

# NEW YORK POWER AUTHORITY



## INDIAN POINT 3 RESTART AND CONTINUOUS IMPROVEMENT PLAN

# RCIP

9406010249 940526  
PDR ADCK 05000286  
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**MESSAGE FROM: THE PRESIDENT AND CEO  
EVP - NUCLEAR GENERATION**

The Restart and Continuous Improvement Plan is the New York Power Authority's roadmap for returning Indian Point 3 to service in a controlled, safe and effective manner, and for significantly improving our performance such that we can become a reliable and cost-effective choice of power for the people of New York State.

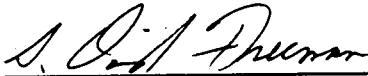
Indian Point 3 was shut down by the Authority in 1993 to address technical and programmatic issues. Although our record for safe operation remained unquestioned, the plant had fallen short in meeting our expectations and our commitments to the Nuclear Regulatory Commission. Over the succeeding months, we initiated many significant improvements at the station, both in our technical programs and the station material condition; however, we continued to experience setbacks and false starts.

We therefore took a deliberate step back, reviewed our entire program to determine the underlying root causes and developed a formal plan to guide our efforts. This plan differs fundamentally from our previous efforts. First, the plan is based on an in-depth, comprehensive, and independent look at our program through the eyes of successful industry experience. Second, we have taken a strategic approach which will address the root causes of our problems by addressing four key initiatives: Management Skills and Effectiveness, Organizational Effectiveness, Key Programs and Processes, and Strategic Practices and Operating Philosophy. Third, we involved all levels of the organization in developing the plan and have assigned responsibilities as low in the organization as possible to empower the people who know the job best and who can come up with the best solutions. Fourth, we will use specific restart criteria, verification and assessment processes, and clear performance measures for each action plan, so that we can objectively gauge the effectiveness of our efforts and determine with certainty when we are ready to safely start-up. Fifth, we have established a management system which will allow us to easily update the plan, track progress, and take immediate corrective action as necessary to ensure success.

The plan builds on the many positive efforts which have been underway over the past year. We have made significant changes in our management team, bringing in proven leaders from other successful utilities, and reassigning our most effective managers to essential positions in the nuclear organization. We have examined our key business processes and made fundamental changes which will enhance productivity and safety. We have upgraded many of our technical programs to meet exacting industry standards. We have reviewed, prioritized and scheduled our backlog of work so that we understand what needs to be done and what resources we need to get the job done. And we are facing up to, and addressing, the

toughest issue of all: the need to fundamentally change our culture. By culture we mean our most basic, underlying assumptions about what constitutes acceptable levels of performance and how we treat each other. We mean cultivating a questioning attitude and accepting no less than the best. We mean doing the job right the very first time. We mean paying attention to the details of our work, and always following our procedures -- or fixing them so we can follow them. We mean that management gets involved by setting specific direction, providing the resources, and solving problems so that employees can get the work done.

It is important to understand that plans, like this one, are just sets of words. We have devoted a significant amount of effort, and involved many of you, in developing it. The time has now come to move from words to action. We have a skilled and capable work force who can and will get the job done. We have a management team which will provide the leadership and resources. The path ahead is not an easy one, but if we all pull together, we will succeed in returning Indian Point 3 to power with a renewed sense of pride and a culture which is soundly based on safety, reliability and service to our customers, the people of New York State. We are counting on your energy and commitment in making the plan a reality.



S. David Freeman  
President and CEO



William A. Josiger  
EVP-Nuclear Generation

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## I. - INTRODUCTION

### A. Background

In mid-1992 the New York Power Authority (NYPA) recognized that the performance of Indian Point 3 (IP3) was declining. An assessment was conducted to identify the causes of performance problems and to develop an improvement program. A Performance Improvement Plan (PIP) was subsequently developed and submitted to the NRC on January 14, 1993.

On February 27, 1993 management shut down IP3 due to deficiencies associated with the Anticipated Transient Without Scram (ATWS) Mitigation System Actuation Circuitry (AMSAC) system. The plant was subsequently brought to cold shutdown on March 7 due to programmatic weaknesses identified in the surveillance test program. On March 26 NYPA submitted a summary of action plans to address hardware problems and programmatic weaknesses to the NRC. The Authority stated that it would not restart the plant until they were satisfied with restart readiness and until the NRC agreed with the Authority's conclusion.

From April 26 to May 28, the NRC conducted a special inspection of IP3. The team determined that the root causes for declining performance were weak managerial processes, controls and skills. Two contributing causes were also identified: (1) management failed to identify and resolve underlying root causes for problems that had been identified by the QA organization, and (2) management did not have an effective self-assessment process. On June 17 the NRC sent Confirmatory Action Letter 1-93-009 to the Authority acknowledging the PIP and the Authority's additional commitments. Subsequently, IP3 was placed on the NRC's Watch List.

Over the succeeding months, several PIP action plans were completed and officially closed. However, management realized that the existing programs and efforts to improve the performance of IP3 were not sufficiently effective in returning the plant to service nor were they creating a foundation for long-term, sustained improvement. Previous performance problems continued to occur even though programs and process improvements designed to correct those deficiencies had been implemented. On December 17 the NRC met with NYPA management to discuss concerns with the PIP and its apparent ineffectiveness in light of recurring plant events and procedural violations.

A Restart Management Team (RMT) was formed in October, 1993 consisting of senior managers from Nuclear Generation and other departments. The team was

chartered to direct the actions necessary to restart IP3. The RMT established a Situation Assessment Team (SAT) under the direction of a senior project manager to perform a root cause analysis for the decline in performance at IP3 and the White Plains Office (WPO) and to develop a comprehensive and integrated Restart and Continuous Improvement Plan (RCIP).

The RCIP project began in early January 1994 and was completed in May. The first task performed by the SAT was to determine the root causes for performance decline at IP3. The team reviewed all relevant documents (e.g., NRC inspection reports, QA reports, management reports, and INPO evaluations). They interviewed personnel and performed field observations to identify and document the key performance issues associated with the decline in performance at the plant and WPO.

These key performance issues were then grouped by similar themes and rolled up to a higher set of issues culminating in six root causes and six contributing causes which, in the aggregate, encompassed the performance issues. The root and contributing causes were then put through a validation process involving a cross section of staff from all levels of the Nuclear Generation organization. The RMT reviewed and approved the root and contributing causes. A detailed presentation of the methodology is presented in Appendix D.

The six primary root causes were:

- A. Management did not demonstrate the leadership, interpersonal skills, or the credibility to provide a work environment that encouraged open communication, teamwork, innovation and trust.
- B. Senior management did not establish the vision or provide the direction to drive the organization's agenda.
- C. Issue identification, assessment, and problem resolution processes were not well managed and did not result in lasting correction of issues and problems.
- D. Management did not establish clear performance expectations, provide effective coaching and feedback, or hold people accountable for meaningful performance results.
- E. Management of change was ineffective.
- F. Roles and responsibilities were not sufficiently defined to support effective organizational performance.

The six contributing causes were:

- G. NYPA management did not employ industry experience to establish and implement effective performance standards.

- H. Information and direction were unclear and often not communicated effectively.
- I. Policies and procedures were inadequate to support acceptable station performance. They were overly complex, contained technical inaccuracies, and were ineffectively enforced.
- J. The maintenance function did not provide for the quality and rate of completion of work to support plant needs.
- K. Information management systems did not support management needs.
- L. Engineering procedures and products did not effectively support plant operations and maintenance.

The SAT then facilitated the development of a strategic approach to performance improvement. The RMT developed four broad initiatives: management skills and effectiveness, organizational effectiveness, programs and processes, and strategic practices and operational philosophy. Key objectives and strategies to achieve the initiatives were developed. The RMT then identified action plan areas that, in the aggregate, would address the root and contributing causes. The objectives, strategies, and action plans in the RCIP are designed in their totality to address the root and contributing causes. Appendix D presents a matrix that illustrates the relationship between the RCIP strategies and the root and contributing causes.

The SAT formed teams of individuals from all areas and levels throughout the organization to develop details of the action plans. Twenty-two teams developed the plans that provide specific results-oriented tasks. Action plans were also designated as required for startup or as part of the continuous improvement plan. All of the action plans will be integrated through the Finest Hour scheduling system or the IP3 Action Commitment Tracking System (ACTS).

#### **B. Structure of the RCIP**

The Restart and Continuous Improvement Plan defines the elements necessary to restart and improve performance at IP3. Those actions that are required to restart IP3 have been included in one section (Section II - *Restart Plan*), and those that represent long-term actions to improve performance are included in another (Section III - *Continuous Improvement Plan*).

Section II includes four subsections: A. *Restart Criteria*, which describes the criteria the RMT will use in determining readiness for restart, B. *Restart Action Plans*, which are specific actions necessary to achieve management's objectives for improvement, C. *Restart Readiness and Assessment*, which includes four assessment and verification methods to assure readiness for restart, and D.



*Startup Plan*, which describes the senior manager on shift, preparation and management of the startup sequence, and the Startup and Power Ascension Plan.

Section III consists of two subsections: A. Outline of the Plan and B. Continuous Improvement Action Plans.

Section IV describes how the RCIP will be managed. It includes roles and responsibilities, how emerging issues and changes to the plan will be handled, periodic assessments, and verification of action plan closure.

Section V consists of six appendices to the RCIP:

- Appendix A contains the Regulatory Interface Plan, which describes interaction with the NRC.
- Appendix B contains a cross-reference between the RCIP and the Performance Improvement Plan. The PIP will cease to exist as a separate document after the publication of the RCIP.
- Appendix C is a cross reference between the RCIP and the regulatory issues tracked by NYPA.
- Appendix D is a description of the Root Cause Analysis, including a cross reference between the RCIP strategies and the root causes.
- Appendix E contains a list of acronyms and abbreviations used in the RCIP.
- Appendix F provides the schedules for completion of the action plans.

## II. - RESTART PLAN

The Restart Plan addresses the major activities that must be completed prior to restart of Indian Point 3. The plan has been developed with input from utilities that have recently gone through similar restart processes. It consists of four subsections as follows:

1. The **Restart Criteria** subsection summarizes the top level criteria the Restart Management Team will use to conclude that the New York Power Authority is ready to restart Indian Point 3.
2. The **Restart Action Plans** subsection consists of specific action plans addressing management, organizational, and program and process performance issues that the Restart Management Team has determined need to be corrected prior to restart.
3. The **Restart Readiness and Assessment** subsection provides four assessment methods to confirm the effectiveness of the restart action plans and the readiness of Indian Point 3 for restart. This section builds upon the successful approach taken at NYPA's James A. FitzPatrick Nuclear Power Plant (JAF).
4. The **Startup Plan** subsection describes the key elements that must be developed to permit a deliberate and controlled return to power operation including preparation and management of the startup sequence, provisions for a senior manager on shift, augmented shift support, and the startup and power ascension process. The plan is similar to that used at JAF.

### A. Restart Criteria

The restart criteria are used to assure the readiness for plant restart, based upon the correction of identified performance deficiencies that require corrective action. The restart criteria are in three categories: (1) Management Issues, (2) Material Condition and Equipment Readiness, and (3) Regulatory Issues. The discussion of the restart criteria for each of these areas follows.

#### 1. Management Issues

These issues deal with effective management of the station, improvement in self-assessment and corrective-action processes, and assurance that startup prerequisite activities are satisfactorily completed prior to restart. The criteria include:

- a. The restart action plans are complete and assessment results for the plans are satisfactory.

- b. The operational readiness review program has been completed satisfactorily.
- c. The employee concerns program (SPEAKOUT) is providing an effective mechanism for identification and resolution of employee concerns not addressed elsewhere.
- d. The startup and power ascension test schedule and plan and the startup management structure (i.e., senior manager on-shift and augmented shift coverage) are in place.
- e. Quality Assurance and Startup Evaluation for Readiness Team (SERT) results are satisfactory for restart.

## **2. Material Condition and Equipment Readiness**

Readiness for restart related to plant material condition will be measured primarily by the results of a comprehensive review of the work that is outstanding at the station. This work will be reviewed to assure that there are no maintenance or engineering work items that could adversely impact any plant safety functions. In addition, an assessment will be performed to confirm that the aggregate effects of the work backlogs do not compromise plant safety. These reviews of plant material condition for restart will provide a high degree of assurance of an error-free startup followed by a sustained period of successful operations.

In addition to the above screening and evaluation process, there are specific equipment and other technical issues that have been identified for resolution. These issues are carried as NRC NYPA Assessment Panel (NAP) items, and they will be verified to have been satisfactorily resolved prior to plant startup.

## **3. IP3 Regulatory Issues**

NYPA will resolve the regulatory issues contained in the following prior to restart:

- a. The NRC NYPA Assessment Panel (NAP) issues.
- b. Other regulatory issues, i.e., issues identified as part of the NRC inspection process.
- c. Any followup items identified as a result of the NRC Operational Readiness Assessment Team inspection.
- d. The Confirmatory Action Letter.

## **B. Restart Action Plans**

After the root and contributing causes for the decline in performance of IP3 had been identified and validated (see Appendix D for details), the RMT conducted planning sessions to develop a strategic-based approach to performance

improvement. The RMT first identified four broad, department-wide areas in which major improvements were required. These areas, called initiatives, are:

- Management Skills and Effectiveness
- Organizational Effectiveness
- Program and Process Improvements
- Strategic Practices and Operating Philosophy

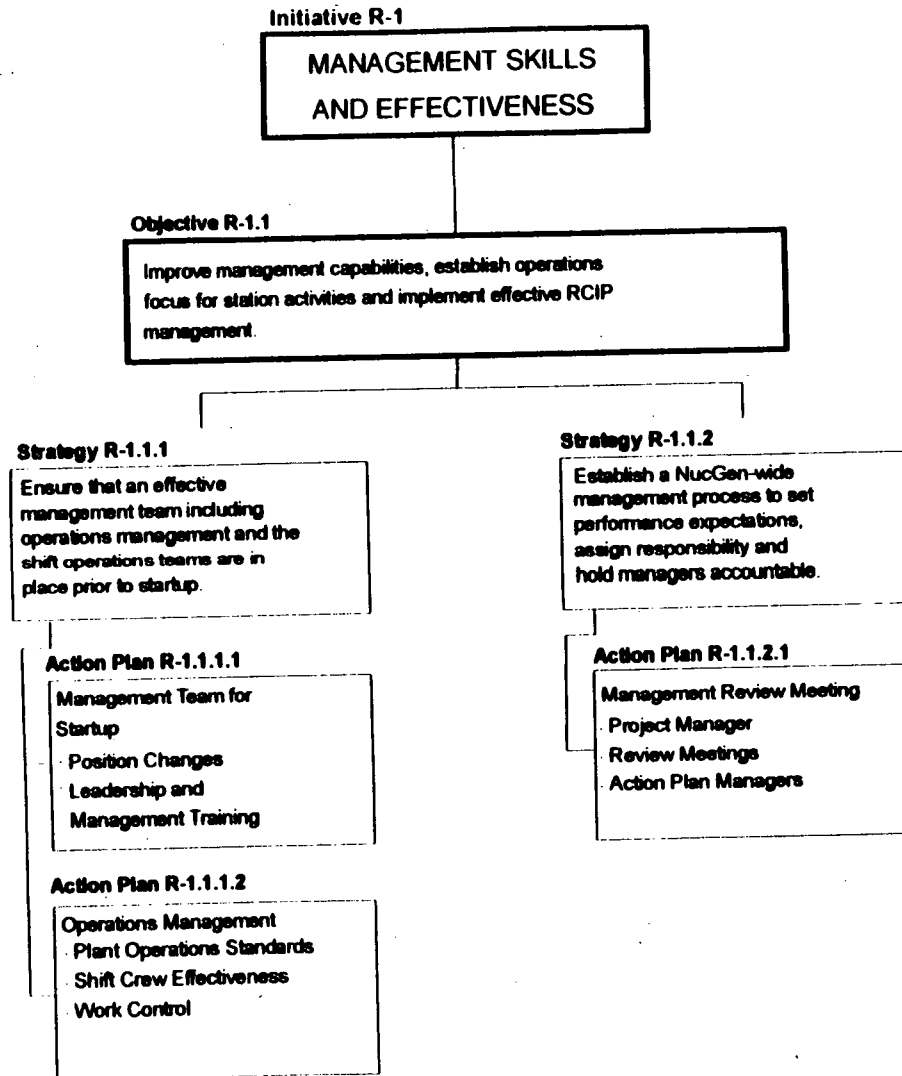
For each initiative, the RMT developed a set of objectives that provide verifiable expectations for performance. One or more strategies were then created to describe how each objective would be achieved. Each strategy, in turn, has one or more action plans that define the specific tasks to be accomplished.

For example, refer to Figure 1, "Restart Action Plans." Under "Management Skills and Effectiveness," the objective is "R-1.1 Establish Improved Management Capabilities, Operations Focus for Station Activities and Effective RCIP Management." Strategies to achieve this objective are "R-1.1.1 Ensure an Effective Management Team and Shift Operations Management Team Are in Place Prior to Startup," and "R-1.1.2 Establish a Nuclear Generation-Wide Management Process to Set Performance Expectations, Assign Responsibility and Hold Managers Accountable." Two action plans carry out strategy R-1.1.1: "R-1.1.1.1 Management Team for Startup," and "R-1.1.1.2 Operations Management Responsibility."

The remainder of Figure 1 provides an overview of the action plans relating to restart. Note that the Strategic Practices and Operating Philosophy initiative is not included under the restart action plans. This document, the RCIP, provides the strategic direction necessary for restart; therefore an additional action plan is not required. Figure 2 in Section III provides the action plans related to continuous improvement.

The restart action plans that follow are organized according to Figure 1. The action plans include a brief description, the plan manager, and the key action plan steps. Appendix C is a cross reference of NRC issues and restart action plans. The action plans provide a reference to the associated NAP issue, identified by a Roman numeral prefix, or other NRC issue. Nap issues are issues defined by the NRC as requiring resolution for restart.

Appendix D provides a complete cross reference between the root and contributing causes and the RCIP strategies, and Appendix E contains a list of acronyms and abbreviations. Appendix F provides the action plan schedules.



## RESTART ACTION PLANS

FIGURE 1

Initiative R-2

**ORGANIZATIONAL  
EFFECTIVENESS**

Objective R-2.1

Establish an organizational structure and clearly define roles and responsibilities for functions essential for restart.

Strategy R-2.1.1

Analyze the organization and, where necessary, transition to a more appropriate structure.

Action Plan R-2.1.1.1

Organizational Structure for Restart  
· RCP Changes

Strategy R-2.1.2

Clearly define and communicate organizational roles, responsibilities and interfaces

Action Plan R-2.1.2.1

Roles, Responsibilities and Interfaces for Restart  
· Key Functions  
· Documentation  
· Training

Action Plan R-2.1.2.3

System Engineering  
· Management Assistance  
· Augment Systems Engineers  
· Onshift Support  
· Backlog Reduction

Action Plan R-2.1.2.2

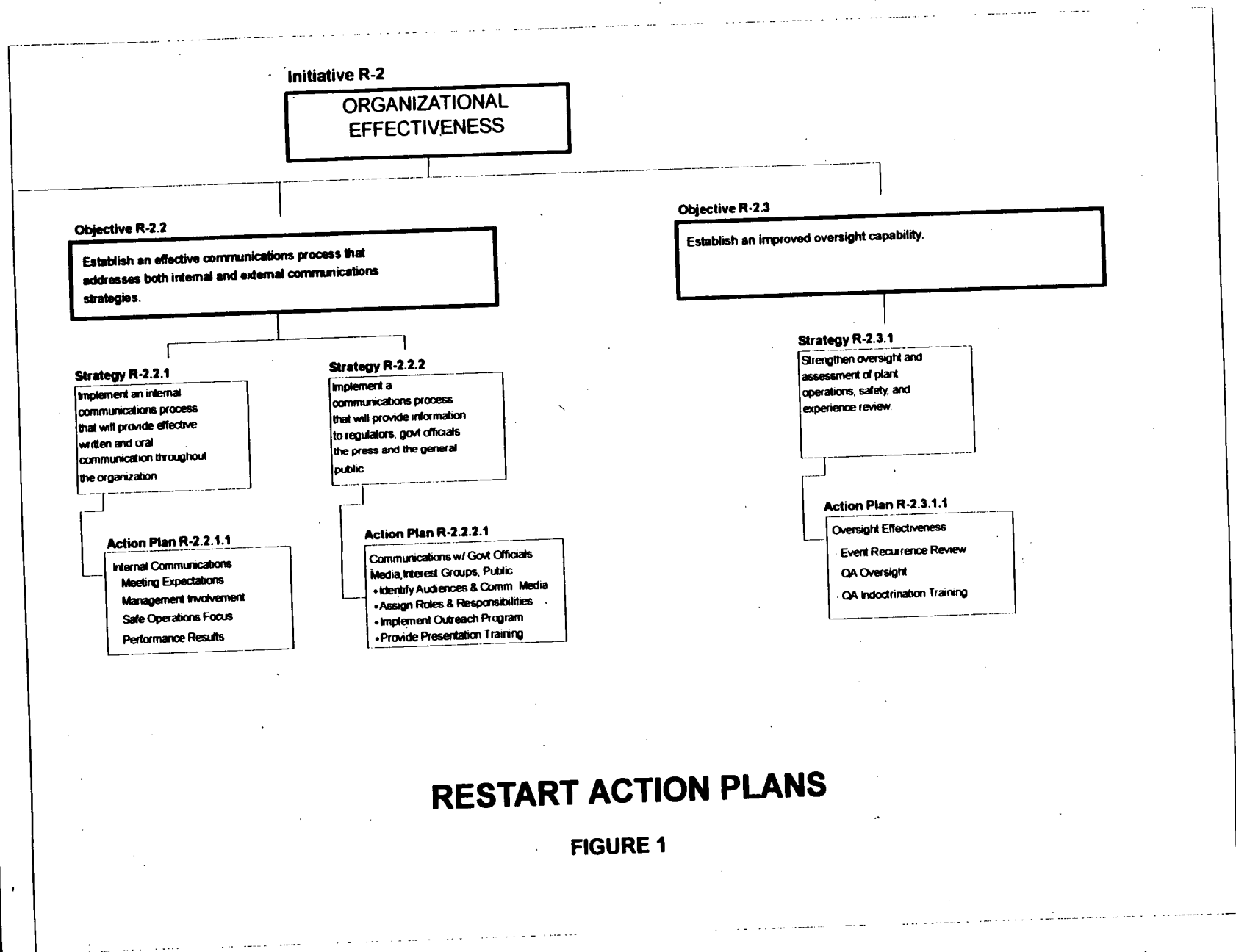
Outage Management  
· Responsibility  
· Outage Scope for Restart  
· Restart Commitments  
· System WD / Certification  
· Regulatory Issues

Action Plan R-2.1.2.4

Training  
· Operations interface  
· INPO Evaluation  
· Ops mgt and SME involvement  
· Enhanced training  
· Simulator Training

**RESTART ACTION PLANS**

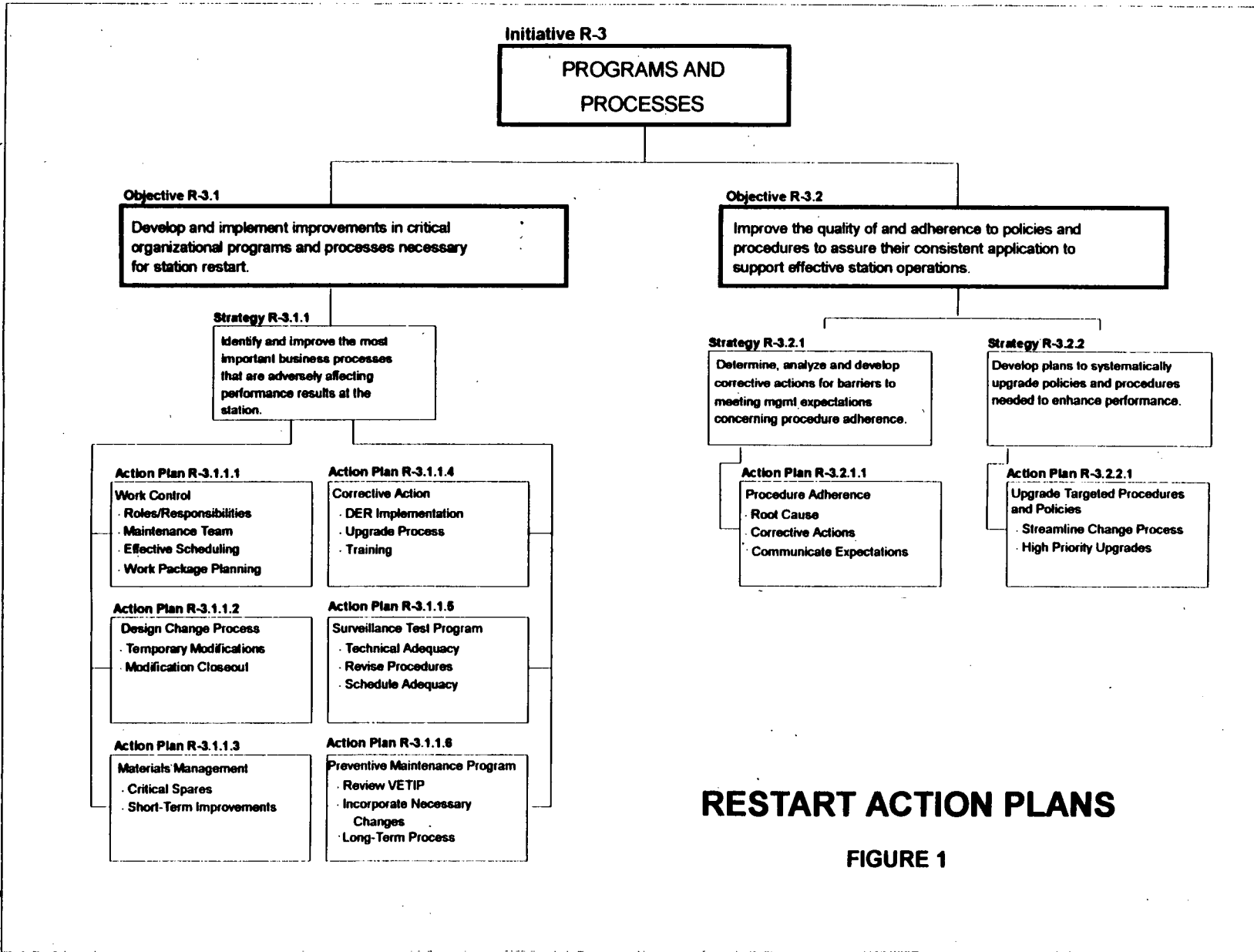
FIGURE 1



# RESTART ACTION PLANS

FIGURE 1

INDIAN POINT 3  
RESTART & CONTINUOUS IMPROVEMENT PLAN



# RESTART ACTION PLANS

FIGURE 1



# 1. MANAGEMENT SKILLS AND EFFECTIVENESS

## OBJECTIVE R-1.1

Improve management capabilities, establish operations focus for station activities and implement effective RCIP management.

**STRATEGY R-1.1.1:** Ensure that an effective management team including operations management and the shift operations teams are in place prior to startup.

### ACTION PLAN R-1.1.1.1: MANAGEMENT TEAM FOR STARTUP

Ensure that an effective management team is in place prior to startup.

**ACTION PLAN MANAGER:** A. Smith-Law      Manager, Mgmt. Training and Org. Dev.

#### ACTION PLAN STEPS

1. Complete the assessment of the management team responsible for IP3 operation and support, implement appropriate position changes, and fill key positions.
2. Provide leadership and teambuilding training for the Plant Leadership Team, department managers and shift supervisors.
3. Implement a focused training program for station management through the first-line supervisors and the control room SROs to provide a clear understanding of management's expectation for performance. Include as the basis for the training the management expectations discussed in step 3 of Action Plan R-2.2.1.1, *Internal Communications*.

### ACTION PLAN R-1.1.1.2: OPERATIONS MANAGEMENT

Ensure that the Operations Department understands and exercises its responsibility for setting the station expectations for the conduct of station operations, safety and excellence.

**ACTION PLAN MANAGER:** N. Eggemeyer      Operations Manager

## ACTION PLAN STEPS

1. Define and communicate station management's expectations to the Operations Department. Expectations will address the role the Department and the shift crews will play in implementing the Plant Leadership Team's objectives, including establishing the station's agenda and maintaining the focus on safe plant operations and maintenance. Define the ways in which that role is implemented, e.g., control of the Plan of the Day (POD) and prioritization of work.
2. Improve how shift crews conduct business, take corrective actions, and set the standards for station operations in the following areas:
  - Command and control roles and responsibilities
  - Management and interface with
    - work control (POD)
    - maintenance and I&C
    - technical support organizations
  - Communications and teamwork within the shift crew and with other crews
3. Reassign the direct responsibility for the work control function to the Operations Department.
4. Resolve related regulatory issues:
  - NRC-50 - Review of operator log keeping.
  - NRC-51 - Review of unqualified NPO standing conventional watch.
  - NRC-100 - Resolve recurring operational issues and configuration control problems (control of equipment status).

**STRATEGY R-1.1.2:** Establish a Nuclear Generation-wide management process to set performance expectations, assign responsibility and hold managers accountable.

**ACTION PLAN R-1.1.2.1: MANAGEMENT REVIEW MEETING**

Establish a periodic management review process and schedule with the RMT to review plan results, monitor schedule progress, determine potential plan deviations, take action to assure the plan remains on track, and hold action plan managers accountable for results.

**ACTION PLAN MANAGER:** K. Chapple Director, Nuclear Operations

**ACTION PLAN STEPS**

1. Establish a Project Manager responsible for implementation of the RCIP reporting to the RMT. Restructure the RMT upon implementation of the plan with membership as follows: Resident Manager (chairman) and Vice Presidents of Operations and Maintenance, Engineering and Nuclear Business Operations, and the IP3 General Managers.
2. Establish a management review meeting to create an effective forum to review performance results with responsible line managers. Structure the meetings to support effective management of the RCIP.
3. Conduct an initial group meeting with the action plan managers to set expectations for the management review meetings.
4. Incorporate additional specific review areas into the management review meeting including the directed assessments performed by oversight organizations in Section IV.C, *Periodic Assessment*.
5. Resolve related regulatory issues:
  - NRC-42 - Improve communications, management oversight of safety related and significant activities.

## 2. ORGANIZATIONAL EFFECTIVENESS

### OBJECTIVE R-2.1

Establish an organizational structure and clearly define roles and responsibilities for functions essential for restart.

**STRATEGY R-2.1.1:** Analyze the organization and, where necessary, transition to a more appropriate structure.

---

### ACTION PLAN R-2.1.1.1: ORGANIZATIONAL STRUCTURE FOR RESTART

Realign the organization, where required, to implement the changes included in the RCIP and any other identified improvement initiatives.

**ACTION PLAN MANAGER:** T. Dougherty      Director, BWR Project Engineering

### ACTION PLAN STEPS

1. Conduct a final review of recommendations of other RCIP action plans related to startup to determine whether any organizational changes are necessary to restart IP3 successfully. Make recommendations to the RMT as appropriate.
2. If any changes are necessary before startup, communicate and implement the changes, including PORC and SRC approval if required.

**STRATEGY R-2.1.2:** Clearly define and communicate organizational roles, responsibilities and interfaces.

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**ACTION PLAN R-2.1.2.1: ROLES, RESPONSIBILITIES AND INTERFACES FOR RESTART**

Clarify functional areas at IP3 to show better definition of roles, responsibilities and interfaces prior to restart. Communicate them to all employees.

**ACTION PLAN MANAGER:** G. Fogarty General Manager, Support Services

**ACTION PLAN STEPS**

1. Clarify the roles, responsibilities and interfaces of the following functions that are affected by changes implemented in other action plans:
  - Engineering, particularly the role of Technical Services and System Engineering
  - Work control and planning and scheduling
  - Outage management
  - Corrective action and Quality Assurance/Quality Control
  - Training
  - Operations
2. Ensure the changes in the above step are reflected in the appropriate NuAPs, Program Descriptions and Implementing Procedures.
3. Ensure that training is provided for all functions identified in step 1 so that employees understand their revised roles and responsibilities.

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**ACTION PLAN R-2.1.2.2: OUTAGE MANAGEMENT**

Establish the roles and responsibilities of and assign appropriate resources to the Outage Manager and outage management organization. Define and manage the work necessary to restart the station.

**ACTION PLAN MANAGER:** G. Sadauskas Technical Services Manager

## ACTION PLAN STEPS

1. Assign responsibility to the Outage Manager for developing the plan and restart schedule for the current outage.
2. Develop and implement a process to define the work-to-go. This will include the following:
  - Review of work in Finest Hour to capture any startup items.
  - Review of all maintenance, post-maintenance testing, and other work in ROME required for startup.
  - RES documentation review.
  - Review of ACTS to capture any startup items.
3. Identify and resolve any pre-restart commitments as follows:
  - Identify and validate all commitments made to external agencies; segregate the commitments required to be completed before restart. Identify and resolve overdue commitments.
  - Review regulatory restart packages and assure programmatic issues are contained within the appropriate RCIP action plan.
  - Ensure all uncompleted commitments made to date and new commitments are tracked in ACTS. Issue a coordinated commitment status report weekly.
  - Review and validate all NRC commitments identified for the next refueling cycle to ensure the commitment dates are acceptable for restart and operation until the next refueling outage.
4. Implement a prioritized system walkdown process that will confirm the work to go with project teams led by a system engineer.
5. Review backlogs of station work and other open items, and establish performance measures for each for use by management.
6. Establish and implement a final system walkdown and certification process to confirm system readiness for restart and subsequent successful operation.
7. Assign responsibility for management of regulatory restart issues including package preparation and final closeout where applicable.
8. Resolve related regulatory issues:
  - IV.1 - Develop a reasonable assurance that all NRC commitments have been met or are on a schedule for closure by reviewing an appropriately sized sample of commitments.
  - III.2 - Resolve plant-wide commitment tracking and implementation process deficiencies.
  - IV.7 - Review all backlogs to assess the safety impact of the items contained in these backlogs; backlogs include RES, CAR, REC, PORC open item, RIND, and RIP lists.

- NRC-10 - Provide an assessment that the physical readiness of the plant is acceptable to ensure safe plant operation.
- NRC-13 - Resolution of overdue commitments and tracking system weaknesses.
- NRC-17 - Review all CARs and audit findings to ensure that startup related items are properly addressed.
- NRC-27 - Verification of compliance to ATWS, Appendix R, QSPDS, RG 1.97 requirements.
- NRC-43 Upgrade management processes and programs identified by the team.
- NRC-102 - Review identification of deficient equipment. PIDs not hung where required.

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**ACTION PLAN R-2.1.2.3: SYSTEM ENGINEERING**

Augment and enhance System Engineering to meet plant needs during the current outage and plant startup.

**ACTION PLAN MANAGER:** G. Sadauskas Technical Services  
Manager

**ACTION PLAN STEPS**

1. Assign an experienced manager to assist Technical Services managers in implementing best practices from other successful utility system engineering programs.
2. Augment the system engineers with experienced personnel with plant or system engineering backgrounds.
3. Establish a shift-based engineering support team to provide support during plant startup, special evolutions, and power ascension. Coordinate with operations, maintenance and other on-shift organizations during startup.
4. Provide additional resources for System Engineering to maintain the operating experience review workload at acceptable levels and permit the system engineers to devote more attention to their other duties.
5. Resolve related regulatory issues:
  - NRC-65 - Recruitment and development of system engineering program and development of training.

**ACTION PLAN R-2.1.2.4: TRAINING**

Resolve pre-startup operations training program deficiencies associated with recent evaluations of the IP3 training program.

**ACTION PLAN MANAGER:** T. Reeder Training Manager

**ACTION PLAN STEPS**

1. Improve operations and training interface and coordination through the following:
  - Conduct periodic management meetings to establish mutual expectations.
  - Increase operations management oversight of simulator crew training.
2. Identify and resolve startup-related training issues in the INPO plant evaluation report and the accreditation team report on operator training programs. Incorporate continuous improvement issues into action plan C-2.1.2.3, *Training*.
3. Directly involve operations management, including Shift Supervisors, and subject matter experts in training program corrective actions.
4. Conduct an enhanced operator training course targeted to address specific training needs identified by operators and training instructors in the areas of systems, procedures, Technical Specifications, integrated plant operations and shift teamwork.
5. Conduct pre-startup, augmented simulator training on startup activities for each crew.
6. Complete operator training on core physics and reactivity and modifications completed.
7. Resolve related regulatory issues:
  - IV.5 - Provide operability determination guidance and training to all applicable station personnel.



## OBJECTIVE R-2.2

Establish an effective communications process that addresses both internal and external communications strategies.

**STRATEGY R-2.2.1:** Implement an internal communications process that will provide effective written and oral communication throughout the organization.

### ACTION PLAN R-2.2.1.1: INTERNAL COMMUNICATIONS

Provide proactive, accurate and timely communications to employees, obtain an understanding of their concerns, and provide feedback to address them.

**ACTION PLAN MANAGER:** W. Berzins Manager of Communications

#### ACTION PLAN STEPS

1. Implement station management's expectations for the conduct, frequency, minimum content, and attendees for routine station meetings. This will include the expectations in areas such as the morning meeting, weekly staff meetings, department weekly meetings, tailgate meetings, 3-level meetings, and all-hands meetings. Conduct a review of the meeting results to confirm meeting effectiveness.
2. The Resident Manager will train the general managers and department managers on his expectations for management involvement in station activities. The session will specifically require them to solicit feedback from employees including responding to concerns raised in a timely manner. As a minimum, the following expectations of management must be embraced and continuously reinforced by all employees:
  - Safety and quality are more important than production
  - Management wants problems identified
  - Questioning attitude is a part of safety
  - When in doubt, proceed conservatively
  - Procedures and safety practices must be followed
  - Resources will be provided to do the job right
  - Do the job right the first time
  - Pay attention to detail
  - Safety and quality will lead to effective production
3. Conduct similar training sessions for the WPO as described in step 2.

4. Conduct a final communications roll-out of the RCIP for the employees.
5. Upon issuance of the IP3 RCIP, provide frequent performance results updates to employees at WPO and IP3. Incorporate the performance results into appropriate meetings as provided in step 1.
6. Resolve related regulatory issues:
  - IV.8 - Assess NYPA staff attitude with respect to performance improvement.
  - NRC-101 - NRC review of employee safety concerns.

**STRATEGY R-2.2.2:** Implement a communications process that will provide information to government officials, the press and the general public.

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**ACTION PLAN R-2.2.2.1: COMMUNICATIONS WITH GOVERNMENT OFFICIALS, MEDIA, INTEREST GROUPS, AND THE GENERAL PUBLIC**

Develop and implement a plan for effective communications with government officials, the media, interest groups, and the general public that will assure proactive, accurate and timely information is provided to these audiences.

**ACTION PLAN MANAGER:** C. Patrick Director, Nuclear Policy and Information

**ACTION PLAN STEPS**

1. Identify key external audiences for information on restart plans and progress.
2. Identify and develop media and mechanisms for communicating restart information.
3. Assign roles and responsibilities to implement communications to outside audiences. Include management review to assure technical and material accuracy.
4. Conduct training for appropriate staff to improve presentation skills and message content.
5. Implement a communication outreach effort to external audiences.
6. Evaluate program effectiveness and modify as required.

## OBJECTIVE R-2.3

Establish an improved oversight capability.

**STRATEGY R-2.3.1:** Strengthen oversight and assessment of plant operations, safety, and experience review.

### ACTION PLAN R-2.3.1.1: OVERSIGHT EFFECTIVENESS

Strengthen the Quality Assurance oversight functions including the ability to identify conditions adverse to quality. Assure that all organizations can resolve deficiencies effectively and in a timely manner. In conjunction with other restart initiatives, conduct a review of past events to provide assurance that they will not recur.

**ACTION PLAN MANAGER:** R. Patch VP, Appraisal and Compliance  
(Acting)

#### ACTION PLAN STEPS

1. For the past two plant operating cycles, identify occurrences of repetitive LCOs, LERs or unanticipated plant transients, determine and consolidate root causes for the most significant events, and demonstrate why those events will not recur or develop appropriate corrective action within the RCIP.
2. Resolve NYPA Assessment Panel restart issue IV.6 - Reestablish the QA organization as an effective oversight group. This includes:
  - Conduct and document a root-cause analysis for NAP-30.
  - Identify and resolve other RCIP startup initiatives directly related to the NAP IV.6 root-cause analysis issue.
  - Identify and resolve QA Division restart initiatives directly related to NAP IV.6 root-cause analysis issue.
  - Perform a corrective action verification of the actions taken.
3. Provide QA indoctrination training to IP3 and WPO employees addressing as a minimum the following:
  - An overview of 10CFR50 Appendix B and the QA program.
  - A description of each employee's roles and responsibilities established in the QA program.
  - A description of the hierarchy of NYPA policy, programs and procedures and how they address the QA program commitments.

- A discussion of quality principles such as teamwork, questioning attitudes, attention to detail and procedure adherence and how the practice of these principles results in producing a quality product.
4. Resolve related regulatory issues:
- IV.6 - Reestablish the QA organization as an effective oversight group.
  - NRC-11 - Resolution of LER submittal deficiencies.
  - NRC-14 - Resolve QA oversight and the classification of maintenance activities.
  - NRC-16 - Resolution of weakness in QA oversight and corrective action timeliness.

### 3. PROGRAMS AND PROCESSES

#### OBJECTIVE R-3.1

Develop and implement improvements in critical organizational programs and processes necessary for station restart.

**STRATEGY R-3.1.1:** Identify and improve the most important business processes that are adversely affecting performance results at the station.

#### **ACTION PLAN R-3.1.1.1: WORK CONTROL**

Continue the efforts already identified as necessary to improve the work control process prior to plant restart. This action plan builds upon the approval and implementation of work control process changes contained in AP-9, AP-10.1, P&S-SD-01, and ICP-DD-0.

**ACTION PLAN MANAGER:** C. MacKay Work Control Supervisor

#### **ACTION PLAN STEPS**

1. Reassign Work Control to the Operations Department as discussed in Action Plan R-1.1.1.2, *Operations Management*. Clearly define the long-term roles and responsibilities of the IP3 work control function including the interface of work center management with operations, planning, scheduling and maintenance. Update appropriate Implementing Procedures.
2. Establish a maintenance team, assigned to work closely with work control, to pre-screen PIDs and accomplish minor maintenance effectively. The team will perform the following:
  - Field check PIDs to determine the correct work scope and duplication and assign them to minor maintenance or normal maintenance. Minor maintenance goes directly to the minor maintenance team. Normal maintenance goes to the planners after a pre-screening results in an accurate description of the work required.
  - The minor maintenance team takes action to correct the PID or carry the work forward for future team action.

- Assign responsibility to the maintenance team to review and approve work packages prior to issuance from Central Planning.
3. Fully implement effective maintenance scheduling techniques, including Finest Hour integration, using industry best-practice models and INPO recommendations.
- Establish clear control of the rolling system schedule, train outages and system schedules by operations through the Work Control SRO.
  - Establish an effective restart schedule and subsequent schedules in Finest Hour by removing all items not logic-tied to station work activities or plant configuration changes.
  - Improve integrated maintenance and operations scheduling, including clearances, support and post-maintenance testing.
  - Fully implement effective rolling system scheduling and the POD.
4. Make near-term changes to improve the effectiveness of Central Planning including:
- Assign operations representatives to Central Planning to prepare operating orders and clearances.
  - Assign performance engineers to Central Planning to write post-maintenance test procedures.
  - Improve the technical support to the planners by assigning sufficient engineering support directly to planning.
5. Resolve related regulatory issues:
- III.4 - Resolve maintenance/engineering retest program deficiencies.
  - III.10 - Review work control and operations clearances weaknesses.
  - IV.3 - Resolve vendor/contractor oversight and control deficiencies.
- 

**ACTION PLAN R-3.1.1.2: DESIGN CHANGE PROCESS**

Reduce the number of open temporary modifications and assure that planned modifications are completed to support plant requirements.

**ACTION PLAN MANAGER:** J. Gullick Site Engineering Manager

## ACTION PLAN STEPS

1. Temporary modifications:
  - Evaluate the current actions for temporary modifications and determine if these are sufficient to achieve goals.
2. Modification closeout actions:
  - Complete all current outage modifications. Note: some items require plant startup to test appropriately.
  - Resolve the contingency modifications. Possible decisions are: (1) complete this outage, (2) complete at a future outage (to be defined), or (3) cancel the modification.
3. Resolve related regulatory issues:
  - NRC-26 - Resolution of modification close-out process.
  - NRC-68 - Review of T-Mod process.
  - ~~NRC-99 - Resolution of T-Mod reporting under 50.59.~~

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### ACTION PLAN R-3.1.1.3: MATERIALS MANAGEMENT PROCESS

Conduct a targeted inventory to determine the categories of parts availability problems having the greatest impact on maintenance, and implement corrective measures as necessary to eliminate maintenance impact.

**ACTION PLAN MANAGER:** J. Inglis Materials Manager

## ACTION PLAN STEPS

1. Conduct a focused inventory analysis to identify stock-outs for critical maintenance spares based upon recent usage data and results from prior plant startup experience.
2. Evaluate and adjust the inventory baseline to include components listed by the above analysis.
3. Identify and implement any short-term materials management process improvements to eliminate parts availability problems.
4. Resolve related regulatory issues:
  - III.11 - Resolution of recurring maintenance inadequacies (parts, procedure violations).
  - III.12 - Category I (safety related) equipment procurement process.

### **ACTION PLAN R-3.1.1.4: CORRECTIVE ACTION**

Improve the process for identification (including DER threshold), root-cause analysis, prioritization, corrective action, and effectiveness verification to assure that station performance problems are identified and effectively resolved.

**ACTION PLAN MANAGER:** J. Perrotta ORG Manager

#### **ACTION PLAN STEPS**

1. Review the effectiveness of the implementation of the DER process at IP3 and compare it to the JAF DER process. Specifically assess the threshold of problem identification, root-cause analysis effectiveness, the assignment of and completion of corrective action, and the verification of problem closure.
  2. Upgrade the DER process to correct the areas identified.
  3. Conduct necessary training.
  4. Resolve related regulatory issues:
    - III.1 - Establish an effective program for problem identification, tracking, evaluation, and corrective action implementation.
    - III.9 - Enhance the reasonable assurance of safety (RAS) and justification for continued operation (JCO) processes.
    - NRC-28 - Improvement in the deficiency evaluation and engineering process to enhance review and quality.
    - NRC-43 Upgrade management processes and programs identified by the team.
    - NRC-96 - Resolution of lack of event response corrective action completion.
- 

### **ACTION PLAN R-3.1.1.5: SURVEILLANCE TEST PROGRAM**

Upgrade and improve the station Technical Specification surveillance test program by addressing test technical adequacy, scheduling systems, and procedure human factors.

**ACTION PLAN MANAGER:** T. Orlando Performance and Reliability Supervisor



## ACTION PLAN STEPS

1. Validate the surveillance test program technical adequacy.
2. Revise the surveillance test procedures to include any changes required from step 1 and any changes necessary to correct administrative or human factors problems.
3. Assure that any surveillance test deficiencies are corrected by reperforming the surveillance tests, if required.
4. Perform an independent assessment of the adequacy of the surveillance test schedule to provide assurance that surveillance tests will not be missed. Implement required changes.
5. Resolve related regulatory issues:
  - III.3 - Resolve surveillance test program deficiencies; certify that all surveillance tests are current and the results of each test properly demonstrate equipment operability.
  - III.5 - Resolve calibration deficiencies for instruments used to conduct surveillance testing.
  - IV.2 - Resolve startup control and mode change deficiencies.
  - NRC-37 - Review I&C surveillance testing, especially in light of recent security zone testing findings.
  - NRC-43 Upgrade management processes and programs identified by the team.
  - NRC-77 - Resolution of OPS recurring actuations and surveillance testing deficiencies.

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### ACTION PLAN R-3.1.1.6: PREVENTIVE MAINTENANCE PROGRAM

Upgrade and improve the station preventive maintenance program including procedure scope and adequacy, scheduling systems, and confirmation that appropriate vendor and technical information is properly reviewed for inclusion in the program.

**ACTION PLAN MANAGER:** A. Vitale      Supervisory Maintenance  
Engineer

#### ACTION PLAN STEPS

1. Conduct a detailed review of component failure history for selected safety related equipment to identify components with poor performance including high failure rates. Compare vendor recommended PMs with the current PM scope. Implement necessary scope changes prior to startup based upon engineering evaluation.

2. Develop a Program Description and Implementing Procedures (as appropriate) that define the long-term, RCM-based site PM program and upgrade. Include the resources and process for ensuring appropriate components and vendor recommendations are included in the PM program scope.
3. Resolve related regulatory issues:
  - II.28 - Completion of Vendor recommendations for MS-2.
  - III.8 - Review preventive maintenance accomplished to ensure vendor recommendations have been included and develop a process to ensure vendor recommendations are reflected in PM procedures as appropriate.
  - III.11 - Resolution of recurring maintenance inadequacies (parts, procedure violations).
  - NRC-43 Upgrade management processes and programs identified by the team.

## OBJECTIVE R-3.2

Improve the quality of and adherence to policies and procedures to assure their consistent application to support effective station operations.

**STRATEGY R-3.2.1:** Determine, analyze and develop corrective actions for barriers to meeting management expectations concerning procedure adherence.

### ACTION PLAN R-3.2.1.1: PROCEDURE ADHERENCE

Conduct a root-cause analysis for procedure adherence performance issues and implement effective corrective actions.

**ACTION PLAN MANAGER:** L. Hill Resident Manager

#### ACTION PLAN STEPS

1. Conduct a focused root-cause analysis to identify, categorize and resolve procedural adherence issues. Separate the analysis into station procedures (operations, maintenance and surveillance test at IP3) and WPO for other procedures.
2. Communicate the results of the analysis to the organization to assure an understanding exists on the root causes of procedure adherence issues and the actions that management has taken to correct the problems.
3. Implement the identified corrective actions required prior to restart.
4. Revise and issue a Nuclear Generation NuAP policy that communicates management's expectations concerning procedure adherence.
5. Resolve related regulatory issues:
  - IV.4 - Ensure management's expectations with regard to procedure adherence and attention to detail are clearly understood.

**STRATEGY R-3.2.2:** Develop plans to systematically upgrade policies and procedures needed to improve performance.

**ACTION PLAN R-3.2.2.1: UPGRADE TARGETED PROCEDURES AND POLICIES**

Implement a procedure and policy upgrade program targeted to those areas where significant benefit can be realized in support of restart.

**ACTION PLAN MANAGER:** J. Schivera Configuration Information Manager

**ACTION PLAN STEPS**

1. Streamline the procedure change process to provide a more responsive turnaround for required changes while maintaining regulatory requirements.
2. Evaluate and identify procedures to be upgraded prior to restart. Include the areas identified for correction identified from Action Plan R-3.2.1.1, *Procedure Adherence*.
3. Upgrade the procedures required for restart.
4. Resolve related regulatory issues:
  - III.6 - Evaluate the need for a plant-wide procedure upgrade program; identify and upgrade critical procedures needed to support restart and safe operations.
  - III.7 - Resolve deficiencies associated with the temporary procedure change (TPC) process and the biennial review process.
  - III.11 - Resolution of recurring maintenance inadequacies (parts, procedure violations).
  - NRC-43 Upgrade management processes and programs identified by the team.

### **C. Restart Readiness and Assessment**

This section establishes a Restart Readiness Review and Assessment Process to promote an error-free startup and subsequent successful operation. This process will confirm the effectiveness of actions taken to address performance deficiencies that must be corrected before startup and assure that any issues identified during the outage are resolved satisfactorily. This process builds upon NYPA's successful process used to confirm the acceptability of J. A. FitzPatrick's restart plan and incorporates lessons learned from other utilities' restart and improvement plans.

The process consists of four distinct assessment methods:

1. System Certification provides for final walkdowns of focus systems (systems that have been identified through the IP3 Individual Plant Examination) and subsequent acceptance of these systems by Operations.
2. Startup Evaluation for Readiness Team (SERT) readiness certification provides an independent assessment of selected plan results.
3. The Operational Readiness Review process provides RMT review of the IP3 readiness for restart.
4. Quality Assurance oversight is provided throughout the entire restart process for independent assessment of the effectiveness and acceptability of the plant for restart.

#### **1. System Certification**

IP3 will develop a process to involve plant and support organizations in walkdowns of plant systems important to safety and reliability to demonstrate plant readiness for operation. Material readiness of the plant systems will be compared to objective criteria. Key elements of the criteria include probabilistic risk assessment (PRA) input, a review of systems involved in power reductions or trips, and susceptibility to single failures that affect plant reliability. A team under the leadership of the system engineer will be responsible for the development, execution, tracking and performance of system turnovers to operations for restart of the unit. This team will include maintenance, operations and engineering personnel.

The System Certification process will be controlled by a procedure that integrates the system readiness review and turnover to operations with the outage scope control and work control processes. The procedure will require documentation that the system has been adequately reviewed and will define any work items to be completed.

This system readiness concept will be carried through to the completion of power ascension testing to assure that systems are ready for identified startup and power ascension plateaus. Feedback from system operating experience during this period will be used to direct engineering or maintenance actions necessary to resolve performance deficiencies.

Certification by the System Engineer and acceptance by operations will be predicated upon performance measures for key plant systems. These performance measures will include, but not be limited to, the following:

- Plant Identified Deficiencies (PID), none with safety significance.
- Inoperable automatic functions.
- Temporary modifications.
- Systems will perform their intended functions.

## **2. Startup Evaluation for Readiness Team (SERT) Certification**

The SERT is intended to provide an independent assessment of the readiness of NYPA for restart of IP3. The scope of the SERT includes management, policy, and coordination issues derived from the technical issues defined in the RCIP, including selected NRC Assessment Panel restart issues. The members assigned to SERT will be selected to comprise a team of qualified, experienced individuals with a diverse background in management, operations, maintenance, engineering, oversight and assurance and other skills. The team qualifications will assure that issues are examined thoroughly and actions taken by the organization in response to plan requirements successfully resolve the issues and result in the performance improvements required.

A SERT Action Plan Manual will be developed to provide a listing of the management, policy, and coordination issues that will be examined, as well as the primary source for each issue. Should the need arise, the SERT leader has the flexibility to expand the scope of the assessment beyond these initial issues.

### *Step One: Initial Review of Issues*

Each SERT member will be assigned one or more specific issues to analyze. During this phase of the SERT process, each team member will become familiar with all assigned issues. Source documentation will be identified and reviewed, and a general approach for analyzing each issue will be developed. This will include determining what documents need to be reviewed, which personnel need to be interviewed, and what field observations need to be made. Preliminary Issue Analysis sheets developed for each issue will be included in the SERT Action Plan

Manual. The initial review of issues will begin during this phase and will continue on an individual basis until the actual SERT assessment commences.

### *Step Two: Analyze Issues*

The SERT evaluation will commence when those issues selected for SERT review have been completely resolved to the satisfaction of the manager of that issue. The SERT Manual will list the specific issues that must be completed prior to the start of the SERT.

Each SERT member will be assigned lead responsibility for one or more issues. Issue Analysis sheets will be used as a starting point for conducting the assessment. Team members will use interviews, document reviews, and field observations to assess the effective resolution of each issue.

In the course of their analysis, team members will determine if each issue is effectively resolved. The Team Leader will keep the IP3 Resident Manager and the RMT informed on the progress of the assessment.

### *Step Three: Document Results*

At the conclusion of the SERT evaluation, a report will be prepared that documents the findings and conclusions of the team. This report will be one of the major inputs to the Executive Vice President - Nuclear Generation's determination that the plant is ready for the NRC Operational Readiness Assessment Team (ORAT) inspection.

## **3. Operational Readiness Review**

Another key process to ensure an effective self-assessment of readiness for startup and successful operations is the conduct of management assessments of performance. The collective perspective of the management team will provide the necessary focus on critical work activities and issues that need to be resolved.

The Operational Readiness Review is modeled after recent plant startups and recoveries at other nuclear plants. Concurrent with the System Certification and the SERT process, line and support managers will assess the preparedness of their organizations and the readiness for startup of systems, equipment and processes for which they are responsible. The assessment methodology will involve the review of acceptability of results in five areas, primarily using presentations by managers to the RMT. In addition, the RMT will use personal observations of

processes and performance in the course of their management duties. The five areas to be assessed and reviewed by the RMT are:

a. **Management Effectiveness**

- Review the process for maintenance and engineering backlog management, including responsibility for management, identification of critical equipment and operability issues, and accurate communication to management.
- Evaluate the adequacy of surveillance test scheduling to assure there are adequate checks, responsibility assignments, and control.
- Assure a startup schedule is available to sequence activities necessary to support plant startup.
- Determine the status and acceptability of operating experience review and any unresolved SOER and ORG issues.
- Review the outstanding commitment assessment results to determine that all appropriate items have been resolved.

b. **Operations Effectiveness**

- Review the effectiveness of the operability verification process to track, communicate and resolve operability issues.
- Evaluate the nature and extent of operations issues, including a backlog review of maintenance, engineering, and temporary modifications. Evaluate the potential for these to impact the objective of an error-free start-up.
- Assess the outstanding equipment clearances to assure any operability issues are identified and resolved.
- Evaluate simulator training results for operating crews for startup.
- Evaluate the plan and schedule to assure post-maintenance tests are completed successfully.
- Assess shift crew performance.

c. **Maintenance Effectiveness**

- Assure staffing is adequate to support startup shift work requirements.
- Evaluate key plant system performance issues and determine risk associated with remaining open maintenance or modification activities.

d. **Support Effectiveness**

- Assure adequate engineering support is provided to support shift work requirements and operability determinations.
- Assure adequate shift staffing for RP, chemistry, QA/QC, construction services and reactor engineering to support start-up.



e. **Startup Plan**

- Assure designated managers are assigned to manage plant startup activities through the completion of power ascension.
- Provide specific actions to verify the closure of start-up commitments and other necessary actions.

**4. Quality Assurance Role**

The Quality Assurance organization will provide oversight and assurance services to management in determining continuing acceptability of plant operations. Their role in the RCIP will include the following:

- a. Continuing oversight of facility operations to assure that Technical Specification and QA program requirements are met.
- b. Independent verification of acceptable closure of regulatory closeout issues.
- c. Independent verification of the closure and acceptability of selected RCIP action plans and an analysis of the results achieved.
- d. Implementation of effective, performance-based evaluations to identify performance problems and assure appropriate corrective actions are taken.
- e. Participation in the SERT Certification process.
- f. Participation in the System Certification process.

The QA organization will make periodic reports to the RMT to apprise it of the effectiveness of RCIP and organizational activities for restart.

**D. Startup Plan**

An essential element of startup readiness is a plan for a deliberate and controlled return to power operation. This plan provides for augmented shift coverage to handle anticipated additional work loads, dedication of maintenance and support staffing, identification of special testing and power ascension hold points, and contingency plans for plant problems. It also establishes a clearly defined startup sequence and start-up and power ascension plan. Primary responsibility for the startup plan rests with the IP3 Resident Manager.

**1. Senior On-Shift Manager**

IP3 will establish a senior on-shift manager to assure the successful completion of the startup process through power ascension. The senior on-shift manager will provide continuous management representation and presence during the plant startup, subsequent power ascension to full power and for a period as determined by the Resident Manager. The primary function of this position is to ensure that

the Shift Supervisor and the shift operating staff's command and control authority are not diluted by the increased level of activity during the start-up and power ascension. The on-shift manager will assume responsibility for management of the overall schedule to assure decisions are made as necessary to support the Shift Supervisor in conducting plant operations in accordance with the schedule. The shift manager will also be responsible for assessing the conduct of operations, maintenance and support organizations. On-shift manager duties include:

- a. Providing 24-hour, 7-days/week shift coverage as the direct representative of the Resident Manager.
- b. Managing the integrated startup and plant schedule, assuring all critical issues are scheduled and planned for completion at the appropriate milestones, and planning ahead for the upcoming shifts.
- c. Providing direction to appropriate support managers for resolution of plant support issues.
- d. Responding to issues identified by the Shift Supervisor, assigning appropriate actions and ensuring that each issue is properly resolved.
- e. Calling in additional assistance, as necessary, to resolve critical issues.
- f. Providing management status and assessments as directed by the RMT.
- g. Advising management of significant schedule restraints and potential schedule impacts.

## **2. Preparation and Management of the Startup Sequence**

Following successful completion of the verification activities to confirm readiness for plant restart, the plant will be taken through the startup sequence in preparation for resumption of power operation. The startup sequence consists of those activities that will verify plant physical readiness through completion of required post-maintenance tests, preventive maintenance, completion of Technical Specification surveillance tests, and configuration of the plant to startup status. The IP3 Manager of Planning and Scheduling will prepare and maintain a detailed startup sequence schedule to be managed under the work control organization.

## **3. Startup and Power Ascension**

The startup and power ascension process will be carefully controlled through a startup and power ascension plan that will include:

- Management review and approval of plant configuration and mode changes
- Required testing and inspection
- Contingency plans
- A critical path schedule

The schedule will include holds at various stages. The holds permit time to confirm satisfactory plant performance, assure that open issues are resolved satisfactorily, and evaluate self-assessment results. Final approval of acceptability to proceed will be made by the Resident Manager following review and evaluation by the Plant Leadership Team. The following hold points will be scheduled (as defined in appropriate operating procedures):

1. Transition to above 200° F (Cold Shutdown)
2. Transition to above 350° F
3. Completion of Hot Shutdown (547° F) and transition to criticality
4. Completion of 30% power plateau
5. Completion of 50% power plateau
6. Completion of 75% power plateau
7. Completion of 90% power plateau

The startup and power ascension plan establishes testing and acceptance criteria at various power plateaus. The testing will be structured around Technical Specification required surveillance tests. During the plant heatup and power ascension, on-shift maintenance and support crews will be assigned to perform frequent plant walkdowns to assure acceptable equipment performance. They will take action to correct plant problems including steam and other fluid leakage and to direct resources as necessary to corrective maintenance activities.

The plan will contain contingency processes for emergent issues during startup. The most effective element of contingency planning is the establishment of augmented shift maintenance crews consisting of maintenance and engineering support personnel. These crews will assure that maintenance activities are successfully completed and the plant material condition during heatup and power ascension is maintained. The plan will also contain provision for a scheduled maintenance shutdown following the 30% power plateau should the Resident Manager and RMT deem it necessary to place the plant in a shutdown condition to correct deficiencies.

### III. - CONTINUOUS IMPROVEMENT PLAN

NYPA management has developed two plans for improving performance at IP3: the *Restart Plan* (Section II) and the *Continuous Improvement Plan* (CIP). Both plans include action plans and specific work activities that can be tracked and reported with assigned responsibilities for plan implementation. The *Restart Plan* defines actions required to effect immediate performance improvements and provide the direction for restart of the plant.

This section of the RCIP is the *Continuous Improvement Plan*. It defines station and IP3-related activities at WPO over an approximate three-year planning horizon. It continues the planning process of the *Restart Plan* and provides for long-term solutions. If closure of specific *Restart Plan* actions results in the need for additional actions, these additional actions will be incorporated into the appropriate *Continuous Improvement Plan* using the revision process discussed in Section IV, *Plan Management*. This will provide a controlled mechanism for continuing to link the two plans.

The Nuclear Generation Business Plan establishes objectives and performance measures used to track organizational performance. Management will use periodic performance reports to trend performance against the CIP.

#### A. Outline of the Plan

The *Continuous Improvement Plan* will guide IP3 toward excellent performance as defined by our strategic objectives contained in the Business Plan. It focuses on issues that must be resolved to achieve significant, permanent performance improvement at IP3 by adopting initiatives and corresponding strategic approaches to performance improvement.

As discussed in Section II.B, *Restart Action Plans*, the RMT conducted a planning session to develop a strategic-based approach to performance improvement. The RMT first identified four broad, department-wide areas in which major improvements were required. These areas, called initiatives, were:

- Management Skills and Effectiveness
- Organizational Effectiveness
- Program and Process Improvements
- Strategic Practices and Operating Philosophy

For each initiative, the RMT developed a set of objectives that provides verifiable expectations for performance. One or more strategies were then created to

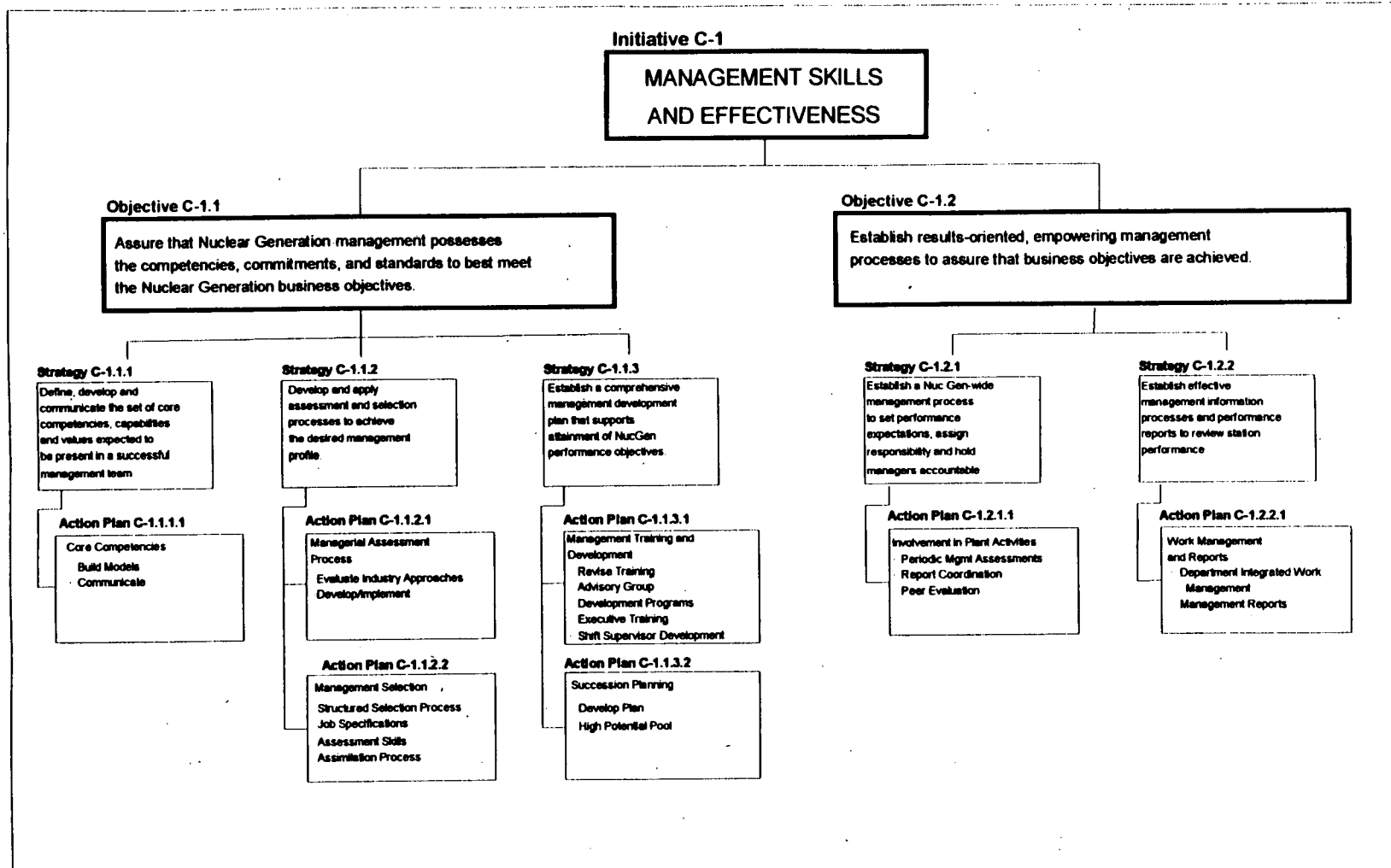
describe how each objective would be achieved. Each strategy, in turn, has one or more action plans that define the specific tasks to be accomplished.

For example, refer to Figure 2, "Continuous Improvement Plans." Under "Management Skills and Effectiveness," the first objective is "C-1.1, Assure That Nuclear Generation Management Possesses the Competencies, Commitments, and Standards to Best meet the Nuclear Generation Business Objectives." The first of three strategies to achieve this objective is "C-1.1.1, Define, Develop and Communicate the Set of Core Competencies, Capabilities and Values Expected to be Present in a Successful Management Team." The action plan under this strategy is "C-1.1.1.1, Core Competencies."

The remainder of Figure 2 provides a roadmap of action plans relating to continuous improvement. Figure 1 in Section II.B provides the action plans related to restart.

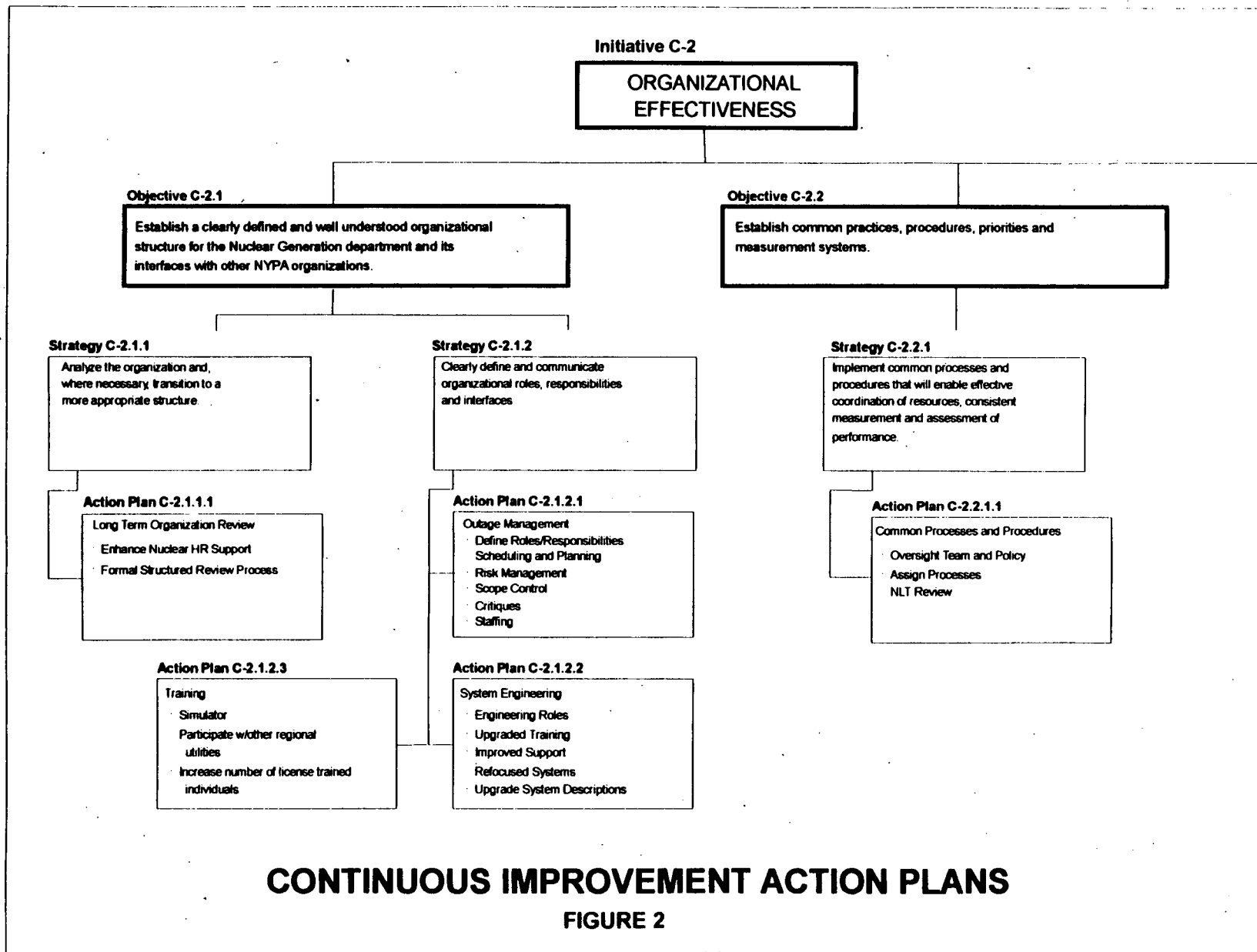
#### **B. Continuous Improvement Action Plans**

The continuous improvement action plans that follow are organized according to Figure 2. The action plans include a brief description, the action plan manager, and the key action plan steps. Appendix D provides a cross reference between the root and contributing causes and the RCIP strategies.



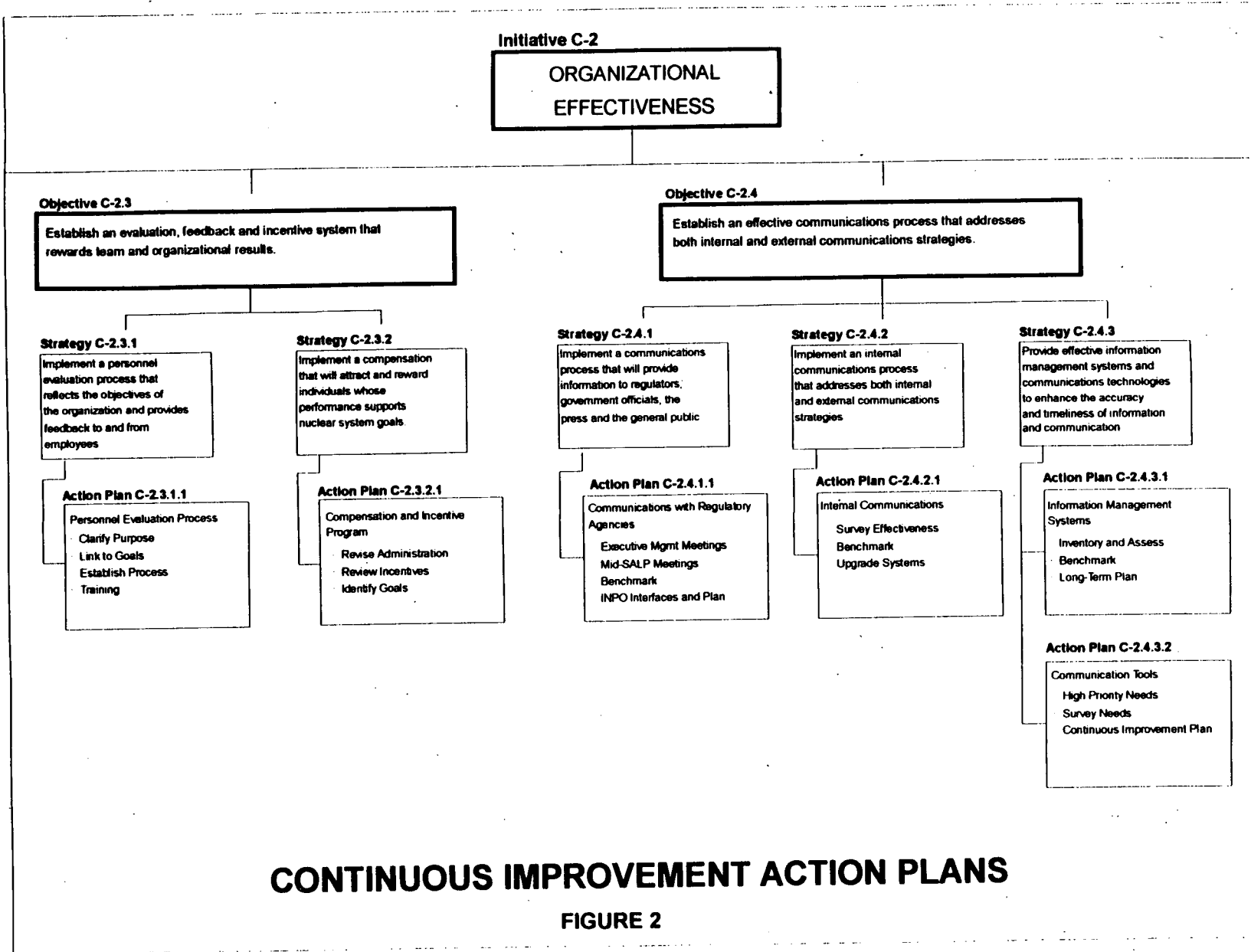
# CONTINUOUS IMPROVEMENT ACTION PLANS

FIGURE 2



# CONTINUOUS IMPROVEMENT ACTION PLANS

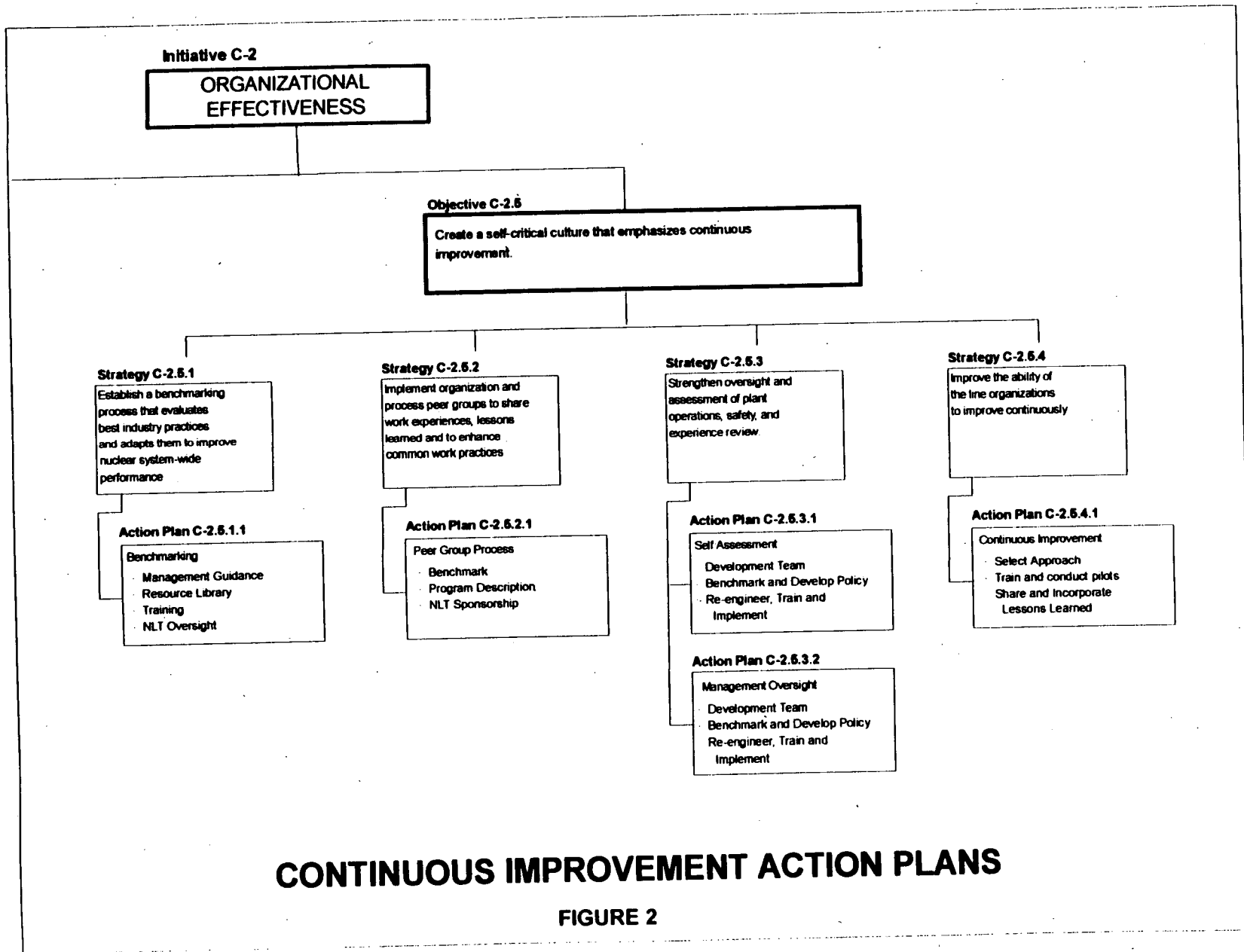
FIGURE 2



# CONTINUOUS IMPROVEMENT ACTION PLANS

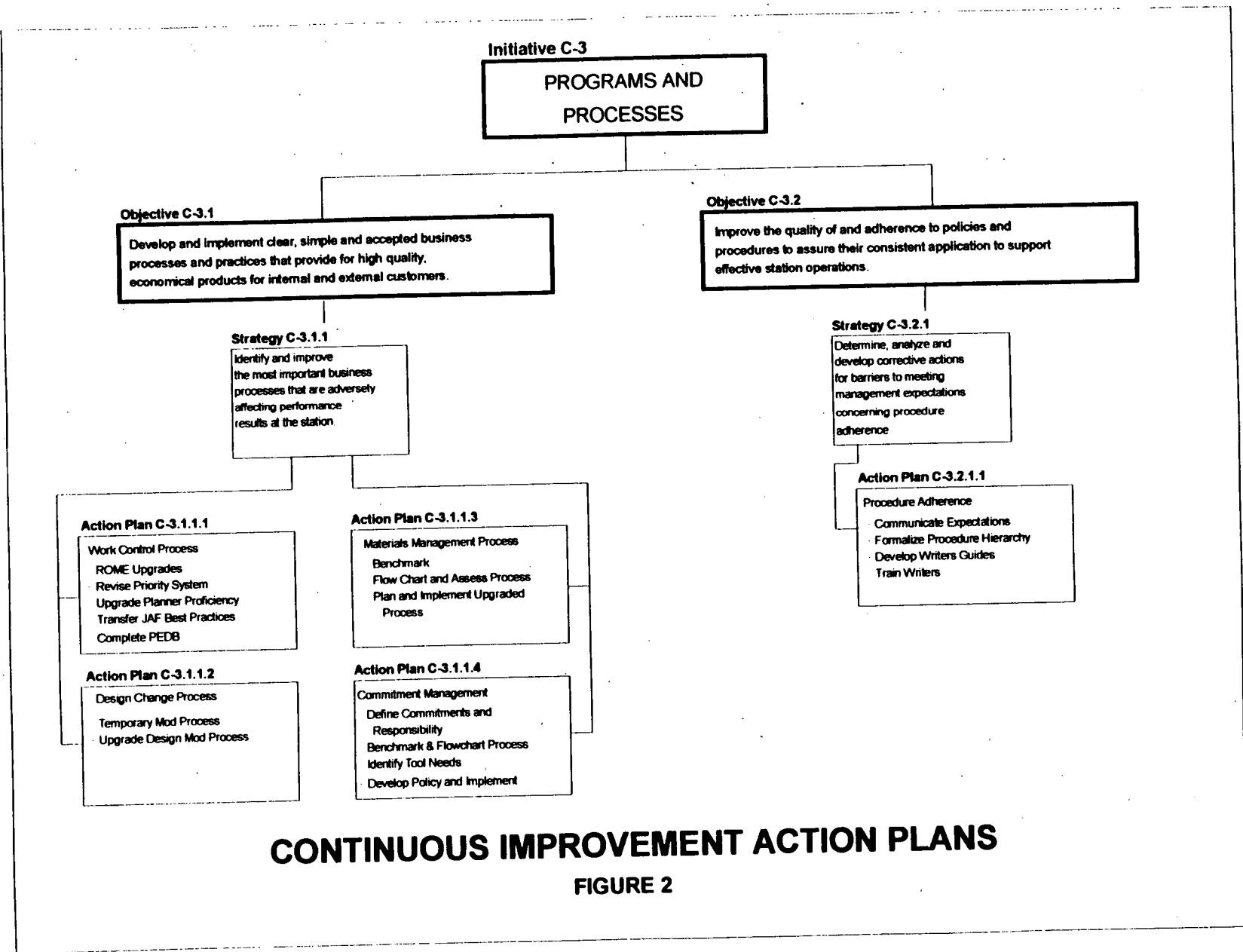
FIGURE 2





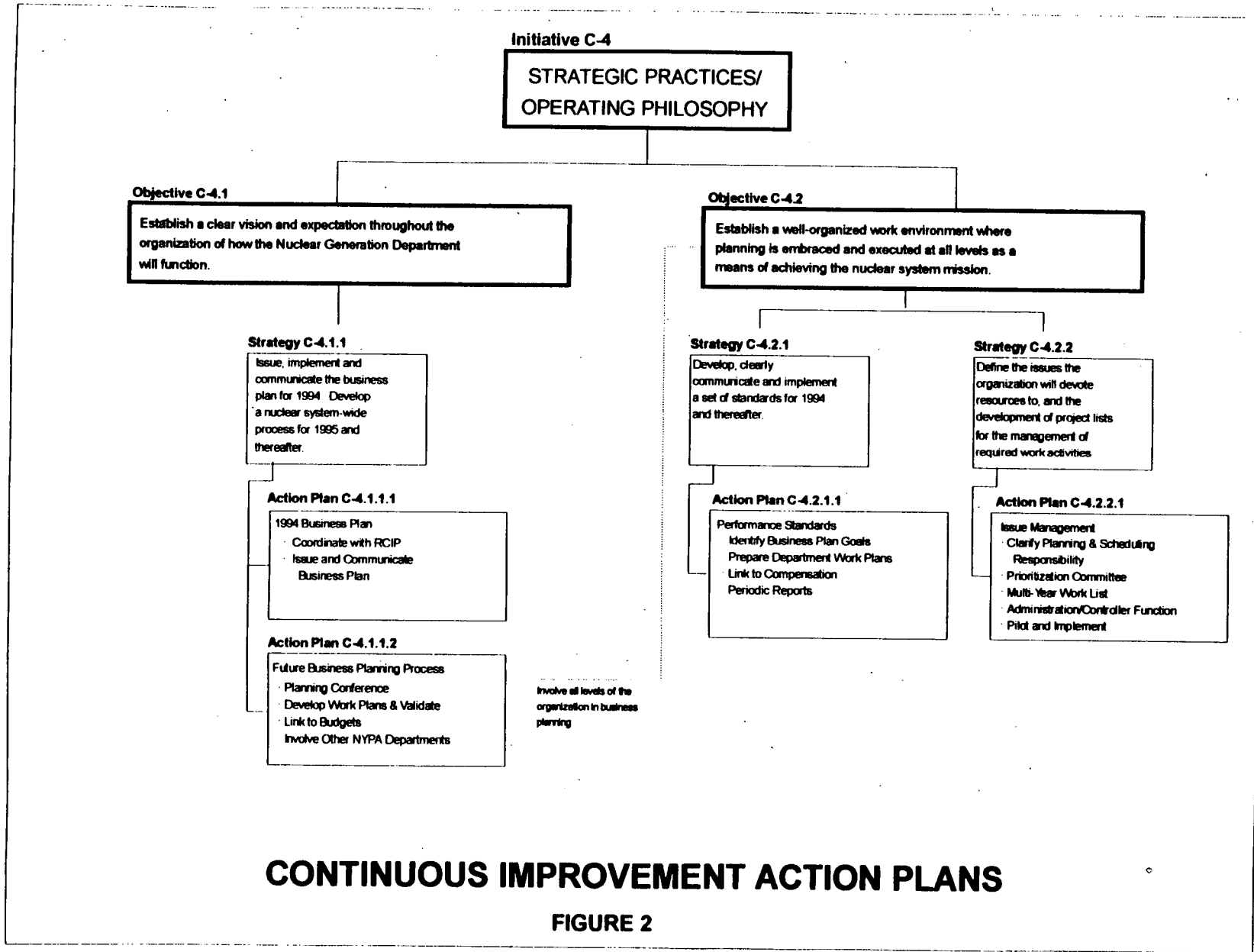
## CONTINUOUS IMPROVEMENT ACTION PLANS

FIGURE 2



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FIGURE 2



# CONTINUOUS IMPROVEMENT ACTION PLANS

FIGURE 2

## 1. MANAGEMENT SKILLS AND EFFECTIVENESS

### OBJECTIVE C-1.1

Assure that Nuclear Generation management possesses the competencies, commitments, and standards to best meet the Nuclear Generation business objectives.

**STRATEGY C-1.1.1:** Define, develop and communicate the set of core competencies, capabilities and values expected to be present in a successful management team.

#### ACTION PLAN C-1.1.1.1: CORE COMPETENCIES

Develop core competency models that describe the management and leadership characteristics needed by Nuclear Generation managers to meet long term business objectives. The models will be used for management assessment and selection, development programs, and succession planning.

**ACTION PLAN MANAGER:** A. Smith-Law      Manager, Mgmt. Training and Org. Dev.

#### ACTION PLAN STEPS

1. Building upon the results from the Business Planning Conference in Action Plan C-4.1.1.2, *Future Business Planning Process*, catalog the critical success factors and behavioral characteristics that serve as the foundation for building core competency models.
2. Build core competency models using conference results, an industry generic model, and internal interviews.
3. Communicate models to Nuclear Generation employees, educating them in the foundation the models provide for the appraisal process, succession planning, and management and executive development.

**STRATEGY C-1.1.2:** Develop and apply assessment and selection processes to achieve the desired management profile.

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**ACTION PLAN C-1.1.2.1:           MANAGERIAL ASSESSMENT PROCESS**

Implement a managerial assessment process that assesses Nuclear Generation managers against the core competencies necessary to effectively perform their current job or a position of greater responsibility.

**ACTION PLAN MANAGER:**     A. Smith-Law           Manager, Mgmt. Training and Org. Dev.

**ACTION PLAN STEPS**

1. Research and evaluate successful managerial assessment processes currently in use in the utility and appropriate non-utility industries.
2. Present recommendations to senior management on the benefits of internal and external managerial assessment processes and obtain approval.
3. Develop and implement the approved methodology.

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**ACTION PLAN C-1.1.2.2:           MANAGEMENT SELECTION**

Develop a structured selection and assimilation process for executives, managers, and supervisors.

**ACTION PLAN MANAGER:**     A. Smith-Law           Manager, Mgmt. Training and Org. Dev.

**ACTION PLAN STEPS**

1. Develop a structured selection process. This process will address the interviewing aspect of selection by identifying interviewers and ensuring they assess applicants' knowledge and experience against the core competencies required by Nuclear Generation. The process includes assessment and evaluation of potential as an effective manager.
2. Establish written job specifications for recruiting and a team approach between the hiring manager and the assigned recruiter. Ensure specifications are provided for the assessment and evaluation process in step 1 above.

3. Develop written guidelines for interviewers and conduct training to enhance their skills in assessing applicants.
4. Develop a formal process to ensure timely and appropriate assimilation of new managers and supervisors into their new positions. (This process will include both external hires and internal promotions and transfers).
5. Ensure job postings and external job advertisements reflect the core competencies required for open positions.

**STRATEGY C-1.1.3:** Establish a comprehensive management development plan that supports attainment of Nuclear Generation performance objectives.

**ACTION PLAN C-1.1.3.1: MANAGEMENT TRAINING AND DEVELOPMENT**

Ensure Nuclear Generation receives results-oriented management training and development that addresses the needs of all levels of management.

**ACTION PLAN MANAGER:** A. Smith-Law      Manager, Mgmt. Training and Org. Dev.

**ACTION PLAN STEPS**

1. Assess current training programs against core competency models to identify gaps.
2. Form a Nuclear Generation Management Training Advisory Group to work closely with Human Resources to review new training programs and identify emerging training gaps.
3. Revise current training, if needed, and develop new programs to fill gaps identified. Management training programs will be results-oriented and based on the core competency models.
4. Design a train-the-trainer program, and identify Nuclear Generation managers to be co-trainers for training programs.
5. Develop and conduct seminars for all Nuclear Generation managers to educate them about the current training programs and their personal role in the development of their staff.
6. Establish effective management development programs complementary to the competency-based training programs including:
  - Targeted developmental experiences, e.g., short-term job assignments, task force or committee assignments, participation in industry groups including INPO peer evaluations, executive oversight groups and management conferences, mentoring by senior management, and on-the-job coaching.
  - Guidelines on how to assess development needs, write realistic development plans, monitor progress, and coach.
  - A plan for each manager with longer-term development needs identified annually (including action plans to address development needs).





**OBJECTIVE C-1.2**

Establish results-oriented, empowering management processes to assure that business objectives are achieved.

**STRATEGY C-1.2.1:** Establish a Nuclear Generation-wide management process to set performance expectations, assign responsibility and hold managers accountable.

**ACTION PLAN C-1.2.1.1: MANAGEMENT INVOLVEMENT IN PLANT ACTIVITIES**

Establish a management process for involvement by NYPA managers in assessing important station activities. Management involvement is intended to provide first-hand knowledge of plant activities, assess plant activities and problem correction, report on performance issues and problems to a wider audience, and enhance management's understanding of challenges to successful performance.

**ACTION PLAN MANAGER:** G. Fogarty General Manager, Support Services

**ACTION PLAN STEPS**

1. Establish a schedule for management assessment of specific station activities such that designated IP3 and WPO managers conduct periodic assessments at IP3 and JAF. The activities to be observed include (but are not limited to) the following:
  - Maintenance
  - Operations rounds and plant evolutions
  - Surveillance tests
  - Management meetings
  - Control room operations
2. Establish a vehicle for reporting results to management. Provide reports to the Operations Review Group to assign corrective actions and trend performance and process deficiencies.
3. Develop a standardized INPO-type peer evaluation process to be used to guide the mechanics of the assessment process and preparation of reports. Develop and implement training for the process.
4. Designate those managers involved and provide the required training.

**STRATEGY C-1.2.2:** Establish effective management information processes and performance reports to review station performance periodically and to assure that appropriate management visibility and direction are provided for managing risk to Nuclear Generation objectives.

**ACTION PLAN C-1.2.2.1: WORK MANAGEMENT AND REPORTS**

Establish and implement a work management and reporting system that can be used to manage department work activities. Management reporting processes will be improved to provide performance-based reports and management-by-exception reports wherever possible.

**ACTION PLAN MANAGER:** J. Russell Director, Nuclear Administrative Programs

**ACTION PLAN STEPS**

1. Develop and implement an effective department work management and tracking system that will satisfy department needs. Reconcile and integrate the needs with the use of ACTS, ROME, PARIS and other work management or information systems. This will be accomplished in conjunction with the project to develop an integrated Nuclear Generation Action and Commitment Tracking System.
2. Establish the management reports needed to manage the station activities properly to meet overall objectives, including the appropriate information format, content and frequency. As a minimum, redesign the station daily report, weekly management report, project management reports, and action tracking reports to provide clear and unambiguous information that will assist Nuclear Generation management.

## 2. ORGANIZATIONAL EFFECTIVENESS

### OBJECTIVE C-2.1

Establish a clearly defined and well understood organizational structure for the Nuclear Generation Department and its interfaces with other NYPA organizations.

**STRATEGY C-2.1.1:** Analyze the organization and, where necessary, transition to a more appropriate structure.

#### ACTION PLAN C-2.1.1.1: LONG-TERM ORGANIZATION REVIEW

Establish a methodology for evaluating the effectiveness of the Nuclear Generation organization structure and interfaces with other NYPA organizations. Reviews are to be performed after changes to key work processes and as part of the Nuclear Generation business planning process.

**ACTION PLAN MANAGER:** R. Lauman Director, Business Analysis

#### ACTION PLAN STEPS

1. In collaboration with Human Resources, establish a nuclear HR support capability consistent with top performing utilities. This capability should include organizational development expertise for Nuclear Generation and nuclear personnel recruitment expertise.
2. Establish a process for reviewing the organizational structure, roles and responsibilities due to changing requirements (for example, regulatory, business objectives, market conditions or staff reassignment).
3. On an annual basis, and in conjunction with the strategic business planning process, conduct a review of the roles, responsibilities and structure of the Nuclear Generation organization:
  - Review the Nuclear Generation mission, vision and goals.
  - Determine which work processes are key in achieving the mission, vision and goals, and establish appropriate teams to:
    - examine and re-engineer those processes
    - establish necessary roles, responsibilities, and interfaces
    - implement necessary organizational changes
    - obtain buy-in from stakeholders
  - Revise organizational documents to reflect the changes.

- Ensure training is provided so that employees understand these roles and responsibilities.
- Integrate changes with Action Plans C-1.1.2.1, *Managerial Assessment Process* and C-1.1.3.2, *Succession Planning*.

**STRATEGY C-2.1.2:** Clearly define and communicate organizational roles, responsibilities and interfaces.

### **ACTION PLAN C-2.1.2.1: OUTAGE MANAGEMENT**

Establish an outage management organization with clearly defined roles and responsibilities and appropriate processes to manage plant outages successfully and achieve Business Plan objectives for outage lengths.

**ACTION PLAN MANAGER:** W. Carano Outage Manager

#### **ACTION PLAN STEPS**

1. Establish complementary responsibilities and interfaces between the work control and outage management functions such that the work control organization will be responsible for routine outage work control functions, and during outages, they will assume responsibility for managing the startup sequence and subsequent recovery. The outage management organization will control the outage schedule in addition to being responsible for pre-outage planning and scheduling activities.
2. Define the outage management organization roles and responsibilities including:
  - Management coverage.
  - Area coordinators.
  - Project management assignments.
  - Staging and outage preparation.
  - Communications and reporting.
3. Develop standard outage scheduling and reporting methods including:
  - Train and system outage schedule management.
  - Critical-path analysis and summary requirements.
  - Milestone analysis tools and techniques including lead times.
  - Resource utilization and budget systems and processes.
  - Radiation exposure goals and management.
4. Prepare an outage plan that includes:
  - A pre-defined baseline schedule forming a skeleton for the outage including the shutdown and startup sequences, disassembly and reassembly, defuel and refuel, and primary and secondary side work.
  - Outage-specific milestone scheduling tools, methods and standards using archived outage history information.
  - Development of outage goals.

5. Develop and implement a methodology to perform more corrective and preventive maintenance and modifications during non-outage periods.
6. Define and implement a process and responsibility for shutdown risk management.
7. Establish outage and pre-outage scope control rules.
8. Establish a formal and effective outage feedback and critique (lessons learned) process.
9. Define the staffing required for the Outage Management organization.
10. Write the Outage Manual and conduct training.

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**ACTION PLAN C-2.1.2.2: SYSTEM ENGINEERING**

Establish an effective System Engineering Program that meets plants needs for system management and performance improvements and is consistent with industry norms.

**ACTION PLAN MANAGER:** G. Sadauskas      Technical Services  
Manager

**ACTION PLAN STEPS**

1. Clarify the roles and responsibilities of the system engineers relative to maintenance engineers, site engineering and other groups of major interface for each function performed by the system engineer. Use the JAF lessons learned as an input to this activity.
2. Supplement the system engineer training program with additional training focused on broadening the experience of the system engineer. This is analogous to the JAF "qualification card" approach.
3. Implement the following organizational changes:
  - Supplement each system engineering group with an experienced engineer identified as the Plant Support Engineer (3 total) to assess emergent issues and, to the extent possible, resolve the issue prior to the development of an RES.
  - Utilize the JAF lessons learned to establish an on-call, shift based engineering response team to better support operations during off-normal work hours.
4. Utilize the results of the IP3 Individual Plant Examination (IPE) in combination with ROME priority codes to focus the system engineering function on those items of highest importance to plant safety and reliability. Extend this focus to take advantage of the JAF lessons learned.

5. Establish a system engineering benchmarking process that incorporates industry lessons learned into the IP3 system engineering program.
6. Perform the system description upgrade program on a contract basis under the direction of the Technical Services organization.

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**ACTION PLAN C-2.1.2.3: TRAINING**

Implement improvements in the accredited training program and to the simulator as necessary to enhance training effectiveness at the station and WPO.

**ACTION PLAN MANAGER:** G. Fogarty General Manager, Support Services

**ACTION PLAN STEPS**

1. Conduct an assessment of the remaining accredited training programs as a follow-on activity to the INPO training assist visit for operator training and INPO accreditation renewal evaluations. Develop and implement an action plan for required upgrades.
2. Determine the simulator's conformance to the training program update requirements, and implement an appropriate upgrade plan.
3. Following licensing of additional operations staff, provide direct operations involvement in the training program including a full-time Operations-Training Liaison position and dedicated oversight assignments for crew training.
4. Participate with other regional utilities in periodic sharing of people to conduct team-assist visits and assessments of accredited training program effectiveness.
5. Participate with other regional utilities and, where feasible, share resources and establish common training systems.
6. Establish effective corporate oversight for independent assessment of accredited training program effectiveness.
7. Assign resources to update the training lesson plans consistent with accredited training program priorities.
8. Establish line organization and training curriculum committees to oversee day-to-day development and implementation needs for IP3 and WPO.
9. Establish a policy and schedule to provide sufficient numbers of NRC licensed or license-trained individuals throughout the organization including:

- Licensing and rotation of NYPA staff members through the operations on-shift organization.
- License certification of staff members as part of an overall upgrade of the organization's capabilities.
- Develop and implement an effective licensing certification program that will support timely certification and will provide essential management skills in areas such as risk-management techniques using the IPE.



## OBJECTIVE C-2.2

Establish common practices, procedures, priorities and measurement systems.

**STRATEGY C-2.2.1:** Implement common processes and procedures that will enable effective coordination of resources, consistent measurement and assessment of performance.

### ACTION PLAN C-2.2.1.1: COMMON PROCESSES AND PROCEDURES

Establish common practices, procedures, priorities and measurement systems between IP3, JAF and WPO in those areas in which the common practice will improve coordination of resources, sharing of information, staff and equipment, implementation of best practices across the organization, and oversight effectiveness.

**ACTION PLAN MANAGER:** S. Zulla Senior Technical Advisor to  
EVP

#### ACTION PLAN STEPS

1. Assign an oversight project team of WPO, IP3 and JAF representatives to oversee this action plan and work with the Action Plan manager.
2. Develop a NuAP policy that defines criteria, roles, responsibilities and accountabilities for identifying and integrating common processes and procedures within Nuclear Generation. The policy will clearly establish management's expectations for performance and effectiveness improvements.
3. Select high-priority common processes for review and conduct interviews. Potential processes include but are not limited to:
  - a. Fitness for duty
  - b. General employee training
  - c. Prioritization, planning and scheduling
  - d. Commitment and action item tracking
  - e. Work control
  - f. DER process
  - g. Emergency preparedness programs
  - h. Reporting status, monthly, daily, projects
  - i. Root cause analysis
  - j. Quality Assurance Program Procedures
  - k. Commercial grade dedication
  - l. Self Assessment (includes benchmarking)

- m. Records management and retention programs
  - n. Warehousing
  - o. Health physics practices
  - p. Industrial safety
  - q. Procedure consolidation, formatting and human factors
  - r. Security programs
  - s. Document control processes
  - t. Drawing update program
  - u. Document change request (DCR) process
  - v. Installation documents (procedures/step list/PORC review)
  - w. Special process procedures (welding, NDE)
  - x. Programmatic procedures (engineering standards), EQ, FP, Human Factors design, ALARA, setpoint control.
  - y. PORC charters.
4. Present the results to the NLT and implement appropriate common processes and procedures.
5. Establish a routine agenda item for the NLT to determine the progress and plans for future common process initiatives.

## OBJECTIVE C-2.3

Establish an evaluation, feedback and incentive system that rewards team and organizational results.

**STRATEGY C-2.3.1:** Implement a personnel evaluation process that reflects the objectives of the organization and provides timely, accurate and relevant feedback, both formal and informal, to and from employees.

### ACTION PLAN C-2.3.1.1: PERSONNEL EVALUATION PROCESS

Modify the personnel evaluation process to support Nuclear Generation Department objectives.

**ACTION PLAN MANAGER:**

G. Grochowski	Director, Reactor Engineering
K. Caruso	Director, Employment and Employee Relations

### ACTION PLAN STEPS

1. Change the focus of and revise the Nuclear Generation personnel performance evaluation process to link evaluations more closely to the business plan goals and objectives (and, by inclusion, the RCIP). The change in focus includes:
  - Define and communicate the annual goals and objectives to be used for performance evaluations as described in Action Plan C-4.2.1.1, *Performance Standards*.
  - Implement a process to define group and department level goals that will be used for individual and team goals as part of the evaluation process.
  - Assure that the results of the objective-based evaluation process are closely linked to Action Plan C-2.3.2.1, *Compensation and Incentive Program*.
2. Revise the process for preparing and conducting performance evaluations to prepare and implement evaluations based upon the objectives and goals defined in step 1.
  - Each management employee should have an achievable set of objectives for the year, communicated at the beginning of the year and linked to department and group objectives so that their contribution to overall Nuclear Generation objectives can be clearly seen.

- The evaluation cycle should require a process of mutual development, feedback and evaluation of performance results. As a minimum, the cycle should require formal mid-cycle evaluations and mutual determination of performance results at the end of the cycle. Informal feedback should be encouraged.
  - Provide for two-level review of performance results, i.e., at the first level, a manager evaluates his or her subordinate; at the second level, the evaluation is reviewed and approved by the manager's supervisor. The second level review will form the basis for evaluating managers on their effectiveness in conducting performance evaluations.
3. Conduct appropriate training on and implement the revised performance evaluation process.

**STRATEGY C-2.3.2:** Implement a compensation system that will attract and reward individuals whose performance supports nuclear system goals.

**ACTION PLAN C-2.3.2.1: COMPENSATION AND INCENTIVE PROGRAM**

Enhance the compensation and incentive program to support Nuclear Generation Department objectives.

**ACTION PLAN MANAGER:** N. Eng Finance Manager  
R. Meehan Director, Employee Benefits and Compensation (Acting)

**ACTION PLAN STEPS**

1. Review the effectiveness of incentive programs (such as Employee of the Quarter) and revise those programs to ensure they reward individual and group performance that furthers the goals and objectives of Nuclear Generation.
2. Identify incentive programs that are in use at other companies to determine their potential applicability throughout Nuclear Generation.
3. Revise the administration of the salary program to ensure that appropriate emphasis is placed on rewarding top-performing employees.
4. Identify the individual and team goals that are to be used to provide base and incentive compensation to employees including:
  - The goals should be based on the performance standards established as part of the business planning process.
  - The goals should be consistent with those identified in Action Plan C-2.3.1.1, *Personnel Evaluation Process*.

**OBJECTIVE C-2.4**

Establish an effective communications process that addresses both internal and external communications strategies.

**STRATEGY C-2.4.1:** Implement a communications process that will provide information to regulators, government officials, the press and the general public.

**ACTION PLAN C-2.4.1.1: COMMUNICATIONS WITH REGULATORY AGENCIES**

Develop and implement guidance for effective communications with the NRC and INPO.

**ACTION PLAN MANAGER:** K. Peters      Supervisory Nuclear Licensing Engineer

**ACTION PLAN STEPS**

1. Develop and implement a policy to govern management oversight of communications with regulatory agencies. Oversight should be provided so that communications receive sufficient review and approval to assure factual, technically correct, and consistent information is provided to the regulators.
2. Conduct periodic, strategically focused meetings with the NRC Commissioners, senior NRC staff, and NYPA executive management. These meetings should center on performance results and feedback from the NRC and be complementary to other forms of communication with the NRC.
3. Conduct routine mid-SALP status meetings with Region I for each station.
4. Benchmark against other nuclear utility programs for communications with NRC and INPO.
5. Evaluate current INPO interfaces and contacts, including roles and the purpose of communications, and establish more effective interface with the approval of the NLT.
6. Develop a communications plan to ensure consistent and beneficial usage of INPO resources. Publish a list of INPO contacts and their NYPA counterparts. Publish a list of available INPO materials at each site.

**STRATEGY C-2.4.2:** Implement an internal communications process that addresses both internal and external communications strategies.

**ACTION PLAN C-2.4.2.1: INTERNAL COMMUNICATIONS**

Improve internal communication practices to provide proactive, accurate, timely and effective written and oral communications throughout Nuclear Generation.

**ACTION PLAN MANAGER:** C. Patrick Director, Nuclear Policy and Information

**ACTION PLAN STEPS**

1. Conduct a sampling survey of internal communications effectiveness using methods (verbal or written) such as:
  - Feedback meetings or mail box
  - Test message on E-Mail
  - Coupons on newsletters
  - Periodic evaluations of effectiveness of tailgate meetings
  - Track performance indicators - rework procedure revisions
  - Formal survey instruments
2. Analyze the effectiveness of the current NYPA nuclear internal communication practices:
  - Nuclear Generation Bulletin Board
  - Effectiveness of Senior Management and other Meetings
  - E-Mail
  - Newspapers / memorandums
  - Video Display
  - Plant Status Phone Line
  - Speak-Out Program
  - Tailgate Meetings
3. Benchmark outside nuclear and non-utility industries
4. Make appropriate changes to and implement the revised internal communications process.

**STRATEGY C-2.4.3:** Provide effective information management systems and communications technologies to enhance the accuracy and timeliness of information and communication.

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**ACTION PLAN C-2.4.3.1: INFORMATION MANAGEMENT SYSTEMS**

Optimize Nuclear Generation Department information management systems to support organizational efficiency initiatives and improve the configuration control of the station.

**ACTION PLAN MANAGER:** J. Russell Director, Nuclear Administrative Programs

**ACTION PLAN STEPS**

1. Optimize or enhance existing information management systems:
  - Implement an effective PEDB upgrade process.
  - Upgrade the use of ROME to support the station needs more effectively.
2. Enhance data management to improve efficiency:
  - Centralize responsibility for and coordinate required databases.
  - As feasible, interconnect appropriate databases and systems to improve efficiency.
3. Provide a plan coordinated by NISCC to manage long-term information needs efficiently and cost effectively.

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**ACTION PLAN C-2.4.3.2: COMMUNICATIONS TOOLS**

Improve the usage of existing communications tools required for the effective operation of the department, and determine any cost-effective enhancements.

**ACTION PLAN MANAGER:** J. Russell Director, Nuclear Administrative Programs

**ACTION PLAN STEPS**

1. Improve the usage of existing tools by enhancing their connectivity and improving training:
  - Implement the common E-mail system so that access and transfer capabilities are functional.



- Establish modem connection capability to allow routine file transfers from entities not on the LAN.
  - Train relevant personnel in the use of these communications tools, specifically including the planned upgrade of the E-mail system.
2. Determine and implement the economically viable options for enhancing communications tools:
- Improved (less complicated) remote network access
  - Improved off-hours communications (particularly at WPO)
  - Installation of a voice mail system
3. Develop and implement a continuous improvement program for internal communications technologies, including:
- Ongoing surveys of Nuclear Generation Department employees to determine their need for communications tools
  - Review of existing communications tools to determine deficiencies and over- and under-use.

**OBJECTIVE C-2.5**

Create a self-critical culture that emphasizes continuous improvement.

**STRATEGY C-2.5.1:** Establish a benchmarking process that evaluates best industry practices and adapts them to improve nuclear system-wide performance.

**ACTION PLAN C-2.5.1.1: BENCHMARKING**

Establish a benchmarking methodology to assist managers in evaluating Nuclear Generation and their groups against other NYPA units and best industry performance and practices and in identifying actions to improve group and Nuclear Generation system-wide performance.

**ACTION PLAN MANAGER:** E. DeGennaro Senior Technical Account Specialist

**ACTION PLAN STEPS**

1. Establish management guidance and expectations for benchmarking including:
  - Guidelines on conducting benchmarking.
  - Identification of processes and activities to be evaluated.
  - Preparation of a program plan (steps required).
  - Designation and training of participants.
  - Pre-visit preparation and planning.
  - Presentation of evaluation results to management and the organization (written reports, presentations and action plan recommendations).
2. Create a resource library of contacts and data and performance measures.
3. Develop and conduct training for managers and individuals assigned to conduct benchmarking.
4. Establish a routine process for sponsorship and approval for benchmarking activities by the NLT or PLT as appropriate. Develop benchmarking plans in conjunction with the Business Plan and Department Plans.

**STRATEGY C-2.5.2:** Implement organization and work function/process peer groups to share work experiences and lessons learned and to enhance common work practices.

**ACTION PLAN C-2.5.2.1: PEER GROUP PROCESS**

Establish a process to implement work function peer groups of managers, supervisors and workers to share work experience and lessons learned, enhance common work practices across Nuclear Generation and identify opportunities for continuous performance improvement.

**ACTION PLAN MANAGER:** R. Penny Senior Maintenance Engineer II

**ACTION PLAN STEPS**

1. Benchmark effective peer group processes at other multi-site utilities.
2. Prepare a program description for peer groups that will require that each group have a defined charter with performance objectives, participation and expected deliverables.
3. With NLT sponsorship and participation, identify areas for establishment of peer groups. These should initially include ROME, long-term work control, and material management improvements.
4. Implement and train the identified peer groups.
5. Develop individual peer group charters (agendas, meeting schedule, and action item tracking).
6. Conduct peer group meetings on a periodic basis and present the results to NLT on a schedule established by the NLT.

**STRATEGY C-2.5.3:** Strengthen oversight and assessment of plant operations, safety, and experience review.

**ACTION PLAN C-2.5.3.1: SELF ASSESSMENT**

Conduct an evaluation of the existing self-assessment activities, develop and implement an integrated improved self assessment policy and program. Strengthen oversight and assessment of plant operations, safety and experience review.

**ACTION PLAN MANAGER:** J. Maurer Director of Assessments

**ACTION PLAN STEPS**

1. Establish a cross-organizational team to evaluate, design and implement the integrated Self Assessment Program including a manager and representatives from each station and WPO.
2. Evaluate the existing self-assessment practices and processes, benchmark against INPO Good Practices and the best practices within the nuclear industry, and develop specific recommendations for the new program.
  - a. Conduct an evaluation and flow chart current self-assessment processes.
  - b. Benchmark the best practices within the nuclear industry.
3. Re-engineer the self assessment processes, design the desired program, and communicate, train, implement and measure performance. The following outlines the required steps:
  - a. Develop a NuAP, Program Descriptions and Implementing Procedures that delineate the process, roles, responsibilities and accountabilities for conducting self assessment.
  - b. Design the integrated Self Assessment Program to describe the process across organizational groups and delineate roles, responsibilities, accountabilities and interfaces.
  - c. Design a self-assessment performance review and measurement process with specific measurement criteria, frequencies, corrective action implementation and standards for reporting.
  - d. Develop training requirements and conduct the training.
  - e. Implement and communicate the new self assessment program
  - f. Implement the performance measurement review and effectiveness methodology and reporting process.

## **ACTION PLAN C-2.5.3.2: MANAGEMENT OVERSIGHT**

Complete and integrate assessments of the existing oversight activities. Implement an integrated, improved management oversight policy and program that will strengthen oversight of plant operations, safety and experience review to engender a self-critical culture that emphasizes continuous improvement.

**ACTION PLAN MANAGER:** R. Patch VP, Appraisal and Compliance  
(Acting)

### **ACTION PLAN STEPS**

1. Establish a cross-organizational team to evaluate, redesign, and implement integrated management oversight. The team makeup will include a manager, and representatives from the Safety Review Committee (SRC), Quality Assurance (QA), Plant Operations Review Committee (PORC), and the Operating (Experience) Review Group (ORG).
2. Evaluate existing processes and develop specific recommendations as follows:
  - Flow chart current oversight processes including management expectations.
  - Benchmark other utilities.
  - Assess and analyze the SRC and PORC work load and time required for effective review and evaluation.
3. Re-engineer the oversight processes and design the desired program.
  - Develop a NuAP policy that delineates the roles, responsibilities and accountabilities for conducting nuclear safety oversight within NYPA.
  - Design a nuclear oversight performance assessment and measurement process with specific measurement criteria, frequencies, corrective action implementation and standards for reporting.
4. Revise the implementing procedures.
5. Develop and conduct training for IP3 and WPO personnel.
6. Implement the new oversight program.
7. Implement the performance measurement assessment and effectiveness activity methodology.

**STRATEGY C-2.5.4:** Enhance the ability of the line organizations to improve continuously.

**ACTION PLAN C-2.5.4.1: CONTINUOUS IMPROVEMENT**

Implement a continuous improvement program to provide a mechanism for line management and staff to evaluate work and business processes, work together in effective teams, implement improvements, and measure results. This program will help to foster a self-critical, team-oriented culture in the organization directed toward constructive improvement and will also provide a mechanism for effectively managing process change.

**ACTION PLAN MANAGER:** J. Macchiarulo Assistant to the Resident Manager

**ACTION PLAN STEPS**

1. Select a continuous improvement approach that best suits Nuclear Generation's needs, based upon evaluation of programs at other businesses and organizations.
2. Provide training for selected employees.
3. Pilot the methodology in selected areas (1 to 3 simple processes).
4. Share lessons learned with other organizations in Nuclear Generation and promote the pilot program.
5. Incorporate lessons learned and proceduralize the program (including committees, continuous improvement teams, communications, and performance measures).
6. Publicize, communicate and promote the program throughout Nuclear Generation.
7. Facilitate implementation of the continuous improvement teams.
8. Communicate the program throughout NYPA.

### 3. PROGRAMS AND PROCESSES

#### OBJECTIVE C-3.1

Develop and implement clear, simple and accepted business processes and practices that provide for high quality, economical products for internal and external customers.

**STRATEGY C-3.1.1:** Identify and improve the most important business processes that are adversely affecting performance results at the station. Improvement will focus on immediate actions that can be taken to achieve short-term improvement followed by longer-term process redesign, using other, successful utilities as models.

#### **ACTION PLAN C-3.1.1.1: WORK CONTROL PROCESS**

Establish an effective maintenance work control process from problem identification through return of equipment and components to service.

**ACTION PLAN MANAGER:** J. Dichiaro Central Planning Manager

#### **ACTION PLAN STEPS**

1. Identify, plan and implement improvements to ROME including implementing lessons learned from JAF.
2. Revise and implement the maintenance priority system to conform to the ROME system used by JAF:
  - Apply JAF priorities to all new PIDs and PIDs without priority codes.
  - Apply the JAF priorities to the remainder of the open PIDs.
3. Develop and implement actions to upgrade the skills and proficiency of the planners with the objective of achieving a planner staff consisting predominately of experienced NYPA personnel.
4. Identify and transfer best practices from JAF to IP3 to improve planning efficiency.
5. Develop and implement a schedule to complete the Plant Equipment Database (PEDB) project in support of work control needs.

### **ACTION PLAN C-3.1.1.2: DESIGN CHANGE PROCESS**

Establish an effective design change process from issue identification through modification closeout so that design changes (including temporary modifications) are effectively and efficiently defined, implemented, and closed out.

**ACTION PLAN MANAGER:** K. Mavrikis Director, Nuclear Engineering and Design

#### **ACTION PLAN STEPS**

1. Temporary Modifications:
  - Assign ownership of temporary modifications to the system engineer for that particular system. The role of the owner would be to assess open temporary modifications, ensure that actions are in progress to resolve the condition, and ensure that temporary conditions are properly identified to station operations personnel (i.e., red-line drawings).
  - Reevaluate the priority assignment of temporary modifications in the ROME system so that open temporary modifications receive resource commitments commensurate with long-term backlog targets.
  - Establish management guidance on the implementing philosophy for temporary modifications (e.g., purpose and when they are acceptable, priority for resolution, acceptable numbers and duration).
2. Design Change Process
  - Clarify and document the roles and responsibilities of the various engineering groups with respect to a plant design changes. Specifically clarify the design authority responsibility.
  - Redesign the current design modification process using the results of the Change Control Evaluation and the EPRI Design Change Optimization Guidelines. The revised process should substantially improve the current process in terms of interfaces, responsibilities, accountabilities, and timely engineering support of operations.



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**ACTION PLAN C-3.1.1.3: MATERIALS MANAGEMENT PROCESS**

Develop and implement clear, simple and accepted material management business processes and practices that provide for high-quality, low-cost products for internal and external customers.

**ACTION PLAN MANAGER:** J. Inglis Materials Manager

**ACTION PLAN STEPS**

1. Establish a cross-organizational team to evaluate the materials management business processes and practices and benchmark them against the best practices within nuclear, fossil and related non-utility industries. The team will build from the existing Material Supply Process Team.
2. Flow chart and assess current processes using the Material Supply Process Team's output as a starting point.
3. Develop a training and communications plan, prepare a materials management handbook for the new processes, and communicate them with employees, contractors, and vendors.
4. Identify specific performance measures for the new business practices and processes and design a simple and effective reporting method.
5. Revise policies and procedures and incorporate feedback from management, supervision and line personnel received on new material management business practices and processes.
6. Implement new materials management processes.
7. Measure and report the performance of the new business practices and processes and implement corrective actions as applicable.
8. Identify, evaluate and prepare an economic business justification, based on the new integrated business processes and practices for facility improvement needs required to ensure the desired performance improvements are achieved.

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**ACTION PLAN C-3.1.1.4: COMMITMENT MANAGEMENT**

Develop an integrated commitment management and tracking system that links to action tracking, scheduling systems and department work management systems for IP3, JAF and WPO.

**ACTION PLAN MANAGER:** J. Gray Director, Nuclear Licensing  
(BWR)

**ACTION PLAN STEPS**

1. Define commitments and identify who can make commitments for Nuclear Generation.
2. Benchmark best industry practices and incorporate them in the current initiative to develop an Action and Commitment Tracking Process.
3. Flow chart the commitment management processes, compare them to the industry benchmark, and develop the desired commitment management process, including how commitments are made and what actions are to occur to meet those commitments.
4. Identify commitment management tool requirements and evaluate the available technology within NYPA. Develop the new integrated (IP3, JAF and WPO) system and ensure it links with appropriate action tracking and schedule systems.
5. Develop a revised NuAP, Program Description and Implementing Procedures for commitment management.
6. Develop training as required, and train personnel on the new commitment management process and supporting tool.
7. Implement the new commitment management process and supporting tools.
8. Develop and implement performance measures to ensure that the new processes are effective

**OBJECTIVE C-3.2**

Improve the quality of and adherence to policies and procedures to assure their consistent application to support effective station operations.

**STRATEGY C-3.2.1:** Determine, analyze and develop corrective actions for barriers to meeting management expectations concerning procedure adherence.

**ACTION PLAN C-3.2.1.1: PROCEDURE ADHERENCE**

Identify, analyze and design procedure processes that address personnel procedural adherence root causes.

**ACTION PLAN MANAGER:** K. Chapple Director, Nuclear Operations

**ACTION PLAN STEPS**

1. Formalize and implement the procedural hierarchy structure as approved by the NLT at all three locations (IP3, JAF and WPO).
2. Develop an integrated Nuclear Generation procedure preparation and revision process that includes a writers guide, human factors method, verification and validation, feedback, and skill and knowledge of personnel.
3. Train and qualify Nuclear Generation procedure writers, and implement an initiative to improve ease of use of procedures by developing an easy cross reference for procedural application.

## 4. STRATEGIC PRACTICES AND OPERATING PHILOSOPHY

### OBJECTIVE C-4.1

Establish a clear vision and expectation throughout the organization of how the Nuclear Generation Department will function.

**STRATEGY C-4.1.1:** Issue, implement, and communicate the Nuclear Generation Business Plan for 1994, ensuring that the mission, vision, and objectives of the department are appropriately communicated. Develop a nuclear system-wide business planning process and cycle for 1995 and thereafter.

#### **ACTION PLAN C-4.1.1.1: 1994 BUSINESS PLAN**

Issue and implement the Nuclear Generation Business Plan for 1994, ensuring that the mission, vision and objectives are communicated to all employees.

**ACTION PLAN MANAGER:** R. Lauman Director, Business Analysis

#### **ACTION PLAN STEPS**

1. Coordinate the Restart and Continuous Improvement Plan and the Business Plan to ensure the Business Plan provides an overview structure and envelope for the RCIP.
2. Issue the Business Plan and distribute copies of the entire Business Plan to applicable employees and make it available to all employees. Develop plan summaries for widespread distribution and posting of the plan on the E-mail bulletin board system.
3. Communicate the key elements of the plan to all Nuclear Generation Department employees including:
  - A presentation describing the goals and objectives of the Nuclear Generation Department, along with a question-and-answer session
  - Identification of the relationship between the goals and objectives of the Business Plan, and the day-to-day activities of employees.

- Identification and implementation of the responsibility of managers to serve as role models in carrying out the objectives of the plan.
4. Develop a communications plan to report performance results on achieving the goals and objectives of the Business Plan.

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**ACTION PLAN C-4.1.1.2: FUTURE BUSINESS PLANNING PROCESS**

Develop a Nuclear Generation business planning process and cycle for 1995 and thereafter.

**ACTION PLAN MANAGER:** R. Lauman Director, Business Analysis

**ACTION PLAN STEPS:**

1. Conduct a strategic Business Planning Conference to develop a common vision, mission and strategic objectives for a high-performance nuclear generation system. Conference attendees will also identify critical success factors for the organization. The conference is intended to establish and reinforce a collective focus on a common set of priorities for Nuclear Generation.
2. Involve managers and other employees in developing a work plan that links tasks to strategic objectives.
3. Validate the work plan to ensure that all tasks meet the goals and objectives of the strategic plan. The results of this validation should be to ensure that (a) all of the goals and objectives of the Business Plan are linked to tasks that are being conducted by the department (b) that all tasks being conducted by the department are linked to the goals and objectives of the Business Plan (no unnecessary tasks are being performed).
4. Identify and involve other departments that are actively involved in Nuclear Generation activities and determine the relationship between the goals and objectives of those departments relative to Nuclear Generation.
5. Develop an integrated planning cycle aligned with the NYPA budget cycle.

**OBJECTIVE C-4.2**

**Establish a well-organized work environment where planning is embraced and executed at all levels as a means of achieving the nuclear system mission.**

**STRATEGY C-4.2.1:** Develop, clearly communicate, and implement a set of standards that are associated with the goals and objectives of the Nuclear Generation Business Plans for 1994 and thereafter.

**ACTION PLAN C-4.2.1.1: PERFORMANCE STANDARDS**

Develop, clearly communicate, and implement a set of standards that are associated with the goals and objectives of the Nuclear Generation Business Plan for 1994 and thereafter.

**ACTION PLAN MANAGER:** J. Kelly VP, Nuclear Operations (Acting)

**ACTION PLAN STEPS**

1. Identify goals from the Business Plan.
2. Establish a process, format and schedule for preparing annual group and department work plans that translate the Business Plan actions to the group and department level.
3. Translate the group and department work plans into specific performance objectives for the groups, departments and individuals to be assessed under the performance evaluation process. This process should include (a) participation by all employees through the plan validation process and (b) review and final development by managers.
4. Link goals to compensation and incentives in conjunction with Action Plan C-2.3.2.1, *Compensation and Incentive Program*.
5. Develop and circulate periodic reports on progress against goals and objectives.

**STRATEGY C-4.2.2:** Define the issues the organization will devote resources to, including issue management, integrated prioritization systems, and the development of approved project lists for the management of required work activities.

**ACTION PLAN C-4.2.2.1: ISSUE MANAGEMENT**

Establish an integrated process to identify and approve issues and problems and the management systems used to cost, prioritize, and complete approved projects. This process will result in approved projects that are budgeted and scheduled over a defined time frame. The projects include modifications, O&M projects and new program development.

**ACTION PLAN MANAGER:** J. Kelly VP, Nuclear Operations (Acting)

**ACTION PLAN STEPS**

1. Implement the Prioritization process approved by the NLT that includes the following attributes:
  - Site Scheduling and Planning are responsible for controlling the integrated short- and long-range schedules.
  - A centralized scheduling group at the WPO for scheduling plant support work.
  - A prioritization committee to rank, prioritize and approve projects for further review.
  - Include the approved work list in the multi-year work plan.
  - An administrator/controller function.
  - The appropriate ROME interface.
  - A followup process to assure budget and progress are monitored to prevent overruns.
2. Pilot the process at JAF.
3. Prepare a Program Description and Implementing Procedures, as necessary, for implementation of the process at JAF and prepare a NUAP to implement it throughout Nuclear Generation.
4. Prepare a NuAP, Program Description and Implementing Procedures as necessary, conduct appropriate training and implement the process at IP3 and WPO.

## IV. - PLAN MANAGEMENT

Establishment of a strategic, performance-based Restart and Continuous Improvement Plan (RCIP) is an essential first step in achieving and sustaining the required level of performance at IP3. The critical elements missing from past improvement efforts have been effective management oversight, cross-functional organizational involvement, ownership of the required changes by line management, and processes that hold responsible managers accountable for achieving the desired performance results. This plan provides a management process to ensure that the RCIP is effectively implemented.

### A. Responsibilities

#### 1. Executive Vice President

Because the RCIP encompasses station and WPO actions needed for the restart of IP3 and achievement of lasting performance improvement, it will remain under the sponsorship and direction of the EVP of Nuclear Generation. The EVP will assure that sufficient resources are provided to complete the plan satisfactorily. In addition, the EVP will actively participate in establishing expectations for performance results with Nuclear Generation management, monitoring plan results, reviewing management presentations for the purpose of establishing accountability within the organization, and providing overall plan guidance, leadership, and monitoring.

#### 2. RMT Oversight

The Restart Management Team (RMT) has been established to provide the primary management forum to focus attention and resources to the restart of IP3. The RMT will manage the detailed implementation of the plan and reports directly to the EVP. The RMT will consist of the Resident Manager (as the chairman), Vice President of Engineering, Vice President of Operations and Maintenance, the Vice President Nuclear Business Operations and the Indian Point 3 General Managers. Membership will be periodically reviewed and adjusted by the EVP as necessary to address changes in plan management and oversight required. The RMT will conduct the periodic management review meetings and interface with the EVP as necessary to assure successful plan progress and completion.

#### 3. RCIP Project Manager

The day-to-day management of the RCIP will be assigned to a senior NYPA manager (RCIP Project Manager), responsible for assuring that the plan progresses satisfactorily. The RCIP Project Manager is responsible for the following activities:



- Coordinating and preparing management reports for the RMT,
- Assuring that RCIP activities are integrated effectively with the overall Nuclear Generation (WPO and IP3) schedule,
- Facilitating changes to existing action plans or the development of new plans as emerging issues develop,
- Establishing and managing the agenda for the periodic RMT management review meetings,
- Coordinating periodic communications and feedback to Nuclear Generation staff with respect to plan results and milestones achieved,
- Interfacing with Licensing and the NRC (as appropriate) to assure that any regulatory issues are resolved, and
- Coordinating and assuring the adequacy and acceptable closure of the RCIP action plans.

A critical element of RCIP success is to assure that the activities in the plan are integrated with other IP3 and WPO activities. To this end, the RCIP Project Manager will assure that the RCIP action plans are scheduled, responsibility is assigned, and resources are loaded against each activity. Working with WPO and plant management, the RCIP Project Manager will develop the final schedule. The RCIP Project Manager will then work with appropriate planning and scheduling organizations to progress the plan and develop appropriate management reports.

#### **4. Action Plan Managers**

Each of the action plans has an assigned action plan manager. The responsibilities of the action plan manager are to review the action plan and ensure that it is implemented effectively. In reviewing the action plan, the assigned manager will verify that the action plan is implementable and will achieve its objectives. In most cases, the action plan manager will have been involved in the development of the action plan, and this step is a certification that the action plan manager accepts ownership of the plan.

In cases where the action plan manager identifies the need to change the action plan, those changes will be submitted in writing to the RCIP Project Manager for review and approval. After the changes are approved, the action plan manager will accept ownership of the action plan.

The action plan managers are responsible to assure that the action plan steps are implemented and the intended results are achieved. A key element in the implementation of the action plans is a commitment on the part of the action plan managers to periodic assessments of plan progress. The objective of this assessment effort is to check and adjust the execution of action plan steps. In addition to these assessments, the action plan manager will determine whether specific targeted evaluations or surveillances by other organizations, such as the

IP3 Operations Review Group (ORG) or the Quality Assurance (QA) organizations, would be useful.

Action plan managers will also have responsibility for action plan closure. The closure process embodies the following elements: (1) verification that the action plan steps are complete, and (2) confirmation that the desired results have been achieved. Closure packages will be prepared for submission to the RCIP Project Manager for review, and will require documentary evidence that the action plan is complete and an analysis of the success of the plan.

#### **5. Regulatory Issue Managers**

Each of the issues tracked by the regulator will be monitored as follows:

- *Programmatic* issues (broad-based management or administrative issues) are incorporated into the RCIP and will be tracked by action plan managers and regulatory issue managers.
- *Hardware and technical* issues will be tracked by regulatory issue managers.

In both cases, the regulatory issue managers and action plan managers will be responsible for managing their issues and action plans through implementation and will be accountable for results. In addition, the regulatory issue managers will conduct self-assessments of the results of their assigned issue, and present the assessment results to the RCIP Project Manager.

#### **6. Safety Review Committee (SRC)**

As part of its oversight review responsibilities, the SRC has reviewed the RCIP. This review concluded that the RCIP includes the important performance issues, adequately addresses the root causes, and includes corrective actions that, when implemented, will result in IP3 being ready to restart and resume power operation.

During implementation of the RCIP, the SRC's focus will be on the performance resulting from the implementation of the associated action plans. The SRC will examine the integrated results of the restart improvement efforts and submit broad-based recommendations to the Executive Vice President-Nuclear Generation.

#### **B. Emerging Issues and Changes to the Plan**

The action plans in the RCIP have been designed such that the actions will result in continuing improvements in the capability and performance of the organization. In cases where action plan activities require further evaluation of specific issues and determination of additional actions to be taken, those actions will be incorporated,

if appropriate, in the RCIP using a formal change process to assure coordination and appropriate resource allocation.

The RCIP will be controlled by a documented process summarized below. Changes to the RCIP will be managed using an RCIP Change Form controlled by the RCIP Project Manager. The Change Form documents any changes to an action plan in the RCIP as follows:

1. Action Plan Closure - The Change Form is completed specifying the dates of completion and closure references that provide an auditable trail. Closure is recommended by the Project Manager, approved by the Resident Manager, and subsequently presented to the RMT for their review.
2. Action plan step deletion, addition or modification - The Change Form is completed with necessary details and justification. It is then approved by the RCIP Project Manager and reported to the RMT.
3. Addition of new action plans or action plan deletions - The Change Form is completed with necessary details and the new section as required, recommended by the Project Manager and approved by the RMT.

### **C. Periodic Assessment**

The RMT, as assisted by the RCIP Project Manager, will provide the focal point for continuing review of RCIP effectiveness through its review of line management assessments of plan results. These assessment results will be provided in the periodic management review meetings held to review plan results.

Additional organizations will assist the RMT in performing independent assessments of the effectiveness of the plan and the performance improvements. The following organizations will provide periodic assessments:

1. The IP3 Operational Review Group (ORG) will conduct periodic assessments and trend analyses of plant Deficiency Evaluation Reports (DERs) to provide an analysis of performance improvements, areas where plan results are not being achieved, or potential areas where changes in the plan may be necessary.
2. The QA organization will be requested to perform targeted assessments of areas identified through plan performance results that do not meet expectation. The QA teams may be augmented as necessary to assure the effectiveness of the assessment.
3. The RCIP Project Manager will perform an overall assessment, on a periodic basis of the effectiveness of the plan in achieving the performance results.

#### D. Verification of Action Plan Closure

Assessments will be conducted to determine that the individual action plans are satisfactorily completed prior to closure. The RCIP Project Manager is responsible for recommending plan closure to the Resident Manager and presenting it to the RMT. Closure of the action plans will require a three-step process.

1. The first step will be a report by the action plan manager to the RCIP Project Manager that each of the steps has been satisfactorily completed. Completion will be demonstrated by the action plan manager using documentary evidence (if required), personal observation, reports, or any combination of the three. The RCIP Project Manager will review and approve the documentation. Action plans that implement regulatory corrective actions will be reported as complete by the RCIP Project Manager to the IP3 Licensing Manager for determination of additional documentation (if any) required by the action plan manager.
2. The second step will be to assure that the individual plan performance results have been achieved through self assessment by the responsible action plan manager. The action plan manager will complete the assessment and provide it to the RCIP Project Manager with the closure package.
3. The RCIP Project Manager will review the completed action plan and the assessment and present the results to the RMT for their review and acceptance.

As discussed in Section IV.C, QA will perform independent assessments of selected RCIP action plan closures including the performance results specified. QA will provide the results of independent assessments to the Restart Management Team.

## V. - APPENDICES

### APPENDIX A - REGULATORY INTERFACE PLAN

The Restart and Continuous Improvement Plan provides the management framework for the restart of Indian Point 3. Section II, the *Restart Plan*, provides direction to Nuclear Generation for the management, programmatic and process actions required to demonstrate a level of performance sufficiently improved to assure the plant can achieve a smooth and error-free startup, followed by sustained performance improvement. Once the plant is in operation, the focus will shift to the longer-term part of the RCIP, the *Continuous Improvement Plan* contained in Section III.

This appendix discusses the interface between the RCIP *Restart Plan*, Section II, and the parallel activities conducted to verify acceptability of the plant for restart and operation by the NRC.

#### Regulatory Process for Restart

The NRC will interface with Nuclear Generation and the RCIP through three regulatory mechanisms specifically associated with restart (normal regulatory interactions, i.e., resident and regional inspections, will continue). These three mechanisms are:

- The NYPA Assessment Panel (NAP)
- The Operational Readiness Assessment Team (ORAT)
- The Confirmatory Action Letter (CAL)

The specifics of each of these and the corresponding interface with Nuclear Generation are discussed in the following sections.

#### 1. NYPA Assessment Panel

The NRC NYPA Assessment Panel (NAP) has issued a Restart Action Plan (RAP) for their use in tracking and assessing IP3 programs, issues, and hardware concerns. The RAP is the overall management document used by the Panel to coordinate actions identified as necessary by the NRC for restart of IP3.

The primary interface of the RAP and the RCIP involves the specific program and hardware/technical issues required for resolution in the RAP. The RCIP specifically addresses these issues. In addition, the RCIP addresses additional programmatic and hardware/technical issues identified as part of the NRC inspection process. In the aggregate, these issues are referred to as regulatory issues in the *Restart Plan*.

Each of the *Restart Plan* action plans contains a cross reference to the specific program areas tracked by the NRC that must be resolved prior to startup. The action plan manager is responsible for assuring that these issues are satisfactorily resolved in the course of implementing the action plan.

The hardware and technical NAP items are assigned to a Regulatory Issues Manager as discussed in Section IV, *Plan Management*. These issues each have an assigned manager and the closeout of the issues and preparation of a documented closeout package will be coordinated by the Regulatory Issue Manager for subsequent presentation to and acceptance by the NRC.

## **2. Operational Readiness Assessment Team**

The NRC will conduct a special team inspection of IP3 prior to the Regional Administrator authorizing plant startup. This inspection will be conducted by the NRC Operational Readiness Assessment Team (ORAT). The Confirmatory Action Letter (CAL) requires the performance of a startup readiness evaluation by NYPA prior to restart to assess whether the plant and plant support organizations have the necessary knowledge, skills, and abilities to detect, prevent, or correct future problems in a timely manner. As described in Section II.C of the RCIP, the assessment consists of system certification, SERT team readiness evaluation, and an operational readiness review, in addition to specific oversight activities by the QA organization. Once completed, the results will be provided in a NAP meeting as provided by the NRC Restart Action Plan and the Confirmatory Action Letter.

When NYPA corporate and plant management are assured that IP3 is ready for restart, the Executive Vice President, Nuclear Generation, will notify the NRC Regional Administrator of the readiness for the ORAT Inspection. The Inspection will be used by the NRC as one of the final indicators of the plant's readiness for restart.

## **3. Confirmatory Action Letter**

The NRC Confirmatory Action Letter requires specific management meetings to be held with the NRC prior to restart. There are additional meetings required to be held by the NAP. As a minimum, two specific meetings, as identified in the CAL, are required to be held prior to restart. The first is a management meeting with the NRC staff, open for public observation, to establish an initial list of mutually agreed-upon restart issues. This meeting was held on August 18, 1993. The second is a management meeting with the NRC staff, open for public observation, to present the results of the Indian Point Unit 3 startup readiness evaluation. This meeting will be scheduled to coincide with the satisfactory completion of the actions required in Section II.C, *Restart Readiness and Assessment* of the RCIP.

Other scheduled meetings with the NRC include periodic Restart and Continuous Improvement Plan (RCIP) status meetings between the NAP and NYPA management. These meetings may be scheduled more frequently to coincide with major milestones.

## APPENDIX B - CROSS REFERENCE TO PIP

The RCIP replaces the PIP as the key management document for restart and continuous improvement. PIP issues will no longer be issued or tracked in a database. This appendix shows how the work done under the PIP relates to the RCIP, both the restart action plans and the continuous improvement plans. In addition, it shows the relationship of PIP projects to regulatory issues. It is important to note that although a PIP item may have been closed out, the related regulatory issue and action plan are still open and must be resolved to the satisfaction of the RMT.

PIP projects are split into two categories: those required for startup (numbered with the suffix ".1") and those that were considered ongoing performance improvement items.

Table B-1 shows the relationship between the startup PIP projects and the regulatory issues and RCIP restart action plans. Most of these PIP projects (38 out of 49) have been completed and closed out by the Plant Leadership Team. For example, PIP 1.1, "Conduct periodic all-employee meetings and establish regularly scheduled departmental meetings," has been closed out. It is related to regulatory issue 42, "Improve communications, management oversight of safety related and significant activities," and to RCIP Action Plan R-1.1.2.1, *Management Review Meeting*. Ten other PIP projects have been completed, but for each, a punchlist of items remains to be signed off before they can be completely closed out. These projects are identified in the table. Finally, one PIP startup item is still in progress: 146.1, "Implement the IP3 Operations Improvement Plan." It is related to Action Plan R-1.1.1.2, *Operations Management* and three regulatory issues (50, 51, and 100).

Table B-2 shows the relationship between non-startup PIP projects and RCIP continuous improvement action plans. For example, PIP 2, "Display daily plant status at strategic locations," is related to Action Plan C-2.4.2.1, *Internal Communications*. These PIPs were considered in the development of the continuous improvement action plans. If still considered appropriate, they were included in the continuous improvement plans.



**Table B-1: Relationship of Startup Pip Items  
to Regulatory Restart Issues and Restart Action Plans**

RESTART PIP Number	Closed	Closed w/ Punchlist	Regulatory Issue	RCIP Action Plan Number
1.1	x		42	R-1.1.2.1
4.1	x			R-2.2.1.1
32.1	x		48 (IV.5)	R-2.1.2.4
72.1	x		45 (III.1)	R-3.1.1.4
73.1	x		45 (III.1)	R-3.1.1.4
129.1	x		37, 40 (III.3), 71(III.6), 77	R-3.1.1.5
130.1	x		34 (II.1)	R-2.1.2.2 Hardware; see App. C
131.1	x		66 (IV.2)	R-3.1.1.5
132.1		x	59	R-2.1.2.2 Hardware; see App. C
133.1		x	27	R-2.1.2.2
134.1	x		52 (III.9)	R-3.1.1.4
135.1	x		6,80	R-2.1.2.2 Hardware; see App. C
136.1	x		34	R-2.1.2.2 Hardware; see App. C
137.1	x		35	R-2.1.2.2 Hardware; see App. C
138.1	x			Review of NRC reports complete
139.1	x		41(IV.7)	R-2.1.2.2
140.1	x		98,106	R-3.1.1.3
141.1	x		2 (III.8),7,83	R-3.1.1.6
142.1		x	65	R-2.1.2.3
143.1	x		52 (III.9)	R-3.1.1.4
144.1	x		41(IV.7)	R-2.1.2.2
145.1	x		64 (III.4)	R-3.1.1.1
			70 (III.7)	R-3.2.2.2
146.1			50,51,100	R-1.1.1.2
147.1	x		1(IV.3)	R-3.1.1.1
148.1	x			R-3.1.1.5; R-3.1.1.6

RESTART PIP Number	Closed	Closed w/ Punchlist	Regulatory Issue	RCIP Action Plan Number
149.1	x			R-2.1.2.2 Hardware; see App. C
150.1	x			R-3.1.1.6
151.1	x		37,38 (III.5)	R-3.1.1.5
152.1		x	68	R-3.1.1.2
153.1		x		R-2.1.2.4
154.1	x			R-3.1.1.1
155.1	x		41 (IV.7)	R-2.1.2.2
			45 (III.1)	R-3.1.1.4
156.1	x		11	R-2.3.1.1.
157.1	x			R-2.1.2.2
158.1	x			Complete; additional actions C-2.4.3.1
159.1	x		31 (IV.1)	R-2.1.2.2
160.1	x		70 (III.7)	R-3.2.2.1
161.1	x		14,15 (IV.6),16	R-2.3.1.1
162.1	x			R-2.1.2.1
163.1	x		17,41 (IV.7)	R-2.1.2.2
164.1	x			R-2.1.2.1
165.1	x		2 (III.8)	R-3.1.1.6
169.1	x			R-2.3.1.1
170.1		x	31 (IV.1)	R-2.1.2.2
171.1		x	31 (IV.1)	R-2.1.2.2
173.1		x		Key process program on hold
174.1	x		2 (III.8)	R-3.1.1.6
177.1		x	12 (II.3),18	R-2.1.2.2 Hardware; see App. C
178.1		x	31 (IV.1)	R-2.1.2.2

Table B-2: Relationship of Non-Startup PIP Items to CIP Action Plans

Non S/U PIP	Cancelled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
2				C-2.4.2.1		
3				C-2.4.2.1		
5		x				
6				C-2.4.2.1		
7		x				
8		x				
9				C-2.4.2.1		
10				C-2.4.3.2		
11				C-2.4.2.1		
12				C-2.4.3.2		
13				C-2.4.2.1		
14				C-2.4.3.2		
15				C-1.1.1.1		
16				C-1.1.3.1		
17			x			Sharing of staff during outage
18		x				
19				C-2.1.2.3		
20				C-2.5.2.1		
21				C-2.1.1.1		
22				C-1.1.3.1		
23				C-2.1.1.1		
24				C-3.2.1.1		
25				C-2.4.1.1		
26				C-3.1.1.4		
27				C-3.1.1.4		
28				C-3.1.1.2		

Non S/U PIP	Can- celled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
29				C-3.1.1.4		
30				C-3.1.1.4		
31				C-3.1.1.4		
33				C-3.1.1.2		
34				C-3.1.1.4		
35				C-3.1.1.4		
36				C-3.1.1.4		
37				C-2.1.2.2		
38		x				
39				C-2.4.1.1		
40		x				
41				C-2.4.1.1		
42	x					
43				C-3.1.1.4		
44				C-2.4.2.1		
45		x				
46				C-2.3.2.1		
47		x				
48				C-2.3.2.1		
49		x				
50				C-1.1.3.1		
51				C-1.1.3.1		
52				C-1.1.3.1		
53				C-1.1.3.1		
54				C-1.1.3.1		
55				C-1.1.3.1		
56						Covered by R-2.2.1.1
57		x				
58				C-2.3.1.1		

Non S/U PIP	Cancelled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
59				C-1.2.1.1		
60				C-4.1.1.2		
61				C-2.5.2.1		
62	x					
63				C-2.5.1.1		
64	x					
65				C-2.5.3.2		
66				C-2.5.3.1		
67		x				
68		x				
69				C-3.1.1.1		
70		x		C-3.1.1.1		
71			x			Completed productivity audit
74						Root cause training in progress
75						Covered by R-3.1.1.4
76				C-2.2.1.1		
77				C-2.5.3.1		
78		x				
79				C-3.1.1.1		
80		x				
81		x				
82				C-3.1.1.2		
83				C-2.5.3.1		
84				C-3.1.1.2		
85				C-3.1.1.2		
86				C-2.4.3.1		
87				C-2.4.3.1		
88				C-2.1.2.2		

Non S/U PIP	Cancelled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
89		x				
90				C-3.1.1.2		
91				C-2.1.2.1		
92				C-2.1.2.1		
93				C-2.1.2.1		
94				C-2.1.2.1		
95				C-2.1.2.1		
96				C-2.1.2.1		
97				C-3.1.1.3		
98				C-2.1.2.1		
99					Model plant area program	
100					Preservation program	
101					Leak reduction program	
102				C-3.1.1.3		
103				C-3.1.1.2		
104				C-3.1.1.2		
105	x					
106				C-2.1.2.2		
107				C-2.1.1.1		
108				C-3.1.1.3		
109				C-3.1.1.3		
110				C-3.1.1.3		
111				C-3.1.1.3		
112				C-3.1.1.3		
113				C-3.1.1.3		
114				C-3.1.1.3		
115				C-3.1.1.3		
116				C-3.1.1.1		

Non S/U PIP	Cancelled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
117				C-3.1.1.2		
118				C-4.2.2.1		
119				C-4.2.2.1		
120				C-4.2.2.1		
121				C-3.1.1.1		
122				C-2.1.2.3		
123				C-2.1.2.3		
124	x					
125				C-2.1.2.2		
126	x					
127				C-2.1.2.2		
128			x			Equipment software controls issued
130					Long-term AMSAC issues	
132		x				
133					Non TS systems comply w/10CFR	
141				C-2.4.3.1		
143				C-2.1.2.2		
146				C-4.2.1.1		
148				C-4.2.1.1		
150					Establish I&C PM program	
151					Improve I&C cal program	
152				C-3.1.1.2		
155				C-3.1.1.4		
156						Covered by R-3.1.1.4
159				C-3.1.1.4		
161				C-2.5.3.2		

Non S/U PIP	Cancelled	Closed	Complete	Considered in Action Plan	To be Considered for entry in ACTS	Comment
162				C-2.1.2.2		
164				C-2.1.2.1		
165					Establish relay PM program	
166				C-2.4.2.1		
167				C-2.1.2.3		
168				C-3.1.1.4		
172	x					
174						Covered by R-3.1.1.6
175					Computer battery deficiencies	
176				C-2.5.3.2		
177					Fire protection/App R compliance	



## APPENDIX C - CROSS REFERENCE TO REGULATORY ISSUES

This appendix provides a cross reference to the regulatory issues as they relate to the RCIP action plans. If a regulatory issue is programmatic in nature (broad management or process related), then it is addressed by an RCIP action plan. If it is a hardware or technical issue, it is not covered by a specific action plan, and a separate closure package will be developed and provided to the NRC. Each of the issues has an assigned issue manager.

One member of the RCIP Project Management Team has been designated as responsible to coordinate the incorporation of each programmatic regulatory issue into the appropriate RCIP action plan as well as to ensure that the hardware-related issues are properly closed out. The detailed methodology is described in the following paragraphs.

Each of the regulatory issues has an assigned Regulatory Issue Manager who is responsible for forwarding programmatic regulatory issues, as identified by the RCIP Project Manager, to the appropriate action plan manager for review and verification that the fundamental root cause(s) and corrective action(s) are addressed by an RCIP action plan. Programmatic regulatory issues are listed in the RCIP restart action plans. A list of other open regulatory items, such as LERs and IE Notices and Bulletins, will be given to the action plan manager who will be responsible their closure.

For hardware-related regulatory issues, the existing Regulatory Issue Manager is responsible for preparing a closure package once the issue is resolved. The package will include a brief problem description, the applicable root cause(s), and a list of other open regulatory items such as LER's, IE Notices and Bulletins. The Regulatory Issue Manager is responsible for closing these other issues and will attach a listing of all repair activities associated with the hardware issue (e.g. work orders and modifications). The Regulatory Issue Manager will submit the package to Licensing who will coordinate closure with the NRC.

The Regulatory Issue Manager will prepare a closure package for the hardware portion as previously indicated. In addition, the issue manager will forward any programmatic issue(s) to the RCIP Project Manager who will verify that the RCIP appropriately addresses the root cause(s). This determination will be documented in the closeout package by the issue manager. If a root cause is not closed by the RCIP, then the RCIP Project Manager will develop a new RCIP action plan to correct it. Action Plan Managers and Regulatory Issue Managers are listed in the attached cross-reference matrix.

**NRC ISSUE STATUS**

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
II. 1	NRC-34	Ensure AMSAC system meets requirements of ATWS Rule and is reliable	93-03, 93-09, LER 93-05	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
II. 2	NRC-3	Resolve emergency diesel generator deficiencies	LER 93-19, 20, 24, 27, 42	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II. 3	NRC-12	Resolve fire protection and APP "R" deficiencies.	91-09-03, 92-14-01, 02, 03, 04, 93-24-01, 02, 03, 04, 93-04-07, 93-22-02, LER 93-07, 18, 29, 31, 37, 38, 41, 55	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Dube
II. 4	NRC-30	Resolve cable separation deficiencies	LER 92-18, 93-06, 25, 52	Hardware embodied in R-2.1.2.2	G. Sadauskas	T. Klein
II. 5	NRC-22	Resolve the reactor missile block bolt/fastener deficiencies	93-08, 93-04	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Gullick
II. 6	NRC-58	Resolve orifice plate orientation deficiencies	93-09, 92-15-04, LER 93-43	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II. 7	NRC-39	Resolve fuse control deficiencies	LER 93-37	Hardware embodied in R-2.1.2.2	G. Sadauskas	T. Klein

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
II. 8	NRC-60	Ensure the weld channel and containment penetration system nitrogen backup supply satisfies the design basis	93-80, LER 93-16, 35, 43	Hardware embodied in R-2.1.2.3	G. Sadauskas	R. Schimpf
II. 9	NRC-53	Resolve the backup service water biofouling issue	93-80	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.10	NRC-9	Resolve the valve handwheel issue so that, at a minimum, the EOPs and AOPs can be adequately implemented	93-08	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.11	NRC-69	Implement the applicable requested actions of NRC Bulletin 93- 02 (Debris Plugging of ECCS Strainers)	93-22, IEB 93-02	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.12	NRC-67	Ensure the control room ventilation system (air conditioning) satisfies the design basis	LER 93-36, 45	Hardware embodied in R- 2.1.2.2	G. Sadauskas	R. Schimpf
II.13	NRC-8	Resolve the PORV issue	93-22-06	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.14	NRC-29	Resolve the instrument bus voltage fluctuation issue		Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
II.15	NRC-23	Resolve the main turbine potential overspeed issue		Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Gullick

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
II.16	NRC-4	Resolve instrument air deficiencies (Resolution of instrument air heat trace deficiencies)	93-22	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.17	NRC-5	Resolution of FCU damper deficiencies. Development of PM program.	93-08-04, LER 93-13	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.18	NRC-6	Resolve AFWS deficiencies (Review of AFWS for paint problems. Also review any inoperability issues).	93-22, 93-23-01	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.19	NRC-20	Resolution of overdue and outstanding EDSFI issues.	91-80, 93-18-02, LER 93-02, 26	Hardware embodied in R-2.1.2.2	G. Sadauskas	T. Klein
II.20	NRC-24	NRC (DRS) review of submerged cable issue.	87-22-05, TIA, IR 93-25	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.21	NRC-54	Containment sump level instrumentation calibration issue	93-04-04, IR 93-27, LER 93-09	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.22	NRC-55	Resolution of BAHT deficiencies. Placement of BAHT controllers, recorders, alarm panel into surveillance program	92-10, 93-09-07, LER 92-04	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.23	NRC-57	Resolution of service water heat trace deficiencies	92-28-13, 92-27-01	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
II.24	NRC-63	Resolution of Core Exit Thermocouple System (CET) requirements in light of FSAR	93-04-01	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.25	NRC-73	Resolution of PASS sampling deficiencies/missing commitments	93-16-10	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn
II.26	NRC-79	Resolution of Salem control rod issue	G. L. 93-04	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
II.27	NRC-82	Zion minimum temperature for criticality issue	93-16-09, LER 93-46	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.28	NRC-83	Completion of vendor recommendations for Main Steam Non- Return Check Valves (MS-2)	IR 93-20, 93-16-03	R-3.1.1.6	A. Vitale	N. Eggemeyer
II.29	NRC-84	CCR A/C service water valves weights and other generic concerns plant-wide	93-16-05	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.30	NRC-88	Resolution of gas stripper removal	93-22-04, LER 93-39	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn
II.31	NRC-89	Inspection and repair to extraction steam piping	93-16-02, 93-24, 93-91	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Nilsen

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
II.32	NRC-90	Resolution of numerous valve issues: MS non-return check valves S&K, MOV weak link analysis, MOV ant-actuation keys.	93-16-06, 93-16-06, IR 93-20, LER 93-30	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.33	NRC-91	Resolve radiation monitor deficiencies (Resolution of R-27 monitor database phenomenon)	93-22-07	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
II.34	NRC-93	Resolution of the control building exhaust fan inadequate design	93-22-09, LER 93-48	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.35	NRC-95	Review and resolution of recurring construction strainer issue	93-27-01	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger
II.36	NRC-105	IA to EDG SWS valves single failure, overpressurization of IA issue.	93-29-01, G.L. 91-15, LER 93-50	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
II.37	NRC-107	Flooding of Fire Protection header in 480V switchgear room	IR 94-05, LER 93-051	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
III. 1	NRC-45	Establish an effective program for problem identification, tracking, evaluation, and corrective action implementation	93-80	R-3.1.1.4	J. Perrotta	J. Perrotta
III. 2	NRC-33	Resolve plant-wide commitment tracking and implementation process deficiencies		R-2.1.2.2	G. Sadauskas	G. Fogarty

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
III. 3	NRC-40	Resolve surveillance test program deficiencies; certify that all surveillance tests are current and the results of each test properly demonstrate equipment operability	LER 92-16, 17, 93-01, 03, 08, 10, 17, 22, 23, 28, 34	R-3.1.1.5	T. Orlando	G. Sadauskas
III. 4	NRC-64	Resolve maintenance/engineering retest program deficiencies	93-03, 93-09	R-3.1.1.1	V. Coulehan	R. Schimpf
III. 5	NRC-38	Resolve calibration deficiencies for instruments used to conduct surveillance testing	92-06, 93-03, 93-09	R-3.1.1.5	T. Orlando	J. Odendahl
III. 6	NRC-71	Evaluate the need for a plant-wide procedure upgrade program; identify and upgrade critical procedures needed to support restart and safe operations	93-16, 93-09, 92-11, 92-26	R-3.2.2.1	J. Schivera	J. Schivera
III. 7	NRC-70	Resolve deficiencies associated with the temporary procedure change (TPC) process and the biennial review process		R-3.2.2.1	J. Schivera	J. Schivera
III. 8	NRC-2	Review preventive maintenance (PM) accomplished to ensure vendor recommendations have been included and develop a process to ensure vendor recommendations are reflected in PM procedures as appropriate.	93-08 LER 93-13, 19, 20, 24, 42	R-3.1.1.6	A. Vitale	N. Heuberger

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
III. 9	NRC-52	Enhance the reasonable assurance of safety (RAS) and justification for continued operation (JCO) processes		R-3.1.1.4	J. Perrotta	R. Schimpf
III.10	NRC-49	Review work control and operations clearance weaknesses	93- 22-01, 93-09-02, 93-08-02, IR 93-29	R-3.1.1.1	V. Coulehan	N. Eggemeyer
III.11	NRC-98	Resolution of recurring maintenance inadequacies (parts, procedure violations)	93-22-01, 92-11-01, 93-03-03, 93-22-01, LER 92-17, 93-04	R-3.2.2.1 R-3.1.1.3 R-3.1.1.6	J. Schivera J. Inglis A.Vitale	A. Vitale
III.12	NRC-106	Category I (safety related) equipment, Procurement process		R-3.1.1.3	J. Inglis	J. Inglis
IV. 1	NRC-31	Develop a reasonable assurance that all NRC commitments have been met or are on a schedule for closure by reviewing an appropriately sized sample of commitments		R-2.1.2.2	G. Sadauskas	P. Kokolakis
IV. 2	NRC-66	Resolve startup control and mode change deficiencies	92-28, 93-03, 930-9	R-3.1.1.5	T. Orlando	R. Schimpf
IV. 3	NRC-1	Resolve vendor/contractor oversight and control deficiencies	93-09, LER 92-11	R-3.1.1.1	V. Coulehan	N. Nilsen
IV. 4	NRC-44	Ensure management's expectations with regard to procedure adherence and attention to detail are clearly understood	93-22	R- 3.2.1.1	L. Hill	K. Peters



NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
IV. 5	NRC-48	Provide operability determination guidance and training to all applicable station personnel	93-80	R-2.1.2.4	T. Reeder	K. Peters
IV. 6	NRC-15	Reestablish the QA organization as an effective oversight group.		R-2.3.1.1	R. Patch	R. Patch
IV. 7	NRC-41	Review all backlogs to assess the safety impact of the items contained in these backlogs; backlogs include request, RES, CAR, REC, PORC open item, RIND, and RIP lists		R-2.1.2.2	G. Sadauskas	J. Perrotta
IV. 8	NRC-32	Assess NYPA staff attitude with respect to performance improvement		R-2.2.1.1	W. Berzins	G. Fogarty
	NRC-7	Certify that PM program is in accordance with vendor manual recommendations (Note - duplicate of NRC-2, Preventive Maintenance)	(see NRC-2)	(see NRC-2)	(see NRC-2)	
	NRC-10	Provide an assessment that the physical readiness of the plant is acceptable to ensure safe plant operation.	92-28-09, 93-23-01, LER 93-50	R- 2.1.2.2	G. Sadauskas	K. Chapple
	NRC-11	Resolution of LER submittal deficiencies.	93-04-06	R- 2.3.1.1	R. Patch	K. Peters
	NRC-13	Resolution of overdue commitments and tracking system weaknesses.	91-17-02, 92-901-02, LER 93-50	R-2.1.2.2	G. Sadauskas	R. Patch
	NRC-14	Resolve QA oversight and the classification of maintenance activities.	92-11-01, 92-901-01, 93-05-02	R-2.3.1.1	R. Patch	R. Patch

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-16	Resolution of weakness in QA oversight and corrective action timeliness.	91-17-02	R-2.3.1.1	R. Patch	R. Patch
	NRC-17	Review all CARs and audit findings to ensure that startup related items are properly addressed.	N/A	R-2.1.2.2	G. Sadauskas	P. Peloquin
	NRC-18	Verify that Indian Point Unit 3 complies with the requirements of Appendix R to 10 CFR Part 50. NOTE: This issue will be encompassed in NRC-12 (Fire protection and Appendix R)		Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Dube
	NRC-19	Resolution of NRHX wall safety evaluation and impact on accident mitigation.	SOR 93-098	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Gullick
	NRC-21	NRC DRS seismic qualification of station batteries	N/A	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Gullick
	NRC-25	Resolution of reduced inventory/midloop indication deficiencies.	93-09-01, LER 93-11	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Gullick
	NRC-26	Resolution of modification close-out process.	92-28-10, 93-03-04	R-3.1.1.2	J. Gullick	J. Gullick
	NRC-27	Verification of compliance to ATWS, APP "R", QSPDS, RG 1.97 requirements.	LER 93-05	R-2.1.2.2	G. Sadauskas	J. Gullick

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-28	Improvement in the deficiency evaluation and engineering process to enhance review and quality.	92-20-01, 02, 92-27-01, 92-28-13, 93-22-08, 93-29-03, LER 93-33, 39, 42, 50	R-3.1.1.4	J. Perrotta	J. Gullick
	NRC-35	Resolution of plant computer battery issue.	N/A	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
	NRC-36	Resolution of control room overhead annunciator failures	SOR 93-03-136	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
	NRC-37	Review I&C surveillance testing, especially in light of recent security zone testing findings.	N/A	R-3.1.1.5	T. Orlando	J. Odendahl
	NRC-42	Improve communications, management oversight of safety related and significant activities.	92-10	R-1.1.2.1	K. Chapple	K. Peters
	NRC-43	Upgrade management processes and programs identified by the team	92-10-02	R-3.1.1.4 R-2.1.2.2 R-3.2.2.1 R-3.1.1.5 R-3.1.1.6	J.Perrotta G.Sadauskas J.Schivera T.Orlando A.Vitale	J.Perrotta R.Patch J.Schivera G.Sadauskas N.Heuberger
	NRC-46	Resolution of CST/PWST bladder deficiencies	93-08-05	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn
	NRC-47	Inspection of Fuel pool and FSB roof leaks	N/A	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-50	Review of operator logkeeping	92-22-01, LER 93-16, 32	R- 1.1.1.2	N. Eggemeyer	N. Eggemeyer
	NRC-51	Review of unqualified NPO standing conventional watch	SOR 93-256	R-1.1.1.2	N. Eggemeyer	N. Eggemeyer
	NRC-56	Resolution of H2 monitor heat trace deficiencies on VC sample lines		Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-59	Resolution of BAT pump and instrumentation (Flow & Pressure)	93-09-08	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-61	Review NYS Assembly jacketed cable questions	N/A	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-62	Resolution of loss/lack of capability to restart EDG air compressors during LOCA.	SOR 93-242	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-65	Recruitment and development of system engineering program and development of training.	N/A	R-2.1.2.3	G. Sadauskas	G. Sadauskas
	NRC-68	Review of T-Mod process	92-20-01, 92-22, 93-22	R- 3.1.1.2	J. Gullick	R. Schimpf
	NRC-72	Resolution of cold weather deficiencies	93-22, 92-27, 92- 28	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-74	Resolution of APP "R" reverse power tripping	IR 93-16	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Eggemeyer

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-75	Resolution of safeguards initiation system logic questions	93- 08-06	Hardware embodied in R-2.1.2.2	G. Sadauskas	J. Odendahl
	NRC-76	Resolution and review of RHR pump discharge relief valve setpoint, and suction valve interlock setpoint.	93-16-07	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-77	Resolution of OPS recurring actuations and surveillance testing deficiencies	SOR 92-3-94, 300	R-3.1.1.5	T. Orlando	N. Eggemeyer
	NRC-78	Resolution of poor Instrument Air & Admin Air quality	92-02, 92-03, 92-04, 93-22, LER 93-45	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-80	Resolution of ABFP check valves hanging open	92-28-05, 93-20	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-81	Inoperability of toxic gas monitor & surveillance test deficiencies	93-09-10, IR 93-16, LER 93-23	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-85	Inadequate CCR ventilation damper design	93-27-02, LER 93- 36	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-86	Inadequate design of IA to CCR ventilation dampers	93- 27-02, LER 93-45	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-87	Resolution of monitor tank unmonitored release path (Bulletin 80-10)	LER 93-39, IEB 80-10	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-92	Resolution of EDG exhaust fan overload issue and other overloads throughout the plant	93-22-08, LER 93-42	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-94	Resolution of EDG fuel oil tank below DBE level issue and root cause	93-29-03, LER 93-33	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf
	NRC-96	Resolution of the lack of event response corrective action completion	LER 92-15	R-3.1.1.4	J. Perrotta	J. Perrotta
	NRC-97	Resolution of recurring E-Plan call in drill failures	93-27, 93-23-07	Hardware embodied in R-2.1.2.2	G. Sadauskas	D. Quinn
	NRC-99	Resolution of T-Mod reporting under 50.59.	93-22-03	R-3.1.1.2	J. Gullick	R. Schimpf
	NRC-100	Resolve recurring operational issues and configuration control problems	93-09-02, 93-15-01, 93-22-01, 93-08-02, 92-15-01	R-1.1.1.2	N. Eggemeyer	N. Eggemeyer
	NRC-101	NRC review of employee safety concern issue	NRC Letter 9-16-93	R-2.2.1.1	W. Berzins	K. Peters
	NRC-102	Review identification of deficient equipment. PIDs not hung where required.	IR 92-27, 93-81, LER 93-50	R-2.1.2.2	G. Sadauskas	N. Heuberger
	NRC-103	Resolve relief valve testing repairs to SWN-86-1 & 2 and the CCR A/C SWS relief valve	IR 93-81	Hardware embodied in R-2.1.2.2	G. Sadauskas	R. Schimpf

NAP No.	Finest Hour No.	Issue Description	Source: IR, URI, NOV, LER	RCIP Action Plan No.	Action Plan Manager	Regulatory Issue Manager
	NRC-104	Repair TSC generator	SOR 93-665,576,166,003,032,038	Hardware embodied in R-2.1.2.2	G. Sadauskas	N. Heuberger

## APPENDIX D - ROOT CAUSE ANALYSIS

### A. Methodology Overview

A root cause analysis was performed to determine the underlying causes for the problems associated with performance decline at IP3. An initial draft of the root causes was prepared by the Situation Assessment Team (SAT). Those causes were then validated with managers and other employees at all levels of the organization. The RMT subsequently approved the root cause analysis results. This section provides a detailed description of the methodology used to develop and validate the root causes that need to be corrected at IP3 and WPO.

Root cause analysis is an essential part of every corrective action process. The identification of why performance problems have occurred is necessary to identify the actions that will prevent recurrence and therefore improve plant safety, reliability and cost performance. The structured process to determine root causes involved four major steps:

- *Data Collection.* The data collection step included a review of documents, interviews with personnel involved, and observations.
- *Data Analysis.* The data from the collection step were grouped into similar performance areas so that further analysis could be performed to identify trends, evaluate the relative importance of the areas, and prepare a ranked set of performance results and deficiencies.
- *Identification of Root Causes.* Once the data were collected and analyzed, the root causes were identified through an iterative process by asking the question "Why did the problem occur?" This step resulted in a rank-ordered list of causal statements supported by underlying performance statements.
- *Validation of Root Causes.* The last step in the process was to validate the conclusions reached to ensure that the root causes were accurate. Validation was conducted in workshops with Nuclear Generation personnel.

### B. Data Collection

The SAT collected data by reviewing documents, interviewing NYPA personnel and observing activities and actions of personnel. The primary purpose of data collection was to determine the events or symptoms indicative of declining performance of Indian Point 3 and WPO.



## 1. Document Review

The SAT reviewed documents related to the declining performance at IP3. The documents reviewed covered the period from mid-1992 to the present. They included NRC inspections, INPO evaluations, Quality Assurance reports, management reports, Human Resources reports, Safety Review Committee meeting minutes, and corporate and station procedures.

## 2. Interviews

Information from interviews was a significant source of data. The interviews were conducted to validate information from document reviews. The questions asked and topics discussed were also based on the experience of the SAT members. Interviewees were selected from all levels of management and supervision at IP3, JAF, and the White Plains Office.

## 3. Observations

The SAT observed activities at IP3 and WPO. The observations included management and staff interactions during shift turnover, daily scheduling meetings, project staff meetings, and Plant Operations Review Committee (PORC) and Safety Review Committee (SRC).

## C. Analysis

The SAT next analyzed the extensive list of symptoms of declining performance. Using nominal group technique, the group inductively developed a set of performance issues requiring improvement that best characterized a grouping of two or more events or symptoms. This inductive method was chosen because of the extensive amount of data collected and the complexity of the issues.

The SAT grouped the performance issues requiring improvement into related categories. This process was iterated until all the performance issues were placed in a category. Categories were combined where appropriate into larger families of issues with a common cause. This categorization was reviewed until the SAT members were assured that each family of performance issues was appropriate. The SAT then developed labels or definitions for each of the categories based on the performance issues assigned. Then the SAT reversed the analysis process to assure that each performance issue was assigned to the proper category as the category had been defined.

## D. Identification of Root Causes

With these iterative steps of the analysis complete, the SAT developed the root causes that, if corrected, would have prevented the decline in performance at IP3. The indicators of performance, and the behaviors identified in the twelve categories developed in the analysis phase, were reviewed to look for commonality and similarity in the reasons for occurrence. As in the analysis phase, this activity was performed in a team environment with all members contributing to the discussion.

This analysis led to the identification of six primary root causes and six contributing causes as follows:

- A. Management did not demonstrate the leadership, interpersonal skills, or the credibility to provide a work environment that encouraged open communication, teamwork, innovation and trust.
- B. Senior management did not establish the vision or provide the direction to drive the organization's agenda.
- C. Issue identification, assessment, and problem resolution processes were not well managed and did not result in lasting correction of issues and problems.
- D. Management did not establish clear performance expectations, provide effective coaching and feedback, or hold people accountable for meaningful performance results.
- E. Management of change was ineffective.
- F. Roles and responsibilities were not sufficiently defined to support effective organizational performance.

The six contributing causes were:

- G. NYPA management did not employ industry experience to establish and implement effective performance standards.
- H. Information and direction were unclear and often not communicated effectively.
- I. Policies and procedures were inadequate to support acceptable station performance. They were overly complex, contained technical inaccuracies, and were ineffectively enforced.
- J. The maintenance function did not provide for the quality and rate of completion of work to support plant needs.
- K. Information management systems did not support management needs.
- L. Engineering procedures and products did not effectively support plant operations and maintenance.

## **E. Validation of Root and Contributing Causes**

The final step in the root cause analysis was to validate the results to ensure that correction of the identified root and contributing causes would prevent recurrence of the declining performance of Indian Point 3. Each of the causes was examined. Three basic questions were considered in the validation process. Examination of these questions, which are listed below, is also required by NYPA procedure:

1. Would the problem of declining performance have occurred if the root causes had not been present?
2. If the root causes are corrected or eliminated, will the problem recur?
3. Will correction or elimination of the root causes prevent recurrence of similar conditions?

The SAT examined each root cause against each of the questions. The SAT concluded that, if effective actions were taken to address the root causes, each question is satisfactorily answered. Finally, the SAT compared the root and contributing causes with the root causes stated in the NRC special Team Inspection and INPO's evaluation and found them to be consistent. Thus, the SAT concluded that the root causes were valid and inclusive.

NYPA conducted additional validation steps. Two focus meetings were held with members of the line organization representing IP3, JAF, and WPO. Participants included managers, supervisors, and members of the bargaining unit, representing vertical and horizontal cross sections of the Nuclear Generation organization.

In these workshops, participants developed their own list of performance issues requiring improvement. They then verified that their performance issues were adequately addressed by the root causes developed by the SAT. They also provided suggestions to clarify the wording of the root causes. These meetings validated the root causes as the correct set necessary and sufficient to address the declining performance at IP3.

The Restart Management Team (RMT) reviewed and commented on the root causes. The root-cause analysis was accepted as presenting a valid picture of the underlying causes associated with the performance problems at IP3 and WPO.

## **F. Relationship Between Root Causes and RCIP**

The objectives, strategies and action plans developed in the RCIP were generated based on the root and contributing causes. As a result, each strategy addresses one or more of the twelve root and contributing causes. The matrix on the following page demonstrates how the strategies and root causes relate.

In most cases, each root cause is addressed by more than one strategy, and each strategy addresses more than one root or contributing cause. The combination of all strategies and action plans in the RCIP is designed to address all of the root causes developed as a result of this root cause analysis. The RMT will evaluate the results of action plan implementation to ensure that the root causes are appropriately addressed.

**SITUATION ASSESSMENT TEAM - RCIP INITIATIVES VS ROOT CAUSES**

	A	B	C	D	E	F	G	H	I	J	K	L
R-1.1.1	X	X		X	X	X						
R-1.1.2				X							X	
R-2.1.1					X	X						
R-2.1.2		X		X	X	X	X					X
R-2.2.1		X		X				X				
R-2.2.2								X	X		X	
R-2.3.1			X				X					
R-3.1.1			X			X			X	X		X
R-3.2.1	X		X	X				X	X			
R-3.2.2			X					X	X			
C-1.1.1	X						X					
C-1.1.2	X						X					
C-1.1.3	X			X	X		X					
C-1.2.1	X											
C-1.2.2			X	X				X			X	
C-2.1.1		X		X	X							
C-2.1.2						X	X					
C-2.2.1			X		X		X					X
C-2.3.1	X			X				X				
C-2.3.2	X			X				X				
C-2.4.1		X		X				X			X	
C-2.4.2	X	X		X				X	X		X	

INDIAN POINT 3  
RESTART & CONTINUOUS IMPROVEMENT PLAN

	A	B	C	D	E	F	G	H	I	J	K	L
C-2.4.3		X						X			X	X
C-2.5.1			X	X	X		X					
C-2.5.2			X	X	X		X					
C-2.5.3			X				X					
C-2.5.4			X		X		X					
C-3.1.1			X			X	X		X	X	X	X
C-3.2.1	X			X				X	X			
C-4.1.1		X		X								
C-4.2.1		X		X								
C-4.2.2		X	X	X	X			X				X

## APPENDIX E - ACRONYMS AND ABBREVIATIONS

ABFP	Auxiliary Boiler Feed Pump
ACTS	Action Commitment Tracking System
AFWS	Auxiliary Feedwater System
ALARA	"As Low as Reasonably Achievable"
AMSAC	ATWS Mitigation System Actuation Circuitry
AOP	Abnormal Operating Procedure
ATWS	Anticipated Transient Without SCRAM
BAHT	Boric Acid Heat Trace
BAT	Boric Acid Transfer
CA	Corrective Action
CAL	Confirmatory Action Letter
CAR	Corrective Action Request
CCR A/C	Central Control Room Air Conditioning
CET	Core Exit Thermocouple
CM	Corrective maintenance
CST	Condensate storage tank
DBE	Design Basis Event
DCM	Design Change Manual
DCR	Document Change Request
DDOI	Design Deficiency Open Item
DER	Deviation Event Report
ECCS	Emergency Core Cooling System
ECN	Engineering Change Notice
EDSFI	Electrical Distribution System Functional Inspection
EOP	Emergency Operating Procedure
EPRI	The Electric Power Research Institute
EQ	Environmentally Qualified
EVP	Executive Vice President
FCU	Fan Cooler Unit
Finest Hour	A commercial software application used in scheduling
FP	Fire Protection
HR	Human Resources
I&C	Instrumentation and Controls
IP2	Indian Point 2, a Consolidated Edison plant
IP3	Indian Point 3 Nuclear Power Plant
IPE	Individual Plant Examination
JAF	James A. FitzPatrick Nuclear Power Plant
JCO	Justification for Continued Operation
LAN	Local Area Network
LCO	Limiting Condition for Operation

LER	Licensee Event Report
MOD	Management and Organizational Development department
MOV	Motor Operated Valve
MS	Main Steam
NAC	Nuclear Advisory Committee (An advisory group to the NYPA Board of Trustees)
NAP	NYPA Assessment Panel (A senior NRC oversight team)
NDE	Non-Destructive Evaluation
NLP	Nuclear Licensing Procedure
NLT	Nuclear Leadership Team (consists of the EVP Nuclear, Nuclear Generation Vice Presidents, and Resident Managers)
NPO	Nuclear Plant Operator
NRC	Nuclear Regulatory Commission
NRHX	Non-Regenerative Heat eXchanger
NuAP	Nuclear Administrative Procedure
NYPA	New York Power Authority
O&M	Operations and Maintenance
OER	Operating Experience Report
OPS	Overpressure Protection System
ORAT	Operational Readiness Assessment Team (An NRC team)
ORG	Operations Review Group
ORR	Operational Readiness Review
PASS	Post Accident Sampling System
PEDB	Plant Equipment Data Base
PID	Plant Identified Deficiency
PIP	Performance Improvement Program
PLT	Plant Leadership Team (the Resident Manager and his General Managers)
PM	Preventive Maintenance
POD	Plan of the day
PORC	Plant Operations Review Committee
PRA	Probabilistic Risk Assessment
PWST	Primary Water Storage Tank
QSPDS	Qualified Safety Parameter Display System
RAP	Restart Action Plan (An NRC tracking and assessment system)
RAS	Reasonable Assurance of Safety
RCIP	Restart and Continuous Improvement Plan
REC	Recommendation
RES	Request for Engineering Services
RHR	Residual Heat Removal

RIND	Recommendation based on industry operating experience
RIP	Recommendation based on IP3 operating experience
ROME	Reliable On-line Maintenance Environment (A software system used for work control and material history)
RP	Radiation Protection
RRI	Regulatory Restart Issue
SALP	Systematic Assessment of Licensee Performance
SAT	Situation Assessment Team
SERT	Startup Evaluation for Readiness Team
SOER	Significant Operating Experience Report
SPEAKOUT	A program that supports confidential inquiry into issues that concern employees
SRC	Safety Review Committee
SRR	System Readiness Review
STA	Shift Technical Advisor
T-Mod	Temporary Modification
TempMod	Temporary Modification
TM	Temporary Modification
TPC	Temporary Procedure Change
TQM	Total Quality Management
TSC	Technical Support Center
WBS	Work Breakdown Structure



## APPENDIX F - ACTION PLAN SCHEDULES

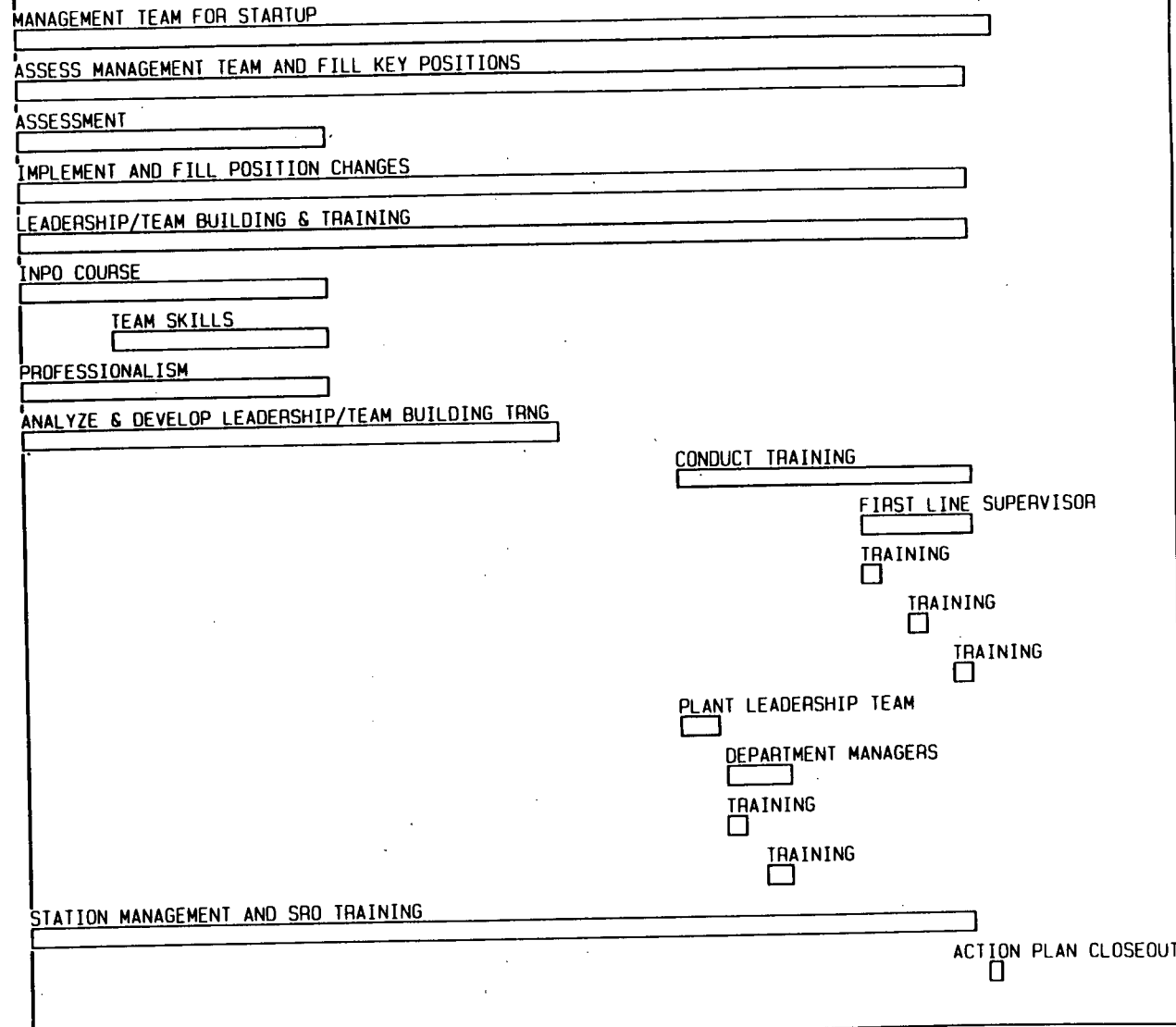
Attached are the schedules for the restart action plans. The continuous improvement action plan schedules will be provided later.

1994

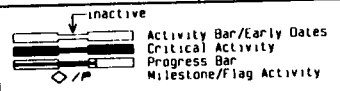
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**SMITH-LAW, A.**

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R11111	ES 9MAY94	EF 30SEP94	STEP MANAGER JOSIGER, W.
R11111A	ES 9MAY94	EF 24JUN94	STEP MANAGER JOSIGER, W.
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R11112C	ES 17AUG94	EF 30SEP94	STEP MANAGER BECKER, BILL
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Plot Date 21MAY94  
 Data Date 9MAY94  
 Project Start 15APR94  
 Project Finish 2AUG96



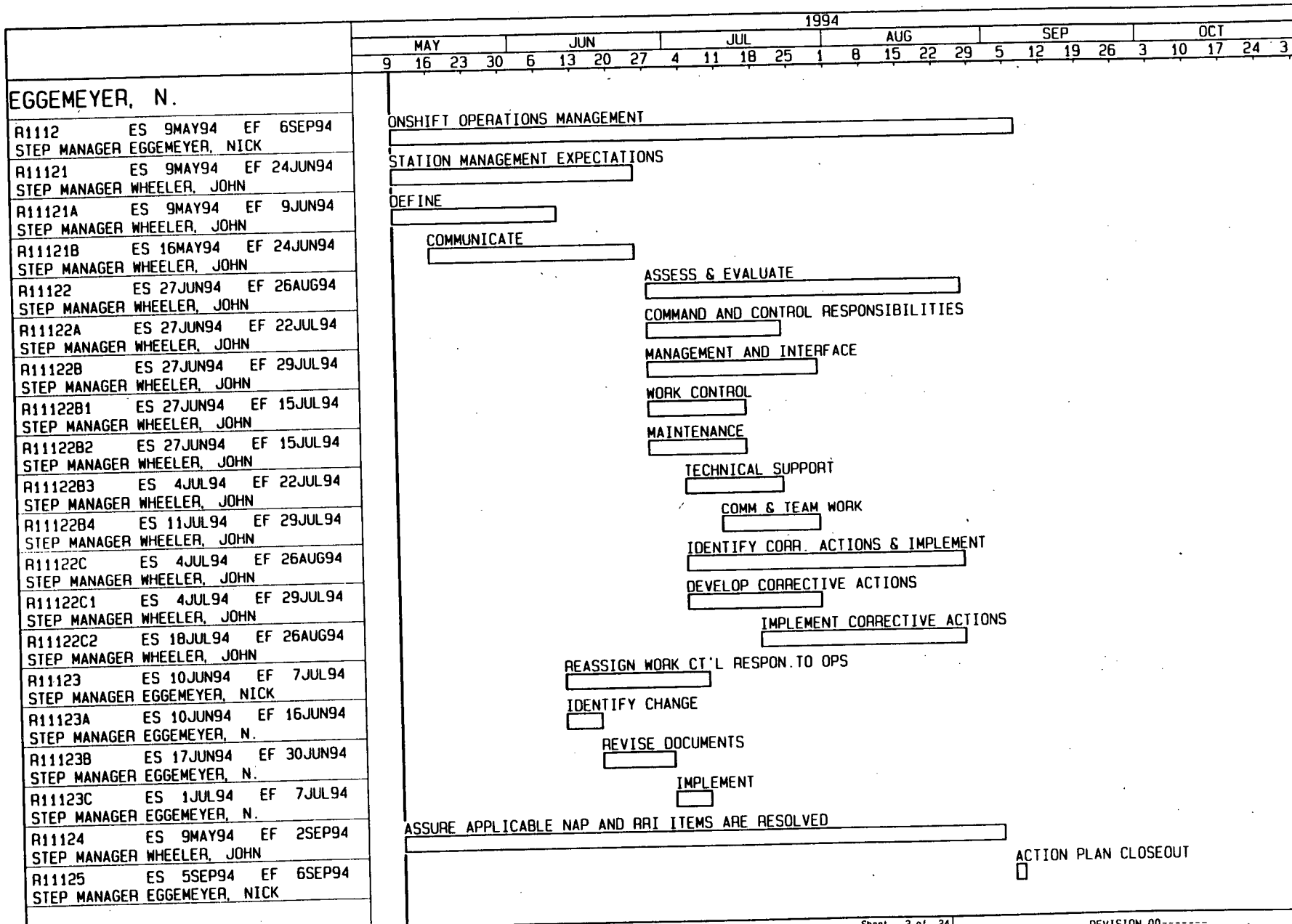
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NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)

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Date	Revision	Checked	Approved



Plot Date 21MAY94  
Data Date 9MAY94  
Project Start 15APR94  
Project Finish 2AUG96

inactive  
Activity Bar/Early Dates  
Critical Activity  
Progress Bar  
Milestone/Flag Activity

RCP2

NEW YORK POWER AUTHORITY  
RESTART & CONTINUOUS IMPROVEMENT PLN  
ACTION PLAN SCHEDULE APP F (REV 1)

Sheet 2 of 24

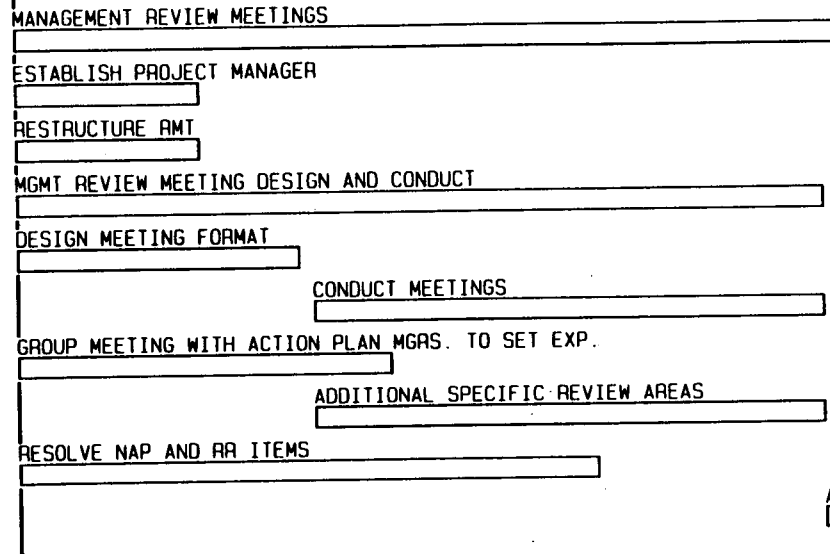
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Date	Revision	Checked	Approved

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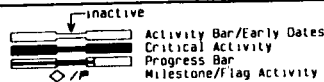
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STEP MANAGER CHAPPLE, KEN		



AP CLOSE-OUT

Plot Date 21MAY94  
 Data Date 9MAY94  
 Project Start 15APR94  
 Project Finish 2AUG96



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 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)

Date	Revision	Checked	Approved

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STEP MANAGER DOUGHERTY, TOM		
R21113	ES 12SEP94	EF 13SEP94
STEP MANAGER DOUGHERTY, TOM		

ORGANIZATION STRUCTURE FOR RESTART

EVALUATE & RECOMMEND ORGANIZATIONAL CHANGES

REVIEW RCIP

CONTACT ACTION PLAN MANAGERS

IDENTIFY REQD. ORG. CHANGES WITH OTHER AP MGRS.

RECOMMEND ORGANIZATIONAL CHANGES

IMPLEMENT ORGANIZATIONAL CHANGES

COMMUNICATE CHANGES

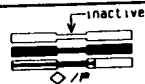
SRC/PORC APPROVAL

PROCEDURE REVISIONS

IMPLEMENT

ACTION PLAN CLOSE OUT

Plot Date 21MAY94  
 Data Date 9MAY94  
 Project Start 15APR94  
 Project Finish 2AUG96



Activity Bar/Early Dates  
 Critical Activity  
 Progress Bar  
 Milestone/Flag Activity

RCP2

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NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)

Date	Revision	Checked	Approved

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**FOGARTY, G.**

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R21211C7	ES 13JUL94	EF 1AUG94	STEP MANAGER FOGARTY, EUGENE
R21212	ES 18JUL94	EF 4OCT94	STEP MANAGER SCHIVERA, JOHN
R21212A	ES 18JUL94	EF 29JUL94	STEP MANAGER SCHIVERA, JOHN
R21212A1	ES 1AUG94	EF 12AUG94	STEP MANAGER SCHIVERA, JOHN
R21212B	ES 18JUL94	EF 29JUL94	STEP MANAGER SCHIVERA, JOHN
R21212B1	ES 1AUG94	EF 19AUG94	STEP MANAGER SCHIVERA, JOHN
R21212C	ES 18JUL94	EF 29JUL94	STEP MANAGER SCHIVERA, JOHN
R21212C1	ES 1AUG94	EF 26AUG94	STEP MANAGER SCHIVERA, JOHN
R21212D	ES 29AUG94	EF 23SEP94	STEP MANAGER SCHIVERA, JOHN

ROLES, RESP. & INTERFACES FOR RESTART

CLARIFY ROLES, RESP., & INTERFACES

IDENTIFY TEAMS:

DESIGN STRUCTURED MEETINGS

CONDUCT MEETINGS

TECHNICAL SERVICES & SYSTEM ENGINEERS

WORK CONTROL TEAM

PLANNING & SCHEDULING TEAM

OUTAGE MANAGEMENT TEAM

CORRECTIVE ACTION TEAM

QA/QC TEAM

OPERATIONS & TRAINING TEAM

ENSURE CHANGES IN NUAPS, PROG DESC, & IMPL. PROC

REVIEW NUAP POLICIES

REVISE NUAPS

REVIEW PROGRAM DESCRIPTIONS

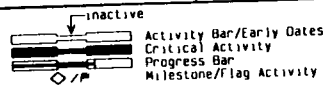
REVISE PROGRAM DESCRIPTIONS

REVIEW IMPLEMENTING PROCEDURES

REVISE IMPLEMENTING PROCEDURES

OBTAIN APPROVAL

Plot Date 21MAY94  
 Data Date 9MAY94  
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 Project Finish 2AUG96



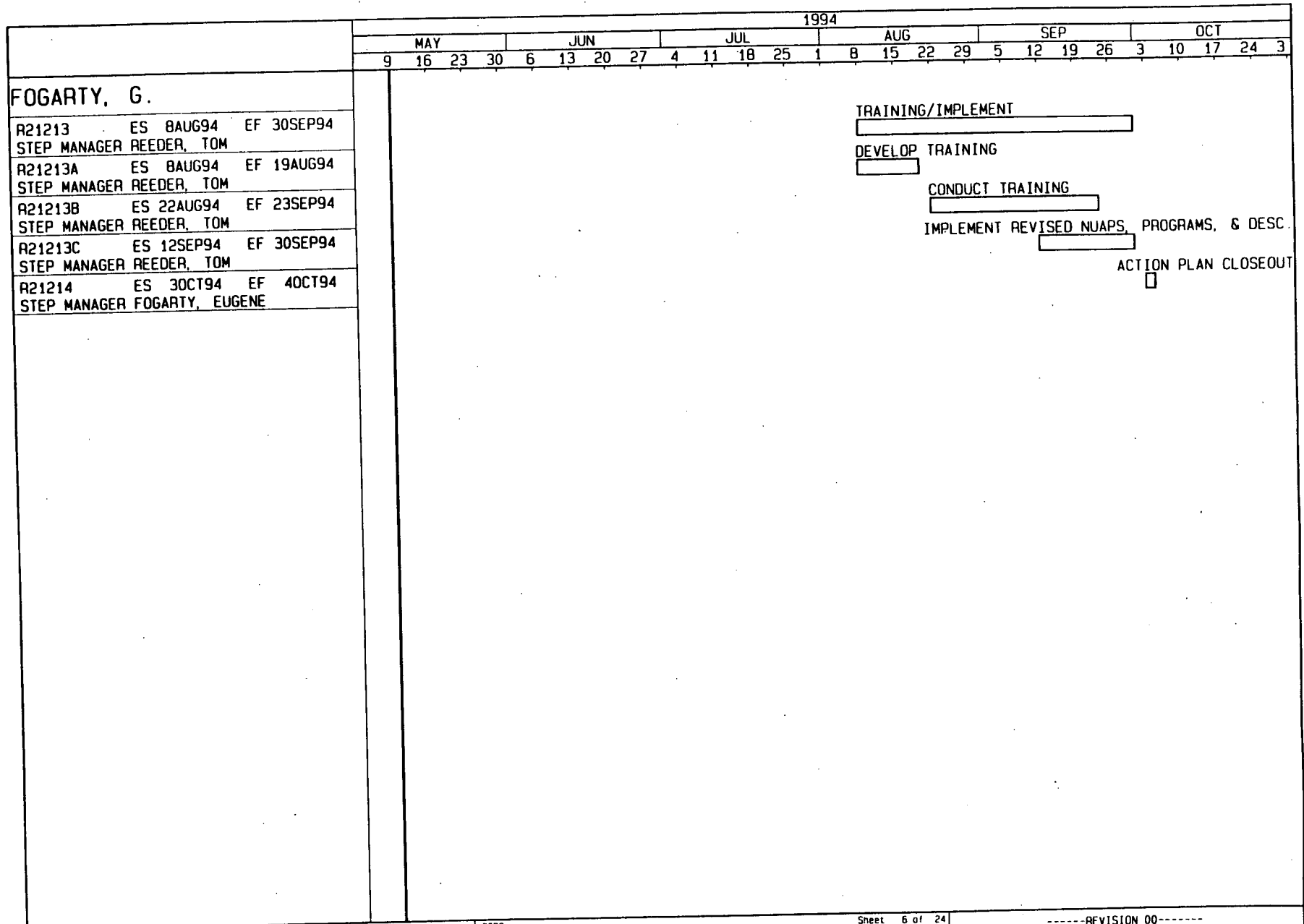
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**NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)**

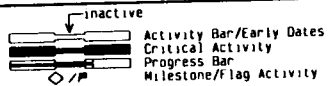
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1994

MAY				JUN				JUL				AUG				SEP									
9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	3	10	17	24	31

<b>SADAUSKAS, J.</b>			
R2122	ES 9MAY94	EF 4OCT94	STEP MANAGER SADAUSKAS, J.
R21221	ES 9MAY94	EF 13MAY94	STEP MANAGER CARANO, BILL
R21221A	ES 9MAY94	EF 11MAY94	STEP MANAGER CARANO, BILL
R21221B	ES 12MAY94	EF 13MAY94	STEP MANAGER CARANO, BILL
R21222	ES 9MAY94	EF 9JUN94	STEP MANAGER SADAUSKAS, J.
R21222A	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222B	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222C	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222D	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222E	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222F	ES 9MAY94	EF 13MAY94	STEP MANAGER SADAUSKAS, J.
R21222G	ES 16MAY94	EF 2JUN94	STEP MANAGER SADAUSKAS, J.
R21222H	ES 3JUN94	EF 9JUN94	STEP MANAGER SADAUSKAS, J.
R21222I	ES 3JUN94	EF 9JUN94	STEP MANAGER SADAUSKAS, J.
R21223	ES 27MAY94	EF 30SEP94	STEP MANAGER PERROTTA, J.
R21223A	ES 27MAY94	EF 7JUL94	STEP MANAGER PERROTTA, J.
R21223B	ES 8JUL94	EF 22JUL94	STEP MANAGER PERROTTA, JOE
R21223C	ES 25JUL94	EF 5AUG94	STEP MANAGER PERROTTA, JOE
R21223D	ES 25JUL94	EF 5AUG94	STEP MANAGER PERROTTA, J.
R21223E	ES 8AUG94	EF 19AUG94	STEP MANAGER PERROTTA, JOE

OUTAGE MANAGEMENT

ASSIGN OUTAGE MANAGER FOR RESTART

ID RESTART MANAGER

ASSIGN RESPONSIBILITIES

DEVELOP WORK-TO-GO PROCESS AND ID SCOPE

ID AND REVIEW WORK IN FINEST HOUR

REVIEW MAINTENANCE WORK IN ROME

REVIEW POST-MAINTENANCE WORK IN ROME

REVIEW RES DOCUMENTATION

REVIEW ACTS

DEVELOP WORK-TO-GO PROCESS

PREPARE AND ISSUE GUIDELINE

COMMUNICATE NEW PROCESS

TRAIN

ID AND RESOLVE PRE-RESTART COMMITMENTS

ID COMMITMENTS TO EXTERNAL AGENCIES

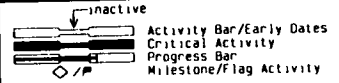
SEGRAGATE RE-START COMMITMENTS

DEVELOP OVER-DUE ITEM LIST

DEVELOP RESTART COMMITMENT CORRECTIVE ACTIONS

DEVELOP OVER-DUE ITEM CORRECTIVE ACTIONS

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 ACTION PLAN SCHEDULE APP F (REV 1)

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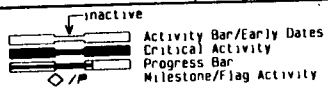
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	MAY				JUN				JUL				AUG				SEP				OCT				
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<b>SADAUSKAS, J.</b>	IMPLMNT CORR ACTN FOR RESTART & OUTLINE COMITMNT																								
R21223F ES 22AUG94 EF 16SEP94 STEP MANAGER PERROTTA, J.	CLOSE-OUT COMMITMENT																								
R21223G ES 19SEP94 EF 30SEP94 STEP MANAGER PERROTTA, J.																									
R21223H ES 27MAY94 EF 30AUG94 STEP MANAGER PERROTTA, J.	RVW REGULATORY RESTART PACKAGES																								
R21223H1 ES 27MAY94 EF 23JUN94 STEP MANAGER PERROTTA, J.	ASSIGN RESPONSIBILITIES																								
R21223H2 ES 24JUN94 EF 30SEP94 STEP MANAGER PERROTTA, J.	REVIEW NRC PACKAGE FOR CLOSE-OUT																								
R21223I ES 27MAY94 EF 30SEP94 STEP MANAGER PERROTTA, J.	TRACK COMMITS TO-DATE & NEW IN ACTS-INTRFC C3114																								
R21223I1 ES 27MAY94 EF 30SEP94 STEP MANAGER PERROTTA, J.	TRACK COMMITMENTS																								
R21223I2 ES 27MAY94 EF 30SEP94 STEP MANAGER PERROTTA, J.	ISSUE WEEKLY STATUS COORDINATED REPORTS																								
R21223J ES 27MAY94 EF 2SEP94 STEP MANAGER PERROTTA, J.	RVW & VALIDATE NRC COMMITMENTS ID FOR NEXT RFO																								
R21223J1 ES 27MAY94 EF 21JUL94 STEP MANAGER PERROTTA, J.	IDENTIFY COMMITMENTS AND DATES																								
R21223J2 ES 22JUL94 EF 2SEP94 STEP MANAGER PERROTTA, J.	DEVELOP RESPONSE / ACTIONS REQUIRED																								
R21224 ES 9MAY94 EF 13MAY94 STEP MANAGER SADAUSKAS, J.	SYSTEM WALKDOWN PROCESS																								
R21224A ES 9MAY94 EF 13MAY94 STEP MANAGER SADAUSKAS, J.	DEVELOP METHODOLOGY																								
R21224B ES 9MAY94 EF 13MAY94 STEP MANAGER SADAUSKAS, J.	IDENTIFY PRIORITIZATION																								
R21224C ES 9MAY94 EF 13MAY94 STEP MANAGER SADAUSKAS, J.	ID TEAMS																								
R21224D ES 9MAY94 EF 13MAY94 STEP MANAGER SADAUSKAS, J.	TRAIN																								
R21225 ES 9MAY94 EF 26MAY94 STEP MANAGER BERGERON, C.	REVIEW STATION WORK BACKLOGS/DEFINE GOALS																								
R21225A ES 9MAY94 EF 13MAY94 STEP MANAGER BERGERON, C.	ID STATION WORK BACKLOGS																								
R21225B ES 9MAY94 EF 26MAY94 STEP MANAGER BERGERON, C.	ID "OTHER" ADMIN OPEN ITEMS																								
R21225C ES 9MAY94 EF 13MAY94 STEP MANAGER BERGERON, C.	ESTABLISH PERFORMANCE MEASURES																								

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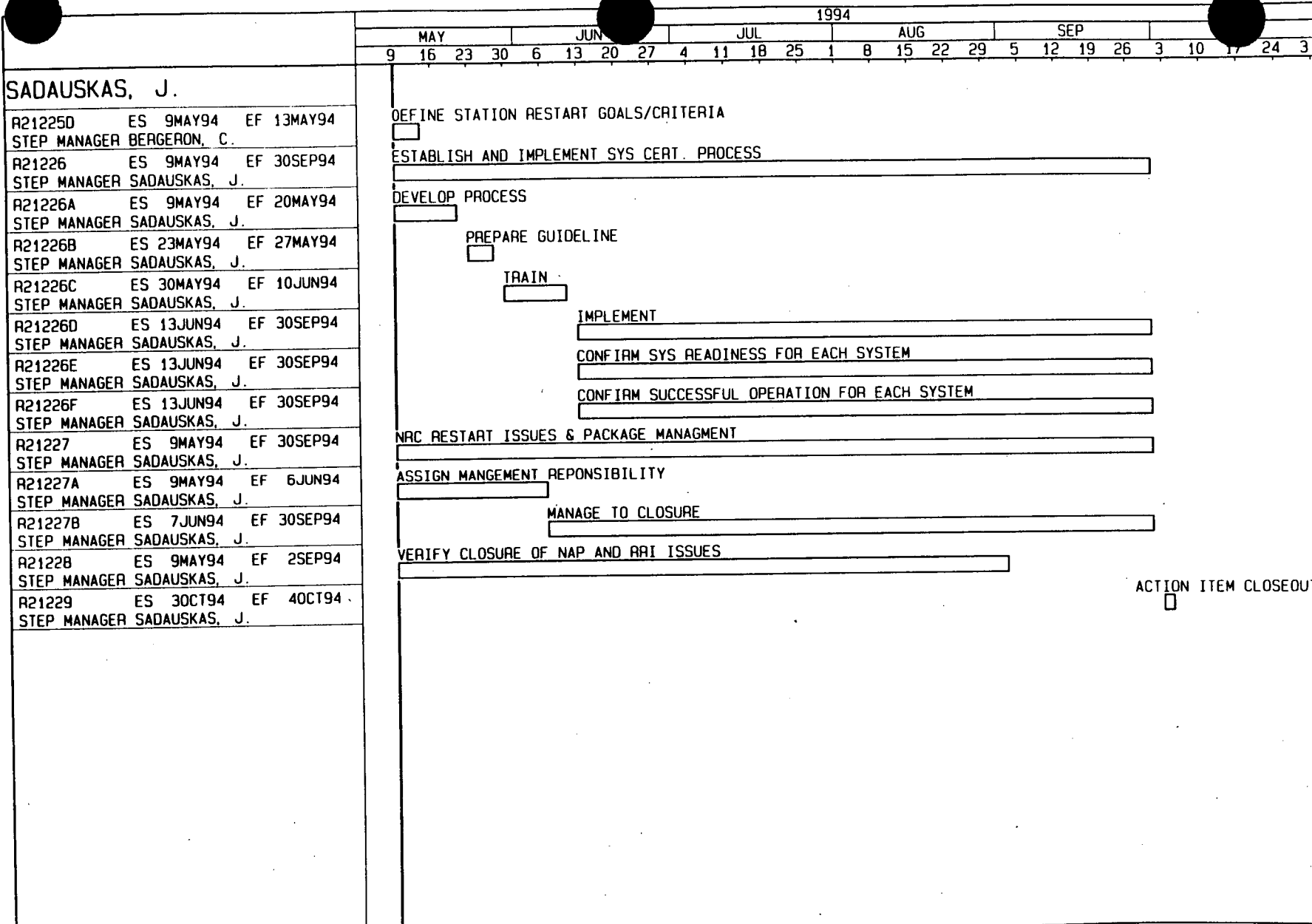
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NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)

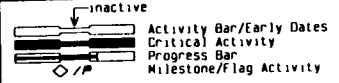
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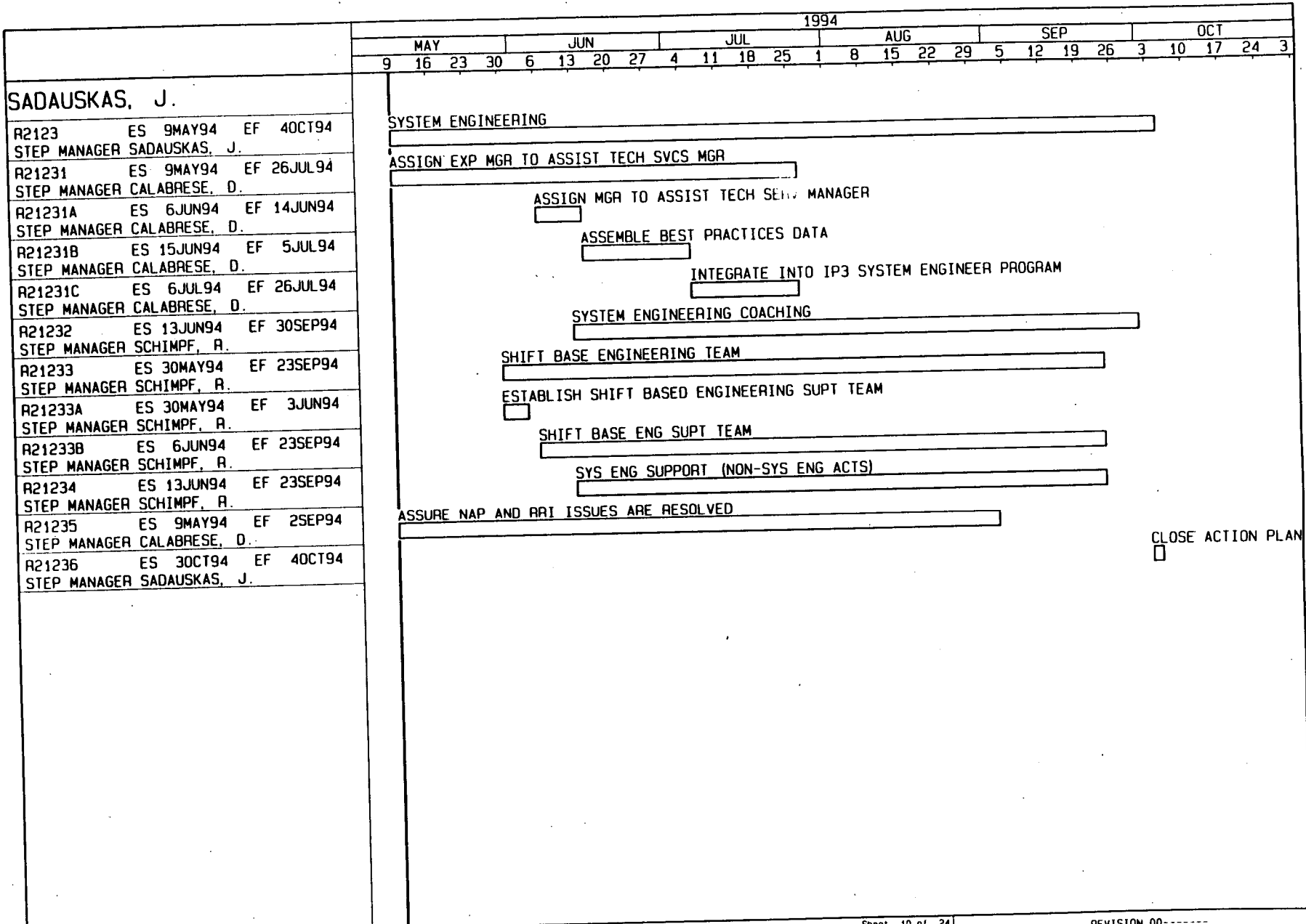


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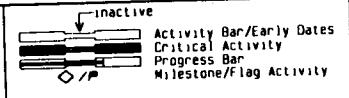
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CLOSE ACTION PLAN

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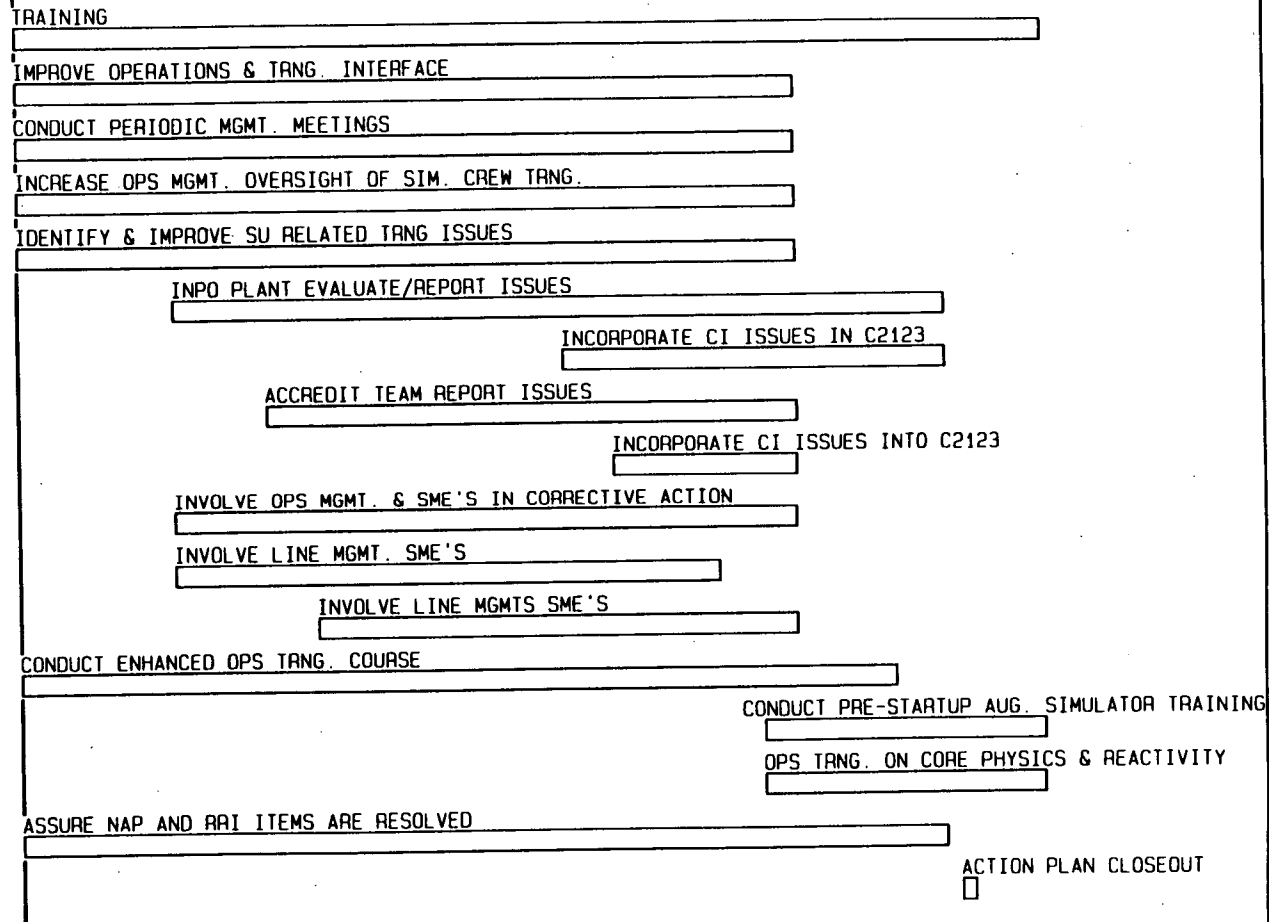
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RESTART & CONTINUOUS IMPROVEMENT PLN  
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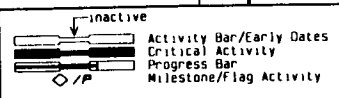
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<b>REEDER, T.</b>		
R2124	ES 9MAY94	EF 30SEP94
STEP MANAGER REEDER, TOM		
R21241	ES 9MAY94	EF 26AUG94
STEP MANAGER REEDER, TOM		
R21241A	ES 9MAY94	EF 26AUG94
STEP MANAGER REEDER, TOM		
R21241B	ES 9MAY94	EF 26AUG94
STEP MANAGER REEDER, TOM		
R21242	ES 9MAY94	EF 26AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21242A	ES 31MAY94	EF 16SEP94
STEP MANAGER ROBENSTEIN, RICH		
R21242A1	ES 25JUL94	EF 16SEP94
STEP MANAGER ROBENSTEIN, RICH		
R21242B	ES 13JUN94	EF 26AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21242B1	ES 1AUG94	EF 26AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21243	ES 31MAY94	EF 26AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21243A	ES 31MAY94	EF 15AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21243B	ES 20JUN94	EF 26AUG94
STEP MANAGER ROBENSTEIN, RICH		
R21244	ES 9MAY94	EF 9SEP94
STEP MANAGER BECERRA, JOHN		
R21245	ES 22AUG94	EF 30SEP94
STEP MANAGER BECERRA, JOHN		
R21246	ES 22AUG94	EF 30SEP94
STEP MANAGER EMBREY, CHARLIE		
R21247	ES 9MAY94	EF 16SEP94
STEP MANAGER PETERS, KEN		
R21248	ES 19SEP94	EF 20SEP94
STEP MANAGER REEDER, TOM		



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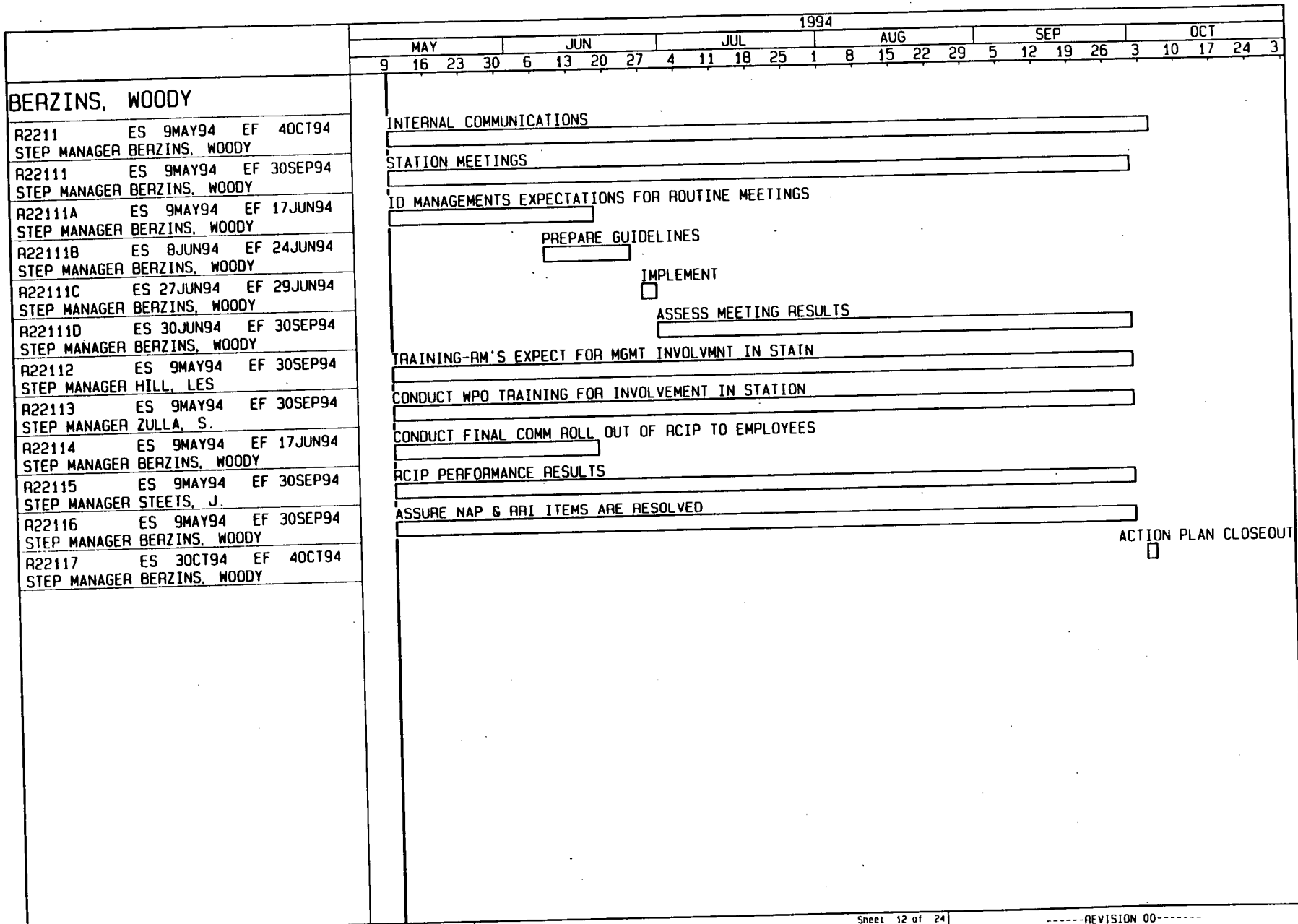
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**NEW YORK POWER AUTHORITY**  
**RESTART & CONTINUOUS IMPROVEMENT PLN**  
**ACTION PLAN SCHEDULE APP F (REV 1)**

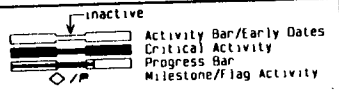
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1994

MAY 9 16 23 30 JUN 6 13 20 27 JUL 4 11 18 25 1 AUG 8 15 22 29 5 SEP 12 19 26 3 10 17 24 31

PATRICK, C.

R2221	ES 9MAY94	EF 4OCT94
STEP MANAGER PATRICK, C.		
R22211	ES 9MAY94	EF 3JUN94
STEP MANAGER STEETS, J.		
R22212	ES 9MAY94	EF 24JUN94
STEP MANAGER STEETS, J.		
R22213	ES 9MAY94	EF 1JUL94
STEP MANAGER PATRICK, C.		
R22214	ES 26MAY94	EF 30SEP94
STEP MANAGER STEETS, J.		
R22215	ES 22AUG94	EF 30SEP94
STEP MANAGER STEETS, J.		
R22216	ES 22AUG94	EF 4OCT94
STEP MANAGER PATRICK, C.		
R22216A	ES 8AUG94	EF 19AUG94
STEP MANAGER PATRICK, C.		
R22216B	ES 22AUG94	EF 30SEP94
STEP MANAGER PATRICK, C.		
R22217	ES 3OCT94	EF 4OCT94
STEP MANAGER PATRICK, C.		

COMM WITH GOV OFFICIALS, MEDIA, INT GRPS, GEN PUB

IDENTIFY KEY EXTERNAL AUDIENCES

ID & DEVELOP MECHANISMS FOR COMM RESTART INFO

ASSIGN ROLES & RESPON IMPLEMENT TO OUTSIDE

COMM. OUTREACH TO EXT AUDIENCES

EVALUATE COMM. PGM EFFECTIVENESS

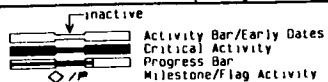
PRESENTATION TRAINING

DEVELOP PRESENTATION/MESSAGE CONTENT SKILLS TRNG

CONDUCT TRAINING

ACTION PLAN CLOSEOUT

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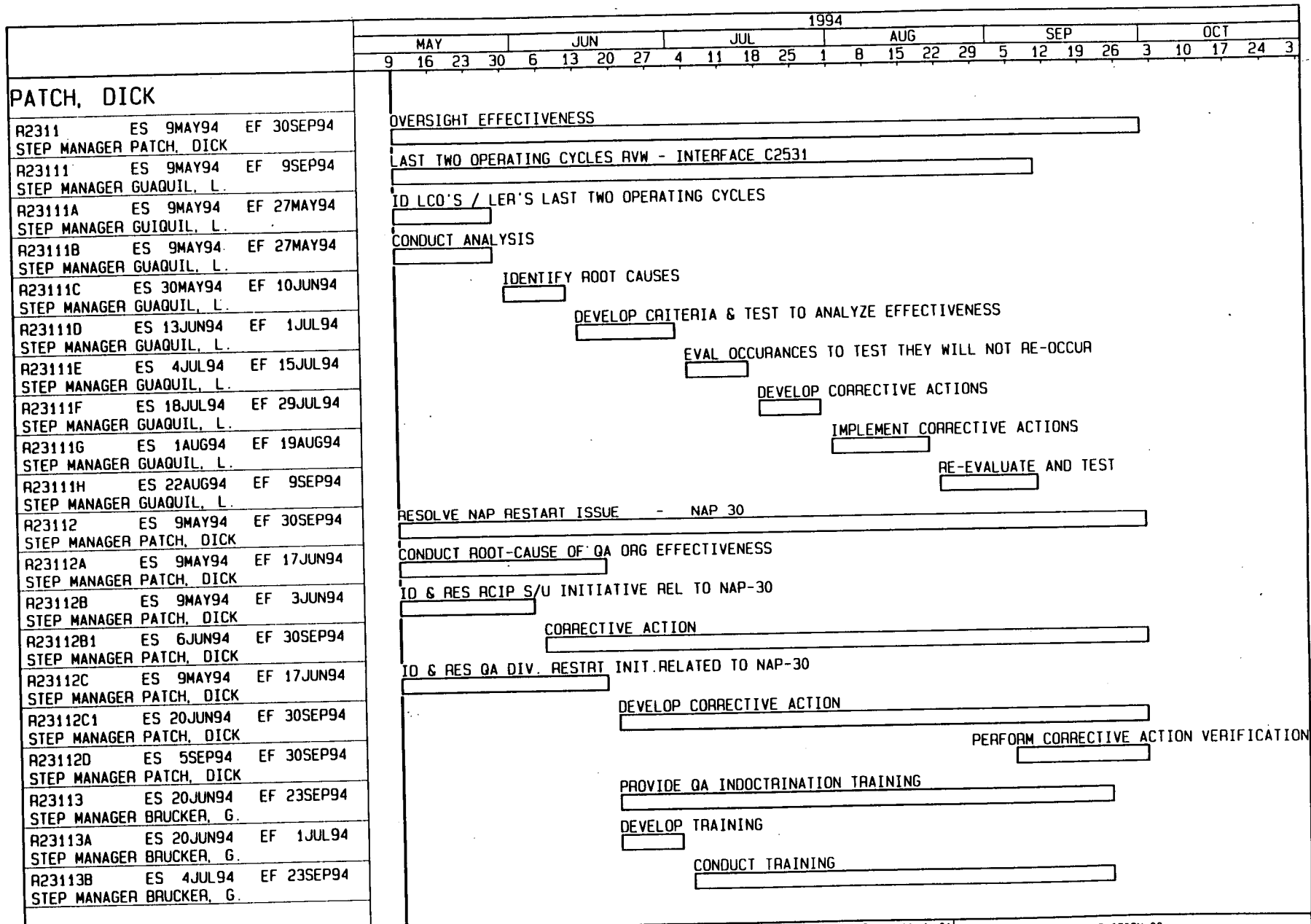
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inactive  

 Activity Bar/Early Dates  
 Critical Activity  
 Progress Bar  
 Milestone/Flag Activity

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1994

MAY

JUN

JUL

AUG

SEP

9 16 23 30 6 13 20 27 4 11 18 25 1 8 15 22 29 5 12 19 26 3 10 17 24 3

PATCH, DICK

R23114 ES 9MAY94 EF 7SEP94  
STEP MANAGER PATCH, DICK

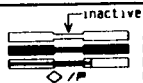
R23115 ES 8SEP94 EF 9SEP94  
STEP MANAGER PATCH, DICK

RESOLVE SPECIFIC NAP & RRI'S

ACTION PLAN CLOSEOUT



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Activity Bar/Early Dates  
Critical Activity  
Progress Bar  
Milestone/Flag Activity

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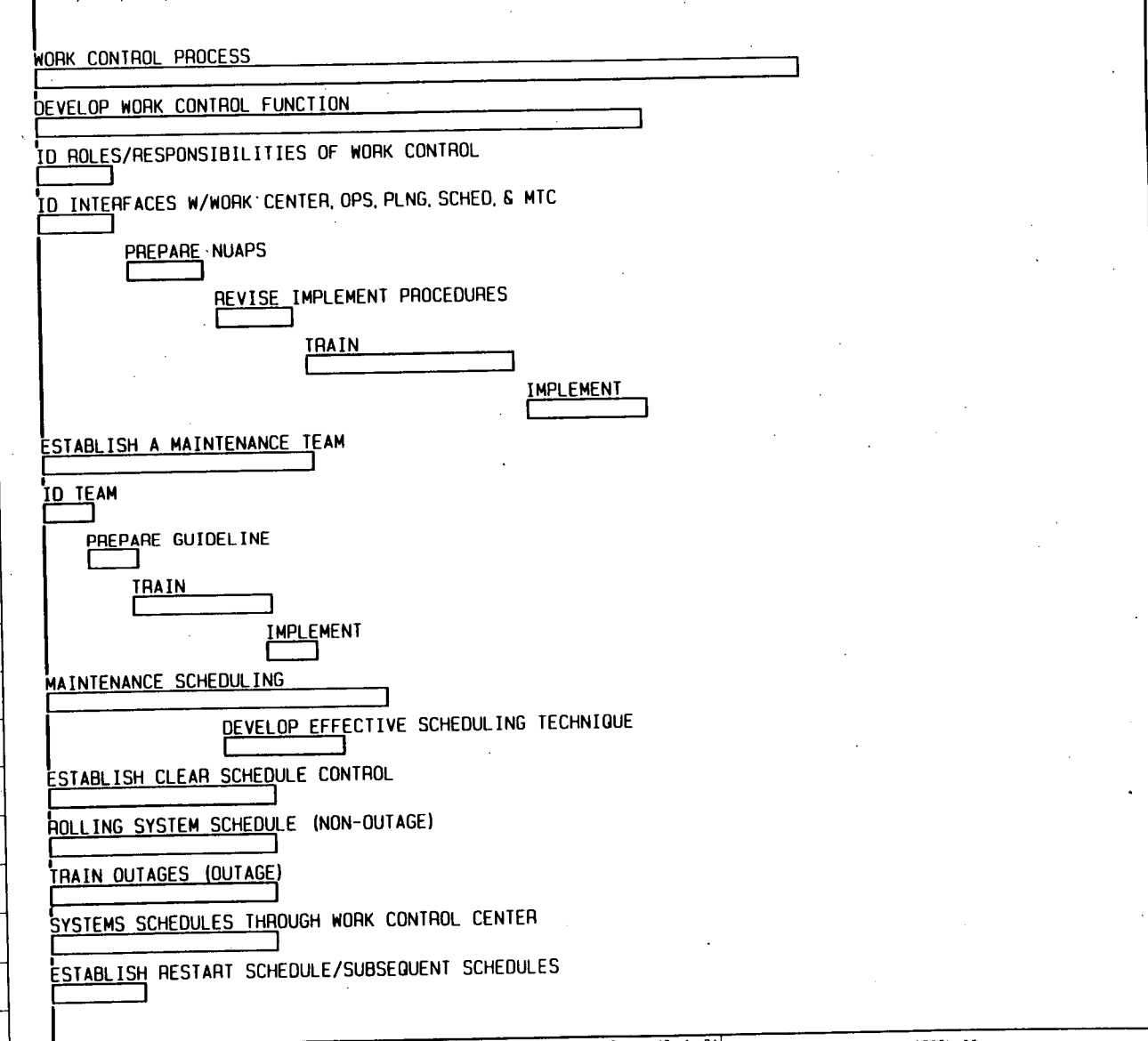
NEW YORK POWER AUTHORITY  
RESTART & CONTINUOUS IMPROVEMENT PLN  
ACTION PLAN SCHEDULE APP F (REV 1)

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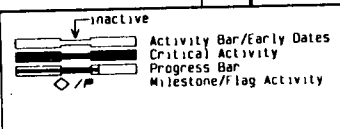


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MAY				JUN				JUL				AUG				SEP				OCT					
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<b>COULEHAN, V.</b>			
R31111	ES 9MAY94	EF 6SEP94	
STEP MANAGER COULEHAN, V.			
R31111	ES 9MAY94	EF 12AUG94	
STEP MANAGER MACKAY, C.			
R31111A	ES 9MAY94	EF 20MAY94	
STEP MANAGER MACKAY, C.			
R31111B	ES 9MAY94	EF 20MAY94	
STEP MANAGER MACKAY, C.			
R31111C	ES 23MAY94	EF 3JUN94	
STEP MANAGER MACKAY, C.			
R31111D	ES 6JUN94	EF 17JUN94	
STEP MANAGER MACKAY, C.			
R31111E	ES 20JUN94	EF 22JUL94	
STEP MANAGER MACKAY, C.			
R31111F	ES 25JUL94	EF 12AUG94	
STEP MANAGER MACKAY, C.			
R31112	ES 9MAY94	EF 20JUN94	
STEP MANAGER LOUGHNEY, D.			
R31112A	ES 9MAY94	EF 16MAY94	
STEP MANAGER LOUGHNEY, D.			
R31112B	ES 16MAY94	EF 23MAY94	
STEP MANAGER LOUGHNEY, D.			
R31112C	ES 23MAY94	EF 13JUN94	
STEP MANAGER LOUGHNEY, D.			
R31112D	ES 13JUN94	EF 20JUN94	
STEP MANAGER LOUGHNEY, D.			
R31113	ES 9MAY94	EF 1JUL94	
STEP MANAGER NIKOLATOS, G.			
R31113A	ES 6JUN94	EF 24JUN94	
STEP MANAGER NIKOLATOS, G.			
R31113A1	ES 9MAY94	EF 13JUN94	
STEP MANAGER NIKOLATOS, G.			
R31113A2	ES 9MAY94	EF 13JUN94	
STEP MANAGER NIKOLATOS, G.			
R31113A3	ES 9MAY94	EF 13JUN94	
STEP MANAGER NIKOLATOS, G.			
R31113A4	ES 9MAY94	EF 13JUN94	
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STEP MANAGER NIKOLATOS, G.			

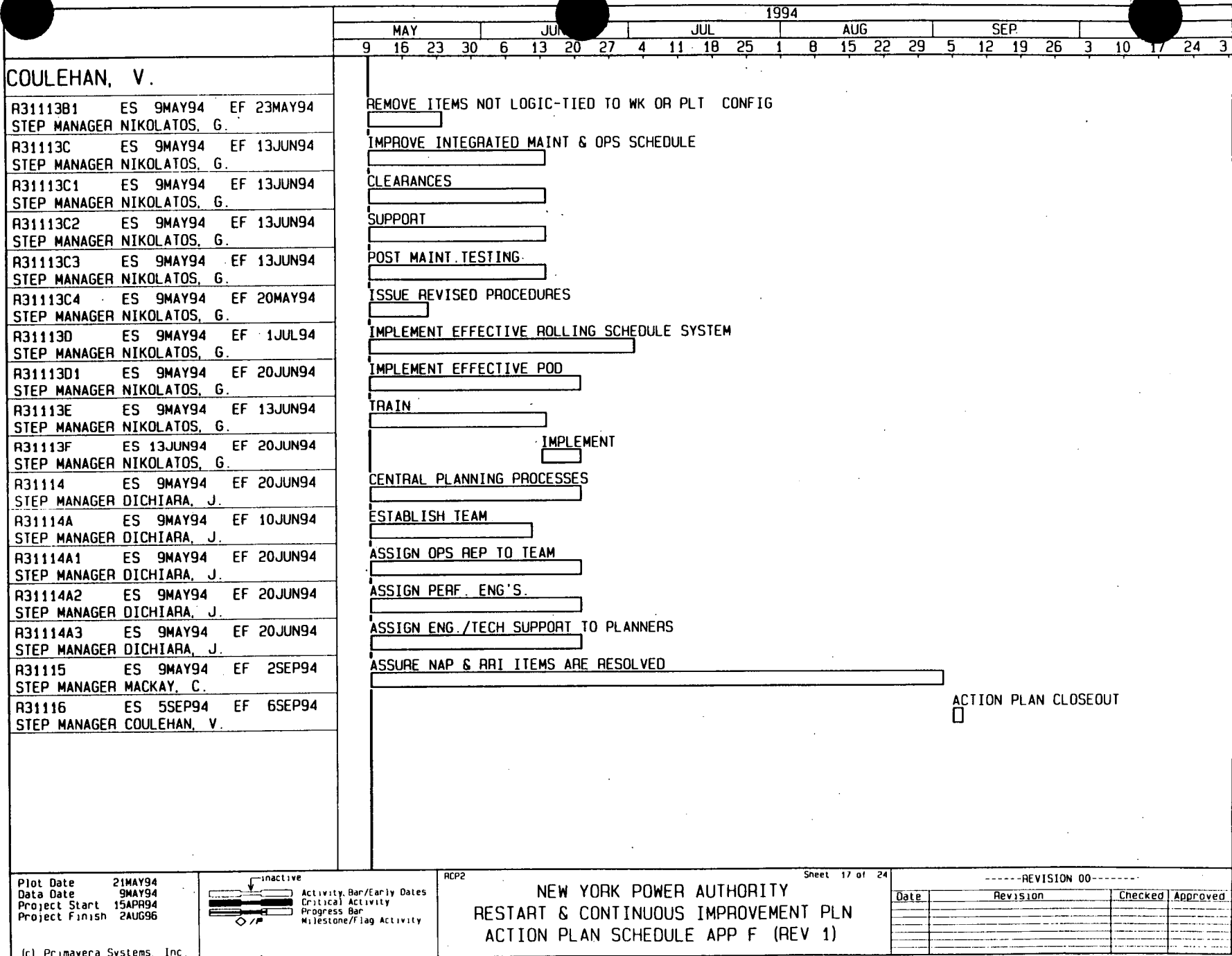


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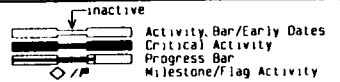


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**RESTART & CONTINUOUS IMPROVEMENT PLN**  
**ACTION PLAN SCHEDULE APP F (REV 1)**

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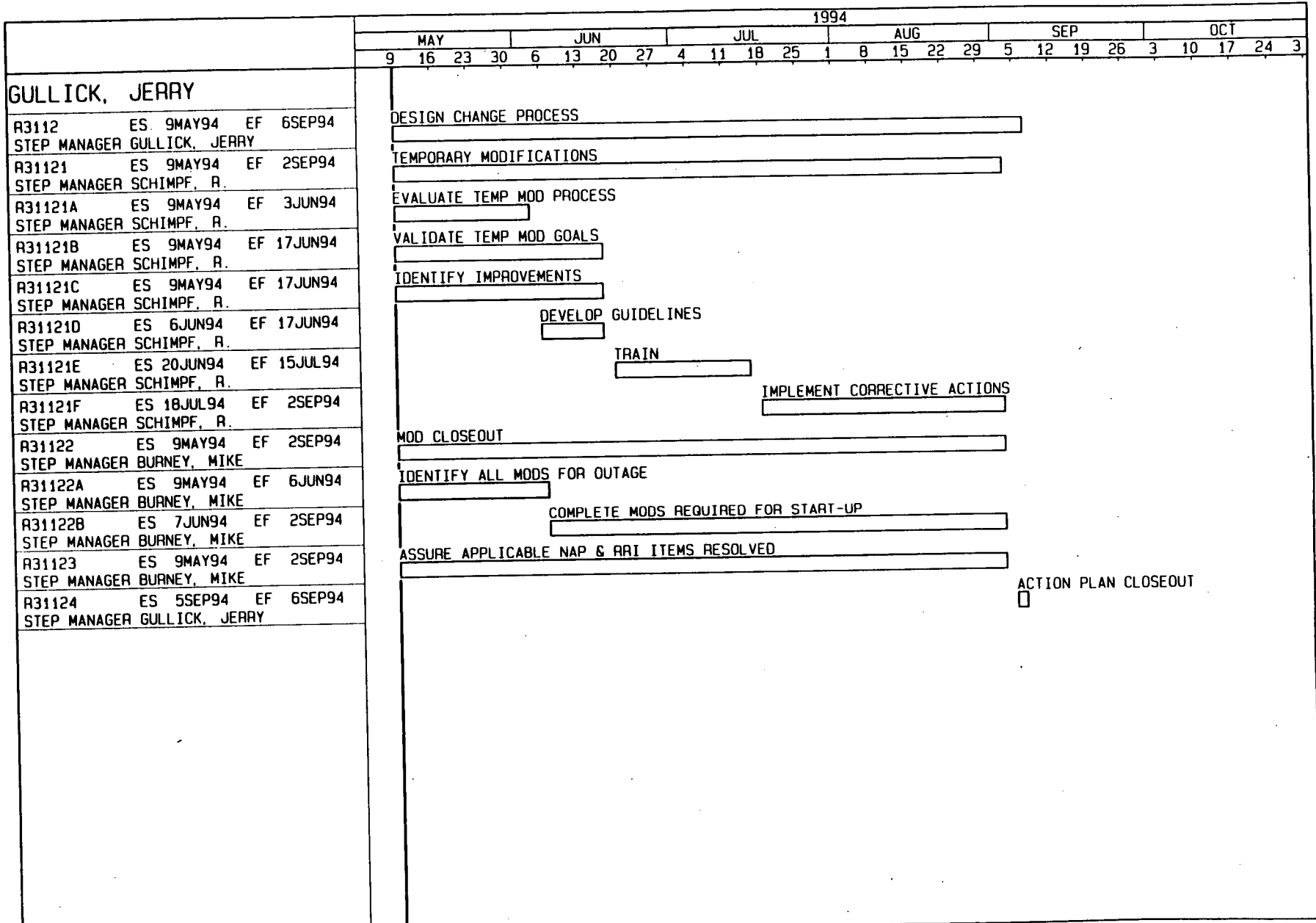
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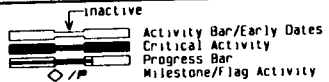
NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLN  
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Plot Date 21MAY94  
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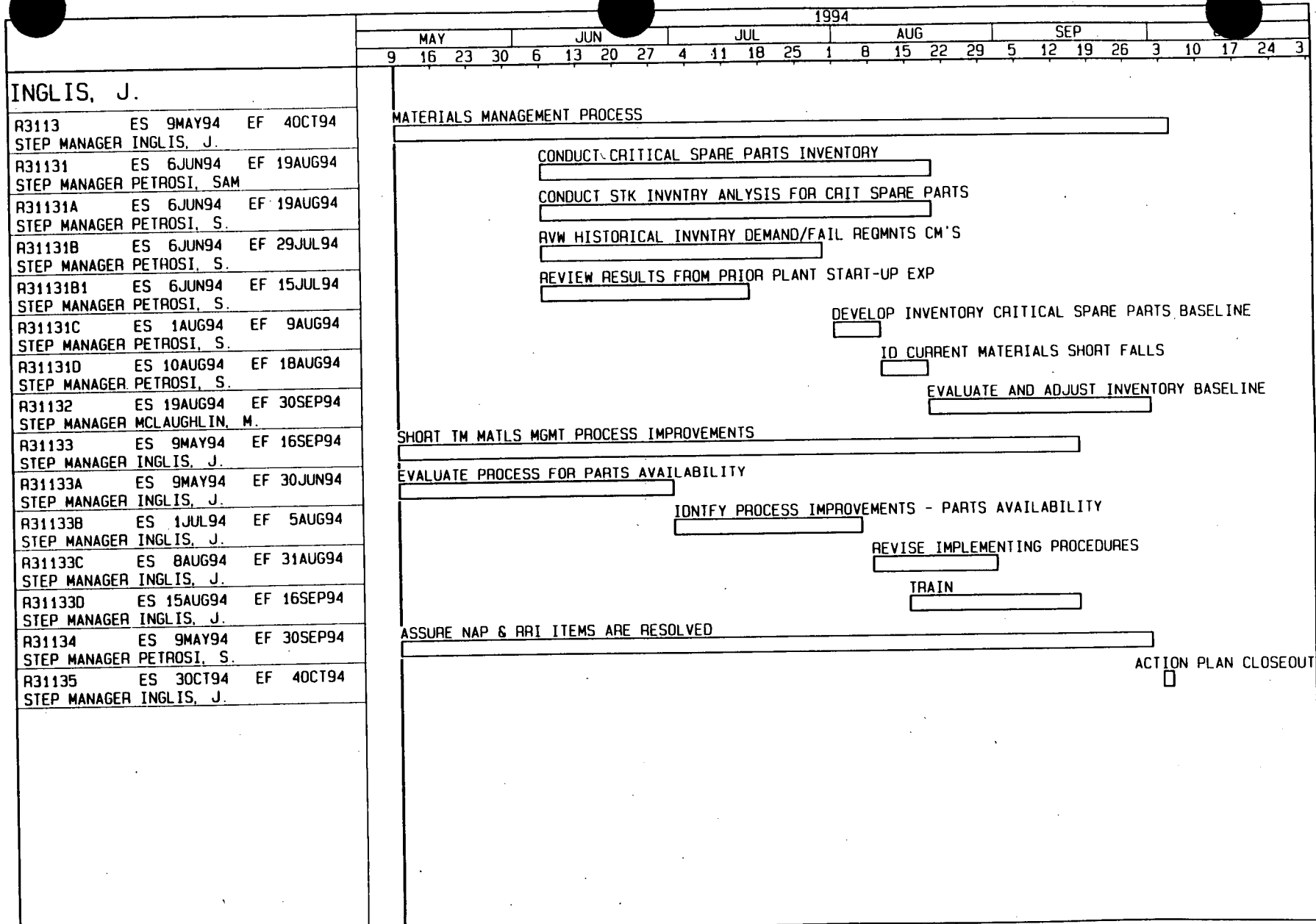
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NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLAN  
 ACTION PLAN SCHEDULE APP F (REV 1)

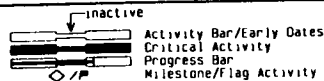
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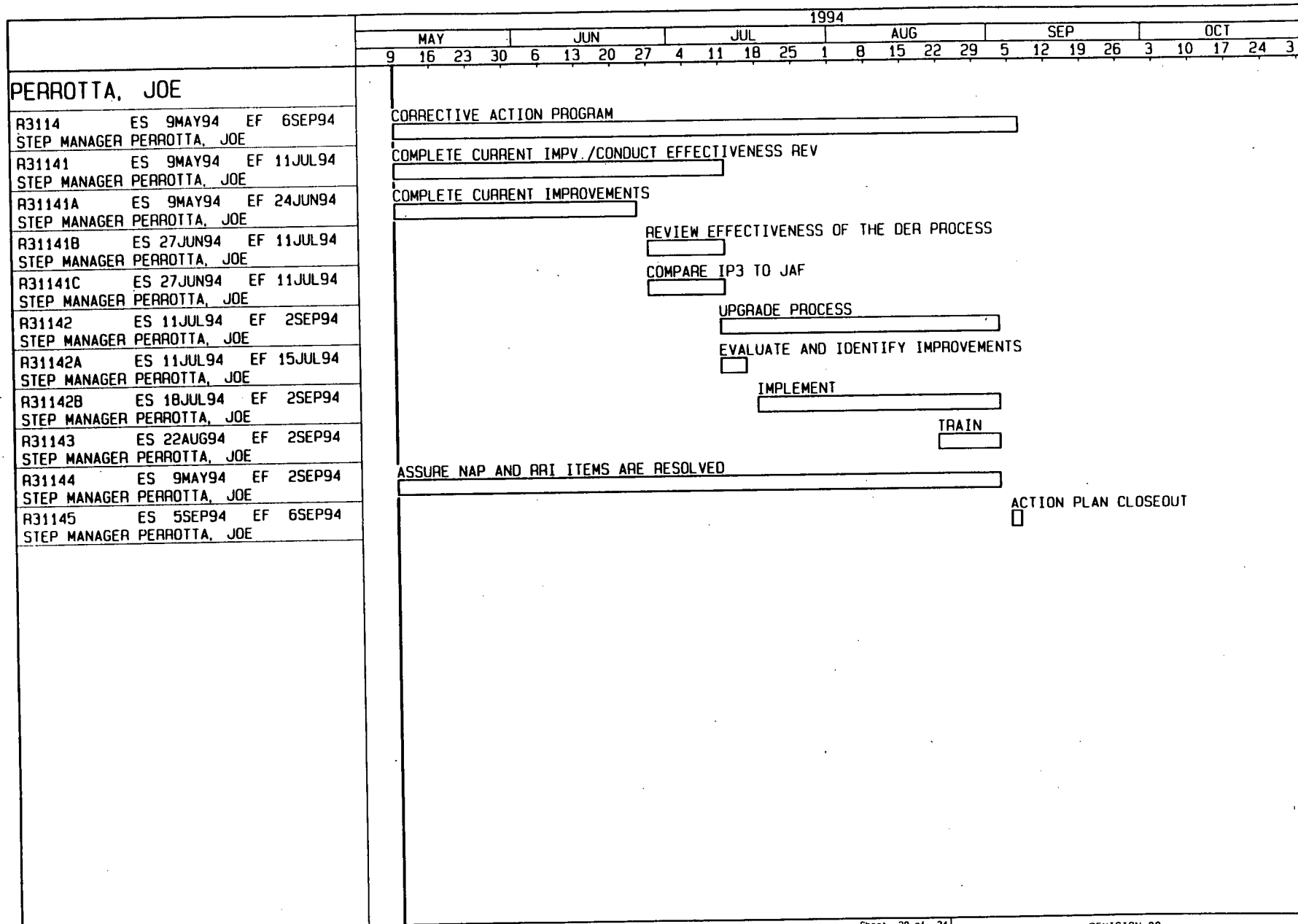
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NEW YORK POWER AUTHORITY  
 RESTART & CONTINUOUS IMPROVEMENT PLAN  
 ACTION PLAN SCHEDULE APP F (REV 1)

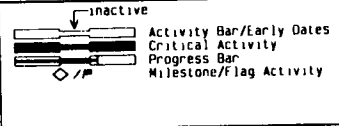
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 Project Start 15APR94  
 Project Finish 2AUG96

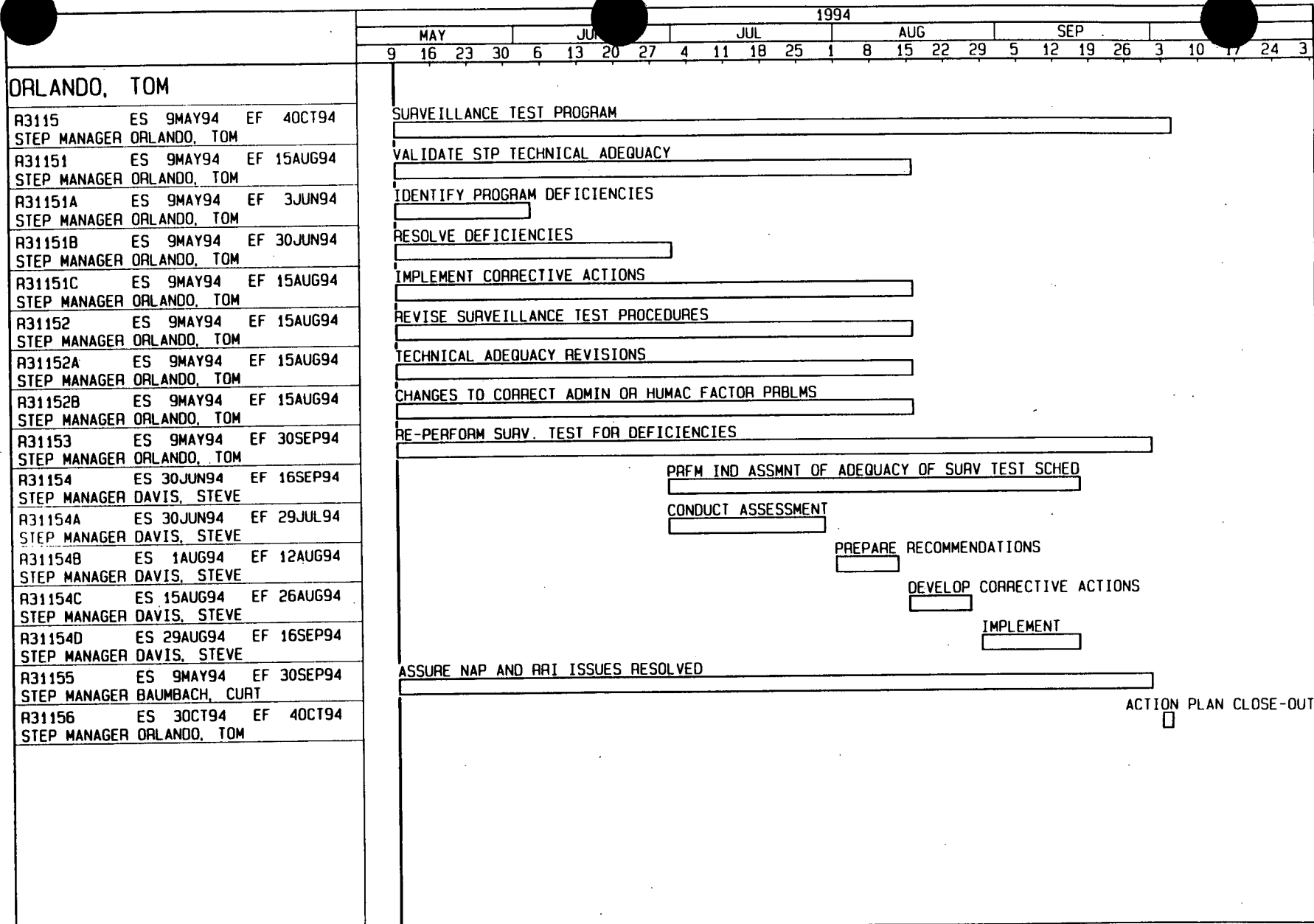


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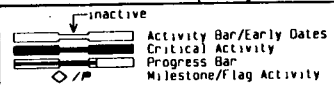
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 ACTION PLAN SCHEDULE APP F (REV 1)

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Date	Revision	Checked	Approved



Plot Date 21MAY94  
 Data Date 9MAY94  
 Project Start 15APR94  
 Project Finish 2AUG96



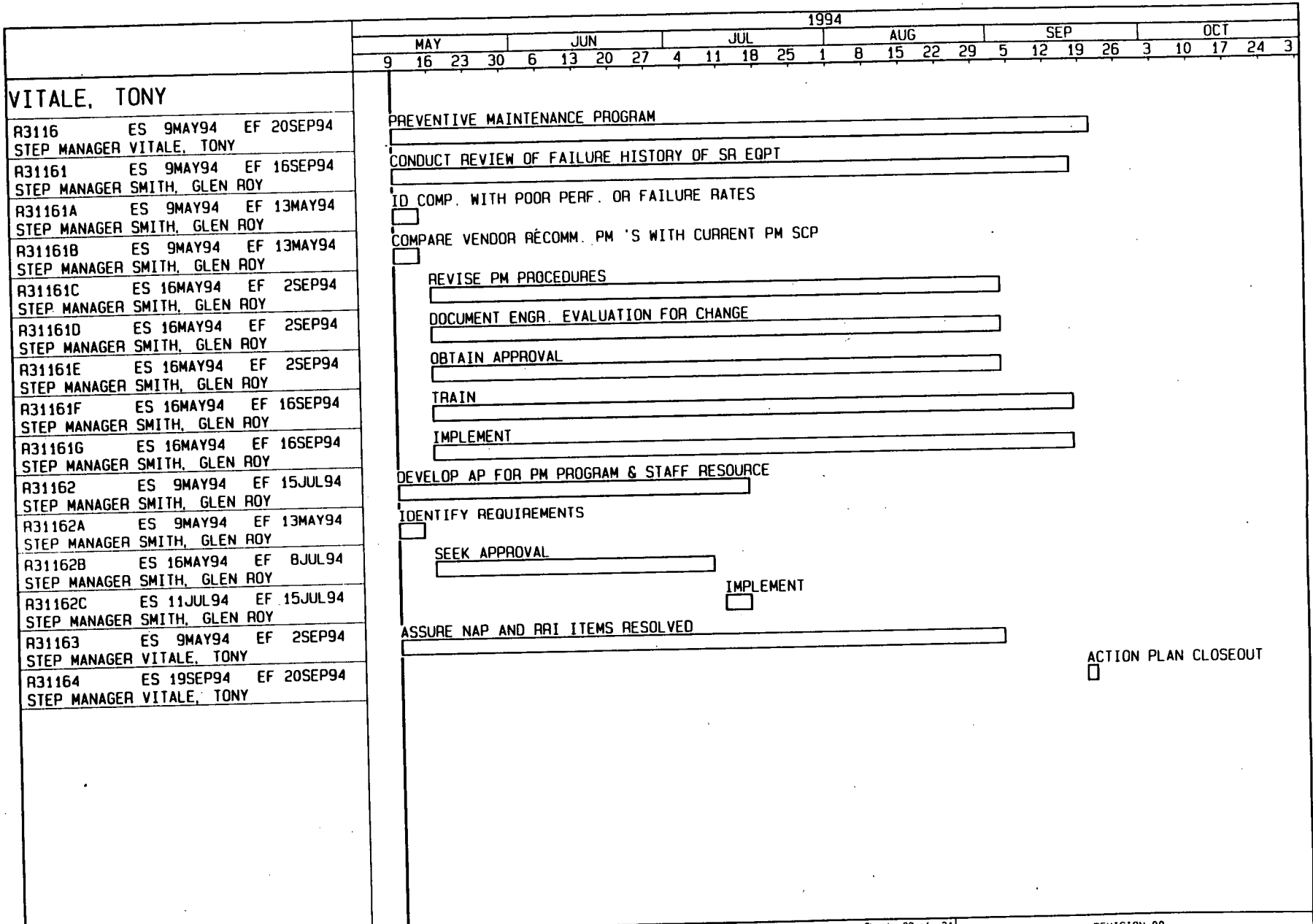
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 RESTART & CONTINUOUS IMPROVEMENT PLN  
 ACTION PLAN SCHEDULE APP F (REV 1)

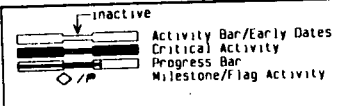
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Date	Revision	Checked	Approved

1994

MAY

JUN

JUL

AUG

SEP

9 16 23 30 6 13 20 27 4 11 18 25 1 8 15 22 29 5 12 19 26 3 10 17 24 3

HILL, LES

R3211	ES 9MAY94	EF 6SEP94
STEP MANAGER HILL, LES		
R32111	ES 9MAY94	EF 27MAY94
STEP MANAGER KELLY, LARRY		
R32111A	ES 9MAY94	EF 25MAY94
STEP MANAGER KELLY, LARRY		
R32111B	ES 20MAY94	EF 27MAY94
STEP MANAGER KELLY, LARRY		
R32112	ES 30MAY94	EF 2SEP94
STEP MANAGER FOGARTY, GENE		
R32112A	ES 30MAY94	EF 3JUN94
STEP MANAGER FOGARTY, GENE		
R32112B	ES 6JUN94	EF 10JUN94
STEP MANAGER FOGARTY, GENE		
R32112C	ES 13JUN94	EF 17JUN94
STEP MANAGER FOGARTY, GENE		
R32112D	ES 20JUN94	EF 2SEP94
STEP MANAGER FOGARTY, GENE		
R32113	ES 9MAY94	EF 2SEP94
STEP MANAGER KELLY, LARRY		
R32114	ES 13JUN94	EF 18JUL94
STEP MANAGER ZULLA, SAL		
R32115	ES 9MAY94	EF 2SEP94
STEP MANAGER KELLY, LARRY		
R32116	ES 5SEP94	EF 6SEP94
STEP MANAGER KELLY, LARRY		

PROCEDURE ADHERENCE

ROOT CAUSE ANALYSIS

ROOT CAUSE DETERMINATION

ROOT CAUSE VALIDATION

CORRECTIVE ACTION IMPLEMENTATION

CORRECTIVE ACTN DETERMINATION REQ'D PRIOR RESTR

CORRECTIVE ACTION VALIDATION

DEVELOP A PLAN TO IMPLEMENT

IMPLEMENT

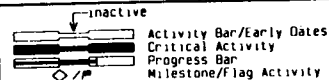
COMMUNICATE ROOT CAUSE RESULTS & CORRECTIVE ACTN

REVISE NUAP POLICY

ASSURE NAP & RRI ITEMS RESOLVED

ACTION PLAN CLOSEOUT

Plot Date 21MAY94  
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ACP2

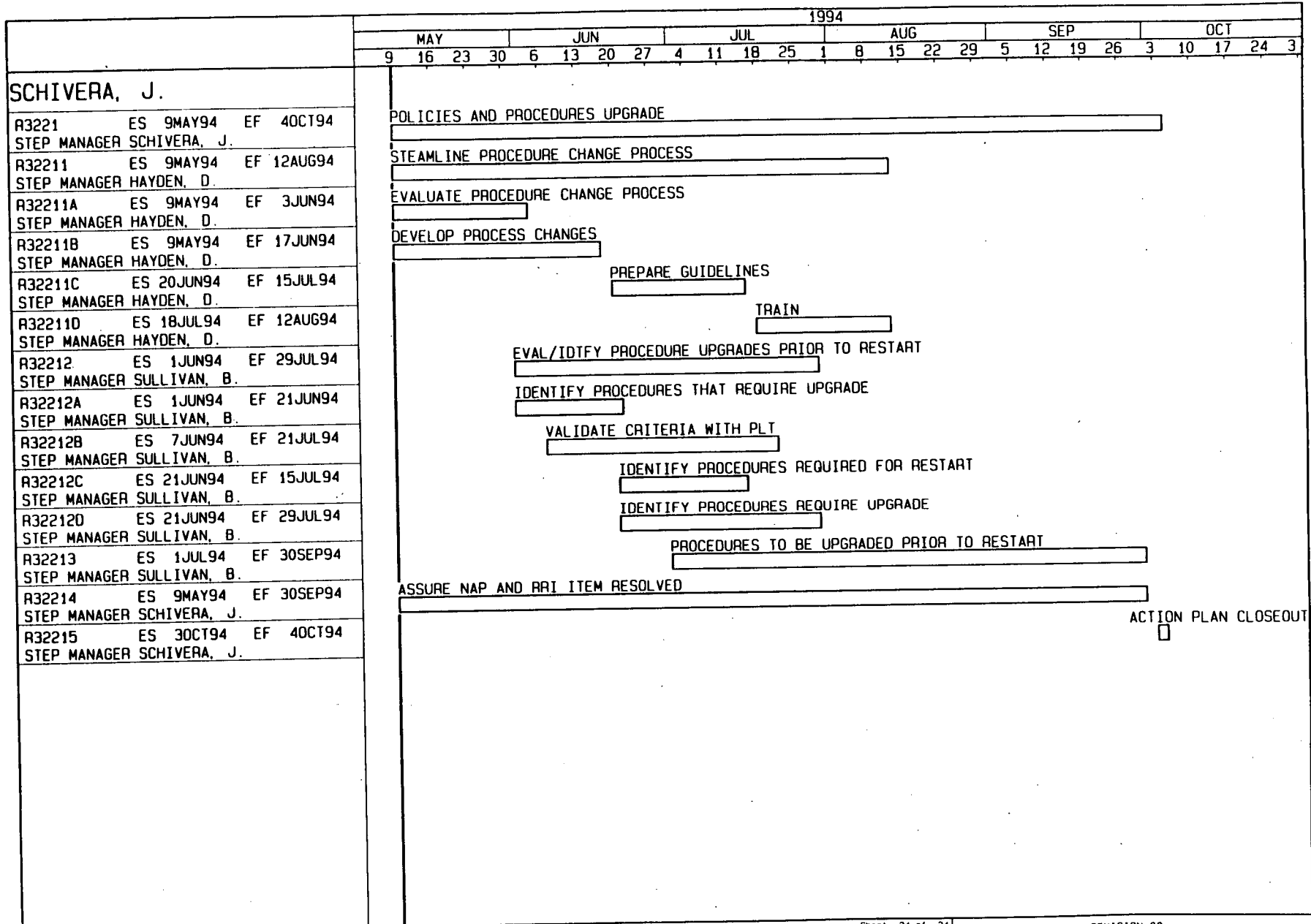
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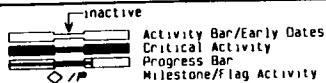
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