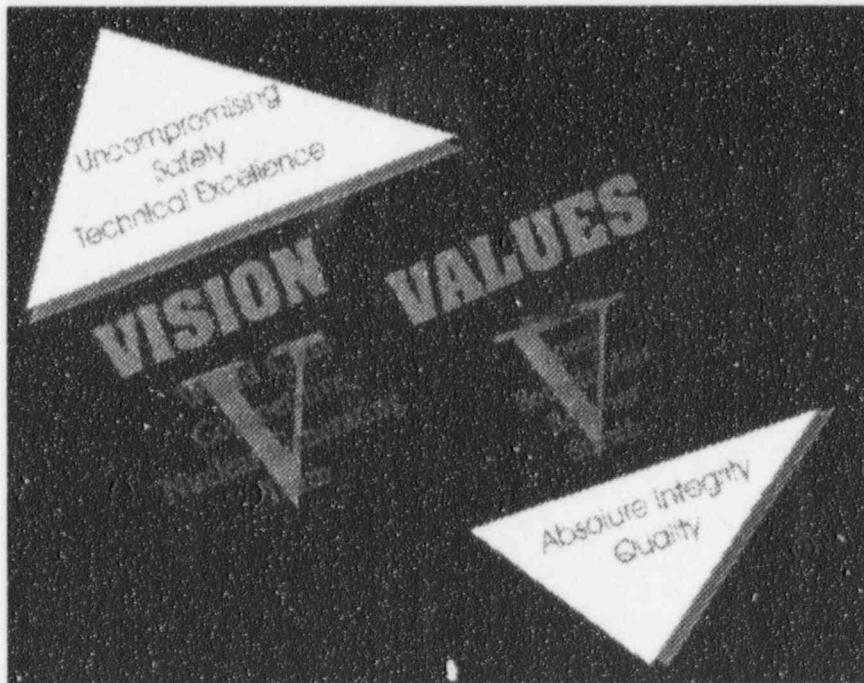


LaSalle Nuclear Power Station

Course of Action Progress Report

December 22, 1995



ComEd

A Unicom Company

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EXECUTIVE SUMMARY

The Course of Action (COA), previously the BUP Management Overview, was issued in May 1994 as a three-year program focused on resolution of issues identified by an assessment and comprehensive review of station performance. The LaSalle Business Unit Plan was developed by Station management with discrete adaptable action plans that served as the working-level document through which Station personnel were held accountable for necessary improvement actions. The COA outlines the key issues addressed by the BUP and summarizes the activities that are being taken to resolve LaSalle's performance issues and reverse the station's declining performance trend. Although other issues are addressed in the BUP and its corresponding action plans, the COA focuses on those issues which are most significant to addressing the performance trend.

The LaSalle COA includes the following eight major focus areas:

1. Management and Leadership
2. Radiation Protection
3. Materiel Condition
4. Issues Management
5. Workforce Management
6. Maintenance
7. Engineering
8. Operations

The progress in each of these areas is addressed in this report with summaries of the actions completed to date. Many issues have been closed and are noted as such on the summary status sheets included in this document. All closed issues have undergone a final review by a team of Senior Managers to assure the original issue has been resolved and the documentation appropriately supports closure of the issue. The support documentation packages assembled for the COA review have been retained in a COA Document Closure File.

Our performance improvement over the most recent months confirms the need for continued, aggressive, focused efforts. We acknowledge and understand our problems and we will continue to follow our existing plans for the actions required to accomplish additional performance improvement.

While many improvements remain to be accomplished, it is clear that material condition remains our number one weakness and priority. Some improvements have been made, but more work remains. Overall material condition improvement will require several years of sustained progress to attain the performance goals we have established.

Another area where we have focused improvement goals is the constitution of the LaSalle senior management team. I am now confident the current senior management team has the necessary abilities to accomplish the performance improvement goals and sustain continual improvement for the future.

The results of the actions outlined in the Course of Action and implemented as defined in the 1994 Business Unit Plan and the 1995 LaSalle Annual Plan demonstrate improved performance in certain areas.

The following highlights major accomplishments as well as future actions:

- Material Condition continues to be the key focus area for LaSalle. Significant work has been performed to improve material condition for several key systems, including Condensate and Condensate Booster Pumps, Neutron Monitoring and the Reactor Recirculation System. Work on these and other systems will be continued throughout 1996.
- Programmatic improvements have been implemented in the area of Issue Management with specific improvements made in the Problem Identification process. Near term emphasis will highlight the effectiveness review for all significant corrective actions resultant from root cause analysis.
- Radiation Protection improvements have been made in the areas of dose and radworker performance. However, continued attention to detail and source term reduction will be enhanced in the near term.
- Improvements are occurring in the area of Operations. The operating culture is becoming more proactive. The Conservative Decision Making philosophy has been incorporated into daily business in the Operations Department.
- The current level of performance in executing work at LaSalle is not meeting our expectations. Changes in the Work Control area thus far have focused on the identification and removal of barriers to performing work in the field. Near term efforts to improve performance focus on "getting work done". This review is led by the Operations Manager, Work Control Superintendent, System Engineering Manager and the Maintenance Superintendent. Additionally our expectations and standards on planning and execution and are continually raising
- Administrative and personnel changes were made to enhance the Maintenance organization. Significant effort is still necessary to improve Maintenance "wrench time". LaSalle has directed a small group of senior managers to improve our ability to "get work done."

- The Site Engineering organization has been strengthened through self assessment. Improvements will occur in 1996 in the following areas: timely closure of Design Change Packages, reduction in the current backlog of design change requests, changes in the VETIP program and improvements to LaSalle's Design Change process, including implementation of the "Design-It-Now" process.
- In the area of Station Training, some milestones were achieved. For example, the Maintenance and Technical training program's probationary status was removed. In 1996, improvements in Station Training will focus on completing the Conservative Decision Making training initiative for Site Engineering and Maintenance personnel. In addition, training of all first line supervisors in enhanced safety standards and Management Action Response Checklist (MARC) is scheduled for completion prior to May 1996.

Currently, the COA improvement plan is approximately 81% complete following management review of all issues. Completion of the activities and achieving the objectives has focused LaSalle's improvement progress as well as forming a foundation of improved processes and management and leadership. The open COA issues are being included in the 1996 Business Plan and associated department plans. The effectiveness review by a Senior Manager Review Team of the open items will be completed at a later date and reported in the final COA Status Report.

A final COA Closure Report will be submitted in early 1997 following completion of the three-year improvement plan.

Summary Status of COA Issues

22-Dec-95

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Management and Leadership	1.B.1	Strengthen the Leadership Team Structure	1.B.1.a	Leadership Team Changes	Closed
			1.B.1.b	Creation of BUP Group	Closed
	1.B.2	Improve Leadership Behaviors	1.B.2.a	Leadership Coaching Opportunities	Open
			1.B.2.b	Assignment of Temporary RP advisor from INPO	Closed
	1.B.3	Establish Standards and Expectations	1.B.3.a	Published Major Station Goals	Closed
			1.B.3.b	Consolidated Priority List of Station Issues	Open
			1.B.3.c	Communicate Importance of Assessments, Quality Overviews, Corrective Action Programs	Closed
			1.B.3.d	Develop and Communicate Roles and Responsibilities	Closed
	1.B.4	Communicate Expectations	1.B.4.a	Conduct Expectation Seminars	Closed
			1.B.4.b	Develop Station Wide Communication Plan	Open
			1.B.4.c	Weekly Communication Meetings	Closed
			1.B.4.d	Communicate Standards and Expectations at Daily Event Screening Meetings	Closed
	1.B.5	Enforce Accountability	1.B.5.a	PPR Links 50% Performance Rating to Implementing Major Station Goals	Closed
			1.B.5.b	Improve Disciplinary Process	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Management and Leadership	1.B.6	Enhance Management Monitoring and Assessment	1.B.6.a	Managers and Supervisors Monitor Daily Activities	Open
			1.B.6.b	Develop and Implement a System for BU Personnel to Input on Performance of First Line Supervisors	Closed
			1.B.6.c	Implement Integrated Quality Effort (IQE)	Closed
Radiation Protection	2.B.1	Improve Leadership and Management	2.B.1.a	Communicate Expectations for Managers and Supervisors to Spend Time in the Field	Closed
			2.B.1.b	Authority and Instructions of RP Staff not to be Circumvented	Closed
			2.B.1.c	Radworker Training Outlining Management Expectations	Closed
			2.B.1.d	Implementation of Senior Manager On-Site Program	Closed
			2.B.1.e	RP Department Adopting a Customer Orientation	Closed
			2.B.1.f	Restructure of Station ALARA Committee	Closed
			2.B.1.g	INPO RP Manager to be Onsite	Closed
			2.B.1.h	Implement ALARA Dose Budgeting Process	Closed
			2.B.1.i	Re-establish Teamwork and Trust in RP Department	Closed
			2.B.1.j	Accountability for Poor Radworker Performance	Closed
			2.B.1.k	Implement Station Recognition Program for Good Radiation Worker Performance	Closed
			2.B.1.l	Station Radiation Exposure Performance to be Included in Individual Performance Ratings	Closed
			2.B.1.m	Implementation of the Respiratory Protection Program	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Radiation Protection	2.B.2	Worker Knowledge and Accountability	2.B.2.a	Emphasis Intra-departmental Communications	Closed
			2.B.2.b	Conduct Refresher Radiation Training Modules	Closed
			2.B.2.c	Station Management Define Expectations	Closed
			2.B.2.d	Promote Accountability to Radiation Work Permit Adherence	Closed
	2.B.3	Radiation Protection Program Improvements	2.B.3.a	Improve Radioactive Material Control	Closed
			2.B.3.b	Improvement of Radiological Postings	Closed
			2.B.3.c	Improvement of the Control of High Radiation Areas	Closed
			2.B.3.d	Review of Radiological Work Planning Process	Closed
			2.B.3.e	Training on the Difference of Pre-job and ALARA Briefs	Closed
			2.B.3.f	Implement New Access Control System	Closed
			2.B.3.g	Review of Practices, Procedures and RWP Program	Closed
			2.B.3.h	Improve Radiological Surveys	Open
	2.B.4	Dose Reduction	2.B.4.a	Inventory	Closed
			2.B.4.b	Techniques/Processes	Closed
			2.B.4.c	Optimized Water Chemistry	Closed
			2.B.4.d	Source Term Reduction	Open
			2.B.4.e	Technology/Engineering Controls	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Material Condition	3.B.1	Improve Overall Plant Materiel Condition	3.B.1.a	Identify Problems and Weakness in Overall Material Condition of Systems and Equipment	Closed
			3.B.1.b	Revise Material Condition Program to Define Departments Roles and Responsibilities	Closed
			3.B.1.c	Composite Maint. Crews to address Minor Maint. Issues and Housekeeping Activities	Closed
			3.B.1.d	Reduce Work Request Backlog	Open
			3.B.1.e	System Engineers Review WR Backlog and Determine Effect on System	Closed
			3.B.1.f	System Engineers Develop Program for Review of Open WR with Prioritization System	Closed
			3.B.1.g	Identify/Review Workarounds by OPs/Engineering and Escalate by Priority	Closed
			3.B.1.h	Emphasize Materiel Condition Expectations	Closed
			3.B.1.i	Benchmark Two Non-ComEd Nuclear Stations for Materiel Condition Programs	Closed
	3.B.2	Improve Resource Utilization On Materiel Conditions	3.B.2.a	Improve Planning and Coordination of Resource Allocation	Open
			3.B.2.b	Improve Inter-departmental Communications and Coordination with Work Control Center	Closed
			3.B.2.c	Implementation of WATS for Station Eng. Groups	Closed
			3.B.2.d	Performed Materiel Condition Improvements During L1R06	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Material Condition	3.B.3	Improve Technical Support	3.B.3.a	Establish Clear Roles and Responsibilities for Eng. Personnel	Closed
			3.B.3.b	Implement Senior System Eng. Program by end of 1994	Closed
			3.B.3.c	Root Cause Analysis Group Formed (4.B.3.a)	Closed
			3.B.3.d	Root Cause Analysis Group will Semiannually assess Effectiveness of PIF Process	Open
			3.B.3.e	Achieve Higher Level of Performance and Improved Equipment Reliability	Closed
	3.B.4	Reduce the Number of Temporary System Changes	3.B.4.a	Temporary System Change Coordinator Designated	Closed
			3.B.4.b	Station Eng. Plan Support Dept. Formed in 1993	Closed
	3.B.5	Improve Maintenance Work Practices	3.B.5.a	Expectations for Maint. Quality and Efficiency to be Established	Open
	3.B.6	Improve Equipment Reliability	3.B.6.a	Engr. Dept. to Resolve Approx.. 50 Material Condition Issues Identify Through Station PDT Evaluation	Open
	Issue Management	4.B.1	Improve Issue Prioritization and Resource Allocation Processes	4.B.1.a	Event Screening Committee Formed
4.B.1.b				Review for Applicability Existing Processes that Critically Examine and Respond to Emerging Issues	Open
4.B.2		Improve the Awareness and Utilization of the IRP Process for Problem Identification	4.B.2.a	Simplified PIF Form and Instructions	Closed
			4.B.2.b	Event Screening Committee Formed	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Issue Management	4.B.2	Improve the Awareness and Utilization of the IRP Process for Problem Identification	4.B.2.c	Develop Mechanism to Conduct Effectiveness Reviews of Problem Identification Process	Closed
	4.B.3		Improve Root Cause Analysis and Trending Process	4.B.3.a	Root Cause Analysis Group Formed (3.B.3.c)
		4.B.3.b		Root Cause Analysis Group to Develop Trending to be Performed on PIFs	Closed
		4.B.3.c		Root Cause Analysis Group will Assess Semi-Annually Effectiveness of PIF Process	Closed
	4.B.4	Develop and Implement Self-Assessment Processes	4.B.4.a	Self-Assessment Director Position Established/Filled	Closed
			4.B.4.b	Self-Assessment Director Implement IQE	Closed
			4.B.4.c	IQE Meetings Held Monthly	Closed
			4.B.4.d	Develop/Provide Self-Assessment Training Module to Dept.	Open
			4.B.4.e	QV Dept. Develop/Implement Integrated Analysis Process	Closed
	4.B.5	Define Expectations, Responsibility, and Accountability for Corrective Actions	4.B.5.a	Implementation of Corrective Actions Aggressively Pursued	Closed
			4.B.5.b	RA Dept. to Develop Training Aids on use of NTS	Closed
			4.B.5.c	Revise LAP-1500	Closed
			4.B.5.d	RA Dept. to Develop Mechanism of Assess Mgmt. Effectiveness in Follow-up of Corrective Actions	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Issue Management	4.B.5	Define Expectations, Responsibility, and Accountability for Corrective Actions	4.B.5.e	SVP and SM to Set Formal Expectations of Timeliness of Corrective Actions	Closed
			4.B.5.f	QV Dept. Establish Guidelines on Escalating Findings	Closed
	4.B.6	Improve Station Responsiveness to QV Findings	4.B.6.a	Station Management Define/Communicate Roles and Responsibilities for Resolution of QV Issues	Closed
			4.B.6.b	QV Issues to be Incorporated into IRP	Open
			4.B.6.c	Conduct Independent Evaluation of Station Responsiveness to QV Issues	Closed
Workforce Management	5.B.1	Improve Compliance with Procedures	5.B.1.a	SVP and SM Holding Management and Employees Accountable	Open
			5.B.1.b	Conduct Expectation Seminars for all Station Personnel	Closed
			5.B.1.c	Revise Admin. and Implementing Procedures to Define Adherence Requirements	Open
	5.B.2	Improve Procedural Adequacy	5.B.2.a	Streamlined Procedure Revision Process	Open
			5.B.2.b	Motivate Plant Personnel to Identify Deficient Procedures	Open
	5.B.3	Reduce Human Errors	5.B.3.a	SVP Holding Meetings with First Line Supervisors	Closed
			5.B.3.b	SVP Sent Letter to all Management on Performance Expectations	Closed
			5.B.3.c	Develop Supervisory Development Seminar	Open
Maintenance	6.B.1	Improve Materiel Condition of Equipment	6.B.1.a	Screen Work Request Backlog	Closed
			6.B.1.b	Review and Revise Minor Maintenance Program	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Maintenance	6.B.1	Improve Materiel Condition of Equipment	6.B.1.c	Expand CAT Concept	Closed
	6.B.2	Improve Work Control	6.B.2.a	Implemented Interim Work Control Center	Closed
			6.B.2.b	Full Implementation of Work Control Center	Closed
	6.B.3	Implement the Maintenance Strategy	6.B.3.a	Improve Reliability of Station Equipment, Efficiency and Productivity	Closed
			6.B.3.b	Effective Work Execution	Open
	6.B.4	Improve Maintenance Work Instructions	6.B.4.a	Improve Quality and Efficiency of Maint. Work Packages	Open
			6.B.4.b	VTIP	Closed
	6.B.5	Improve Worker Abilities	6.B.5.a	Coordination Between Training and Maintenance	Open
			6.B.5.b	Develop Training to Enhance Maint. Staff's Observation and Troubleshooting Skills	Open
			6.B.5.c	Additional Training For Work Analysts	Open
			6.B.5.d	Training to Develop Specific Troubleshooting Process	Open
			6.B.5.e	Increase use of Practical Application Exercises in Station Training Modules	Closed
			6.B.5.f	NGET Training Revised to Include Dress-out and Mock-up	Closed
	6.B.6	Improve Maintenance Work Practices	6.B.6.a	Establish/Communicate Expectations of Maint. Quality and Efficiency	Closed
			6.B.6.b	Fully Utilize Pre-job and Post -job Briefings	Closed
			6.B.6.c	Develop/Utilize Maint. Dept. Performance Indicators	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Engineering	7.B.1	LaSalle Station Engineering Groups Will Perform Mainly Engineering/Technical Support Functions	7.B.1.a	Develop Clear Roles , Responsibilities, and Interfaces	Closed
			7.B.1.b	Review/Revise Procedures to Reflect the Reorganized Engineering	Closed
	7.B.2	LaSalle Station Maintains a Technically Competent, Highly Motivated and Experienced Engineering Staff	7.B.2.a	Provide Professional/Technical Development	Open
			7.B.2.b	Review Training Program and Implement Necessary Improvements	Closed
			7.B.2.c	Develop Reward/Recognition System	Closed
	7.B.3	Implement an Effective Root Cause and Corrective Action Program	7.B.3.a	Use of IRP	Closed
			7.B.3.b	Root Cause Group Formed	Closed
	7.B.4	Integrate Work Management System for Engineering	7.B.4.a	Implementation of Engineering Assignment Tracking System (WATS)	Closed
			7.B.4.b	Upgrade WATS to Direct Link to Station Work Planning System	Closed
			7.B.4.c	Revise Station's Prioritization Process	Closed
	7.B.5	Engineering Self-Assessment Practices	7.B.5.a	Develop Eng. Indicators for IQE	Closed
			7.B.5.b	A/E Performance Indicator Program	Closed
			7.B.5.c	Implementation of System Readiness Review Board	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Engineering	7.B.5	Engineering Self-Assessment Practices	7.B.5.d	Develop/Implement Self Assessment Process	Closed
	7.B.6	Information Management Enhancements	7.B.6.a	Implement EDCM	Closed
			7.B.6.b	System Engineering Taking Responsibility for VTIP	Open
			7.B.6.c	Electronic Platform for Retrieval of Design Information	Open
	7.B.7	System Engineering is the Technical Manager of Plant Systems	7.B.7.a	Complete Implementation of Senior System Engineer Program	Closed
			7.B.7.b	Use RCM Process	Closed
			7.B.7.c	Implement Maint. Strategy	Open
			7.B.7.d	Utilized Probabilistic Risk Assessment Techniques	Closed
	7.B.8	Effective and Efficient Engineering Processes and Practices	7.B.8.a	Identify and Revise Processes and practices that need revision	Closed
			7.B.8.b	Engineering fully integrated with the Dedicated Architect Engineer	Closed
Operations	8 B.1	Establish Higher Standards	8.B.1.a	Bring Material Condition Deficiencies to Attention of Site Support Dept.	Closed
			8.B.1.b	Operate Plant as Designed	Closed
			8.B.1.c	Insist Equipment Problems Resolved W/Permanent Fix	Closed
			8.B.1.d	Review Workarounds and Ensure High Visibility	Closed
			8.B.1.e	Develop/Maintain Workaround List	Closed
			8.B.1.f	Accept Workarounds Only if Long Term Solutions cannot be Practically Implemented	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Operations	8.B.1	Establish Higher Standards	8.B.1.g	Twice Monthly Review Workarounds and Temp. Changes	Open
			8.B.1.h	Establish Threshold for Number of TSCs at Station	Closed
			8.B.1.i	Review Operator Rounds Data Each Shift	Closed
			8.B.1.j	Operation Manager Conduct Weekly Plant Tours	Open
			8.B.1.k	Conduct Review of Control Room Duties	Closed
			8.B.1.l	Established Shift Engineer Review Board	Closed
			8.B.1.m	Operators Participate in Review Teams to Improve Safety/Housekeeping/Labeling/Outage Support	Closed
			8.B.1.n	Provide New Approach to Operating Issues	Closed
			8.B.1.o	Benchmark Industry-Recognized Good Operating Plants	Closed
	8.B.2	Reinforce Management's Position on Adherence to Rules and Procedures	8.B.2.a	Revised Procedure for Control Room Activities	Open
			8.B.2.b	RP Supervisor Assigned to OPs	Closed
			8.B.2.c	RPT Assigned to Each Operating Shift	Closed
	8.B.3	Improve Human Performance	8.B.2.d	Operations Manager Conducted Crew Meetings on Compliance with Rad. Rules and Standards	Closed
			8.B.3.a	OM Communicated that Supervisors to Field Monitor Operator Activities	Closed
			8.B.3.b	OM Establish Program to Improve Quality of Operating Procedures	Closed
			8.B.3.c	OM Established Weekly Communications Meeting With Operating Crews	Closed

Focus Area	Objective No	Objective Description	Objective Action No	Objective Action Description	Status
Operations	8.B.3	Improve Human Performance	8.B.3.d	OM and Supv. to Emphasize Applying STAR	Closed
			8.B.3.e	OM Established Bi-weekly Meetings with Shift Engineers	Closed
			8.B.3.f	Operating BU Employees to Receive Standardized Performance Rating from their Shift Supervisors	Closed
			8.B.3.g	Develop Formal Roles and Responsibilities for All Operating BU Positions	Closed
			8.B.3.h	OM Lead for Plant Labeling and Upgrade Project	Closed
	8.B.4	Improve Training Performance	8.B.4.a	Change Crew Composition for Simulator Training	Closed
			8.B.4.b	Instructor Assigned to Monitor and Facilitate Communications in the Simulator	Closed
			8.B.4.c	Organizational Effectiveness Consultant Spends One Day with each Crew during Training	Closed
			8.B.4.d	Develop More Realistic Drills on Simulator	Closed
			8.B.4.e	Senior Management Attend Simulator Training one Day Each Week	Closed
			8.B.4.f	Licensed Training Instructor Assigned to Each Crew to Spend Time on Shift for Observation	Closed

SECTION II

Status of the COA Focus Areas

Management & Leadership

Strengthen the Leadership Team Structure (COA 1.B.1)

LaSalle management has reinforced the leadership team's key positions with personnel who have successfully demonstrated their technical and leadership abilities elsewhere in the industry or within Commonwealth Edison. The personnel selected to fill the following positions have been judged by the Site Vice President and Chief Nuclear Officer to be people who have the skills and experience to successfully implement and achieve performance improvements at the Station.

New Management and Supervisory personnel, many who bring experience from outside of the Station, have been assigned to the following positions:

- Site Vice President
- Station Manager
- Site Engineering and Construction Manager
- Operations Manager
- Services Director
- Maintenance Superintendent
- Executive Assistant to the Site Vice President
- Corrective Action and Improvement Director
- Chemistry Supervisor
- System Engineering Manager
- Radiation Protection Manager

In addition to those listed above, new people have been assigned the following positions: Shift Operations Supervisor, Training Supervisor, Regulatory Assurance Supervisor, Master Instrument Mechanic and Master Electrician. Leadership and accountability are being emphasized in developing the new management team. The structure and makeup of the management team will continue to change to develop our managers and supervisors and to meet the challenges that face the LaSalle Team. This action step is CLOSED. (COA 1.B.1.a)

The Business Unit Plan group coordinated and assisted in BUP activity through 1994. Ongoing BUP activities were evaluated and incorporated as appropriate into the strategic planning that resulted in the 1995 and 1996 strategic plans. The responsibilities of the BUP group have been reassigned within the line organization as part of the strategic planning process. This action step is CLOSED.
(COA 1.B.1.b)

Improve Leadership Behaviors (COA 1.B.2)

Mentoring actions were initiated by senior managers to establish strong leadership within the organization. Mentoring and developing leadership ability throughout all levels in the organization are ongoing activities which must become routine for the LaSalle team. Some of the coaching/mentoring opportunities included:

- Key Senior Station Managers meeting weekly to focus on important station issues.
- The Site Vice President and the Station Manager met with the First Line Supervisors in 1994 and in 1995.
- The Site Vice President holds meetings with various management staff personnel on a monthly basis.

(COA 1.B.2.a)

A temporary Radiation Protection advisor was utilized from INPO to assist in the improvement in RP. The Technical Services Superintendent position was eliminated and temporarily reassigned as the Radiation Protection Manager. This was followed up by the acquisition of an individual from outside the ComEd system to fill the Radiation Protection Manager position permanently. This action step is CLOSED. (COA 1.B.2.b)

Establish Standards and Expectations (COA 1.B.3)

LaSalle Station published the 1994 Major Station Goals. These goals set targets for unit and safety system performance, as well as personnel safety and radiation exposure. The 1995 goals were blended into the 1995 Annual Plan which lists the activities the Station is to complete during 1995. The priority issues will continue to be addressed in the LaSalle Annual Business Plan. This action step is CLOSED.
(COA 1.B.3.a)

Station priority issues are identified and assignments made through the LaSalle Business Plan. The Business Plan and associated documents will continue to reflect the Station priorities as has the 1995 Annual Plan. (COA1.B.3.b)

Critical independent assessments have been performed in various areas of the organization.

- EPRI assessment of Radwaste
- ANI assessment of RP
- FINETECH assessment of Chemistry

The ongoing activities which address independent assessments, overviews and the focus on corrective action program are further described in Section 4 of this report. This action step is CLOSED. (COA 1.B.3.c)

Roles and responsibilities were developed for all departments as part of the Business Unit Plan. These roles and responsibilities have been incorporated into various documents including procedures, policies, and performance expectation documents including PPRs. This action step is CLOSED. (COA 1.B.3.d)

Communicate Expectations (COA 1.B.4)

Expectation seminars for station personnel were conducted. In these seminars, management expectations regarding radiation worker performance and procedure adherence were emphasized. This action step is CLOSED. (COA 1.B.4.a)

Communication plans were developed by each department as part of the Business Unit Plan. Action to continue to improve communications at LaSalle have been included in the 1995 Annual Plan.
(COA 1.b.4.b)

The Senior Manager rotation was scheduled and conducted through August of 1995. The individual department heads assumed responsibility to discuss current station issues with their own departments in August of 1995. Senior Managers still periodically attend department communication meetings to support the department heads in setting standards consistent with those expected by Senior Management. Delegating this action to the Department Heads is the result of setting the example and then establishing accountability at the appropriate level. A positive point to be made is that the Department Heads pulled this additional responsibility down rather than Senior Managers pushing it down. This action step is CLOSED. (COA 1.B.4.C)

After setting the standards for the questioning attitude and conservative approach expected of Events Screening Committee members, the Station Manager turned the responsibility over to representatives approved by the Department Heads. This action is the result of setting the example and then establishing accountability at the appropriate level. Senior Managers continue to monitor performance during these meetings to ensure standards are being maintained. This action step is CLOSED. (COA 1.B.4.d)

Enforce Accountability (COA 1.B.5)

The philosophy supporting this objective changed with the new Site Vice President. Individual responsibilities as they relate to the station goals are key elements of the PPRs. As such, the PPRs reflect the individual's contribution to station goals without the need for additional correction factors. Monetary incentives have been added for meeting key station and division performance goals. This action step is CLOSED. (COA B.5.a)

The current focus for discipline at LaSalle continues to be on consistent implementation of processes with no discipline for honest mistakes. This action step is CLOSED. (COA 1.B.5.b)

Enhance Management Monitoring and Assessment (COA 1.B.6)

The field monitoring program continues to focus senior management attention to work in the plant. Actions have been taken and priorities set to increase the time and effectiveness of first-line supervisors in the plant. This remains a significant issue that we must continue to address. (COA 1.B.6.a)

Subordinates evaluated supervisors as part of the Leadership Seminars conducted at LaSalle. Feedback received from the seminar may be used for PPR objectives and development. This action step is CLOSED. (COA 1.B.6.b)

A Performance Assessment meeting chaired by the BWR Vice President is currently being conducted monthly. The Performance Meeting is a forum for Senior Managers from the line departments to report on their self-assessment. The BWR Vice President, Site Vice President, and Station Manager create an environment of self-critical behavior and accountability for achieving desired performance. Minutes of the meeting are kept and action items arising from the meeting are followed up on at subsequent Performance Meetings.

Departments which normally are not presenters at the Performance Assessment Meetings Services Area of the station, hold monthly self-assessment meetings. The Services Area endeavors to achieve the same level of self-critical behavior and accountability as is achieved in the Performance Assessment Meeting.

The station utilizes to a significant degree NODs Enterprise Information System (EIS) to conduct performance monitoring. EIS may be replaced with an improved electronic tool in the future. This action step is CLOSED. (CCA 1.B.6.c)

Radiation Protection

Improve Leadership and Management (COA 2.B.1)

Senior Management has communicated expectations to plant personnel that safe radiological performance is an integral part of the successful completion of work. Supervisors are expected to monitor worker performance in the field. These expectations were communicated to each person through Radworker Expectations seminars presented by the Site Vice President (SVP) or Station Manager. This action step is CLOSED. (2.B.1.a & b)

All workers attended a Rad Worker training session during their NGET requalification in 1994 and early 1995. This class focused on hands-on training with the use of mock-ups to simulate actual plant conditions and increase worker sensitivity to radiological problems. The feedback from plant workers on the use of mock-ups for and simulated radiation area problems has been very positive and has contributed to the improvements in radiation worker performance. Annual training for late 1995 includes class participation exercises focused on selected radworker procedures. Communication of radworker standards and expectations continues to be discussed at Weekly Communication meetings, Plan of the Day meetings and other forums as part of a continuing emphasis on improving radworker performance. This action step is CLOSED. (COA 2.B.1.c)

Senior Managers routinely spend time in the plant monitoring performance, coaching, and communicating expectations. As the result of Senior Managers presence in the plant it is no longer necessary to monitor activities through the more formal Senior Manager On-Site Program. This action step is CLOSED to COA 1.B.6.a for tracking to completion. (COA 2.B.1.d)

The Radiation Protection (RP) Department has enhanced its standing within the organization through team building sessions with other departments. For example, Radiation Protection and Operations personnel met on a weekly basis to discuss radiological concerns. Currently an RP representative attends the Operations Department Communication meetings. These meetings have led to many improvements in Radiation Protection policies and practices. Additionally, Radiation Protection personnel have assumed roles outside of their previously defined job scope in order to heighten their presence in the plant. During the L2R06 Refueling Outage, an RP Technician acted as Drywell Coordinator, lending an increased focus to radiation work practices during outage planning.

Team building sessions, communications training, and customer focus classes were held for all Radiation Protection Technicians. This action step is CLOSED. (COA 2.B.1.e)

The Station ALARA Committee is chaired by the Radiation Protection Manager with active involvement in monitoring progress toward achieving Station goals. Based on Station ALARA activities and other improvements, the 1995 Total Station Person-rem Goal was revised down from 550 to 520 person-rem. This action step is CLOSED. (COA 2.B.1.f)

INPO Management was on site for much of 1994 to provide input on improving the RP culture at the station. This input led to several improvements in radiological posting and survey techniques. Radworker Seminars for all ComEd workers were held for the purpose of enforcing SVP and Station Manager expectations. This action step is CLOSED. (COA 2.B.1.g)

The ALARA dose budgeting process has been implemented and is active in establishing stretch goals for key jobs and overall Station exposure. This action step is CLOSED. (COA 2.B.1.h)

Teamwork and trust development continue to be a focus of the Radiation Protection Department management. Initial team development sessions have been completed with an ongoing emphasis on good communications. This action step is CLOSED. (COA 2.B.1.i)

The Station Manager expectations are that all personnel maintain a high level of radworker performance. Personnel review of radiological incidents by the Station Manager are conducted on an "as needed" basis. This action step is CLOSED. (COA 2.B.1.j)

A Station recognition program for good rad performance was implemented. A radworker caught doing things right was awarded a hard hat sticker identifying their "good actions". Currently there is no specific recognition program for good radworkers. It is management's expectation that all personnel will continue to follow good rad practices. This action step is CLOSED. (COA 2.B.1.k)

The philosophy supporting this objective changed with the new Site Vice President. Individual responsibilities as they relate to the station goals are key elements of the PPRs. As such, the PPRs reflect the individual's contribution to station goals without the need for additional correction factors. Monetary incentives have been added for meeting key station and division performance goals. This action step is CLOSED. (COA 2.B.1.l)

The implementation of the Respiratory Protection Program has been in place since 1994. Continued emphasis and training is included in the employee Annual Requalification Program. This action step is CLOSED. (COA 2.B.1.m)

Worker Knowledge and Accountability (COA 2.B.2)

RP presence in the Work Control Center has led to early input into the planning process. This has resulted in improved identification of radiation worker concerns and a higher level of worker performance. This action step is CLOSED. (COA 2.B.2.a)

All workers were required to attend a Rad Worker training session during their NGET requalification in 1994 and early 1995. This replaced the previous policy of allowing workers to "test out" of the requal training. This class focused on hands-on training with the use of mockups to simulate actual plant conditions and increase worker sensitivity to radiological problems. The feedback from plant workers on the use of mockups for and simulated radiation area problems has been very positive and has contributed to the improvements in radiation worker performance. This action step is CLOSED. (COA 2.B.2.b)

Station management continues to define expectations, assess performance and focus on all aspects of radworker performance. This continual focus on all elements of radworker activity is evidenced by improvements in the station total personnel exposure. This action step is CLOSED. (COA 2.B.2.c)

The Radiological Protection Area (RPA) access monitoring crews provide individual and supervisor accountability. Challenges by RP personnel in the field, and increased individual accountability have reduced the need for continuous monitoring of the RPA access point. The access point monitoring is utilized during periods of high traffic as directed by the Radiation Protection Manager. This action step is CLOSED. (COA 2.B.2.d)

Radiation Protection Program Improvements (COA 2.B.3)

The improper release of radioactive materials from the RPA has been stopped, with no incidents since September of 1994. Improvements include the establishment of only one exit from the RPA, the placement of portal monitors at this exit, more conservative setpoints in the IPM-7 personnel contamination monitors, the use of small article monitors, and increased controls relative to eating and drinking in the RPA. Control of tools has been improved by the implementation of a consolidated tool facility inside the RPA. Additionally, the establishment of a satellite Consumable Material Stores area inside the RPA has greatly reduced the need to take consumable material in and out of the RPA. This action step is CLOSED. (COA 2.B.3.a)

Radiological postings have been improved. Low dose walkways have been identified in the Reactor Building, and overposted high radiation areas have been eliminated. This action step is CLOSED. (COA 2.B.3.b)

Progress has been made in the reduction exposure through rerouting and critical evaluation of work in radiation areas, with pilot programs going on in Security and Chemistry. The Operations Department has initiated similar actions through their interface with the Radiation Protection Department. Additionally, selected high radiation area entrances have been enhanced with the installation of swing gates with audible alarms and flashing lights. This action step is CLOSED. (COA 3.B.3.c)

The radiological work planning process review has been completed. As the result of the review greater emphasis has been placed on the pre-planning stages of the work package development. As an example the ALARA review requires a direct interface between the Work Analyst and Radiation Protection personnel when the work package is first initiated. This allows ALARA planning and input early in the work package development. Additionally, increased emphasis has been placed on job lessons learned which are captured during the work package evaluation activity. This action step is CLOSED. (COA 2.B.3.d)

The Radiation Protection Technicians (RPTs) and Radiation Protection Shift Supervisors have completed training on the pre-job and ALARA briefs. The training was completed in 1994. Increased focus has been placed on the briefs through the work package documentation procedures. This action step is CLOSED. (COA 2.B.3.e)

Recently, LaSalle has implemented the new computer based access control system. The system, installed in late 1994, includes features which allow direct communication with the radworker via the video display as well as the ability to lock out access when necessary. The system continues to be enhanced as software is developed. This action step is CLOSED. (COA 2.B.3.f)

The Radiation Work Permit (RWP) form was reviewed and modified to focus on required worker information. Information not needed by the radworker was removed from the RWP package. Training for the changes was completed via department tailgates and general station communications such as Station newspaper articles, and Training General Information Notices (GINs). Station Annual Requalification and NGET Training were revised to include the donning and removal of protective clothing, RP rules and 10CFR20 changes. The 1995 Annual Training included a review of selected RP procedures which featured active involvement of the trainees as they presented portions of the training to other trainees. This action step is CLOSED. (COA 2.B.3.g)

The Radiation Protection Technicians have developed a standardized format for radiological surveys that is geared to the plant worker. The standard which was developed coupled with the increased expectations and accountability of the Radiation Protection Technicians ensures that the quality of radiological surveys is maintained at a high level. Radiological surveys are reviewed and posted by the Radiation Protection Shift Supervisor and Duty Radiation Protection Technician within a shift of the survey completion. This process includes posting the survey to the display cases so that they may be reviewed by all prior to entering the plant or remote work location; scanning the surveys into a computerized data base which may be accessed by the work force; and notification of any changes to plant postings at plant shift briefings. All surveys are documented in accordance with the requirements of plant radiological procedures to ensure that plant radiological workers have the information needed to perform their duties in the safest possible manner. (COA 2.B.3.h)

Dose Reduction (COA 2.B.4)

Plant general area "hot spots" continue to be identified and prioritized for resolution. Currently there are 320 "hot spots". One hundred Sixteen (116) have been eliminated or reduced to date. This process is expected to be an ongoing activity for the station. This action step is CLOSED. (COA 2.B.4.a.1)

Aggressive action will continue through 1995 and 1996 to evaluate and implement cost efficient methods of removing contributors to the general area dose rates throughout the plant. The following significant Source Term Reduction activities have been addressed to date:

- Completion of chemical decontamination of Unit 2 Reactor Recirculation Piping in support of L2R06. This action step is CLOSED. (COA 2.B.4.a.2)
- The chemical decontamination of Unit 2 Residual Heat Removal (RHR) piping was completed during L2R06. The Reactor Water Cleanup System was not deconned based on a cost benefit analysis of the project. Currently limited portions of RWCU and "A", "B" and the suction piping to "C" RHR systems are planned for L1R07. Cost benefit evaluations will continue to direct the final decisions on whether or not to perform system decontamination projects. This action step is CLOSED. (COA 2.B.4.a.3 & 4)
- Installation of a permanent zinc injection skid on Units 1 and 2. This action step is CLOSED. (COA 2.B.4.a.4)
- Scram Discharge Volume Hydrolaze on Unit 2 during L2R06. This action step is CLOSED. (COA 2.B.4.a.4)

- The Reactor cavity was vacuumed from the Refuel Floor During L2R06 and are planned for L1R07. Long term projects to eliminate the reactor cavity crud trap were evaluated and were determined not to be cost justified. This action step is CLOSED. (COA 2.B.4.a.5)
- Reactor vessel nozzle flushes are conducted as required based on scheduled work. The Inservice Inspection program (ISI) is the primary driver for requiring the flushes. This action step is CLOSED. (COA 2.B.4.a.6)
- The reactor vessel guide tube vacuum for removed control rod drives was evaluated and not considered to be cost justified based on the expected dose reduction. This action step is CLOSED. (COA 2.B.4.a.7)
- The ECCS injection lines were flushed on both units during L1R06 and L2R06. The flushes will continue to be evaluated based on work scope and dose savings benefits. This action step is CLOSED. (COA 2.B.4.a.8)

Techniques/Processes (COA 2.B.4.b)

A Lead Shielding Program has been established which provides for replacement of temporary with permanent lead shielding. Key elements of the program are identification and prioritization of shielding needs to allow Engineering evaluation as required. Additionally, in a related shielding endeavor, ComEd helped develop shielded metallic reflective insulation (SMRI) which provides both shielding and insulation properties. The SMRI will be evaluated and installed on systems based on cost benefit evaluation results. This action step is CLOSED. (COA 2.B.4.b.1)

Optimized Water Chemistry (COA 2.B.4.c)

Depleted zinc oxide injection on Unit 1 proved successful in maintaining dose rates in the Unit 1 drywell at a reduced level. Mid-cycle surveys on the Unit 1 Recirculation Piping indicate no substantial increase in dose rates from L1R06 outage post chem-decon levels. Zinc injection commenced on Unit 2 during startup following the L2R06 Refuel Outage. This action step is CLOSED. (COA 2.B.4.c.1)

The enhanced Condensate Polisher crud removal resins were installed and were effective at reducing iron concentrations. A side effect of this new resin was an increase in reactor sulfate concentrations. A decision was made to replace the Crud Removal resin with non-separable resin. Reactor sulfate levels have decreased to the lowest levels in the Station's history. Iron concentration has increased but the impact on decreased zinc effectiveness has been manageable. This action step is CLOSED. (COA 2.B.4.c.2)

Source Term Reduction (COA 2.B.4.d)

A new Source Term Reduction Manager was named in June of 1995. As the project manager, the Source Term reduction Coordinator has developed a Source Term Reduction Plan and is responsible for directing its implementation. As it is recognized that full implementation of the Source Term Reduction Plan is resource dependent, a major effort has been undertaken to ensure that individual items within the plan are included in the normal station process such that the overall interest of the station is best served. An example of how the program has evolved would be assistance in the development of new technology such as Shielded Metallic Reflective Insulation which will be marketed for use throughout the industry. As opposed to performing an annual assessment of the program, the Source Term Reduction Plan itself is continually updated to provide an up to the minute evaluation of the Station's Source Term Reduction efforts. The Source Term Reduction Plan itself includes two major subcomponents one of which is to restrict the future production of radioactive materials which includes such items as the prioritized valve replacement program and other Cobalt reduction efforts. The other key component is elimination of the already existing inventory of radioactive materials and this includes items such as Chemical Decontaminations and Hydrolazing. Heavily supporting what will be ComEd's best exposure year in history, for a fully operational dual unit BWR, the Source Term Reduction Program is seen as having taken great strides, yet the ever increasing competition for resources within the station will greatly challenge future success. (COA 2.B.4.d)

Technology/Engineering Controls (COA 2.B.4.e)

Dose reduction techniques were included in the planning for L2R06, including state of the art video equipment for drywell activities, with the capability to observe drywell work and perform pre-job briefings with monitoring capability in the Administration Building.

LaSalle participates actively in the ComEd Robotics program. The station continues to utilize robotics to reduce exposure during outage and non-outage periods

The Video Tour Computer Program was evaluated and determined not to be cost effective. The primary focus has been redirected to robotics. This action step is CLOSED. (COA 2.B.4.e.1)

Engineering controls, primarily shielding and hydrolazing, continue to be utilized to reduce personnel exposure. One measure of the success of this effort is the recent reduction of the 1995 goal of 550 rem to 520. These continuing efforts are expected to result in further exposure savings in the future. This action step is CLOSED. (COA 2.B.4.e.2)

Materiel Condition

Improve Overall Plant Materiel Condition (COA 3.B.1)

Materiel Condition continues to be a major focus of improvement activities at LaSalle. This is reflected in the location of materiel condition responsibility within the Operations Department. Materiel Condition priorities and progress are periodically reported in the "LaSalle Station Materiel Condition Improvements - 1995" report. The report summarized Materiel Condition improvements, priority lists, and performance indicators. While not duplicated in this report due to the quantity of detailed information, the Materiel Condition Improvement report reflects the effort placed on correcting materiel condition weaknesses at LaSalle.

The Vulnerability Assessment Team was utilized to identify Safety System Vulnerabilities. 18 Vulnerabilities and 97 Observations were identified, none of which resulted in immediate equipment operability concerns. Completion of the actions required is expected to continue into 1997. This action step is CLOSED. (COA 3.B.1.a)

Roles and Responsibilities have been developed. Final document approvals were completed in late 1995.

Routine walkdowns by System Engineering and Operations personnel are occurring on a weekly basis. This action step is CLOSED. (COA 3.b.1.b)

The Corrective Action Team (CAT) is now named the "First Hit Team". The team continues to function as a composite maintenance team addressing minor maintenance and housekeeping issues. Currently the "First Hit Team" is completing approximately 50 tasks per week, precluding these items from being added to the routine work control processes. This reduces the number of scheduled tasks that have to be dropped for emergent work and has contributed to a reduction in the non-outage corrective backlog from 600 in April 1995 to a current level of 380. This action step is CLOSED. (COA 3.b.1.c)

Maintenance performance goals have been developed and are tracked weekly by the respective departments as well as the Maintenance Superintendent. In addition to Maintenance Department monitoring, the performance goals are included in the Station Monthly Performance Report for tracking and trending.

LAP-900-18 Housekeeping Procedure defines LaSalle's Standards and is tracked and reviewed with housekeeping committee members. The Consolidated Facilities Maintenance (CFM) department head is tracking and monitoring progress. (COA 3.B.1.d)

System Engineering has instituted a program to review all outstanding Work Requests and prioritize them as either high, medium, or low. The data from this review is stored in a database that is accessible to the System Engineering, Operations, Work Control, and Maintenance departments. System Engineers monitor work on their systems through the Electronic Work Control System (EWCS). This action step is CLOSED. (COA 3.B.1.e & f)

A Work-Around Team was established in July 1995 which consists of System Engineering, Operations, Work Control Center, and Maintenance. Performance Indicators are used to track progress on Work-Around completion. This action step is CLOSED. (COA 3.B.1.g)

The Station Expectations meetings, Weekly Communication meetings and Station Performance meetings are utilized to update personnel on Materiel Condition issues. The Monthly Performance Report, which trends key Materiel Condition issues, is distributed to all departments as is the periodic Materiel Condition Improvement update which provides details on all materiel condition work completed, Top Technical Issues, Work-Around status and other information related to plant materiel condition. This action step is CLOSED. (COA 3.B.1.h)

Benchmarking trips to Peach Bottom, Hatch, Waterford, Susquehanna, and Limerick have been completed along with status reports for good practices. Follow-through on good practices is continuing. This action step is CLOSED. (COA 3.B.1.i)

Improve Resource Utilization of Materiel Condition (COA 3.B.2)

Planning and coordination of resources has been improved by implementation of the Station Integrated Reporting Program (IRP). The program focuses on identification and resolution of problems. Details of the program are included in Section 4.B.2.a. Additionally, a priority list for the Top Technical Issues list has been developed and is tracked to completion via the plant Operating "Top 5" List. These five top station operating issues are identified in the Plan of the Day report and monitored in the Monthly Performance Report. (COA 3.B.2.a)

In addition to implementation of the central Work Control Center enhancements to the work planning process have been made which include:

- Work bundling, the assembly of work on specific systems or components, and improvements to reduce unnecessary repetitive equipment out-of-service. This activity greatly decreases the radiation dose received by operations and improved manpower utilization.

- Implemented Work Control Center improvements, based on Lessons Learned and Best Practices for management of the eight week schedule preparation process and support for operations work planning.
- Developed and implemented Work Control Center performance indicators. This action step is CLOSED. (COA 3.B.2.b)

System Engineering and Site Engineering are using Work Action Tracking System (WATS) for tracking System issues. This action step is CLOSED. (COA 3.B.2.c)

During L1R06 and subsequent Refueling Outages material condition issues were addressed and corrected. The Materiel Condition issues continue to be identified, prioritized, and scheduled for implementation via the planning process and The Plant Operations "Top 5" List. This action step is CLOSED. (COA 3.B.2.d)

Improve Technical Support (COA 3.B.3)

System and Site Engineering have developed a roles and responsibilities document which is provided to all engineers. The Group Lead Engineers maintain the master document for their group. This action step is CLOSED. (COA 3.B.3.a)

A Senior System Engineer is an engineer with advanced training and experience with plant systems/components who, in addition to performing System Engineering responsibilities, acts as a mentor and facilitator to other System Engineers for their development and growth within the department. These engineers have had a positive impact on their assigned systems and on the overall performance of the department. This is due not only to the technical talent they bring to the department and the positive influence they have on the younger system engineers. LaSalle currently has five Senior System Engineers with additional ones planned for the future. This action step is CLOSED. (COA 3.B.3.b)

The Root Cause Analysis team is being developed in the Corrective Actions Department. Members of the group are currently assisting in the mentor process for root cause analysis.

Trending data is being provided by SQV and CA&I Group on a monthly basis. The data includes root cause or Trend PIFs. Additionally, the CA&I Department is continuing to develop a standard for performing root cause analysis. This action step is CLOSED. (COA 3.B.3.c)

The Corrective Actions Department is providing reports and analysis of the PIF process to Senior Managers and Department Heads on a monthly basis. (COA 3.B.3.d)

In order to achieve higher levels of equipment performance Root Cause Evaluations have been completed on the following:

- Reactor Recirculation System
- Condensate/Condensate Booster Pumps
- Neutron Monitoring System

Experienced Engineers, many who previously worked for the AE, have been integrated into the Station CECo Engineering groups. This affords the Engineering Department the ability to coach and educate less experienced CECo engineers with respect to design methods. In September 1995 Site Engineering was established as the design organization for LaSalle. As of that date, all new design work has been performed or coordinated through Site Engineering. This action step is CLOSED. (COA 3.B.3.e)

Reduce the Number of Temporary System Changes (COA 3.B.4)

A Temporary System Change (TSC) Coordinator has been designated. The number of temporary alterations (formally termed TSCs) has been reduced from 58 in May of 1994 to 41 in September 1995. This action step is CLOSED. (COA 3.B.4.a)

Site Engineering has developed a performance indicator which is monitored in the Monthly Performance Report and a priority list for TSC activities. This action step is CLOSED. (COA 3.B.4.b)

Improve Maintenance Work Practices (COA 3.B.5)

Management expectations have been developed and are a part of department personnel PPRs.

Maintenance pre and post job briefings have been reviewed and revised. Departmental expectations with respect to use of pre and post job briefs were communicated. Further improvements will be made as identified. An outside assessment of the process was conducted and no concerns were identified. (COA 3.B.5.a)

Improve Equipment Reliability (COA 3.B.6)

The Materiel Condition Group of System Engineering is reviewing Preventive Maintenance (PM) programs on major system components with the System Engineers. The Materiel Condition Group has formed an alliance with the Maintenance Staff equipment specialists to facilitate these reviews. The information obtained during these reviews will be used to adjust existing PM programs to ensure the proper PMs are being performed.

The Corrective Action Team was formed in the fall of 1993 and replaced by the Consolidated Facilities Maintenance (CFM) Group in July 1994. This group has and is continuing to correct deficiencies in the plant relating to housekeeping, as well as routine minor maintenance items. The Work Control Center and CFM review action requests daily to identify work which can be completed effectively without initiating a work request.

A Plant Operating Top 5 List is in place which identifies and tracks to completion plant operating problems which may effect reliability. A performance monitor for the activity is included in the Monthly Performance Report.

Focus continues on resolution of Materiel Condition issues affected by equipment design. Issues resolved are documented in the "LaSalle Materiel Condition Improvements - 1995" report. While numerous issues have been corrected to date approximately 45 of those completed were Operator Work-Arounds.

A computerized engineering tracking system was implemented in the Spring of 1994 for both Site and System Engineering Departments. The database contains issues assigned to engineers with vital information such as priorities, due dates, and periodic reviews/updates. The system provides the ability to track status of issues and document activities. It has improved the management of engineering resources and led to quality documentation of issues, resource allocation, and results; all of which support the efforts to improve plant materiel condition. (COA 3.B.6.a)

Issue Management

Improve Issue Prioritization and Resource Allocation Processes (COA 4.B.1)

A Technical Review Committee was formed to review all emerging technical issues and industry commitments. This committee is meeting routinely to ensure activities approved are technically sound solutions to identified problems.

A Business Review Committee has been formed in order to approve significant site-wide business decisions. The committee also meets to approve expenditures which exceed \$100,000. However, the TRC/BRC process has not been very efficient or effective in performing its resource allocation responsibilities. Further enhancement to the functions of TRC and BRC are needed.

The existing open NTS issues are to be reviewed to determine if an issue is still valid or should be canceled. Valid issues are issues which add value to the station and resources which add value to the station and resources can be allocated to complete the issue. Issues that are to be canceled add little to no value to the station and the resources cannot be allocated to support its completion. Upon the completion of this review, the valid issues will be included into CBM Planning (Competitive Business Management Systems), which identifies current/planned work and the resources required to do the work. All new NTS issues are to be evaluated and processed in similar fashion. The process will be implemented by 6/30/96.
(COA 4.B.1.a and b)

Improve the Awareness and Utilization of the IRP Process for Problem Identification (COA 4.B.2)

The Corrective Action and Improvement Department was created in March, 1995 to provide the station a concentrated effort to improve the corrective action process at LaSalle. Previously, responsibility for various corrective action processes were dispersed at the station. The Department has responsibility for the Integrated Reporting Program (aka the PIF process), supporting the Event Screen Committee, coordination of Root Cause Analysis, control of the corrective action tracking system, coordination of performance monitoring, coordination of self-assessment processes, performance of event and causal factor trending, and assessing corrective action effectiveness, among other responsibilities. The department is currently primarily staffed by senior technical experts.

In November, 1995, Station Management determined the corrective action process had improved sufficiently to allow the responsibilities of the CA&I Department to be transferred back to their normal location within the organization.

In 1994, the Problem Identification Form (PIF) and instructions were restructured to simplify the method to report issues, events, and deficiencies, which has resulted in a more "user friendly" process. The process was subjected to review by the system users, and the identified improvements included in the IRP procedure. Some of the improvements include a trending process and guidance as to when a PIF is required.

In 1995 a further simplified and improved PIF process was implemented (LAP-1500-8A "Initiation of a PIF). Key aspects of the simplification were:

- Guidance on when to initiate a PIF;
- Requirement of the PIF initiator to take prudent immediate corrective actions to address the problem as necessary;
- The utilization of all shift SROs (who are stationed in the Work Control Center and in the future in the Operations Communication Center) to make the initial operability determination, thereby relieving the Shift Engineer of routine PIFs. Should the SRO determine an operability or reportability question exists, the PIF is immediately hand carried to the Shift Engineer; and
- Encouragement of the PIF initiator to discuss the PIF and appropriate corrective actions with their immediate supervisor but not requiring immediate supervisor signature before processing the PIF.

Based on preliminary data, since the implementation of the simplified process, the number of PIFs has slightly increased from about 208 per month to 238 per month. Currently, approximately 25000 PIFs per year are being written of which about 250 are classified significant. These numbers are consistent with industry norms. This action step is CLOSED. (COA 4.B.2.a)

An Event Screening Committee (ESC) was formed to ensure the review of all new Problem Identification Forms. The ESC meeting, under the guidance and example of the Station Manager, has matured to a level which has enabled selected senior staff to administer the ESC in their review of new PIFs. The ESC is normally chaired by the Operating Department. Senior Managers continue to monitor performance of these meetings to ensure standards are being maintained.

In October 1995 a new Procedure (LAP-1500-8B) "Problem Screening Committee" was implemented. The membership and quorum requirements were identified. More importantly, the ESC process was reorganized in order to focus the process on the following questions:

- Is there sufficient information contained within the PIF to make a logical determination?;
- Does the ESC agree with the Operability and Reportability determinations performed by the SRO and/or Shift Engineer?;
- Is the event significant (thereby requiring corrective action to prevent recurrence)?;
- Is additional corrective action necessary beyond the immediate corrective action that already has been implemented?; and
- Is a formal Root Cause Analysis needed?

This action step is CLOSED. (COA 4.B.2.b)

The Site Quality Verification Department conducts semi-annual Corrective Action Effectiveness Audits to measure the effectiveness of corrective actions that address significant events, commitments to regulatory and non-regulatory bodies and in response to SQV identified deficiencies.

Monthly random checks of the effectiveness of corrective actions as required by Root Cause Evaluations of Significant Plant Events are performed. Early results show that for events whose corrective actions were completed in early 1995 have been effective for six months with no repeat events. The results are discussed in the Station's Monthly Performance Report.

By December 31, 1995 a new procedure "Corrective Action Effectiveness" (LAP-1500-8E) will be implemented. The procedure will require line management to identify and perform an appropriate self-assessment to assure the corrective actions in response to Significant Events and "Trend PIFs" are adequate. The procedure will also provide several methods for performing the Corrective Action Effectiveness Self-Assessment. The specific Corrective Action Effectiveness Self-Assessment items will be tracked in the site-wide corrective action tracking system. This action step is CLOSED to COA 3.B.3.d for tracking to completion for duplicate issue.
(COA 4.B.2.c)

Improve Root Cause Analysis and Trending Process (COA 4.B.3)

In 1994, a dedicated Root Cause Analysis (RCA) group was formed in the System Engineering Department to augment the Station's capability to provide consistently high quality evaluations. This team leads selected investigations and mentored other Station personnel, including System Engineers, Design Engineers, and Maintenance Staff members, on appropriate RCA techniques for their scope of work. The System Engineering RCA Group focused on decreasing the large backlog of RCAs. Once that was accomplished the System Engineering RCA group was redirected to focus on performing RCA on equipment problems and was merged into the department Materiel Condition Group.

In 1995, as discussed earlier in this Status Report, the Corrective Action & Improvement Department (CA&I) was established and overall responsibility for RCA was transferred from the System Engineering Department to CA&I and later to Regulatory Assurance.

The RCA group has been staffed with four senior technical personnel. Three of the individuals had been previously SRO qualified. One individual had RCA responsibility at the Department of Energy and Argonne National Laboratory. The RCA group has responsibility for mentoring and monitoring RCA investigations performed by line departments. To a lesser degree the RCA group will assist, facilitate or lead in specific RCAs.

A "Root Cause Analysis" Procedure (LAP-1500-8C) was implemented in October 1995. The procedure outlines the requirements for performing RCA. A key aspect of the procedure requires those assigned lead responsibility for performing a RCA to meet with an RCA Group expert at least:

- At the beginning of the investigation so that a RCA expert can discuss RCA methodology, timelines and expectations; and
- Once when the draft RCA report has been completed, a RCA expert will critique the effectiveness of the RCA and will evaluate the appropriateness of the proposed corrective actions

This action step is CLOSED. (COA 4.B.3 a)

The station maintains databases on PIFs. These databases contain appropriate information such as who, what, when and how the event occurred. Also, each PIF is assigned appropriate causal codes and keywords to allow for database searches.

The SQV Department utilizes the above database information to produce a monthly Trend Report. The Trend Report focuses on major problem areas. SQV's Integrated Analysis Administrator evaluates the data to determine if any adverse trends are evident. When an adverse trend is found to exist, a "Trend PIF" is written and it will receive a RCA to determine if any common causes can be determined. Also, SQV's trend information is displayed on a "Trend Board" in a key meeting room (The Morris Room) at the Station. This action step is CLOSED to COA 3.B.3.d for tracking to completion for duplicate issue. (COA 4.B.3.b)

As discussed in Section COA 4.B.2.c and 4.B.3.a above, the RCA Group performs an assessment of each RCA that is performed and performs a monthly spot check on the effectiveness of corrective actions. This action step is CLOSED to COA 3.B.3.d for tracking to completion for duplicate issue. (COA 4.B.3.c)

Develop and Implement Self-Assessment Processes (COA 4.B.4)

The Station's Performance Monitoring/Communication Group has responsibility for performing site-wide performance monitoring. They also produce the Station's Monthly Performance Report. This action step is CLOSED. (COA 4.B.4.a)

The Station utilized the Enterprise Information System (EIS) to conduct performance monitoring. EIS may be replaced with an improved electronic tool in the future. This action step is CLOSED. (COA 4.B.4.b)

Departments which normally are not presenters at the Performance Assessment Meetings, primarily from the Services Area of the Station, hold a monthly self-assessment meeting. The Services Area endeavors to achieve the same level of self-critical behavior and accountability as is achieved in the Performance Assessment Meeting. This action step is CLOSED. (COA 4.B.4.c)

By December 31, 1995 a "Self-Assessment Policy Guideline" will be published. The guideline describes various approaches that can be used to conduct effective performance assessments. Additionally, the policy guideline will delineate management's requirements for conducting performance assessments. This will include periodicity, reporting, corrective action tracking and personnel for conducting the performance assessments.

Self-Assessment training material is being developed utilizing information from other utilities as well as guidance gathered from Station Senior Managers. This material will be included in the LaSalle Station Self-Assessment Guideline. (COA 4.B.4.d)

The LaSalle Site Quality Verification (QV) Integrated Analysis process evaluates internal and external performance indicators and publishes the results in a bi-monthly Independent Consultation Report. This process will be automated and enhanced to provide the station with current, real time trend analysis. This action step is CLOSED. (COA 4.B.4.e)

Define Expectations, Responsibility, and Accountability for Corrective Actions (COA 4.B.5)

Management controls have been implemented to further Senior Management's authority over corrective actions. The following have been implemented:

- A method to control the initiation of new open corrective actions. A key feature is that a station department cannot commit the resources of other station departments without their concurrence.
- A method to document and control the transfer, elimination, closure or due date extension of corrective actions.
- A weekly report produced for Senior Management, identifies by name, people who are overdue or have extended a due date. The Site Vice President is holding personnel and Senior Managers accountable to assure the timely completion of corrective actions.

Performance indicators have been developed to measure past due corrective actions, due date extensions, open corrective actions and average age of corrective actions. This action step is CLOSED. (COA 4.B.5.a)

The Station commitment tracking system is the Nuclear Tracking System (NTS). A simple modified NTS System viewer called "WinNTS" has been presented to Station personnel in a training session and is currently operating on the Station's LAN. Training materials on the use of the modified system are available to Station personnel. This action step is CLOSED. (COA 4.B.5.b)

Procedure LAP-1500-4 has been revised to reflect ownership and accountability of assigned actions being completed as scheduled. The Senior Station Managers have also emphasized the expectation of meeting all due dates by trending and identifying responsibility for overdue or re-scheduled commitments. This action step is CLOSED. (COA 4.B.5.c)

A report was developed by the Corrective Actions and Improvements staff to inform management in following up on corrective actions completion. The report includes an evaluation of both aging commitments, as well as the number of times Corrective Action due dates are postponed. This action step is CLOSED. (COA 4.B.5.d)

The Site Vice President and Station Manager have jointly set formal expectations for all of their direct reports regarding the timeliness of corrective actions. This action step is CLOSED. (COA 4.B.5.e)

The LaSalle County Station Quality Verification Escalation to Management of Declining Corrective Action Policy was presented and accepted by station management in November 1993. This policy was exercised on a small number of very significant deficiencies during the first part of 1994. These deficiencies are now under control and progressing towards effective closure. This action step is CLOSED. (COA 4.B.5.f)

Improve Station Responsiveness to QV Findings (COA 4.B.6)

The Roles and Responsibilities of Station organizations for the resolution of QV issues have been defined and communicated by Station Management. The issue of Station responsiveness to QV findings continues to be acceptably resolved. There have been no overdue QV identified issues since January 1994. This action step is CLOSED. (COA 4.B.6.a)

QV identified issues will be incorporated into the Station's Integrated Reporting Program to ensure that QV issues are adequately defined, reviewed, evaluated, prioritized, corrected, trended, and closed. (COA 4.B.6.b)

An initial independent assessment and follow-up of station responsiveness to QV issues was conducted in April and December 1994, respectively. The results indicated stated that the Station was responsive to QV issues and had improved significantly.

A number of station departments have requested QV to perform focused reviews or evaluation of suspected areas of concern as an independent quality assessment to the line departments. Additionally, QV has initiated quality consultant activities with Station departments in an effort to analyze key issues in search of their root cause and ultimate resolution. Examples include a quality partner (QV person) working in RP, a review of Station efforts to reschedule L1R07, and an independent overview of Operations activities. Clearly, the station has determined that QV does add value to Station activities and the Station is utilizing QV in a positive endeavor as an independent quality authority. This action step is CLOSED. (COA 4.B.6.C)

5.0

Workforce Management

Improve Compliance with Procedures (COA 5.B.1)

The Site Vice President and Station Manager hold management and employees accountable for meeting their expectations concerning procedural adherence through communication meetings, letters to personnel, and special supervisor meetings.
(COA 5.B.1.a)

Expectation seminars for all Station personnel were completed. In these seminars, expectations for procedure adherence were presented by the Site Vice President or the Station Manager to groups of approximately 20 individuals. This action step is CLOSED. (COA 5.B.1.b)

The Problem Identification Form (PIF) process is used to monitor and trend instances of procedural noncompliance at the Station and in individual departments. These trends are analyzed, displayed, and included in the Monthly Performance Report.

A multi-discipline team has been assembled to analyze and propose corrective actions to solve the procedure problem. Team activities include benchmarking other plants' procedures and processes.
(COA 5.B.1.c)

Improve Procedural Adequacy (COA 5.B.2)

Streamlined procedure revision processes will improve the technical quality of procedures and the process for identifying and expeditiously correcting procedure deficiencies. Procedure revision processes are being re-engineered utilizing a multi-discipline team to develop/revise procedures that are technically sound, user-friendly, and that add value to the Station.
(COA 5.B.2.a)

Efforts are being taken to motivate plant personnel to identify deficient procedures. A multi-discipline team is proposing corrective actions to remove the barriers to procedure deficiency identification.
(COA 5.B.2.b)

Reduce Human Errors (COA 5.B.3)

The Site Vice President held special meetings directed at discussing FLS expectations. As part of these discussions, the FLS were encouraged to demonstrate their authority in holding personnel accountable. FLS were encouraged to provide feedback to their staff and maintain an open forum for discussion with employees. This action step is CLOSED. (COA 5.B.3.a)

The Site Vice President sent a letter to all management personnel delineating routine job performance expectations. These expectations address personnel safety, procedural adherence, radiation worker practices, openness to QV and outside organizations, and emphasize the importance of including these issues in pre and post-job briefings. This action step is CLOSED. (COA 5.B.3.b)

A Supervisory Development Seminar has been initiated. The seminar develops supervisory effectiveness including planning, communication, team building, coaching, and learning from experience.
(COA 5.B.3.c)

Maintenance

Improve Materiel Condition of Equipment (COA 6.B.1)

System Engineering has instituted a program to review all outstanding Work Requests and prioritize them as either high, medium, or low. The data from this review is stored in a database which is accessible to the System Engineering, Operations, Work Control, and Maintenance departments. New Work Requests are continually reviewed by the System Engineers. This action step is CLOSED. (COA 6.B.1.a)

The Minor Maintenance Program is still under development and currently in review by ANI and QE to ensure code related issues are properly addressed. This action step is CLOSED. (COA 6.B.1.b)

The Corrective Action Team (CAT) is now called the First Hit Team. The function of the team has been expanded to include a wider scope of work activities. This action step is CLOSED. (COA 6.B.1.c)

Improve Work Control (COA 6.B.2)

The permanent Work Control Center (WCC) was established upon completion of the remodeling effort. The location of the individuals within the center was arranged to facilitate ease of communication and rapid response to change, i.e., all the maintenance schedulers sit together in a specific area of the WCC and Out-of-Service (OOS) writers are located next to the OOS Writer's Supervisor. Changes and improvements in the WCC are expected to continue through implementation of lessons learned and process improvements. Examples of recent changes include the following:

- Work packages are delivered to the Maintenance Supervisors three weeks in advance of the scheduled work to allow for pre-job package reviews and walkdowns.
- An SRO is assigned to the Work Control Center 24 hours per day, 5 days per week to pre-authorize work prior to the scheduled start time.
- Three (3) work week managers have been added to the organization to concentrate on executing work as scheduled. They are responsible for the preparation and execution of the schedule. A full complement of five (5) work week managers is planned by year's end. This action step is CLOSED.

This action step is CLOSED. (COA 6.B.2.a and b)

Implement the Maintenance Strategy (COA 6.B.3)

A Performance Centered Maintenance initiative was started in late March 1995 as a Nuclear Division effort to improve the six Nuclear Station Preventive Maintenance Program. This action step is CLOSED.

(COA 6.B.3.a)

Work execution is an area that will continue to be worked on in 1996.

(COA 6.B.3.b)

Improve Maintenance Work Instructions (COA 6.B.4)

Work packages have been standardized throughout the system per the Work Control Initiative. Additionally, station procedures and maintenance department memos have been revised to give the Work Analyst guidance on package preparation and contents. Work package walkdowns and feedback from workers are being used to improve work package quality. Standard packages are now being used for all work groups.

(COA 6.B.4.a)

Extending the scope of VETIP beyond safety related equipment has been reviewed. It was determined that the cost to initially VETIP, and then maintain additional manuals beyond safety related equipment was greater than the benefit. Thus there are no plans to include Non-Safety Related material in VETIP. This action step is CLOSED to COA 7.B.6.b for tracking to completion for duplicate issue.

(COA 6.B.4.b)

Improve Worker Abilities (COA 6.B.5)

A minor maintenance program has been initiated. The response has been positive in that the workers welcome the opportunity to achieve visible results without undue administrative process delays. Worker response has increased involvement and suggestions for increasing the program's effectiveness.

Maintenance Supervisors are provided with a list of qualified personnel to perform the task identified on the NWR as part of the Electronic Work Control System. Additionally, the supervisors have a list of individual qualifications that they use to determine the appropriate job assignment (Maintenance Memo #12, Training Matrix).

The TIF (Training Identification Form) process is being used to enhance worker's abilities by identifying needed training. This effort is ongoing.

(COA 6.B.5.a)

Maintenance Staff observation and troubleshooting skills is expected to occur in 1996.
(COA 6.B.5.b)

Work Analyst Training Program is under development.
(COA 6.B.5.c)

Root Cause Analysis and troubleshooting training is in the planning stages.
(COA 6.B.5.d)

Mock-ups are being used for practical application training on an ongoing basis. A recent example is the use of a Reactor Recirculation System Flow Control Valve as a mock-up for planned maintenance repair work. This action step is CLOSED.
(COA 6.B.5.e)

Annual Nuclear General Employee Training (NGET) includes donning and removal of anti-contamination clothing on an every other year cycle. This action step is CLOSED.
(COA 6.B.5.f)

Improve Maintenance Work Practices (COA 6.B.6)

The expectations and standards are clearly understood. Expectations are communicated to groups on a continuous basis. Department goals are advertised in maintenance work areas. Each management and bargaining unit individual has performance appraisals which are the primary method of communicating expectations. Also, daily morning updates and weekly department tailgates reinforce policy and set forth direction as necessary to maintain station requirements. Additionally, periodic meetings with the Site Vice President are conducted to keep proper focus on the station's direction.

The entire Maintenance Staff as well as selected Bargaining Unit personnel attended a presentation on Conservative Decision Making Process, which was led by the BWR Vice President and three BWR Site Vice Presidents. Expectations regarding the use of the proper Conservative Decision Making Process were communicated. This action step is CLOSED. (COA 6.B.6.a)

The Storeroom opened a second service window inside the RPA. While organizing this project many in-plant problems were uncovered including expired shelf-life, oil issuance and storage, and chemical control in the plant. With input from the other departments, many process improvements were developed.

Pre-job and post-job briefings are being conducted with briefing guidance, documentation and work evaluation information provided within the work package. This action step is CLOSED. (COA 6.B.6.b)

The Maintenance Departments have established performance indicators which measure individual performance and trends. The indicators are used to evaluate the success of the Department. This action step is CLOSED. (COA 6.B.6.c)

7.0

Technical Support Performance (COA 7 - Engineering)

LaSalle Station Engineering Groups Will Perform Mainly Engineering/Technical Support Functions (COA 7.B.1)

The System Engineering Roles and Responsibilities Handbook was developed and approved by the System Engineering Manager. The Handbook is intended to be maintained as a living document. Interface agreements with key departments (Site Engineering, Operating, Maintenance, and Work Control) have been completed. The process of finalizing agreements based on feedback from other departments is ongoing. This action step is CLOSED. (COA 7.B.1.a)

The Corporate Engineering Procedures were reviewed by a seven site team to identify and prioritize those most needed. Using the 80/20 principle, those needed to control the most important Engineering functions have been rewritten as common procedures. Site Engineering has developed LaSalle specific procedures which control other processes. This action step is CLOSED. (COA 7.B.1.b)

LaSalle Station Maintains a Technically Competent, Highly Motivated and Experienced Engineering Staff (COA 7.B.2)

The Senior Engineer Operations Certification (SEOC) is a six week training course which combines detailed system description study with simulator training. This course was designed for System Engineering by LaSalle and Production Training Center, using input from the System Engineering Managers. Candidates for the class require approximately 5 years technical experience before participating. Trainees experience an accelerated systems description study, simulator training on unit startups/shutdowns, and Emergency Operating Procedure drills. Upon satisfactory completion of the course, the trainee has a much broader perspective of power plant operations and how their assigned systems interact with other plant systems. Approximately 26 engineers have attended the course.

Engineering has performed professional/technical development activities to attain skills that will lead to qualifications for higher level positions within the Engineering Department and greater experience levels overall. System Engineering has enhanced engineer training by providing a six week Simulator Certification Course and Management Development training for System Engineering Group Leaders.

Training needs to support System Engineering Roles and Responsibilities were solicited via a team comprised of System Engineering and Training department personnel from all six sites, as well as Production Training Center (PTC). The team defined the training requirements for System Engineers in a document called "Administration and Course Management Information". This document identifies existing courses available to system engineers to support their roles and responsibilities. The System Engineers and their Group Leader will identify the specific training needs to improve job performance through the PPR system. (COA 7.B.2.a)

The Engineering training program has undergone significant improvements, which have resulted in maintaining program accreditation from INPO. This action step is CLOSED. (COA 7.B.2.b)

The recognition system has been designed and presented to the engineering personnel. The ComEd program recognizes outstanding contributions with a monetary award. Two engineers have been nominated to date. This action step is CLOSED. (COA 7.B.2.c)

Implement an Effective Root Cause and Corrective Action Program (COA 7.B.3)

The Integrated Reporting Program (IRP) has been in place for the past three years. Currently, about 2500 Problem Identification Forms per year are being submitted by workers for classification, root cause analysis for significant issues, and necessary corrective actions. This action step is CLOSED. (COA 7.B.3.a)

Root Cause Analysis (RCA) engineers in the System Engineering Department specialize in performing root cause analysis on materiel condition problems.

Corrective Actions and Improvements Department (CA&I) has responsibility for performance monitoring, problem identification and classification, root cause analysis, and corrective action tracking processes. The Root Cause Group in CA&I are root cause analysis process experts who assist, support, and monitor line departments conducting root cause analysis. This action step is CLOSED. (COA 7.B.3.b)

Integrate Work Management System for Engineering (COA 7.B.4)

The Work Assignment Tracking System (WATS), implemented for Engineering in early 1994, was scheduled to be upgraded to provide a direct link to the Station work planning system. Further evaluation revealed this is not the best solution. Integration of WATS with the Projects software application is currently planned for 1996. This action step is CLOSED. (COA 7.B.4.a and b)

The Station's prioritization process was revised to provide a systematic structure including integrated prioritization, long-range planning, resource requirements, and scheduling information. The process requires that emerging technical issues be addressed by the Technical and Business Review Committees for concurrence, prioritization, resource requirements, and the implementation schedule. This action step is CLOSED. (COA 7.B.4.c)

Engineering Self-Assessment Practices (COA 7.B.5)

The Integrated Quality Effort (IQE) program was implemented at LaSalle. This is a performance indicator program which currently includes 24 direct measurements for the Engineering function and numerous other measurements of plant functions that Engineering impacts. While the IQE program is currently not utilized, trending of the indicators continues to provide self-assessing capabilities for Engineering processes and practices. This action step is CLOSED. (COA 7.B.5.a)

A Dedicated Architect Engineer (DAE) performance indicator program has been developed to provide measurable and subjective input on the DAEs performance in order to identify areas of superior performance. The Engineering performance indicators are joint indicators of both DAE and Site Engineering performance. This action step is CLOSED. (COA 7.B.5.b)

The System Readiness Review Board program, which was initiated in August 1994, allows System Engineers to make formal presentations to senior management on the status of their assigned systems. The System Engineers discuss various system performance issues such as repetitive equipment failures, maintenance costs, and various work request information. Also discussed are the root causes of equipment failures and the corrective actions taken or needed to prevent recurrence. This forum is a good two-way communication mechanism between senior management and the System Engineers. During the meeting, the senior managers obtain information on major plant components and the status of plant major systems; the System Engineers benefit by gaining the insight of senior managers and possibly their assistance in removing obstacles preventing progress on specific items. The System Readiness Review Board program will continue to play a major role in developing system priorities and long-term corrective actions to enhance system performance. This action step is CLOSED. (COA 7.B.5.c)

LaSalle Engineering has developed a self-assessment process with an established reporting format, frequency, and distribution of results. Results of these assessments are shared with other ComEd sites in a joint meeting. To date approximately 18 assessments have been completed. Examples of completed assessments include: Motor Operated Valve Program, Lead Shielding Program, Temporary Alteration Program, and the Training Process. This action step is CLOSED. (COA 7.B.5.d)

Information Management Enhancements (COA 7.B.6)

An Engineering Design Change Module (EDCM), a component of the Electronic Work Control System, is in use providing an integrated mechanism to manage Engineering design changes to the physical plant and associated design documentation. This action step is CLOSED. (COA 7.B.6.a)

Based on a Self-Assessment of the VETIP Process it has been determined that it is similar to other design processes performed by Site Engineering and should have a technical owner. Ownership and accountability has been established in the Physical Design Group of Site Engineering. The Physical Design Group has developed an action plan and schedule for reduction of the current backlog of vendor manual updates, as well as processing new updates. The backlog will be monitored on a monthly basis to ensure that we maintain progress on our reduction effort. (COA 7.B.6.b)

LaSalle Station continues as an active participant in the NOD Design Information Review Team. As part of the efforts to locate design information close to the end user high use calculations have been located on site as well as microfiche copies of other non-high use calculations. Additionally, the Engineering Design Control Module of the Electronic Work Control System has been implemented and is used to control engineering processes and data. (COA 7.B.6.c)

System Engineering is the Technical Manager of Plant Systems (COA 7.B.7)

LaSalle currently has five Senior System Engineers. A Senior System Engineer is an engineer with advanced training and experience with plant systems/components who, in addition to performing System Engineering responsibilities, acts as a mentor and facilitator to other System Engineers for their development and growth within the department. At LaSalle, these engineers have had a positive impact on their assigned systems and on the overall performance of the department. This is due to the technical talent they bring to the department and the positive influence they have on the younger system engineers. This action step is CLOSED. (COA 7.B.7.a)

Reliability Centered Maintenance (RCM) is being used on selected systems and/or components to determine the basis for preventative maintenance. LaSalle has taken the lead in an all six nuclear site effort to develop a Performance Centered Maintenance (PCM) program. The process utilizes equipment PM templates and component criticality to determine PMs and intervals. To date, most of the 19 equipment type templates (i.e. pumps, valves, motors, fans, etc.), and an additional 20 templates for specific instrument types have been developed and approved for use. The action step is CLOSED (COA 7.B.7.b)

The System Engineering Materiel Condition Group has formed a partnership with the Maintenance Staff to apply the process to major components across systems. The individual System Engineers will use the process to focus on the problem components in their systems, in parallel with the Materiel Condition Group efforts. (COA 7.B.7.c)

The Vulnerability Assessment Team was utilized to identify Safety System Vulnerabilities. 18 Vulnerabilities and 97 Observations were identified, none of which resulted in immediate equipment operability concerns. This action step is CLOSED. (COA 7.B.7.d)

Weekly Maintenance activities are being reviewed to determine if there is an increased risk of core damage based on planned activities. This review provides additional assurance that any reactor safety concerns are identified and resolved prior to work implementation. This action step is CLOSED. (COA 7.B.7.d)

Effective and Efficient Engineering Processes and Practices (COA 7.B.8)

An Engineering Design Change Module (EDCM) has been incorporated into the Electronic Work Control System (EWCS) to provide an integrated mechanism to manage Engineering Design Changes to the physical plant and associated design documentation. EDCM benefits include a streamlined work-flow process, enhanced control of the design process, increased data entry consistency, consolidation of multiple databases, and integration with other EWCS Modules for better communication with other departments.

Open work requests are being prioritized by System Engineering in cooperation with Maintenance and Operating. This effort includes consideration of importance to the safety and reliability of the units, the age of the work requests, and confirmation that the proposed work item is still valid. Two thousand (2000) open work requests, which is 90 percent of the total open work requests, have been prioritized enabling better scheduling of work while the unit is on-line.

System Engineering is conducting more thorough walkdowns of plant systems and has lowered the threshold of deficiency identification. The current focus is on important safety and reliability systems. This action step is CLOSED. (COA 7.B.8.a)

The full time Dedicated Architect Engineers (DAEs) are assigned on site and many have been hired by ComEd as part of the in-house design initiative. Design Change Requests (DCRs) are processed on site which results in efficiency gains and faster turn-around of DCRs. This action step is CLOSED. (COA 7.B.8.b)

8.0

Operating Performance (COA 8 - Operations)

Establish Higher Standards (COA 8.B.1)

In addition to the specifics given for each portion under this main objective (i.e., items 8.B.1.a to 8.B.1.o), many parts of the 1995 Action Plan support this overall objective of establishing higher standards. These include actions such as:

- Issuing an Operations Department Memo Book (reference 1995 Action Plan item OP.A.1),
- Creation of an Operations Core Team to revise/develop department standards (reference 1995 Annual Plan item OP.A.2),
- Revising the Memo Book (Memo #2 specifically) to reflect the Core Team's work (reference 1995 Annual Plan item OP.A.3),
- Training operators on the revised standards (reference 1995 Annual Plan item OP.A.4),
- Performing annual appraisals for both management and bargaining unit personnel (reference 1995 Annual Plan item OP.A.5),
- Training the operators on Conservative Decision Making (reference 1995 Annual Plan item OP.F.1),
- Improving Senior Management overview of operating activities (reference 1995 Annual Plan items OP.F.2a, OP.F.2b, and OP.F.2c),
- Improvement of shift self-assessment (reference 1995 Annual Plan item OP.F.3),
- The efforts to develop a conservative decision making culture in radwaste (reference 1995 Annual Plan item OP.F.6), and
- Establishing guidelines for reviewing the aggregate effect on plant operations of equipment deficiencies (reference 1995 Annual Plan item OP.F.7).

(COA 8.B.1)

Operator involvement in the identification of work-arounds through the Problem Identification (PIF) process has been achieved. A work-around bulletin board in the operator ready room lists the definition and status of work-arounds increasing awareness and sensitivity to work-around issues. Potential work-arounds identified on PIFs have been reviewed and valid work-arounds have been added to the list. The Radwaste Materiel Condition Committee is prioritizing and resolving long-standing materiel condition problems with radwaste systems, demonstrating to operators that work-arounds are unacceptable. In addition to this, in order to help those in the Site Support Departments understand what are the Operating Department's priorities, the Plant Operating Top 5 List is distributed at the MAF to all personnel entering the plant. This list is updated as progress is made and items are completed. Finding and identifying Materiel Condition issues is an ongoing task that will be a part of our "core business" in the Operating Department. This action step is CLOSED. (COA 8.B.1.a)

Operating the plant as designed is the goal toward which the Operating Department is striving. When systems are found to not work in automatic or remote operating capacity is lost or operations are outside the designed operating ranges, they are added to the work-around list. Then the corrective actions are evaluated and prioritized. Over 107 design changes have been completed this year and 70 work-arounds have been closed. One example is the modification to the Rod Worth Minimizer on both units where the system was changed to have a SCRAM capture mode to prevent loss of rod position indication. Another example is the permanent piping which was installed to replace hoses in the WY System in Radwaste. The temperature controllers for the CSCS Room ventilation were fixed so the dampers will respond when the controllers are set at their normal setpoint. The Condensate Polisher control panel was tested and many timers and relays replaced. This eliminated an Operator Work-around (pulling out a relay) during CP transfers to the URC. Many more items could be listed, but these show that mechanisms are in place to identify and correct plant Materiel Conditions so the Operator can operate the plant as it is designed. This action step is CLOSED. (COA 8.B.1.b)

Any time a design change is implemented or a work-around is closed, doing permanent and not temporary fix is the goal. Examples of these items were discussed in item 8.B.1.b. In addition to the items listed in that discussion, many other items have been completed during 1995. LaSalle did a cost analysis for using land application of sewage treatment sludge and has obtained the necessary federal and state permits for site land application (reference 1995 Action Plan items OP.K.1, OP.K.2, OP.K.3, and OP.K.4 for more details). Several items are being replaced with permanent fixes including, new evaporators in radwaste (details referenced further in 1995 Action Plan, item OP.L.1a and OP.L.1b.), a new makeup demineralizer system (reference 1995 Annual Plan item OP.L.2a), and new WE non-precoatible filter septa (reference 1995 Annual Plan OP.L.3a, OP.L.3b, OP.L.3d, OP.L.3e, and OP.L.3f). These are some of the major actions taken in Radwaste. A committee has been focusing just on Radwaste issues. In April 1994 there was a backlog of 727 work requests for radwaste alone. As of December 1995, the backlog has been reduced to 149. These are examples of ways in which we are attempting to fix problems permanently. This action step is CLOSED. (COA 8.B.1.c)

A Materiel Condition Focus Group was established in January 1995 to identify and resolve long-standing equipment problems, including operator work-arounds. This group met on a periodic basis and included Operating, System Engineering, Site Engineering, and representatives from the Work Control Center. They reviewed the work-arounds for current status. To ensure high visibility a "Plant Operating Top 5 List" is now issued regularly to indicate progress in resolving work-arounds. In addition a Materiel Condition Notebook is distributed on a periodic basis to the appropriate personnel. This Notebook identifies the number and type of work-arounds that are currently in the work-around database. It includes completed work-arounds for information. Charts are provided in the notebook to illustrate the number of work-arounds completed, the number scheduled for work, the number with work in progress, the number of draft action plans and the number of action plans developed.

This Materiel Condition Focus Group has successfully performed its function and has been dissolved. The Operating Department has picked up the job of tracking Operator Work-arounds and keeping up the Materiel Condition Notebook and the Operating Top 5 List. They will continue to give these items high visibility. A chart showing the status of Operator Work-arounds is included in the Monthly Performance Reports. Periodically the station newspaper (the STAR) has an article highlighting work-arounds and the current status. The STAR is also used to report completed work-arounds. Lastly, copies of all the work-arounds and the charts are provided to the Shift Engineers and their crews. This year 70 work-arounds have been closed and steady progress has been made to reduce the total number to reach our goal of 60 for this year. The goal for 1996 is 40 or less work-arounds. This action step is CLOSED (COA 8.B.1.d)

An Operating Work-around Database has been set up to track and provide current status of LaSalle's work-arounds. This database is owned and controlled by the Operating Department. Problems or issues have been defined and action plans have been developed to achieve resolution. Status changes are usually made based on feedback from the "owners" of the work-arounds -- i.e., the System Engineers. New items are reviewed from PIFs and other feedback for inclusion on this list. This tracking is now considered a normal part of Operating's core business and it will continue. This action step is CLOSED. (COA 8.B.1.e)

If an issue fits the definition/criteria of a work-around, then it will be added to the Operator Work-arounds List. It does not matter how short or how long it will take to fix, it will be accepted as a work-around. When a work-around is identified, the applicable "owner" is found. The owner is then requested to propose an action plan for resolution of the issue. Once a proposed fix is found, it is subject to a predefined criteria as to whether it is going to be economic to do. If it passes this test, it is kept on the list and resolution is pursued. If it does not meet the economic criteria, it will be closed and removed from the work-around list. This action step is CLOSED. (COA 8.B.1.f)

The amount of effort originally put into tracking and identifying operator work-arounds and temporary alterations originally started at a high level. This was scaled back as 1995 progressed and the station got a better handle on what needed to be done. Both Operator Work-Arounds and Temporary Alterations are reviewed monthly. Work-arounds that are being worked on are discussed weekly in the Work Control Center by a team including the Lead Unit Planners and the Operations Manager's Assistant. Monthly, all the Operator Work-arounds are reviewed by these individuals with the addition of an Operating Supervisor and Engineering. In addition, the Operations Manager receives a monthly report on operator work-arounds and temporary alterations for his review. Due to a recent revision to LAP-240-6, a new quarterly Temporary Alteration Program Assessment Report will be sent to the Station Manager, Site Engineering Manager and System Engineering Manager. On a quarterly basis the Management Review Board does look at work-arounds and temporary alterations. However, there is still a need for improvement here specifically in the area of ensuring the cumulative effect is not substantially affecting the safe and reliable operation of the units. The 1996 Action Plan will include an item so that the review also will consider the extent of operator burden in responding to major plant transients or accidents. (COA 8.B.1.g)

The program for controlling temporary alterations has been revised to improve the recording and review of these changes. There are approximately 40 temporary alterations of which 13 have been in existence for over 18 months. The current goal is to reduce the number of temporary alterations to 19 by the end of 1996. In 1996 the groundwork will be set to remove the remaining 19 in 1997 and 1998 as schedules and budget allow. Operating's threshold for temporary alterations will be that no temporary alteration will exist for more than 3 cycles and that 90% of all temporary alterations should be less than 1 cycle old. When coming out of an outage there should be no open temporary alterations except for the "old dogs" which need extensive work to be eliminated. This action step is CLOSED. (COA 8.B.1.h)

Operator rounds for both units reactor, turbine and auxiliary buildings have been reviewed and revised. In addition they have been implemented in an electronic format. This Course of Action is supported by 1995 Action Plan items in the Operating section, including: (1) Review rounds activities to reduce high rad area activities (OP.D.2), (2) Implement computerized rounds (OP.D.3), and (3) Operating/Rad Protection Team to review activities and reduce high rad area activities (OP.D.5). The 1996 Action Plan will have in it an item to implement the use of computerized rounds for EO rounds packages. This action step is CLOSED. (COA 8.B.1.i)

Formerly the Operations Manager did perform weekly tours of the plant with the Shift Engineers and the Shift Operations Supervisor to identify activities and conditions where standards or expectations are being met or need further improvement. This practice has been revised during the course of 1995. After evaluating the programs effectiveness, the Operations Manager decided that he can better uphold these standards through the Shift Engineers and currently, the Operations Manager expects the Shift Engineer to do tours to reinforce housekeeping and materiel condition standards. The Operations Manager does do weekly tours when he is here, but not always with operating crew members. (COA 8.B.1.j)

Several things have been done to improve log keeping, turnovers and other control room activities in 1995. One is the implementation of computerized logs which has been implemented this year. Another is the establishment of the Shift Engineer Event Review. Also a weekly Senior Operating Management Staff Meeting is now being held. Lastly, Senior Management overview of simulator activities are performed twice a week. (reference 1995 Action Plan item OP.F.2a.) This action step is CLOSED. (COA 8.B.1.k)

The Shift Engineer Review Board has been established and is available to be used to evaluate Operator performance issues. In addition in many cases the monthly Shift Engineer meeting is being used to review events and actions, giving the opportunity for cross crew assessments and peer evaluation of decisions and actions taken. This action step is CLOSED. (COA 8.B.1.l)

Operators are continuing to improve in the areas of safety, housekeeping, labeling and outage support. For example, in the area of housekeeping, they have established cleaning carts on various floors to facilitate ease of maintaining equipment and floors clean. In the area of outage support, NSOs are preparing equipment Out of Services and an operator is evaluating the necessary resources to accomplish various activities. To improve OOS writing a review team was set up to find common errors/problems in OOS writing. To help find solutions to the identified problems, operators were sent on a benchmarking trip to Hatch. Ideas from Hatch are being implemented at LaSalle (reference 1995 Action Plan items OP.B.1, OP.B.4a, OP.B.4b, OP.B.4c, OP.B.4d, and OP.B.4e). Operators are now actively engaged in bundling OOS requests together which has reduced the total number of OOSs written for the next outage by more than one half compared to recent refueling outages (reference 1995 Action Plan item OP.B.2). The Out-of-Service milestone for L1R07 was met (reference 1995 Action Plan item OP.B.3).

Several other new approaches have been implemented by operators in 1995. One is electronic checklists. The Operations/Rad Protection Team had input related to dose reduction when rounds and mechanical checklists were revised and computerized (reference 1995 Action Items OP.D.2 and OP.D.3). Electronic checklists improve the operator's ability to quickly locate components in the field. They also enable verification of valve positions by area (instead of by system) which eliminates multiple entries into an area, saving time and dose. Also component positions can be entered after an OOS is cleared, eliminating the need for the component to be visited again. The plant relabeling project is just getting started and will be continued in 1996 (reference 1995 Action Plan item OP.D.4). The mechanical equipment checklists have been converted into electronic format. This was a necessary and preliminary step to cleaning up nomenclature so standardized component names could be developed. Plant relabeling and getting the electrical checklists into electronic format are items in the 1996 Action Plan.

Another new item for 1995 is the conversion of the control room and shift engineer's logs into electronic format. This was implemented on Dec. 4, 1995 and will improve logkeeping and turnover activities. In addition in 1995 operators were put on the leak rate team to perform local leak rate testing on valves during outages. The operators retain control of valve position and system status. This also enables the operators to obtain a first hand awareness of any deficiencies in valve operation. The plant implemented the Operations Management Assessment Plan to give supervisors in the Operating Department guidance in monitoring and coaching personnel. (This is more fully described in the discussion for item OP.F.2c in the 1995 Action Plan.) Another innovation implemented in 1995 is the addition of a second supervisor in the Control Room. This provides a Unit Supervisor to direct control room activities and a Field Supervisor for activities outside the control room. This gives the Supervisors better opportunity to support high operator standards and safe operations. Lastly, the Operating Work Analyst job was created with defined responsibilities and duties. This operator provides help to the shift in planning and staging operating activities and in supporting maintenance work. This action step is CLOSED. (COA 8.B.1.m)

To provide a new approach to Operating issues, a new Operations Manager and Senior Operating Supervisor have been named. This is complete as Les Guthrie and Al Magnifici have taken over these two jobs. This action step is CLOSED. (COA 8.B.1.n)

Operators have been sent to two plants -- Hatch, and River Bend. These trips were designed to look at their OOS process, conservative decision making implementation, operator communications, performance monitoring, operator performance appraisals, etc. The details of how the trips impacted the plant are more fully described in the discussion for the following items in the 1995 Action Plan: (1) Benchmarking two utilities for OOS improvement (items OP.B.1, OP.B.2, OP.B.3, OP.B.4a, OP.B.4b, OP.B.4c, OP.B.4d, and OP.B.4e), (2) Conservative decision making (items OP.F.1, OP.F.4, and OP.F.5), (3) Self assessment of shift performance (item OP.F.3), and (4) Communications, performance monitoring and performance appraisal good practices (item OP.G.6). This action step is CLOSED. (COA 8.B.1.o)

Reinforce Management's Position on Adherence to Rules and Procedures (COA 8.B.2)

Control Room organization has been dramatically revised in 1995 with the addition of a second supervisor in the Main Control Room and the assignment of 2 NSOs per unit. This provides one supervisor per unit to control activities for each unit and gives them better opportunity to observe procedure adherence and to support high operator standards and safe operations. The second NSO can relieve some of the burden off the shoulders of the unit NSO and is available to do peer checking of procedure adherence. Other Control Room changes include professional apparel and moving the food preparation equipment to the back of the Control Room (off center desk). It is the expectation of the Operations Manager that the foreman enforce strict procedural adherence. The procedures guiding Control Room activities have been revised to reflect these changes, especially LAP-200-1, Operating Department Organization, LAP-200-3, Shift Change, and LAP-200-5, Transfer of Control Room Command Functions Between the Control Room Unit Supervisors, the Shift Engineer, and/or the Field Supervisor. The procedure on Procedure Use and Adherence Expectations is LAP-100-40. Documentation of procedure adherence is done in two ways. The Shift Engineers are required to watch and document evolutions, especially in the plant. In addition, both Upper Operations Management and Shift Engineers observe and enforce procedure adherence expectations at the simulator during drills. Shift Engineers watch not only their own crews, but other crews as well. These evaluations are all documented. (COA 8.B.2.a)

A Radiation Protection Supervisor has been assigned to the Operating Department. He has been involved in many activities linked to dose reduction and implementation of issues from Operating/Rad Protection Team Meetings. Examples include using an AM10 remote readout digi system to stop routine entry into the URC area, using cameras to keep people out of high rad areas in four places, flushing lines and adding lead to reduce dose rates, using a robot to do an operator's task and thus reduce dose, reducing Rad Protection survey frequency in some areas to just when Operating needs it, the addition of 8 specific RWPs to allow operators to track specifically where they are getting dose, and revision to RPA control points to allow operator access to MCCs without dressing out. (Further details of his activities can be seen in the response to 1995 Action Plan items OP.D.1 and OP.D.5). He has also been involved in the revision to the mechanical checklists which made them electronic -- thus allowing one entry into a room to do one checklist to get all the valves (instead one checklist per system in the room with multiple room entries) and having the feature that if a valve's position is verified in clearing an OOS, it can be entered into the computer and will not be checked again when the checklist is run (reference 1995 Action Plan items OP.D.2 and OP.D.4). Another improvement which saves dose was the implementation of electronic rounds by reducing the frequency of access into many areas (reference 1995 Action Plan item OP.D.3). This action step is CLOSED. (COA 8.B.2.b)

An RPT has been assigned to each crew to help whenever he/she is needed. The RPT attends the crew briefing so that they know plant status and activities on the upcoming shift. They are a very useful part of the shift. They carry a pager and will respond whenever the shift needs help in the rad protection area. The RPT may survey items, shoot dose in an area for operating personnel, help with rad practices, etc., depending on what the need is. This action step is CLOSED. (COA 8.B.2.c)

The Operations Manager visits each crew on their training week to discuss issues related to plant operations. This discussion includes stressing safety and compliance with all rules and standards, including rad rules and standards. Twice weekly Senior Operations Management also watch the crew during simulator drills and critiques the crews. This gives them a platform to stress the importance of the rules and standards that the crews must follow. This action step is CLOSED. (COA 8.B.2.d)

Improve Human Performance (COA 8.B.3)

In addition to the specifics given for each portion under this main objective (i.e., items 8.B.3.a to 8.B.3.h), many parts of the 1995 Action Plan support this overall objective of improving human performance. These include actions such as:

- The conservative decision making seminar given to the operators (reference 1995 Action Plan item OP.F.1),
- Improving senior management's overview of operating activities (reference 1995 Annual Plan items OP.F.2a, OP.F.2b, OP.F.2c),

- Improving crew self assessment of performance (reference 1995 Annual Plan item OP.F.3),
- The issuance of the Operating Department Memo Book (reference 1995 Annual Plan item OP.F.4),
- Benchmarking other plants for conservative decision making and problem identification programs (item OP.F.5),
- The efforts to develop a conservative decision making culture in radwaste (reference 1995 Annual Plan item OP.F.6),
- Establishing guidelines for reviewing the aggregate effect on plant operations of equipment deficiencies (reference 1995 Annual Plan item OP.F.7),
- The Training Department's new video they made on proper communication techniques (reference 1995 Annual Plan item OP.G.1),
- The special assessor training given to Operating Management personnel (reference 1995 Annual Plan item OP.G.2a, and OP.G.2b),
- The efforts to incorporate skill improvements into operator continuing training (reference 1995 Annual Plan item OP.G.4),
- Benchmarking at Pilgrim on how they do communications and performance appraisals (reference 1995 Annual Plan item OP.G.6), and
- Putting 4 people into license training class and moving 11 others into developmental assignments (reference 1995 Annual Plan items OP.H.1, OP.H.2, OP.H.3, and OP.H.4).

This action step is CLOSED. (COA 8.B.3)

A Field Supervisor position has been created on each shift to increase supervisory involvement in the plant with operators. This supervisor's prime focus is to coach and mentor workers on proper practices that support high standards for performance. In addition to this many out of services are now prepared by the NSOs, thereby reducing this administrative duty to help the Field and Unit Supervisors. Finally, a dedicated lubrication coordinator has taken over the lubrication program, eliminating this duty from Operating Supervision. This action step is CLOSED (COA 8.B.3.a)

The Operating Staff has been expanded to include a Shift Engineer who is spearheading the Operating Procedure Improvement Initiative. A new Writer's Guide for the station has been written and approved with Operating help (for more details reference 1995 Action Plan item OP.I.2). To implement the new guidelines the Shift Engineer has one new operating management person, an NSO, an EO, an A-Operator and a B-Operator assigned to the Operating Staff. In addition to these, four contractors are allotted to augment the Staff and three more operating management personnel are now budgeted to be a part of this team (reference further 1995 Action Plan item OP.I.4e).

The procedure review process has been simplified to facilitate minor changes to operating procedures which do not change the intent. This has improved the ability of shift operators to initiate needed revisions to their procedures. Also the temporary procedure change procedure process has been revised to enable the shift personnel to quickly implement any needed temporary procedure change (for more details reference 1995 Action Plan item OP.I.1). The large backlog of procedure deficiencies have been entered into a database for tracking and they have been reviewed and prioritized by an operator to facilitate implementation (Reference 1995 Annual Plan item OP.I.4a). Many other items in the 1995 Action Plan also support or amplify the activity undertaken to improve operating procedures. They include:

- Putting guidance in the procedure revision philosophy document to look for where non-literal compliance with Technical Specifications is being allowed (reference 1995 Annual Plan item OP.I.3),
- Improving the technical content and human factoring of the surveillance and abnormal procedures (reference 1995 Annual Plan items OP.I.4b and OP.I.7),
- Developing a checklist to aid in review of procedures for conservative decisions (reference 1995 Annual Plan item OP.I.4c),
- Upgrading the mechanical checklists with a computerized program (reference 1995 Annual Plan item OP.I.4d),
- Consolidating procedures for some systems (reference 1995 Annual Plan items OP.I.5a, OP.I.5b, and OP.I.5c),
- Establishing crew ownership of certain procedures (reference 1995 Annual Plan items OP.I.6a and OP.I.6b),
- Providing support people to reduce the time it takes to do a procedure change (reference 1995 Annual Plan items OP.J.1a and O.J.1b),
- Simplifying the biennial procedure review process (reference 1995 Annual Plan item OP.J.2), and

- Revising MUDS and WE Evaporator procedures to go with the new equipment when installed in radwaste (reference 1995 Annual Plan items OP.L.1b and O.L.2a).

This action step is CLOSED (COA 8.B.3.b)

The Operations Manager meets with the operating crew on Monday of its Training Week. This gives him the chance to communicate his standards of performance and for him to get feedback from the crews. This originally started with two crews together. After implementation, this was evaluated and the decision was made to only do the crew in training rather than pull in a second crew also. Thus the frequency of these talks has been reduced to every six weeks. This has been evaluated to be sufficient at this time. This action step is CLOSED (COA 8.B.3.c)

The Operations Manager in his weekly meetings with the Operating crews and monthly at the Shift Engineer Meetings has opportunity to emphasize safety and his expectations that STAR will be used. It is part of the Operations Manager's expectations for the Shift Engineers that they stress and enforce with their crews STAR, self checking, peer checking, pre-job briefing's, and a questioning attitude. The Shift Engineer and Operating Supervisors have the opportunity to reinforce STAR and these other items in their safety meetings, during pre-shift meetings, and in pre-job briefing's. This Course of Action is also supported by 1995 Action Plan's (1) effort to improve operator attendance at the monthly Safety Committee Meetings (reference 1995 Annual Plan item OP.E.1) and (2) the review of the 1995 safety tailgate meeting content (reference 1995 Annual Plan item OP.E.2). This action step is CLOSED (COA 8.B.3.d)

The meetings started out as bi-weekly and attendance was poor and so an effectiveness review was done and these meetings were revised to be monthly with all the Shift Engineer. The length of the meetings was increased. This meeting has become an effective time for analysis and a retrospective look at what the Operating Department is doing. It has become a very effective way for the Operations Manager to communicate with his Shift Engineers. This action step is CLOSED. (COA 8.B.3.e)

Operating Supervisors are administering appraisals for members of their crews. The Shift Engineer for each crew, the Operating Staff Supervisor and Work Control Center Operating Engineer are responsible for their respective areas to do the union appraisals. This Course of Action is supported by two 1995 Action Plan items -- perform performance for all personnel (reference 1995 Annual Plan item OP.A.5) and perform appraisals for bargaining unit personnel (reference 1995 Annual Plan item OP.G.5). This action step is CLOSED (COA 8.B.3.f)

The Operations Manager has decided that this will not be done. In the current environment of trying to use mixed work teams among generating station departments, this is the wrong way to go. Instead operating management personnel will make expectations of bargaining unit personnel clear when their work is assigned. This action step is CLOSED. (COA 8.B.3.g)

This item is still in progress. An Operations Labeling Coordinator was named and began the process of standardizing plant labeling. One of the first items he did was the conversion of the mechanical checklists to electronic form (reference 1995 Action Plan item OP.1.4d. for further detail). This allows for one name to exist in the computer for a component. This name can then be consistently used in procedures and in the plant. Second, the labeling coordinator has developed a standard for how components should be named as the current system is not consistent -- what in one system is called a pump suction valve in another might be labeled the tank outlet valve. Having standardized this the next step was to begin to correct all the mechanical checklists to match the labeling standard. This has been completed for the Diesel Generator checklists. This all lays the basis for creating the new label for the system. This is an activity that will continue throughout the next year as the same person will be one of the Operating Staff Procedure Writers. This standardization effort will be his primary responsibility for 1996. Tom Meyer head of the Consolidated Maintenance Team has established the means and the technology to make the labels and appointed a labeling coordinator -- Dave Nicklin -- to work with the Operating Department. Braidwood's program for labeling was evaluated as part of this effort. This action step is CLOSED (COA 8.B.3.h)

Improve Training Performance (COA 8.B.4)

The crew makeup has been changed for simulator training. The size of the crew was increased from 5 to 6 in the simulator. This gives each crew 3 ROs and 3 SROs. This breakdown corresponds to what is available to a typical crew on shift where in an accident 3 of the 4 ROs on the crew and at least 3 SROs would be available to handle the unit. This action step is CLOSED. (COA 8.B.4.a)

One Licensed Training Instructor has been assigned to monitor communications in the simulator for all the crews. He has been given special training on crew communications. His role is to serve as an independent standard for crew communications separate from the normal instructors in the simulator. As part of facilitating communications techniques, a video presentation on proper communications was prepared and used in License Requal (as part of item O.G.1 of the 1995 Action Plan). To further facilitate communications development among the crew members, twice a week during the crews training, a Senior Operations Management representative observes the crew in the simulator. One of the key items they watch for is good communications. This action step is CLOSED. (COA 8.B.4.b)

It was determined that it was unnecessary to hire an organizational effectiveness expert. This was because Operating is taking an active part in the training process. Examples to support this are many:

- A station cross-crew review has recently been completed.
- In the non-licensed operator training program the operators participate 1 to 2 days per 7 week cycle with the entire crew.
- The non-licensed operator training program was recently reviewed by other ComEd stations.
- The shift engineers weekly identify training needs (e.g., TIFs are written).
- A licensed NSO is involved full-time with the initial license training program.
- Four SRO licensed individuals will be rotating to the training department in 1996 -- two in January and two in June.
- One operating management individual has been assigned to enhance the non-licensed operator training program.

This action step is CLOSED. (COA 8.B.4.c)

Several things have been done to help the Training Department develop more realistic drills. A licensed NSO has been assigned to the Training Department. Four more Operating management SROs will join him during 1996. Training is also using a seven week rotation in License Requal. The last 6 weeks are for crew training. The first week is a trial week which includes Training instructors and an Operating Management individual who is there to give criticism of each module's drills and lesson plan content. This individual also is there to answer issues related to Operating Department philosophy on elements of the drills so that the Training Department can consistently use the drills to reinforce Operating Department standards and expectations. In addition to this, two days a week in each week of the module, the Senior Operating Department Team performs an overview of operating activities at the simulator which gives them opportunity to give feedback on simulator drills (reference item O.F.2b in the 1995 Action Plan for more details on this last item). This will be an ongoing process that is a part of our core business -- continuous evaluation of our program by the Senior Management Team which will be supplemented by benchmarking what other plants are doing. This action step is CLOSED. (COA 8.B.4.d)

Currently two days a week in each week of the module, the Senior Operating Management Team performs an overview of operating activities at the simulator. This usually is on Tuesday and Friday -- reference item O.F.2b in the 1995 Action Plan for more details on this item. Another portion of the 1995 Action Plan which supports this Course of Action is the Special Assessor Training which is being given to the Senior Operations Team (O.G.2a). In addition to this other Senior Managers also visit simulator training as a part of their observation of training -- including the Station Manager and Site Vice President. This action step is CLOSED. (COA 8.B.4.e)

Each of the six Operating Crews has their own crew partner in the Training Department Operations Group. This instructor monitors crew performance, tracking generic weaknesses from module to module. He is also available to assist the Training Department in their efforts to get out timely training to each crew when necessary. This allows specific needs for each crew to be focused on (reference also O.G.4 in the 1995 Action Plan). This action step is CLOSED. (COA 8.B.4.f)