earlier report seven EEl)s and two violations were associated with 16 open items.

The most recent Millstone site inspection report, 97-02 (June 24, 1997), examined the corrective action program at Unit 1, and indicated that overall, the implementation of procedure RP-4, "Corrective Action Program," Revision 4, has resulted in only limited improvements in the corrective action process. The revision of the condition report (CR) process was poorly implemented in that specific guidelines were not put in place to ensure the initiation and appropriate processing of CRs for conditions adverse to quality.

ISSUE: Oversight

DISCUSSION: The licensee has identified its oversight function as deficient through self-assessments and external and internal audits, and has identified its oversight function as a contributing factor in its declining performance. The Yankee Atomic Electric Company (YAEC), as described in the report "Assessment of Past Ineffectiveness of Independent Oversight," examined the failure of Quality Assessment Services (QAS), the Independent Safety Evaluation Group, and the Nuclear Review Board (NRB) to identify specific

program  
support

deficiencies. YAEC found that management did not  
these oversight functions adequately.

released.

The licensee recently had an independent review of the  
nuclear oversight function performed by an outside  
consulting firm. The results have not yet been

NRC ACTION:  
inspection

The NRC assessment of the nuclear oversight function is  
addressed through insights gained from the normal

Inspection  
inspect  
integrated

program. In addition, the NRC will perform a special  
inspection of the oversight function using NRC

Manual Chapter 40500. Additionally, the OSTI will  
how effectively the oversight function has been  
into the operation of the plants.

STATUS:  
recovery  
ongoing,  
nuclear  
results.

With the implementation of the program revisions,  
activities, and organizational initiatives still  
the impact and effectiveness of the changes in the  
oversight function have not yet provided measurable

management  
time"  
activities

The staff has observed increased Nuclear Safety and  
Oversight (NS&O) involvement in performance monitoring,  
interfacing analysis, and support of the Unit 3

and line staffs. Such involvement has included "real  
evaluation and feedback on routine operational

and nonroutine events. The NRC's assessment of NS&O  
effectiveness (including an expectation of demonstrable  
results of the corrective action program improvements)

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specific QAS activities will continue over the course  
next several inspection periods, covering the ongoing  
recovery, open item closure, and work associated with  
startup planning for the unit.

ISSUE:

Enforcement Statu

DISCUSSION:  
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A Predecisional Enforcement Conference was held with  
licensee on December 5, 1996, to discuss 64 individual  
apparent violations. Subsequent inspections have

identified  
been  
the  
items.  
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finalizing

additional examples of similar violations that have  
incorporated into the enforcement package, increasing  
number of violations to approximately 80 individual  
The licensee did not contest any of the violations at  
conference, and the staff is in the process of  
the enforcement package.

NRC ACTION: Once enforcement actions have been taken, the NRC will  
evaluate the licensee's corrective action to those  
enforcement actions that are determined to impact the  
restart of each unit.

STATUS: The rate of new enforcement item identification remains  
fairly constant for Units 1, 2, and 3.

involved  
protected  
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Nuclear

On February 3-7, 1997, an inspection identified several  
violations in the security area. The violations  
the failure to properly control vehicles in the  
area, the failure to control safeguards information,  
failure to properly perform personnel searches prior to  
granting protected area access. The first two of these  
violations were cited in the past, and it appears that  
corrective actions were not effective. A civil penalty  
\$55,000 was issued on June 11, 1997, to Northeast  
Energy Company.

ISSUE: Work Planning and Control

DISCUSSION: Work planning and controls are other areas in which the  
licensee has shown a weakness. The ability to plan,  
control, and complete work is fundamental to achieving  
adequate corrective actions. Effective work planning  
and  
controls are prerequisites for reducing and managing  
backlogs. Weak work planning and controls were  
demonstrated  
during the Unit 2 outage, wherein, tagging boundary  
violations resulted in an extensive effort by the  
licensee  
to correct the identified weaknesses. Work planning  
and  
controls were also issues at Unit 1.

NRC ACTION: There will be a complete review of the licensee's site-wide Automated Work Order (AWO) process by the NRC staff. The AWO process is an integral part of the work planning and control system and is instrumental in establishing the scope of the work, providing the appropriate procedures, and establishing the tagging boundaries.

assess The Operational Safety Team Inspection (OSTI) will engineering and maintenance backlogs during its operational readiness inspection. The OSTI will determine if there are safety significant issues that must be resolved before restart.

STATUS: An NRC inspection of the AWO process was performed during the inspection period ending in October 1996. In that found inspection, which focused on Unit 1, the inspectors 1996 that a new work control process was instituted in June inspectors in an effort to improve the overall process. The being observed that a substantial number of work orders were impacted returned for an assortment of reasons, all of which and the ability of the work force to efficiently conduct backlogs. maintenance. Current licensee data for the corrective AWO maintenance work orders required for restart of Units 1 and 2, indicate little or no progress on reducing the Recent licensee data indicate a modest reduction in the backlog to support startup for Unit 3.

ISSUE: Procedure Upgrade Progra

DISCUSSION: The quality of and adherence to procedures have been a chronic problem at the Millstone site. This issue was an element in "Improving Station Performance" and the

earlier "Performance Enhancement Program," and was one of the subjects of discussion at the periodic meetings between NU and the NRC. In response to NRC concerns, the licensee developed the Procedure Upgrade Program (PUP) in the early 1990s to improve station procedures.

Before the reorganization in October 1996, there was a station-wide Procedure Upgrade Group that provided overall control of the PUP. This group developed and maintained the station document control (DC) procedures for control of the program, the overall status of upgraded procedures, coordinators for each Millstone unit, and the hiring of contractors, as necessary, to write the procedures.

Since the licensee's reorganization in October 1996, the PUP group has been decentralized. The station-wide group now only controls the station administrative procedures including the PUP DC procedures. The implementation and quality of procedure upgrades are now the responsibility of the individual technical departments within each unit.

NRC ACTION: The staff, in its inspection of selected plant procedures, will identify whether the procedures have been upgraded and will evaluate the effectiveness of the PUP. NRC inspections will include an assessment of the PUP for each Millstone unit.

STATUS: The Procedure Upgrade Program has been effective in standardizing procedure formats. The document control procedures are lengthy and somewhat difficult to use, but are comprehensive. The PUP is scheduled to be completed before the startup of each unit, and in the case of Unit 3, should be ready for inspection by the OSTI in October 1997.

ISSUE: Inspection Activities and Result

STATUS: The most recent inspection report (June 24, 1997), for  
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Millstone Station identified, at Unit 1, a violation involving failure to translate correctly the plant basis into drawings and to implement appropriate administrative controls on the positions of certain containment isolation valves in the main feedwater system. Additionally, it was identified that corrective actions were inadequate to address a Unit 2 single failure associated with an enclosure building damper. Finally, five examples of unauthorized radiological workers or workers lacking proper dosimetry entering or working in the radiologically controlled areas, one each in Units 1 and 3, and three in Unit 2, were identified. The first two items are historical in nature; they are similar to issues which have previously been identified by the licensee and the NRC, and they are the focus of ongoing corrective actions. The radiological issue is a current finding. This report also discusses several apparent violations of NRC requirements at Unit 1 pertaining to the conduct of containment leakage rate testing, failure to perform safety evaluations required by 10 CFR 50.59, inoperability of the low pressure coolant injection (LPCI) system, failure to trend condition reports as required by plant procedures, and failure to identify and correct significant conditions adverse to quality associated with containment leak rate testing and fouling of LPCI system heat exchanger tubes. These items represent a mixture of current and historical issues.

On June 26, 1997, the operators for Unit 3 identified increasing temperature in the spent fuel pool (Ref: Preliminary Notification dated June 27, 1997). The

previous day  
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about

fuel pool cooling configuration was altered the  
and the operators failed to identify the fact that when  
made the changes they, in fact, removed all cooling to  
spent fuel pool. The actual safety significance of the  
event is very low; however, the issue raises concerns  
licensee management of plant configuration.

applicants  
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operator  
licensee  
On  
Letter

In December 1996, the NRC administered initial senior  
reactor operator examinations. Six of the seven  
failed the examinations. Subsequently, the licensee  
performed an independent review of the training program  
identified additional problems with the licensed  
training program. In a March 3, 1997 letter, the  
committed to implement a series of corrective actions.  
March 7, 1997, the NRC issued a Confirmatory Action  
regarding the identified deficiencies and corrective  
actions.

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As a result of the known deficiencies  
operator training program, the NRC performed a Manual  
Chapter 41500 inspection of the nonlicensed training  
program. This was done in parallel with a licensee  
Oversight audit of the same area. Based on the results  
the audit and inspection, the licensee stopped all  
on the site. As of July 10, 1997, only limited  
such as the licensed operator training for Unit 3 has  
resumed. The audit identified that the feedback  
improve the training program was not being implemented.  
The licensee is planning to begin reloading the reactor  
on August 2, 1997, at Unit 2. The NRC staff is  
inspections of the licensee's regulatory compliance  
mode change, management oversight and involvement,

performance, and Nuclear Oversight involvement.

ISSUE: Operational Safety Team Inspectio

DISCUSSION: As a final check before the staff would be in a position to recommend restart of each individual unit, the staff will conduct an inspection to verify that the plant operations are being conducted safely and in conformance with regulatory requirements. The staff will verify that the organizations that control and support plant operations are functioning effectively to ensure operational safety. maintenance, Elements of the inspection include operations, surveillance, management oversight, technical support, safety review, quality assurance, and corrective action. Additionally, the staff will verify that the licensee has properly prepared the staff and the plant for resumption of power operations after an extended shutdown.

NRC ACTION: NRC management will designate a team leader and arrange for the appropriate technical inspectors. The team leader will develop the scope of the inspection and determine the necessary technical disciplines to adequately inspect the plan. The inspection team typically is given 1 to 2 weeks to prepare for the inspection, 2 weeks (or more, if needed) onsite to perform the inspection, and 2 weeks to write the report inputs. A formal exit interview with the licensee is held 1 to 2 weeks after the last day of inspection to present the findings and receive any completed corrective actions from the licensee.

STATUS: The team leader for Unit 3 has been tentatively identified and preliminary planning has begun. The inspection for Unit 3 is scheduled to start October 13, 1997. The inspection for Unit 2 is scheduled to start January 5, 1998.

Enclosure 2

PROJECT PLANNING SCHEDULE

PROJECT PLANNING SCHEDULE

PROJECT PLANNING

SCHEDULE