

June 30, 1995

Mr. John F. Opeka  
Executive Vice President - Nuclear  
Northeast Nuclear Energy Company  
P. O. Box 270  
Hartford, CT 06141-0270

SUBJECT: ALTERNATIVE TO SERVICE WATER SYSTEM OPERATIONAL PERFORMANCE  
INSPECTION (SWSOPI) AT MILLSTONE UNIT 2

Dear Mr. Opeka:

This letter is in response to your request of May 12, 1995, to perform a self-assessment as an alternative to a SWSOPI conducted by the Nuclear Regulatory Commission (NRC). In a conference held on June 28, 1995, at the Region 1 office, your staff discussed the details of the proposed "Millstone Unit 2 Self-Assessment Plan." Qualifications of the self-assessment team members were also discussed. The slides from that conference are enclosed.

Based on our review, we have concluded that your self-assessment plan is acceptable for meeting the NRC requirements for such plans. This acceptance is contingent upon: (1) the NRC in-process and final inspections of your effort, and (2) Northeast Utilities' completion of the Millstone Unit 2 self-assessment and issuance of a final report. We would also request that you formally present the results of your self-assessment to the NRC at a later date.

The NRC's pilot program to authorize licensee self-assessment in area-of-emphasis inspections is designed to minimize regulatory impact and to promote efficient use of NRC resources. However, the NRC may elect not to reduce its normal inspection scope in the area-of-emphasis if significant weaknesses are identified in the self-assessment efforts.

Questions regarding your conduct of a self-assessment or the NRC's intended oversight may be directed to Mr. E. Kelly of my staff at (610) 337-5111. Your cooperation with us in this matter is appreciated.

Sincerely,

*Original Signed By:*

A. Randolph Blough, Acting Deputy Director  
Division of Reactor Safety

Docket No. 50-336

Enclosure: As stated

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Q PDR

*JED*

Mr. John F. Opeka

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cc w/encl:

- M. H. Brothers, Nuclear Unit Director
- G. H. Bouchard, Nuclear Unit Director
- L. M. Cuoco, Esquire
- F. R. Dacimo, Vice President, Haddam Neck Station
- R. M. Kacich, Director, Nuclear Planning, Licensing and Budgeting
- J. J. LaPlatney, Haddam Neck Unit Director
- D. B. Miller, Senior Vice President, Millstone Station
- Nicholas Reynolds, Esquire
- S. E. Scace, Vice President, Nuclear Operations Services
- J. Solymossy, Director, Nuclear Quality and Assessment Services
- State of Connecticut SLO Designee

Distribution w/encl:

- Region I Docket Room (with concurrences)
- E. Kelly, DRS
- B. Welling, DRS
- L. Privity, DRS
- Larry Nicholson, DRP
- NRC Senior Resident Inspector
- Nuclear Safety Information Center (NSIC)
- PUBLIC
- D. Norkin, NRR
- W. Dean, OEDO
- P. McKee, NRR/PD I-4
- G. Vissing, PM, NRR
- Inspection Program Branch, NRR (IPAS)
- DRS File

DOCUMENT NAME: A:MILLSTON.SWS

*Discussed w/ NRR*

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OFFICE	RI/DRS	RI/DRP	NRR	RI/DRS	RI/
NAME	EKELLY <i>[initials]</i>	LNICHOLSON	DNORKIN <i>[initials]</i>	ABLUGH	
DATE	06/29/95	06/29/95	06/29/95	06/30/95	06/ /95

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**MILLSTONE UNIT NO. 2**

**SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**June 28, 1995**

**June 28, 1995**

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

<b>I. Introduction</b>	<b>R. P. Necci</b>
<b>II. Overview</b>	<b>R. D. Hart</b>
<b>III. Description of Self-Assessment Plan</b>	<b>B. E. Hinkley/ A. D. Parker</b>
– Purpose/Scope	
– Organization	
– Assessment Team Qualification	
– Self-Assessment Process	
– Schedule	
<b>IV. Response Team</b>	<b>S. A. Sudigala</b>
<b>V. Corrective Action Plan</b>	<b>R. P. Necci</b>
<b>VI. Summary</b>	<b>R. P. Necci</b>

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**Participants**

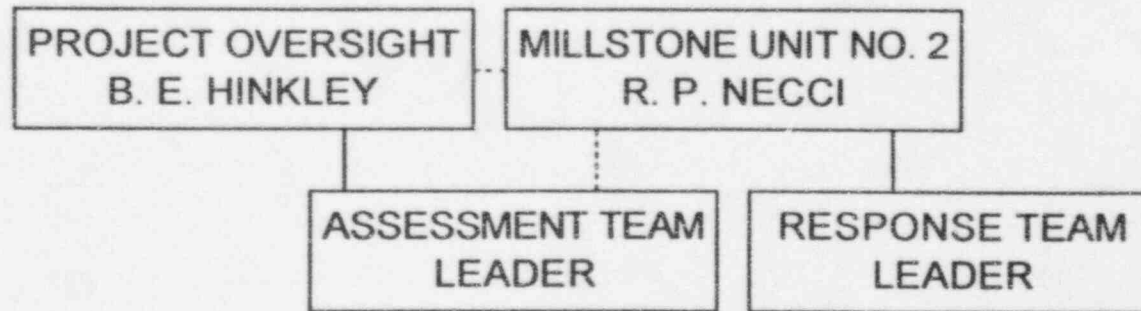
R. P. Necci	Director, Engineering Millstone Unit No. 2
S. A. Sudigala	Manager, Design Engineering, Millstone Unit No. 2
R. D. Hart	Senior Engineer, Engineering Support
R. G. Joshi	Principal Engineer, Nuclear Licensing
B. E. Hinkley	Director, Engineering Services, Yankee Atomic Electric Company
A. D. Parker	Audit Group Supervisor, Yankee Atomic Electric Company

## **MILLSTONE UNIT NO. 2 SERVICE WATER SYSTEM – SELF-ASSESSMENT**

### **I. INTRODUCTION**

- This presentation is intended to summarize the assessment scope, schedule, responsibilities, assessment team and response team qualification, questions/concern processing, and corrective actions
- All concerns will be identified in the Assessment Report. Millstone Unit No. 2 will track, follow-up, and closeout all identified concerns consistent with the existing station procedures
- It is noted that Millstone Unit No. 2 has performed a pre-self-assessment audit

MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM - SELF ASSESSMENT  
TEAM ORGANIZATION AND INTERFACE



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**II. OVERVIEW**

**Purpose/Scope**

- Perform a self-assessment of the Millstone Unit No. 2 service water system to verify that the system design, operation, and performance meets design basis and regulatory requirements
- Assess the unit's implementation of actions taken in response to GL 89-13
- Self-assessment will be conducted by Yankee Atomic in accordance with NRC Temporary Instruction (TI) 2515/118 for Service Water System Operational Performance Inspections
- Process consistent with intent of IP 40501 for self-assessments



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**II. OVERVIEW (Continued)**

**NU Responsible For:**

- Contract Administration, logistics, and planning
- Development and implementation of inspection responses
- Implementation of any final recommendations
- Presentation of results of self-assessment to NRC

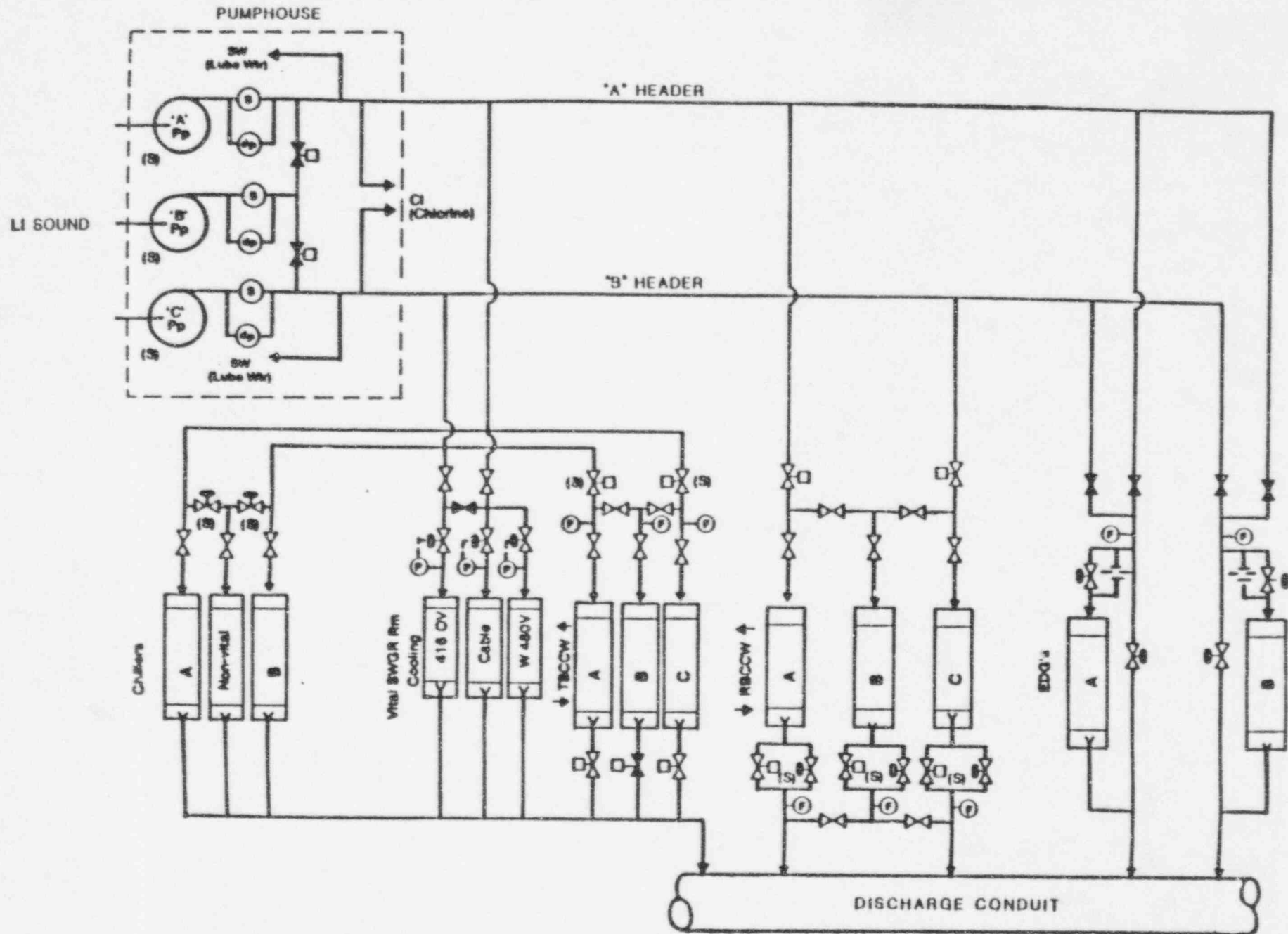
**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**II. OVERVIEW (Continued)**

**Yankee Atomic Responsible For:**

- Development of self-assessment plan
- Establishment of qualified team
- Performance of self-assessment
- Evaluation of plant responses
- Preparation of formal assessment report and presentation of results to NU management
- Participation in NU presentation to NRC

# MILLSTONE UNIT NO. 2 SERVICE WATER SYSTEM — SELF-ASSESSMENT



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM -- SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN**

**Purpose**

- Assess the licensee's planned or completed actions in response to Generic Letter 89-13, "Service Water System Problems Affecting Safety-Related Equipment," July 18, 1989
- Verify that the Service Water System (SWS) is capable of fulfilling its thermal and hydraulic performance requirements and is operated consistent with its design basis
- Assess the SWS operational controls, maintenance, surveillance, and other testing and personnel training to ensure the SWS is operated and maintained so as to perform its safety-related functions

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

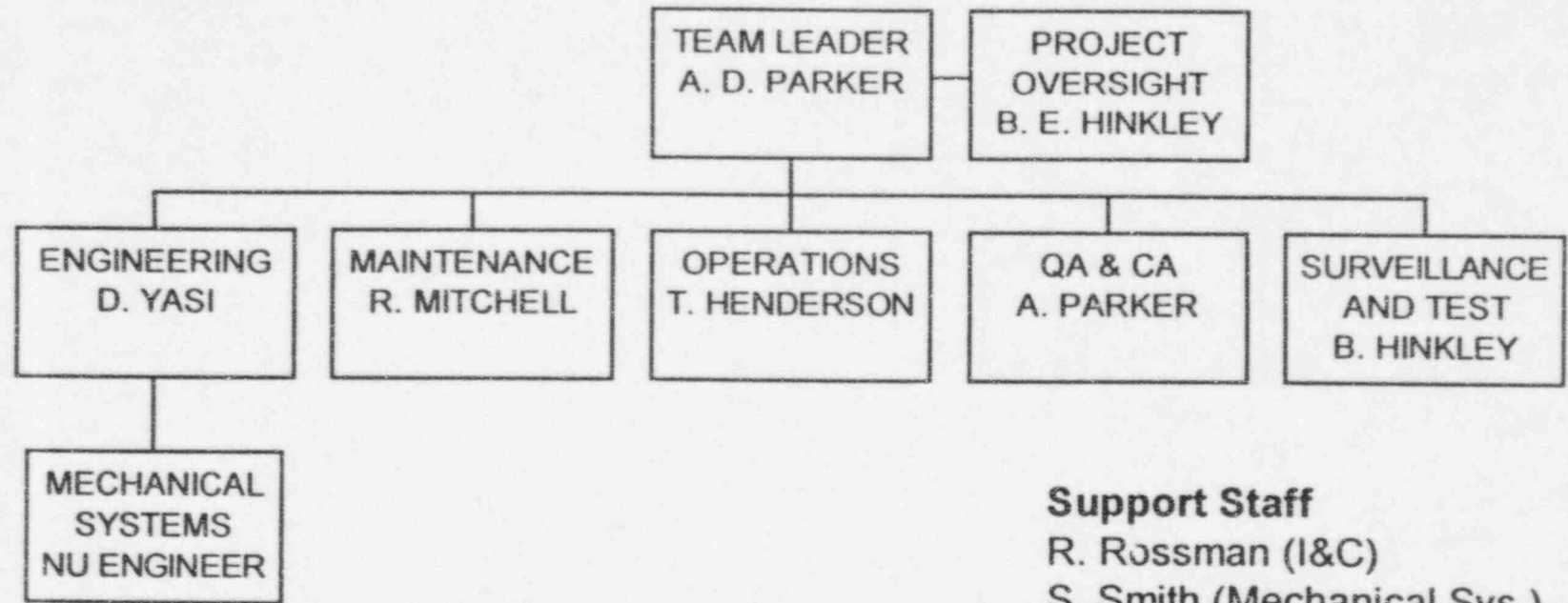
**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Scope**

Scope is consistent with NRC Temporary Instruction (TI) 2515/118 for Service Water System Operational Performance Inspections.

- System design and configuration control
- System operations/maintenance
- System surveillance and testing
- Quality assurance and corrective action

MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM - SELF ASSESSMENT  
ASSESSMENT TEAM ORGANIZATION



**Support Staff**  
R. Rossman (I&C)  
S. Smith (Mechanical Sys.)  
S. Rosenberg (electrical)  
B. Holmgren (Mech./Structural)

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Assessment Team Qualifications**

**Team Leader**

- 19 Years Nuclear Experience
- Current Audit/Assessment Group Supervisor
- Team Leader Vermont Yankee, Maine Yankee, and Haddam Neck SWOPI
- Certified Lead Auditor
- Team Member Prairie Island (Northern State Power) SWOPI

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Project Oversight and Testing/Surveillance Reviewer**

- 19 Years Nuclear Experience
- Current Director, Engineering Services
- Project Manager for Eight (8) Safety System Functional Inspections (SSFI)
- Five (5) Years Nuclear Utility Management Experience
- Technical Oversight for Vermont Yankee, and Haddam Neck SWOPI
- Project Manager/Team Leader Prairie Island (Northern State Power) and Maine Yankee SWOPI



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Mechanical Systems Engineering and Design Review**

- 19 Years Experience in Systems Engineering and Design
- Registered Professional Engineer
- Engineering Manager, Boston Edison Project Team
- Vermont Yankee Service Water Project Team

**Mechanical System Reviewer**

- 24 Years Nuclear Experience
- Service Water System Design and Construction Experience
- Licensed Professional Engineer
- Haddam Neck SWOPI Team Member

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Mechanical/Structural Design Reviewer**

- 20 Years Experience in the Electric Utility and Nuclear Industry
- Current Lead Mechanical Engineer, Yankee Rowe
- Licensed Professional Engineer
- Haddam Neck SWOPI Team Member

**Electrical Design Reviewer**

- 30 Years Experience in Design, Construction, Installation, and Testing of Electrical Systems for Nuclear Power Plants and Water Pumping Stations
- Electrical Design Reviewer on Vermont Yankee and Haddam Neck and Prairie Island SWOPI
- Team Member on NU MOV Self-Assessment

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**I&C Design Reviewer**

- 25 Years Nuclear Design and Operations Experience
- Previous Lead I&C Engineering Rowe Project
- Haddam Neck and Prairie Island SWOPI Team Member

**Operations Reviewer**

- 20 Years Experience in PWR Operation and Management
- Previous Assistant Plant Superintendent, Yankee Rowe
- Former SRO Licensed Operator
- Operations Reviewer for Vermont Yanke, Prairie Island and Haddam Neck SWOPI

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Maintenance Reviewer**

- 20 Years Experience in Nuclear Power Plant Maintenance
- Current Manager Plant Support Department, YAEC
- Former Maintenance Director, Maintenance Support Supervisor and I&C Supervisor of Yankee Rowe
- Maintenance Review for Vermont Yankee, Prairie Island and Haddam Neck SWOPI
- Maintenance Program Evaluations Millstone Unit No. 2 and Indian Point 3

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Self-Assessment Process**

- Team Orientation and Training
- Use of EPRI SWOPI Checklist and Self-Assessment Plan (Assignments)
- Incorporation of Industry Lessons Learned
- Daily Team Meetings
- Processing Questions and Concerns

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Schedule**

- Week 1 (9/5/95)
  - Team leader assembles documentation, arranges work location for team, and assigns areas for review.
  
- Week 2 (9/18/95)
  - Team takes GET on site. Conducts orientation and training with the assessment team. Team prepares individual assessment plans, generates questions/concerns and other information requests in office.

MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)

Schedule (Continued)

- Week 3 (9/25/95)
  - Entire team starts on-site inspection/interviews and specific area walkdowns. Team issues questions/concerns to the plant for response.
  
- Week 4 (10/2/95)
  - On-site Inspection continues, follow up on questions/concerns from the previous week on site.

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

Schedule (Continued)

- Week 5 (10/10/95)
  - In-office review.
  
- Week 6 (10/16/95)
  - Resume on-site inspection activities. Follow up on questions/concerns from the previous week on site. Tentative exit meeting October 20, 1995.
  
- Week 7 (10/23/95)
  - Team writes draft report in office.



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Continued)**

**Schedule (Continued)**

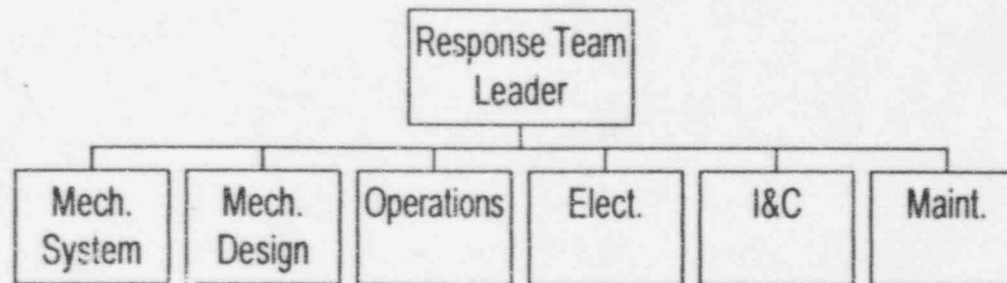
- Week 8 (10/30/95)
  - Team leader edits report and presents to Director - Engineering Services for review.
  
- Week 9 (11/6/95)
  - Team leader incorporates comments and final report is issued.

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

**IV. RESPONSE TEAM**

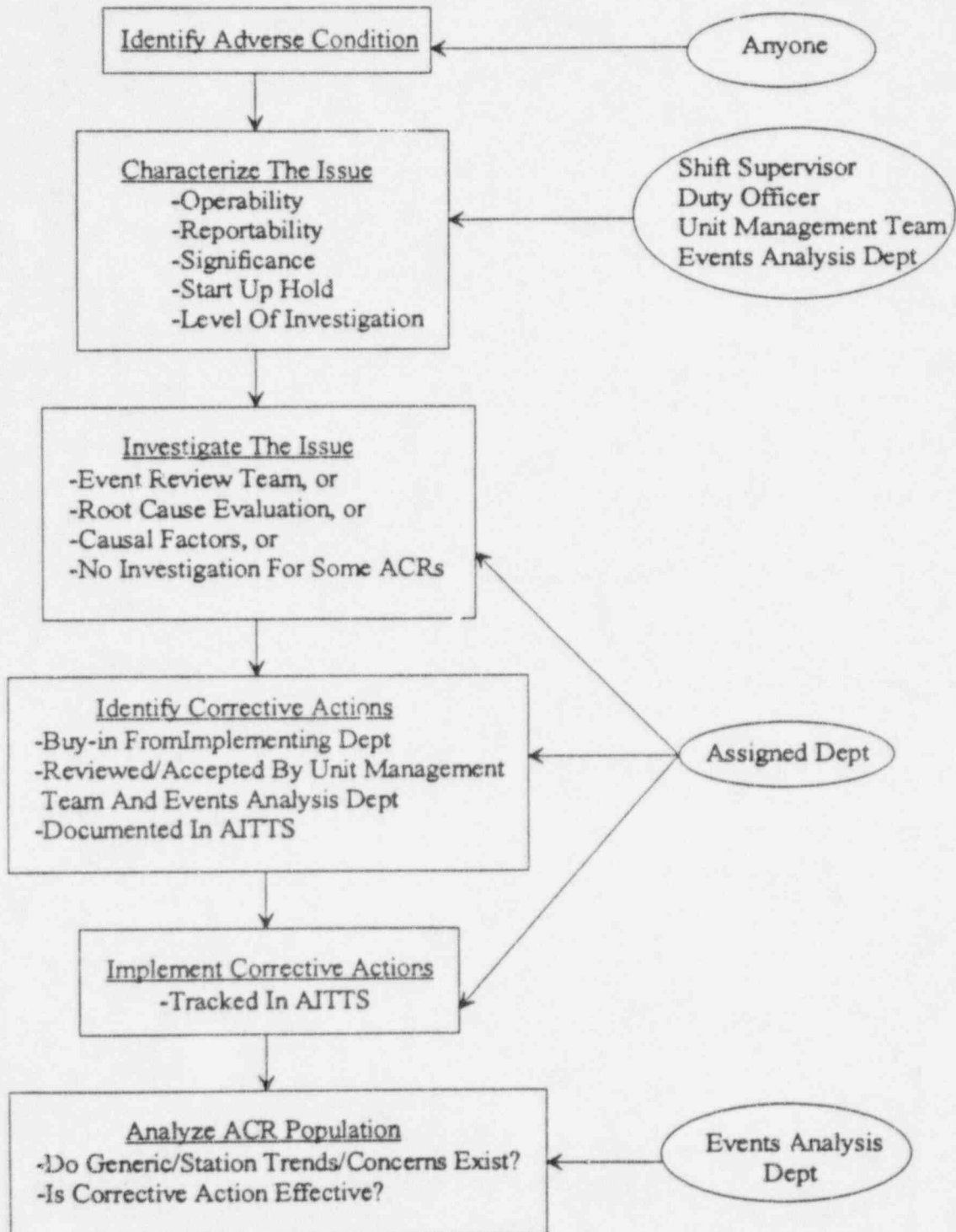
- Response team assembled to parallel the inspection team as well as other specialists
- Record questions/concerns and log in database
- Review with team members and determine operability concern
  - Generate ACR as required

MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM - SELF-ASSESSMENT  
RESPONSE TEAM ORGANIZATION



Response Team Support  
QA  
Chemistry  
Environmental  
Purchasing  
Procurement Engineering

# MILLSTONE UNIT NO. 2 SERVICE WATER SYSTEM - SELF-ASSESSMENT Flow Chart for ACR Process



**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**IV. RESPONSE TEAM (Continued)**

- Daily Interface with the Assessment Team
- Daily status to plant management
- Prioritize questions/concerns
  - Priority 1 - Response same day
  - Priority 2 - Response within 48 hours
  - Priority 3 - Response as required
- Record and log responses in database
- Conduct team meeting each day

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**V. CORRECTIVE ACTION PLAN**

- Evaluate the report for issues with respect to root cause
- Define comprehensive plan for corrective actions
- Communicate report and plan with NRC Staff
- Maintain communication between SWOPI response and assessment team for closure of issues

**MILLSTONE UNIT NO. 2  
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

**VI. SUMMARY**

- Scope of Effort
- Assessment Team Qualifications
- Organization
- Millstone Unit No. 2 Commitment and Follow-Up