PROBLEM STATEMENT:

The Work Control Process is not effectively implemented.

CAUSAL FACTORS:

1. The Work Control Process is not effectively implemented due to a lack of organizational ownership, commitment, and support. (Action plan steps: 1, 3, 4, 5, 6, 9)
2. Roles, standards, expectations, and Infrastructure for the Work Control Process are not adequately developed. (Action plan steps: 1, 2, 6, 10)
3. Lack of alignment in priorities between the Work Control Process (Maintenance Work Management) and the Engineering Work Management activities. (Action plan steps: 3, 4, 7, 11)
4. Package status is not effectively communicated in order to identify and resolve restraints. (Action plan steps: 2, 3, 9)
DISCUSSION:

CNS is weak in the organizational discipline of planning and execution of plans. In general, activities are not well planned. Existing planning and scheduling systems have been ineffective. Management has fostered an environment in which production and work accomplishment has usually been given the first priority with pressure on the staff to achieve results with minimal delay. This statement is directly out of the 1994 CNS Diagnostic Self-Assessment and can be characterized as being generally representative of current performance. It is clear from the recent evaluations that the Work Control Process is not effectively implemented due to a lack of organizational ownership, commitment, and support. Recent reports clearly identify problems with engineering work management, even after the implementation of an engineering work management tool in 1999/2000. Areas of continued weakness include:

- Differing priorities between the Work Control Process (Maintenance Work Management) and the Engineering Work Management efforts. Evidence of planning and prioritization silos.
- Work Week Directors have little or no clout/authority to ensure activities for Work Week preparation and implementation are being actively pursued.
- The Work Control Process has been benchmarked and changed after initial introduction. Current assessments (since 1999) indicate the problems are not with the defined process but accountability and reinforcement of the process.
- Roles, standards, expectations, and infrastructure for the Work Control Process are not adequately developed or detailed to allow for applicable supervision to reinforce the process. For example, a work package does not have one clear owner who is responsible for driving the package through the process. Instead, collective ownership of the package as it is handed off through the process is expected.
- Communication of package status routinely only occurs at the scheduled "T" meetings. No communications expectations are established outside of these meetings. Thus restraints are recognized late and hand off missed.

OBJECTIVE:

The purpose of the work planning and scheduling process is clearly defined and understood throughout the organization. Specific organizational and individual roles and responsibilities for work package and schedule preparation activities have
been explicitly defined including specifically who will be held accountable for the timeliness, completion and accuracy of an individual work package and for the work week schedule. Individuals who are accountable have the authority to get the job done. The station effectively utilizes the On-line Scheduling Process to aggressively fix degraded plant equipment. Preventive and Predictive Maintenance is completed on time and effectively minimizes unplanned corrective maintenance.

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop controls to ensure the rigorous implementation of the 12-week rolling system window scheduling process currently defined by our procedures.</td>
<td>J. McMahan</td>
<td>05/02</td>
<td>09/02</td>
<td>Procedure 0.40.1 revised. See attached for recommended controls.</td>
</tr>
<tr>
<td>2</td>
<td>Define single point of accountability for an individual work package. Revise procedure and communicate new expectations and requirements to staff</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>07/02</td>
<td>Appropriate Procedures revised to reflect this accountability.</td>
</tr>
<tr>
<td>3</td>
<td>Establish a periodic work package accountability status meeting to review status of all Work Packages not yet Ready for Work</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>09/02</td>
<td>Weekly status report to Work Control Manager identifying all packages with outstanding restraints, individuals responsible for resolution of restraint, expected date of resolution, week work task is scheduled In.</td>
</tr>
<tr>
<td>4</td>
<td>Ensure roles and responsibilities of various individuals / groups involved in the development of work order packages are clearly defined and proceduralized.</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>09/02</td>
<td>All appropriate procedures revised</td>
</tr>
<tr>
<td>5</td>
<td>Review the Work Week Director roles and responsibilities and revise procedures as necessary.</td>
<td>J. McMahan</td>
<td>05/02</td>
<td>09/02</td>
<td>All appropriate procedures (0.40, 0.40.1) revised to reflect this accountability.</td>
</tr>
<tr>
<td>6</td>
<td>Develop a prioritization and decision making tool to improve the consistency of prioritization and screening of work orders.</td>
<td>J. McMahan</td>
<td>06/02</td>
<td>08/02</td>
<td>All appropriate procedures revised</td>
</tr>
</tbody>
</table>

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Revision 1 6/7/02
<table>
<thead>
<tr>
<th></th>
<th><strong>Map the work control process with key implementers in the process (planning, engineering, shops, supply chain, operations, work control) identified with roles and responsibilities defined.</strong></th>
<th>B. Macecevic</th>
<th>06/02</th>
<th>09/02</th>
<th>All appropriate procedures revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td><strong>Develop or modify Performance Indicators as Necessary.</strong></td>
<td>S. Woerth</td>
<td>06/02</td>
<td>09/02</td>
<td>Adequate performance indicators available to monitor effectiveness of changes being made in the WCD</td>
</tr>
<tr>
<td>9</td>
<td><strong>Evaluate current Work Control Organization and make changes to Improve accountability.</strong></td>
<td>B. Macecevic</td>
<td>05/02</td>
<td>09/02</td>
<td>Work Control roles and responsibilities, standards and accountabilities are proceduralized and communicated to staff.</td>
</tr>
<tr>
<td>10</td>
<td><strong>Revise appropriate procedures to allow support more effective use of Spot Maintenance.</strong></td>
<td>J. McMahan</td>
<td>05/02</td>
<td>07/02</td>
<td>All appropriate procedures revised and change management performed.</td>
</tr>
<tr>
<td>11</td>
<td><strong>Establish a 12 Month Event Calendar to allow for Improvements In Integrated station scheduling.</strong></td>
<td>B. Macecevic</td>
<td>06/02</td>
<td>09/02</td>
<td>12-month event calendar and process for updating established.</td>
</tr>
<tr>
<td>12</td>
<td><strong>Effectiveness Review</strong></td>
<td>B. Macecevic</td>
<td>10/02</td>
<td>11/02</td>
<td>Report based off PI data.</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

- T-9 through T-0 Schedule Stability.
- Package Not Ready Cause Code Trend Graphs (TBD-to be developed)
- Average age of open Work Packages
- Total Online Maintenance Backlog (CM & Elective)
- Past Due/Overdue PM Report

RESOURCE REQUIREMENTS:

To Be Determined for Revision 2.

(Attached is a copy of the Change Complexity Worksheet which must be filled out)
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.5.1 – Work Package/Online Schedule Development – Purpose/Accountability

1. How many people are affected by this change?
   - One work group under one supervisor .................. Score 1
   - One department .......................................... Score 2
   - No more than four departments ....................... Score 3
   - More than four departments .......................... Score 4
   - Most of the site population ........................... Score 5
   
   4

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 ........................................... Score 1
   - More than $5,000 but less than $50,000 .............. Score 2
   - More than $50,000 but less than $300,000 .......... Score 3
   - More than $300,000 ....................................... Score 4
   
   2

3. What training is required for this change?
   - No training is required ................................. Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ........ Score 3
   - Classroom or workplace training for most of the site Score 4
   
   1

4. How will this change affect Cooper processes?
   - Modifies part of a process .............................. Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   
   3

5. Upon completion, how will this Change affect staff workload?
   - Reduces work .............................................. Score 1
   - No new work ............................................... Score 2
   - Distributes work from one group to another ........ Score 3
   - Adds new work .......................................... Score 4
6. Will this Change require organizational changes?
- No organizational realignment required ........ Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site .... Score 3

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks ......................... Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks .................... Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

---

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PILLAR OF EXCELLENCE: Operational Excellence
FOCUS AREA: Work Package/Online Schedule Development
ACTION PLAN TITLE: Completeness/accuracy/timeliness
ACTION PLAN NUMBER: 5.2.5.2
WBS CROSS-REFERENCE No: 2.1.2 (1.2.4, 2.1.3, 2.3.2)
COMPLETION DATE: November 2002
ACTION PLAN OWNER: Ken Talbott
FOCUS AREA OWNER: Bill Macecovic

PROBLEM STATEMENT:
Maintenance planning has been ineffective in producing consistent, quality Work Packages (WP's) in timeframes necessary to allow recipients to become familiar with the work prior to performing it.

CAUSAL FACTORS:
1. Expectations for the development of quality work packages have not been clearly established. (Action plan steps: 1, 2).
2. Prioritization of work activities is inconsistent between organizations supporting the development of Work Packages. (Action plan steps: 4, 6).
3. Management oversight has not been effective in reinforcing requirements. (Action plan steps: 2, 3, 8).

DISCUSSION:
Many cases exist in which weaknesses in the quality, completeness, and timeliness of Maintenance WP's have contributed to inefficiencies and scheduling problems that unnecessarily challenge the operators. Maintenance Planning weaknesses
have existed since 1994 and still exist in 2002. Additionally, weaknesses in Maintenance Department personnel pre-job preparations for pending work have adversely impacted the schedule, as well as work quality and task duration.

**OBJECTIVE:**

Station personnel systematically, rigorously, and consistently apply and incorporate human error prevention techniques in all aspects of work planning and execution. Individuals who will be held accountable for the timeliness, completion and accuracy of an individual work packages have been identified. Restraints are clearly identified in work packages minimizing delays and schedule perturbations. Packages are detailed enough for qualified personnel to consistently and properly execute the work plan, and include contingency plans for possible scope increases. Restraints such as rigging evaluations, pending procedure changes, scaffolding requests, component location, and support department requirements are known and resolved prior to the package being defined as shop ready. Operating Experience is systematically, rigorously, and consistently incorporated into work planning and scheduling activities.

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maintenance and Work Planning develop prototype “Quality Work Packages.” Include quality checklist in “model”.</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>09/02</td>
<td>Planner Desk Guides revised to reflect the model Work Package format and Quality Indicator.</td>
</tr>
<tr>
<td>2</td>
<td>Develop user package feedback process, and response process.</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>09/02</td>
<td>Work Packages evaluated by Planners and Customers as meeting or exceeding defined quality standards. Feedback form developed and incorporated into applicable procedures.</td>
</tr>
<tr>
<td>3</td>
<td>Establish clear standard regarding types of work order packages that should be jointly walked down by the planner and the craftsman (and / or Engineer)</td>
<td>K. Talbott</td>
<td>06/02</td>
<td>08/02</td>
<td>Appropriate procedures revised, and change management completed.</td>
</tr>
<tr>
<td></td>
<td>Evaluate the Minor Maintenance process and the definition of Minor Maintenance. Revise procedure as appropriate to maximize effectiveness of this process.</td>
<td>K. Talbott</td>
<td>05/02</td>
<td>08/02</td>
<td>Appropriate procedures revised, and change management completed.</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
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<td>------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Develop or modify Performance Indicators as Necessary.</td>
<td>S. Woerth</td>
<td>06/02</td>
<td>09/02</td>
<td>Adequate performance Indicators available to monitor effectiveness of changes being made In the WCD</td>
</tr>
<tr>
<td></td>
<td>Establish standard for &quot;non-emergent&quot; work not &quot;shop ready&quot; at T-5, which determines the best organizational response to this situation</td>
<td>J. McMahon</td>
<td>06/02</td>
<td>09/02</td>
<td>Appropriate procedures revised, and change management completed.</td>
</tr>
<tr>
<td></td>
<td>Evaluate Planning Staff resources and if required, hire additional planners.</td>
<td>K. Talbott</td>
<td>06/02</td>
<td>09/02</td>
<td>Adequate planners available to plan Work Packages.</td>
</tr>
<tr>
<td></td>
<td>Weekly package status meetings as defined in Action Plan 5.2.5.1</td>
<td></td>
<td></td>
<td></td>
<td>Cross reference Item to plan 5.2.5.1</td>
</tr>
<tr>
<td></td>
<td>Effectiveness Review</td>
<td>B. Macecevic</td>
<td>10/02</td>
<td>11/02</td>
<td>Report based off PI data.</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

1) Craft Initiated Package Feedback Quality Indicator (TBD-to be developed)
2) Work Package Status Meeting results indicator (TBD-to be developed)
3) Number of notifications written due to Inadequate package quality (TBD-to be developed)

RESOURCE REQUIREMENTS:

To Be Determined for Revision 2.

(Attached is a copy of the Change Complexity Worksheet)
**TIP ACTION PLAN**

**TIP**

**Change Complexity Worksheet**

**Description of the Change:**

Action Plan 5.2.5.2 – Work Package/Online schedule Development – Completeness/Accuracy/Timeliness

1. **How many people are affected by this change?**
   - One work group under one supervisor ................ Score 1
   - One department ........................................ Score 2
   - No more than four departments ....................... Score 3
   - More than four departments .......................... Score 4
   - Most of the site population .......................... Score 5
   
   __3__

2. **What will this change cost to implement (exclude training costs and ongoing costs)?**
   - Less than $5,000. ....................................... Score 1
   - More than $5,000 but less than $50,000 .......... Score 2
   - More than $50,000 but less than $300,000 ...... Score 3
   - More than $300,000 .................................... Score 4
   
   __1__

3. **What training is required for this change?**
   - No training is required ................................. Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ....... Score 3
   - Classroom or workplace training for most of the site Score 4
   
   __2__

4. **How will this change affect Cooper processes?**
   - Modifies part of a process. .......................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   
   __1__

5. **Upon completion, how will this Change affect staff workload?**
   - Reduces work ........................................... Score 1
   - No new work ............................................. Score 2
   - Distributes work from one group to another ...... Score 3
   - Adds new work .......................................... Score 4

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6. Will this Change require organizational changes?

- No organizational realignment required ........ Score 0
- The Change affects the organization of one division ... Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site ..... Score 3

Score 0

7. Will this Change cause disruption of daily work?

- Effects a few daily tasks .................. Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks ............... Score 5

Score 3

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE: Operational Excellence

FOCUS AREA: Work Package Implementation

ACTION PLAN TITLE: Work Practices

ACTION PLAN NUMBER: 5.2.6.1

WBS CROSS-REFERENCE No: 2.2.1 (1.2.1, 1.2.3, 1.2.4, 2.4.1)

COMPLETION DATE: December 2002

ACTION PLAN OWNER: Neal Wetherell

FOCUS AREA OWNER: Neal Wetherell

PROBLEM STATEMENT:

Work practices have not consistently met expectations.

CAUSAL FACTORS:

1. Management oversight has not been effective in addressing improper work practices. (Action plan steps: 2,3,4,5)
2. Inappropriate reliance on "skill-of-the-craft" for performing maintenance work. (Action plan step 10)
3. Formal pre-job briefs are not consistently conducted.(Action plan step 1)

DISCUSSION:

The 1994 CNS Diagnostic Self-Assessment Identified poor work practices, such as industrial safety issues, inappropriate implementation of procedures, improper or unsuccessful repairs to equipment, low housekeeping standards, and an unacceptable level of human performance errors. In addition, in some cases there has been an over-reliance on "skill-of-the-craft" for performing maintenance work. Assessments and evaluations conducted over the next several years, continued to identify the same types of issues. Development of formal pre-job briefs, including use of a checklist, is the expectation of management. However, even with formal pre-job briefs, management expectations and standards are not being enforced.
Objective:

Work practices at CNS improved to meet management expectations. Station personnel systematically, rigorously, and consistently apply and incorporate human error prevention techniques in all aspects of work planning and execution. Operating Experience is systematically, rigorously, and consistently incorporated into work planning and scheduling activities, outage preparations, and training programs. CNS experience is provided to the Industry in a timely manner. The Line Managers own and effectively apply the management and peer observation programs. Line Managers actively evaluate and report on observation quality, problems identified, and actions taken to improve performance.

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establish controls, for Supervisors/Crew Leaders, to improve the effectiveness Pre-job briefs</td>
<td>J Smith</td>
<td>6/02</td>
<td>9/02</td>
<td>Revised procedures as necessary reflecting any new controls.</td>
</tr>
<tr>
<td>2</td>
<td>Review Principles and Standards Manual and revise as necessary</td>
<td>Wetherell</td>
<td>6/02</td>
<td>8/02</td>
<td>Manual reviewed and revised as necessary</td>
</tr>
<tr>
<td>3</td>
<td>Shop Supervisors review key performance standards each week from one principle in the Principles and Standards Manual. (Interim step until formal training completed)</td>
<td>Supervisors</td>
<td>7/02</td>
<td>10/02</td>
<td>Tailgate sheets documenting presentation of material</td>
</tr>
<tr>
<td>4</td>
<td>Develop training, based on Maintenance Department’s Principles and Standards Manual</td>
<td>Christensen</td>
<td>8/02</td>
<td>10/02</td>
<td>Training developed</td>
</tr>
<tr>
<td>5</td>
<td>Train the Maintenance work force on the performance standards included in the Maintenance Department Principles and Standards Manual</td>
<td>Christensen</td>
<td>10/02</td>
<td>12/02</td>
<td>Lesson plan developed based on Principles &amp; Standards Manual. Training conducted</td>
</tr>
<tr>
<td>6</td>
<td>Walkdown all systems and housekeeping areas per MWP 5.0.8. Within the next 6 months Manager and or Assistant Manager will tour with each area owner to impart correct standards</td>
<td>Supervisors</td>
<td>6/02</td>
<td>9/02</td>
<td>Walkdown database established and all walkdowns completed by due date</td>
</tr>
</tbody>
</table>
## TIP ACTION PLAN

<table>
<thead>
<tr>
<th>No.</th>
<th>Task Description</th>
<th>Responsible Person(s)</th>
<th>Start Date</th>
<th>End Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Evaluate where in the T-12 process to assign craft ownership of the work activity. Revise process as necessary and implement the change.</td>
<td>J. Smith</td>
<td>8/02</td>
<td>10/02</td>
<td>Process revised as necessary and implemented.</td>
</tr>
<tr>
<td>8</td>
<td>Establish clear standards, expectations and ownership for work package development. This should include product content and quality. It should also clearly define roles and responsibilities for package development.</td>
<td>Macevic</td>
<td>Per Plan 5.2.5.2</td>
<td>Per Plan 5.2.5.2</td>
<td>Per Plan 5.2.5.2.</td>
</tr>
<tr>
<td>9</td>
<td>Implement maintenance observation program.</td>
<td>Departmental HP Coordinator</td>
<td>9/02</td>
<td>12/02</td>
<td>Department observation program implemented.</td>
</tr>
<tr>
<td>10</td>
<td>Develop a procedure improvement plan to address &quot;skill of the craft&quot; concerns.</td>
<td>C. Markert</td>
<td>7/02</td>
<td>10/02</td>
<td>Procedure improvement plan that includes: Standard for procedure detail and level of knowledge, list of procedures to be revised, schedule for revision, personnel responsible for revision.</td>
</tr>
<tr>
<td>11</td>
<td>Develop Performance Indicators</td>
<td>J. Smith/A. Scala</td>
<td>7/02</td>
<td>10/02</td>
<td>Performance Indicators</td>
</tr>
<tr>
<td>12</td>
<td>Effectiveness Review</td>
<td>N. Wetherell</td>
<td>10/02</td>
<td>12/02</td>
<td>Report based off PI data</td>
</tr>
</tbody>
</table>

### PERFORMANCE INDICATORS:

- Percentage of jobs completed by team assigned in T schedule.
- Percentage of Work Packages completed by craft that performed walkdown.
- Quarterly MWP 5.0.8 Inspection Status.
- Departmental Event Free Clock.
- Rework.
RESOURCE REQUIREMENTS:
To be determined for Revision 2.

(Attached is a copy of the Change Complexity Worksheet which must be filled out)
TIP ACTION PLAN

TIP Change Complexity Worksheet

Description of the Change:


1. How many people are affected by this change?
   - One work group under one Supervisor .............. Score 1
   - One department .................................... Score 2
   - No more than four departments .................. Score 3
   - More than four departments ..................... Score 4
   - Most of the site population ..................... Score 5
   
   __3__

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000. ............................... Score 1
   - More than $5,000 but less than $50,000 ....... Score 2
   - More than $50,000 but less than $300,000 ..... Score 3
   - More than $300,000 ............................ Score 4
   
   __1__

3. What training is required for this change?
   - No training is required .......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4
   
   __2__

4. How will this change affect Cooper processes?
   - Modifies part of a process. ..................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   
   __1__

5. Upon completion, how will this Change affect staff workload?
   - Reduces work ...................................... Score 1
   - No new work ...................................... Score 2
   - Distributes work from one group to another ..... Score 3
   - Adds new work .................................... Score 4
   
   __3__
6. Will this Change require organizational changes?
- No organizational realignment required ........ Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site .... Score 3

0

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks ......................... Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks .................... Score 5

3

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

13
PILLAR OF EXCELLENCE: Operational Excellence
FOCUS AREA: Work Package Implementation
ACTION PLAN TITLE: First Line Supervision
ACTION PLAN NUMBER: 5.2.6.2
WBS CROSS-REFERENCE No: 2.2.2 (1.1.2, 1.1.4, 1.2.1, 1.2.2)
COMPLETION DATE: December 2003
ACTION PLAN OWNER: Neal Wetherell
FOCUS AREA OWNER: Neal Wetherell

PROBLEM STATEMENT:
Supervision has not been effective or consistent in enforcing standards for the planning and performance of work.

CAUSAL FACTORS:
1. Roles and responsibilities were not clearly defined. (Action plan steps 2, 3, 4, 5)
2. Management does not effectively reinforce performance expectations. (Action plan steps 1, 2, 6, 7, 8)
3. Knowledge and skills of Supervisors/Crew Leaders needs improvement (Action plan steps 2, 4, 5)

DISCUSSION:
Several assessments, ranging from the 1994 CNS Diagnostic Self Assessment, through more recent evaluations, indicate continuing problems with the effectiveness and consistency of supervision over the planning and performance of work. Performance problems include inadequate supervisory support of the work schedule, weak and untimely review of work products prior to their issuance, lack of verification of training and qualifications of staff prior to assigning them to specific tasks, and infrequent monitoring of work in the field. In addition, when Supervisors/Crew Leaders are observing work in the field, they are not typically focused on mentoring their personnel and ensuring that appropriate work practices and behaviors are being used.
Objective:

Supervisors and Crew Leaders actively coach, mentor, recognize and reinforce high standards and expectations for personnel safety, proper work practices, and incorporation of human error reduction techniques. An effective work planning and scheduling process enables First Line Supervisors to provide adequate oversight of pre-job briefs and field activities. Station personnel systematically, rigorously, and consistently apply and incorporate human error prevention techniques in all aspects of work planning and execution. Line Managers own and effectively apply the management and peer observation programs. Line Managers actively evaluate and report on observation quality, problems identified, and actions taken to improve performance.

<table>
<thead>
<tr>
<th>#</th>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Eliminate/redistribute the work load on the Crew Leaders and Supervisors so that they can focus on leading, coaching, mentoring, and correcting behaviors in the field. (Use recently developed Roles &amp; Responsibilities document (RCR 2000-1042) found in the Principles &amp; Standards Manual)</td>
<td>Wetherell</td>
<td>7/02</td>
<td>11/02</td>
<td>Document detailing actual transition of work from Crew Leaders to specific individuals.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Schedule and conduct follow up INPO First Line Supervisor Assist Visit</td>
<td>Wetherell</td>
<td>6/02</td>
<td>6/03</td>
<td>Assist Visit Report with Action Plan</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Plan and schedule select Crew Leaders to attend the INPO First Line Supervisors Working Groups Meetings</td>
<td>Markert</td>
<td>6/02</td>
<td>12/03</td>
<td>Personnel scheduled for meetings. Trip Reports include recommendations for improvements</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Develop Field Intervention Training for Crew Leaders and Supervisors as part of the Maintenance Supervisor Training Program. Use industry best as models for training development</td>
<td>Christenson</td>
<td>06/02</td>
<td>06/03</td>
<td>Approved Lesson Plan for all Maintenance Crew Leaders and Supervisors</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Implement field intervention training</td>
<td>Christenson</td>
<td>06/03</td>
<td>12/03</td>
<td>Training complete and documented</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task Description</td>
<td>Responsible</td>
<td>Start Date</td>
<td>End Date</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Establish method for Maintenance Manager/Assistant Manager to observe/evaluate field observations conducted by Supervisor/Crew Leader as part of monthly field observation requirements</td>
<td>Markert</td>
<td>7/02</td>
<td>10/02</td>
<td>Manager Field Observation Reports documenting coaching and mentoring of Maintenance Supervision.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Establish controls to ensure field observations standards (number/month &amp; quality) are being meet.</td>
<td>J. Smith</td>
<td>7/02</td>
<td>10/02</td>
<td>Field Observation Report</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Establish controls and method of validating that training and qualifications are adequately being verified</td>
<td>J. Smith</td>
<td>6/02</td>
<td>8/02</td>
<td>Controls and method of validation are in place</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Develop Performance Indicators</td>
<td>J. Smith</td>
<td>7/02</td>
<td>9/02</td>
<td>Performance Indicators developed</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Effectiveness review</td>
<td>Wetherell</td>
<td>11/02</td>
<td>12/02</td>
<td>Report based off PI data.</td>
<td></td>
</tr>
</tbody>
</table>

**PERFORMANCE INDICATORS:**

- Field observations performed, by individual, per week - TBD
- Quality score for Field Observation Reports, by Individual - TBD

**RESOURCE REQUIREMENTS:**

To be determined for Revision 2.

*(Attached is a copy of the Change Complexity Worksheet which must be filled out)*
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.6.2 - Work Package Implementation - First Line Supervision

1. How many people are affected by this change?
   - One work group under one supervisor ........... Score 1
   - One department .................................. Score 2
   - No more than four departments ................. Score 3
   - More than four departments ..................... Score 4
   - Most of the site population ..................... Score 5

   2

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 .................................. Score 1
   - More than $5,000 but less than $50,000 ....... Score 2
   - More than $50,000 but less than $300,000 ..... Score 3
   - More than $300,000 ............................ Score 4

   1

3. What training is required for this change?
   - No training is required .......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4

   2

4. How will this change affect Cooper processes?
   - Modifies part of a process ........................ Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

   1

5. Upon completion, how will this Change affect staff workload?
   - Reduces work .................................... Score 1
   - No new work ..................................... Score 2
   - Distributes work from one group to another ..... Score 3
   - Adds new work .................................... Score 4

   1

Page 4 of 5
Revision 1 6/7/02
6. Will this Change require organizational changes?
- No organizational realignment required .............. Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site .... Score 3

   0

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks .......................... Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks .................... Score 5

   1

Low:  Score 5 to 10
Moderate:  Score 11 to 20
High:  Score 21 to 30

8
PILLAR OF EXCELLENCE: Operational Excellence

FOCUS AREA: Work Package Implementation

ACTION PLAN TITLE: Technical Support/Lessons Learned

ACTION PLAN NUMBER: 5.2.6.3

WBS CROSS-REFERENCE No: 2.2.3 (2.1.2, 2.3.2, 2.4.2)

COMPLETION DATE: December 2002

ACTION PLAN OWNER: Neal Wetherell

FOCUS AREA OWNER: Neal Wetherell

PROBLEM STATEMENT:

Lack of technical support and poor preplanning has resulted in untimely completion of work.

CAUSAL FACTORS:

1. Lesson learned are not consistently captured and translated into appropriate documents to improve future performance. (Action plan step 1)
2. Standards and expectations for technical support in the field has not been clearly established or communicated. (Action plan steps: 5, 6,

DISCUSSION:

Ineffective work implementation has occurred at CNS due, in part, to poor planning and lack of technical support. Additionally, lessons learned from both internal and external experience have not been consistently applied. This action plan has significant crossover with 5.2.5.1 and 5.2.5.2. Planning of work packages should consider lessons learned from past work activities and industry experience. Adequate technical support also needs to be provided during planning and execution of work. Frequently this information is not captured during and after the execution of work and therefore, not considered during the planning of new work.
**Objective:**

Restrains are clearly identified, where necessary, in work packages to minimize delays in work and schedule perturbations. Restraints such as rigging evaluations, pending procedure changes, scaffolding requests, component location, and support department requirements are resolved prior to issuance of the work package. Lessons learned from activities are captured and translated into appropriate documents to improve future performance. Experience is systematically, rigorously, and consistently incorporated into work activities. Technical support is provided in the field to resolve issues and support the timely completion of work activities.

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Description</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evaluate and revise appropriate procedures to ensure that lessons learned are captured in specific MWR type work packages. Also establish a process that provides feedback to the appropriate organizations.</td>
<td>J. Smith</td>
<td>7/02</td>
<td>11/02</td>
<td>Evaluate and revise appropriate procedures for post job critiques and have feedback mechanism in place.</td>
</tr>
<tr>
<td>2</td>
<td>Establish controls in the design change process to require craft input prior to completing conceptual design.</td>
<td>Kevin Jones</td>
<td>6/02</td>
<td>9/02</td>
<td>Revise Procedure 3.4 to reflect controls.</td>
</tr>
<tr>
<td>3</td>
<td>Develop feedback indicator.</td>
<td>J. Smith</td>
<td>9/02</td>
<td>11/02</td>
<td>Feedback Indicator developed and in place.</td>
</tr>
<tr>
<td>4</td>
<td>Crew Leaders/Job Leads walk down job sites for equipment Integrity and system cleanliness prior to release of clearance order and work order closeout.</td>
<td>J. Smith</td>
<td>6/02</td>
<td>9/02</td>
<td>Revise procedures as necessary and ensure work packages require sign off.</td>
</tr>
<tr>
<td>5</td>
<td>Actions to revise 0-CNS-22 to include the roles and responsibilities of the Maintenance Engineering Group and ensure the expectations for coverage during field work for System Engineers is included in Action Plan 5.3.1.</td>
<td>Fadi Dlya</td>
<td>Per 5.3.1</td>
<td>Per 5.3.1</td>
<td>Per 5.3.1</td>
</tr>
<tr>
<td></td>
<td><strong>Establish expectations for Program Engineers</strong></td>
<td><strong>Jim Salisbury</strong></td>
<td>6/02</td>
<td>9/02</td>
<td>0-CNS-22 revised</td>
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</tr>
<tr>
<td>6</td>
<td>field support during fieldwork on program</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>components/systems</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>Establish expectations for Design Engineers</strong></td>
<td><strong>Kevin Jones</strong></td>
<td>6/02</td>
<td>9/02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>field support during design development and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>implementation on assigned modifications/design</td>
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<tr>
<td></td>
<td>changes</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td><strong>Effectiveness Review</strong></td>
<td><strong>Wetherell</strong></td>
<td>11/02</td>
<td>12/02</td>
<td></td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**PERFORMANCE INDICATORS:**

- Develop a feedback performance indicator
- Number of field changes to designs changes during implementation

**RESOURCE REQUIREMENTS:**

To be determined for Revision 2.

(Attached is a copy of the Change Complexity Worksheet)
TIP

Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.6.3 – Work Package Implementation – Technical Support/Lessons Learned

1. How many people are affected by this change?
   - One work group under one supervisor ........ Score 1
   - One department .................................. Score 2
   - No more than four departments .............. Score 3
   - More than four departments .................. Score 4
   - Most of the site population .................... Score 5

   __________ 3 __________

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 .................................. Score 1
   - More than $5,000 but less than $50,000 .... Score 2
   - More than $50,000 but less than $300,000 ... Score 3
   - More than $300,000 ............................. Score 4

   __________ 1 __________

3. What training is required for this change?
   - No training is required .......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4

   __________ 2 __________

4. How will this change affect Cooper processes?
   - Modifies part of a process ........................ Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

   __________ 5 __________

5. Upon completion, how will this Change affect staff workload?
   - Reduces work ........................................ Score 1
TIP ACTION PLAN

- No new work. .................................. Score 2
- Distributes work from one group to another.... Score 3
- Adds new work. ............................. Score 4

4

6. Will this Change require organizational changes?
- No organizational realignment required ....... Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site .... Score 3

0

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks ....................... Score 1
- Effects few, but the tasks are highly valued .... Score 3
- Effects most of the daily tasks. ............... Score 5

3

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

18
PROBLEM STATEMENT:
High standards and expectations related to the Corrective Action Program at CNS have not been consistently reinforced to provide a greater level of assurance that CAP is utilized to achieve excellent station performance.

CAUSAL FACTORS:

1. CAP standards and expectations are not consistently documented and disseminated to the CNS staff. (Action plan steps: 1, 4)
2. Training on CAP performance issues has not consistently utilized line management to reinforce standards and expectations. (Action plan step 5)
3. CAP processes (performance indicator review meetings, screening of notifications, trending) that evaluate station performance issues do not always include line management/supervision to ensure that issues are fully understood and corrected. (Action plan steps: 7, 8)
4. Ownership of CAP performance is sometimes perceived to be the responsibility of the Performance Analysis Department rather than the department managers. This results in lack of understanding and ineffective corrective actions to resolve CAP performance issues. (Action plan steps: 1, 4)
**OBJECTIVE:**

This action plan will improve management's ability to effectively communicate and reinforce CAP standards and expectations. Actions apply to management, supervision, team leads and plant personnel. Actions are tactical in nature and ultimately result in focused reinforcement of CAP standards and expectations by NPPD management. Success of this plan will be evident by improved ownership/oversight by management. This will result in the use of the Corrective Action Program as the primary site tool to improve station performance versus being considered a regulatory compliance tool.

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Revise procedures to eliminate Pre-Screen Committee and rely on Management Team of CRG to screen Notifications</td>
<td>R. Estrada</td>
<td>Completed</td>
<td></td>
<td>Revised procedure</td>
</tr>
<tr>
<td>2.</td>
<td>Revise CARB charter to focus CARB on providing and oversight role in the CAP process</td>
<td>R. Estrada</td>
<td>Completed</td>
<td></td>
<td>Revised CARB Charter</td>
</tr>
<tr>
<td>3.</td>
<td>Have Site VP provide discussion session with site management that summarizes CAP Program infrastructure elements, standards/expectations of its use, a clear understanding of when a problem should be entered into the CAP process, and reiteration of not utilizing other tracking mechanisms outside of CAP to resolve conditions adverse to quality.</td>
<td>R. Estrada</td>
<td>06/2002</td>
<td>07/2002</td>
<td>Completed tailgate attendance forms.</td>
</tr>
<tr>
<td>4.</td>
<td>Discuss purpose of CAP and CAP standards and expectations during two all hands meetings in 2002</td>
<td>M. Coyle</td>
<td>07/2002</td>
<td>12/2002</td>
<td>Communicate Standards and Expectations at all hands meetings.</td>
</tr>
<tr>
<td></td>
<td>Present a summary of the CAP TIP plan to the B-Can group and provide a talking paper for the B-Can group to share with their department.</td>
<td>R. Estrada</td>
<td>07/2002</td>
<td>09/2002</td>
<td>Write CAP Tip summary and issue talking paper. Follow-up meeting to receive feedback.</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
</tbody>
</table>
| 6. | Continue reinforcement of CAP standards and expectations in the year 2003 by: | J. Hutton | 01/2003 | 12/2003 | • Issue talking paper and completed tailgate forms  
• Talking points from all hands meetings  
• Write and issue talking paper. |
|   | • Issue a quarterly talking paper to managers to allow discussions of current CAP performance issues and good practices  
• Discuss CAP standards and expectations at two all hands meetings  
• Attend a B-Can meeting to discuss CAP performance trends with B-Can members |   |   |   |   |
| 7. | Ensure that the CAP training given in the year 2002 includes plans to involve Senior Managers and Line Managers in the conduct of CAP specific training. This should be accomplished by ensuring that line management or senior manager: | J. Hutton, R. Gardner, N. Wetherall, T. Chard, J. Ranalli, K. Jones, F. Diya | 06/2002 | 12/2002 | Document kick-off through management observation  
Documented effectiveness review |
|   | • Reinforces CAP standards through management kickoff sessions for specific 2002 CAP training  
• Conducts training effectiveness reviews of 2002 CAP training |   |   |   |   |
| 8. | Revise procedures to institute CAP trend/effectiveness reviewers in each department that will interface with CAP evaluator for CAP trends and effectiveness reviews. Provide workshop training to the CAP trend/effectiveness reviewers on the procedures, expectations and tools. | R. Estrada | 02/2002 | 09/2002 | Revised procedure and workshop training completed |
### PERFORMANCE INDICATORS:
- CAP Open Items
- CAP Efficiency
- CAP Quality Submittals
- CAP Backlog
- CAP Self Identification
- SCR Quality
- RCR Quality
- SCR Recurrence
- CAP Root Cause Effectiveness(%)  
- CAP Items > 1 Year Old
- CAP Evaluations Average Age
- CAP Actions Average Age

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**TIP ACTION PLAN**

<table>
<thead>
<tr>
<th></th>
<th>ACTION</th>
<th>PERFORMER</th>
<th>DATE</th>
<th>COMPLETE DATE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>Establish a process improvement team of Managers and Supervisors to identify and implement short term process improvements in the areas of trending, common cause analysis, use of apparent cause and feedback to the originator</td>
<td>R. Estrada</td>
<td>03/2002</td>
<td>12/2002</td>
<td>Procedure revisions that implement identified process improvements</td>
</tr>
<tr>
<td>12.</td>
<td>Perform an interim and final effectiveness review of this action plan using the guidance provided by the 0.5.CAER procedure.</td>
<td>O. Olson</td>
<td>01/2003</td>
<td>02/2004</td>
<td>Documented review per the requirements of 0.5.CAER</td>
</tr>
</tbody>
</table>
• CRG PIR Quality

Management Ownership Attribute Matrix Produced Quarterly

**RESOURCE REQUIREMENTS:**

• Site Management (all at 10 hours a piece)
• Site Management (specifically listed at 30 hours a piece)
• B-CAN Network Team (10 hours/member)
• CAP Evaluators (80 hours)
• Trend Evaluators (10 hours a piece)
• Effectiveness Reviewer (40 hours)

*(Attached is a copy of the Change Complexity Worksheet)*
TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.7.1 – Corrective Action, Operating Experience, Self-Assessment – Improve Reinforcement of CAP Standards and Expectations

1. How many people are affected by this change?
   - One work group under one supervisor ................ Score 1
   - One department ........................................ Score 2
   - No more than four departments ...................... Score 3
   - More than four departments .......................... Score 4
   - Most of the site population .......................... Score 5

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000. ....................................... Score 1
   - More than $5,000 but less than $50,000 .......... Score 2
   - More than $50,000 but less than $300,000 .... Score 3
   - More than $300,000 ..................................... Score 4

3. What training is required for this change?
   - No training is required ................................. Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ........ Score 3
   - Classroom or workplace training for most of the site Score 4

4. How will this change affect Cooper processes?
   - Modifies part of a process .......................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, Integrated processes Score 5
5. Upon completion, how will this Change affect staff workload?
- Reduces work .................................. Score 1
- No new work ................................. Score 2
- Distributes work from one group to another .... Score 3
- Adds new work ............................... Score 4

6. Will this Change require organizational changes?
- No organizational realignment required .......... Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site ..... Score 3

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks ........................ Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks .................. Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE: OPERATIONAL EXCELLENCE
FOCUS AREA: Corrective Action, Operating Experience, Self-Assessment
ACTION PLAN TITLE: Root Cause
ACTION PLAN NUMBER: 5.2.7.2
WBS CROSS-REFERENCE No: 3.1.2
COMPLETION DATE: 10/2003
ACTION PLAN OWNER: Roman Estrada
FOCUS AREA OWNER: Jim Hutton

PROBLEM STATEMENT:
Apparent Cause Evaluations and Root Cause Investigations have been identified since 1994, as being inadequate and continue to be identified as a major contributor to the ineffective implementation of the CAP at CNS.

CAUSAL FACTORS:
1. Ineffective extent of conditions performed in the root cause process has resulted in recurrence of issues. (Action plan steps: 2,6,7,8)
2. Corrective actions are not assigned to all causal factors to further ensure that problems are resolved. (Action plan steps: 2,6,7,8)
3. Training related to the fundamental building blocks of the CNS CAP process has been inconsistently applied. (Action plan steps: 2,4,8)

OBJECTIVE:
The action will determine the knowledge and skill level related to the Apparent and Root Cause portion of the CAP process. The results of this effort will be used to develop and or modify training to be presented to the targeted audience. In addition, the reduction of Root Cause Investigators will improve product consistency and Quality. Success of this plan will be improved quality in RCR and SCR evaluations and reduction of recurrences of root cause issues.
<table>
<thead>
<tr>
<th>No.</th>
<th>Action Description</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reduce Root Cause Investigators from ~200 to 50 to improve consistency.</td>
<td>Roman Estrada</td>
<td>1/2002</td>
<td>Completed</td>
<td>New list established and maintained for 50 root cause evaluators</td>
</tr>
<tr>
<td>2</td>
<td>Perform a training assessment (SAT) to determine any knowledge/skill weaknesses with respect to the Corrective Action Process (CAP).</td>
<td>Tim Donovan</td>
<td>3/02</td>
<td>4/02</td>
<td>Completed training assessment detailing knowledge/skill areas where training needs to be developed.</td>
</tr>
<tr>
<td>3</td>
<td>Revise the procedure guidance with respect to the apparent cause report format to differentiate it from a root cause report format.</td>
<td>Roman Estrada</td>
<td>06/02</td>
<td>08/02</td>
<td>Revised process for apparent cause format.</td>
</tr>
<tr>
<td>4</td>
<td>Include into the content of CAP training the process for development of good problem statements.</td>
<td>Tim Donovan</td>
<td>05/02</td>
<td>07/02</td>
<td>Revised training material.</td>
</tr>
<tr>
<td>5</td>
<td>Promulgate the Quality Indicator Report to the line departments. This report provides a quality index by department regarding the quality of their performance of CAP investigations.</td>
<td>Roman Estrada</td>
<td>06/02</td>
<td>08/02</td>
<td>Develop PI and Issue to Departments.</td>
</tr>
<tr>
<td>6</td>
<td>Institute RC/ACE Trend/Effectiveness Reviewers in each department that will interface with the CAP evaluator for CAP trends and effectiveness reviews. Link to 5.2.7.1 action #7.</td>
<td>Roman Estrada</td>
<td>Linked to Action 7 of Action Plan 5.2.7.1</td>
<td>Refer to Action 7 of Action Plan 5.2.7.1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Reduce Root Cause Investigators from 50 to 30 to improve consistency.</td>
<td>Roman Estrada</td>
<td>12/2002</td>
<td>06/2003</td>
<td>30 Root Cause Investigators providing consistent Corrective Actions that Include Extent of Conditions.</td>
</tr>
<tr>
<td>8</td>
<td>Deliver Training to target population.</td>
<td>Tim Donovan</td>
<td>06/2002</td>
<td>12/2002</td>
<td>Delivered training to targeted audience.</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

SCR Quality
SCR Recurrence
Cap Root Cause Effectiveness (%)

RESOURCE REQUIREMENTS:

- Training Instructors (400 hours)
- CAP evaluators (400 hours)
- Root Cause Investigators (80 hours a piece)

(Attached is a copy of the Change Complexity Worksheet)
TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.7.2 – Corrective Action, Operating Experience, Self-Assessment – Root Cause

1. How many people are affected by this change?
   - One work group under one supervisor ................ Score 1
   - One department ........................................ Score 2
   - No more than four departments ..................... Score 3
   - More than four departments ......................... Score 4
   - Most of the site population .......................... Score 5

4

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000. ....................................... Score 1
   - More than $5,000 but less than $50,000. ........... Score 2
   - More than $50,000 but less than $300,000. ........ Score 3
   - More than $300,000 .................................... Score 4

3

3. What training is required for this change?
   - No training is required ............................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ........ Score 3
   - Classroom or workplace training for most of the site Score 4

3

4. How will this change affect Cooper processes?
   - Modifies part of a process .......................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

1
5. Upon completion, how will this Change affect staff workload?
   - Reduces work .................................... Score 1
   - No new work .................................. Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work .................................. Score 4

   ____ 2 ____

6. Will this Change require organizational changes?
   - No organizational realignment required ........ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3

   ____ 3 ____

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks .......................... Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks .................. Score 5

   ____ 1 ____

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

17
PILLAR OF EXCELLENCE: OPERATIONAL EXCELLENCE

FOCUS AREA: Corrective Action, Operating Experience, Self-Assessment

ACTION PLAN TITLE: Improve Utilization of OER

ACTION PLAN NUMBER: 5.2.7.3

WBS CROSS-REFERENCE No: 3.5.2

COMPLETION DATE: 01/2004

ACTION PLAN OWNER: Roman Estrada

FOCUS AREA OWNER: Roman Estrada

PROBLEM STATEMENT:

CNS is effective in providing Operating Experience topics each day, to the Plan of the Day Meeting and to the Daily Manager's Meeting. However, the line supervision and line workers are not always sensitive to the benefit on 'taking on' the OE lesson.

CAUSAL FACTORS:

1. There is not a consistent follow-up by line management to ensure that Operating Experience is utilized in the field by the CNS work force. (Action plan steps: 1,3,4)
2. There is not consistent coaching and mentoring by line management to improve the ability of the CNS work force to benefit from Operating Experience lessons. (Action plan steps: 1,4)

OBJECTIVE:

This action plan provides specific actions to improve the ability of CNS to internalize the use of Operating Experience. Success will be evident when the work groups at CNS use Operating Experience information as a way to perform routine work proactively versus having it provided to them by their supervision.
<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide standards and expectations on use of Operating Experience to Plant and Engineering Management to be used in Improving Implementation and use of OE by their staffs</td>
<td>D. Shrader</td>
<td>06/02</td>
<td>07/02</td>
<td>Talking paper for specified managers and tailgate provided to these managers</td>
</tr>
<tr>
<td>2</td>
<td>Review a representative sample of work packages issued to the field and discuss Identified Improvement areas with the work planners</td>
<td>D. Shrader, B. Delay</td>
<td>07/2002</td>
<td>12/2002</td>
<td>Documented management observations on work planning group</td>
</tr>
<tr>
<td>3</td>
<td>Perform observations of use of OER in pre-job briefs and performance of tasks and discuss identified areas of Improvement for utilization of OER with the appropriate departments</td>
<td>R. Gardner, N. Wetherell, T. Chard, F. Diya, K. Jones, J. Sallsbury, B. Macecevik</td>
<td>07/2002</td>
<td>12/2002</td>
<td>Documented management observations on departments</td>
</tr>
<tr>
<td>4</td>
<td>Perform quarterly follow-up observations of use of OER in work planning, pre-job briefs and performance of tasks and discuss identified areas of “good practices” and areas for Improvement with the appropriate departments</td>
<td>R. Gardner, N. Wetherell, T. Chard, F. Diya, K. Jones, J. Sallsbury, B. Macecevik</td>
<td>01/2003</td>
<td>12/2003</td>
<td>Documented management observations on departments</td>
</tr>
<tr>
<td>5</td>
<td>Benchmark OE program Implementation use to validate if gaps in performance in this area are improving towards Industry standards.</td>
<td>D. Shrader</td>
<td>08/02</td>
<td>12/02</td>
<td>Completed Trip Report</td>
</tr>
<tr>
<td>6</td>
<td>Perform an effectiveness review of resolution items with respect to AFI OE1-1 Issues from 2002 INPO E&amp;A report.</td>
<td>R. Estrada</td>
<td>04/03</td>
<td>05/03</td>
<td>Documented review per the requirements of 0.5.CAER</td>
</tr>
<tr>
<td>7</td>
<td>Perform an Interim and final effectiveness review on the Internalization of OER at CNS using the 0.5.CAER process</td>
<td>O. Olson</td>
<td>01/2003</td>
<td>01/2004</td>
<td>Documented review per the requirements of 0.5.CAER</td>
</tr>
<tr>
<td>8</td>
<td>Develop and implement new Performance Indicator to measure number of management observations on use of OE.</td>
<td>B. Delay</td>
<td>07/02</td>
<td>09/02</td>
<td>Performance indicator established</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:
Number of observations of OER use in the field performed per quarter (new indicator)

RESOURCE REQUIREMENTS:
- Selected Site Managers (250 hours a piece)
- OE Group (200 hours)
- Effectiveness Reviewer (80 hours)
- PAD Manager (40 hours)

*(Attached is a copy of the Change Complexity Worksheet)*
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.7.3 Corrective Action, Operating Experience, Self-Assessment – Improve utilization of OER

1. How many people are affected by this change?
   - One work group under one supervisor ....................... Score 1
   - One department .................................................. Score 2
   - No more than four departments ............................. Score 3
   - More than four departments ................................. Score 4
   - Most of the site population ................................. Score 5
   _______ 4 _______

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000.............................................. Score 1
   - More than $5,000 but less than $50,000.................. Score 2
   - More than $50,000 but less than $300,000............ Score 3
   - More than $300,000 ........................................ Score 4
   _______ 2 _______

3. What training is required for this change?
   - No training is required......................................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments............. Score 3
   - Classroom or workplace training for most of the site Score 4
   _______ 1 _______

4. How will this change affect Cooper processes?
   - Modifies part of a process.................................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   _______ 1 _______

5. Upon completion, how will this Change affect staff workload?
   - Reduces work.................................................... Score 1
   - No new work..................................................... Score 2
   - Distributes work from one group to another............ Score 3
   - Adds new work.................................................. Score 4
6. Will this Change require organizational changes?
   - No organizational realignment required ............ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3

   3

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ......................... Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks .................. Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

18
PROBLEM STATEMENT:
CNS Vendor Manuals are not easy to use and are poorly organized.

CAUSAL FACTORS:
1. A cultural acceptance of long-standing vendor manual problems. (Action Plan 5.1.1.4, Action Steps 5.1.1.4.4)
2. A lack of priority in establishing accurate and reliable vendor information. (Action Steps 3, 4, 5, 6, 7)
3. A lack of dedicated resources. (Action Step 3, 8)

OBJECTIVE:
CNS Vendor Manuals baselined, scanned and available for online viewing.
## FOCUS AREA 5.2.8 FUNCTION: SERVICES - TIP ACTION PLAN

<table>
<thead>
<tr>
<th>No.</th>
<th>Action Description</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete baselining of essential vendor manuals</td>
<td>Keith Wright</td>
<td>Complete</td>
<td>Complete</td>
<td>Essential manuals baselined.</td>
</tr>
<tr>
<td>2</td>
<td>Develop Performance Indicator(s)</td>
<td>Keith Wright</td>
<td>6/02</td>
<td>7/02</td>
<td>Performance Indicators developed</td>
</tr>
<tr>
<td>3</td>
<td>Obtain and Train Dedicated Resources</td>
<td>Keith Wright</td>
<td>5/02</td>
<td>8/02</td>
<td>Personnel trained</td>
</tr>
<tr>
<td>4</td>
<td>Complete Scanning Process – Essential Vendor Manuals</td>
<td>Keith Wright</td>
<td>8/02</td>
<td>4/03</td>
<td>Essential manuals scanned</td>
</tr>
<tr>
<td>5</td>
<td>Complete Baselining &amp; Scanning Process – Risk Significant Vendor Manuals</td>
<td>Keith Wright</td>
<td>8/02</td>
<td>6/04</td>
<td>Risk Significant manuals baselined &amp; scanned</td>
</tr>
<tr>
<td>6</td>
<td>Complete Baselining &amp; Scanning Process – Other Vendor Manuals</td>
<td>Keith Wright</td>
<td>1/04</td>
<td>12/04</td>
<td>Other manuals baselined &amp; scanned</td>
</tr>
<tr>
<td>7</td>
<td>Develop a plan to address potential PM and vendor manual compatibility issue.</td>
<td>Keith Wright</td>
<td>8/02</td>
<td>12/02</td>
<td>Plan developed</td>
</tr>
<tr>
<td>8</td>
<td>Evaluate &amp; obtain appropriate number of dedicated resources to ensure manuals are updated and maintained upon project completion.</td>
<td>Keith Wright</td>
<td>9/04</td>
<td>12/04</td>
<td>Appropriate resources.</td>
</tr>
<tr>
<td>9</td>
<td>Determine the appropriate ownership for the vendor manuals upon project completion.</td>
<td>Keith Wright</td>
<td>9/04</td>
<td>12/04</td>
<td>Owning department identified.</td>
</tr>
</tbody>
</table>

### PERFORMANCE INDICATORS:

Work Off Curves – TBD
RESOURCE REQUIREMENTS:

- List specific resource requirements for the action plan.
  - Manpower, internal, external, required skills and/or knowledge. Clerical resources will be assigned to the Vendor Manual Program until the completion of this project.
  - Materials and Supplies. Tabs and dividers, already on hand or budgeted.
  - Equipment. None
  - Facilities. None

*(Attached is a copy of the Change Complexity Worksheet, which must be filled out)*
TIP Change Complexity Worksheet

Description of the Change:
Action Plan 5.2.8.1 – Functions & Services – Vendor manual Upgrade Program

1. How many people are affected by this change?
   - One work group under one supervisor ............... Score 1
   - One department ................................... Score 2
   - No more than four departments .................. Score 3
   - More than four departments ..................... Score 4
   - Most of the site population ..................... Score 5
   - Score: 4

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000. .................................. Score 1
   - More than $5,000 but less than $50,000 ....... Score 2
   - More than $50,000 but less than $300,000 ..... Score 3
   - More than $300,000 ............................ Score 4
   - Score: 3

3. What training is required for this change?
   - No training is required ........................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ....... Score 3
   - Classroom or workplace training for most of the site Score 4
   - Score: 1

4. How will this change affect Cooper processes?
   - Modifies part of a process ........................ Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   - Score: 1

5. Upon completion, how will this Change affect staff workload?
   - Reduces work ..................................... Score 1
   - No new work ..................................... Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work .................................. Score 4
   - Score: 1
6. Will this Change require organizational changes?
   - No organizational realignment required ............ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3

   ____________
   Number: 0

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ......................... Score 1
   - Effects few, but the tasks are highly valued ....... Score 3
   - Effects most of the daily tasks.................... Score 5

   ____________
   Number: 1

TOTAL: 11

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
FOCUS AREA 5.2.8 FUNCTION: SERVICES - TIP ACTION PLAN

PILLAR OF EXCELLENCE: OPERATIONAL EXCELLENCE
FOCUS AREA: FUNCTIONS & SERVICES (OPE/8.0)
ACTION PLAN TITLE: PROCEDURE CHANGE PROCESS
ACTION PLAN NUMBER: 5.2.8.3
COMPLETION DATE: 08/02
ACTION PLAN OWNER: JAY SCHEUERMAN
FOCUS AREA OWNER: LAURIE SCHILLING

PROBLEM STATEMENT:
The existing procedure change process requires the unnecessary routing of many changes to SORC.

CAUSAL FACTOR:
Unnecessary complexity of change process (Action Steps 4 and 8).

DISCUSSION:
While many aspects of the procedure change process are necessary to ensure changes are of high quality and technically accurate, streamlining through adoption of an Independent Qualified Reviewer (IQR) process, comparable to that being used by several successful nuclear facilities, will remove unnecessary delays from the process.

An IQR process will provide for individual high quality technical reviews, in place of SORC’s formal committee review, of those procedure changes that do not involve 10CFR50.59 safety evaluations. Removal of SORC from the review process for these changes will reduce the processing time and complexity associated with procedure changes, allowing the workers to see their changes implemented sooner. Additionally, SORC will be able to focus more attention on those changes that do affect nuclear safety.

OBJECTIVE:
- Average procedure change processing time reduced.
- Worker perception of process improved.
- SORC members and presenters with more time for other issues.
## ACTION PLAN

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop procedure structure to support training development.</td>
<td>J. Scheuerman</td>
<td>Complete</td>
<td>Complete</td>
<td>Completed strawman.</td>
</tr>
<tr>
<td>2</td>
<td>Develop process procedures.</td>
<td>J. Scheuerman</td>
<td>Complete</td>
<td>Complete</td>
<td>Completed draft process procedures.</td>
</tr>
<tr>
<td>3</td>
<td>Approve training TQDs for IQR and IQA.</td>
<td>P. Leininger</td>
<td>Complete</td>
<td>Complete</td>
<td>Completed IQR/IQA TQDs.</td>
</tr>
<tr>
<td>4</td>
<td>Develop and approve IQR Implementing procedures.</td>
<td>J. Scheuerman</td>
<td>3/02</td>
<td>8/02</td>
<td>Completed procedure revisions.</td>
</tr>
<tr>
<td>5</td>
<td>Develop and approve IQR QAPD revision.</td>
<td>L. Dewhirst</td>
<td>5/02</td>
<td>8/02</td>
<td>Completed QAPD revision.</td>
</tr>
<tr>
<td>6</td>
<td>Develop and approve IQR USAR revision.</td>
<td>D. VanDerKamp</td>
<td>5/02</td>
<td>8/02</td>
<td>Completed USAR revision.</td>
</tr>
<tr>
<td>7</td>
<td>Develop and Implement Initial IQR training.</td>
<td>P. Leininger</td>
<td>3/02</td>
<td>8/02</td>
<td>Completed initial training.</td>
</tr>
<tr>
<td>8</td>
<td>Implement IQR process.</td>
<td>J. Scheuerman</td>
<td>8/02</td>
<td>8/02</td>
<td>Process implemented.</td>
</tr>
<tr>
<td>9</td>
<td>Follow-on assessments.</td>
<td>J. Scheuerman</td>
<td>8/02</td>
<td>8/03</td>
<td>Assessment reports issued.</td>
</tr>
</tbody>
</table>

## PERFORMANCE INDICATORS:

- PI for PCR Processing Time Indicating if new process is allowing for more timely review and approval of changes.
- PI for PCRs in Process Indicating if number of changes are outpacing resources devoted to processing of changes.

## RESOURCE REQUIREMENTS:

All resources will be provided by internal labor. No contractor assistance is planned, including instructors for the various required training classes. Classroom space is available for necessary classes.

Team members include:

- Project Manager: Jay Scheuerman – Technical Support Supervisor
- Project Sponsor: Jim Hutton – Plant Manager
- Project Team: Laurie Schilling – Administrative Services Manager
- Linda Dewhirst – Quality Assurance Audit Supervisor (TA)
- Phil Leininger – Design Engineer (Acting Trainer)
TIP Change Complexity Worksheet

Description of the Change:

Action Plan 5.2.8.3 – Functions & Services – Procedure Change Process

1. How many people are affected by this change?
   - One work group under one supervisor ................ Score 1
   - One department .................................................................. Score 2
   - No more than four departments ........................................ Score 3
   - More than four departments ........................................... Score 4
   - Most of the site population .............................................. Score 5
   - Score: 4

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 ......................................................... Score 1
   - More than $5,000 but less than $50,000 .................. Score 2
   - More than $50,000 but less than $300,000 .......... Score 3
   - More than $300,000 ...................................................... Score 4
   - Score: 1

3. What training is required for this change?
   - No training is required .............................................. Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .......... Score 3
   - Classroom or workplace training for most of the site Score 4
   - Score: 3

4. How will this change affect Cooper processes?
   - Modifies part of a process ........................................ Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   - Score: 3

5. Upon completion, how will this Change affect staff workload?
   - Reduces work ......................................................... Score 1
   - No new work .............................................................. Score 2
   - Distributes work from one group to another ........ Score 3
   - Adds new work .......................................................... Score 4
   - Score: 3

6. Will this Change require organizational changes?
FOCUS AREA 5.2.8 FUNCTIONS & SERVICES - TIP ACTION PLAN

- No organizational realignment required ........... Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site .... Score 3

0

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks ....................... Score 1
- Effects few, but the tasks are highly valued ...... Score 3
- Effects most of the daily tasks .................. Score 5

1

TOTAL 15

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
Problem Statement:

Cooper Nuclear Station has repeatedly exhibited a failure to proactively address equipment issues. An unacceptably large percentage of resources are routinely expended to resolve equipment problems.

CAUSAL FACTORS:

1. Inability to effectively implement actions to correct impending deficient or restraining conditions. (Plan sections 1.0, 2.0, 3.0, & 4.0)
2. Lack of an integrated approach to preclude the initial failure and minimize recurrence. (Plan sections 2.0 & 3.0)
3. Cultural acceptance of long-standing equipment problems due to lack of organizational leadership which continually sets and reinforces high standards for equipment performance. (Plan sections 2.0 & 3.0)
Discussion:

- Communication of management expectations regarding system and equipment performance has resulted in a "course change" regarding the approach to ensuring a high degree of system/equipment reliability. This is evident by recent actions taken, including:
  - Implementation of, and focus on, Top Ten Equipment Issues List.
  - Concentrated efforts to fix equipment problems by formation and Implementation of System Health Teams.
  - Revamping the Red Arrow and Operator Work Around Programs. (ref: COP 2.0.12, OPERATOR CHALLENGES)
  - Submitted changes to streamline Engineering Procedure 3.4, CONFIGURATION CHANGE CONTROL.

- More organizational focus has been placed on improving equipment reliability. To obtain an improved level of long-term system/equipment performance further efforts are required, including the implementation of a dedicated Equipment Reliability Group.

Objective:

- Completion of ongoing activities in support of achieving an improved level of equipment reliability.

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION:OWNER</th>
<th>STARTDATE</th>
<th>ENDDATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Upgrade the PM Program and reduce the PM backlog</td>
<td>M. Young</td>
<td>4/02</td>
<td>5/02 complete</td>
<td>An effective working process.</td>
</tr>
<tr>
<td>1.1</td>
<td>Review the PM change process for improvement.</td>
<td>M. Young</td>
<td>4/02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Develop and update general PM task lists, &quot;commitment related&quot;.</td>
<td>M. Young</td>
<td>5/02</td>
<td>10/02</td>
<td>Commitment related task lists updated.</td>
</tr>
<tr>
<td>1.3</td>
<td>Minimize the PM closeout backlog.</td>
<td>M. Young</td>
<td>3/02</td>
<td>9/02</td>
<td>PM closeout backlog reduced to minimal.</td>
</tr>
<tr>
<td></td>
<td>Task Description</td>
<td>Responsible</td>
<td>Due Date 1</td>
<td>Due Date 2</td>
<td>Notes</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------</td>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.4</td>
<td>Develop a PM feedback process.</td>
<td>M. Young</td>
<td>7/02</td>
<td>9/02</td>
<td>Revised process that has an effective feedback loop.</td>
</tr>
<tr>
<td>1.5</td>
<td>Develop PM program performance Indicators.</td>
<td>T. Scala</td>
<td>7/02</td>
<td>9/02</td>
<td>Performance indicators developed.</td>
</tr>
<tr>
<td>1.6</td>
<td>Update “non-commitment” related task lists.</td>
<td>M. Young</td>
<td>8/02</td>
<td>3/03</td>
<td>Non-commitment related task lists updated.</td>
</tr>
<tr>
<td>2.0</td>
<td><strong>Implement the “System Health Team” process</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Conduct health team meetings on pilot systems (AOG, CRD, RM, SA, and SW) to assess the system health team process.</td>
<td>T. Hottovy</td>
<td>3/02</td>
<td>6/02</td>
<td>Pilot system health team meetings held and lessons learned documented and results communicated.</td>
</tr>
<tr>
<td>2.2</td>
<td>Revise System Health Team Desktop Guide to include lessons learned from the implementation of the pilot system health teams, and identify imbedded Operator Work A rounds. (ref: Plan 5.2.1, Step 1.4)</td>
<td>T. Hottovy</td>
<td>6/02</td>
<td>7/02</td>
<td>Updated desktop guide that incorporates both lessons learned from the pilot System Health Teams, and a section discussing resolution of Operator Work Arounds.</td>
</tr>
<tr>
<td>2.3</td>
<td>Implement revised system health team process for remaining In-scope systems.</td>
<td>T. Hottovy</td>
<td>7/02</td>
<td>3/03</td>
<td>System health team process implemented for remaining In-scope systems.</td>
</tr>
<tr>
<td>2.4</td>
<td>Revise 0-CNS-22 to reflect roles and responsibilities of Maintenance Engineering Group and ensure expectations for Engineering support of fieldwork are defined.</td>
<td>S. Domikaltis</td>
<td>7/02</td>
<td>10/02</td>
<td>0-CNS-22 revised.</td>
</tr>
<tr>
<td>3.0</td>
<td><strong>Perform a gap analysis to INPO AP-913 “Equipment Reliability Process”</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Form multi-discipline team to perform gap analysis.</td>
<td>F. Diya</td>
<td>9/02</td>
<td>10/02</td>
<td>Team formed.</td>
</tr>
</tbody>
</table>
**Perform gap analysis. Areas of focus will be:**
- Scoping and Identification of Critical Components
- Performance Monitoring
- Corrective Action
- PM Implementation
- Continuing Equipment Reliability Improvement
- Long-Term Planning and Life-Cycle Management

<table>
<thead>
<tr>
<th>3.2</th>
<th>F. Diya</th>
<th>10/02</th>
<th>12/02</th>
<th>Gaps Identified.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>3.3</th>
<th>Identify and assign actions to fix the identified gaps.</th>
<th>F. Diya</th>
<th>1/03</th>
<th>2/03</th>
<th>Actions Identified and assigned.</th>
</tr>
</thead>
</table>

**4.0 Develop and implement an equipment obsolescence program**

<table>
<thead>
<tr>
<th>4.1</th>
<th>Identify obsolescence issues that can be addressed in the short term and will give immediate benefit to CNS. Interview personnel to identify obsolescence issues.</th>
<th>H. Minassian</th>
<th>4/02</th>
<th>8/02</th>
<th>List of issues which will relieve staff of burdens associated with equipment obsolescence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2</td>
<td>Prioritize obsolescence issues based on risk significance.</td>
<td>F. Diya</td>
<td>9/02</td>
<td>11/02</td>
<td>Prioritization of issues associated with equipment obsolescence completed and communicated to site.</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4.3</td>
<td>Initiate and begin implementation of corrective actions for those high-risk obsolescence issues identified.</td>
<td>K. Jones</td>
<td>12/02</td>
<td>12/03</td>
<td>Implementation of actions associated with equipment obsolescence in accordance with prioritized list.</td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------</td>
<td>-------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

- Control Room Deficiencies
- Unplanned LCO Entries (TS)
- Unplanned LCO Entries (All)
- Temporary Modifications/Leak Repairs
- Number of Operability Determinations
- Components in Accelerated Testing
- Repetitive Equipment Failures
- System Health

RESOURCE REQUIREMENTS:

To be developed after Rev. 1

(Attached is a copy of the Change Complexity Worksheet which must be filled out)
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.3.1.1 – Improve Equipment Reliability – System/Equipment Performance

1. How many people are affected by this change?
   - One work group under one supervisor ................ Score 1
   - One department ........................................ Score 2
   - No more than four departments ....................... Score 3
   - More than four departments .......................... Score 4
   - Most of the site population .......................... Score 5
   _____5____

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 ........................................ Score 1
   - More than $5,000 but less than $50,000 .......... Score 2
   - More than $50,000 but less than $300,000 .... Score 3
   - More than $300,000 .................................. Score 4
   _____3____

3. What training is required for this change?
   - No training is required ............................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ........ Score 3
   - Classroom or workplace training for most of the site Score 4
   _____3____

4. How will this change affect Cooper processes?
   - Modifies part of a process .......................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   _____5____

5. Upon completion, how will this Change affect staff workload?
   - Reduces work .......................................... Score 1
   - No new work ............................................. Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work ......................................... Score 4
   _____4____
6. Will this Change require organizational changes?
   - No organizational realignment required ........... Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3
     
     2

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ......................... Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks ................... Score 5
     
     5

Low:          Score 5 to 10
Moderate:     Score 11 to 20
High:         Score 21 to 30

27
PILLAR OF EXCELLENCE: Equipment Excellence
FOCUS AREA: Programs
ACTION PLAN TITLE: Programs
ACTION PLAN NUMBER: 5.3.2.1
WBS CROSS-REFERENCE No: 3.4.4
COMPLETION DATE: December 2004
ACTION PLAN OWNER: Scott Freborg
FOCUS AREA OWNER: Jim Salisbury

PROBLEM STATEMENT:
The extent of condition review performed as a result of programmatic deficiencies in the Environmental Qualification (EQ) Program (SCR 2000-0423) identified similar weaknesses in other CNS programs. Issues include lack of commitment to program implementation, lack of standards and expectations, lack of organizational depth and lack of self-assessments. The review identified cyclical program performance because of lack of commitment to program implementation.

CAUSAL FACTORS:
1. Ownership of programs had been either loosely defined or not defined at all. Management had not clearly articulated, documented, nor enforced expectations of a program owner. (Action plan Items 3, 4, 5 and 6)

2. Organizational depth in many programs had been lacking. With personnel reassignment or attrition, a backup person to assume program ownership has not been readily available. (Action plan items 3, 4, 5 and 6)

3. The quality and frequency of self-assessments had been lacking. (Action plan items 3, 4, 5 and 6)
OBJECTIVE:

- Ensure that procedure 0-CNS-12 is closely aligned with industry norms and contains the proper scope of programs and program categorization. (Action plan items 1 and 2)

- Complete the execution of existing program improvement project action plans (e.g., Program Improvement Project, EQ Improvement Project) to ensure that CNS technical programs consistently meet or exceed the prescribed management standards and expectations for program scope and definition, program implementation, program interfaces, and program monitoring. Procedure 0-CNS-12 established a graded approach to program management and standards for CNS program implementation in 2001 to ensure consistent long-term program performance. 0-CNS-12 addresses program ownership, management standards and expectations, resource allocation, and self assessments. Selected site technical programs (Category A/B) are being systematically improved by applying the management standards and expectations of 0-CNS-12. Specifically, this is accomplished by utilizing the process currently being employed in the Program Improvement Project of detailed technical assessments followed by interface assessments, entering the deficiencies identified into the Corrective Action Program, and finally, performing follow-up reviews to validate improvements. A separate specific project has been established for EQ program improvement. (Action plan items 3, 4, 5 and 6)

- Complete specified corrective and improvement actions identified through Program Improvement Program self-assessments performed in 2001, other program improvement efforts or actions to correct performance issues. Examples of these actions included in TIP are:
  - Establish implementing BWRVIP guidance documents at CNS. (Action plan item 7)
  - Complete 4160 volt circuit breaker refurbishment program. (Action plan item 8)
  - Establish and implement a funded and approved 480 volt circuit breaker refurbishment program. (Action plan items 9 and 10)
  - Complete MOV Program Phase II design calculations. (Action plan item 12)

- Complete the docketed EQ Improvement Project to correct programmatic deficiencies in the Environmental Qualification (EQ) Program identified during the 2000 Refueling Outage (SCR 2000-0330, SCR 2000-0386 and SCR 2000-0423). (Action plan item 11)
<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Benchmark 0-CNS-12 against best industry practices in the area of program scope and management standards and expectations.</td>
<td>Hannaford</td>
<td>08/02</td>
<td>09/02</td>
<td>Benchmark report IAW 0-CNS-06.</td>
</tr>
<tr>
<td>2</td>
<td>With input from benchmark report, re-evaluate procedure 0-CNS-12 to determine if program categorizations are sufficiently rigorous and to determine if additional CNS programs should be included in the scope of the procedure or in a series of 0-CNS-12 procedures.</td>
<td>Hannaford</td>
<td>10/02</td>
<td>11/02</td>
<td>Revised 0-CNS-12, CNS Program Administration</td>
</tr>
<tr>
<td>3</td>
<td>Complete detailed technical self-assessments of the following Category A/B CNS programs in 2002: BWRVIP (currently considered part of ISI program) Erosion/Corrosion (FAC) Appendix J Welding/Repair &amp; Replacement</td>
<td>S. Freborg</td>
<td>In Progress</td>
<td>12/02</td>
<td>Self-assessment reports submitted and notifications written for deficiencies.</td>
</tr>
<tr>
<td>4</td>
<td>Complete detailed technical self-assessments of five additional Category A/B CNS Programs in 2003.</td>
<td>S. Freborg</td>
<td>01/03</td>
<td>12/03</td>
<td>Self-assessment reports submitted and notifications written for deficiencies.</td>
</tr>
<tr>
<td>5</td>
<td>Conduct Interface assessments of previously selected programs to verify adequate interfaces for program Implementation.</td>
<td>K. Thomas</td>
<td>07/02</td>
<td>07/04</td>
<td>Interface assessments submitted and notifications written for deficiencies.</td>
</tr>
<tr>
<td>6</td>
<td>Conduct annual follow-up review assessments of previous year’s Program Improvement activities to validate improvements.</td>
<td>S. Freborg</td>
<td>In Progress</td>
<td>12/04</td>
<td>Follow-up assessment reports submitted and notifications written for any additional deficiencies.</td>
</tr>
<tr>
<td></td>
<td>Action</td>
<td>Responsible</td>
<td>Status</td>
<td>Date</td>
<td>Notes</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Develop a separate BWRVIP Program document and implementing procedure.</td>
<td>K. Thomas</td>
<td>In Progress</td>
<td>11/02</td>
<td>BWRVIP Program document in place and Implementing procedure issued.</td>
</tr>
<tr>
<td>8</td>
<td>Implement the 4160 volt breaker refurbishment plan.</td>
<td>T. Hough</td>
<td>In progress</td>
<td>06/03</td>
<td>Breakers refurbished.</td>
</tr>
<tr>
<td>9</td>
<td>Create and approve the 480 volt circuit breaker replacement and refurbishment project plan per procedure 0-CNS-18.</td>
<td>T. Hough</td>
<td>In Progress</td>
<td>09/02</td>
<td>Approved project plan for 480 volt circuit breakers.</td>
</tr>
<tr>
<td>10</td>
<td>Implement 480 volt circuit breaker project plan scope through 2004.</td>
<td>T. Hough</td>
<td>10/02</td>
<td>12/04</td>
<td>Breakers refurbished</td>
</tr>
<tr>
<td>11</td>
<td>Complete Implementation of the EQ Improvement Project. Docketed commitment date 6/30/03</td>
<td>T. Hough</td>
<td>In Progress</td>
<td>06/03</td>
<td>All project milestones complete, all project deliverables issued or implemented.</td>
</tr>
<tr>
<td>12</td>
<td>Complete MOV Program Category II Design Basis Calculations</td>
<td>K. Thomas</td>
<td>10/02</td>
<td>01/03</td>
<td>Calculations completed.</td>
</tr>
<tr>
<td>13</td>
<td>Develop performance indicators for circuit breaker refurbishment projects.</td>
<td>T. Hough</td>
<td>08/02</td>
<td>09/02</td>
<td>Performance Indicator developed.</td>
</tr>
<tr>
<td>14</td>
<td>Develop performance indicators for Category II MOV project.</td>
<td>K. Thomas</td>
<td>08/02</td>
<td>09/02</td>
<td>Performance Indicator developed.</td>
</tr>
</tbody>
</table>

**PERFORMANCE INDICATORS:**

- CNS Program Cumulative Health Indicator
- 480 volt and 4160 volt breaker refurbishment programs schedule and cost indicators (TBD)
- MOV Category II design basis calculations project schedule and cost indicators (TBD)

**RESOURCE REQUIREMENTS:** (TBD)

*(Attached is a copy of the Change Complexity Worksheet)*
### TIP Change Complexity Worksheet

**Description of the Change:**

Action Plan 5.3.2.1 - Programs

1. **How many people are affected by this change?**
   - One work group under one supervisor ........ Score 1
   - One department ................................ Score 2
   - No more than four departments ................ Score 3
   - More than four departments .................. Score 4
   - Most of the site population ................ Score 5
   - Score: 5

2. **What will this change cost to implement (exclude training costs and ongoing costs)?**
   - Less than $5,000 ........................ Score 1
   - More than $5,000 but less than $50,000 .... Score 2
   - More than $50,000 but less than $300,000..... Score 3
   - More than $300,000 ........................ Score 4
   - Score: 4

3. **What training is required for this change?**
   - No training is required ........................ Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4
   - Score: 1

4. **How will this change affect Cooper processes?**
   - Modifies part of a process .................. Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
   - Score: 5

5. **Upon completion, how will this Change affect staff workload?**
   - Reduces work ................................ Score 1
   - No new work .................................. Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work ................................ Score 4
   - Score: 1
6. Will this Change require organizational changes?
- No organizational realignment required ................ Score 0
- The Change affects the organization of one division Score 1
- The Change affects the organization of multiple divisions Score 2
- The Change affects most organizations on site ........ Score 3

   0

7. Will this Change cause disruption of daily work?
- Effects a few daily tasks .......................... Score 1
- Effects few, but the tasks are highly valued .... Score 3
- Effects most of the daily tasks .................... Score 5

   5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE:  Equipment Excellence
FOCUS AREA:  Key Modifications & Projects; Configuration
ACTION PLAN TITLE:  Design Basis Information/Licensing Basis Information (DBI/LBI) Translation Project
ACTION PLAN NUMBER:  5.3.3.1
WBS CROSS-REFERENCE No:  3.4.1
COMPLETION DATE:  12/02
ACTION PLAN OWNER:  K. Jones
FOCUS AREA OWNER:  K. Jones

PROBLEM STATEMENT:
CNS has implemented changes resulting in challenges to assumptions used in the CNS Safety Analysis.

CAUSAL FACTORS:

1. Retrieval of Design Basis Information can be complex and inefficient
   (See actions 1 thru 10)
2. Engineering Design Basis knowledge lacked site specific depth
   (See action 11)

DISCUSSION:
This action plan validates that the Inputs and Assumptions for the CNS Safety Analysis have been properly translated into the implementing plant procedures, programs and processes. CNS committed to complete this project by December 31, 2002 in its May 19, 1999 submittal of the CNS Strategy for Achieving Engineering Excellence, Revision 3. This validation effort will provide added assurance that the plant configuration is in accordance with its design bases, and that the extent of condition for previously identified issues is addressed.
OBJECTIVES:

1) Validate that the Inputs and assumptions for the CNS safety analysis are properly translated into the appropriate policies, procedures, and programs,
2) Develop a tool for CNS engineering use that enables better and quicker access to CNS design basis and supporting design information, and
3) Improve CNS engineering and sitewide understanding of the CNS design, supporting design information, and its licensing basis.

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Scope and perform a Design Basis Information/Licensing Basis Information (DBI/LBI) Pilot Project for selected systems.</td>
<td>K. Jones</td>
<td>8/01</td>
<td>Complete</td>
<td>DBI/LBI Database for selected systems; DBI/LBI Pilot Project Completion Report</td>
</tr>
<tr>
<td>2</td>
<td>Develop lessons learned from DBI/LBI Pilot Project.</td>
<td>K. Jones</td>
<td>2/02</td>
<td>Complete</td>
<td>DBI/LBI Pilot Project Completion Report</td>
</tr>
<tr>
<td>3</td>
<td>Develop DBI/LBI Translation Project Plan.</td>
<td>K. Jones</td>
<td>8/01</td>
<td>Complete</td>
<td>DBI/LBI Translation Project Plan</td>
</tr>
<tr>
<td>4</td>
<td>Develop DBI/LBI Translation Project Implementation Phase Project Instructions.</td>
<td>K. Jones</td>
<td>2/02</td>
<td>Complete</td>
<td>DBI/LBI Translation Project Implementation Phase Project Instructions</td>
</tr>
<tr>
<td>5</td>
<td>Develop DBI/LBI Translation Project Interim Report</td>
<td>K. Jones</td>
<td>5/02</td>
<td>6/02</td>
<td>DBI/LBI Translation Project Interim Report</td>
</tr>
<tr>
<td>6</td>
<td>Present DBI/LBI Translation Project Interim Report to NRC</td>
<td>K. Jones</td>
<td>7/02</td>
<td>To be scheduled.</td>
<td>CNS/NRC Meeting held to discuss DBI/LBI Translation Project</td>
</tr>
<tr>
<td>7</td>
<td>Complete DBI/LBI Translation Project Implementation.</td>
<td>K. Jones</td>
<td>3/02</td>
<td>12/02</td>
<td>DBI/LBI Database; Project completion documentation</td>
</tr>
<tr>
<td>8</td>
<td>Create an action plan to correct procedure and program discrepancies identified during the Implementation.</td>
<td>K. Jones</td>
<td>3/02</td>
<td>12/02</td>
<td>Associated notification actions closed</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

- TIP Schedule performance

RESOURCE REQUIREMENTS:

- $600,000 for contractor support of project
- 2200 man-hours in house for implementation
- Training hours TBD

(See Change Complexity Worksheet)
TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.3.3.1 – Key Modifications & Projects, Configuration – Design Basis
Information/Licensing Basis Information Translation Project

1. **How many people are affected by this change?**
   - One work group under one supervisor ........... Score 1
   - One department ....................................... Score 2
   - No more than four departments ............... Score 3
   - More than four departments ..................... Score 4
   - Most of the site population ................... Score 5

      ___3___

2. **What will this change cost to implement (exclude training costs and
ongoing costs)?**
   - Less than $5,000 ........................................ Score 1
   - More than $5,000 but less than $50,000. .... Score 2
   - More than $50,000 but less than $300,000. .... Score 3
   - More than $300,000 .................................. Score 4

      ___4___

3. **What training is required for this change?**
   - No training is required .......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments. .... Score 3
   - Classroom or workplace training for most of the site Score 4

      ___3___

4. **How will this change affect Cooper processes?**
   - Modifies part of a process ....................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

      ___1___

5. **Upon completion, how will this Change affect staff workload?**
   - Reduces work ........................................ Score 1
   - No new work ........................................ Score 2
• Distributes work from one group to another .......... Score 3
• Adds new work .................................. Score 4

6. Will this Change require organizational changes?
• No organizational realignment required ........ Score 0
• The Change affects the organization of one division Score 1
• The Change affects the organization of multiple divisions Score 2
• The Change affects most organizations on site .... Score 3

7. Will this Change cause disruption of daily work?
• Effects a few daily tasks .......................... Score 1
• Effects few, but the tasks are highly valued ...... Score 3
• Effects most of the daily tasks .................... Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE: Equipment Excellence
FOCUS AREA: Key Modifications & Projects; Configuration
ACTION PLAN TITLE: Offsite Power Reliability Improvement – Phase 1
ACTION PLAN NUMBER: 5.3.3.2
COMPLETION DATE: 5/03
ACTION PLAN OWNER: J. Gausman
FOCUS AREA OWNER: K. Jones

PROBLEM STATEMENT: – In recent years there have been a number of events that have challenged off-site power supplies at Cooper.

CAUSAL FACTORS:
CNS did not adequately communicate its need for reliable off-site power supplies to Transmission Services. This resulted in certain substation equipment failures. (Actions 1 and 2)

OBJECTIVE:
- Switchyard equipment performance meets plant goals for reliability.
- Acceptable grid voltage is available at the offsite power sources, barring extreme grid conditions (e.g. peak summer loading with multiple plant/line outages).
- Real-time grid analysis provides continuous assurance that acceptable voltage will be available following a CNS trip.
<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implement Recommendations of SOER 99-1.</td>
<td>J. Gausman</td>
<td>Complete</td>
<td>Complete</td>
<td>Implement actions needed to address the recommendations of SOER 99-01 including agreements, procedures, calculations, training, etc.</td>
</tr>
<tr>
<td>2</td>
<td>Improve reliability of off-site power sources by establishing a joint PM program with NPPD Transmission Services. Program will cover &quot;critical&quot; switchyard components identified through SCR 2001-0567.</td>
<td>J. Gausman/D. Soley</td>
<td>In progress</td>
<td>9/02</td>
<td>Required preventive and predictive maintenance activities documented. Transmission Services and Plant PM programs revised to incorporate required maintenance activities.</td>
</tr>
<tr>
<td>3</td>
<td>Adjust the Second Level Undervoltage Relays to have a reset dead-band less than the present 1%.</td>
<td>K. Cohn</td>
<td>In progress</td>
<td>8/02</td>
<td>Second Level Undervoltage Relays adjusted to reduced reset dead-band per approved CED.</td>
</tr>
<tr>
<td>5</td>
<td>Submit a Technical Specification change to the NRC to revise the trip setting of the Second Level Undervoltage Relays based on technical justification provided in step 4.</td>
<td>C. Blair</td>
<td>9/02</td>
<td>11/02</td>
<td>Proposed Technical Specification revision submitted to NRC.</td>
</tr>
<tr>
<td>6</td>
<td>Obtain NRC approval of Technical Specification change developed in step 5.</td>
<td>C. Blair</td>
<td>11/02</td>
<td>05/03</td>
<td>NRC approved Technical Specification revision.</td>
</tr>
<tr>
<td></td>
<td>Activity Description</td>
<td>Performer</td>
<td>Start Date</td>
<td>End Date</td>
<td>Notes</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Establish a plant specific methodology for determining acceptable off-site power source voltages.</td>
<td>K. Cohn</td>
<td>8/02</td>
<td>12/02</td>
<td>Calculations that identify voltage limits to be compared to voltages calculated by the analysis developed in step 8.</td>
</tr>
<tr>
<td>8</td>
<td>Provide for an analysis of grid conditions in near real time. Analysis will determine available grid voltages following a trip of Cooper and other grid disturbances as necessary.</td>
<td>K. Cohn/R. Gunderson</td>
<td>8/02</td>
<td>12/02</td>
<td>Analytical model that consistently provides expected post-disturbance voltages. Procedure changes needed for the operators to use model outputs in identifying acceptability of off-site power sources.</td>
</tr>
<tr>
<td>9</td>
<td>Evaluate the plant specific potential for and consequences of double sequencing.</td>
<td>G. Seeman</td>
<td>In progress</td>
<td>9/02</td>
<td>Documented position on plant specific probabilities and consequences of double sequencing. Verify procedural guidance is optimal for degraded voltage conditions.</td>
</tr>
<tr>
<td>10</td>
<td>Lower the ESST permissive setting. Calculation and procedures will be revised and relays set to the new settings.</td>
<td>M. Vanwinkle</td>
<td>In progress</td>
<td>8/02</td>
<td>Lower ESST Permissive setting in accordance with approved CED.</td>
</tr>
<tr>
<td>11</td>
<td>Evaluate switchyard modifications since initial licensing.</td>
<td>J. Gausman</td>
<td>11/02</td>
<td>2/03</td>
<td>Document basis of switchyard modification list used in 2001 ALTRAN report.</td>
</tr>
<tr>
<td>12</td>
<td>Provide analysis and procedures that support to removal of the autotransformer (T2) from service during outage conditions.</td>
<td>J. Gausman</td>
<td>9/02</td>
<td>1/03</td>
<td>Qualification of generator back-feed as an off-site source or application of 5.3.3.2.7/8 deliverables to shutdown conditions.</td>
</tr>
<tr>
<td>13</td>
<td>Closeout review</td>
<td>J. Gausman</td>
<td>4/03</td>
<td>5/03</td>
<td>Closeout report assessing effectiveness of project. Input to Phase 2 plan if required.</td>
</tr>
</tbody>
</table>

**PERFORMANCE INDICATORS:**

- Off-Site Power Supply Unavailability
- Off-Site Power Supply Maintenance Preventable Functional Failures
- Off-Site Power Supply Unplanned LCOs
- Switchyard System Health Indicator
- TIP Schedule Performance
RESOURCE REQUIREMENTS:
External Contractor Costs = $270,000
Total Resources Internal and External = $627,000
Description of the Change:

Action Plan 5.3.3.3 – Key Modifications & Projects; Configuration – Offsite Power Reliability (Phase 1)

1. How many people are affected by this change?
   - One work group under one supervisor ............... Score 1
   - One department .................................... Score 2
   - No more than four departments ..................... Score 3
   - More than four departments ........................ Score 4
   - Most of the site population ........................ Score 5

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000. ................................. Score 1
   - More than $5,000 but less than $50,000 .......... Score 2
   - More than $50,000 but less than $300,000 ...... Score 3
   - More than $300,000 .............................. Score 4

3. What training is required for this change?
   - No training is required. .......................... Score 0
   - Training consists of communication only, no classroom training .......................... Score 1
   - Classroom training for 1 department/people from several disciplines ........ Score 2
   - Classroom training for multiple departments .......... Score 3
   - Classroom or workplace training for most of the site .................. Score 4

4. How will this change affect Cooper processes?
   - Modifies part of a process ........................ Score 1
   - The Change modifies or replaces an entire process .......................... Score 3
   - The Change affects multiple, integrated processes ....................... Score 5

5. Upon completion, how will this Change affect staff workload?
   - Reduces work ...................................... Score 1
   - No new work ....................................... Score 2
   - Distributes work from one group to another ....... Score 3
   - Adds new work ..................................... Score 4

   2  4  2  1  2
6. Will this Change require organizational changes?
   - No organizational realignment required .................. Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site ........ Score 3

6. Will this Change cause disruption of daily work?
   - Effects a few daily tasks .................................. Score 1
   - Effects few, but the tasks are highly valued .......... Score 3
   - Effects most of the daily tasks .......................... Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE: Equipment Excellence
FOCUS AREA: Key Modifications & Projects; Configuration
ACTION PLAN TITLE: Unauthorized Modifications Follow-up Project
ACTION PLAN NUMBER: 5.3.3.3
COMPLETION DATE: 8/03
ACTION PLAN OWNER: J. Gausman
FOCUS AREA OWNER: K. Jones

PROBLEM STATEMENT:
The purpose of this plan is to track the completion of the actions required to disposition previously identified unauthorized modifications (UM).

CAUSAL FACTORS:
The causal factors associated with the introduction of unauthorized modifications have been resolved by actions previously completed. Since the purpose of this plan is to track action completion, there are no causal factors identified.

OBJECTIVE:
The objective of this plan is to track the completion of actions included in the unauthorized modification follow-up project.
## TIP ACTION PLAN

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>ACTION OWNER</th>
<th>START DATE</th>
<th>END DATE</th>
<th>DELIVERABLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Complete review of 562 potentially inappropriately dispositioned UMs.</td>
<td>J. Gausman</td>
<td>In progress</td>
<td>8/02</td>
<td>562 EDP-21 Checklists completed.</td>
</tr>
<tr>
<td>2</td>
<td>Complete review of 1478 &quot;White Paper&quot; items.</td>
<td>J. Gausman</td>
<td>In progress</td>
<td>11/02</td>
<td>1478 EDP-21 Checklists completed.</td>
</tr>
<tr>
<td>3</td>
<td>Prepare design change documents (EEs, CEDs) to address UMs identified in the reviews performed under the UM Follow-Up Project.</td>
<td>J. Gausman</td>
<td>11/02</td>
<td>5/03</td>
<td>Approved EEs and CEDs as appropriate.</td>
</tr>
<tr>
<td>4</td>
<td>Revise configuration documents to reflect the EE's/CED's developed in 3 as well as authorized configuration changes identified in 1 and 2</td>
<td>J. Gausman</td>
<td>3/03</td>
<td>7/03</td>
<td>Revised drawings, databases and procedures as appropriate.</td>
</tr>
<tr>
<td>5</td>
<td>Complete remaining open &quot;Unauthorized Modifications Follow-Up Project&quot; matrix action items.</td>
<td>J. Gausman</td>
<td>In progress</td>
<td>7/03</td>
<td>Matrix action items completed.</td>
</tr>
<tr>
<td>6</td>
<td>Perform a close-out/effectiveness review of UM Follow-up Project.</td>
<td>J. Gausman</td>
<td>7/03</td>
<td>8/03</td>
<td>Closeout report completed.</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

TIP Schedule Performance

RESOURCE REQUIREMENTS:

Presently 6 Engineers have been assigned to this project.
Remaining project resource estimate is approximately 3-4 person years.
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.3.3.3 – Key Modifications & Projects, Configuration – Unauthorized Modifications Follow-up Project

1. **How many people are affected by this change?**
   - One work group under one supervisor .......... Score 1
   - One department .................................. Score 2
   - No more than four departments ................. Score 3
   - More than four departments ................... Score 4
   - Most of the site population .................... Score 5

   __2__

2. **What will this change cost to implement (exclude training costs and ongoing costs)?**
   - Less than $5,000................................. Score 1
   - More than $5,000 but less than $50,000 ....... Score 2
   - More than $50,000 but less than $300,000 .... Score 3
   - More than $300,000............................. Score 4

   __4__

3. **What training is required for this change?**
   - No training is required ......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4

   __0__

4. **How will this change affect Cooper processes?**
   - Modifies part of a process ........................ Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

   __1__

5. **Upon completion, how will this Change affect staff workload?**
   - Reduces work .................................... Score 1
   - No new work ..................................... Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work .................................. Score 4

   __1__
6. Will this Change require organizational changes?
   - No organizational realignment required .................... Score 0
   - The Change affects the organization of one division ........ Score 1
   - The Change affects the organization of multiple divisions ... Score 2
   - The Change affects most organizations on site ............. Score 3

   Total: 0

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks .................................... Score 1
   - Effects few, but the tasks are highly valued ............... Score 3
   - Effects most of the daily tasks ............................. Score 5

   Total: 1

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PILLAR OF EXCELLENCE: Training
FOCUS AREA: Training Program
ACTION PLAN TITLE: Management Ownership
ACTION PLAN NUMBER: 5.4.1.1
WBS CROSS-REFERENCE No: 3.5.3
COMPLETION DATE: 12/02
ACTION PLAN OWNER: John Christensen
FOCUS AREA OWNER: John Christensen

PROBLEM STATEMENT:
Training at CNS has, at times, not achieved desired results due to ineffective line management ownership of training.

CAUSAL FACTORS:
1. Unclear roles and responsibilities for line ownership of training. (Action steps: 1,3)
2. Failure of station management and MTERC to hold line managers and supervisors accountable for proper ownership of training. (The MTERC was replaced by the Training Council in April 2002) (Action Plan 5.1.1.2; Action steps: 1,2,3)
3. Lack of clear ownership measures and performance indicators. (Action step 2)

OBJECTIVE:
A management team that is accountable for their roles and responsibilities related to training. Line managers and incumbents identify opportunities for improved performance through utilization of training. A decline in station human performance errors.
<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Develop and communicate expectations for line management ownership of accredited training programs.</td>
<td>Mike Coyle</td>
<td>06/02</td>
<td>07/02</td>
<td>Written document containing expectations delivered to line management responsible for accredited training programs.</td>
</tr>
<tr>
<td>2</td>
<td>Implement a process to monitor and evaluate management ownership of training. The CNS Training Council will review this indicator.</td>
<td>John Christensen</td>
<td>03/02</td>
<td>08/02</td>
<td>Implemented process to monitor and evaluate management ownership of training.</td>
</tr>
<tr>
<td>3</td>
<td>Revise procedures NTP 1.0 and 0-CNS-47 as required to refine the expectations for the various Plant Training Committees.</td>
<td>Tim Donovan</td>
<td>07/02</td>
<td>08/02</td>
<td>Approved procedures NTP 1.0 and 0-CNS-47 that provides management’s expectations of the Plant Training Committees.</td>
</tr>
<tr>
<td>4</td>
<td>Conduct a training self-assessment on management ownership of training.</td>
<td>Tim Donovan</td>
<td>10/02</td>
<td>12/02</td>
<td>Self-assessment results indicating effective corrective action and additional actions, as required.</td>
</tr>
<tr>
<td>5</td>
<td>Develop a program-level performance indicator for the maintenance and technical programs that measures staff qualification status.</td>
<td>John Christensen</td>
<td>8/02</td>
<td>12/02</td>
<td>Program performance indicator for staff qualification developed and reported to Training Council.</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

- Management Observations
- Training Attendance
- Training Observations Program Effectiveness
- Qualification Matrix
- Training Schedule Changes
- Training Effectiveness Scorecard
- Management Ownership Scorecard
- Maintenance/Technical Staff Qualification (TBD see Action 5)

RESOURCE REQUIREMENTS:

- Manpower, internal, external, required skills and/or knowledge - None other than normal work load.
- Materials and Supplies- None.
- Equipment - None.
- Facilities - None.

(See attached Change Complexity Worksheet)
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.4.1.1 – Training Program – Management Ownership

1. How many people are affected by this change?
   - One work group under one supervisor ................ Score 1
   - One department ........................................ Score 2
   - No more than four departments ..................... Score 3
   - More than four departments .......................... Score 4
   - Most of the site population .......................... Score 5

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 .................................... Score 1
   - More than $5,000 but less than $50,000 .......... Score 2
   - More than $50,000 but less than $300,000 .... Score 3
   - More than $300,000 .................................. Score 4

3. What training is required for this change?
   - No training is required ............................. Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments ........ Score 3
   - Classroom or workplace training for most of the site Score 4

4. How will this change affect Cooper processes?
   - Modifies part of a process .......................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5

5. Upon completion, how will this Change affect staff workload?
   - Reduces work .......................... Score 1
   - No new work .......................... Score 2
   - Distributes work from one group to another ...... Score 3
TIP ACTION PLAN

- Adds new work. .................................. Score 4

6. Will this Change require organizational changes?
   - No organizational realignment required ........ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3

   ______0_____

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ...................... Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks.................. Score 5

   ______1_____

Low:    Score 5 to 10
Moderate: Score 11 to 20
High:   Score 21 to 30

14
PROBLEM STATEMENT:

CNS has experienced problems with poor quality of exams and the validation of individual staff qualification status, as well as process implementation inadequacies associated with On-The-Job Training and Evaluation (OJT/TPE). As a result, there have been problems with workers performing work for which they were not qualified.

CAUSAL FACTORS:

1. Lack of instructor knowledge concerning development of higher order test questions and exams. (see Action plan 5.4.1.3, action 4)
2. The processes to assign work and verify personnel qualifications are difficult to use. (see Action plan 5.4.1.2, actions 2 and 3)
3. The processes to develop evaluation tools, assign work, and verify personnel qualifications are not always followed. (See Action plan 5.1.1.2)
**DISCUSSION:**

Tools used to evaluate and qualify trainees have not always met expectations and standards. "Qualification" type issues have also been identified at CNS. Implementation deficiencies associated with OJT/TPE also have been identified at CNS.

**OBJECTIVE:**

Training program material that thoroughly evaluates and qualifies the staff to the skills and knowledges needed to perform assigned tasks. The CNS staff is capable of determining qualification levels prior to assigning or conducting tasks.

<table>
<thead>
<tr>
<th>No.</th>
<th>Action</th>
<th>Action Owner</th>
<th>Start Date</th>
<th>End Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conduct quarterly monitoring of the use of the qualification tracking system by the line organizations to identify problem areas.</td>
<td>John Christensen</td>
<td>3/02</td>
<td>12/02</td>
<td>Quarterly monitoring reports with actions to correct noted problems.</td>
</tr>
<tr>
<td>2</td>
<td>Revise Administrative Procedure 0.17, &quot;Selection and Training of Station Personnel&quot; to provide guidelines, expectations, and roles and responsibilities for CNS staff relative to maintaining qualification status.</td>
<td>Tim Donovan</td>
<td>7/02</td>
<td>9/02</td>
<td>Revised and approved procedure.</td>
</tr>
<tr>
<td>3</td>
<td>In cooperation with the line, evaluate how individual qualifications for task performance will be verified prior to assigning individuals work.</td>
<td>John Westbrook</td>
<td>6/02</td>
<td>9/02</td>
<td>Documented evaluation results and identified recommendations.</td>
</tr>
<tr>
<td>4</td>
<td>Conduct an assessment in the Maintenance and Technical training programs that is focused to evaluate effectiveness of actions taken to address OJT/TPE performance issues.</td>
<td>John Westbrook</td>
<td>9/02</td>
<td>11/02</td>
<td>Completed and documented assessment report. Issues identified will be entered in the Corrective Action Program for resolution.</td>
</tr>
</tbody>
</table>
TIP ACTION PLAN

|   | Using the results from the assessment in action 4 (lessons learned) conduct an assessment of OJT/TPE performance for the Operations department. | Mark Schaible | 12/02 | 3/03 | Completed and documented assessment report. Issues identified will be entered in the Corrective Action Program for resolution. |

**PERFORMANCE INDICATORS:**

- Qualification Matrix Adherence
- Maintenance/Technical Staff Qualification (TBD see Action Plan 5.4.1.1 action 5.4.1.1.5)

**RESOURCE REQUIREMENTS:**

- Manpower, internal, external, required skills and/or knowledge - None.
- Materials and Supplies - None.
- Equipment - None.
- Facilities - None.

*(See Change Complexity Worksheet)*
### TIP Action Plan

**TIP Change Complexity Worksheet**

**Description of the Change:**

**Action Plan 5.4.1.2 – Training Program – Evaluation and Qualification**

1. **How many people are affected by this change?**
   - One work group under one supervisor .................................. Score 1
   - One department ................................................................. Score 2
   - No more than four departments ........................................... Score 3
   - More than four departments ............................................... Score 4
   - Most of the site population ................................................. Score 5

   **Total Score:** 5

2. **What will this change cost to implement (exclude training costs and ongoing costs)?**
   - Less than $5,000. ............................................................... Score 1
   - More than $5,000 but less than $50,000. ............................. Score 2
   - More than $50,000 but less than $300,000. .......................... Score 3
   - More than $300,000 ............................................................. Score 4

   **Total Score:** 1

3. **What training is required for this change?**
   - No training is required ....................................................... Score 0
   - Training consists of communication only, no classroom ....... Score 1
   - Classroom training for 1 department/people from several disciplines ................................................................. Score 2
   - Classroom training for multiple departments ..................... Score 3
   - Classroom or workplace training for most of the site .......... Score 4

   **Total Score:** 3

4. **How will this change affect Cooper processes?**
   - Modifies part of a process .................................................. Score 1
   - The Change modifies or replaces an entire process ............ Score 3
   - The Change affects multiple, integrated processes ............ Score 5

   **Total Score:** 3
5. Upon completion, how will this Change affect staff workload?
   - Reduces work .................................. Score 1
   - No new work .................................. Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work .................................. Score 4

6. Will this Change require organizational changes?
   - No organizational realignment required .......... Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ........................ Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks ..................... Score 5

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30
PROBLEM STATEMENT:

The methods used by Training Management to communicate expectations and supervision’s methods of managing change have contributed to staff performance issues such as procedural compliance.

CAUSAL FACTORS:

1. CNS training administrative processes have become excessively cumbersome and requirements, roles and responsibilities, and standards for effective training have become increasingly hard to determine by the staff. (Plan steps: 2, 3 and 5)
2. Lack of adherence to process requirements. (see Action plan 5.1.1.2)
3. Ineffective communications and change management for implementing process revisions and enhancements. (Plan steps: 1)
4. Lack of recent instructor continuing training that focused on identified instructor performance issues. (Plan steps: 4)

DISCUSSION:

Human behavior, management of change, and communications within the training department have at times not met expectations. As a result, the staff is sometimes unaware of management’s expectations. Frequent procedure changes that were not well communicated to the staff have caused procedure adherence issues.
**OBJECTIVE:**

A training organization that fosters a culture that values prevention of events, strengthens the integrity of defenses to prevent errors, precludes the development of error-likely situations and maintains a learning environment that encourages continuous improvement.

<table>
<thead>
<tr>
<th>No.</th>
<th>ACTION</th>
<th>START</th>
<th>END</th>
<th>DELIVERABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Implement a standard communication model that assures consistent alignment between training groups and provides a structured format for communicating change to the staff. (This item is also tied to Action Plan 5.1.3.2 “Internal Communications”)</td>
<td>John Christensen</td>
<td>07/02</td>
<td>09/02</td>
</tr>
<tr>
<td>2</td>
<td>Develop a “Conduct of Training” procedure that provides the guidelines for the Training Department infrastructures.</td>
<td>Tim Donovan</td>
<td>09/02</td>
<td>12/02</td>
</tr>
<tr>
<td>3</td>
<td>Implement a training program effectiveness scorecard that measures the effectiveness of training relative to the establishment of measurable goals (0-CNS-47, Training Effectiveness Review Committee).</td>
<td>Tim Donovan</td>
<td>06/02</td>
<td>09/02</td>
</tr>
<tr>
<td>4</td>
<td>Conduct instructor continuing training sessions that addresses identified instructor skill weaknesses. This training will include content to improve exam item development and conduct of task analysis.</td>
<td>Tom Doray</td>
<td>06/02</td>
<td>12/02</td>
</tr>
<tr>
<td>5</td>
<td>Develop and implement a training process simplification project with the purpose of producing improved procedures and change process controls. This will incorporate the use of industry benchmarking.</td>
<td>Tim Donovan</td>
<td>12/02</td>
<td>12/04</td>
</tr>
</tbody>
</table>
PERFORMANCE INDICATORS:

- Training Effectiveness Scorecards – monitored quarterly – Presented to the Training Council
- Training Department Human Performance Event Free Clock resets – Goal of 30 days between resets (Human Performance Clock resets measure performance issues such as procedural adherence errors).

RESOURCE REQUIREMENTS:

- Manpower, internal, external, required skills and/or knowledge – Implementation of this action plan is ‘Level of Effort’ work. Each of the action items will require significant person-hours to implement, but resources currently exist to perform the work (i.e., individuals are on staff to write procedures, Continuing Instructor Training was previously planned and budgeted).
- Materials and Supplies – None
- Equipment – None
- Facilities -- None
TIP ACTION PLAN

TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.4.1.3 – Training Program – Organizational Effectiveness

1. How many people are affected by this change?
- One work group under one supervisor ............ Score 1
- One department ................................ Score 2
- No more than four departments ................. Score 3
- More than four departments ..................... Score 4
- Most of the site population ..................... Score 5

2. What will this change cost to implement (exclude training costs and ongoing costs)?
- Less than $5,000 ................................ Score 1
- More than $5,000 but less than $50,000 ........ Score 2
- More than $50,000 but less than $300,000 ...... Score 3
- More than $300,000 ........................... Score 4

3. What training is required for this change?
- No training is required .......................... Score 0
- Training consists of communication only, no classroom Score 1
- Classroom training for 1 department/people from several disciplines Score 2
- Classroom training for multiple departments ...... Score 3
- Classroom or workplace training for most of the site Score 4

4. How will this change affect Cooper processes?
- Modifies part of a process ...................... Score 1
- The Change modifies or replaces an entire process Score 3
- The Change affects multiple, integrated processes Score 5
5. Upon completion, how will this Change affect staff workload?
   - Reduces work ................................ Score 1
   - No new work. ............................... Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work. ............................ Score 4
   
   4

6. Will this Change require organizational changes?
   - No organizational realignment required ........ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3
   
   0

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ........................ Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks .................. Score 5
   
   1

Low: Score 5 to 10
Moderate: Score 11 to 20
High: Score 21 to 30

Page 5 of 5
Revision 1 6/7/02
PILLAR OF EXCELLENCE: Training  
FOCUS AREA: Training Program  
ACTION PLAN TITLE: Training Program and Process Enhancements  
ACTION PLAN NUMBER: 5.4.1.4  
WBS CROSS-REFERENCE No: 3.5.3  
COMPLETION DATE: 12/03  
ACTION PLAN OWNER: Bob Wulf  
FOCUS AREA OWNER: John Christensen

PROBLEM STATEMENT:
CNS has exhibited problems maintaining some training programs at current industry standards for training excellence.

CAUSAL FACTORS:
1. The line has not always demonstrated expected ownership of training programs. (Action Plan 5.4.1.1)  
2. Training management and program guardian oversight has been inconsistent. (Action Plan 5.4.1.1 and Action Plan 5.4.1.3)  
3. Failure to conduct focused self-assessment activities for all programs. (Completed prior to TIP Rev.0.).  
4. Lack of rigorous performance indicators and accountability to these PIs. (See new Training Excellence PIs, below explanation of completed actions, and Action plan 5.1.1.2).

OBJECTIVE:
The objective of this plan is to track improvement actions for training programs so they will meet or exceed industry standards and guidelines. Training processes will provide assurance that the programs meet the need of the line to provide and maintain a qualified work force at CNS. The causal factors are corrected by other action plans as noted above.
<table>
<thead>
<tr>
<th>No.</th>
<th>Action Plan</th>
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</thead>
</table>
| 1   | Upgrade and implement the following training programs to industry-best practices:  
* Electrical Maintenance Program. This includes:  
  - Benchmark the EM Program against industry peers.  
  - Facilitate an INPO assist visit.  
|     | J. Westbrook | 01/02 | Complete 05/02 | TIP Revision 0 actions completed. Reference "Training Program", Actions 3.1 and 3.2. |
| 2   | Maintenance Supervisor Training Program. This includes:  
* Complete material and program upgrades.  
* Implement approved recommendations.  
* Complete training schedule for Maintenance Supervisors and Crew Leads.  
* Assess and provide delta training for those already qualified.  
<p>|     | J. Westbrook | 01/02 | Complete 05/02 | TIP Revision 0 actions completed. Reference &quot;Training Program&quot;, Actions 4.1, 4.2, 4.3 and 4.4. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Upgrade and implement the following training programs to industry-best practices:</th>
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</thead>
</table>
| 3 | Shift Technical Engineer. This includes:  
  • Evaluate the STE task analysis.  
  Update the STE training material.  
  Develop a lesson plan for casualty management concepts.  
  • Evaluate training needs and assess delta training. | Mark Schaible | 01/02 |
| 4 | Upgrade and implement the following training programs to industry-best practices:  
  RP/Chemistry Program. This includes:  
  • Material revision and development.  
  • Conduct of delta training. | John Westbrook | 01/01 01/03 |
| 5 | Electrical Maintenance Program. This includes:  
  • Conduct of a benchmark visit.  
  • Review of task analysis and objectives.  
  • Revision/development of training material.  
  • Assessment and provision of required delta training. | John Westbrook | 01/01 01/03 |

TIP Revision 0 actions completed. Reference "Training Program", Actions 1.1 and 1.2.
<table>
<thead>
<tr>
<th>Action Plan</th>
<th>Start Date</th>
<th>End Date</th>
<th>Description</th>
</tr>
</thead>
</table>
| Engineering Support Program. This includes:  
  - Complete orientation material development.  
  - Complete job/task analysis for position-specific population.  
  - Complete material revisions/development.  
  - Provide required delta training. |            |          | Upgrade and implement the following training programs to industry-best practices: | Bob Wulf | 01/01 | 12/03 | Implementation of Training Program Materials that fully meet or exceed industry guidelines and CNS staff needs. |
| Shift Technical Engineer. This includes:  
  - Completion of STE delta training. |            |          | Upgrade and implement the following training programs to industry-best practices: | Mark Schaible | 07/01 | 12/03 | Implementation of Training Program Materials that fully meet or exceed industry guidelines and CNS staff needs. |
| Station Operator Program. This includes:  
  - Completion of NLO tabletop task analysis to reanalyze NLO tasks.  
  - Revision/development of training materials.  
  - Provision of required delta training. |            |          | |
## TIP ACTION PLAN

| 8 | Review the newly revised Accreditation Objectives and Criteria ACAD 02-001, and revise CNS Training Processes and Procedures as required. This includes:  
|   | • Revision of training processes/procedures.  
|   | • Development of training on new processes.  
|   | • Delivery of training to instructors. | Tim Donovan | 03/02 | 12/02 | Approved and Implemented Training Process and Procedures that implement industry guidelines and standards. |
| 9 | Perform self-assessments that focus on the effectiveness of training program updates implemented by this action plan. | Tim Donovan | 10/02 | 05/03 | No significant program or material deficiencies identified during 2003 training self-assessments. |

### PERFORMANCE INDICATORS:

**TIP ACTION PLAN**

**RESOURCE REQUIREMENTS:**

No external manpower, materials, supplies, equipment or facilities are required to complete this action plan. Skills or knowledge beyond that of the existing staff is not necessary. Significant internal resources are required to implement this action plan. These resources are identified below.

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<thead>
<tr>
<th>Category</th>
<th>Hours</th>
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<td>Operations Training</td>
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<td>Process Training</td>
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<td>RP Training</td>
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<td>Site Management</td>
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<td>DED</td>
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<td>Maintenance Supervisors</td>
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<tr>
<td>RP Department</td>
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</table>
TIP
Change Complexity Worksheet

Description of the Change:

Action Plan 5.4.1.4 – Training Programs – Training Program and Process Enhancements

1. How many people are affected by this change?
   - One work group under one supervisor ........... Score 1
   - One department .................................. Score 2
   - No more than four departments ................. Score 3
   - More than four departments ..................... Score 4
   - Most of the site population ..................... Score 5

2. What will this change cost to implement (exclude training costs and ongoing costs)?
   - Less than $5,000 .................................. Score 1
   - More than $5,000 but less than $50,000 ....... Score 2
   - More than $50,000 but less than $300,000 ..... Score 3
   - More than $300,000 ............................. Score 4

3. What training is required for this change?
   - No training is required .......................... Score 0
   - Training consists of communication only, no classroom Score 1
   - Classroom training for 1 department/people from several disciplines Score 2
   - Classroom training for multiple departments .... Score 3
   - Classroom or workplace training for most of the site Score 4

4. How will this change affect Cooper processes?
   - Modifies part of a process ..................... Score 1
   - The Change modifies or replaces an entire process Score 3
   - The Change affects multiple, integrated processes Score 5
5. Upon completion, how will this Change affect staff workload?
   - Reduces work ................................ Score 1
   - No new work .................................. Score 2
   - Distributes work from one group to another .... Score 3
   - Adds new work .................................. Score 4
   ______ 2 ______

6. Will this Change require organizational changes?
   - No organizational realignment required ........ Score 0
   - The Change affects the organization of one division Score 1
   - The Change affects the organization of multiple divisions Score 2
   - The Change affects most organizations on site .... Score 3
   ______ 0 ______

7. Will this Change cause disruption of daily work?
   - Effects a few daily tasks ........................ Score 1
   - Effects few, but the tasks are highly valued ...... Score 3
   - Effects most of the daily tasks .................... Score 5
   ______ 1 ______

Low: Score 5 to 10
Moderate: Score 11 to 20 18
High: Score 21 to 30
Attachment 8.2

Site-Wide Performance Indicators

Attached are the performance indicator summary sheets for the station performance measures and the performance measures for each of the four Pillars of Excellence.
8.0 ATTACHMENTS

8.1 Action Plan Index and Action Plans

8.2 Site-Wide Performance Indicators

8.3 Charts and Diagrams
Attachment 8.1

Action Plan Index and Action Plans
### Action Plan Index

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<th>Focus Area</th>
<th>Action Plan #</th>
<th>TIP Action Plans</th>
<th>Action Plan Owner</th>
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## COOPER NUCLEAR STATION

### Performance Indicator Summary

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<tbody>
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<td>CSHA Recordable Injury Rate (18 Month)</td>
<td>0.96</td>
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<tr>
<td>Production Cost (YTD)</td>
<td>$20.51</td>
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<tr>
<td>Unit Capability Factor (18 Month Average)</td>
<td>84.5%</td>
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**Thresholds:**

- **Good Practices:** Meets Target
- **Losing Margin:** Initiate Action to Correct
- **UnAcceptable Performance:** Action Required

**Past Months:**

- **3 Months Ago:** PI Title
- **2 Months Ago:** PI Title
- **Last Month:** PI Title
- **This Month:** PI Title

**Colors:**

- **White:** Performance Meets Target
- **Yellow:** Performance is acceptable
- **Red:** Performance is unacceptable
Organizational Excellence
Performance Indicator Summary

- **Overtime (% Hours)**
  - Acceptable: 8.7% - 7.6% - 7.6%
  - Unacceptable: >10% - >7% - >6%
- **Monthly Training Absences**
  - Acceptable: 7.1%
  - Unacceptable: >6
- **Human Performance Event Frequency**
  - Acceptable: 4.0
  - Unacceptable: >3.9
- **ERG Performance**
  - Acceptable: 92.7% - 92.4% - 92.5%
  - Unacceptable: <90% - <83% - <95%
- **Timeliness of CNS Response to Industry Issues**
  - Acceptable: 190 - 97 - 55
  - Unacceptable: >60 - >30 - >20
- **External Communication Effectiveness**
  - Acceptable: TBD
  - Unacceptable: >75% - >85% - >95%
- **Internal Communication Effectiveness**
  - Acceptable: TBD
  - Unacceptable: >75% - >80% - >90%

**April 2002**

- Review to Capture Good Practices
- Losing Margin: Initiate Action to Correct
- Acceptable Performance: Meets Target
- UnAcceptable Performance: Action Required
Operational Excellence
Performance Indicator Summary

- Deficiencies Outside Control Room: 25
- Control Room Deficiencies: 11
- Configuration Control Events: 2
- Long Term Caution Orders: 64
- 18 Month Collective Dose: 123.8
- Contaminated Floor Area (Housekeeping): 2.2%
- Reactivity Management Performance: 85.5%

Review to Capture Good Practices
Losing Margin: Initiate Action to Correct

Acceptable Performance: Meets Target
UnAcceptable Performance: Action Required

April 2002
Equipment Excellence
Performance Indicator Summary

April 2002

Review to Capture Good Practices

Losing Margin:
Initiate Action to Correct

Acceptable Performance:
Meets Target

UnAcceptable Performance:
Action Required
Training Excellence
Performance Indicator Summary

April 2002

Review to Capture
Good Practices

Losing Margin:
Initiate Action to Correct

Acceptable Performance:
Meets Target

UnAcceptable Performance:
Action Required
Terminology associated with fishbone diagrams:

**Areas of Effect** – The descriptor shown at the head (right side of the diagram). Example: Organizational Effectiveness

**Major Contributor** – The descriptor at the end of one of the ribs (top or bottom of the fishbone). Example: 1.1.0 Management

**Causal Factor Grouping** – Individual line on a rib of the fishbone. Example: 1.1.1 Vision/Mission/Goals/Standards

**Work Breakdown Structure (WBS)** – The hierarchical numbering system used to organize the analysis of causal factor groups. The WBS can be tied to action plans.

Example:  
1.0.0 Organizational Effectiveness  
1.1.0 Management  
1.1.1 Vision/Mission/Goals/Standards
AREA OF EFFECT - 1

1.2.0 HUMAN BEHAVIORAL
  1.2.1 PRIDE
  1.2.2 TRUST
  1.2.3 CULTURE
  1.2.4 TEAMWORK

1.1.1 VISION/MISSION/GOALS/STANDARDS

1.1.2 EMPOWERMENT/STYLE/CHARTERS/ROLES & RESPONSIBILITIES

1.1.3 PRIORITIES

1.1.4 SUCCESSION PLANNING

1.4.0 CHANGE MANAGEMENT

1.4.1 PERSONNEL CHANGES

1.4.2 PROGRAM/PROCESS CHANGES

1.3.0 COMMUNICATIONS

1.3.1 EXTERNAL

1.3.2 INTERNAL

1.0.0 ORGANIZATIONAL PERFORMANCE
AREA OF EFFECT - 2

2.2.1 WORK PRACTICES/BRIEFINGS
  2.2.2 1st LINE SUPERVISION
  2.2.3 UNKNOWNS/LESSONS LEARNED
  2.2.4 TECHNICAL SUPPORT

2.2.0 WP IMPLEMENTATION

2.1.0 WP DEVELOPMENT
  2.1.1 ACCOUNTABILITY/PURPOSE
  2.1.2 COMPLETENESS/ACCURACY/TIMELY
  2.1.3 TEAMWORK

2.4.0 OUTAGE IMPLEMENTATION

2.4.1 INTERACTIONS WITH WP
  2.4.2 RESTRAINTS/UNKNOWNs
  2.4.3 MONITORING

2.4.4 CONTRACTOR MANAGEMENT

2.3.0 OUTAGE PLAN DEVELOPMENT

2.3.1 OUTAGE MANAGEMENT
  2.3.2 PLANNING/TIMELINESS
  2.3.3 SCHEDULING/MONITORING

2.0.0 EXECUTION OF WORK
AREA OF EFFECT - 3
TIP IMPROVEMENT PROCESS

Cause and Effect Analysis

Individual Cause Grouping

Extent of Condition Assessment

Problem Statement drafted

Apparent Cause drafted

Complete Self assessment Reports

INTERNAL ASSESSMENT

TIP, Revision 2

Actions (possible root cause)

CRG review

Supvr./Focus Area Owner reviews and classify recommendation

Apparent/Causal Factors drafted (Action Plans)

Findings Generated

Notification written (incl. problem statement and apparent cause)