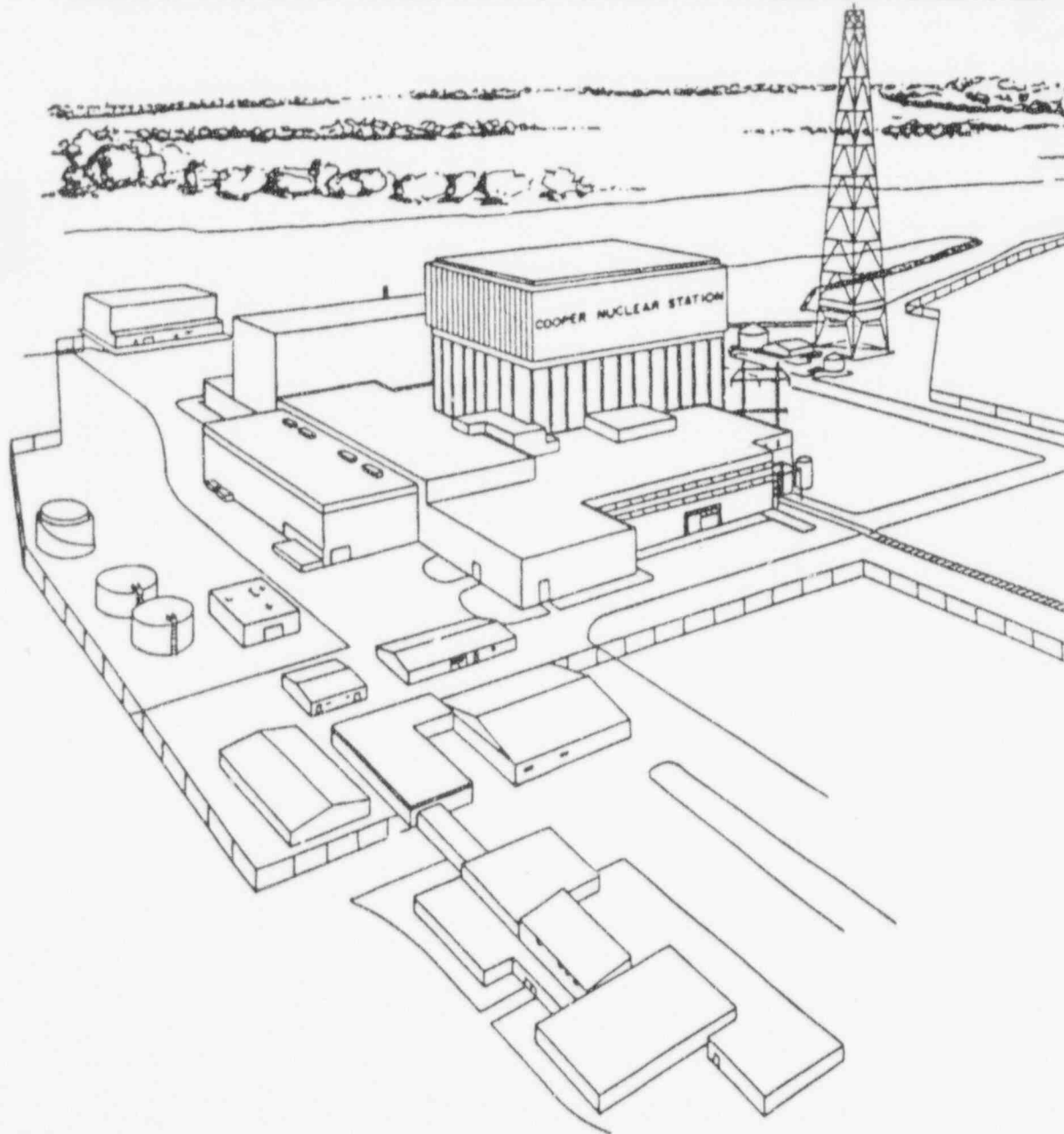


Cooper Nuclear Station

STARTUP AND POWER
ASCENSION PLAN (SHUTDOWN 94-03)



REVISION 3

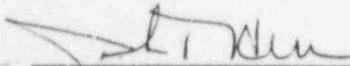
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COOPER NUCLEAR STATION

STARTUP AND POWER ASCENSION PLAN

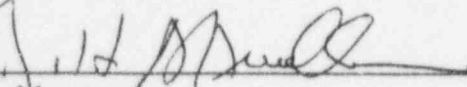
Revision 3

APPROVED BY:



Plant Manager

1-31-95
Date



Site Manager

1/31/95
Date

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ATTACHMENT 1 - STARTUP ORGANIZATION CHART

ATTACHMENT 2 - POWER ASCENSION SCHEDULE *

* NOTE: Final, official revision will be issued prior to plant startup.

1. PURPOSE

The purpose of this document is to establish management's expectations for the safe and controlled restart of Cooper Nuclear Station from shutdown 94-03 that commenced May 25, 1994. This will be accomplished through the following objectives:

- Assign responsibility for the coordination and management of the Startup and Power Ascension Plan to a designated Startup Manager.
- Establish a shift-management and support organization to augment and support the normal shift staff that will assist in conducting a safe and error-free startup. This plan defines responsibilities and accountability of the startup organization during the startup and power ascension.
- Provide a rapid-response maintenance and technical support capability to resolve emergent issues in a timely manner so that safe startup and power ascension are not impeded.
- Conduct startup and surveillance testing in a safe and efficient manner to ensure that system and component operability support startup and power ascension.

2. SCOPE

This plan addresses the activities that will ensure that plant operation, material condition, personnel performance, organizational responsiveness, and the functioning of administrative and work control processes are fully ready for a safe and reliable startup. The development and approval of this plan are part of the criteria on which the evaluation for startup is based. This plan consists of the following major elements:

- Startup Organization
- Startup Readiness
- Power Ascension Overview

The overall responsibility for the successful execution of this plan rests with the Plant Manager.

3. STARTUP ORGANIZATION

This section describes the shift organization and additional staffing (Attachment 1), their responsibilities, and the lines of communication used during preparations for and the conduct of startup and power ascension. As

a minimum, the staffing shall be available from the time the Reactor Mode Switch is placed in the "Start & Hot Standby" position until management determines that the startup and power ascension phase is satisfactorily completed. Assignments to the designated positions will be coordinated by the Startup Manager who will maintain an approved staffing schedule for the startup and power ascension.

3.1. MANAGEMENT OVERSIGHT

3.1.1 Startup Manager

The Startup Manager will provide the necessary focus and single point of contact needed to bring the entire restart together. He will be responsible to ensure that all aspects of the Startup and Power Ascension Plan are implemented and coordinated for the safe and controlled restart of Cooper Nuclear Station from shutdown 94-03, including the following:

- Development of the startup schedule with specific holdpoints for management assessment.
- Development of guidelines for conduct of management holdpoints, i.e., required participants, items to be reviewed and approvals required for continuation of the startup.
- Identification and coordination of site training in support of the startup.
- Development of a contingency plan to address startup issues identified by the OER review, recent industry events and by plant personnel.
- Identification and coordination of activities required to be conducted during the startup and ensuring they are appropriately addressed in the plant daily schedules.
- Development of a site staffing plan for augmented shift coverage in accordance with this Plan that fully supports conduct of the startup and enables appropriate response to emergent issues.
- Verification that appropriate materials, procedures and personnel are in place to support this Plan.

- Development of briefing packages for all startup activities which fall under the guidance of SOER 91-01, *Conduct of Infrequently Performed Tests or Evolutions*.

The Startup Manager shall also ensure that Operations and other site organizations have briefed their personnel on: the Salem event (SOER 94-01), including expectations regarding conservative decision making, emphasizing the transition from shutdown to operations, and the startup plan organization. He will also work with Maintenance, Operations, Planning and Scheduling and Engineering to ensure expectations regarding risk assessment of emergent work items is developed and communicated.

The Startup Manager shall maintain appropriate documentation necessary to manage the Startup and Power Ascension Plan. This documentation will include startup staffing schedules, department and system checklists and affirmations for startup, final checklists for the operating shifts affirmed by the Shift Supervisors for startup, management observation schedules, and other documentation that supports the Plan.

3.1.2 Management Representative

An experienced Management Representative shall be assigned on-shift to provide 24-hour coverage throughout startup and power ascension. He is the direct representative of the CNS Plant Manager and is responsible for maintaining an overall perspective of the startup process. He is the senior CNS manager on shift, and the on-shift organizations report directly to him, including the Shift Supervisor. He will be informed of any significant restraints or potential schedule impacts and take appropriate action to resolve them to meet our objectives of a safe and error-free plant startup. In addition, he will assure that plant material condition is not degraded during the startup. If necessary, the Management Representative will make the decision to delay the startup, reduce power or shutdown to make necessary repairs, keeping the Plant Manager and Site Manager informed of these decisions. Additional responsibilities include:

- Ensuring that on-shift and support personnel are aware of and meet management's expectations on achieving a safe and error-free plant startup.
- Fostering and supporting a questioning attitude by ensuring concerns expressed by plant personnel are acknowledged and addressed in a timely manner.

- Allocating personnel and resources as needed to support the startup and power ascension schedule.
- Apprising the Plant Manager of all off-normal and emerging issues that may impact plant startup and power ascension.
- Conducting a shift briefing with the on-shift managers who report to him shortly following the operations shift turnover. The briefing will include evolutions expected to be completed during the upcoming shift including:
 - Expectations on schedule adherence and notification of schedule delays and barriers to satisfactory completion of activities.
 - Surveillance testing and time-critical schedule constraints.

3.1.3 Management Observation Program

During the startup and power ascension, the CNS Management Observation Program will be redirected to focus on startup evolutions, principally testing, maintenance and plant configuration changes. The Startup Manager is responsible for preparing and coordinating schedules for management observations in support of this Plan. The observations will be event-driven, i.e., they will be scheduled around specific events that the Startup Manager and the Plant Manager feel are appropriate for independent observation and followup reporting to the Plant Manager at the daily POD meeting.

3.2 STARTUP ON-SHIFT STAFFING AND ORGANIZATION

3.2.1 Operations Shift Crews

The duty Shift Supervisor reports directly to the on-shift Management Representative during the period that the Startup and Power Ascension Plan is in effect. He is in charge of plant configuration and control at all times as specified in CNS Procedure 0.2, *Station Organization and Responsibility*. The temporary staffing established to augment the normal operating staff during the startup and power ascension is structured specifically to support the command and control authority of the Shift Supervisor and Control Room Supervisor through the Management Representative.

Shift staffing for startup and power ascension is increased over normal levels. Additional staffing includes a Licensed Operator and two or

more Station Operators. Their responsibilities during this period are as follows:

- The Licensed Operator is dedicated to verifying control board manipulations and control rod movements with a specific focus on reactivity control. This operator is to provide independent verification assistance to the duty crew and will manipulate controls only under the direction of the duty crew.
- At least two additional Station Operators will be assigned, as available, at the direction of the on-shift crew. They will also be assigned, as necessary, to support the Work Control Center.
- The CNS Engineering Department will provide shift coverage for STAs to the operating shifts while this Plan is in place.

3.2.2 Work Control Center

The Work Control Center will be continuously manned during the startup and power ascension. The Center will manage the normal work activities including initial MWR/CR screening and validation, prioritization and scheduling, coordination of clearances and system lineups through the shift schedule, and coordination, scheduling and release of work including PMT. In addition, the Work Center will be augmented by additional staff during the startup and power ascension to assure that planning and scheduling activities are closely coordinated, to provide single point-of-contact for startup testing and PMT, and provide an augmented validation and minor maintenance team (Tiger Team).

3.2.2.1 Work Center Manager

The Work Center Manager is an on-shift management representative of the Maintenance Manager. He is responsible for managing the activities of the Work Control Center, maintenance Tiger Team, Startup Coordinator, and Planning and Scheduling Coordinators. In addition to the normal work management responsibilities, the Work Center Manager has the following additional responsibilities:

- Managing the preparation of the shift startup and power ascension schedule.

- Assuring that the maintenance Tiger Team is coordinated to support the shift crew needs and managing emergent maintenance activities, particularly steam and other fluid leaks, to assure that plant material condition is not degraded.
- Controlling and confirming all prerequisite activities are complete prior to mode changes and advancing beyond each scheduled power and testing plateau.

3.2.2.2 Tiger Team Manager

During the startup and power ascension period, a Tiger Team will be assembled to provide rapid response to plant material condition issues. The Team will be managed by an on-shift member of operations, maintenance or engineering, and it will have the normal responsibilities of the validators and minor maintenance team assigned to the WCC. The Team will also be augmented with operations, maintenance and engineering personnel to assure that plant material condition is not degraded during the startup.

Maintenance Department craft will be on shift under the Tiger Team Manager to provide support for the following:

- MWR validation.
- Planned maintenance activities on the backshift that can be appropriately completed.
- Pre-planned or required surveillance procedures.
- Emergent issues as deemed necessary by the Shift Supervisor.

3.2.2.3 Planning and Scheduling Coordinator

The Planning and Scheduling Coordinator is assigned from the Planning and Scheduling Department or Maintenance Department. He will have the responsibility for preparing, updating and issuing the startup shift schedules prior to the start of each shift. In addition, he will coordinate all planning activities for emergent work activities to support the Tiger Team work activities and any other backshift activities outside the normal responsibility of the Planning Department on day shift.

3.2.2.4 Milestone Coordinator

This position is manned by an individual holding an SRO License or SRO Certification. His responsibility is to interface closely with the Work Center Manager to assure the proper sequencing and coordination of plant activities to support major schedule milestones. He will assure that sufficient advance planning is coordinated to complete prerequisite activities for the milestones, including post maintenance and surveillance testing. Major milestones include hydrostatic testing, PMT closeout for mode change, and surveillance testing completion for mode changes. Responsibilities include:

- Maintaining a Startup Test File as a subset of the Power Ascension Schedule (Attachment 2).
- Coordinating the performance of test file items with the power ascension schedule.
- Assuring that all required post-maintenance or modification tests to be performed during the startup and power ascension evolution are completed satisfactorily.
- Identifying additional testing of plant systems and components to be performed to provide assurance that safety-related and non-safety related systems will support safe and reliable operations.
- Updating the Planning and Scheduling Coordinator with testing status.
- Informing the Work Control Manager and Management Representative of significant restraints and potential schedule impacts.

3.2.3 Technical Support Manager

The Technical Support Manager will be assigned to control on-shift engineering resources as necessary to support scheduled startup testing activities, resolve emergent operability issues, support the maintenance Tiger Team, and manage necessary reactor engineering tests and control room activities. The Technical Engineering Manager will be a department manager or supervisor from NED or CNS Engineering.

3.2.3.1 Reactor Engineering

Reactor engineering will provide on-shift support to the control room as necessary and scheduled during the startup. They will be responsible for the conduct of any required physics testing and assigned startup or surveillance tests. In addition, they will be present in the control room to provide oversight of criticality, all control rod movements and power maneuvering.

3.2.3.2 Engineering Support

NED and CNS Engineering will provide engineering and technical support on shift, as necessary to support scheduled startup and power ascension activities. Their specific assignments include system engineer walkdowns as appropriate during startup and at specified plateaus, direct support of the Tiger Team for material condition walkdowns, close interface with the Shift Supervisor for operability requests, and support for post-maintenance and post design-change testing.

3.2.4 Other Departments

Chemistry, Health Physics, and other support staffing is provided on shift during the startup and power ascension evolution. The personnel are assigned to shift work and are available 24 hours per day in the event of emergent work.

- Health Physics will be available for 24-hour coverage to ensure radiological coverage for emergent work and emergency response.
- Chemistry will provide 24-hour support for the increased number of reactor coolant chemistry samples and any other emergent work.
- Materials Management will provide 24-hour support to respond to the need for materials to support the goal of assuring that the plant material condition is not degraded during the startup.

4. STARTUP READINESS AND MANAGEMENT APPROVALS

This section describes the approval required for startup, the power ascension schedule, and addresses emergent issues. These are described in more detail in the Restart Readiness Program.

4.1 Final System Readiness Reviews

The Final System Readiness Assessment will complement the multi-discipline system walkdowns performed as part of the Phase 1 Performance Improvement Plan. The assessment will be performed and documented, and the assessment results will be presented to the MRC.

4.2 Department Restart Readiness

Department managers will verify readiness for plant startup in accordance with the Restart Readiness Program. Their readiness results will be reviewed by the MRC.

4.3 Site Readiness Assessment

The Restart Readiness Program requires an overall site readiness that consists of a rollup of the various system, program and department assessments. These assessments will be reviewed by the MRC and the Site Manager for development of the final restart recommendation to the VP-Nuclear.

The Startup Manager will coordinate the documentation and reviews necessary to support the final review of readiness and recommendation to the Site Manager and the VP-Nuclear. He will ensure that each department manager prepares and affirms to a final department readiness checklist that each department has completed all items required and that the department is ready for startup. The Startup Manager will, in addition, ensure that each of the Shift Supervisors prepares the same form of affirmation for readiness for each of the operating shift crews.

In addition to department and shift readiness, the Startup Manager will assure that specific briefings are conducted for the operating shifts and other organizations in this Plan. These will include briefings on conservative approach to operations (SOER 94-01), Conduct of Infrequent Evolutions (SOER 91-01) as required, and the Startup and Power Ascension Plan.

The MRC will concur in the readiness for operations (commencement of plant heatup) following a review and final recommendation from the Startup Manager. This review will, as a minimum, confirm that all startup (heatup) items are completed, other test or maintenance activities are scheduled to the required plant operating windows, startup affirmations are complete, and the plant material condition is

acceptable for startup. The MRC will also confirm that this Plan is being satisfactorily implemented.

5. RESTART OVERVIEW

5.1 Schedule

The Startup and Power Ascension Schedule (Attachment 2) is a schedule of the activities performed to progress from cold shutdown to full power operations. It is developed by the Planning and Scheduling Department and is based on procedural requirements, surveillance test and post-maintenance testing requirements. The Power Ascension Schedule begins when approval to commence the startup process has been granted.

The startup and power ascension will be conducted in a controlled and deliberate manner with planned plateaus to support required testing and verification by management that the plant performance is acceptable for proceeding to the next stage of the startup. As a minimum, the plateaus or review points include heatup to above 200°, prior to exceeding minimum turbine load, at the second reactor feed pump startup, at the 90% power plateau, and at 100% power stable operations. Management will review and approve proceeding beyond these points.

5.2 Critical Testing and Other Activities

The detailed startup schedule contains certain critical milestones for testing and other activities. These milestones have specific managers and supervisors assigned to perform observations under the Management Observation Program. In addition, milestone coordinators are assigned as discussed in this Plan. The testing milestones include HPCI and RCIC surveillance testing, drywell inerting, Relief Valve testing and the turbine roll and overspeed test.

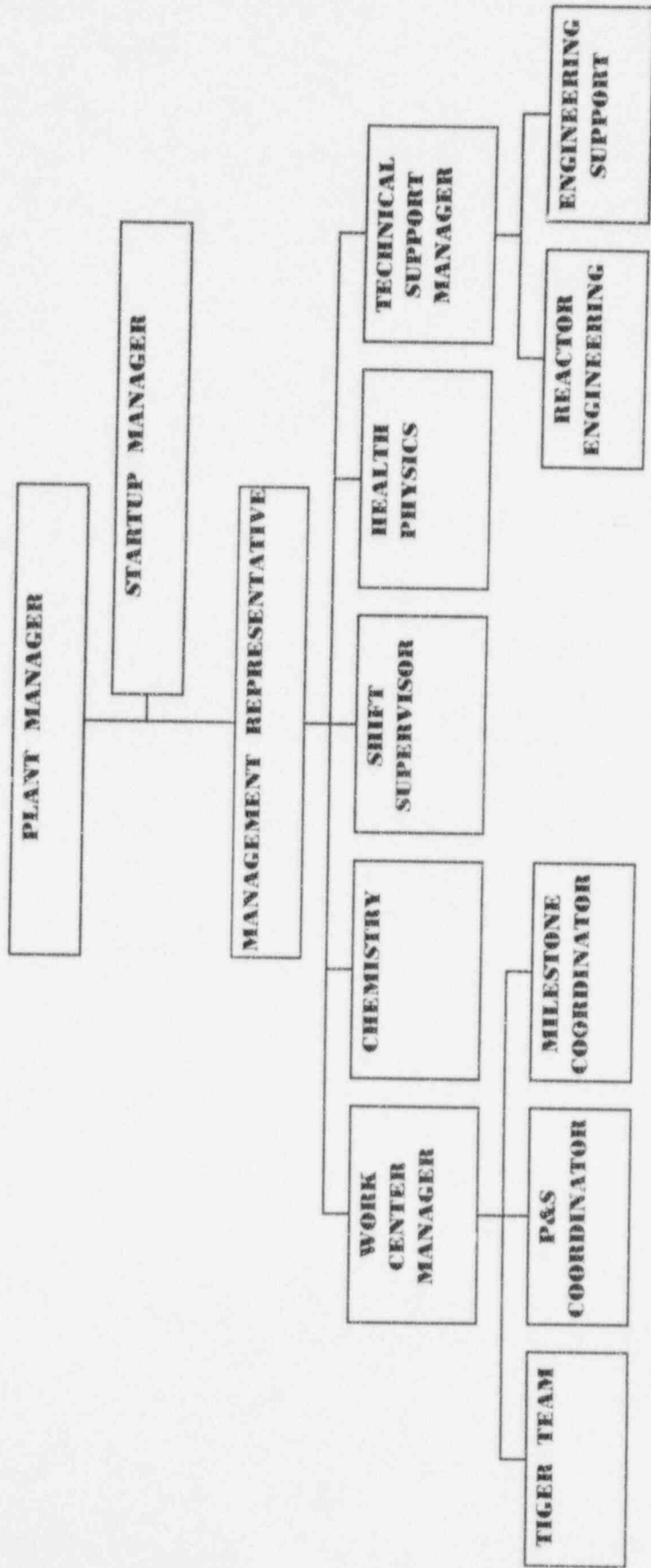
5.3 Contingency Planning

The Startup Manager will ensure that contingency plans are in place to provide sufficient vendor assistance as may be necessary to support the startup schedule. As a minimum, this will include GE, Westinghouse and leak sealing support.

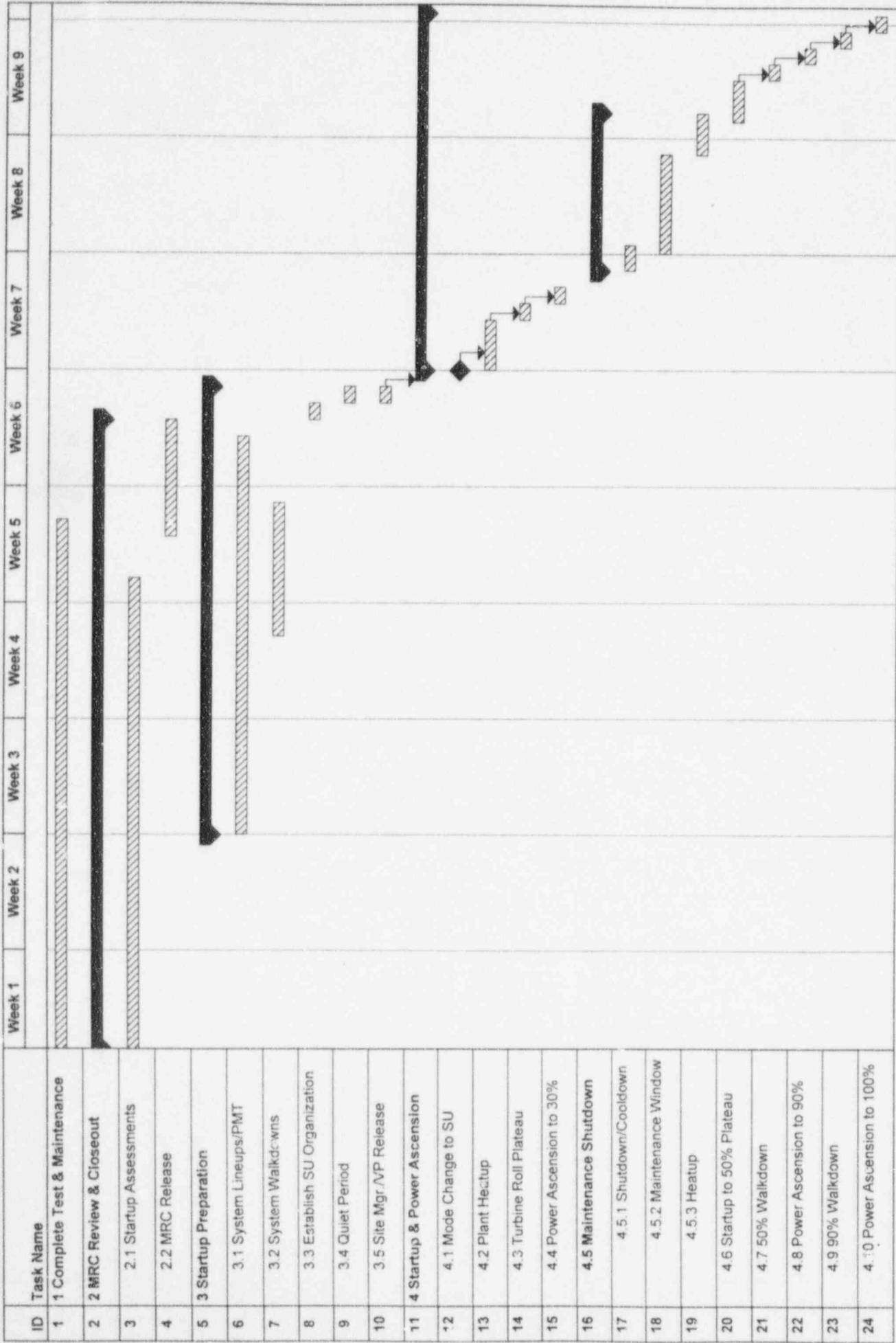
In addition, the power ascension schedule provides for a specific review prior to exceeding 50% power to evaluate whether or not a planned shutdown should occur to repair any conditions requiring shutdown. The preparation of the planned shutdown schedule will be the responsibility of the Startup Manager.

STARTUP & POWER ASCENSION ORGANIZATION

ATTACHMENT I



COOPER STATION RESTART SCHEDULE



CNS RESTART PANEL

MEETING NOTES - FEBRUARY 1, 1995

ATTENDEES

- # A. Beach, Panel Chairman and Director, Division of Reactor Projects (DRP)
- # T. Gwynn, Director, Division of Reactor Safety (DRS)
- # W. Beckner, Panel Vice Chairman and Director, PDIV-1, Office of Nuclear Reactor Regulation (NRR)
- # R. Hall, Project Manager, NRR
- # P. H. Harrell, Chief, Project Branch C, DRP
- # T. Reis, Project Engineer, Project Branch C, DRP
- E. Collins, Team Leader, DRS
- K. Brockman, Chief, Emergency Preparedness Branch, NRR
- T. Kim, Sr. Project Engineer, NRR

Panel Members

The panel met at the Cooper site from 1:00 - 6:30pm on February 1, 1995 prior to a public meeting with the licensee on February 2, 1995.

The panel was briefed on the results of the Cooper Restart Team inspection conducted January 16 - 28, 1995. The team determined that licensee performance was satisfactory in all areas identified as restart items by the restart action plan.

There were two areas requiring significant discussion to determine what resolution was required prior to restart. One involved a design concern with respect to a torus to reactor building vacuum breaker. The panel determined the licensee's design and position were adequate to support operation of the facility and that the issue should be resolved generically by NRR. The second issue concerned the licensee's general policy of not entering TS limiting conditions for operation for equipment in a surveillance testing mode. The panel determined the licensee's practices were consistent with safe operation and the problem was one of the TS wording not being able to support NRC expectations. A determination was made that a startup concern did not exist but that a commitment to correct the TS would be extracted from the licensee as part of the Cooper Restart Team inspection effort.

Following a break to allow for the exit meeting with the licensee on the results of the Cooper Restart Team inspection, the panel reviewed Case Specific Checklists, Parts I and II of the Restart Action Plan. It was determined that items:

- B.4.5 (f) Comments from other parties considered
- B.4.5 (h) Re-view of Generic Restart Checklist
- B.4.6 (6) Significant enforcement issues have been resolved
- B.4.6 (7) Allegations have been appropriately addressed
- B.5 (b) NRC Panel approves Restart Recommendation

were closed based on panel consensus.

Justification:

A/70

B.4.5 (f) Throughout the process, comments from other parties, including co-owners of the facility and FEMA and the industry via the DSAT have been considered.

B.4.5 (h) The generic checklist or the Case Specific Checklist, Part I was re-reviewed by the panel

B.4.6 (6) Pending enforcement regarding a TS violation for lifting heavy loads over vessel without secondary containment and providing inaccurate materiel information was reviewed and determined the underlying issues do not impact restart.

B.4.6 (7) Open allegations of the station were reviewed and no restart issues were identified.

B.5 (b) The panel concluded it would recommend restart to senior NRC management

The panel concluded that the licensee had essentially met the commitments docketed in its CAL responses, the Phase I Action Plan and the Restart Readiness Program. Through the inspection program and the activities defined in the Restart Action Plan, it was determined that licensee plant, personnel, and programs were adequately functioning to support facility restart.



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

FEB - 6 1995

Nebraska Public Power District
ATTN: Guy R. Horn, Vice President - Nuclear
P.O. Box 499
Columbus, Nebraska 68602-0499

SUBJECT: RESTART AUTHORIZATION - COMPLETION OF ACTIONS SPECIFIED IN
CONFIRMATORY ACTION LETTERS 4-94-06 AND 4-94-08 AND STATUS OF
NRC MANUAL CHAPTER 0350. "STAFF GUIDELINES FOR RESTART APPROVAL,"
ACTIVITIES

- References:
- (1) Confirmatory Action Letter 4-94-06 and Revisions 1 and 2 dated May 27, June 16, and July 1, 1994
 - (2) Confirmatory Action Letter 4-94-08 dated August 2, 1994
 - (3) Letter from L. J. Callan (NRC) to G. R. Horn (NPPD) dated August 25, 1994, Subject: Functioning of the Station Operations Review Committee
 - (4) NPPD Response to Confirmatory Action Letter 4-94-06 and Revisions 1 and 2 dated July 28, 1994
 - (5) NPPD Response to Confirmatory Action Letter 4-94-08 dated August 8, 1994
 - (6) NPPD Performance Improvement Plan, Phase I, Revision 3, dated November 9, 1994
 - (7) NPPD Restart Readiness Program, Revision 1, dated January 20, 1995
 - (8) NRC's Cooper Restart Action Plan dated December 21, 1994
 - (9) Letter from G. R. Horn (NPPD) to L. J. Callan (NRC) dated February 4, 1995
 - (10) NPPD Startup and Power Ascension Plan (Shutdown 94-03), Revision 3, dated January 31, 1995

NPPD responses, References (4) and (5), to NRC Confirmatory Action Letters 4-94-06 and 4-94-08, References (1) and (2), constituted commitments to address various hardware, programmatic, and regulatory issues prior to restart of the Cooper Nuclear Station following the May 25, 1994, forced shutdown of the facility. To address these deficiencies and those identified by the NPPD sponsored Diagnostic Self-Assessment Team (DSAT) report of September 2, 1994, the NRC's Safety Evaluation Team (SET) report of November 29, 1994, and performance deficiencies with your Station Operations

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Review Committee identified in Reference (3), your staff developed and implemented formal improvement plans, References (6) and (7). These programs documented the methodology used to complete those activities necessary to return the facility to operation.

The NRC implemented NRC Manual Chapter 0350, "Staff Guidelines for Restart Approval," to both verify the adequacy of your corrective actions and validate their implementation. The manual chapter requirements were implemented through the NRC's Restart Action Plan, Reference (8).

In a public meeting held at the Cooper Nuclear Station, on February 2, 1995, and as documented in Reference (9), you affirmed that your staff had complied with the commitments made to the NRC through the CAL responses and had successfully implemented your Phase I Action Plan and your Restart Readiness Program.

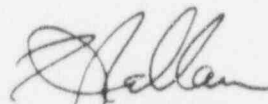
The NRC staff, under the guidance of the Cooper Restart Panel established pursuant to Reference (8), has, through independent inspection activities, evaluated completion status of your commitments and the corrective actions implemented. The Panel concluded that commitments have been met and that the hardware, programmatic, personnel, and management deficiencies have been adequately addressed to allow restart of the facility. The Chairman of the Cooper Restart Panel recommended, on February 2, 1995, that NPPD be allowed to proceed with restart of the facility.

After consultation with the Director, Office of Nuclear Reactor Regulation, and the Executive Director for Operations, we have determined that you may proceed with the restart of the Cooper Nuclear Station in accordance with your Startup and Power Ascension Plan, Reference (10). The NRC will conduct augmented inspection coverage during the startup and power ascension process to confirm the continued adequacy of your corrective actions.

NRC management oversight of your activities, conducted through the NRC Manual Chapter 0350 process, will continue through the power ascension phase of the facility. You will be notified when the process is completed.

Should you have any questions concerning this matter, please contact us.

Sincerely,



L. J. Callan
Regional Administrator

Docket: 50-298
License: DPR-46

cc:

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bcc to DMB (IE51)

bcc distrib. by RIV:

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Project Engineer (DRP/C)

Senior Resident Inspector - River Bend

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D:DRS	D:DRSS	D:DRP	BRA	RA
TPGwynn	SJCollins	ABBeck	JMMontgomery	LJCallan
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UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

MEMORANDUM FOR: L. J. Callan, Regional Administrator
R. P. Zimmerman, Associate Director for Projects
Office of Nuclear Reactor Regulation

FROM: A. B. Beach, Director, Division of Reactor Projects
and CNS Restart Panel Chairman
J. W. Roe, Director, Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

SUBJECT: COOPER NUCLEAR STATION RESTART ACTION PLAN

On November 10, 1994, you agreed that NRC Inspection Manual Chapter (MC) 0350, "Staff Guidelines for Restart Approval," was applicable for the Cooper Nuclear Station (CNS). The Cooper Restart Panel has initiated the implementation of the MC and, as a result, has developed the attached Restart Action Plan and submits it for your review and approval. The Restart Action Plan status will be updated on an as-required basis. Revisions will be made by the Panel, as appropriate, without seeking additional formal approval from you.

The Restart Action Plan consists of three sections. The first section, "General," provides the purpose of the Plan and background information. The second section, "Case-Specific Checklist - Part I," includes the MC 0350 checklist of items to consider during the overall review process for coordination of the NRC authorization for restart of the CNS. The third section, "Case-Specific Checklist - Part II," includes the MC 0350 checklist for assessment of the issues that the Panel considers integral to the CNS shutdown and require NRC assessment prior to restart. This list was developed from Confirmatory Action Letters 4-94-06, -06A, and -06B and 4-94-08, the findings of the Safety Evaluation Team, the independent Diagnostic Self-Assessment NRC inspection findings, and licensee-identified problems.

/s/

A. B. Beach, Director, Division of Reactor Projects
and CNS Restart Panel Chairman

A. Bill Beach for

J. W. Roe, Director, Division of Reactor Projects III/IV

UPDATED MARCH 1, 1995

A/72

L. J. Callan
R. P. Zimmerman

-2-

Approved:

/s/	12/21/94	L. J. Callan for	12/23/94
_____ L. J. Callan Regional Administrator Region IV	_____ Date	_____ R. P. Zimmerman Associate Director for Projects Office of Nuclear Reactor Regulation	_____ Date

Enclosure:
Cooper Nuclear Station Restart Action Plan

cc w/enclosure:

RIV

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UPDATED MARCH 1, 1995

L. J. Callan
R. P. Zimmerman

RIV:DRP/C TReis;df 12/7/94	SRI RAKopriva 12/8/94	C:DRP/C PHHarrell 12/8/94	D:DRP ABBeach 12/16/94	TA ATHowell 12/12/94	D:DRSS SJCollins 12/13/94
NRR JRHall 12/20/94	NRR WDBeckner 12/20/94				

COOPER NUCLEAR STAT^{IC} RESTART ACTION PLAN

A.	<u>GENERAL</u>	1
	A.1 PURPOSE	1
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A. GENERAL

A.1 PURPOSE

To provide a basis to plan and coordinate NRC review activities for restart of the Cooper Nuclear Station (CNS).

A.2 OBJECTIVES

To ensure that NRC review efforts are consistently developed and implemented and specific guidance is provided to support:

- a. Determining restart issues for review,
- b. Identification of the basic tasks needed to review and approve plant restart, and
- c. Coordination and tracking of restart review activities.

A.3 BACKGROUND

Declining performance at the CNS was documented in NRC SALP Report 50-298/93-99, dated June 23, 1993. Regional plant performance reviews in August and October 1993 and February, April, and October 1994 continued to assess overall performance at CNS to be only marginally adequate. Following the January 1994 Senior Management Meeting, a trending letter forwarded to the licensee discussed NRC concerns regarding self-assessment and corrective actions. Subsequent to the trending letter, additional significant regulatory concerns have been identified. The licensee has not demonstrated the ability to self-identify issues and develop and implement lasting corrective actions.

In April 1994, licensee testing identified the control room envelope as inoperable. A reactive NRC inspection identified serious deficiencies in the manner in which the envelope was tested and the corrective actions taken for previous similar deficiencies associated with secondary containment. In May 1994, the licensee identified that a tie wrap was installed on a breaker for a nonvital 480 volt load designed to be shed during accident conditions. Subsequent inspections revealed that the load shed capability of all of these type breakers was never tested and that serious deficiencies existed in the licensee's overall testing of the electrical distribution system. The deficiencies rendered the critical buses inoperable and caused an unplanned shutdown, which commenced May 25, 1994, and continues to date.

In parallel with the control room envelope and electrical distribution system deficiencies, the licensee identified other serious deficiencies with the testing of containment penetrations. Numerous penetrations had never been local leak rate tested as required and, when tested, the cumulative leakage exceeded allowable limits. Enforcement action is pending on the above three issues.

Due to the scope of the issues involved, Confirmatory Action Letters 4-94-06, -06A, -06B, and 4-94-08 were issued requiring the licensee to address deficiencies in testing programs, design basis for control room ventilation, and operational experience review programs. Additionally, prior to startup the licensee is requested to address, in conjunction with the CAL items,

UPDATED MARCH 1, 1995

serious deficiencies found with the function of the Station Operations Review Committee and to reestablish confidence in the functioning of the committee.

A.4 RESTART ACTION PLAN OVERVIEW

As summarized in the preceding section, the results of inspection, investigation, and enforcement activities point to common or root causes for the extended shutdown of the CNS. These common causes are the basis for restart issues identified in Section C. Resolution of the restart issues is the principle objective of the panel.

A comprehensive NRC review of the restart process is required. This Restart Action Plan is intended to include expected NRC actions that will be required to be taken before restart of the CNS, including those actions not directly related to the initiating event. The Plan defines: the actions which must be accomplished by the NRC, as a minimum, to approve restart; the organization that has the lead responsibility for each action; the case-specific issues must be resolved before restart; and who has the actual responsibility for restart approval.

The Panel retains responsibility for assessment of the restart issues and determining whether the issue has been satisfactorily addressed. The CNS Restart Panel will make updates and minor revision to the Restart Action Plan without seeking approval from the Regional Administrator and the Associate Director for Projects.

Section B, "Case-Specific Checklist - Part I," of this plan provides generic tasks that support the Restart Action Plan. This section outlines the overall review process needed for the NRC to authorize restart of the facility.

Section C, "Case-Specific Checklist - Part II," contains issues requiring assessment during the restart review. The issues developed in this section were derived from the underlying or root causes of the conditions necessitating plant shutdown. Within the scope of each issue are numerous elements or examples supporting the broader issue. It will not be necessary for each element or example on the checklist to be assessed, but enough items must be reviewed in order to make an assessment that the issue has been sufficiently resolved to support plant restart.

Each of the checklists in Sections B and C include columns to record the NRC organization with lead responsibility for the item and the date and mechanism by which the item was closed. Attachment 1 identifies concerns identified during the shutdown interval for which followup as part of the normal inspection program is appropriate.

The CNS Restart Panel is responsible for implementation of the CNS Restart Action Plan. The CNS Restart Panel will maintain and periodically review the Restart Action Plan. These actions should: (1) determine review status, (2) verify necessary tasks and items are complete for each phase of the review, and (3) ensure that review tasks and issues for assessment remain consistent with the known facts and status of the restart effort. The lists

in Sections B and C should be reviewed when significant milestones are completed and prior to restart authorization to ensure any emerging items are considered.

B. CASE-SPECIFIC CHECKLIST - PART I (PROCESS)

B.1 INITIAL NRC RESPONSE

Establishment of the facts, the causes, and their apparent impacts should be accomplished early in the process. This information will assist the NRC in characterizing the problems, the safety significance, and the regulatory issues. Early management appraisal of the situation is also important to ensure the proper immediate actions are taken. Many of these items may already be complete when the initial checklist review is performed.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Initial notification and NRC management discussion of known facts and issues (Region)	DRP	COMPLETED
b. Identify/implement additional inspections (i.e., AIT, IIT, or Special) (Region)	DRP	COMPLETED; SET, AUGMENTED REGIONAL INSPECTIONS & IRs 94-14, -16, and -18
c. Determine need for formal regulatory response (i.e., Order or CAL)	DRP	COMPLETED; CALs 4-94-06 & -08
d. Determine need for senior management involvement	ALL	RESTART PANEL ESTABLISHED 11/94
e. Identify other parties involved, i.e., NRC Organizations, other Federal agencies, industry organizations		COMPLETED; NO ADDITIONAL PARTIES INVOLVED

B.2 NOTIFICATIONS

Initial notification of the event quickly communicates NRC's understanding of the event and its immediate response to the parties having an interest in the event. Notification to Regional and headquarters offices of cognizant Federal agencies may be appropriate. As the review process continues, additional and continuing notifications may be required.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Issue Daily and Directors Highlight (NRR)	DRP	COMPLETED; SEE FILE
b. Issue PN (Region)	DRP	COMPLETED; SEE FILE
c. Conduct Commissioner Assistants' Briefing	NA	NA
d. Issue Commission Paper (NRR)	NA	NA
e. Cognizant Federal agencies notified (i.e., FEMA, EPA, DOJ, DOL)		FEMA 6/1/94 NOTIFIED
f. State and local officials notified (Region)	DRP	COMPLETED; MEETING NOTICE DTD 10/31/94
g. Congressional notification (NRR)	NRR	NA

B.3 ESTABLISH AND ORGANIZE THE NRC REVIEW PROCESS

It will be necessary to establish and organize the NRC restart review to ensure the effective coordination of resources in evaluating the restart process. Effective interfaces within and outside the NRC are critical to properly identify and resolve the pertinent issues. Consider both Regional and headquarters offices of cognizant Federal agencies.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Establish the Restart Panel	RA	COMPLETED; CHARTERED 11/10/94
b. Assess available information (i.e., inspection results, licensee self-assessments, industry reviews)	PANEL	COMPLETED
c. Obtain input from involved parties both within NRC and other Federal agencies such as FEMA, EPA, DOJ, DOL	PANEL	COMPLETED; FEMA LTR OF 11/23/94
d. Conduct Regional Administrator briefing (Region)	DRP	COMPLETED
e. Conduct NRR Executive Team Briefing (NRR)	NRR	NA
f. Develop the Case Specific Checklist (CSC)	PANEL	REV. 3 DTD 12/15/94

g. Develop the Restart Action Plan	PANEL	COMPLETED 12/23/94
h. Regional Administrator approves Restart Action Plan	DRP	COMPLETED; 12/23/94
i. NRR Associate Director and/or NRR Director approves Restart Action Plan	NRR	COMPLETED; 12/23/94
j. Implement Restart Action Plan	PANEL	COMPLETED IRs 94-13 - 16; 94-18; 94-19; 94-24; 94-27 - 31; 95-01; 95-04
k. Modify CAL/Order as necessary	PANEL	COMPLETED; 6/16, 7/1, 8/2, & 8/25/94

B.4 REVIEW IMPLEMENTATION

The review can be accomplished by a variety of methods including inspections, testing, evaluation of licensee self-assessments, evaluation of licensee action plans, and regulatory actions (i.e., Orders, CALs). Early establishment of the review areas will assist in defining the methods to perform the review. Once the licensee has developed its corrective action plan, the NRC shall review that plan to verify its completeness and adequacy. The NRC will also need to determine which corrective actions will be required to be implemented before restart and thus become restart issues and can be deferred to some later date as long-term corrective actions. The discussions and issues provided in Section C of this appendix provide additional information to support the review activities described below.

B.4.1 Root Causes and Corrective Actions

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Evaluate findings of AIT, IIT, or Special Team Inspection	PANEL	COMPLETED; ISSUES DEVELOPED

b. Licensee performs root cause analysis and develops corrective action plan for root causes	DRP	COMPLETED; PHASE 1 PLAN 11/9/94
c. NRC evaluates licensee's root cause determination and corrective action plan	PANEL	COMPLETED IRs 94-31, 95-01

B.4.2 Assessment of Equipment Damage

For events where equipment damage occurs, a thorough assessment of the extent of damage is necessary. A root cause determination will be necessary if the damage was the result of an internal event. The need for independent NRC assessment should be considered. The licensee will need to determine corrective actions to repair, test, inspect, and/or analyze affected systems and equipment. These actions are required to restore or verify that the equipment will perform to design requirements. Equipment modifications may also be required to assure performance to design requirements.

Consider potential offsite emergency response impact for external events, such as natural disasters, explosions, or riots. NRR should obtain information from FEMA headquarters reaffirming the adequacy of state and local offsite emergency plans and preparedness if an event raises reasonable doubts about emergency response capability.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Licensee assesses damage to systems and components	NA	NA
b. NRC evaluates licensee damage assessment	NA	NA
c. Licensee determines corrective actions	NA	NA
d. NRC evaluates corrective actions	NA	NA

B.4.3 Determine Restart Issues and Resolution

The establishment of the restart issues that require resolution before restart demands a clear understanding of the issues and the actions required to address those issues by both the NRC and the licensee. This table outlines steps to determine the restart issues and NRC's evaluation of their resolution.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Review/evaluate licensee generated restart issues	PANEL	COMPLETED; PUBLIC MTGS 11/8/94, 12/15/94, 1/5/95, 2/2/95
b. Independent NRC identification of restart issues (consider sources external to NRC and licensee)	PANEL	COMPLETED; PANEL MTG 11/4/94
c. NRC/licensee agreement on restart issues	PANEL	COMPLETED; PUBLIC MTG 11/8/94
d. Evaluate licensee's restart issues implementation process	DRP	COMPLETED IRs 94-24 and -31, 95-01
e. Evaluate licensee's implementation verification process	DRP	COMPLETED IRs 94-31 and 95-01

B.4.4 Obtain Comments

Since some shutdowns involve a broad number of issues, solicitation of comments from diverse sources may be appropriate. The decision to solicit comments from a group and the level of participation should be made on a case-by-case basis. Input from these groups should be factored into the restart process when they contribute positively to the review. Note: if needed, comments concerning the adequacy of state and local emergency planning and preparedness must be obtained from FEMA headquarters through NRR.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Obtain public comments	PANEL	COMPLETED; PUBLIC MTGS 11/9/94, 12/15/94, 1/5/95, 2/2/95

b. Obtain comments from State and local officials (Region)	PANEL	COMPLETED; PUBLIC MTGS 11/9/94, 12/15/94, 1/5/95, 2/2/95
c. Obtain comments from applicable Federal agencies	NRR	COMPLETED; FEMA LTR DTD 11/23/94

B.4.5 Closeout Actions

When the actions to resolve the restart issues and significant concerns are substantially complete, closeout actions are needed to verify that planned inspections and verifications are complete. The licensee should certify that corrective actions required prior to restart are complete and that the plant is physically ready for restart. This table provides actions associated with completion of significant NRC reviews and preparations for restart.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Evaluate licensee's restart readiness self-assessment (Region)	DRP	COMPLETED IRs 94-31 and 95-01
b. NRC evaluation of applicable items from Section C "ISSUES" complete	PANEL	COMPLETED IRs 94-24; -27 - 29; and 31; and 95-01; and Project Mgr memo to file dated 2/9/95
c. Restart issues closed	PANEL	COMPLETED; ABOVE and RA LTR TO LIC. DATED 2/6/95
d. Conduct NRC Restart Readiness Team Inspection (Region)	DRS	COMPLETED IR 95-01
e. Issue Augmented Restart Coverage Inspection Plan (Region)	DRP	COMPLETED; DISTRIBUTED 2/1/95

f. Comments from other parties considered	PANEL	MEETING MINUTES OF 2/1/95 and Proj. Mgr. memo to file dated 2/9/95
g. Determine that all conditions of the Order/CAL are satisfied	PANEL	COMPLETED; RA LTR TO LIC. DATED 2/6/95
h. Re-review of Generic Restart Checklist complete	PANEL	COMPLETD; MEETING MINUTES OF 2/1/95

B.4.6 Assessment of Compliance with Regulatory Requirements

The plant and its prospective operation must not be in conflict with any applicable regulations or requirements of any document authorizing restart (such as license amendments, orders, or a CAL). Restart should not conflict with any ongoing matter such as an Atomic Safety and Licensing Board hearing.

ISSUES	RESP ORG	MECHANISM/ DATE CLOSED
1. Applicable license amendments have been issued	NRR	COMPLETED; PROJECT MGR MEMO TO FILE DATED 2/9/95
2. Applicable exemptions have been granted	NRR	COMPLETED; PROJECT MGR MEMO TO FILE DATED 2/9/95
3. Applicable reliefs have been granted	NRR	COMPLETED; PROJECT MGR MEMO TO FILE DATED 2/9/95
4. Imposed Orders have been modified/rescinded	NA	NA
5. Confirmatory Action Letter conditions have been satisfied	PANEL	COMPLETED; RA LTR DTD 2/6/95

6. Significant enforcement issues have been resolved	PANEL	COMPLETED; MEETING MINUTES OF 2/2/95
7. Allegations have been appropriately addressed	PANEL	COMPLETED; MEETING MINUTES OF 2/2/95
8. 10 CFR 2.206 Petitions have been appropriately addressed	NA	NA
9. Atomic Safety and Licensing Board hearings have been completed	NA	NA

B.5 RESTART AUTHORIZATION

When the restart review process has reached the point that the issues have been identified, corrected, and reviewed, a restart authorization process is begun. At this point the restart panel should think broadly and ask: "Are all actions substantially complete? Have we overlooked any items?"

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Prepare restart authorization document and basis for restart (Region)	DRP	COMPLETED 2/6/95
b. NRC Restart Panel approves Restart Recommendation	PANEL	COMPLETED; MEETING MINUTES OF 2/2/95
c. No restart objections from other applicable HQ offices (i.e., OE for DFI Issues)	NRR	COMPLETED; PROJECT MGR MEMO TO FILE DATED 2/9/95
d. No restart objections from applicable Federal agencies	PANEL	COMPLETED; FEMA MEMOS OF 1/25 AND NRR EP MEMO OF 1/20/95
e. Regional Administrator concurs in Restart Authorization	RIV	COMPLETED; RA LETTER DATED 2/6/95

f. NRR Associate Director and/or NRR Director Concurs in Restart Authorization (NRR)	NRR	COMPLETED; RA LETTER DATED 2/6/95
g. EDO concurs in Restart Authorization	RA, RIV	COMPLETED; RA LETTER DATED 2/6/95
h. Conduct ACRS briefing/notification (NRR)	NRR	COMPLETED; PROJECT MGR MEMO TO FILE DATED 2/9/95
i. Conduct Commission briefing/notification (NRR)	NRR	NA
j. Commission concurs in Restart Authorization	NRR	NA
k. Regional Administrator authorizes restart	RIV	COMPLETED; RA LETTER DTD 2/6/95

B.5.1 Coordination with Interested Agencies/Parties

Coordination with other interested parties and agencies is important to ensure that concerns and requirements of these organizations are factored into the restart authorization.

ORGANIZATION	RESP ORG	MECHANISM/ DATE CLOSED
1. Federal Emergency Management Agency	NRR	COMPLETED; FEMA MEMOS OF 1/25 AND NRR EP MEMO TO FILE OF 1/20/95
2. Environmental Protection Agency	NA	NA
3. Department of Justice	NA	NA
4. Department of Labor	NA	NA
5. Appropriate State and Local Officials	SLO	COMPLETED; PANEL MTG. 2/2/95

6. Appropriate Public Interest Groups	PAO	COMPLETED; PANEL MTG. 2/2/95
7. Local News Media	PAO	COMPLETED; PANEL MTG. 2/2/95

B.6 RESTART AUTHORIZATION NOTIFICATION

Notify the applicable parties of the restart authorization. Communication of planned actions is important at this stage to ensure that NRC intentions are clearly understood.

TASK	RESP ORG	MECHANISM/ DATE CLOSED
a. Commission (NRR)	DRP	COMPLETED; PNO 4-95-002
b. EDO (NRR)	DRP	COMPLETED; PNO 4-95-002
c. Congressional Affairs (NRR)	DRP	COMPLETED; PNO 4-95-002
d. ACRS (NRR)	DRP	NA
e. Applicable Federal agencies (NRR)	NRR	COMPLETED; PNO 4-95-002
f. Public Affairs (Region)	PAO	COMPLETED; PNO 4-95-002
g. State and Local Officials (Region)	SLO	COMPLETED PNO 4-95-002

CNS RESTART PANEL

MEETING NOTES - FEBRUARY 28, 1995

ATTENDEES

- # A. Beach, Panel Chairman and Director, Division of Reactor Projects (DRP)
- # W. Beckner, Panel Vice Chairman and Director, PDIV-1, Office of nuclear Reactor Regulation (NRR)
- # P. Harrell, Chief, Project Branch C, DRP
- J. Montgomery, Deputy Regional Administrator

Panel Members

The members above met at the Cooper site on the morning of February 28, 1995 prior to a public meeting with the licensee at 1:00 p.m. The objective of the meeting was provide for closure of the Manual Chapter 0350 process.

The panel accepted the completed Case Specific Checklists of the Restart Action Plan without comment.

The panel reviewed open allegations and determined none impacted continued power operations of the facility.

The panel reviewed the observations made by licensee's Quality Assurance personnel and noted that the evaluations were adequate.

The panel identified the issues below as requiring further NRC followup and review outside of the Manual Chapter 0350 process.

- Changes to be made to the Technical Specifications, as agreed to by the licensee, to clarify ambiguities - particularly with respect to allowed outage times and corresponding limiting conditions for operation
- Review licensee actions to be implemented to ensure that factual information is provided to the NRC
- Develop an understanding of the licensee's plans for completion of the design basis reconstitution program.

The panel adjourned with agreements that the objectives of the MC 0350 process and the Restart Action Plan had been met, panel activities could cease and normal inspection per the MIP process could resume.

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C.

COOPER RESTART PLAN: CASE-SPECIFIC CHECKLIST - PART II

ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
1.	OPERATIONAL EXPERIENCE REVIEW PROGRAM			CRT 1/9/95		CAL 4-94-08; Lic. Items 22 & 23
a.		Root cause of deficient OER program	C.1.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
b.		Evaluation of corrective action plan	C.1.3(2)	CRT 1/9/95	COMPLETED IR 95-01	
c.		Corrective action tracking	C.1.3(3)	CRT 1/9/95	COMPLETED IR 95-01	
d.		Implementation of corrective actions	C.1.3(4)	CRT 1/9/95	COMPLETED IR 95-01	
e.		Adequacy of corrective action verification process	C.1.3(6)	CRT 1/9/95	COMPLETED IR 95-01	
f.		Bulletin 88-04: sufficient recirc flow for safety-related pumps		DRP 1/9/95	COMPLETED IR 94-31	
m.		Screening of DSAT field notes	SET 15	DRP 12/12/94	COMPLETED IR 94-31	
2.	MANAGEMENT INTERNAL REVIEW EFFECTIVENESS			CRT 1/9/95		RA letter dated 8/25/94; Lic. Item 1
a.		Root cause of ineffectiveness	C.1.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
b.		Evaluation of corrective actions	C.1.3(2)	CRT 1/9/95	COMPLETED IR 95-01	
c.		Corrective action tracking	C.1.3(3)	CRT 1/9/95	COMPLETED IR 95-01	
d.		Implementation of corrective actions	C.1.3(4)	CRT 1/9/95	COMPLETED IR 95-01	
e.		Adequacy of corrective action verification process	C.1.3(6)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Item 3
f.		SORC effectiveness	C.2.1(8)	DRP 12/12/94	COMPLETED IR 94-31	Lic. Item 2

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ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
g.		SRAB effectiveness	C.2.1(8)	DRP 12/12/94	COMPLETED IR 94-31	Lic. Item 1
3.	TESTING, ADEQUACY OF			CRT 1/9/95		CAL 4-94-06; Lic. Item 21
a.		Root cause of inadequacy	C.1.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
b.		Evaluation of corrective actions/plan	C.1.3(2)	CRT 1/9/95	COMPLETED IR 95-01	
c.		Corrective action tracking	C.1.3(3)	CRT 1/9/95	COMPLETED IR 95-01	
d.		Implementation of corrective actions	C.1.3(4)	CRT 1/9/95	COMPLETED IR 95-01	
e.		Adequacy of corrective action verification process	C.1.3(6)	CRT 1/9/95	COMPLETED IR 95-01	
f.		Preconditioning		DRP 1/9/95	COMPLETED IR 94-31	CAL 4-94-06; Lic. Item 20
g.		Contact testing		DRP	COMPLETED IRs 94-31 and 94-25	CAL 4-94-06
h.		Corrective actions to prevent indiscriminate use of tie wraps, jumpers, blocks, etc.		DRP	COMPLETED IR 94-31	CAL 4-94-06
o.		Safety/nonsafety SW isolation valves not tested. Pressure actuation switch is flushed but not tested.	SET .1	DRP 12/12/94	COMPLETED IR 94-31	
4.	CONFIGURATION CONTROL/TECH CONCERNS					
a.		Root cause of failures	C.1.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
b.		Evaluate corrective actions/plan	C.1.3(2)	CRT 1/9/95	COMPLETED IR 95-01	
c.		Corrective action tracking	C.1.3(3)	CRT 1/9/95	COMPLETED IR 95-01	
d.		Implementation of corrective actions	C.1.3(4)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Item 12
e.		Adequacy of corrective action verification process	C.1.3(6)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Item 12

ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
5.	ABILITY TO IDENTIFY AND RESOLVE DEFICIENCIES			CRT 1/9/95		Lic. Item 5
a.		Root cause of ineffectiveness	C.1.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
b.		Evaluate corrective actions/plan	C.1.3(2)	CRT 1/9/95	COMPLETED IR 95-01	
c.		Corrective action tracking	C.1.3(3)	CRT 1/9/95	COMPLETED IR 95-01	
d.		Implementation of corrective actions	C.1.3(4)	CRT 1/9/95	COMPLETED IR 95-01	
e.		Adequacy of corrective action verification process	C.1.3(6)	CRT 1/9/95	COMPLETED IR 95-01	
6.	ELECTRICAL DISTRIBUTION SYSTEM			DRP		CAL 4-94-06; IR 94-16
a.		Root cause of failure	C.1.1(2)	DRP	COMPLETED IR 94-31	
b.		Evaluate corrective actions/plan	C.1.3(2)	DRP	COMPLETED IR 94-31	
c.		Corrective action tracking	C.1.3(3)	DRP	COMPLETED IR 94-31	
d.		Implementation of corrective actions	C.1.3(4)	DRP	COMPLETED IR 94-31	
e.		Adequacy of corrective action verification process	C.1.3(6)	DRP	COMPLETED IR 94-31	
7.	CONTROL ROOM ENVELOPE			DRP		CAL 4-94-06; IR 94-19
a.		Root cause of failure	C.1.1(2)	DRP	COMPLETED IR 94-31	
b.		Evaluate corrective actions/plan	C.1.3(2)	DRP	COMPLETED IR 94-31	
c.		Corrective action tracking	C.1.3(3)	DRP	COMPLETED IR 94-31	

ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
d.		Implementation of corrective actions	C.1.3(4)	DRP	COMPLETED IR 94-31	
e.		Adequacy of corrective action verification process	C.1.3(6)	DRP	COMPLETED IR 94-31	
8.	CONTAINMENT INTEGRITY			DRS		CAL 4-94-06; IR 94-14
a.		Root cause of failure	C.1.1(2)	DRP	COMPLETED IR 94-31	
b.		Evaluate corrective actions/plan	C.1.3(2)	DRP	COMPLETED IR 94-31	
c.		Corrective action tracking	C.1.3(3)	DRP	COMPLETED IR 94-31	
d.		Implementation of corrective actions	C.1.3(4)	DRP	COMPLETED IR 94-31	
e.		Adequacy of corrective action verification process	C.1.3(6)	DRP	COMPLETED IR 94-31	
9.	OPERATIONS			CRT 1/9/95		
e.		Control room/plant operator awareness of equipment status	C.3.3(4)	CRT 1/9/95	COMPLETED IR 95-01	
f.		Adequacy of plant operating procedures	C.3.3(5)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 25 & 26
g.		Procedure usage/adherence	C.3.3(6)	CRT 1/9/95	COMPLETED IR 95-01	
10.	HARDWARE					
aa.		Agastat relay not being replaced at recommended frequency		DRS	COMPLETED IR 94-27	
bb.		Moisture found in EDG air system		D&P	COMPLETED IR 94-24	
cc.		Wrong springs installed on RCIC, HPCI, and RHR relief valves		DRP	COMPLETED IR 94-28	
a.		Operations evaluation assessments		DRP	COMPLETED IR 94-31	Lic. Item 19
c.		Failure of SBM switches		DRP	COMPLETED IR 94-24	
d.		REC leaks		DRP	COMPLETED IR 94-28	

ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
e.		Modification to add REC cont isolation valves		NRR	COMPLETED	PROJECT MGR MEMO TO FILE 2/9/95
f.		Core Spray Operability - MOV26 & MOV 5 (LER 94-02)		DRP	COMPLETED IR 94-31; IR 94-22	
g.		RCIC noncompliance with SBO rule		DRP	COMPLETED IR 94-31	
i.		River bottom doesn't meet FSAR		DRP	COMPLETED IR 94-31	
q.		Emergency lighting won't last 8 hours		DRP	COMPLETED IR 94-31 and -32	
11.	MANAGEMENT EFFECTIVENESS					
a.		Assess performance of new management staff		CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 30 & 32
d.		Effectiveness of Quality Assurance Program	C.1.4(1)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Item 4
e.		Mgt. commitment to achieving improved performance	C.2.1(1)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 6 & 31
f.		Goals/expectations developed for staff	C.2.1(2)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 6 & 31
g.		Above communicated to staff	C.2.1(3)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 6 & 31
h.		Resource available to mgt. to achieve goals	C.2.1(4)	CRT 1/9/95	COMPLETED IR 95-01	Lic. Items 6 & 31
i.		Qualification and training of mgt.	C.2.1(5)	CRT 1/9/95	COMPLETED IR 95-01	
j.		Management's commitment to procedure adherence	C.2.1(6)	CRT 1/9/95	COMPLETED IR 95-01	
k.		Effectiveness of internal mgt. meetings	C.2.1(9)	CRT 1/9/95	COMPLETED IR 95-01	
l.		Mgt. in-plant time	C.2.1(10)	CRT 1/9/95	COMPLETED IR 95-01	
m.		Mgt. awareness of day-to-day operational con.	C.2.1(11)	CRT 1/9/95	COMPLETED IR 95-01	

ITEM NO.	ISSUE	ELEMENT/EXAMPLE	SOURCE	ASSIGNEE	STATUS	REFERENCE
q.		Ability to staff the organization	C.2.2(2)	CRT 1/9/95	COMPLETED IR 95-01	
r.		Effect of mgt. reorganization	C.2.2(3)	CRT 1/9/95	COMPLETED IR 95-01	
s.		Ability to foster teamwork	C.2.2(5)	CRT 1/9/95	COMPLETED IR 95-01	
t.		Ability to provide engineering support	C.2.2(7)	CRT 1/9/95	COMPLETED IR 95-01	
u.		Adequacy of plant administrative procedures	C.2.2(8)	CRT 1/9/95	COMPLETED IR 95-01	
v.		Ability to function in emergency response organization	C.2.2(11)	DRSS	COMPLETED IR 94-29	
w.		Coordination with offsite emergency planning office	C.2.2(12)	DRSS	COMPLETED IR 94-29	
x.		Staff commitment to achieving improved performance	C.3.1(1)	CRT 1/9/95	COMPLETED IR 95-01	
y.		Staff's safety conscience	C.3.1(2)	CRT 1/9/95	COMPLETED IR 95-01	
		DELETED 11.z-ss				NOTE 2
tt.		Management involvement in self-assessment and independent self-assessment capability	C.2.1(7)	DRP	COMPLETED IR 94-31	
uu.		Staff's understanding of plant issues and corrective actions	C.3.1(4)	CRT	COMPLETED IR 95-01	
vv.		Adequacy of plant maintenance program effectiveness	C.4.8	DRP	COMPLETED IR 94-31	
12.	EXCEEDING COOLDOWN RATE		SET 13	NRR	COMPLETED	Lic. Item 24 PROJECT MGR MEMO TO FILE 2/9/95
13.	FEMA CONCERN	State did not adequately formulate and disseminate emergency information		NRR	COMPLETED	FEMA MEMOS OF 1/25 AND NRR EP MEMO TO FILE 1/20/95

Summary of Revision 3

NOTE 1: At the December 5 panel meeting, items restored were: 1.m and 10.a, c, d, i, q. Completed items 10.aa, bb, cc, originally on the OER list, were added to the hardware list. Items 3.l, 9.i, and 10.z were deleted from restart list based on panel recommendation.

NOTE 2: Items 11.tt, uu, and vv were added based upon the outcome of the December 5 panel meeting.

March 6, 1995

MEMORANDUM

FOR: Cooper Restart Panel Members
FROM: T. Reis, Project Engineer & Panel Member
SUBJECT: DOCKETING OF RESTART PANEL ACTIVITIES

The NRC Manual Chapter 0350, "Staff Guidelines for Restart Approval" process officially ended with the public meeting on February 28, 1995. Section 08 of MC 0350 details the requirements for recordkeeping. That section is excerpted below.

0350-08 RECORDS

It is important that the restart process be documented. The licensee and the NRC staff must understand the reasons for plant shutdown and the necessary actions to be completed before restart. In addition, information related to NRC and licensee actions, as well as acceptance criteria and confirmatory actions by other agencies and government organizations, must be made available to the public. As a minimum, the record developed for the shutdown and restart process consists of the following:

- a. Preliminary Notifications, Commission Information Papers, and other documents describing the nature of the problem.
- b. Confirmatory Action Letter (CAL) or Order issued to the licensee specifying the actions to be taken.
- c. Establishment of the Restart Panel and the specific Restart Action Plan.
- d. Interim progress reports (e.g., Commission Paper).
- e. Minutes of meetings of the Restart Panel and of meetings of NRC and licensee representatives to discuss the licensee's progress in taking necessary actions.
- f. Inspection reports and related correspondence.
- g. Safety evaluations.
- h. Other agency and government actions communicated to NRC.
- i. Documentation that describes the resolution of restart issues.
- j. Written determination that restart is approved.

All documents relating to the restart process are to be included in the docket

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file and, to the extent permitted by 10 CFR 2.790, made public in accordance with NRC policy.

To comply with the above, I have forwarded for docketing as a package:

- Restart Authorization Letter of Feb 6, 1995
- All CALs and licensee responses to CALs
- Restart Panel Charter
- MC 0350
- All Meeting Minutes - October 27, 1994, November 4, 1994, December 5, 1994, January 5, 1995, February 1, 1995 and February 28, 1995
- Agendas for all scheduled panel meetings
- The Restart Action Plan - Revisions OI through Revision 3
- Inspection Plans for restart readiness inspections
- Licensee's Phase 1 - Performance Improvement Plan, Revision 3
- Licensee's Restart Readiness Program - OI and Revision 1
- Licensee's Startup and Power Ascension Plan
- Correspondence
 - Watkins to Taylor, Jan 30, 1995 - Response to SET
 - Taylor to Watkins, Feb 1, 1995 - Senior Management Assessment of Licensee Progress
 - Horn to Beetle, November 23, 1994 - Forwarding Phase 1 and Restart Readiness Plans
 - FEMA correspondence related to Nov. exercise deficiency - Jan 25, 1995
 - D.M. Barss memo to file dtd January 23, 1995 regarding FEMA exercise deficiency
 - Memo B. Murray, RIV to C. Miller, NRR dtd Jan 20, 1995 regarding corrective actions on FEMA exercise deficiency
 - Letter Mueller (NPPD) to Callan RIV - November 7, 1994 - Progress on Improvements at CNS
 - Letter Horn to Callan - December 23, 1994 - Corrective Actions taken with respect to SORC deficiencies
 - JR Hall Memo to File dated February 9, 1995 documenting closure of all NRR Restart Action Plan responsibilities
- EAs 94-164, -165, -166
- Enforcement Conference Summary for above
- Licensee Response to above
- All NRP Director Highlights - May 1994 - February 1995
- All Preliminary Notifications May 1994 - February 1995
- All Morning Reports - May 1994 - February 1995
- Diagnostic Self Assessment Team Report
- NRC Safety Evaluation Team Report
- All Public Meeting Summaries May 1994 - February 1995
- All Non Public Meeting Summaries - May 1994 - February 1995
- Power Ascension Coverage Inspection Plan
- Enforcement action for heavy loads & 50.9 violation - February 1995

Inspection reports referenced in closeout documentation will be docketed per standard procedures.

This completes actions required by MC 0350, Section 08. Should you have any questions regarding completion of this action, please contact me.

Thanks,

T. Reis
Project Engineer, Branch C

cc:
w/attachments
J. R. Hall
file

w/o attachments
A. B. Beach
W. D. Beckner
P. H. Harrell
S. J. Collins
A. T. Howell
T. P. Gwynn



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

MAR - 6 1995

Nebraska Public Power District
ATTN: Guy R. Horn, Vice President - Nuclear
P.O. Box 499
Columbus, Nebraska 68602-0499

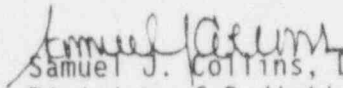
SUBJECT: CLOSURE OF FEMA IDENTIFIED DEFICIENCY AT THE NOVEMBER 16, 1994,
COOPER NUCLEAR STATION EXERCISE

Enclosed is a letter dated January 25, 1995, from John A. Miller, Regional Director for Region VII, of the Federal Emergency Management Agency (FEMA), notifying Dennis Kwiatkowski, Deputy Associate Director, Preparedness, Training & Exercise Directorate, FEMA, of the closure of a Deficiency identified during the November 16, 1994, exercise with the Cooper Nuclear Station.

The Deficiency involved the capability to coordinate the formulation and dissemination of accurate information to the public using the Emergency Broadcast System (EBS). This Deficiency was assessed against the Nebraska Field Command Post/Information Authentication Center. The Deficiency was corrected by the submission of an appropriate plan amendment.

The enclosed FEMA letter is provide to you to ensure that you are aware that the Deficiency was closed. No response to this letter is necessary.

Sincerely,


Samuel J. Collins, Director
Division of Radiation Safety
Safeguards

Enclosure:
FEMA letter dated 01/25/95

Docket: 50-298
License: DPR-46

cc:
Nebraska Public Power District
ATTN: G. D. Watson, General Counsel
P.O. Box 499
Columbus, Nebraska 68602-0499

Nebraska Public Power District
ATTN: John Mueller, Site Manager
P.O. Box 98
Brownville, Nebraska 68321

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Nebraska Public Power District -2-

Nebraska Public Power District
ATTN: Robert C. Godley, Nuclear
Licensing & Safety Manager
P.O. Box 98
Brownville, Nebraska 68321

Midwest Power
ATTN: James C. Parker, Sr. Engineer
907 Walnut Street
P.O. Box 657
Des Moines, Iowa 50303

Lincoln Electric System
ATTN: Mr. Ron Stoddard
11th and O Streets
Lincoln, Nebraska 68508

Nebraska Department of Environmental
Quality
ATTN: Randolph Wood, Director
P.O. Box 98922
Lincoln, Nebraska 68509-8922

Nemaha County Board of Commissioners
ATTN: Larry Bohlken, Chairman
Nemaha County Courthouse
1824 N Street
Auburn, Nebraska 68305

Nebraska Department of Health
ATTN: Harold Borchert, Director
Division of Radiological Health
301 Centennial Mall, South
P.O. Box 95007
Lincoln, Nebraska 68509-5007

Nebraska Department of Health
ATTN: Dr. Mark B. Horton, M.S.P.H.
Director
P.O. Box 950070
Lincoln, Nebraska 68509-5007

Department of Natural Resources
ATTN: R. A. Kucera, Department Director
of Intergovernmental Cooperation
P.O. Box 176
Jefferson City, Missouri 65102

Kansas Radiation Control Program Director

Nebraska Public Power District

-3-

Program Manager
FEMA Region 7
911 Walnut Street, Room 200
Kansas City, Missouri 64106

Director
Nebraska Civil Defense Agency
1300 Military Road
Lincoln, Nebraska 68508

bcc w/copy of letter dated January 25, 1995:

- DMB (A045)
- L. J. Callan
- CNS Resident Inspector
- C. A. Hackney, SLO
- RITS Coordinator
- E. F. Bates, IRC
- R. Hall, NRR Project Manager (MS 13 H3)
- T. Essig, NRR/DOTS/TERB (MS 9 H15)
- Branch Chief (DRP/C)
- Leah Tremper (OC/LFDCB, MS: TWFN 9E10)
- G. M. Good, DRSS/RIB
- MIS System
- DRSS-RIB (Hodges - Deficiency Tracking)
- Branch Chief (DRP/TSS)
- Project Engineer (DRP/C)
- RIV File
- Senior Resident Inspector - River Bend
- Senior Resident Inspector - Fort Calhoun
- C. A. Hackney, SLO
- RITS Coordinator
- E. F. Bates, IRC
- T. Essig, NRR/DOTS/TERB (MS 9 H15)

DOCUMENT NAME: G:\HODGES\DOCUMENT\Deficien.CNS

*P. Libonelli
RSC
telecom*

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RIV:C:RIB	DD:DRSS	D:DRSS	D:DRP		
*BMurray	*RAScarano	SJCollins	ABBeach		
03/ /95	03/ /95	03/6/95	03/6/95		

OFFICIAL RECORD COPY

*Previously concurred.



Federal Emergency Management Agency

Region VII
911 Walnut Street, Room 300
Kansas City, MO 64106

JAN 25 1995

R7-PT-TE

MEMORANDUM FOR: Dennis Kwiatkowski, Deputy Associate Director
Preparedness, Training & Exercise Directorate

FROM: *John H. Miller*
Regional Director

SUBJECT: Cooper Nuclear Station Exercise Deficiency

In compliance with 44 CFR Part 350 and the Radiological Emergency Preparedness Exercise Manual (FEMA-REP-14), I hereby certify that the deficiency, identified during the November 16, 1994, exercise evaluation of the implementation of state and local radiological emergency response plans for the Cooper Nuclear Station, has been corrected. The deficiency was corrected by the submission of an appropriate plan amendment. This deficiency is now closed.

cc: Megs Hepler, PT-EX
Sue Perez, PT-EX-RG
Kathy Cole, PT-EX-RG
Charles Hackney, NRC IV

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages = 2

To	CHARLES HACKNEY	From	FEMA - SCOUTS
Dept./Agency	NRC IV	Phone #	816 283-7016
Fax #		Fax #	