

NEW YORK POWER AUTHORITY

JAMES A. FITZPATRICK
NUCLEAR POWER PLANT

STARTUP PLAN

July 27, 1992

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I. EXECUTIVE SUMMARY

This Startup Plan describes the management review and process necessary to ensure a safe and organized return to service of the James A. FitzPatrick Nuclear Power Plant. The three major sections to the Startup Plan are briefly described below:

Plant Readiness For Startup

Describes actions necessary to assure both the physical and administrative readiness for startup. Responsible individuals and departments are identified and the means by which the Resident Manager arrives at a decision for plant startup and heatup is described. This includes the role of the Plant Leadership Team which is chaired by the Resident Manager. Startup, heatup, and power level milestones are defined, along with the general criteria upon which the Resident Manager bases decisions to continue plant startup. The role and interfaces of the Senior Nuclear Manager are addressed in this section.

Startup Contingency and Management Plan

Provides expectations regarding the preparation of plans and startup coverage requirements, both on site and call-in. This section also describes the additional management support which is provided during startup.

Startup Self-Assessment Plan

Provides the approach James A. FitzPatrick will take to assess the results of our efforts to improve safety, quality, and procedural compliance, and to evaluate performance of these changes. Lessons learned from this assessment effort are incorporated into present and future programmatic improvements as warranted by the priority of identified issues. The Startup Self-Assessment Plan involves plant management and supervision using the process defined, including supervisory job observations and QA surveillances. The Startup Self-Assessment Plan emphasizes active involvement of plant management to monitor and evaluate established programs. Prompt observation, evaluation, and feedback to the Plant Leadership Team allows the Resident Manager to make well informed decisions regarding startup progress.

II. DEFINITIONS

Milestones

Defined stopping points during plant startup. At each milestone specified plant conditions and administrative requirements are evaluated prior to continuing with plant startup and heatup. Attachment 4, Milestone Checkoff List, is provided to document completion of tasks at each Milestone.

Plant Leadership Team (PLT)

Performs management review and recommendations to the Resident Manager for continuing plant startup. Comprised of the following members and chaired by the Resident Manager:

- Resident Manager
- General Manager - Operations
- General Manager - Maintenance
- General Manager - Support Services

Senior Nuclear Manager (SNM)

Management personnel assigned to each shift to provide continuous management presence to supplement the Shift Supervisor during plant startup.

Startup Schedule

A schedule which consists of all significant tasks needed to be completed in order to progress from Cold Condition, all rods in, to a full power condition. Embodied in the Startup Plan are the requirements of RAP-7.3.30, Cycle Startup Reactor Physics Test Program*.

III. PLANT READINESS FOR STARTUP

This section provides the process and criteria to determine plant readiness to begin startup, and for moving from one milestone to the next.

A. ORGANIZATION

The existing management organization performs the major role in the preparation and conduct of the Startup Plan. Organization enhancements are described below:

White Plains Office Oversight

A Division Vice President will be present on-site during plant heatup and startup to act in an advisory capacity and provide an interface between site management and White Plains Office.

Plant Leadership Team

To provide prompt and comprehensive management review and recommendations to the Resident Manager, the PLT is established. The PLT is a mechanism used by senior plant management to assure a methodical and organized approach is used to examine the physical and process readiness for operation. This includes the safety, quality, and effectiveness of the processes used to operate, maintain, and support the plant. This team is comprised of the Resident Manager and General Managers. The PLT is chaired by the Resident Manager.

Prior to startup and heatup, and at all Milestones during this process, the PLT meets to receive reports from Department Managers and Department Supervisors, and resolve open issues regarding readiness to continue to the next milestone. The PLT reviews identified issues and other pertinent information and makes recommendations to the Resident Manager regarding continuing with plant startup.

The PLT is also responsible for receiving status reports from selected individuals involved in the self-assessment process. This information provides input to a self-assessment report to be written following the general review and critique conducted after the startup period. PLT meeting minutes document startup readiness decisions, and provide self-assessment reports and reviews.

Senior Nuclear Manager (SNM)

A SNM is assigned to each shift throughout the startup period. The SNM is a member of management who provides continuous management presence to supplement the Shift Supervisor during plant startup, and is available during all shifts. The SNM is on site during the entire startup period until a reactor power of greater than 30 percent is achieved. The SNM provides backup to the Shift Supervisor to assist in ensuring safety and quality concerns receive priority over production concerns.

The SNM provides management interface to resolve interdepartmental issues and problems. These may include problems the Shift Supervisor encounters that are not related to the responsibilities of the senior license holder in charge of the shift. In this manner, the Shift Supervisor is able to focus attention on plant operation. Since it is expected there will be an increased level of interface among various departments during startup, including contact with the Nuclear Regulatory Commission, the interface and support function of the SNM complements the Shift Supervisor in making the startup a controlled and safe evolution.

The licensed and procedural authority of the Shift Supervisor and Licensed Operators shall be maintained, and they shall execute license responsibilities and not delay or defer required immediate actions. If time permits, the Shift Supervisor may discuss operational matters with the SNM prior to making decisions. The SNM shall bring all matters relating to plant operation to the attention of the Shift Supervisor. The SNM shall not direct on-shift personnel in plant operations.

The SNM interfaces with the various departments on site for all matters pertaining to startup coverage, contingency, and self-assessment process. Operating matters directly and immediately affecting nuclear safety or requiring the Shift Supervisor's signature shall be brought to the Shift Supervisor's attention.

The on-coming SNM attends the Operations Department shift turnover and pre-shift briefing, and receives a verbal turnover from the off-going SNM. The SNM assists the Shift Supervisor in implementing contingency plans as required. The SNM also normally attends outage meetings to provide operating and Startup Schedule status and priorities to department representatives and support personnel. The SNM may also be called upon to provide input to the PLT at various times during plant startup.

B. PLAN EXECUTION

Approval and Performance

The Resident Manager approves the Startup Plan. The Startup Plan is implemented by General Managers and Department Managers.

Deviations

The Startup Plan is flexible enough to allow necessary changes or adjustments. The Resident Manager may make pen and ink changes to revise the Startup Plan.

Startup Schedule

A comprehensive schedule showing major milestones and duration of tasks. The requirements of RAP-7.3.30 are included within the Startup Plan.

Training

When the Startup Plan is approved and issued, site supervision shall hold meetings to brief personnel on the purpose and major aspects of the plan. Personnel involved in supporting this startup should have an appreciation for the contents and importance of the Startup Plan.

Post Maintenance Testing

All required post-maintenance testing is coordinated through the Work Control Center.

C. PLAN DESCRIPTION

The following describes the plan for the startup process, the milestones involved, and the basic criteria evaluated by the PLT before recommending to the Resident Manager that action to reach the next milestone may begin. While the description of the process for Milestone 1 is more detailed because of the many preparatory activities and readiness reports, the basic process conducted at each milestone is the same:

- Department Managers prepare, review, and evaluate readiness to move toward the next milestone.
- Department Managers review any work or maintenance activities which can result in a reactor trip. Review information is provided in Attachment 1.
- The PLT meet to receive verbal reports from Department Managers and Department Supervisors. The PLT may request written summaries if necessary to assist review and discussion.
- The PLT discuss any known personnel safety issues and interdepartment communications or interface issues.
- The PLT discuss and evaluate recommendations, reports, and any other information provided, including member observations of the process. PLT meeting minutes document the review process.
- The PLT provide input and recommendations to the Resident Manager regarding plant startup.
- The Resident Manager reviews startup progress and decides whether plant startup may continue, and informs the Executive Vice President - Nuclear Generation. This decision is communicated to plant staff.

D. PLANT TOURS

Department Managers and supervisors selected by the PLT conduct plant tours in accordance with the Startup Self-Assessment Plan in their areas of responsibility. Plant tours and observations evaluate activities and processes for safety, quality, efficiency and effectiveness, procedural compliance, significant material condition problems, and adequate interface and communications. Department Managers schedule Department Supervisors to perform self-assessment tours to provide adequate and thorough plant tours. The results of the self-assessment tours and observations of activities and processes are reported to the PLT, along with any information that may impact continuation of plant startup. Problems of immediate safety significance are immediately reported to the SNM or Shift Supervisor. Several observation tours should be performed by members of department management participating in milestone self-assessments, as described in the Startup Self-Assessment Plan, prior to continuing to the next milestone.

Problems identified should be documented via a WR or AQCR. Personnel involved in plant tours and system walkdowns forward any concerns that could impact startup to the responsible Department Manager. If the item cannot be resolved by the Department Manager, the issue is presented to PLT for resolution.

E. STATUS REPORTING

In addition to system walkdown and observation tours, certain additional information is provided to the PLT to assist in assessing the proper functioning of processes to support safe and effective plant operation and startup. Responsibilities include:

Department Managers

- Specific incidents
- Potentially reportable items
- Safety concerns
- WRs and AQCRs generated during plant startup
- Minor unusual occurrences and near misses
- Temporary Procedure Change status

RES Manager

- Radiological events

Work Control Center Supervisor

- Test results

RES Manager or Chemistry General Supervisor

- Chemistry parameters

Operations Manager

- Any new temporary modifications
- Any new Temporary Procedure Changes

I&C Manager and Maintenance Manager

- Equipment status

Reactor Analyst Supervisor

- RAP-7.3.30 status

F. STARTUP MILESTONES

MILESTONE 1

Purpose

This Milestone provides a decision making period to evaluate if conditions are met to enter the Startup Mode and commence heatup to less than 150 psig.

Plant Conditions

Reactor shutdown and plant in the Cold Condition.

Responsibilities

- Resident Manager
 - Authorize proceeding to Milestone 2 when satisfied that Milestone 1 results are satisfactory.
 - Notify the Executive Vice President - Nuclear Generation when proceeding to Milestone 2.
- Plant Leadership Team

The PLT meets and reviews reports for readiness. The PLT evaluates whether Milestone 1 is reached, then makes a recommendation to the Resident Manager.
- Operations Manager

Complete Cold Startup Checkoff of Startup and Shutdown Procedure*, with exception of authorization for startup by the Resident Manager.
- Department Managers

Provide an on-call and staffing plan to the SNM.
- Planning Manager

Verify actions required by PSO-64, Outage Closeout - Readiness For Startup Checklist*, are complete and presented to PORC.
- Reactor Analyst Supervisor

Complete Pre-Startup Testing portion of the Refuel Startup Program Checklist of RAP-7.3.30.

MILESTONE 2

Purpose

Milestone 2 is established to provide a period to allow system surveillance testing and post maintenance testing walkdowns to detect steam leakage or other problems, and to carry out observation of activities and processes in accordance with the Startup Self-Assessment Plan. By conducting an initial series of system walkdowns at lower pressures, leakage is detected and repairs or adjustments made.

Plant Conditions

Reactor pressure less than 150 psig, reactor critical, Startup Mode, surveillance testing of HPCI and RCIC in progress or complete.

Responsibilities

- Resident Manager

- Authorize proceeding to Milestone 3 when satisfied with self-assessment results.
- Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 2 level, and when proceeding to Milestone 3.

- Plant Leadership Team

Department Managers report evaluations of self-assessment efforts to the PLT. The PLT conducts a review of self-assessment evaluations and make a recommendation regarding proceeding to Milestone 3 to the Resident Manager.

- Department Managers

Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.

- Senior Nuclear Manager

Notify the General Managers and the Resident Manager that plant conditions are stabilized at the Milestone 2 level.

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- Operations, Maintenance, I&C, and RES Departments
Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to the PLT.
- Operations, Maintenance, and System Engineering Departments
Perform walkdown of Main Steam and safety related systems as determined by the General Manager - Operations.
- Work Control Center Supervisor
Ensure post work testing necessary to exceed 150 psig is complete.
- Planning Manager
Ensure tasks scheduled for Milestone 2 are complete.

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MILESTONE 3

Purpose

This milestone provides an intermediate reactor pressure condition to establish operation of the Reactor Feed Pumps.

Plant Conditions

Plant is critical in the startup mode at 500 - 600 psig reactor pressure.

Responsibilities

• Resident Manager

- Authorize proceeding to Milestone 4 when satisfied with self-assessment results.
- Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 3 level, and when proceeding to Milestone 4.

• Plant Leadership Team

Department Managers report evaluations of self-assessment efforts to the PLT. The PLT conducts a review of self-assessment evaluations and made a recommendation regarding proceeding to Milestone 4 to the Resident Manager.

• Department Managers

Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.

• Senior Nuclear Manager

Notify the General Managers and the Resident Manager that plant conditions are stabilized at the Milestone 3 level.

• Operations, Maintenance, I&C, and RES Departments

Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to the PLT.

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- Operations, Maintenance, System Engineering, and QC Departments
Conduct system walkdowns as determined by the Operations Manager.
- Work Control Center Supervisor
 - Review WRs that have been generated during system walkdowns and make appropriate recommendations to the SNM for establishing required plant conditions to perform repairs.
 - Ensure post work testing necessary to exceed 500 psig is complete.
- Planning Manager
Ensure tasks scheduled for Milestone 3 are complete.

MILESTONE 4

Purpose

This milestone is established at normal operating pressure to conduct final containment inspections, test HPCI and RCIC, and perform other testing and assessments prior to exceeding 25 percent power.

This milestone provides a low, stable power level within the capability of turbine bypass valves to allow walkdown and evaluation of systems and equipment used during power operation, such as the turbine generator and other secondary steam systems. An at-power self-assessment provides the assurance that systems, processes, and procedures are functioning properly to continue power ascension.

Plant Conditions

Reactor critical, Mode Switch in Run, reactor pressure approximately 900 psig, and main generator synchronized to the grid.

Responsibilities

- Resident Manager

- Authorize proceeding to Milestone 5 when satisfied with self-assessment results
- Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 4 level, and when proceeding to Milestone 5.

- Plant Leadership Team

Department Managers report evaluations of self-assessment efforts to the PLT. The PLT conducts a review of self-assessment evaluations and made a recommendation regarding proceeding to Milestone 5 to the Resident Manager.

- Department Managers

Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.

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- Senior Nuclear Manager

Notify the General Managers and the Resident Manager that plant conditions are stabilized at the Milestone 4 level.

- Operations, Maintenance, I&C, and RES Departments

Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to the PLT.

- Operations, Maintenance, System Engineering, and QC Departments

Conduct system walkdowns as determined by the General Manager - Operations.

- Work Control Center Supervisor

- Review WRs that have been generated during system walkdowns and make appropriate recommendations to the SNM for establishing required plant conditions to perform repairs.

- Ensure post work testing necessary to exceed 900 psig is complete.

- Planning Manager

Ensure tasks scheduled for Milestone 4 are complete.

MILESTONE 5

Purpose

This milestone provides a stable power level to allow walkdown and evaluation of systems and equipment used during power operation. An at-power self-assessment provides the assurance that systems, processes, and procedures are functioning properly to continue power ascension.

Plant Conditions

Reactor at 50 percent power.

Responsibilities

• Resident Manager

- Authorize proceeding to Milestone 6 when satisfied with the self-assessment results.
- Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 5 level, and when proceeding to Milestone 6.

• Plant Leadership Team

Department Managers report evaluations of self-assessment efforts to the PLT. The PLT conducts a review of self-assessment evaluations and made a recommendation regarding proceeding to Milestone 6 to the Resident Manager.

• Department Managers

Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.

• Senior Nuclear Manager

Notify the General Managers and the Resident Manager that plant conditions are stabilized at the Milestone 5 level.

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- Operations, Maintenance, I&C, and RES Departments
Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to the PLT.
- Operations, Maintenance, System Engineering, and QC Departments
Conduct system walkdowns as determined by the General Manager - Operations.
- Work Control Center Supervisor
Review WRs that have been generated during system walkdowns and make appropriate recommendations to the SNM for establishing required plant conditions to perform repairs.
- Planning Manager
Ensure tasks scheduled for Milestone 5 are complete.

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MILESTONE 6

Purpose

To establish a stable power to conduct inspections prior to continuing power ascension.

Plant Conditions

Reactor at 75 percent power.

Responsibilities

- Resident Manager

- Authorize proceeding to Milestone 7 when satisfied with the self-assessment results.

- Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 6 level, and when proceeding to Milestone 7.

- Plant Leadership Team

Department Managers report evaluations of self-assessment efforts to the PLT. The PLT conducts a review of self-assessment evaluations and made a recommendation regarding proceeding to Milestone 7 to the Resident Manager.

- Department Managers

Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.

- Senior Nuclear Manager

Notify the General Managers and the Resident manager that plant conditions are stabilized at the Milestone 6 level.

- Operations, Maintenance, I&C, and RES Departments

Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to the PLT.

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- Operations, Maintenance, System Engineering, and QC Departments
Conduct system walkdowns as determined by the General Manager - Operations.
- Work Control Center Supervisor
Review WRs that have been generated during system walkdowns and make appropriate recommendations to the SNM for establishing required plant conditions to perform repairs.
- Planning Manager
Ensure tasks scheduled for Milestone 6 are complete.

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MILESTONE 7

Purpose

To conduct inspections at full power operations.

Plant Conditions

Reactor at 100 percent power.

Responsibilities

- Executive Vice President - Nuclear Generation
Meet with the PLT as a whole to review their conclusions and recommendations.
- Resident Manager
Notify the Executive Vice President - Nuclear Generation when plant conditions are stabilized at the Milestone 7 level.
- Plant Leadership Team
Conduct a review of the self-assessment process, including lessons learned and recommendations for improvement. A report of the PLT's conclusions is issued by the Resident Manager and provided to the Executive Vice President - Nuclear Generation within 30 days after completing Milestone 7 requirements.
- Department Managers
Ensure Startup Self-Assessment Plan tours are conducted as described in Section III.D.
- Senior Nuclear Manager
Notify the General Managers and the Resident Manager that plant conditions are stabilized at the Milestone 7 level.
- Operations, Maintenance, I&C, and RES Departments
Conduct post work surveillance testing and reactor physics testing as indicated on the Startup Schedule. Department Managers report test results to PLT.

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- Operations, Maintenance, System Engineering, and QC Departments
Conduct system walkdowns as determined by the General Manager - Operations.
- Work Control Center Supervisor
Review WRs that have been generated during system walkdowns and make appropriate recommendations to the SNM for establishing required plant conditions to perform repairs.
- Planning Manager
Ensure tasks scheduled for Milestone 7 are complete.

IV. STARTUP CONTINGENCY AND MANAGEMENT PLAN

A. DEPARTMENTS REQUIRING CONTINGENCY PLANS

The following departments require contingency plans:

- White Plains Office:
 - Nuclear Support
 - Nuclear Operations and Maintenance
 - Nuclear Engineering
- Operations
- Maintenance
- Instrument and Controls
- Quality Assurance
- Radiation and Environmental Services
- Technical Services
- Site Engineering
- Operations Review Group
- Security
- Training
- Planning
- Material Control

B. DEPARTMENT CONTINGENCY PLAN PREPARATION

Attachment 2 is used to describe how each department is prepared to support plant startup. A list of names and telephone numbers for both on-site and call-in contacts (primary and alternate) throughout the startup, heatup, and power ascension is provided to the SNM. An example phone list is provided on Attachment 3.

NOTE: Members of site supervision must adhere to Fitness for Duty requirements when conducting call-ins.

The following should be considered during plan preparation:

- What specialties do your people have that may be called upon during unique time frames during the startup? Would it be better to put them on shift or on call?
- What additional support do you typically need to have on tap for unusual or emergent high work load conditions? Such as leak repair, demineralized water supplies, procedure writers, computer, compressed air.
- Review the needs of your groups for various supplies, such as fittings, oils, tygon, leakage catchment devices, packing, absorbents, test equipment, heat stress supplies.
- Review and approve, or establish if necessary, plans of attack for dealing with expected, or unexpected, such as unusual chemistry or HPCI, RCIC, RFP turbine problems.
- Maintenance sections shall plan to provide coverage.
- Warehouse personnel must be available on site around-the-clock.
- Document control personnel must be available on a call-in basis on back shifts to obtain prints, technical manuals, and procedures as required.
- PORC members must be available for call-in for PORC meetings at any time.

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- Operation Department provide additional Operators during major planned evolutions, such as reactor heatup, turbine roll, parallel the turbine generator, and surveillance testing.
- The Control Room is occupied by more than the minimum number of personnel. All site supervisors, as part of their planning for this startup, must emphasize to their personnel that deliberate control of the numbers of personnel in the Control Room at any one time is essential. Reemphasize the need for a business-like atmosphere: quietly carry out required work, keep unnecessary activities and discussions outside the Control Room. If asked by Control Room operators or the Shift Supervisor to leave the Control Room, do so immediately.
- Each department designates (as applicable) in their contingency plans specific people who support event evaluations.
- Address any system walkdowns that are conducted as required by the Readiness or Self-Assessment portions of the plan.
- Based on experience, consider your preparedness to:
 - Exercise the proper industrial safety and maintenance/troubleshooting practices to avoid personnel injury.
 - Handle the most common problems that have been encountered in the past.
 - Assure that complex and major evolutions are appropriately supported.
 - Prevent problems that have had significant impact in the past or resulted in a reportable event, or and unnecessary reactor trip or challenge to Safety Systems.

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C. DEPARTMENT CONTINGENCY PLAN APPROVAL

Each Department's Contingency Plan must be approved by the responsible General Manager. The Contingency Plan does not need to be submitted to the PLT. However, a key contact phone list must be given to the SNM prior to Milestone 1 and updated as required.

D. MANAGEMENT SUPPORT FOR STARTUP, POWER OPERATION AND SHUTDOWN

Department Managers

Provide supervisory presence and conduct supervisory job observations and tours during this period, as described in the Startup Self-Assessment Plan.

Manager Level

Department Managers prepare a schedule to provide management presence in the form of observation tours throughout the period. Tours are also conducted on back shifts.

General Managers shall spend time in the plant as available, observing activities using observation criteria from such sources as PSO-58, Management Observer Program. This effort not only provides their presence to demonstrate the importance of conducting the startup safely and effectively, but also gives each manager valuable input and feedback as a member of the PLT. In this way, they are able to gain a better picture of the effectiveness of processes to support safe plant operation. The concept of full participation in the Startup Self-Assessment Plan by all levels of supervision is supported by this manager-level effort.

The presence of Department Managers and General Managers on site and in the field shall not interfere with the prime licensed responsibility and authority of the Operations Manager, Shift Supervisor, and on-shift personnel.

V. STARTUP SELF-ASSESSMENT PLAN

A. PURPOSE

To provide to site management a critical evaluation of the performance and effectiveness of plant programs, hardware, and personnel as the plant proceeds from shutdown, through startup, and power ascension.

B. SCOPE

The focus is directed towards a methodical evaluation by senior plant personnel of site performance in the following areas during plant startup:

- Safety Perspective and Professionalism of Operations
- Procedural Compliance
- Systems and Equipment Performance
- Plant Material Condition
- Work Control Processes: Efficiency
- Work Control Processes: Safety and Compliance
- Personnel Safety: Compliance (Industrial and Radiation)
- Personnel Safety: Awareness (Industrial and Radiation)
- Engineering and Technical Support
- Interface and Teamwork
- Communications (Inter and Intra-Department)
- Identification and Resolution of Safety Issues
- Supervisory Oversight and Involvement

C. GOAL

To provide the following:

- Added assurance of orderly, safe, and deliberate operations.
- Additional monitoring and assessment of plant operations, plant programs, and equipment.
- An additional mechanism for the prompt identification and correction of problems that impact immediate or current operations.
- An additional mechanism for the identification of areas that require further improvement through critical observation, self-assessment, and incorporation of any lessons learned.

D. ATTRIBUTES

Additional Assurance

The existing site programs, procedures, and instructions are structured so that as problems occur, the problems are identified, screened for significance and reportability, and corrected in a manner that assures continued safe operations. An important part of the process is that these programs require actions to ensure that the plant is maintained in a safe condition at all times (including placing the plant in cold shutdown) even though problems are identified.

While we are confident that the organization, hardware, and programs are satisfactory for safe operations, senior management has initiated this Startup Self-Assessment Plan to provide added assurance of orderly, safe, and deliberate operations.

Additional Monitoring and Assessment of Plant Operations, Plant Programs, and Equipment

An important part of this Startup Self-Assessment Plan is the increased emphasis on monitoring and assessment activities required of line managers.

The increased frequency of field observations of work in progress and subsequent recording of activities observed provide many benefits. These observations are used to provide increased opportunities for line management to compare expectations with actual performance in the plant. Further, these observations provide opportunities for line management to reinforce changes in programs, practices, and expectations that have occurred as part of the Results Improvement Plan.

Additional Mechanism for Prompt Identification and Correction of Problems

While existing programs already provide for the identification and correction of problems, it is probable that additional problems may arise as the plant is placed into power operations.

Startup Self-Assessment Plan activities provide additional assurance that problems which have an immediate or current affect on plant operations are brought to the attention of the responsible Department Managers. The issue is corrected and actions are taken to place the plant in a safe condition, as necessary.

It is important to note that these actions are not intended to circumvent or take the place of existing programs. These additional measures are only intended for use during this period of startup.

Additional Mechanism for Identification of Areas that Require Further Improvement

As the plant is operated for preoperational testing of plant modifications and equipment, and plant processes, programs, procedures, and instructions are exercised by demonstration, areas that require further improvement are identified and implemented during future plant startups.

E. REQUIREMENTS

The Startup Self-Assessment Plan consists of the following:

Plant Leadership Team (PLT)

The PLT is a board of senior site management tasked to monitor and assess the effectiveness of site performance in the areas within the scope of this Startup Self-Assessment Plan. At each Milestone (described in Section III.F) the PLT is tasked with making a recommendation to the Resident Manager based on their determination of additional tasks or actions required, if any, to permit the plant to resume progress toward the next milestone and further power operations. This assessment is in addition to the normal reviews and checks called for by existing site programs.

Milestone Conditions

These milestones were chosen as conditions of safe and stable operations, where further heatup or power escalation are suspended so the evaluation and assessment activities required by this plan may be completed and results reviewed by management.

Department Managers and Selected Department Supervisors

Perform frequent field observations of work in progress within their areas of responsibility. These observations are evaluated by the Department Manager and a copy of the observations forwarded to the PLT. The Department Managers report their evaluations to the PLT at the applicable milestone meeting. While all aspects of work performance should be considered in the course of these observations, extra attention should be directed towards the programs and hardware that fall within the scope of this self-assessment.

Department Managers

As designated by the PLT, collect specific examples of problems encountered and specific examples of successes. At each Milestone meeting copies of these specific examples are provided to the PLT as another source of information to the startup self-assessment process.

Within five days following completion of Milestone 7

Each Department Manager conducts a post-startup critique with appropriate personnel from within their area of responsibility. The emphasis of this critique should be on lessons learned, problems identified, areas that need further improvement, and examples of team and individual success.

Within seven days following completion of Milestone 7

A copy of the minutes of these post-startup critiques is forwarded to the PLT secretary.

Within 10 days following completion of Milestone 7

The PLT conduct a round table discussion regarding lessons learned, problems identified, and areas of improvement resulting from this period.

Within 20 days following completion of Milestone 7

The PLT provides the Executive Vice President - Nuclear Generation a written report providing:

- A brief chronology of return to power operations
- Significant events or occurrences
- A summary of results of tests or inspection conducted
- Lessons learned
- Examples of major successes
- Areas that require improvement
- Recognition of team and individual excellence
- Recommendations

Executive Vice President - Nuclear Generation

Meet with the PLT to review their conclusions and recommendations.

MAINTENANCE THAT COULD CAUSE A REACTOR TRIP

To reduce the possibilities of reactor trips, routine maintenance on components that could result in a reactor trip if an error were made or if the unexpected were to happen should not be permitted.

Each maintenance activity is evaluated on a case-by-case basis to consider the possibility of a trip compared to the urgency of the maintenance. In cases where maintenance must be performed on critical components or in sensitive cabinets and the maintenance is not urgent, the Senior Nuclear Manager should be consulted to discuss what measures are prudent to prevent a plant trip or power reduction.

Except for emergency work, only scheduled work should be allowed. During the scheduling process, criteria such as possibility of reactor trips is reviewed. Prior to starting maintenance involving trip potential the activity is reviewed by the Senior Nuclear Manager. A briefing is held to discuss the details of how the evolution is conducted, what precautions are taken and the responsibility of each person involved. The briefing is attended by the Shift Supervisor, the responsible maintenance supervisor, the system engineer, affected watchstanders, and others as deemed appropriate by the Shift Supervisor.

STARTUP CONTINGENCY PLAN

DEPARTMENT _____

1. Special skills of Department personnel which may be required during Startup:

2. Additional contractor or other support that may be required, or other available resources:

3. Contingency supplies or materials that have been staged:

4. Brief description of how potential or unexpected problems will be handled (consider the 5 to 10 biggest problems encountered in past startups, after major outages):

5. Technical or clerical needs:

6. Designated personnel and telephone numbers from each department who would be available (on-call) to immediately support a post trip review:

7. Expected conduct in the Control Room reviewed with all personnel who will be supporting this startup:

STARTUP CONTINGENCY PLAN

8. Direct support, walkdowns, or actions to be conducted at various milestones:

- Milestone 1:

- Milestone 2:

- Milestone 3:

- Milestone 4:

- Milestone 5:

- Milestone 6:

- Milestone 7:

- Other:

9. Contact phone list complete and provided to the SNM.

REVIEW: DEPARTMENT MANAGER DATE

APPROVAL: GENERAL MANAGER DATE

ATTACHMENT 4

Page 1 of 7

MILESTONE CHECKOFF LIST

MILESTONE 1

Initials/Date

1. Provide on-call and staffing plan to the SNM.
(Responsibility: Department Managers) _____ / _____
2. Complete PSO-64 and present to PORC.
(Responsibility: Planning Manager) _____ / _____
3. Complete RAP-7.3.30 Pre-Startup Testing.
(Responsibility: Reactor Analyst Supervisor) _____ / _____
4. Complete OP-65 Cold Startup Checkoff, with
exception of authorization for startup by
the Resident Manager.
(Responsibility: Operations Manager) _____ / _____
5. Review reports for readiness and make
recommendations to the Resident Manager.
(Responsibility: PLT) _____ / _____
6. Notify Executive VP - Nuclear Generation
when proceeding to Milestone 2.
(Responsibility: Resident Manager) _____ / _____
7. Proceed to Milestone 2 is authorized.
(Responsibility: Resident Manager) _____ / _____

MILESTONE CHECKOFF LIST

MILESTONE 2

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 2. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 2. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Review self-assessment evaluations and make recommendations to the Resident Manager. (Responsibility: PLT) _____ / _____
5. Complete testing as indicated on the Startup Schedule and report test results to the PLT. (Responsibility: Department Managers) _____ / _____
6. Perform system walkdowns as determined by the General Manager - Operations. (Responsibility: Department Managers) _____ / _____
7. Complete post work testing necessary to exceed 150 psig. (Responsibility: WCC Supervisor) _____ / _____
8. Complete tasks scheduled for Milestone 2. (Responsibility: Planning Manager) _____ / _____
9. Notify Executive Vice President - Nuclear Generation when proceeding to Milestone 3. (Responsibility: Resident Manager) _____ / _____
10. Proceed to Milestone 3 is authorized. (Responsibility: Resident Manager) _____ / _____

MILESTONE CHECKOFF LIST

MILESTONE 3

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 3. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 3. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Review self-assessment evaluations and make recommendations to the Resident Manager. (Responsibility: PLT) _____ / _____
5. Complete testing as indicated on the Startup Schedule and report test results to the PLT. (Responsibility: Department Managers) _____ / _____
6. Conduct system walkdowns as determined by the Operations Manager. (Responsibility: Department Managers) _____ / _____
7. Review generated WRs and make recommendations to the SNM to perform repairs. (Responsibility: WCC Supervisor) _____ / _____
8. Complete post work testing necessary to exceed 500 psig. (Responsibility: WCC Supervisor) _____ / _____
9. Ensure tasks scheduled for Milestone 3 are complete. (Responsibility: Planning Manager) _____ / _____
10. Notify Executive VP - Nuclear Generation when proceeding to Milestone 4. (Responsibility: Resident Manager) _____ / _____
11. Proceed to Milestone 4 is authorized. (Responsibility: Resident Manager) _____ / _____

ATTACHMENT 4

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MILESTONE CHECKOFF LIST

MILESTONE 4

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 4. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 4. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Review self-assessment evaluations and make recommendations to the Resident Manager. (Responsibility: PLT) _____ / _____
5. Complete testing as indicated on the Startup Schedule and report test results to the PLT. (Responsibility: Department Managers) _____ / _____
6. Conduct system walkdowns as determined by the General Manager - Operations. (Responsibility: Department Managers) _____ / _____
7. Review generated WRs and make recommendations to the SNM to perform repairs. (Responsibility: WCC Supervisor) _____ / _____
8. Complete post work testing necessary to exceed 900 psig. (Responsibility: WCC Supervisor) _____ / _____
9. Ensure tasks scheduled for Milestone 4 are complete. (Responsibility: Planning Manager) _____ / _____
10. Notify Executive VP - Nuclear Generation when proceeding to Milestone 5. (Responsibility: Resident Manager) _____ / _____
11. Proceed to Milestone 5 is authorized. (Responsibility: Resident Manager) _____ / _____

MILESTONE CHECKOFF LIST

MILESTONE 5

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 5. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 5. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Review self-assessment evaluations and make recommendations to the Resident Manager. (Responsibility: PLT) _____ / _____
5. Conduct testing as indicated on the Startup Schedule and report test results to the PLT. (Responsibility: Department Managers) _____ / _____
6. Conduct system walkdowns as determined by the General Manager - Operations. (Responsibility: Department Managers) _____ / _____
7. Review generated WRs and make recommendations to the SNM to perform repairs. (Responsibility: HCC Supervisor) _____ / _____
8. Ensure tasks scheduled for Milestone 5 are complete. (Responsibility: Planning Manager) _____ / _____
9. Notify Executive VP - Nuclear Generation when proceeding to Milestone 6. (Responsibility: Resident Manager) _____ / _____
10. Proceed to Milestone 6 is authorized. (Responsibility: Resident Manager) _____ / _____

ATTACHMENT 4

MILESTONE CHECKOFF LIST

MILESTONE 6

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 6. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 6. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Review self-assessment evaluations and make recommendations to the Resident Manager. (Responsibility: PLT) _____ / _____
5. Conduct testing as indicated on the Startup Schedule and report test results to the PLT. (Responsibility: Department Managers) _____ / _____
6. Conduct system walkdowns as determined by the General Manager - Operations. (Responsibility: Department Managers) _____ / _____
7. Review generated WRs and make recommendations to the SNM to perform repairs. (Responsibility: WCC Supervisor) _____ / _____
8. Ensure tasks scheduled for Milestone 6 are complete. (Responsibility: Planning Manager) _____ / _____
9. Notify Executive VP - Nuclear Generation when proceeding to Milestone 7. (Responsibility: Resident Manager) _____ / _____
10. Proceed to Milestone 7 is authorized. (Responsibility: Resident Manager) _____ / _____

ATTACHMENT 4

Page 7 of 7

MILESTONE CHECKOFF LIST

MILESTONE 7

Initials/Date

1. Notify General Managers and Resident Manager when plant conditions are stabilized at Milestone 7. (Responsibility: SNM) _____ / _____
2. Notify Executive VP - Nuclear Generation when plant conditions are stabilized at Milestone 7. (Responsibility: Resident Manager) _____ / _____
3. Complete Startup Self-Assessment Plan tours. (Responsibility: Department Managers) _____ / _____
4. Complete testing as indicated on the Startup Schedule and report test results to PLT. (Responsibility: Department Managers) _____ / _____
5. Conduct system walkdowns as determined by the General Manager - Operations. (Responsibility: Department Managers) _____ / _____
6. Review generated WRs and make recommendations to the SNM to perform repairs. (Responsibility: WCC Supervisor) _____ / _____
7. Ensure tasks scheduled for Milestone 7 are complete. (Responsibility: Planning Manager) _____ / _____
8. Conduct a review of the self-assessment process and issue a report of findings to the Executive VP - Nuclear Generation within 30 days after completing Milestone 7 requirements. (Responsibility: PLT) _____ / _____
9. Meet with the PLT to review conclusions and recommendations. (Responsibility: Executive VP - Nuclear Generation) _____ / _____

ENCLOSURE 4

LIST OF ATTENDEES

NRC Attendees:

C. Hehl, Director, Division of Reactor Projects, (DRP)
C. Cowgill, Chief, Reactor Projects Branch No. 1, DRP
L. Bettenhausen, Chief, Operations Branch, Division of Reactor Safety
P. Eselgroth, Chief, Reactor Projects Section No. 1B, DRP
B. McCabe, Project Manager, Office of Nuclear Reactor Regulation
W. Cook, Senior Resident Inspector, FitzPatrick, DRP

NYPA Attendees:

H. Salmons, Resident Manager, FitzPatrick
E. Berzins, Public Relations Manager, FitzPatrick

Others:

A. Smith, Reporter, Syracuse Newspapers