PIL63-C1

BOSTON Edison COMPANY

NUCLEAR OPERATIONS DEPARTMENT

PILGRIM NUCLEAR POWER STATION

PROCEDURE 1.5.3

MAINTENANCE REQUESTS

List of Effective Pages

1.5.3-1
1.5.3-2
1.5.3-3
1.5.3-4
1.5.3-5
1.5.3-6
1.5.3-7
1.5.3-8
1.5.3-9
1.5.3-10
1.5.3-11
1.5.3-12
1.5.3-13
1.5.3-14

Attachments

1.5.3A-1
1.5.3B-1
1.5.3C-1
1.5.3D-1
1.5.3E-1
1.5.3E-2
1.5.3E-3
1.5.3E-4
1.5.3E-5
1.5.3F-1
1.5.3F-2
1.5.3F-3
1.5.3F-4
1.5.3G-1

Approved H. E. Bryngelson 3/4/83
Quality Assurance Manager

Approved _____
CRC Chairman

Date March 4 1983

I. PURPOSE

This procedure provides instructions to personnel performing station maintenance or implementing plant modifications to ensure that:

A. Technical Specification requirements are adhered to.

B. Quality is at least equivalent to the original design and that appropriate quality requirements are specified.

C. Personnel and equipment safety are assured.

II. DISCUSSION

A. Maintenance Request Form

The Maintenance Request (MR) Form (Attachment A) is used as an administrative tool to assure that the requirements of this procedure are documented.

B. Maintenance Summary and Control Form

The Maintenance Summary and Control Form (Attachment D) is an administrative tool utilized to further define the work to be performed including special tools, equipment, procedures, instructions, expected exposure levels and to provide feedback when the work is completed.

C. Planned and Backlogged Maintenance

When the planning for an MR is completed, per paragraph VII.0, and the work is scheduled for a later date, or the work requires a power reduction or an outage, sufficient time should be allocated for a radiological review and for planned maintenance scheduling by the Sr. Engineer for Outages and Modification.

D. Unplanned, Emergency Maintenance

For maintenance that requires immediate response, which precludes meeting all the administrative controls of this procedure, the Operations Supervisor may initiate corrective maintenance in accordance with Administrative Procedure 1.5.7.

E. Cancellation of MR's

When an MR is cancelled by the OS, COE, CME, CTE or CMG Leader, the originator of the MR shall be notified of the cancellation and the reason for this action.

F. Change to a Maintenance Request

Changes to MRs are reviewed and approved in the same manner as the original issue.

III. REFERENCE MATERIAL

A. PNPS Operating Procedures
B. PNPS Technical Specifications
C. BEQAM Vol. II
D. ASME B&PV Code Section XI 1977 Edition thru Summer 1978 Addenda.
E. ANSI 18.7.

F. Definitions:

Maintenance

Repair or rework of a component to a specified requirement or work done under the preventive maintenance program.

Design Documents

Drawings, calculations or specifications that define the system structure or components including the FSAR and the Operating License.

Replacements

Replacements covered by ASME Section XI IWA-7000 will be evaluated for suitability. This review will be performed and documented in accordance with the PNPS Suitability Of Replacement Evaluation (SORE).

Replacements are defined as spare and renewal components, appurtenances, subassembly or part of a component or system.

Not In-Kind Replacements

Not-in-kind replacements are defined as those replacements which do not meet the purchase and/or design specification of the component, appurtenance, subassembly or part of a component or system being replaced.

Temporary Modifications

Temporary Modifications are changes in plant design, which are originally intended not to be permanent. A Temporary Modification (generally referred to as a "Jumper" refers not only to electrical components which may be added or deleted but also to pneumatic and hydraulic connections, mechanical actions, and certain computer actions.

Some examples are as follows:

-- Placing or removing wire to circumvent an interlock or permissive signal.

-- Disabling an RTD or thermocouple.

-- Mechanically wedging or blocking a valve.

-- Disabling or changing an alarm set point via computer software.

-- Blocking or disconnecting a damper.

-- Blocking a pipe line using a "spade" or blank flange.

-- Removing an orifice or valve.

-- Changing a process controller or alarm set point.

Preventive Maintenance

Preventive Maintenance (PM) is defined as "the planned periodic inspection, servicing, adjustment, replacement and repair of plant assets and equipment to maximize the availability of production generating facilities and enhance the effectiveness and efficiency of maintenance resources".

Corrective Maintenance

Corrective Maintenance is the repair or rework of plant assets to restore them to their specified operating condition.

IV. PREREQUISITES

A. Station Maintenance

Station maintenance shall be performed in accordance with approved PNPS procedures, approved Temporary Procedures per Procedure 1.3.4, or as defined in ANSI 18.7. (Except shop work, routine maintenance not affecting equipment, surveillance testing and calibrations - when no tagging/isolations are required.)

B. Plant Modification

Plant modification shall be implemented with the requirements of the "Approved for Implementation" Plant Design Change Request (Procedure 1.3.13).

V. APPARATUS

N/A

VI. PRECAUTIONS

A. Redundant Components

Separate Maintenance Requests will be submitted when similar work is required on redundant components.

B. Multiple Work Items

When an MR is processed that includes more than one item of work within an isolation, and work is complete except for one or two items, the existing MR should be signed off and a new MR generated for the remaining items. The new and completed MR's shall reference each other.

C. Additional Work

When it becomes apparent that the scope of work defined on the MR is not sufficient to satisfactorily complete the assignment, a new MR shall be instituted with the same number and an alpha suffix.

D. Approval Requirements

Positions shown for review/approvals in this procedure shall also include designated alternates acting in the positions indicated. The only exception to this policy is the Watch Engineer's approval required to isolate the system.

E. Approval for Work Start

No maintenance is to be performed at Pilgrim Station without the "APPROVAL FOR WORK START" block on the MR being completed.

F. Maintenance activities which result in the "replacement" of "not-in-kind" components will be administered by the appliance of the "temporary modification" procedure 1.5.9 or "PDCR" 1.3.13 as applicable which requires the performance of a safety evaluation to determine whether or not the replacement can be safely installed and/or operated in addition to providing the basis that determining an unreviewed safety question does not exist or whether a technical specification will be inhibited or overridden.

G. If modification to safety related components are to be implemented using the maintenance request as a vehicle, controls of work performance and documentation may be more restrictive than those within the maintenance request procedure. In these cases, the appropriate procedures and governing codes will be used.

H. Repairs to safety related systems, structures and components will only be made in accordance with an approved repair program with repair procedures which comply with the ASME Code Section XI Sections IWA 4130, IWB 4200 and 4300.

VII. PROCEDURE

A. The processing of the MR by personnel performing work at the station is described below and summarized in Attachment E. Each review of the MR should be expedited to allow timely beginning of maintenance activities.

1. Originator

The originator provides the following information:

a. Date

b. Equipment and Equipment No.

c. Location

d. P&ID No. if applicable

e. A clear problem statement with sufficient detail to describe the request.

Date and Time

What - Describe situation

Where - Give location of situation (physical and functional)

When - Under what plant conditions does the situation occur?

Extent - How big is the devation? Is it tending to remain constant, increase, or decrease?

Signature

NOTE: Provide as much information as you can.

f. Applicable references such as a PDCR, temporary modification or associated maintenance requests. This is in addition to a clear problem statement.

The originator then signs and dates the MR and submits it to the Operating Supervisor.

2. Operating Supervisor (OS)

The OS reviews the problem/work required and performs the following functions:

a. Checks the Maintenance Request Log for duplication. If it is a duplicate, he notifies the originator, cancels the MR and updates the log and/or files as required: if not, he proceeds to:

b. Enter System No.

c. Priority per Attachment F.

d. Identify need for isolation per Procedure 1.4.5.

e. Identify need for RWP per Procedure 6.1.22 VI.A.

f. Record required data on Watch Engineer's Maintenance Request Log by stem and assign an MR Log No. to the MR.

The NOS then forwards the MR to the Chief Operating Engineer.

3. Chief Operating Engineer (COE)

Chief Operating Engineer (COE) checks the MR for correctness and completeness and reviews work requested.

a. If he agrees, the COE adds any pertinent information, verifies the priority assigned, signs and dates the MR. and forwards it to the Chief Maintenance Engineer (CME) for mechanical and electrical for instrumentation and controls work.

4. Chief Maintenance (CME)

The respective Chief Engineer reviews the MR for correctness and completeness and verifies the need for maintenance support, judges priority, safety implications, special group handling.

a. If the CME agrees with the MR, he signs it and dates it and assigns it for implementation. The MR is then forwarded to the Maintenance/Technical (M/T) Secretary.

b. If the CME does not agree with the MR, he resolves the issue with the COE. If the MR is cancelled, the CME writes "CANCELLED" on the MR and forwards it to the M/T Secretary for logging and returns to the OS who cancels it.

The CME will perform a semi-annual review in January and July of open maintenance requests to determine if priorities should be changed, responsibilities should be reassigned or MR's should be combined, expedited, cleared or cancelled. This review will be documented on Attachment 1.5.3H-1. If an extended outage is in progress when the review is scheduled, it may be rescheduled for a later time. Form 1.5.3H-1 will also be used for this purpose.

5. Maintenance Secretary

The M Secretary assigns the MR the next sequential departmental number perfixed with an M for Maintenance or an I for Instrumentation & Controls, records the required information in the respective departmental Maintenance Request Log (Attachment C) and forwards the MR to the Staff Engineer.

6. Staff Engineer (SE)

The S.E. reviews the MR and further defines the work to be done by working with the originator and supervisor and determines plant conditions necessary to accomplish the work and reviews priority by consulting with the NOS.

The Staff Engineer will determine if the activity is on a safety related item and indicated Q-List # if applicable.

The MSE will next determine whether or not the maintenance activity constitutes a modification. If it is a modification, indicate temporary or plant design change request. If it is a temporary need, refer to procedure 1.5.9. If it is a PDCR, refer to procedure 1.3.13.

CAUTION

Maintenance activities conducted under Procedures 1.5.3 or 1.5.7 may not perform modifications to the plant. Procedure 1.5.9 is to be used for temporary modifications and procedure 1.3.13 for changes in plant design (PDCR's).

A maintenance activity will be considered a modification if the system, structure or component being maintained would no longer conform to it's original design documents as changed by subsequent authorized design changes.

The MSE may complete the MSC (Attachment D) addressing the following items, when required.

a. Special tools, equipment and material required.

b. Staffing requirements.

c. Estimated Radiation Exposure Levels.

d. Approved Documents (procedures, tests, etc.).

e. Determination of quality requirements, specifies them, and ensures that they are at least equivalent to the original design basis.

NOTE: A review of the historical visi-record files may provide much of this information.

f. Estimate man-hours and forward maintenance clerk for backlog.

The SE then forwards the MR and MSC forms to the Operations QC Group Leader (OQCGL).

7. Operations Quality Control Group Leader (OQCGL)

The OQCGL assigns a Quality Control representative to perform the following functions:

a. Review the MR for proper approval.

b. Assure approved documents are being utilized for work activities.

c. Review acceptance criteria for establishing quality levels.

d. Enters QC inspection Hold/Witness Points or additional QC quality requirements on the MR form. If additional requirements are made, the MSE shall be notified prior to start of work.

If any QC conflicts arise concerning the described work, the QC representative will resolve them with the SE. The QC representative signs the MR, retains the yellow copy and routes the MR and MSC to the Fire Prevention Protection Officer.

8. Fire Prevention Protection Officer (FPPO)

The FPPO shall review the MSC form for:

a. Possible fire hazards (cutting and/or welding);

b. Effect on the plant fire protection system and add any fire safety requirements on the MSC.

The FPPO signs the MR and forwards the MR and MSC to the SE.

9. Staff Engineer

Based on the assigned priority, the SE will either schedule the work for implementation or place the MR and MSC in the MR backlog.

a. Scheduled for Implementation

The SE performs the following functions:

1. Assign an approximate date and time work will begin.

2. Indicate plant condition necessary.

3. Assign a cognizant Supervisor to the work.

4. Specify retest requirements other than surveillance tests.

b. Backlogged MR's

Based upon MR priority, submittal date or other pertinent factors, the supervisor working with the OS and SE will review and schedule the work from the MR backlog.

NOTE: MR's originating from the backlog must be reviewed by the SE to assure that the procedures specified have not been superseded with later revisions while the Maintenance Request was on hold in the backlog file. If a new revision has been issued, the MR must be updated to reflect the revision prior to scheduling the work.

Once the work becomes scheduled, work proceeds as per 9a above.

10. Supervisor or Cognizant Implementing Individual

The Supervisor shall:

a. Review the MR and MSC and resolve any concerns if not previously done.

b. Request RWP, if required, approximately 16 hours in advance of planned activities.

c. Identify the individual for whom the system will be isolated if applicable.

d. The supervisor brings the MR and RWP (if available) to the Operations Supervisor.

e. If the RWP was not available, the Supervisor will insure that the implementors bring it to the OS for review.

11. Operations Supervisor (OS)

Upon receiving the MR package, the OS shall review the MR and the MSC for completeness and correctness, to verify the work start time, and any Operations support required. The OS shall make arrangements, when possible, to have all Operations Group preparations completed prior to the work scheduled time indicated on the MR.

a. If Technical Specification Operability Surveillance testing is required before taking equipment out of service,

the OS shall indicate this on the MR along with the applicable procedure numbers and shall sign this MR section block when these requirements are satisfied. If no testing is required, he shall check "NOT REQUIRED" and sign the section block.

b. If isolations are required, the OS shall complete the "ISOLATIONS" section "B" of the MR to indicate the device number, device description, its normal position, its tagged position and the color or the tag to be used.

c. If a Radiation Work Permit (RWP) is required, the implementors shall pick up the completed RWP from Health Physics.

When the above is completed, the OS presents the MR package to the WE for review.

12. Watch Engineer (WE)

16 The WE (not an alternate) will review all the safety related MR package for the following:

a. Technical Specification Operability Requirements.

b. Violations of any LCO's.

c. Adequacy of isolation.

If the WE does not agree with the MR, he returns it to the OS for resolution. The WE documents his review and signs and dates the MR for "Approval to Start Isolation" and returns the MR to the OS.

16 Balance of plant MR's can be reviewed and approved for approval to start isolation by the O.S.

13. Operating Supervisor

a. The OS will assign a responsible person to perform the isolation. When completed, the person performing the isolations shall sign and date the MR and indicate the date and time that the isolations were completed.

b. When the Operating Supervisor is satisfied that the equipment is ready for maintenance and all job documentation is correct and complete, he shall sig the "APPROVAL FOR WORK START" block on the MR, have the responsible Supervisor or workers verify that they agree with isolations by signing the MR, remove the white and blue MR copy and give the MR package to the responsible Supervisor or worker. The OS then places the white and blue MR copy in the MR-In-Process file.

CAUTION: No maintenance is to be performed at Pilgrim Station without the "APPROVAL FOR WORK START" block on the MR being completed. (Except shop work, routine maintenance not affecting equipment, surveillance testing and calibrations - when no tagging/isolations are required.)

14. Supervisor

Maintenance Workers/Nuclear Plant Operator (NPO)/Nuclear Control Technician (NCT)

a. Upon receiving the pink copy of the MR, the MSC (if applicable) and any supporting documentation along with a valid Radiation Work Permit (RWP), if needed, the Supervisor shall make an inspection of the work area including isolations/tagging in effect; verify that the workers are fully aware of the work to be done, tools/parts required, procedures to follow and any unusual conditions that may exist; and post the MR, MSC, and RWP at or near the work location.

NOTE: If a fire watch is required for cutting or welding, the Supervisor will enter the assigned person's name on the MSC upon implementing the Work Request.

If a hold/witness point or installation inspection has been specified by Quality Control, DO NOT PROCEED BEYOND THIS POINT without notifying the QC Group Supervisor or his designated alternate(s).

b. The Supervisor and the workers assigned shall perform maintenance per identified procedures, checklists or work instructions as delineated on the MSC and/or supporting documentation.

c. When work is completed, the person(s) who performed the work shall complete the "Description of Work Completed" section of all MR copies (from the MR-In-Process File) and sign and date the form. The workers shall then notify the Supervisor (or in his absence, the OS) that work is completed. He shall verify that all maintenance work completed and the work area is cleaned. The Supervisor shall complete the MSC, to include actual maintenance manhours worked, persons performing work, the equipment condition as found, any special work problems found and/or comments. The Supervisor will sign and date work if not accomplished by the reference MR. The Supervisor will also assure that group retests requirements are met.

d. The responsible supervisor (or in his absence the OS) completes and signs all MR copies (if safety related material was replaced, he indicates the MRIR No. or material traceability). The white MR copy shall be returned to the Operating Supervisor (OS) and the blue and pink MR copies and work documentation shall be returned to the SE.

e. Inform Health Physics, if not previously done, that work has been completed.

15. Operating Supervisor (OS)

Upon receiving the white MR copy from the MS, the OS shall verify that all necessary information has been entered.

a. The OS determines what Technical Specification Operability or Post Work Testing is necessary, if any, and enters the test description or procedure number to be used. If any Post Work Testing is to be taken credit for by QC, the requirement shall be stated by QC during their review and QC notified prior to testing. He may also assist the group retest.

b. The OS assigns a responsible person to perform the testing and places the white MR copy in the Testing File. He also updates Watch Engineer's Maintenance Request Log.

c. The assigned person applies any required testing tags and performs the test per identified procedures or test descriptions. Upon successful completion of the test, the person performing the tests removes all testing tags. He then obtains the white MR copy from the OS and enters the date and time the tests were completed and signs the form. The MR is then returned to the OS. (If the test fails, retag the equipment and perform rework with the same MR. DR refer to subsequent MR).

d. The OS shall check to verify the Quality Control (QC) requirements have been completed. He shall notify QC of the completion of any testing required and obtain the QC representative's signature and date on the MR Section "C" attesting to the completion of the QC requirements and verifying that MRIR No. of material traceability is indicated.

e. After all job tags and isolations have been removed and all acceptance criteria have been met, the OS shall update the Watch Engineer's Maintenance Request Log and the MR-In-Process and Testing files. The OS shall return the equipment or system to normal operation and sign the completed MR copy and enter the date and time. The white MR copy, together with the MSC and required documentation is filed in the Station file after completion.

16. Staff Engineer

The responsible SE shall:

a. Review the blue and pink copies, the MSC (if applicable) and other job documentation for completeness and correctness and shall reorder materials or repair parts used on the job if needed.

b. Review all records required by the Maintenance Request to assure completeness.

c. Forward the completed work package to the Maintenance/Secretary after signing and dating the MSC (if applicable) to show job completed.

17. The Cognizant Chief Engineer

Prior to final acceptance of work performed by station personnel and contractors, the Cognizant chief engineer/group leader is responsible to assure that all records required by the MR are complete.

18. Maintenance Secretary (M Secretary)

The M Secretary updates the MR Log Book and the equipment visi-record files. The pink MR copy, the MSC and other job documentation shall be retained as necessary. Pink MR copies shall be filed in the Maintenance Office System No. in numerical order. (FOR INFORMATION ONLY) Procedure checklists shall be filed by procedure in the Maintenance Office.

VIII. ATTACHMENTS

A. Form PNPS 1.5.3A - Maintenance Request Form.

B. Watch Engineer's Maintenance Request Log.

C. Maintenance Request Log.

D. Form PNPS 1.5.3D - Maintenance Summary and Control.

E. Maintenance Request Process Flow Diagram.

F. Maintenance Request Summary Priorities.

G. MR Semi-Annual Review Form.

BOSTON EDISON – PILGRIM NUCLEAR STATION

MAINTENANCE REQUEST

PRIORITY ☐

MR LOG NO. _____

UNPLANNED–PRIORITY A–WORK ☐
FOLLOW STATION PROCEDURE 1.5.7

PREVENTIVE MAINTENANCE ☐

Running Repair ☐ Sys. Outage ☐
Power Reduction ☐ Outage ☐

ORIGINATOR & O.S.

SYSTEM NO. ☐

DATE _____

R.W.P. NO. _____

EQUIPMENT & NO. _____ LOCATION _____ P&ID NO. _____

REFERENCES (Associated MR's, PDCR's, F&M's etc.) _____

PROBLEM DESCRIPTION _____

_____ ORIGINATOR _____ DATE _____

O.S.

IS A RADIATION WORK PERMIT REQUIRED? YES ☐ NO ☐ ISOLATIONS/TAGGING REQUIRED? YES ☐ NO ☐

THE MR-IN-PROCESS FILE WAS CHECKED FOR DUPLICATION; THE MR WAS LOGGED; THE CORRECT PRIORITY ASSIGNED AND THE MR IS CORRECT AND COMPLETE. APPROVED–OPERATING SUPERVISOR _____

COE CME/CTE

REVIEWED AND APPROVED FOR PLANNING/IMPLEMENTATION COE _____ /DATE _____

☐ CME _____ /DATE _____ ☐ ELECTRICAL ☐ MECHANICAL

OR

☐ CTE _____ /DATE _____ ☐ INSTRUMENTATION & CONTROLS ☐ OTHER _____

STAFF ENGR.

M.S.C. REQ'D YES ☐ M.S.C. COMPLETED AND ATTACHED DEPARTMENTAL LOG NO. _____

NO ☐ WORK INSTRUCTIONS/PROCEDURE _____

SAFETY RELATED	IS THIS A MOD?
Y_____ N_____	Y_____ N_____
MRIR #_____	IS THIS MODIFICATION
O-LIST #_____	TEMP_____ PDCR_____

MSE ASSIGNED _____ /DATE

QC

Ⓐ QUALITY CONTROL REQUIREMENTS – NONE ☐ INSTALLATION INSPECTION REQUIRED ☐

OTHER _____ REVIEWED BY QC _____ /DATE _____

FPO

FIRE PREVENTION/PROTECTION APPLICABLE: YES ☐ NO ☐ ADDITIONAL INFO/REQUIREMENTS GIVEN: YES ☐ NO ☐

POST WORK INSPECTION REQUIRED: YES ☐ NO ☐ IF YES, LIST ATTACHED

SE

WORK SCHEDULED – TIME/DATE FOR MAINT. SUPVR. ISOL./TAGGING REQUIRED ☐

OPERATING SUPVR.

TECHNICAL SPECIFICATION OPERABILITY REQUIREMENTS – NOT REQUIRED ☐

REQUIRED ☐ – PROC. NO(S). _____ BY OPER. SUPVR. _____

Ⓑ DEVICE NO.	DESCRIPTION	NORM. POS.	TAG. POS.	COLOR

☐ SEE ATTACHED SHEETS FOR ADDITIONAL TAGS/SPECIAL INSTRUCTIONS

W.E.

APPROVAL TO START ISOLATION WATCH ENGINEER _____ /DATE _____

NPO

ISOLATION COMPLETE DATE _____ TIME _____ INITIALS _____

O.S.

APPROVAL TO START WORK OPERATING SUPERVISOR _____ DATE/TIME _____

MAINT. SUPVR./ WORKERS/NPO

ISOLATIONS REVIEWED/INSPECTED AND APPROVED – BY MAINT. SUPVR. OR WORKERS _____

DESCRIPTION OF WORK PERFORMED _____

PERSONS PERFORMING WORK _____ DATE _____

WORK COMPLETE – MS (OR NEW MR#) _____ DATE _____

POST WORK TESTING – NOT REQ'D ☐ REQ'D ☐ – DESCRIPTION/PROC. NO. _____

_____ COMPLETED BY _____ POST WORK TEST COMPLETE _____ DATE/TIME _____

OSI/ NPO

TECHNICAL SPECIFICATION OPERABILITY TESTING – NOT REQUIRED ☐

REQUIRED ☐ – DESCRIPTION/PROC. NO. _____

ISOLATIONS/RED TAGS REMOVED ☐ TEST TAGS APPLIED ☐

TESTING SATISFACTORILY COMPLETED AND TEST TAGS REMOVED – BY _____ TIME/DATE _____

QC

Ⓒ ALL QUALITY CONTROL REQUIREMENTS MET – APPROVED BY QC _____ DATE _____

OS

ALL TAGS/ISOLATIONS REMOVED, ACCEPTANCE CRITERIA MET, MR LOG AND FILES UPDATED, AND THE SYSTEM/EQUIPMENT HAS BEEN RETURNED TO NORMAL TIME/DATE _____ OPER. SUPVR. _____ DATE/TIME _____

ORIGINATOR–WE–COE–CME–M/SECTY–MSE–OS–MR–IN–PROC.–FILE

OS STATION FILE

B.E.Co. Form X5259

ORIGINATOR–WE–COE–CME–M/SECTY–MSE–OS–MR–IN–PROC.–FILE
OS STATION FILE

SYSTEM # ______________ TITLE ______________

MR Log #	Priority	Description	Date Entered	Test File Entered	Test File Removed	Date Returned To Normal

MAINTENANCE REQUEST LOG

MAINT REQUEST LOG NO.	PRIORITY	SYSTEM NUMBER	DESCRIPTION	MSE ASSIGNED	DATE FWD TO MSE	DATE RTND FROM MSE	BOOK	MAN HRS. ESTIMATED	WORK STATUS	DATE COMPLETED

1.5.3C-1 Sample

BOSTON EDISON COMPANY - PILGRIM NUCLEAR STATION

Priority

System No.

MAINTENANCE SUMMARY AND CONTROL

(PNPS 1.5.3D - Revision 1)

MR Log No. _____

Running Repair ☐ System Outage ☐

Power Reduction ☐ Outage ☐

Date _____ Maint. Staff Engr. _____

Equipment _____ Location _____

Work Instructions _____

Est'd. Rad. Exp. Levels

Use: Drawing Nos. Instr. Manual Nos.

By Maintenance Staff Engineer

Special Tools/Equipment Req'd. _____

Repair Parts Req'd.

Work Estimate		Est. Clk. Hours	Est'd. Man/Hrs	Act. M/H (By MS)
Craft	Crew			
Nuc. Cntl. Tech.				
Nuc. Mnt. Mech.				
Nuc. Plt. Attd.				
Other				
Totals				

Tools/Equipment/Repair Parts Ordered _____

Date Ordered	W/R No.	P.O. No.	Date Rcv'd.

Instrument Set Point Change Required? – No ☐ Yes ☐ – Procedure Nos.

Cutting and/or Welding Req'd? – No ☐ Yes ☐ – Proc. Nos. _____ Checklists Att'd. ☐

Pre-Work Inspection for Cutting/Welding Req'd? – No ☐ Yes ☐ – Firewatch Req'd? – No ☐ Yes ☐

Quality Control Review Complete? – Yes ☐ N/R ☐ – Forward Yellow Copy and Copy of MSC to Quality Control

By M.S.

Pre-Work Inspection – Inspected Work Area Prior to Work Start for Cutting/Welding Preparation and Safety –

By Maint. Supervisor ☐ Firewatch Assigned

By Firewh.

Post-Work Inspection – The Work Area and Adjacent Areas where Sparks and/or Slag May Have Entered Were Inspected Upon Completion of the Work and are Fire Safe. All Hot Welding Debris Has Been Removed. –

By The Firewatch Time/Date

By Maint. Supvr./Workers

Equipment As Found Condition

Special Work Problems Found / Comments _____

Actual Man-Hours Worked Entered Above ☐

Materials Used (If Different From Above) _____

MR Complete and Work Area Cleaned – By Maint. Supervisor Date

1.5.3D-1 Rev. 16

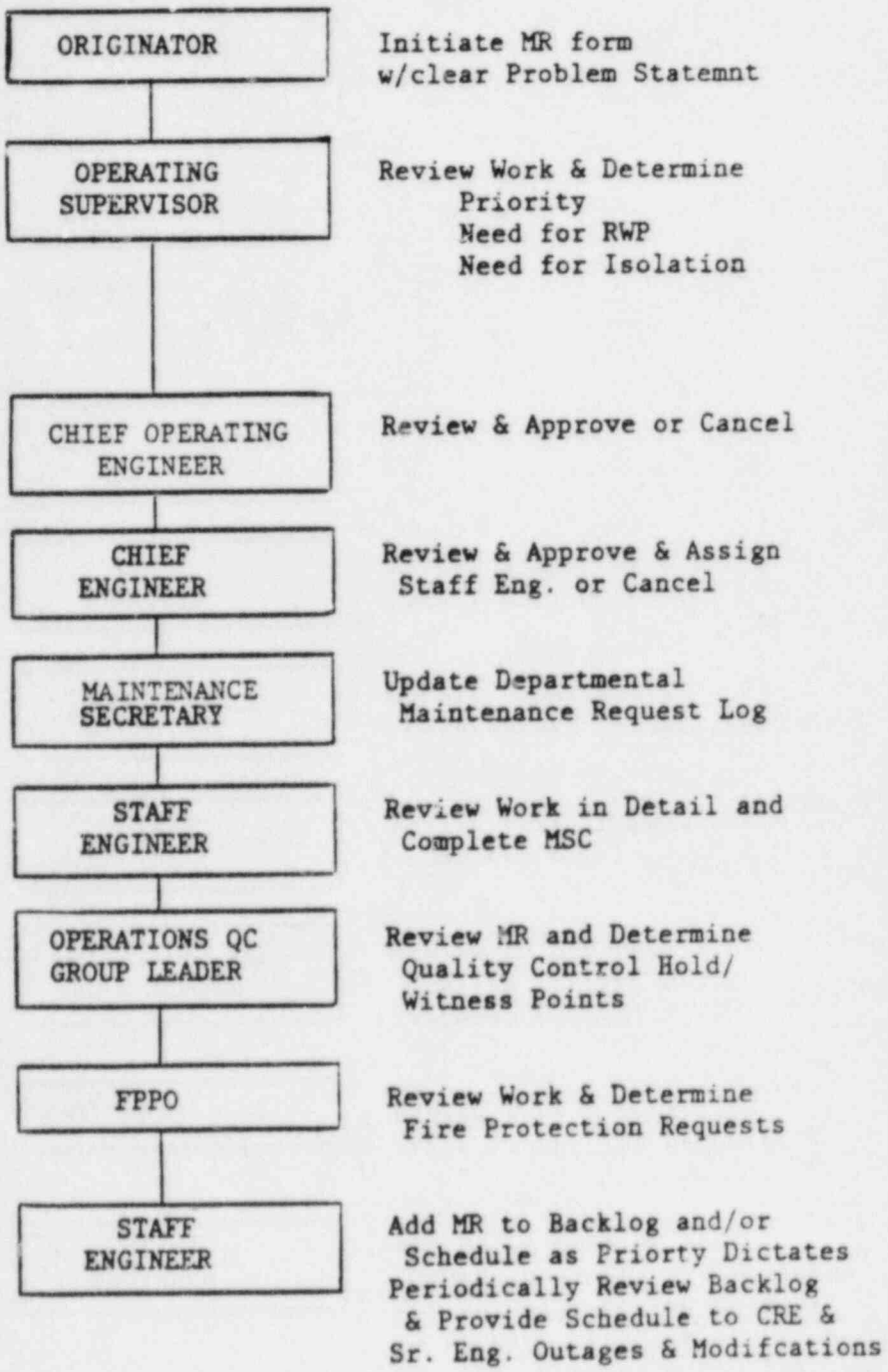
B. E. Co. Form x5261 WHITE MSC COPY REMAINS WITH WHITE MR COPY

ATTACHMENT E

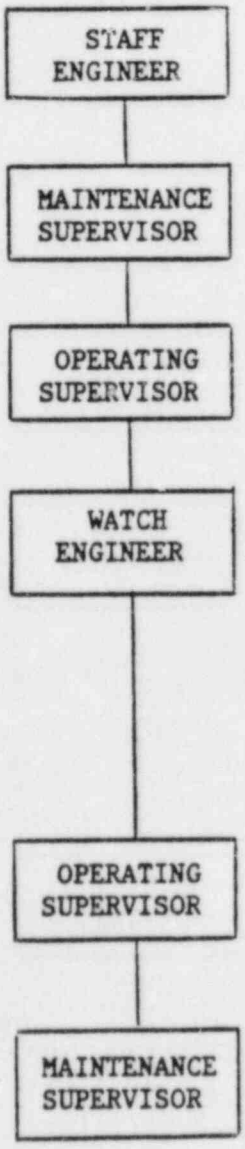
PROCESSING
OF
MAINTENANCE
REQUESTS

PLANNING WORK TO BE IMPLEMENTED

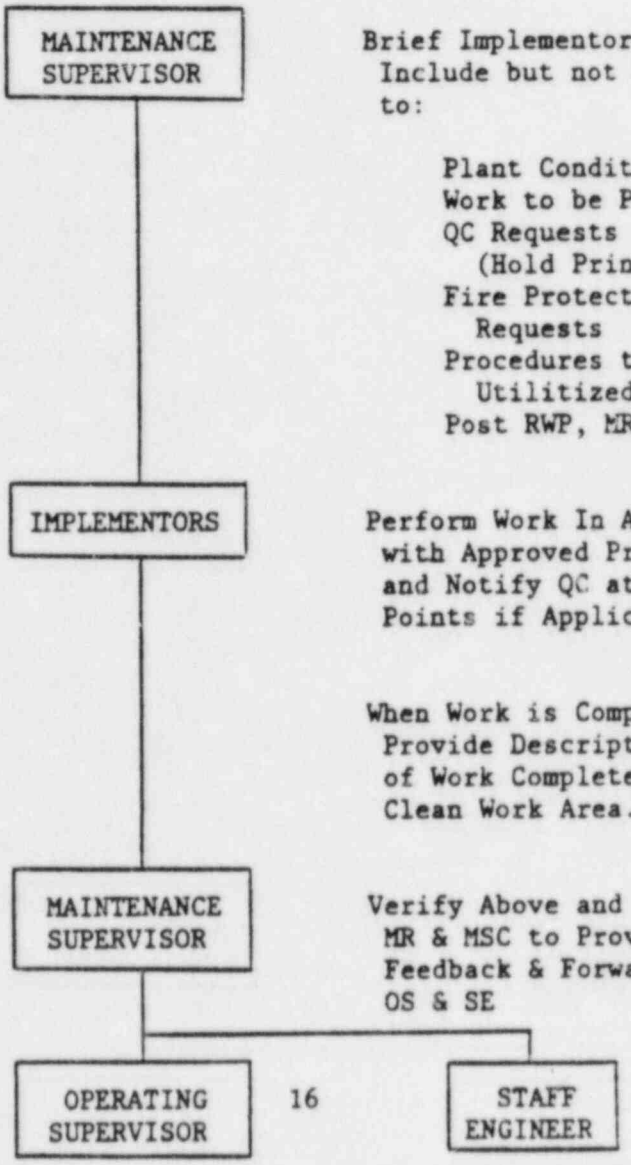
PROC. VII



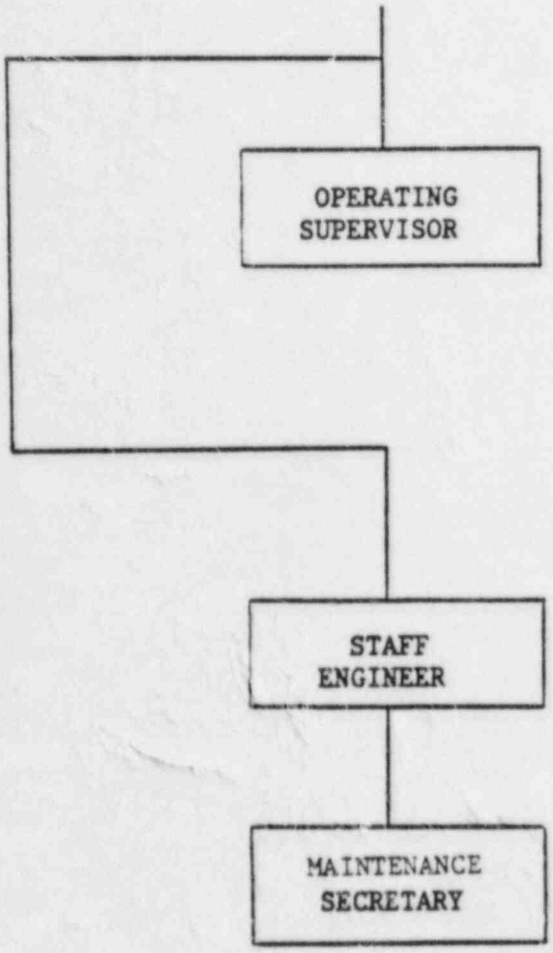
ESTABLISHING PLANT CONDITIONS



IMPLEMENTATION



CLOSE OUT



15 — Determine Operability & Post Tests, Notify QC if Applicable.

Perform Tests

Verify Results

Return System to Normal Operation

File Completed Copies

16 — Review Work Package
Inform H.P. of Completed Work.
Sign & Date MSC (if Applicable).

17 — Update MR Logbook and Visirecord Files.
File Procedure Checklists & Completed MR's.

MAINTENANCE REQUEST SYSTEM PRIORITIES

INTRODUCTION

The Maintenance Request (MR) priority is determined by the Watch Engineer (WE) who approves the MR and is assigned, based upon the WE's knowledge and judgement of station requirements, operation procedures and good operating practics. All MR's shall be assinged one of the priorities discussed below.

All MR priorities shall be reviewed by the Chief Operating Engineer (COE) and the Chief Maintenance Engineer (CME) to determine if conditions have changed to a point where the MR's priority should be revised. However, the WE's priority assignment may be changed only by the Chief Operating Engineer (COE) or by the Chief Maintenance Engineer (CME). Any priority changes shall be initialed and agreed upon when performance of either department is impacted.

All maintenance work will be scheduled so that higher priority work will be completed before lower priority work is started and for equal priority work, the oldest MR will be scheduled first (unless other factors intervene).

MAINTENANCE REQUEST PRIORITIES

The WE will determine if the work requested on the MR can be accomplished during normal plant operation (Running Repair), only when the plant is operating at reduced power levels (Power Reduction), or only when the plant is shut down (Outage). The WE will then assign priorities based upon the following criteria:

FOR RUNNING REPAIRS AND UNPLANNED EMERGENCY REPAIRS:

One of the three priorities shall be assigned as follows:

PRIORITY A - This priority shall be used only on those MR's prepared to correct conditions that have or soon will cause:

- LOSS OR MAJOR REDUCTION OF GENERATING CAPACITY
- EXTREME SAFETY, SECURITY, OR RADIATION CONTAMINATION HAZARDS
- MAJOR EQUIPMENT DAMAGE

Use of priority 'A' would be done on an emergency basis and would necessitate stopping of lower priority work in progress, use of overtime and call-in of off-duty maintenance personnel. Any needed repair parts or special tools not available on site shall be ordered on an emergency basis with continuing requisition follow-up. If necessary, repair parts and/or special tools are not available on stie, use of overtime and/or call-in of maintenance personnel shall be minimized. (Also see Procedure 1.5.7- Unplanned, Emergency Maintenance.)

NOTE: An 'A' priority can also be issued upon consultation with theCOE and either the CME or the CTE on the subject MR.

PRIORITY B - This priority shall be used on those MR's prepared to correct conditions that have or may cause:

- MINOR LOSS OF GENERATING CAPACITY
- LOSS OF BACK-UP SYSTEM/EQUIPMENT WHERE LOSS OF PRIMARY SYSTEM WILL RESULT IN PRIORITY 'A' REPAIRS
- SAFETY OR RADIATION CONTAMINATION HAZARDS
- LONG TERM DAMAGE TO EQUIPMENT
- SITUATIONS CAUSING LOSS OF WORKER PRODUCTIVITY/MAJOR DISCOMFORT

Use of priority 'B' would normally not necessitate stoppage of lower priority work in progress nor call-in or overtime by maintenance personnel; however, priority 'B' MR's should be scheduled for work ahead of all lower priority MR's. Any special tools and/or repair parts not on site shall be ordered in a normal manner with weekly follow-up of the requisition.

PRIORITY C - This priority shall be used on all Running Repair MR's not meeting the criteria for priorities 'A' or 'B'. Work on priority 'C' MR's normally will not require overtime nor call-in of maintenance personnel. Special tools or repair parts not on site will be ordered in a normal manner with requisition/order follow-up.

PRIORITY S - The 'S' priority shall be used for Security Maintenance Requests that affect plant security and are not meeting the 'A' priority criteria. Any material or spare parts not on site shall be ordered expeditiously. Work on priority 'S' MR's shall be scheduled upon procurement of material and shall be given greater importance than 'B' priority MR's when scheduling maintenance work. Normally, 'S' priority MR's will not require overtime nor call-in of maintenance personnel.

FOR POWER REDUCTION OR OUTAGE REPAIRS

For maintenance work that can be performed only at reduced power levels or during a unit outage, the WE shall assign the following priorities:

PRIORITY B - This priority shall be used on all MR's that can only be done at reduced power levels.

PRIORITY O - This priority shall be used on all MR's that can only be done during a unit outage.

During the planning for power reduction or outage maintenance activities, MR's shall be palce in the following schedule categories by mutual agreement between the COE and CME or their designated representatives.

R.1 or 0.1 - MR's that shall be completed prior to return to normal unit power levels/unit start-up.

R.2 or 0.2 - MR's scheduled for work during unit power reduction/outage after completion of R.1/0.1 work is assured.

R.3 or 0.3 - MR's on which owrk is not scheduled during the power reduction/outage, but may be done after coverage or higher schedule categories.

MAINTENANCE REQUEST
SYSTEM PRIORITIES SUMMARY

All Maintenance Requests shall be assigned one of the priorities listed below:

RUNNING REPAIRS AND UNPLANNED EMERGENCY REPAIRS

Priority A - This priority shall be used only on those MR's prepared to correct conditions that have or soon will cause:

- LOSS OF MAJOR REDUCTION OF GENERATING CAPACITY
- EXTREME SAFETY, SECURITY, OR RADIATION CONTAMINATION HAZARDS
- MAJOR EQUIPMENT DAMAGE

Priority B - This priority shall be used on those MR's prepared to correct conditions that have or may cause:

- MINOR LOSS OF GENERATING CAPACITY
- LOSS OF BACK-UP SYSTEM/EQUIPMENT WHERE LOSS OF PRIMARY SYSTEM WILL RESULT IN PRIORITY A REPAIRS
- SAFETY, SECURITY OR RADIATION CONTAMINATION HAZARDS
- LONG TERM DAMAGE TO EQUIPMENT
- SITUATIONS CAUSING LOSS OF WORKER PRODUCTIVITY/MAJOR DISCOMFORT

Priority C - All other Running Repair MR's

POWER REDUCTION OR OUTAGE

Priority R - This priority shall be used on all MR's that can only be done at reduced power levels.

Priority S - Security Maintenance Requests affecting plant securitu

Priority C - This priority shall be used on all MR's that can only be done during a unit outage.

SEMI-ANNUAL REVIEW OF
MAINTENANCE REQUESTS

REVIEW SCHEDULE DATE _____

The review is not able to be performed due to an extended outage in progress

and is to be rescheduled for _____.
Date

Chief Engineer _____ Date _____.

The following is a result of the semi-annual MR review conducted on _____.

Signature _____ Date _____.
