

DCS

APR 8 1994

Docket No. 50-213

Mr. John F. Opeka
Executive Vice President - Nuclear
Connecticut Yankee Atomic Power Company
P.O. Box 270
Hartford, Connecticut 06141-0270

Dear Mr. Opeka:

SUBJECT: ALTERNATIVE TO SERVICE WATER SYSTEM OPERATIONAL
PERFORMANCE INSPECTION (SWSOPI) AT HADDAM NECK

This letter is in response to your request to perform a self-assessment as an alternative to a SWSOPI conducted by the Nuclear Regulatory Commission (NRC) as documented in your letter of March 15, 1994. Northeast Utilities Service Company's presentation to the NRC Region I on March 28, 1994, discussed proposed self-assessment details including the scope, administration and organization, plan description, and inspection criteria that are based upon regulatory and industry guidance. Qualifications of the self-assessment team members were also presented. The transparency slides used during this presentation are enclosed with this letter.

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.

Based on our review, we have concluded that your self-assessment plan is conditionally acceptable for meeting the NRC requirements for such plans. This acceptance is subject to: 1) the NRC in-process and final inspections of your effort, and 2) your completion of the self-assessment, final report, and a presentation of the results to the NRC in Region I.

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Mr. John F. Opeka

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Your cooperation with us in this matter is appreciated.

Sincerely,

Original Signed by *

James T. Wiggins, Deputy Director
Division of Reactor Safety

Enclosure: Slides from Meeting on March 28, 1994

cc w/encl:

S. E. Scace, Vice President, Nuclear Operations Services

J. P. Stetz, Vice President, Haddam Neck Station

J. Solymossy, Director, Nuclear Quality and Assessment Services

J. J. LaPlatney, Director, Nuclear Unit

R. M. Kacich, Director, Nuclear Planning, Licensing and Budgeting

Gerald Garfield, Esquire

Nicholas Reynolds, Esquire

Public Document Room (PDR)

Local Public Document Room (LPDR)

Nuclear Safety Information Center (NSIC)

NRC Resident Inspector

State of Connecticut SLO

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Mr. John F. Opeka

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bcc w/encl:

Region I Docket Room (with concurrences)

J. Stolz, NRR/PD I-4

V. McCree, OEDO

A. Wang, PM, NRR

Talked to Don Norstein on 4/7

RI:DRS
Kenny *KB*

4/5/94

AK
RI:DRS
Kelly

4/5/94

NRR *TJK*
Gillespie *for*

4/7/94

RI:DRS
[Signature]
Wiggins

4/7/94

OFFICIAL RECORD COPY
A:SWSOPL.TJK

HADDAM NECK PLANT

SERVICE WATER SYSTEM – SELF-ASSESSMENT

MARCH 28, 1994

March 28, 1994

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

I. Introduction	J. D. Haseltine
II. Overview	R. D. Hart
III. Description of Self-Assessment Plan	B. E. Hinkley/ A. D. Parker
— Purpose/Scope	
— Organization	
— Assessment Team Qualification	
— Self-Assessment Process	
— Schedule	
IV. Response Team	J. G. Fougere
V. Corrective Action Plan	J. D. Haseltine
VI. Summary	J. D. Haseltine

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

Participants

J. D. Haseltine	Director, Engineering, Haddam Neck Plant
R. D. Hart	Senior Engineer, Engineering Support
R. G. Joshi	Principal Engineer, Nuclear Licensing
J. G. Fougere	Senior Engineer, Technical Support, Haddam Neck Plant
B. E. Hinkley	Director, Engineering Services, Yankee Atomic Electric Company
A. D. Parker	Audit Group Supervisor, Yankee Atomic Electric Company

HADDAM NECK PLANT SERVICE WATER SYSTEM — SELF-ASSESSMENT

II. OVERVIEW

Purpose/Scope

- Perform a self-assessment of the Haddam Neck Plant service water system to verify that the system design, operation, and performance meets design basis and regulatory requirements
 - Determine the adequacy of plant's response to GL 89-13
 - Evaluate plant's response to recent service water piping indications
- Self-assessment will be conducted in accordance with NRC Temporary Instruction (TI) 2515/118, Revision 1, for Service Water System Operational Performance Inspections
- Process consistent with intent of IP 40501 for self assessments

Benefits to NU

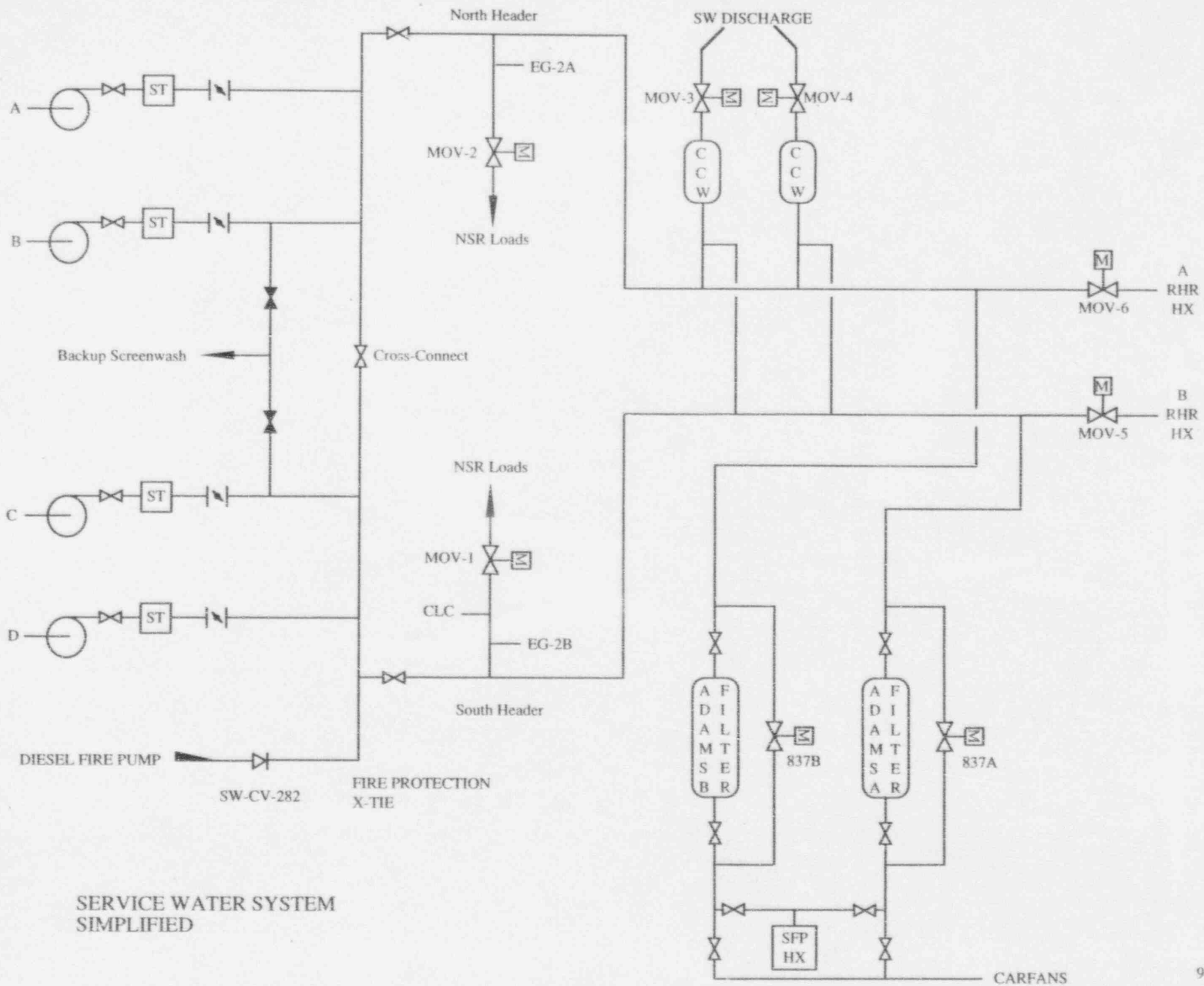
- Provide station/corporate management with independent service water system report card
- Timing minimizes impact on plant resources
- Inspection can be enhanced in specific areas of interest

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

II. OVERVIEW (Cont.)

- 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

- Yankee Atomic responsible for:
 - Development of self-assessment inspection 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



SERVICE WATER SYSTEM SIMPLIFIED

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

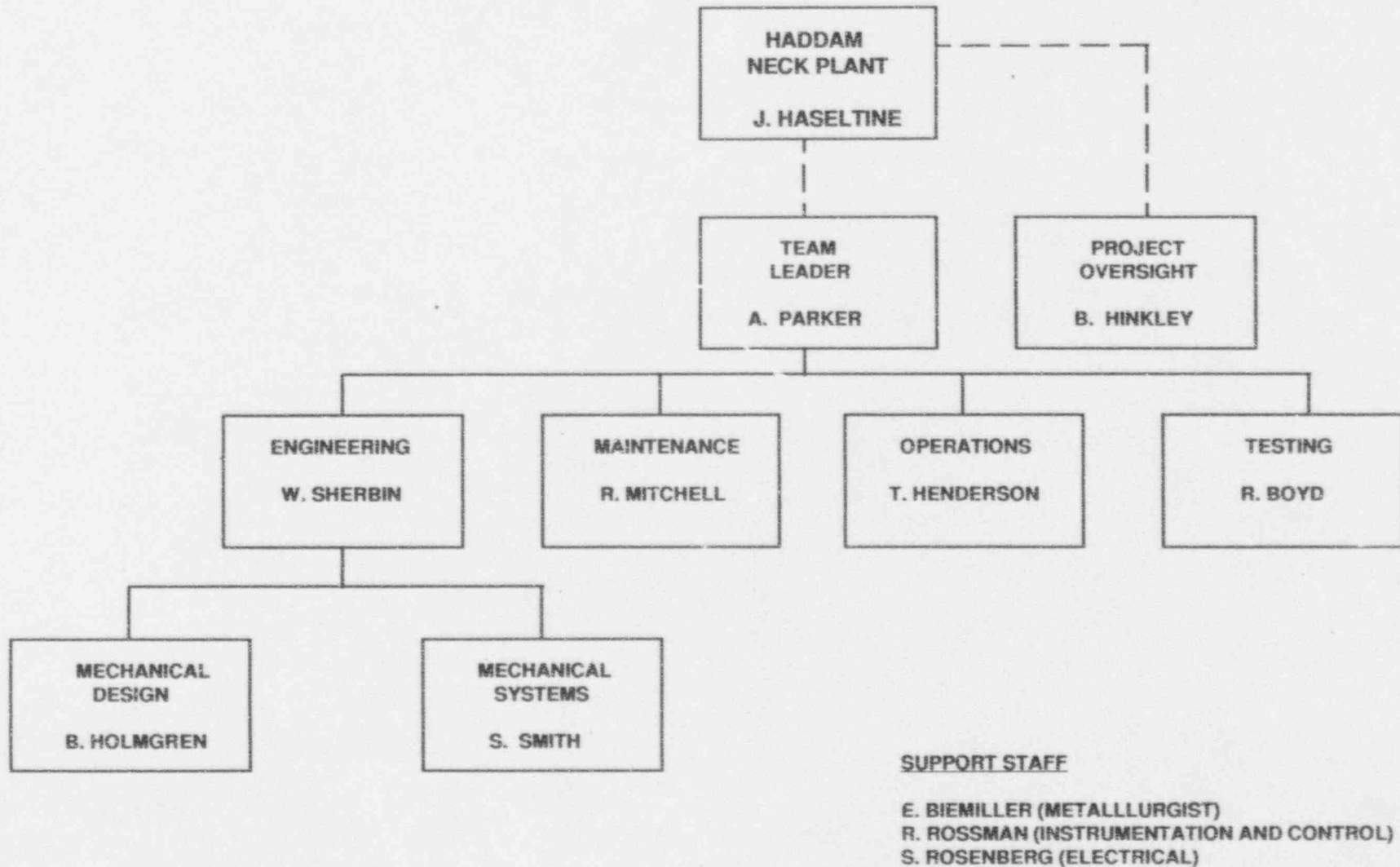
III. DESCRIPTION OF SELF-ASSESSMENT PLAN

Purpose/Scope

- 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
- System Design and Configuration Control
- System Operations/Maintenance
- System Surveillance and Testing
- Review the adequacy of corrective actions completed during the recent SWS outage
- Quality Assurance and Corrective Action

III. Description of Self-Assessment Plan

TEAM ORGANIZATION AND INTERFACE



**HADDAM NECK PLANT
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN

Assessment Team Qualifications

Team Leader

- 18 Years Nuclear Experience
- Current Audit/Assessment Group Supervisor
- Former Rowe Simulator Supervisor/Project Engineer
- Certified Lead Auditor
- Team Leader Vermont Yankee SWOPI

Project Oversight

- 17 Years Nuclear Experience
- Current Director, Engineering Services
- Project Manager for 8 Safety System Functional Inspections (SSFI)
- 5 Years Nuclear Utility Management Experience
- Technical Oversight for Vermont Yankee SWOPI

**HADDAM NECK PLANT
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

Mechanical Systems Engineering and Design Reviewer

- 23 Years Experience in Systems Engineering and Design
- Registered Professional Engineer
- Extensive SSFI/SWOPI Experience

Mechanical System Reviewer

- 23 Years Nuclear Experience
- Service Water System Design and Start-up Experience
- SWS Modeling and Aging Analysis
- Member of VY SWOPI Response Team

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 PLANT
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

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 SWOPI
- MOV Self-Assessment at Northeast Utilities

I&C Design Reviewer

- 25 Years Nuclear Design and Operations Experience
- Previous Lead I&C Engineer Rowe Project
- Participated in other Utility Technical Assessment

Testing/Surveillance Reviewer

- 14 Years Nuclear Experience in Various Operational, Testing, and Engineering Positions
- Participated in numerous SSFIs
- Recent Testing Reviewer on Palo Verde SWOPI

**HADDAM NECK PLANT
SERVICE WATER SYSTEM – SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

Operations Reviewer

- 20 Years Experience in PWR Operation and Management
- Current Assistant Plant Superintendent, Yankee Rowe
- Former SRO Licensed Operator
- Operations Reviewer for Vermont Yankee SWOPI

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 Reviewer for Vermont Yankee SWOPI

HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

Metallurgist

- 25 Years Experience in Nuclear Power
- Metallurgical Experience in Corrosion and Erosion/Corrosion
- Project Manager for Maine Yankee Service Water Pipe Lining
- National Association of Corrosion Engineers
- Knowledgeable in Microbiological Induced Corrosion (MIC)

HADDAM NECK PLANT SERVICE WATER SYSTEM — SELF-ASSESSMENT

Self-Assessment Process

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

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

TENTATIVE SCHEDULE

Week 1 (3/28/94)

Team Leader assembles documentation arranges work location for team and assigns areas for review.

Week 2 (4/4/94)

Team takes GET on site. Conducts orientation and training with the assessment team. Entrance Meeting. Team prepares individual assessment plans, generates questions/concerns and other information requests in office.

Week 3 (4/11/94)

Entire team starts onsite inspection/interviews and specific area walkdowns. Team issues questions/concerns to the plant for response.

Week 4 (4/18/94)

In-office review.

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

III. DESCRIPTION OF SELF-ASSESSMENT PLAN (Cont'd.)

TENTATIVE SCHEDULE

Week 5 and 6 (4/25/94 and 5/2/94)

Resume onsite inspection activities. Follow-up on questions/concerns from the previous week on site. Tentative exit meeting Friday, May 6.

Week 7 (5/9/94)

Team writes report in office.

Week 8 (5/16/94)

Team leader edits report and presents to Director — Engineering Services for review.

Week 9 (5/23/94)

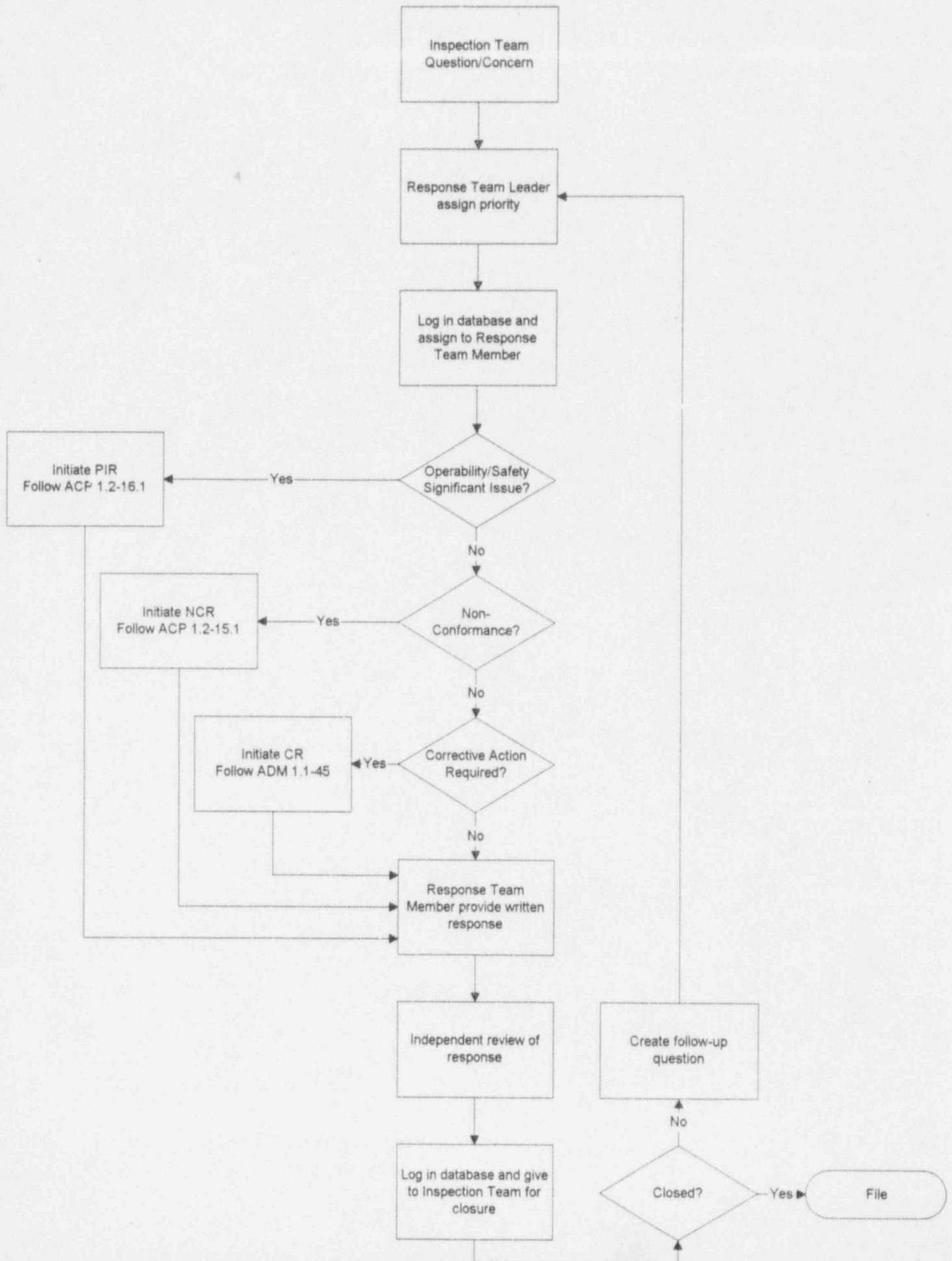
Final Report is issued.

**HADDAM NECK PLANT
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 PIR/NCR as Required
- 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 Evening

QUESTION/CONCERN RESOLUTION PROCESS FLOWCHART



**HADDAM NECK PLANT
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 with SWOPI Team for Closure of Issues

**HADDAM NECK PLANT
SERVICE WATER SYSTEM — SELF-ASSESSMENT**

VI. SUMMARY

- Scope of Effort
- Assessment Team Qualifications
- Organization
- Haddam Neck Plant Commitment and Follow-Up