Nebraska Public Power District

**Nuclear Power Group** 

Phase 3 Performance Improvement Plan

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# 1 Introduction and Purpose

### 1.1 Introduction and Overview

The Nuclear Power Group Phase 3 Performance Improvement Plan (Phase 3 Plan) is the third stage in the performance improvement planning process, which began in the fall of 1994. Phase 1 of the Performance Improvement Plan was directed at the initial actions required to address significant performance issues prior to the startup of the station from the 1994 shutdown. The Phase 2 Plan then followed with a set of program plans implemented during the first three months following plant startup in early 1995.

The Phase 3 Plan refocuses our improvement efforts from shorter-term issues to address our long-term, strategic direction. To do ti., the Plan focuses on establishing a business model that addresses the competitive realities of the electric utility market.

The Phase 3 Plan is a strategy-based plan for achieving significant improvements in NPG's plant and organizational performance. The plan provides clear linkages from NPG challenges and vision to resultant strategies and implementing programs. It covers NPG activities, both those directly involving the staff at Cooper Nuclear Station (CNS) and activities in support of our operations provided from the General Office (including Human Resources, Procurement and Public Affairs). The plan serves the following purposes:

- It establishes the strategic direction for NPG by focusing our activities on supporting plant operations and the competitiveness of the business.
- It is a primary source of management direction. The Phase 3 Plan is our guide for achieving significant improvements in our regulatory, operating and cost performance.
- The Phase 3 Plan fully resolves the causes of performance problems; its strategies and programs will result in sustained improvement in plant and organizational performance.

The Plan establishes an overall framework for improving NPG performance, starting with our vision and top level goals, then translating them to strategies with associated implementing programs. Each program is defined in a comprehensive action plan, including objectives, activities, and schedules. Each strategy has an assigned management sponsor responsible for assuring that the strategy is effectively implemented through the program plans. Each program has an assigned program manager responsible for achieving the results specified in the program plan. Resources have been allocated and are incorporated in the budget.

The Phase 3 programs are long-term in nature, with results expected on a horizon extending to approximately 24 months. The Phase 3 Plan programs (and other NPG activities) will evolve into a continuous improvement mode through the annual business planning cycle. The transition into the annual cycle is expected to be fully implemented for the 1997 plan year.

Consistent with this plan's focus on long-term improvement and the NPG vision, a set of top-level goals has been established. Annual goals and performance measures will be refined to guide incremental improvement. The specific annual goals and measures are established and included in this plan.

## 1.2 Expected Results

This plan is the road map for attaining and maintaining top-quartile performance as compared to other U.S. nuclear utilities over the coming years. Interim goals will be established to measure progress and guide management action on an annual basis. The intent of this plan is to achieve top-quartile performance as measured against other U.S. nuclear utilities. We have selected top-quartile performance as measured by the U.S. nuclear utility industry as appropriate to determine economic viability. However, we will continue to benchmark this performance level to assure that we remain competitive in our specific marketplace and as business environmental conditions change.

Specific performance measures will be used to determine progress and the effectiveness of improvement activities. Periodic management reports will be developed and distributed to plant personnel to compare performance to

goals and performance indicators. These reports also will be reviewed in periodic NPG management review meetings.

# 1.3 Planning Assumptions

Several key assumptions guided plan development.

- NPG's performance must fit within NPPD's overall business envelope for remaining a competitive power supplier and achievement of longterm economic viability. Top-quartile nuclear industry performance is consistent with this boundary condition.
- Performance improvement activities must address problems and issues identified in recent assessment, as well as strategic initiatives needed to progress toward the top level goals.
- Industry performance standards will continue to rise while NPG
  resolves its current performance issues. After acceptable plant
  performance is reestablished, continuous improvement will be
  required to establish and maintain NPG's competitive position relative
  to all energy suppliers.

# 2 Vision and Top Level Goals

### 2.1 Vision

NPG's vision describes what the organization is striving to be and how it communicates those qualities to others. The vision implies change, containing both the direction and objectives for that change. The NPG management team developed the NPG vision statement and is committed to acting in accordance with its principles.

Our vision statement on the next page describes the key attributes of the NPG organization that will be apparent within the coming years. This vision, by highlighting areas where new or significantly enhanced capabilities or behavior is required, provides the focus for implementing the strategies contained in the Phase 3 Plan. Progress toward this vision has already occurred by virtue of the initiatives under the Phase 1 and 2 Plans. By the end of 1997, or sooner, we expect to achieve the vision attributes.

The vision incorporates attributes that are characteristic of the best performing nuclear plants and our top-level goals. As a consequence, NPG's vision and top-level goals are linked and consistent. The strategies, objectives and program plan actions are also consistent with the vision and, in some cases, are directly intended to develop one or more specific vision attributes.

#### NPG Vision

#### Focus on Safe Operations

Safe operations is the central focus of the Nuclear Power Group.

Operations sets the agenda for all other organizations.

NPG finds its own problems. Self assessment and a questioning attitude are used to recognize improvement opportunities as well as problems. Significant problems are addressed promptly.

Recurring deficiencies or equipment failures are not accepted.

Personnel errors are avoided by individual discipline and effective administrative barriers.

Conservative decision-making is practiced at all times.

#### Management Practices

Performance standards are established and communicated to employees.

Rewards are aligned with and based on results.

Accountability is used to focus efforts on results.

All employees accept ownership and personal responsibility for work safety, quality, and efficiency.

Decisions have a rational basis and are consistent with goals.

#### Responsive to External Environment

NPG's operation of CNS delivers a competitive product to its customers.

Customers know their input is valued and they are viewed as partners.

Regulators, the public, and our partners have confidence in our ability to operate safely. There are no surprises. NPG integrates industry experience in continuing assessments of its performance.

Vigilance toward emerging industry issues will be maintained.

#### Resource Management

A consistent priority system is used to allocate financial and human resources to high value activities that support top level goals.

Work activities are planned and completed within budget and on schedule.

Long term asset value is realized by balancing expenditures, operating reliability and risk.

Outage duration is consistently less than 50 days.

#### Organizational Effectiveness

Communications up, down and across the organization are timely, clear and complete. Each member of NPG has a consistent understanding of expectations and the current situation.

Fully developed management development programs preserve "bench strength" and allow NPG to manage both routine and emergent issues without shortchanging either.

Roles and responsibilities are clearly defined and designed to facilitate teamwork. Behavior consistent with teamwork is routine and a constant expectation.

# 2.2 Top-Level Goals

NPG performance must support the District's goals. To focus NPG's efforts, we must achieve a competitive, economically viable position as a valued part of the District's generation mix. To measure our competitiveness, we have determined that achieving and maintaining upper-quartile performance compared to other U.S. nuclear plants in the area of nuclear safety is an appropriate measure to be used. Top level quantifiable measures are NRC SALP rating, capacity factor and plant production cost. These performance measures provide consistent, industry-wide indicators of CNS performance.

Achieving these goals should put NPG into its desired relative competitive position. Cost and operations goals are directly linked to NPG's business purpose: to produce power at a competitive cost so that NPPD can attract and retain customers. Safety and regulatory performance satisfies a mandatory requirement for our business. Achieving this goal is an essential element that allows us to pursue our other business goals.

The performance measures associated with our top-level goals are a minimum set; the challenge is that they must be achieved concurrently. A number of U.S. nuclear plants have achieved top-quartile performance in all three performance areas. Their experience shows that it is possible to achieve a successful balance among the many interrelated factors that affect performance. At these plants, the various performance factors reinforce each other: a safe plant runs efficiently and reliably; high output and reliability improve production-cost performance on a \$/MWH basis; and improved regulatory performance means fewer resources are spent reacting to regulatory issues.

In the short-term, obvious tension exists among the performance factors. We recognize that continued financial investment may be necessary in order to realize higher capacity factors or improved SALP ratings. This plan targets resources on high leverage opportunities (as was done in the Phase 1 and 2 Plans) and problem areas that stand between NPG and top-quartile performance.

The Phase 3 Plan focuses on areas that are key to CNS becoming a torquartile plant. However, accepting less than top-quartile performance is not an option; only solidly performing nuclear plants will be economically competitive in the future. We also acknowledge that performance standards and expectations will continue to rise in each area.

NPG's goals are challenging but realistic. Current long-term goals are to achieve an average SALP rating of 1.25 or less, and rolling averages for capacity factor and production costs of ≥ 85% and ≤ 18 \$/MWh, respectively. It is through the Phase 3 Plan efforts that these long-term goals will be met. Following are the NPG 1995-1997 performance goals in each category:

Performance Category	1995	1996	1997
Safety/Regulatory (average SALP rating)	≤2.5		≤1.5
Operating (% Capacity Factor)	≥66%	≥95%	≥80%
O&M plus Fuel Cost (\$/MWh)	≤28	≤18	≤24

# 3 NPG Strategies and Programs

## 3.1 Strategy Overview

The Phase 3 Plan is a strategy-driven plan for achieving the vision and top-level goals. Strategies delineate *how* NPG will achieve the changes associated with meeting the goals and vision. Strategies provide the overall direction and unifying themes for the programs and specific activities. Strategies also provide the framework to guide management actions as emerging issues develop over the course of plan implementation.

Two different paths were pursued for strategy development: vision-based and problem- or issue-based. This process (illustrated in **Figure 3-1**) drives a convergence to the key performance gaps - and the strategies needed to address each gap. It ensures that the strategic significance of a wide variety of problems, issues and vision attributes are integrated into the performance improvement process.

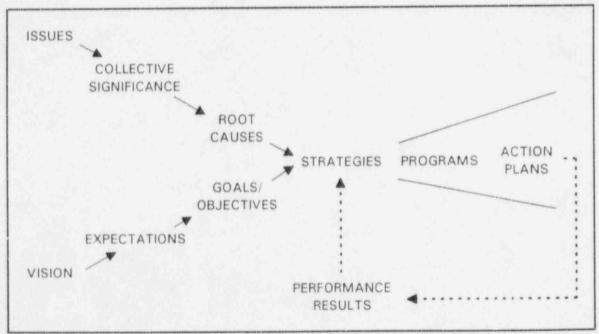


Figure 3-1 Strategy Development Process

Eight strategies for improving performance were identified to address key performance gaps and achieve the vision. The areas addressed by these strategies, identified in Figure 3-2, are comprehensive in terms of improvement focus for the next 24-30 months. Additional strategies may also be developed in certain areas to encompass actions that are determined appropriate to the continuous improvement efforts.

	Focus on Operations
	Configuration Management
	Resource Allocation and Work Management
	Continuous Improvement
	Management Practices and Systems
	Skills and Qualifications
	External Relations
	Station Capacity and Reliability

Figure 3-2 Top-Level NPG Strategies

The cohesiveness of the strategies developed from this process lies in their relation to the top-level NPG goals in terms of safety, production and economics and the implementation of the elements contained within the NPG Vision Statement. The underlying themes that run through the eight strategies are the major elements of the Vision Statement. They are:

Focus on Safe Operations - Safe operations is the central focus of the Nuclear Power Group and operations sets the agenda for all other organizations. This focus includes business practices that reinforce conservative decision-making.

This element of the vision is supported explicitly by the Focus on Operations strategy and the strategy for Station Capacity and Reliability. However, each of the remaining strategies also supports our focus on operations.

Management Practices - Management and the organization establish effective work standards and expectations, and these are used to foster accountability, define quality results and reward individuals and groups for top-level performance.

The management practices vision statement is supported by the strategies associated with Continuous Improvement and Management Practices and Systems.

Responsive to the External Environment - Our foremost challenge is to deliver a competitive product to our customers. Customers are viewed as partners, and regulators, the public, and our partners have confidence in our ability to operate safely.

This vision statement is implemented through the strategy for External Relations.

Resource Management - Work activities are planned and completed within budget and on schedule. Consistent with a priority system that allocates financial and human resources to high value activities that support top level goals.

The strategies that support this vision statement are Configuration Management and Resource Allocation and Work Management.

Organizational Effectiveness - Management and staff development support NPG's mission and strategies. Roles and responsibilities are clearly defined and designed to facilitate teamwork, and there is a consistent understanding of expectations and the current situation throughout NPG.

This vision statement is implemented through the strategies for Resource Allocation and Work Management, Continuous Improvement, Management Practices and Systems, and Skills and Qualifications.

# 3.2 Supporting Strategic Programs

Within the eight strategies, specific activities required for performance improvement are delineated as strategic programs. Each strategy has several associated programs. Each program has its own objectives and action plan, including a detailed schedule, activities and milestones. Activities are resource loaded and will be funded by redirecting existing resources or requesting incremental funding. The programs will result in pervasive, systematic changes in NPG's business approach and processes; the programs are not punch lists of action items or one-shot problem fixes.

"Program trees" are used to illustrate the development of strategic programs for each strategy area. These trees provide a convenient road map to the overall Phase 3 program structure provided in Section 7. Figure 7-1 presents the eight top-level strategies and their associated programs. Figures 7-2 through 7-9 provide expanded trees for each strategy; each tree shows the Phase 3 strategy sponsor, programs, program manager, and program objectives.

# 4 Development Process

# 4.1 Management Involvement

The NPG management team developed the Phase 3 Plan. To the maximum extent possible, the Phase 3 Plan process attempted to develop management consensus on all aspects of the plan, from the current situation analysis to the development of strategies and programs.

The NPG management team participated in a set of workshops to assess the current situation and initiate the planning process. The vision and top-level goals were formulated based on (1) an analysis of the attributes of top performing nuclear plants and how these attributes would apply to NPG's situation, (2) performance history and trends at CNS, (3) the experience of new managers with other nuclear programs and (4) the constraints and requirements established by customers, regulators and other external factors. The group also analyzed the issues and causes from various CNS performance assessments to identify common threads and causes.

Using both the vision and the situation analysis, the management group identified a series of performance gaps, or areas where improvement was needed to meet standards and/or the vision attributes. The set of eight long-term strategies were defined to address these performance gaps. Smaller teams then developed the outlines of the strategic programs necessary to implement each strategy.

Individual managers were assigned as sponsors for each of the eight strategy areas and as program leaders for each of the implementing programs. Sponsors and program leaders were responsible for configuring multi-disciplinary teams (drawn from throughout NPPD) to develop detailed action plans and resource estimates for each program. Regular meetings with senior site management were used to review the plans, ensure their focus is consistent with management direction and confirm the program managers' commitment to their plans. This rigorous, collaborative process provides a high level of confidence that the Phase 3 Plan establishes the correct and effective course of action for NPG.

# 4.2 Process Inputs

As noted above, the Phase 3 planning process considered both current performance problems and the NPG vision in developing strategies. The data and analysis associated with these process inputs are discussed in this section.

### 4.2.1 Performance Issues

Current performance issues were culled from recent evaluations and assessments performed by NPG and external parties such as the NRC. These evaluations included the NRC Special Evaluation Team findings and the May 27, 1994, July 1, 1994 and August 2, 1994 Confirmatory Action Letters; the Diagnostic Self Assessment Team report; former NPG 1994-1997 Business Plan, Phase 1 Performance Improvement Plan, Integrated Enhancement Program plan, 1995 INPO Evaluation results, and other self assessments and management initiatives.

The issues raised in these various documents had been previously examined and screened for restart issues for inclusion in the Phase 1 Plan. For purposes of the Phase 2 and the Phase 3 Plans, these issues were further evaluated to determine their significance to achievement of NPG's vision and top level goals. Although they came from many different sources, the data provided consistent indications of the areas where performance problems were occurring.

These different views of the performance issue data were considered by the management team to identify and describe the most significant problems and characterize performance gaps. The term "performance gap" is used to denote a difference between our desired level of performance in the long term and our actual performance. Identified in this manner, performance gaps are the basis for developing strategies and assuring a competent linkage to improvement activities.

# 4.2.2 CNS Competitiveness

Much of the previous analysis focused on specific issues affecting recent performance and their implications for long-term improvement. Another useful perspective is gained by reviewing NPG's recent performance benchmarked against the industry. Experience indicates that long-term competitiveness requires performance at the upper range of the industry.

The economic competitive position of the NPG (operating and cost performance) declined in 1993 and 1994. This decline was related to a decline in regulatory performance.

Long-term competitiveness means achieving our top level goals: upper quartile regulatory, operating and cost performance. This will require meeting or exceeding the following quantitative targets<sup>1</sup>:

SALP ≤1.25
 Capacity Factor ≥85%

Cost ≤\$18/MWh

NPG's recent cost performance and a range of projections are shown in Figure 41. This figure also highlights the cost challenge facing NPG: over the next several years we will need to capture the cost efficiencies associated with improved performance to regain competitive budget levels.

External factors also affect and establish standards for NPG performance. They include regulatory and industry influences and NPPD's overall competitive situation.

As noted, regulatory and industry performance standards are expected to continue to rise. This expectation has been factored into the upper-quartile estimates, but these will need to be updated on an annual basis.

These targets are estimates based on projections of current industry performance. They represent long-term, cycle averages.

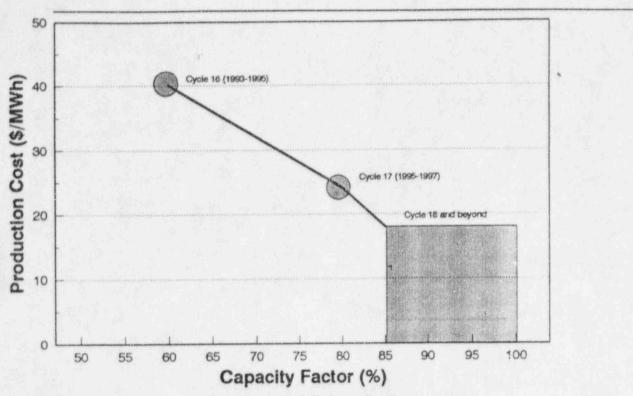


Figure 4-1 Historical and Projected NPG Cost Performance

NPPD's situation is expected to become more competitive. Nebraska is a low-cost energy state. Although there are no investor-owned utilities (IOUs) in the state, the various public agencies are constantly searching for lower-cost sources of reliable power. The biggest customer for CNS product (50% of plant output) is an out-of-state IOU. IOU's are more directly exposed to competitors than Nebraska agencies and also need low-cost suppliers in order to retain their customers.

# 4.3 Performance Gaps

From every point of view, NPG faces significant performance gaps between its current path and necessary future performance. The management team examined the analysis of current issues, the changes required to realize the NPG vision and the performance necessary to meet the top level goals to determine the nature and extent of the performance gaps. Importantly, these gaps relate to both organizational and plant performance.

# 4.4 Strategy Development

Strategies correlate directly to the identified performance gaps. This continues the linkage from the vision and other inputs to required actions. Strategies express how performance improvements will be brought about. They focus on how to change the current situation, practices, beliefs, etc. and include some verifiable indication of exactly what will change. Strategies describe fundamental courses of action and focus on the causes of problems and performance deficiencies.

The eight base strategies define the framework and set the direction for NPG performance improvements. The strategies establish principles for the way NPG will conduct its business. Each strategy focuses on one important performance area. All of the strategies have a wide application and require interdisciplinary approaches that cut across department boundaries. Each strategy has an identified management sponsor.

# 4.5 Supporting Programs and Action Plans

The supporting programs and action plans were developed in accordance with specific objectives to implement all or part of the associated strategy. The programs required to implement each strategy were identified by the NPG management team during the planning workshops.

Each program has its own action plan detailing the specific activities, schedules and resources necessary to accomplish the program objective(s). The action plans also include performance measures and expected results to provide objective evidence of the effectiveness of program actions. A program leader has been identified for each program. A common planning template was used to facilitate program development and management review, permit comparisons and show linkages between programs, and simplify measurement. Review and comparison are used to ensure that NPG's programs fit together, i.e., they are internally consistent and mutually supportive.

Program descriptions, including specific implementing activities and responsibilities, are provided in Section 7.

## 4.6 Critical Success Factors

Critical success factors are the things that are absolutely necessary in order for the NPG organization to be successful. These factors are described below; they should be identifiable implicitly throughout this plan and visible as the plan is implemented.

# Improved external relationships

As a public entity, we must have the confidence of customers, regulators, bond holders, employees, and the general public.

NPG must reestablish satisfactory levels of confidence and credibility with the NRC. Resolving regulatory concerns in a timely and comprehensive manner is essential to earning confidence and trust.

NPG must perform in accordance with projections and forecasts provided to the Board of Directives in order to retain and attract its customers.

# Cost competitiveness

Notwithstanding increased resource requirements associated with needed improvement programs, NPG must recover to competitive budget levels as soon as possible. The future of the NPG beyond our current participation contracts depends on our ability to supply competitively - priced of electricity.

# Managing risks

NPG must actively manage risks while implementing major changes. The organization must take a comprehensive approach to understanding and managing the operating, regulatory and economic risks that it faces.

# 5 Linkage of NPG Plans and Initiatives

## 5.1 Phase 1 Plan

The Phase 1 Performance Improvement Plan addressed those significant issues identified in the DSAT, the CAL and open inspection report items, and management self-identified issues that had to be resolved prior to plant startup. Phase 1 is complete.

## 5.2 Phase 2 and Phase 3 Plans

This Phase 2 plan addressed the need for post-restart performance improvement with high-priority actions required to make a step change in performance within the three months following plant startup, in the context of an overall business plan. Because this phase had a short duration, only a few high-priority issues were addressed. Phase 2 provided a bridge between startup and the full implementation of Phase 3. Phase 2 is complete.

Phase 3 is the long-term strategic planning phase. It provides the framework for managing performance improvement actions essential to meet long-term goals for safety/regulatory, operating and cost performance.

# 5.3 NPG Business Planning

The Phase 3 Plan, in conjunction with NPG budgets and financial plans, will comprise the NPG Business Plan. Budgets and financial plans are developed in accordance with NPPD standard practices and schedules. They integrate resources identified in each of the action plans with resources required to perform normal baseline activities that are a necessary and continuing part of our nuclear operations. An integral part of the Phase 3 management process is the regular prioritization of our workload to ensure that available resources are being applied to the most important activities. This prioritization will be a dynamic process that permits new items to be added when necessary and redirects resources from lower value work.

The NPG 1994-1997 Business Plan developed in early 1994 and the CNS Integrated Enhancement Program plan are superseded by this Phase 3 Plan.

# 6 Management of the Phase 3 Plan

# 6.1 Strategy and Program Management

The key to making progress on implementing the Phase 3 Plan is to measure and manage performance. Each program action plan has a management sponsor and plan manager, and a defined implementation schedule. In addition, there is a Phase 3 project manager with overall coordination responsibilities.

As with Phase 1 and 2 Plans, periodic management reviews will be conducted. Changes to established schedules will require management review and approval.

A reporting framework will be maintained to monitor plan implementation. Performance indicators developed for key programs and processes will continue to be used to measure strategy impact and effectiveness. Periodic reporting, coupled with active oversight and involvement by NPG managers, will keep NPG personnel aware of and focused on plan activities and implementation progress.

At least annually, an overall NPG management team review (similar to the workshops used to develop the Phase 2 and 3 Plans) will be held to review progress, identify any required actions to realign actual implementation with the plan and propose any necessary adjustments to programs, schedules or priorities. Given the major changes taking place, an overall NPG management team review will be scheduled in about six months to revisit the Phase 3 Plan and make any needed adjustments.

#### 6.2 Revisions

The Phase 3 Plan is a working tool for management to establish and communicate direction and priorities for NPG. New information, changing circumstances or new input from external parties may require changes to the plan. Any changes or revisions to the Phase 3 Plan, including the implementing action plans, will be handled as described in this section.

Proposed changes to specific programs will be prepared by the program manager. The cognizant sponsor will review and approve all program changes. Changes that affect relationships among multiple programs must be approved by the cognizant management sponsor(s). The Site Manager must ultimately approve all changes to the Phase 3 Plan, including the program plans.

Follow-up items that do not fit into one of the eight strategies are captured in Appendix A.

# .3 Responsibilities

NPG recognizes that a plan alone will not produce performance improvements. The primary contributor to success is clear assignment of implementation responsibilities, ensuring that responsible individuals have the resources and authority to complete their assignments. As outlined below, these elements have been established for the Phase 3 Plan:

- The Site Manager has overall responsibility for Phase 3 Plan content, coordination, performance tracking and successful implementation. The Site Manager will approve all significant additions, deletions, or revisions to the Phase 3 Plan scope or schedule. In addition, the Site Manager will initiate strategic changes to the Phase 3 Plan when necessary due to changes in management direction, strategic considerations, or concerns about the effectiveness of the plan.
- The Phase 3 Project Manager is responsible for coordinating the development and implementation of the Plan, monitoring and reporting plan progress, tracking revisions and updates, reviewing and concurring with changes to action plans and schedules, informing senior management when

action is necessary to ensure milestones, objectives and performance expectations are met, and developing any documentation necessary to fulfill these responsibilities.

- Each strategy has a sponsor. The sponsor is responsible for ensuring that
  the strategy is effective and coordinating the activities of the program
  managers. The sponsor is also responsible for reviewing progress against
  plan schedules and milestones, and for evaluating the effectiveness of plan
  implementation.
- Each strategic program has a program manager. The program manager is responsible for coordinating resource requirements and assignments for individual activities, and ensuring that milestones are met and program activities have their intended positive impact on plant and organizational performance.

The NPG management team will monitor overall plan implementation and meet, at least annually, to review progress and new issues or problems and, as necessary, propose changes to program managers or strategy sponsors.

The individuals who occupy the roles described above have personal responsibility and accountability for achieving results in their assigned areas. Program managers are responsible for providing monthly progress reports to the Phase 3 project manager. Such reports will cover progress and any problems, issues or changes in their assigned areas.

All NPG employees have a personal stake in Cooper's future. The contents of the Phase 3 Plan will be shared with NPG employees to provide them with the information necessary to make decisions consistent with NPG's top level goals and strategies.

## 6.4 Closure and Effectiveness

#### 6.4.1 Plan Closure Process

The Phase 3 project manager, as part of his project monitoring responsibility, will track schedule progress, milestone achievement, activity completion and program closure for all Phase 3 programs. The program closure process will clearly identify any activities that have a continuing component and specify how the program will be subject to "continuous improvement" after its official closure. The specific closure activities will be comparable to the Phase 1 and 2 Plan process.

## 6.4.2 Evaluation of Plan Effectiveness

Assessments will be performed to verify completion of activities and the effectiveness of Phase 3 strategies and program plans. Effectiveness reviews will be performed at both the program level and the strategy level. Program level effectiveness is directed at the results of the specific actions laid out in the program plan to accomplish the expected changes in performance levels. Strategy level effectiveness is directed at the synthesized results of a number of programs, and must account for the possible impact or interaction associated with other top level strategies.

The objectives for all effectiveness reviews will be as follows:

- Determine that plant and personnel performance results have improved commensurate with the needed level of change
- Verify that the causes of prior performance problems have been, or are being, addressed.

## 6.4.3 Measures of Effectiveness

Effectiveness reviews will be based on objective evidence of progress or the desired impact of program activities, not just the completion of activities or achievement of milestones. The following types of measures will be used as appropriate to the specific situation:

- Performance measures,
- Absence of repeat problems or repetitive failures,
- Awareness and knowledge of and commitment to changed behaviors, and
- Results of communications and training.

## 6.4.4 Effectiveness Reviews

Effectiveness reviews will be performed in accordance with predetermined criteria. For program plans, effectiveness will be reviewed annually, or at plan completion if the plan is completed within 12 months. Reviews also can be performed at the request of the Site Manager, strategy sponsor or program manager. Annual reviews will be conducted throughout the term of the Phase 3 Plan. For completed plans this will involve follow-up reviews at twelve-month intervals. The specific schedule will take into account "natural" milestone or break points in the program or the end of a set of related activities. It will allow time after completion of activities for the results to "take effect" and be measurable.

Effectiveness reviews will include performance data collection and analyses; document reviews and interviews; observations and/or verifications of activities and other modes as may be appropriate. A written report will be prepared to document the results of each effectiveness review. It will summarize the materials and information reviewed, report conclusions, and identify any additional actions or changes needed to achieve effectiveness.

# 7 Strategies and Program Action Plans

This section contains detailed descriptions of the eight strategies, their implementing programs and supporting action plans. This is the heart of the Phase 3 Plan. Each of the strategies focuses on one important performance area. Taken together, the strategies define the framework and set the direction for performance improvements. The programs implement the changes in business practices, operating philosophy and culture that are required to achieve NPG's top level goals. As these programs are implemented, they will result in permanent changes to NPG's business approach and methods.

The program tree in Figure 7-1 shows the eight top-level strategies and their associated programs.

Each of the subsections which follow addresses one top level strategy and its associated programs. An expanded view of the strategy tree delineates the relationship of strategy, programs and program objectives. Action Plans are located behind the expanded view figure.

#### Management Expectations for Operations D. VanDerKamp FOCUS ON OPERATIONS - P. DIRito Prioritization of NPG Workload STRATEGY: Focus our efforts on safe operation by redefining the roles and responsibilities of functions and individuals. Establish uniform work R. Wenzl Operations Critical Work Processes priorities, set standards for performance (quality, timeliness, and cost), and restructure programs and processes to facilitate completion of work and J. Brown Organizational Focus focus on operational needs. Apply safe operating principles in establishing work priorities and in the conduct of operation and a disciplined approach to D. Buman execution and accountability for operational performance results. **Technical Specifications** R. Godley Plant Configuration Control and Design Basis CONFIGURATION MANAGEMENT - P. Graham R. Godley STRATEGY: Establish a clear understanding of the rules for managing the Design Basis configuration of the plant for all operations, maintenance and change M. Boyce activities. Assign responsibility for ownership of configuration programs, Integrated Planning, Scheduling and Work Control define the interface responsibilities, and clarify responsibility for decision Budgeting and Resource Allocation making. A. Dostal Elimination of Low Value Activities and Processes RESOURCE ALLOCATION AND WORK MANAGEMENT - T. Foster STRATEGY Establish resource allocation and work management A. Sessoms Partnering systems that ensure achievement of NPG top-level goals. K. Walden Corrective Action C. Gaines CONTINUOUS IMPROVEMENT - R. Jones Operational Experience Review STRATEGY Continuously improve NPG's performance by routinely assessing performance, including review of operating experience, and J. Long Assessment identifying both improvements and problems. Reduce the impact and recurrence of problems, ensuring they are closed out effectively by C. Moeller follow-up and feedback after corrective actions. Business and Strategic Planning J. Dillich Setting Management Expectation 3 MANAGEMENT PRACTICES AND SYSTEMS- J. Herron E. Mace Performance Management STRATEGY: Implement systems and practices that communicate and V. Kincheloe link the NPG vision and business objectives to individual performance Performance Appraisal expectations and accountability. M.White Incentive System M. White Information Systems for Management T. Hottovy Assessment of Managers, Supervisors and Key Staff SKILLS AND QUALIFICATIONS - M. Peckham Organizztional Development/Required Skills STRATEGY: Develop the capabilities and depth of the organization by defining requirec organizational development attributes, evaluating J. Dutton Succession Planning personnel against these attributes, and developing or recruiting J. Dillich individuals accordingly. NRC Communications M. Bennett **EXTERNAL RELATIONS - B. Houston** Operations-Related Communications STRATEGY: Establish mechanisms to communicate operational and With External Parties regulatory status and issues to Participants and regulators. Hold periodic meetings with Participants to ensure coordination of longer-term business K. Krumland Onsite Public Relations plans J. Sayer Fuel Cycle Optimization E. Lanning STATION CAPACITY AND RELIABILITY -R. Gardner Capacity Increases STRATEGY: Establish the management systems and processes that will focus on systematic improvements in plant reliability and promote J. Salisbury Plant Reliability consistently high levels of plant production capacity. Instill efficiency improvements in operating practices as a standard business method S. Freborg Maintenance M. Boyce Power Up-rate FIGURE 7.1 J. Salisbury

STRATEGIES AND PROGRAMS

# 7.1 Focus on Operations Strategy

This strategy focuses our efforts on safe operation by redefining the roles and responsibilities of functions and individuals. We establish uniform work priorities, set standards for performance and restructure programs and processes to facilitate the completion of work and the focus on operational needs. In addition, we apply safe operating principles in establishing work priorities and in the conduct of operation. A disciplined approach and a strong sanse of accountability is present in the attainment of operational performance results.

The strategy is implemented through the following programs:

- Management Expectations for Operations
- Prioritization of NPG Workload
- Operations Critical Work Processes
- Organizational Focus

Strategy Sponsor: P. DiRito

FIGURE 7.1
FOCUS ON OPERATIONS
Phase 3 Expanded View

#### **FOCUS ON OPERATIONS**

[P. Dirito]
STRATEGY: Focus our efforts on safe operation by redefining the roles and responsibilities of functions and individuals. Establish uniform work priorities, set standards for performance (quality, timeliness, and cost) and restructure programs and processes to facilitate the completion of work and the focus on operational needs.

# **Management Expectations for Operations**

[D. VanDerKamp]

Objective: Increase the focus on safe plant operation through specific improvements in the conduct of plant operations.

#### Prioritization of NPG Workload

[R. Wenzl]

Objective: Ensure that a unified prioritization process that consistently focuses on safety, operation and cost is utilized by NPG departments.

#### **Operations Critical Work Processes**

[J. Brown]

Objective: Establish clear ownership and accountability for those processes critical to safe operations; improve the processes with respect to safety, efficiency, and relevance.

## Organizational Focus

[D. Buman]

Objective: Evaluate and modify NPPD organizations to ensure they are appropriately focused on CNS operation.

# STRATEGY: FOCUS ON OPERATIONS PROGRAM: MANAGEMENT EXPECTATIONS FOR OPERATIONS

## PROGRAM TITLE

Management Expectations for Operations

#### PROGRAM MANAGER

D. VanDerKamp

## PROGRAM COMPLETION DATE

August 31, 1996

#### DESCRIPTION

This Phase 3 Action Plan focuses on communicating and understanding management expectations for standards of performance (quality, timeliness, and cost), application of safe operating principles in the conduct of operations, using a disciplined approach to execution, and accountability for operational results. This program supports the Focus on Operations strategy by setting standards of performance necessary to improve the operational performance of the plant.

Specifically, this program consists of the following:

- Define, in terms that can be communicated to all plant personnel, management's expectations that reinforce the central focus on safe operations and conservative decision-making.
- 2. Evaluate the different methods to communicate this message effectively and implement the method(s) best suited to this purpose.
- Assess the understanding and acceptance of these concepts through management evaluation of operations, performance indicators, and corrective actions.
- 4. Refine the message and methods of communicating based upon the assessments, currents events, and changing points for emphasis. Continue this process of refining the message, communicating it to plant personnel and evaluating the effectiveness of the communicators.

#### **OBJECTIVE**

Increase the focus on safe plant operation through specific improvements in the conduct of plant operations.

## **ACTIVITIES**

The following activities will be implemented via a management panel. The panel will be composed of middle managers and supervisors with oversight by senior management.

- 1 Establish a set of expectations with guidance from senior management that reflects the fundamental principles for safe nuclear plant operation. Include for review those recommendations from Phase 2.
- Select the key themes to be communicated and rank them in order of importance. (It is expected that approximately 15 key themes will be chosen.)
- 3 Evaluate and implement methods to communicate the expectations that are selected. Tangible examples, case studies, and critiques of events should be utilized to communicate these expectations.
- 4 Review and revise the Management Observation Program to reinforce and measure CNS understanding of management expectations during manager/supervisor field tours.
- Assess the effectiveness of these communications using random sampling from various programs such as the management observation, simulator observations, and QA assessments. Provide mechanism for employees to feedback to management examples where meeting management expectations was less than adequate.
- 6 Develop a mechanism for the management expectations panel to periodically re-evaluate and revise the themes and methods of communications. Implement the revisions.

# STRATEGY: FOCUS ON OPERATIONS PROGRAM: MANAGEMENT EXPECTATIONS FOR OPERATIONS

# SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Establish expectations	D. VanDerKamp	16	6/12/95	7/31/95
2 Select the key themes	D. VanDerKamp	100	8/1/95	9/30/95
3 Evaluate and implement communication methods.	D. VanDerKamp	120	9/1/95	10/13/95
4 Review and revise the Management Observation Program to reinforce and measure effectiveness	C. Moeller	40	1/1/96	3/1/96
5 Assess the effectiveness of these communication. Provide mechanism for employees to feedback to management.	D. VanDerKamp	100	3/1/96	5/1/96
6 Develop a mechanism to periodically re-evaluate and revise the themes and methods of communications.	D. VanDerKamp	80	5/1/96	8/31/96

#### PROGRAM TITLE

Prioritization of NPG Workload

PROGRAM MANAGER

R. Wenzl

PROGRAM COMPLETION DATE

May 31, 1996

#### DESCRIPTION

This Phase 3 Action Plan implements the unified prioritization process that was developed in Phase 2. This process will be utilized in both day-to-day and long term prioritization to ensure the site is appropriately focused on work items that will have the greatest operational impact. Improvements to this process will be made based on lessons learned internally and from industry experience. Existing backlogs will be appropriately prioritized and monitoring will be performed to ensure the prioritization process meets CNS operational needs. Backlogs are to be maintained at manageable levels. This program supports the Focus on Operations Strategy by putting in place uniform work priorities that are appropriately focused on quality, timely, and cost-effective operational performance results.

#### **OBJECTIVE**

Ensure a unified prioritization process is employed by all NPG departments that consistently focuses on safety, operation, and cost.

#### **ACTIVITIES**

- 1 Apply the prioritization process developed in Phase 2.
  - 1.1 Modify our existing tracking systems to the workload scheduled for after the fall 1995 outage (such as CWIT, NAIT, and CMDC) to have a field available for priority.

- 1.2 Ensure procedural steps for entry of new items into each of these databases require identification of priority.
- 2 Prioritize existing backlogs.
  - Review and evaluate all existing items in the databases and assign the appropriate priority.
  - 2.2 Develop a system where old backlog items are reviewed on some periodicity for closure based on low value-added.
    - 2.2.1 Form a team
    - 2.2.2 Develop criteria
    - 2.2.3 Develop process
    - 2.2.4 Review with management
    - 2.2.5 Implement
- 3 Implement an effective Plant Manager Top Ten List
  - 3.1 Form a team to develop this process and owner of the program
  - 3.2 Develop the process
  - 3.3 Review with management
  - 3.4 Implement the program
  - 3.5 Effectiveness Review
- 4 Assess the prioritization system
  - 4.1 Survey users of the priority system.

- 4.2 Develop a schedule for selected managers to accompany plant station operators on rounds to determine if the prioritization is meeting operational needs
- 4.3 Based on results (field observations, performance indicators, etc), enhance the system to ensure prioritization meets CNS operational needs

### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Implement the process developed in Phase 2.	R. Wenzl			
1.1 Modify our existing tracking systems.	R. Wenzl	40	12/15/95	2/15/96
1.2 Ensure procedural steps for prioritization of entries.	R. Wenzl	40	12/15/95	2/15/96
2 Prioritize existing backlogs	R. Wenzl			
2.1 Review and evaluate existing items prioritize.	R. Wenzl	100	1/10/96	2/15/96
2.2 Develop a system that includes periodic reviews.	R. Wenzl			
2.2.1 Form a team	R. Wenzi	10	1/8/96	1/15/96
2.2.2 Develop criteria	R. Wenzi	80	1/15/96	1/22/96
2.2.3 Develop process	R. Wenzl	80	1/22/96	1/31/96
2.2.4 Review with management	R. Wenzl	10	2/5/96	2/9/96
2.2.5 Implement	R. Wenzl	80	2/15/96	5/31/96

Activity	Accountable Person	Hours	Start Date	End Date
3 Implement an effective Plant manager Top Ten List	E. Mace			
3.1 Form a team to develop the process and owner of the program	E. Mace	10	6/1/95	6/7/95
3.2 Develop the process	E. Mace	80	6/10/95	6/25/95
3.3 Review with management	E. Mace	10	7/1/95	7/10/95
3.4 Implement the program	E. Mace	80	7/15/95	8/15/95
3.5 Assess effectiveness of the process	E. Mace	80	1/15/96	2/15/96
4 Assess the prioritization system	P. DiRito			
4.1 Survey users of the priority system.	P. DiRito	50	1/15/96	2/15/96
4.2 Develop schedule for managers to accompany plant station operators on rounds.	P. DiRito	20	2/15/96	3/15/96
4.3 Modify the system to ensure prioritization meets CNS operational needs	P. DiRito	100	3/15/96	5/31/96

### STRATEGY: FOCUS ON OPERATIONS PROGRAMS: OPERATIONS CRITICAL WORK PROCESSES

#### PROGRAM TITLE

**Operations Critical Work Processes** 

#### PROGRAM MANAGER

J. Brown

#### PROGRAM COMPLETION DATE

December 15, 1996

#### DESCRIPTION

This program will identify all processes that are critical to the safe, efficient operation of Cooper Nuclear Station, eliminating redundancy and establishing clear responsibility and ownership. This program will establish a schedule to address the critical work processes. This program supports the Focus on Operations strategy by restructuring programs and processes to facilitate the completion of work that focuses on operational needs.

- 1 Identify processes that are critical to the safe, reliable, and efficient operations of CNS.
- 2 Assign clear ownership and responsibilities of these processes.
- 3 Schedule reviews to ensure these processes remain safe, efficient, and relevant.
- 4 Implement identified changes to the process.

#### **OBJECTIVE**

Establish clear ownership and accountability for those processes critical to safe operations; improve the processes with respect to safety, efficiency, and relevance.

### STRATEGY: FOCUS ON OPERATIONS PROGRAMS: OPERATIONS CRITICAL WORK PROCESSES

#### **ACTIVITIES**

- Select members to a Process Review Panel. Ensure sufficient representation from the operations group.
- 2 Identify processes critical to the safe, reliable, and efficient operation of CNS.
  - 2.1 Define "operations critical work process"
  - 2.2 Establish criteria for ranking processes based on importance to safety, evaluating the risk of not doing the assessment.
  - 2.3 Rank processes in order of importance to safety
  - 2.4 Select the highest ranking processes (approximately 10).
  - 2.5 Review with Senior Management for concurrence
- 3 Assign clear ownership for the processes. Implement any stop-gap measures identified.
- 4 Conduct assessments for the selected processes to ensure a keen focus on operations.
  - 4.1 Schedule assessments
  - 4.2 Process owner conducts assessment
  - 4.3 Assessment results reviewed by departments involved in the process
- 5 Implement identified changes to the process

#### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Select the Process Review Panel	J.Brown	40	6/12/95	7/7/95
2 Identify processes critical to the safe, reliable, and efficient operation of CNS				
2.1 Define "operations critical work process"	J. Brown	100	7/7/95	7/21/95
2.2 Establish criteria for ranking processes based on importance to safety, evaluation the risk of not doing the assessment.	J.Brown	120	7/14/95	7/31/95
2.3 Rank processes in order of importance to safety	J. Brown	40	7/14/95	7/31/95
2.4 Select the highest ranking processes	J. Brown	20	7/14/95	7/31/95
2.5 Review with Senior Management for concurrence	J. Brown	20	7/31/95	7/31/95
3 Assign clear ownership for the processes and make selected improvements	J. Brown	80	7/31/95	8/31/95
4 Conduct assessments for the selected processes short-term				

# STRATEGY: FOCUS ON OPERATIONS PROGRAMS: OPERATIONS CRITICAL WORK PROCESSES

Activity	Accountable Person	Hours	Start Date	End Date
4.1 Schedule assessments	J. Brown	30	12/15/95	1/31/96
4.2 Conduct assessments	J. Brown	1200	1/15/96	5/31/96
4.3 Assessment results reviewed	J. Brown	100	6/1/96	7/31/96
5 Implement identified changes to the process	J. Brown	1200	8/1/96	12/15/96

#### PROGRAM TITLE

Organizational Focus

**PROGRAM MANAGER** 

D. Buman

PROGRAM COMPLETION DATE

June 30, 1997

#### DESCRIPTION

This Phase 3 Action Plan continues the Engineering Reorganization transition and evaluates other organizations effectiveness in supporting CNS operation. Further reorganizations may be implemented as part of this program. This action plan supports the Focus on Operations Strategy by evaluating and redefining the roles and responsibilities of organizations to provide timely, cost effective, quality support for CNS operation.

Organizations will determine what services they provide and perform surveys to determine how well the services are being provided. Recommendations for improvements will be provided to an oversight panel, which will ensure company resources are appropriately focused, reduce duplication of effort and identify service areas that are lacking. This oversight panel will make recommendations to senior management on further organization restructuring, which upon approval will be implemented by the respective organization.

#### **OBJECTIVES**

Evaluate and modify NPPD organizations to ensure they are appropriately focused on CNS operation.

#### **ACTIVITIES**

- Complete Engineering Reorganization
  - 1.1 Develop and implement a transition plan to complete the Engineering Reorganization
  - 1.2 During reorganization monitor (CRs QA assessments backlogs, etc), to verify the engineering reorganization is achieving improved performance.
  - 1.3 Monitor engineering performance indicators to determine if performance is improving.
  - 1.4 Perform engineering self-assessment after next refueling outage to determine organizational effectiveness.
  - 1.5 Re-adjust processes and organization, as required.
- 2 Assign designee to develop a list of customers for their respective departments. Identify customers and their needs.
  - 2.1 Each designee identify a list of services to each customer.
  - 2.2 Contact customers to assure all services are identified; also identify adequacy of support
  - 2.3 Evaluate overlap between departments, look for gaps in services.
  - 2.4 Based on overlap and gaps, look at organization, and assess potential re-alignment of organization responsibilities.
- 3 Evaluate Organizational Effectiveness
  - 3.1 Establish an oversight panel of NPPD management and industry peers.
  - 3.2 Each organization make recommendations to the oversight panel on required changes to the organization to better support CNS operation.

- 3.3 Oversight panel make an overall assessment of CNS organization effectiveness and recommend to senior management organization changes to improve CNS operations. The oversight panel will look for duplication or deficiencies in the CNS organization as part of their assessment.
- 3.4 Senior Management determine required changes, which will be implemented by the respective organizations.
- Develop customer-based report cards to evaluate effectiveness of organizations.
  - 4.1 The department designees will develop objective criteria to rate customer based needs.
  - 4.2 From criteria, develop performance indicators to provide input to continuous grading of departments, based on their customer needs.
  - 4.3 Provide performance indicators to the Assessment Program team for use in self-assessments.

### SCHEDULE

	Activity	Accountable Person	Hours	Start Date	End Date
1	Complete Engineering Reorganization				
	1.1 Develop and implement transition plan	P. Graham	800	6/12/95	8/31/95
	1.2 Monitor CRs, QA assessments	P. Graham	80	6/12/95	12/31/95
	1.3 Monitor engineering performance indicators.	P. Graham	40	6/12/95	12/31/95
	1.4 Perform engineering self- assessment after next refueling outage	P. Graham	120	1/1/96	2/15/96
	1.5 Re-adjust organization as required.	P. Graham	200	2/15/96	3/31/96
2	Each NPG organization identify customers and their needs.				
	2.1 A designee in each organization identify a list of services provided to each customer	D. Buman	800	1/1/96	3/31/96

	Activity	Accountable Person	Hours	Start Date	End Date
	2.2 Contact customers to assure all services are identified and identify adequacy of support	D. Buman	400	2/1/96	3/31/96
	2.3 Evaluate overlap between departments, look for gaps in services.	D. Buman	200	4/1/96	5/31/96
	2.4 Based on overlap and gaps, look at organization and assess potential re-alignment of organization responsibilities.	J. Mueller	120	6/1/96	6/30/96
3	Evaluate organizational effectiveness				
	3.1 Establish an oversight panel of NPPD management and industry peers.	J. Mueller	40	5/1/96	5/31/96
t.	3.2 Each organization make recommendations to the oversight panel on required changes to the organization to better support CNS operation.	Panel Chair	200	9/1/96	9/30/96

	Activity	Accountable Person	Hours	Start Date	End ` Date
	3.3 Oversight panel perform an overall assessment of CNS organization effectiveness and recommend to senior management organization changes	Panel Chair	120	10/1/96	10/31/96
	3.4 Senior Management determine required changes.	J. Mueller	40	11/1/96	11/15/96
4	Develop customers based report cards				
	4.1 Department designees develop objective criteria to rate customer based needs.	D. Buman	200	4/1/96	4/30/96
	4.2 Develop performance indicators from these criteria.	D. Buman	200	5/1/96	5/31/96
	4.3 Utilize performance indicators in self-assessments.	C. Moeller	40	6/1/96	6/30/97

#### 7.2 Configuration Management Strategy

This strategy will establish a clear understanding of the rules for managing the configuration of the plant for all operations, maintenance and change activities. It will assign responsibility for ownership of configuration programs, define the interface responsibilities, and clarify responsibility for decision making.

The strategy will be implemented through two programs:

- Technical Specifications
- Plant Configuration Control and Design Basis

Strategy Sponsor: P. Graham

FIGURE 7.2 CONFIGURATION MANAGEMENT Phase 3 Expanded View

### CONFIGURATION MANAGEMENT

[P. Graham] STRATEGY: Establish a clear understanding of the rules for managing the configuration of the plant for all operations, maintenance and change activities. Assign responsibility for ownership of configuration programs, define the interface responsibilities, and clarify responsibility for decision making.

### **Technical Specifications Improvement**

[R. Godley]

Objective: Develop and implement improved Technical Specifications and bases.

### Plant Configuration Control and Design Basis

[M. Boyce)

Objective: Improve the controls for maintaining the plant configuration consistent with the design basis. Upgrade availability, accuracy, completeness, use and control of design basis information.

# STRATEGY: CONFIGURATION MANAGEMENT PROGRAM: TECHNICAL SPECIFICATION IMPROVEMENT

#### PROGRAM TITLE

Technical Specification Improvement

PROGRAM MANAGER

R. Godley

PROGRAM COMPLETION DATE

April 30, 1997

#### DESCRIPTION

The purpose of this program is to review the CNS Technical Specifications against the Improved Standard Technical Specifications (ISTS) and the industry initiatives to improve the technical specifications. Once the review is complete, revision of the CNS Technical Specifications will be pursued in order to improve their form, content, and usability. The goal is to provide a document with a comprehensive basis and clearly defined operability requirements and actions. Clearly defined requirements and actions backed by a comprehensive bases section will improve the consistency of application of the plant license.

### This program will:

- 1 Increase the understanding and the application of the requirements of the CNS Technical Specifications and reduce the need for interpretations by providing an improved, more comprehensive bases section where needed.
- Improve the ease of use of the CNS Technical Specifications by simplifying the wording, improving the consistency between specifications, and by eliminating, to the extent practicable, the built is scades.

### STRATEGY: CONFIGURATION MANAGEMENT PROGRAM: TECHNICAL SPECIFICATION IMPROVEMENT

- Reduce or eliminate requirements that have no safety or operational benefit by adopting provisions which are consistent with the ISTS and/or the NRC recommended line item improvements. (Relocation of Fire Protection requirements, for example)
- 4 Enhance operational control of system configuration by providing allowed outage or Limiting Condition for Operation (LCO) times for equipment addressed in the Technical Specifications which currently lack them.
- Improve the LCO requirements for equipment so that the requirements reflect the true safety basis.

The result of this plan will be an enhanced focus on safe operation, lower risk of personnel errors, facilitation of conservative decision-making, and greater confidence on the part of regulators.

#### **OBJECTIVE**

Develop and implement improved Technical Specifications and bases.

#### **ACTIVITIES**

- Develop a Request for Bid to solicit qualified vendors to perform a line item comparison of the CNS technical specifications against the Improved Standard Technical Specifications (NUREG 1433) to define the impact of adopting the Improved Standard Technical Specifications. The comparison shall provide:
  - A list of Technical Specifications that will be deleted or added including the ISTS criteria that are applicable;
  - B A matrix listing, by Technical Specification, of the significantly more restrictive and less restrictive changes;
  - C An assessment of the operational and safety advantages and disadvantages of items a and b;

# STRATEGY: CONFIGURATION MANAGEMENT PROGRAM: TECHNICAL SPECIFICATION IMPROVEMENT

- D A list of the ten most significant changes to the CNS Technical Specifications that could provide the most immediate operational and safety benefits to CNS;
- E A preliminary markup of the CNS TS showing the changes identified in b.

Arrange presentations from selected vendors to involve affected station departments in the selection process. Select a vendor to perform the line item comparison.

- 2 Establish a team composed of members from Operations, Engineering, Rad Protection, and Licensing to supervise and oversee the improvement process.
- Based upon the information supplied by the line item comparison project, determine if full conversion is to be pursued.
- Develop the schedule for conversion to ISTS, including bases development, procedure revisions, and training if conversion is to be pursued (including submittal to the ERB and NPPD Board).
- 5 Perform a review of NRC recommended line item improvements to determine those with the most operational and safety benefit to CNS.
- Based upon the items identified in the comparison project and the review of line item improvements, create a schedule for development and submittal of line item improvements to the CNS technical specifications. It is expected that submittal to the NRC in the first half of 1996 will be required.
- 7 Develop and implement the technical specification improvements in a accordance with the schedule.

# STRATEGY: CONFIGURATION MANAGEMENT PROGRAM: TECHNICAL SPECIFICATION IMPROVEMENT

### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Request bids and select a vendor to perform a line item comparison of technical specifications	R. Godley			Complete
2 Establish a team to supervise the improvement process	R. Godley	20	6/12/95	6/26/95
3 Determine if full conversion is to be pursued.	R. Godley	40	7/17/95	7/24/95
4 Develop the schedule for conversion to ISTS	R. Godley	80	7/26/95	8/28/95
5 Perform a review of NRC recommended line item improvements	R. Godley	70	6/12/95	7/17/95
6 Create a schedule for development and submittal of line item improvements	R. Godley	20	7/26/95	8/16/95
7 Develop and implement improved technical specifications	R. Godley	300	8/16/95	*

<sup>\*</sup> NLT end of Spring 1997 Refueling Outage

#### PROGRAM TITLE

Plant Configuration Control and Design Basis

#### PROGRAM MANAGER

M. Boyce

#### PROGRAM COMPLETION DATE

June 30, 1997

#### DESCRIPTION

This program will establish awareness and understanding of the critical controls for operational activities and programs that could affect the plant configuration and its alignment with the design basis. The approach will include training, as well as monitoring of progress in the area of configuration control. A formal process will be developed to ensure that the integrity of the controls is maintained.

This program will also result in identifying the design basis and design information used, the people and organizations that use it, and the activities or decisions for which it is used, developing and implementing approaches for information to insure availability and control. Approaches will consider benefit, risk, and cost. The program also includes developing design criteria documents through the accelerated DCD project and integrating data bases and making their use easier and more reliable.

### This program will:

- Ensure the adequacy of (put in place) proper controls for maintaining the plant configuration consistent with the design basis in order to support safe operation, provide an accurate basis for conservative decision-making, avoid personnel errors, and avoid surprises related to the plant configuration and design basis.
- 2 Upgrade NPG knowledge, availability, and use of design information though training, ownership, and improvement in configuration control programs,
- 3 Improve accuracy, completeness, and accessibility of design basis information

The aim is to support the focus on safe operation and conservative decision-making.

#### **OBJECTIVE**

Improve the controls or maintaining the plant configuration consistent with the design basis. Upgrade availability, accuracy, completeness, use and control of design basis information.

#### **ACTIVITIES**

- 1 Design Criteria Document Development and Maintenance
  - 1.1 Complete the current DCD project.
    - 1.1.1 Insure involvement of system (and other) engineers as the ultimate owners of the documents.
    - 1.1.2 Modify and implement the approach for addressing emerging open items.
  - 1.2 Develop the process and make appropriate changes in order to maintain design basis information effectively.
    - 1.2.1 Review existing NPG procedures and DCD project instructions to ensure adequacy of procedures for control of DCDs and other essential design basis information.
    - 1.2.2 Investigate approaches used at other well-performing utilities.
    - 1.2.3 Put in place any interim measures needed to ensure reasonable confidence in design basis information.
    - 1.2.4 Modify and supplement NPG procedures as appropriate.
  - 1.3 Evaluate and implement DCD enhancements, including
    - 1.3.1 Evaluate and select enhancements.
      - Extending the development of DCDs to non-essential systems
      - · Adding capabilities such as electronic search and access
    - 1.3.2 Revise plan and implement.

#### 2 Configuration Management

- 2.1 Identify activities, processes, and programs that affect (or could be affected by) configuration management.
  - 2.1.1 Form a task group with appropriate operations, technical, and support staff representation.
  - 2.1.2 Review NPG procedure and processes.
  - 2.1.3 Develop a list of activities, with affected plant equipment and associated responsibilities, that could change the plant configuration.
  - 2.1.4 Identify any significant gaps or deficiencies and any interim measures that are needed immediately to ensure adequate control. Implement short-term actions, such as training, or procedure changes, as needed.
  - 2.1.5 Develop and implement configuration control training for engineering personnel and general employees.
  - 2.1.6 Review industry guidance and plant good practices to establish the attributes of a proper design basis and plant configuration control program.
  - 2.1.7 Review approaches to configuration at other top-performing nuclear plant operating organizations.
  - 2.1.8 Identify the attributes of effective configuration control programs. Develop the overall program to improve configuration management.
  - 2.1.9 Implement the overall program.
- 2.2 Develop a matrix relating the design basis information to its use (activities and decisions) and users (people, processes, or organizations).

#### Applications include:

- OD/OE preparation
- · safety reviews
- · on-line maintenance
- · risk management
- · modifications
- · operational problem solving
- · procedure revision
- · training

#### Levels of users include:

- · general employees
- · support organizations
- · maintenance
- · engineering
- · operations
- 2.3 Develop approaches and actions to provide the right information to those who use it and to put in place or maintain appropriate controls for design basis information and the plant physical configuration.
  - 2.3.1 Consider existing and needed:
    - · Data bases
    - Documents
    - Procedures
    - · Training
  - 2.3.2 Address issues and options such as:
    - · Consistent component identification
    - · Broad knowledge within NPG
    - · Use of qualified safety reviewers
  - 2.3.3 Consider cost versus risk and benefit, considering plant life and objectives.
  - 2.4 Modify this program plan to include these actions.
  - 2.5 Implement the plans.
- 3 Acquire, upgrade, or integrate data bases and documents to support the Configuration Management Program.
  - 3.1 Work with the Management Information Program team to coordinate efforts.

- 3.2 Base the action on consideration of plans developed above. \*
- 3.3 Review previous study.
- 3.4 Consider existing data bases (STETS, EDF, maintenance history, operating procedures, valve checklists, etc.).
- 3.5 Develop actions to acquire, upgrade, or integrate data bases and documents; incorporate them into the plan.
- 3.6 Implement the revised plan.
- 4 Identify and correct any "gaps" in configuration controls
  - 4.1 Perform a comparison of the ideas configuration control program attributes determined in 2.1 with actual CNS practices; identify areas for improvement.
  - 4.2 Implement program improvements to enhance plant configuration controls. Controls may include:
    - Program guidance document or "upper-tier" procedure
    - Measures to identify procedures and procedure steps that have the potential to effect plant configuration or the design basis
    - Qualified safety reviewer program

### SCHEDULE

	Activities	Accountable Person	Hours	Start Date	End Date
1	DCD development and maintenance				
	1.1 Complete current project	W. Swantz	500	In Process	12/31/95
	1.2 Develop process and modify organizations				
	1.2.1 Review procedures for control of design basis information	M. Boyce	80	6/12/95	7/1/95
	1.2.2 Investigate other utilities' approaches	M. Boyce	160	6/12/95	8/31/95
	1.2.3 Put in place interim measures	M. Boyce	120	7/1/95	7/31/95
	1.2.4 Modify and supplement procedures	M. Boyce	320	12/1/95	3/31/96
	1.3 Evaluate and implement DCD enhancements	M. Boyce			
	1.3.1 Evaluate and select enhancements	W. Swantz	80	6/12/95	7/31/95
	1.3.2 Revise plan	W. Swantz	40	8/1/95	11/30/95
	1.3.3 Implement	W. Swantz	500	1/1/96	6/30/97
2	Configuration Management				

Activities	Accountable Person	Hours	Start Date	End Date
2.1 Identify activities, processes, and programs				
2.1.1 Form a task group	R. Godley	20	6/12/95	6/30/95
2.1.2 Review NPG procedure and processes	W. Victor	400	7/1/95	8/31/95
2.1.3 Develop a list of activities	W. Victor	100	8/1/95	8/31/95
2.1.4 Identify any gaps and interim measures	W. Victor	200	8/1/95	9/30/95
2.1.5 Training	M. Boyce	300	7/1/95	10/1/95
2.1.6 Review industry guidance and good practices	W. Victor	200	12/1/95	2/29/96
2.1.7 Review approaches at other nuclear plants	W. Victor	320	12/1/95	2/29/96
2.1.8 Identify the attributes of effective control programs	W. Victor	200	3/1/96	4/30/96
2.1.9 Implement the overall program	M. Boyce	120	5/1/96	9/30/96
2.2 Develop matrix	M. Boyce	320	1/1/96	2/29/96
2.3 Develop approaches and actions to provide information	M. Boyce	400	3/1/96	6/30/96

	Activities	Accountable Person	Hours	Start Date	End Date
	2.4 Modify program plan	M. Boyce	80	5/1/96	7/31/96
	2.5 Implement plan	M. Boyce	500	8/1/96	12/31/97
3	Acquire, upgrade, or integrate data bases etc.				
	3.1 Work with Management Information Program Team	M. Boyce	80	1/1/96	3/31/96
	3.2 Base the action on consideration of plans	M. Boyce	80	1/1/96	3/31/96
	3.3 Review previous study	M. Boyce	80	1/1/96	3/31/96
	3.4 Consider existing data bases	M. Boyce	80	1/1/96	3/31/96
	3.5 Develop actions to acquire, upgrade, or integrate data bases, etc.	M. Boyce	360	4/1/96	5/31/96
	3.6 Implement the revised plan	M. Boyce	2000	6/1/96	6/30/97
4	Identify and correct any "gaps" in configuration controls				
	4.1 Perform a comparison of the ideas configuration control program	W. Victor	240	5/1/96	8/31/96
	4.2 Implement program improvements	R. Godley	400	9/1/96	12/31/96

#### 7.3 Resource Allocation and Work Management Strategy

This strategy establishes resource allocation and work management systems that ensure achievement of NPG top-level goals.

The strategy is implemented through four programs:

- Integrated Planning, Scheduling and Work Control
- Budgeting and Resource Allocation
- Eliminating Low Value Activities and Processes
- Partnering

Strategy Sponsor: T. Foster

FIGURE 7.3
RESOURCE ALLOCATION AND
WORK MANAGEMENT
Phase 3 Expanded View

### RESOURCE ALLOCATION AND WORK MANAGEMENT

[T. Foster] STRATEGY: Establish resource allocation and work management systems that ensure achievement of NPG top-level goals.

### Integrated Planning, Scheduling and Work Control

[T. Foster]

Objective: Integrate selected work activities into a single site plan and schedule to allow for effective resource utilization.

#### **Budgeting and Resource Allocation**

[A. Dostal]

Objective: Develop a process to allocate financial and human resources to attain top level goals. Provide the appropriate information to allow management to best utilize these resources.

### Elimination of Low Value Activities and Processes

[A. Sessoms]

Objective: Ensure expenditures are more directly related to work activities that contribute to NPG's goals and priorities.

#### Partnering

(V. Kincheloe)

Objective: Establish programs and actions to share and obtain resources to maximize efficiency, quality, and performance while minimizing costs.

### STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

#### PROGRAM TITLE

Integrated Planning, Scheduling, and Work Control

#### PROGRAM MANAGER

T. Foster

#### PROGRAM COMPLETION DATE

January 15, 1997

#### DESCRIPTION

This program supports the Resource Allocation and Work Management strategy by strengthening programs and upgrading data management systems/processes that support integrated planning, scheduling, and work control.

#### **OBJECTIVE**

Integrate selected work activities into a single site plan and schedule to provide for safe and effective resource utilization.

#### **ACTIVITIES**

- 1 Select the work activities to be included in this plan.
  - 1.1 Form team
  - 1.2 Establish criteria for selection
  - 1.3 Complete selection of Work Activities after review with senior management.

# STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

- 2 Establish a common NPG framework to manage information
  - 2.1 Identify information requirements
    - 2.1.1 Identify requirements that are not electronically transferable
  - 2.2 Review information networking options
    - 2.2.1 Utilize in house MIS personnel to review and propose options
    - 2.2.2 Outside expert review of existing system and proposal for most economical way to develop the necessary information network
  - 2.3 Propose options to Management
  - 2.4 Revise/implement system structure to network scheduling information
    - 2.4.1 Details and Scheduling will be developed after the option is selected
  - 2.5 Review Work Order data base management system improvements
    - 2.5.1 Bench mark the industry on use of work order database Management Systems
    - 2.5.2 Utilize in house MIS personnel to review and propose options
    - 2.5.3 Outside expert review of existing system and proposal for most economical way to develop the necessary work order data management system
  - 2.6 Propose options to Management
  - 2.7 Implement selected work order database Management System
    - 2.7.1 Details and Scheduling will be developed after the option is selected

### STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

- 3 Develop and implement tools for planning, estimating, and scheduling of routine and repetitive tasks, both on-line and outage
  - 3.1 Identify Routine and Repetitive tasks for on line maintenance
    - 3.1.1 Capture duration and man-power requirements/on line
    - 3.1.2 Identity tasks that can be grouped

The second secon

- 3.1.3 Create off-the-shelf schedule library for above tasks
- 3.2 Evaluate use of On Line Risk Measurement Tools
- 3.3 Implement selected On Line Risk Measurement Tool
- 3.4 Identify Routine and Repetitive tasks for outages
  - 3.4.1 Capture duration and man-power requirements
  - 3.4.2 Identify tasks that can be grouped
  - 3.4.3 Create of-the-shelf schedule library for above tasks
- 3.5 Develop formal training program for work planners and ensure planners are proficient
- 3.6 Develop formal training program for systems schedulers and ensure schedulers are proficient
- Establish a program for continuously improving both Outage and On-line work performance.
  - 4.1 Bench mark the industry performance
  - 4.2 Develop WC Lessons Learned Program and associated analysis to ensure we're doing the right things right
- 5 Train personnel on the process

# STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

#### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Select work activities to be scheduled	T. Foster	40	1/15/96	2/1/96
2 Establish a common NPG framework to manage information.				
2.1 Identify information requirements.	L. Parks	120	12/1/95	2/1/96
2.2 Review information networking options (work with Information Services Management)				
2.2.1 Utilize in house MIS personnel to review and propose options	L. Parks	500	2/15/96	6/1/97
2.2.2 Outside expert review of existing system and proposal for most economical way to develop the necessary information network	T.Foster	500	2/15/96	6/1/96
2.3 Propose options to Management	T.Foster	80	6/1/96	8/1/96

### STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

Activity	Accountable Person	Hours	Start Date	End Date
2.4 Revise/implement system structure to network scheduling information	L. Parks	100	8/1/96	9/30/96
2.5 Review work order data base management system improvements				
2.5.1 Bench mark the industry on use of work order database manageme nt System	W. McKinzey	200	2/1/96	7/8/96
2.5.2 Utilize in house MIS personnel to review and propose options	L. Parks	500	2/15/96	7/6/96
2.5.3 Outside expert review of existing system and proposal for most economical way to develop the necessary work order data management system	T. Foster	500	2/15/96	7/6/96

## STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

Activity	Accountable Person	Hours	Start Date	End Date
2.6 Propose options to Management	T. Foster	80	N/A	8/1/96
2.7 Implementation of selected work order database Management System	W. McKinzey	100	8/1/96	12/15/96
3 Develop and implement tools for planning, estimation, and scheduling of routine and repetitive tasks				
3.1 Identify Routine and Repetitive tasks online	M.Unruh(1) W.McKinzey(2)	500	12/1/96	4/15/96
3.1.1 Capture duration and man-power requirements	M.Unruh(1) W.McKinzey(2)	500	5/15/96	7/15/96
3.1.2 Identify tasks that can be grouped.	M. Unruh(1) W.McKinzey(2)	100	7/15/96	9/15/96
3.1.3 Create off-the-shelf schedule library for above tasks	W.McKinzey	200	9/15/96	1/15/97
3.2 Evaluate use of On Line Risk Measurement Tools	W.McKinzey	100	1/15/96	3/15/96
3.3 Implement selected On Line Risk Measurement Tool	W.McKinzey	100	3/15/96	5/15/96

# STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

Activity	Accountable Person	Hours	Start Date	End Date
3.4 Identify routine and repetitive tasks (outage)	M.Unruh(1) D.Kuser(2)	200	1/15/96	3/15/96
3.4.1 Capture duration and man-power requirements	M.Unruh(1) D.Kuser(2)	100	3/15/96	5/15/96
3.4.2 Identify tasks that can be grouped	M.Unruh(1) D.Kuser(2)	200	5/15/96	9/15/96
3.4.3 Create of- the-shelf scheduled library for above tasks	M.Unruh(1) D.Kuser(2)	200	9/15/96	1/15/97
3.5 Develop formal training program for work planners	M.Unruh	60	11/1/96	2/1/97
3.6 Develop formal training program for system schedule	D.Kuser	60	11/1/96	2/1/97
4 Establish a program for continuously improving both Outage and On-line work performance	W.McKinzey			
4.1 Bench mark the industry performance	W.McKinzey	120	1/15/96	3/15/96

# STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: INTEGRATED PLANNING, SCHEDULING AND WORK CONTROL

i i	Activity	Accountable Person	Hours	Start Date	End Date
	4.2 Develop WC lessons Learned Program and associated analysis to ensure we're doing the right thing right	W.McKinzey	120	3/15/96	5/15/96
5	Train personnel on the process.	W. McKinzey	40	12/15/95	1/15/96

- (1) Planner
- (2) Scheduler

### PROGRAM TITLE

Budgeting and Resource Allocation

#### PROGRAM MANAGER

A. Dostal

### PROGRAM COMPLETION DATE

June 29, 1996

#### DESCRIPTION

This program is an integral part of the Resource Allocation and Work Management Strategy. An essential part of planning is the identification and verification of the availability of those resources necessary for the implementation of mission critical work. This program will identify the necessary processes, organizational interfaces, and requisite resources necessary to implement this function. A methodology will also be established as part of this process to monitor (in the interest of accountability) the use of resources against a long-range plan.

#### **OBJECTIVES**

Develop a process to allocate financial and human resources to support achievement of top level goals (SALP, Capacity Factor, \$/MWH).

As part of the resource allocation process, provide the appropriate information to allow management to best utilize the available financial and human resources to achieve the objectives specified by the business plan.

#### **ACTIVITIES**

- 1 Develop and implement process to allocate resources.
  - 1.1 Establish cost threshold criteria for evaluation.
  - 1.2 Draft a process structure that includes the criteria elements.
  - 1.3 Establish responsibilities for process ownership and management.
  - 1.4 Review industry approach to resource allocation.
  - 1.5 Write charter and procedures to support process activities.
  - 1.6 Implement process and enhanced scope review board.
  - 1.7 Perform iteration on 1996 NPG budget, taking recent projections into account.
- 2 Establish organization.
  - 2.1 Develop the organization mission and role.
  - 2.2 Develop organization structure to support resource allocation.
  - 2.3 Implement the new organization to support resource allocation.
- 3 Assess personnel and recruit.
  - 3.1 Conduct quick review of resources to identify greatest need and initiate search.
  - 3.2 Complete management requirements analysis.
  - 3.3 Conduct skill inventory.
  - 3.4 Augment existing Program Control staff.

- 4 Provide information for resource allocation and tracking
  - 4.1 Provide information to support the NPG budget process, including establishing baseload resource requirements and a bases for cost control over multiple-cycle planning time frames.
  - 4.2 Provide support for long range business planning.
- 5 Validate financial reporting tools and information.
  - 5.1 Interview managers to determine effectiveness and usability of information provided.
  - 5.2 Assess causes for budget overruns to determine if they are due to lack of information.
  - 5.3 Incorporate required changes into process, organization and tools.

## SCHEDULE

	Activity	Accountable Person	Hours	Start Date	End Date
1	Develop and implement the process				
	1.1 Establish cost threshold criteria for evaluation	A. Dostal	10	7/3/95	7/7/95
	1.2 Draft process structure	M. Dixon	40	7/3/95	7/28/95
	1.3 Establish responsibilities for process ownership and management	A. Dostal	20	7/10/95	7/28/95
	1.4 Review industry approach to resource allocation	M. Dixon	36	6/12/95	6/30/95
	1.5 Write charter and procedures to support process activities	M. Dixon	48	8/14/95	9/29/95
	1.6 Implement process and enhance scope review board	A. Dostal	200	12/15/95	4/96
	1.7 Revise 1996 budget	A. Dostal	100	7/28/95	9/29/95
2	Establish organization				
	2.1 Define the organizations mission and role	M. Dixon	160	7/3/95	7/31/95
	2.2 Develop organization structure to support resource allocation	A. Dostal	60	7/31/95	8/11/95
	2.3 Implement the new organization to support resource allocation	A. Dostal	160	8/14/95	9/29/95
3	Assess personnel and recruit				

	Activity	Accountable Person	Hours	Start Date	End Date
	3.1 Conduct quick review of resources to identify greatest need and initiate search	A. Dostal	80	6/12/95	6/30/95
	3.2 Complete management requirements analysis	A. Dostal	40	6/12/95	6/30/95
	3.3 Conduct skills inventory	M. Dixon	40	6/12/95	6/30/95
	3.4 Augment existing project controls staff	A. Dostal	80	6/12/95	8/31/95
4	Provide information for resource allocation and tracking				
	4.1 Provide information to support the NPG budget process	A. Dostal	80	10/2/95	12/29/95
	4.2 Provide support for long range business planning	M. Dixon	120	1/1/96	6/29/96
5	Validate financial reporting tools and information	A. Dostal	120	12/04/95	3/29/96
	5.1 Interview managers to determine effectiveness and usability of information provided	A. Dostal	40	1/1/96	1/31/96
	5.2 Assess causes for budget overruns to determine if due to lack of information	A. Dostal	20	12/4/95	1/31/96
	5.3 Incorporate required changes into process, organization and tools	A. Dostal	60	2/1/95	3/29/96

### PROGRAM TITLE

Elimination of Low Value Activities and Processes

#### PROGRAM MANAGER

R. Sessoms

#### PROGRAM COMPLETION DATE

December 1, 1996

#### DESCRIPTION

This program is established to identify, evaluate, and eliminate NPG activities and processes that are low in value when compared to other proposed activities; to identify and execute actions to cost optimize other services, activities, and processes where the execution of that opportunity would provide resource savings. Resource savings realized through these activities would be utilized to execute selected activities of higher priority and value or to acknowledge an associated budget reduction.

It is anticipated that this program will:

- 1 Establish an expectation for the continuous assessment of activities, processes, and services to identify those processes that can be eliminated or done more efficiently.
- Develop a process to capture, evaluate, prioritize, and execute the opportunities identified above and monitor the associated resource savings.
- Evaluate the effectiveness of this program contribution to the accomplishment of the NPG vision and goals and provide a recommendation for future direction.

#### **OBJECTIVE**

Ensure expenditures are more directly related to work activities that contribute to NPG's goals and priorities.

#### **ACTIVITIES**

- 1 Communicate Program Objectives and Expectations
  - 1.1 Develop a communications plan.
  - 1.2 Develop a briefing paper for management and supervision to be utilized for communicating to employees the attributes of employee performance that contribute to effective self-assessment of activities, processes, and services.
  - 1.3 Coordinate with MANAGEMENT PRACTICES AND SYSTEMS Program for Performance Measurement to incorporate related requirements into performance expectations.
  - 1.4 Execute communications.
  - 1.5 Evaluate effectiveness of communications and adjust as necessary.
- 2 Develop an approach to identifying and eliminating low value activities and processes
  - 2.1 Review approaches utilized by other companies. Examples may include:

"Low hanging fruit"
Quick Hit (GE WORK OUT PROCESS)
Reengineering Processes

2.2 Outline one or two approaches for teams to use as aids in identification.

- 2.3 Evaluate the value in providing training to enhance the use and effectiveness of the identified approach.
- 2.4 Evaluate the utilization of a Quality Improvement Process for implementation of this program.
- 3 Process Development
  - 3.1 Develop a process for candidate selection.

Identify criteria for candidate selection including candidates for elimination and those for cost optimization. Develop a priority system for candidates. Establish decision process for selection of candidates. Finalize and issue process description.

3.2 Establish mechanisms for recognition of employee participation.

Develop a potential list of recognition techniques. Select techniques and recommend for management approval. Finalize mechanisms.

3.3 Establish target savings goal

Set preliminary target for 95.

Monitor 95 target and set final 95 target goal.

Set 96 target.

Monitor and report 96 results.

- 3.4 Establish list of potential opportunities for elimination.
  - A Solicit ideas for candidate Activities and Processes.
  - B Develop list of potential candidates.
  - C Senior management to review and approve identified opportunities.
- 3.5 Execute those opportunities identified.
- 4 Evaluate Program effectiveness and provide recommendation for long term business Planning.

## SCHEDULE

	Activities	Accountable Person	Hours	Start Time	End
1	Communicate Program objectives and expections				
	1.1 Develop a communications plan	B.Yelkin	40	6/12/95	7/30/95
	1.2 Develop a briefing paper for mgmt. and supvr.	B.Yelkin	24	6/12/95	8/15/95
	1.3 Coordinate with Mgmt. Practices and Systems	R. Sessoms	24	8/15/95	10/15/95
	1.4 Execute communications	B.Yelkin	16	7/30/95	11/14/95
	1.5 Evaluate effectiveness of communications and adjust as necessary	R.Remmers B.Yelkin	32	9/29/95	12/15/95
2	Approach development				
	2.1 Review approaches utilized by other companies	R. Sessoms	24	7/30/95	10/1/95
	2.2 Outline one or two approaches for teams to use as aids in identification	R. Sessoms	20	9/29/95	12/1/95

	Activities	Accountable Person	Hours	Start Time	End
	2.3 Evaluate the value in providing training to enhance the use and effectiveness of the identified approach	R. Sessoms	20	9/29/95	12/10/95
	2.4 Evaluate using a Quality Improvement Process	R. Sessoms	20	9/29/95	3/1/96
3	Process development				
	3.1 Develop a process for candidate selection	S. Bray	20	6/12/95	8/15/95
	3.2 Establish mechanisms for recognition of employee	G.Schmielau	20	6/12/95	8/15/95
	3.3 Establish target saving goal	R. Sessoms	40	6/12/95	6/30/95
	3.4 Establish list of potential opportunities for elimination	R.Heywood D. Stemple S. Gayler	40	7/30/95	8/15/95
	3.5 Execute those opportunities identified	R. Sessoms	8	8/15/95	10/10/95

	Activities	Accountable Person	Hours	Start Time	End
4	Evaluate program effectiveness and provide recommendation for long term business planning	R. Sessoms	40	12/1/95	12/1/96

## STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: PARTNERING

### PROGRAM TITLE

Partnering

#### PROGRAM MANAGER

V. Kincheloe

#### PROGRAM COMPLETION DATE

October 1, 1996

### DESCRIPTION

The purpose of the plan is to identify and implement partnering arrangements to improve processes and reduce costs. This is an integral part of the Resource Allocation and Work Management Strategy.

This strategy includes internal (to the District) and external partnering arrangements. Critical attributes are the identification of shortfalls and strengths within the NPG, a willingness to export or share our strengths outside the NPG and identifying suitable vehicles to implement partnering agreements.

#### **OBJECTIVES**

Establish programs and actions to share and obtain resources to improve efficiency, quality, and performance while reducing costs.

#### **ACTIVITIES**

- 1 Utility Service Alliance (USA)
  - 1.1 Identify USA Project Leader and Site Representative
  - 1.2 Establish process regarding how requests for "services" per USA Agreement will be submitted and how to evaluate/approve services requested from other Alliance members.

## STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: PARTNERING

- 1.3 Identify potential NPG/NPPD exportable strengths for 1995 and 1996
- 1.4 Identify NPG needs for: 1995 (Pre-Outage), 1995 (Outage), 1996
- 1.5 Identify and address any Purchasing or Legal obstacles.
- 2 Investigate and implement other opportunities for risk sharing or partnering.
  - 2.1 Contact other utilities or corporations for examples of opportunities.
  - 2.2 Evaluate against NPPD needs
  - 2.3 Assess legal concerns and statutory limitations
  - 2.4 Initiate contracts with selected vendors for required services

## STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: PARTNERING

## SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Utility Service Alliance				
1.1 Identify USA Project Leader and Site Representative	J. Mueller			Complete
1.2 Establish process regarding how requests for "services" per USA agreement will be submitted and how to evaluate/approve services requested from other Alliance members.	V.Kincheloe	60	6/12/95	7/9/95
1.3 Identify potential NPG/NPPD exportable strengths for 1995 and 1996	P. Graham	30	6/15/95	7/14/95
1.4 Identify NPG needs for: 1995 (Pre-Outage), 1995 (Outage), 1996	V.Kincheloe	25	6/16/95	8/9/95
1.5 Identify and address any purchasing or legal obstacles.	F. Chittenden	60	6/15/95	8/18/95
2 Investigate and implement other opportunities for risk sharing				
2.1 Contact other utilities for examples of opportunities.	V.Kincheloe	100	8/1/95	12/20/95
2.2 Evaluate against NPPD needs	V.Kincheloe	60	11/25/95	1/25/96
2.3 Assess legal concerns or strategy improvements to risk sharing	F. Chittenden	100	1/10/96	2/8/96

## STRATEGY: RESOURCE ALLOCATION AND WORK MANAGEMENT PROGRAM: PARTNERING

Activity	Accountable Person	Hours	Start Date	End Date
2.4 Initiate contracts with selected vendors for required services	F. Chittenden	100	2/8/96	9/30/96

## 7.4 Continuous Improvement Strategy

This strategy is to improve NPG's performance continuously by routinely assessing performance (including review of operating experience) and identifying both improvements and problems. In addition, it reduces the impact and recurrence of problems. This strategy ensures actions are resolved effectively by follow-up and feedback after corrective actions.

The strategy is implemented through three programs:

- Corrective Action
- Operational Experience Review
- Assessments

Strategy Sponsor: R. Jones

## FIGURE 7.4 CONTINUOUS IMPROVEMENT Phase 3 Expanded View

#### **CONTINUOUS IMPROVEMENT**

follow-up.

[R. Jones]
STRATEGY: Continuously improve NPG's performance by routinely assessing performance, including review of operating experience, and identifying both improvements and problems. Reduce the impact and recurrence of problems, ensuring they are closed out effectively by

#### Corrective Actions

[C. Gaines]

Objective: Enhance the corrective action program and make it an integral line management function.

### Operational Experience Review

[J. Long]

Objective: Increase the availabilty of, usefulness of, and confidence in operating experience review information.

#### Assessments

[C. Moeller]

Objective: Improve the skills and tools available to line management for self-assessment.

STRATEGY: CONTINUOUS IMPROVEMENT
PROGRAM: CORRECTIVE ACTION

PROGRAM TITLE

Corrective Action

PROGRAM MANAGER

C. Gaines

PROGRAM COMPLETION DATE

August 9, 1996

#### DESCRIPTION

This Phase 3 plan will change the NPG focus on corrective action to one that strives for a proactive, event-free environment. This will be accomplished by streamlining the administrative processes in the CAP area while stressing line ownership of the Corrective Action Program. Phase 3 will also put into place a method to document and trend precursor events, equipment trends and root cause trends. Additionally the Human Performance program in place at CNS will be better defined. At the completion of this program, a process will be in place to identify areas which will require further investigation (common cause) to prevent significant events.

## This program includes:

- 1 Establishment of a Human Performance program at CNS that stresses eventfree operation.
- 2 Identification and reduction of recurring deficiencies or equipment failures via trending.
- 3 Maintaining safe operation of CNS through effective and timely root cause investigation.
- Establishment of CNS as an event-free site through implementation of a system to document and trend precursor events.
- 5 Streamlining of the CR administrative process to allow resources to be expended on direct work activities rather than the administrative process.

#### **OBJECTIVE**

Enhance the corrective action program and make it an integral line management function.

#### ACTIVITIES

- Develop a Human Performance Program which stresses Event Free Operations.
  - 1.1 Develop the fundamentals of an enhanced Human Performance program.
  - 1.2 Familiarize NPG personnel with the Human Performance Program.
  - 1.3 Benchmark the CNS program against the industry.
  - 1.4 Revise the CNS program, and controlling documents as warranted, to incorporate the best industry practices.

Trending
Documentation of near miss events
Human error prevention techniques

- 1.5 Evaluate the effectiveness of the Human Performance Program, with emphasis on line management involvement.
- Develop and implement an equipment trending program in conjunction with the rest of the site organization that either uses or provides input into equipment trending.
  - Establish an Equipment Trending Program Team to work this action item.
  - 2.2 Determine the aspects of equipment trending to be included in the scope of this action (e.g., maintenance work items, time out of service, LCO entries, CR's by category, performance, etc.).
  - 2.3 Determine the suppliers (those who provide information) and the customers (those who use information) of the trending established in Item 2.2 and the needs and constraints each have.

## STRATEGY: CONTINUOUS IMPROVEMENT PROGRAM: CORRECTIVE ACTION

- 2.4. Determine the platform for the equipment trending, develop input and output software for it, and implement the system.
- 2.5 Integrate the equipment trending program into site processes to eliminate unnecessary, redundant, or no-value-added work.
- 3 Enhance the effectiveness and timeliness of root cause investigation.
  - 3.1 Perform a program assessment
  - 3.2 Modify and conduct the Root Cause Investigator program as necessary
  - 3.3 Formalize the CAP mentoring process
  - 3.4 Formalize the CAP backend review process
- 4 Implement a system to document and trend precursor events.
  - 4.1 Perform an industry review to determine the best precursor trend methodologies.
  - 4.2 Integrate pre-cursor documentation & trending into CNS's programs (CAP/HPES) to facilitate event free operations.
- 5 Streamline the CR administrative process
  - 5.1 Perform a self-assessment of the administrative processes in the CAP. Ensure that the full spectrum of participants in the processes (in both supplier & customer roles) have input to the assessment
  - 5.2 Evaluate the self-assessment & implement improvements, including, but not limited to:

Further computerization of the processes Enhancing data display & retrieval Eliminating, restructuring, or combining steps of the processes

## STRATEGY: CONTINUOUS IMPROVEMENT PROGRAM: CORRECTIVE ACTION

- 6 Evaluate the full spectrum of CAP-related trends for value & effectiveness
  - 6.1 Review all CAP-related trends being maintained (including but not limited to root cause, pre-cursor, equipment, human performance, CR processing timeliness, CR category distribution, and station performance indicators). Evaluate them each for the value provided (in relation to the cost of producing them) and for how effective they each are in conveying the desired information
  - 6.2 Sample & evaluate what CAP-related trends are being maintained by other plants against the same criteria as used with the CNS trends
  - 6.3 Implement changes in the CAP-related trends as determined appropriate following completion of actions 6.1 & 6.2

## SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Develop a Human Performance Program which stresses Event Free Operations.				
1.1 Develop a Human Performance "Directive"	M. Gillan	200	6/12/95	7/31/95
1.2 Provide NPG indoctrination.	M. Gillan	100	8/1/95	8/28/95
1.3 Benchmark the CNS program against the industry.	M. Gillan	320	8/28/95	1/26/96
1.4 Revise the CNS program.	M. Gillan	160	1/29/96	4/30/96
1.5 Evaluate the effectiveness of the Human Performance Program.	M.Gillan	160	7/5/96	8/9/96
2 Develop and implement an equipment trending program.				
2.1 Establish Equipment Trending Program Team.	T. Hough	20	6/12/95	6/15/95
2.2 Determine aspects of equipment trending to be included in program.	T. Hough	240	6/16/95	7/15/95
2.3 Determine equipment trending suppliers & customers.	T. Hough	160	6/16/95	8/15/95
2.4 Develop & implement system.	T. Hough	640	8/15/95	2/15/96
2.5 Integrate the equipment trending program into site processes	T. Hough	320	1/1/96	4/15/96

## STRATEGY: CONTINUOUS IMPROVEMENT PROGRAM: CORRECTIVE ACTION

Activity	Accountable Person	Hours	Start Date	End Date
3 Enhance the effectiveness and timeliness of root cause investigation.				
3.1 Modify and conduct the Root Cause Investigator program as necessary.	C. Quimby	60	6/15/95	8/15/95
3.2 Formalize the CAP mentoring process.	C. Quimby	80	6/12/95	7/27/95
3.3 Formalize the CAP backend review process.	C. Quimby	40	6/12/95	8/16/95
3.4 Perform a program assessment.	C. Quimby	120	1/2/96	3/15/96
4 Implement a system to document and trend pre-cursor events.				
4.1 Perform an industry review of pre-cursor trend methodologies.	T. Hough	160	8/1/95	9/25/95
4.2 Integrate pre-cursor into CNS programs to facilitate event free operations.	T. Hough	160	12/4/95	3/5/96
5 Streamline the CR administrative process.				
5.1 Perform self-assessment of the CAP admin. processes.	C. Quimby	160	9/1/95	10/1/95
5.2 Implement improvements to the CAP admin process based on the self-assessment.	C. Quimby	120	10/1/95	2/15/96

Activity	Accountable Person	Hours	Start Date	End Date
6 Evaluate the full spectrum of CAP-related trends for value & effectiveness.				
6.1 Review all CAP-related trends being maintained. Evaluate them each for the value provided and for how effective they each are.	P. Wade	80	7/19/95	8/16/95
6.2 Sample & evaluate what CAP-related trends are being maintained by other plants.	P. Wade	80	6/12/95	7/19/95
6.3 Implement changes in the CAP-related trends as determined appropriate following completion of actions 6.1 & 6.2.	P. Wade	160	8/16/95	1/15/96

#### HPES Team:

Mark Gillan, Dave Montgomery, Corey Kelsey, Bob Slama

## Corrective Action Program Team:

Phillip Wade, Howard Smith, LuAnn Bray, Don Reeves, Tom Carson, Steve Smallfoot, Cal Taylor

## **Equipment Trending Team:**

Ted Hough, Phillip Wade, Mike Unruh, Engineering Support Person (TBD, per Mike Boyce)

#### PROGRAM TITLE

Operating Experience Review

### PROGRAM MANAGER

J. Long

### PROGRAM COMPLETION DATE

July 31, 1996

#### DESCRIPTION

Integrate the use of industry operating experience (OE) into the day-to-day operation of the NPG. An effective operating experience review (OER) program is responsive to plant problems and issues in a real-time continuum and provides methods to analyze both in-house and industry events to identify station-specific actions needed to prevent the occurrence of similar events. Effective communication of pertinent operating experience information is critical to the value added by the OER process. The OER program is enhanced by regular and frequent use of multiple sources of information, including the Nuclear Plant Reliability Data System (NPRDS).

## This program aims to:

- 1 Reassess historical OE reviews in order to increase confidence that actions taken and lessons learned will avoid recurring NPG or industry deficiencies or failures.
- 2 Eliminate the NPRDS backlog and make the associated knowledge available to the organization in order to reduce recurring equipment failures.
- Improve the OE review process, communication, application, and acceptance in order to use OE experience more effectively to avoid recurring deficiencies and failures, to enable the NPG to find its own problems, to increase vigilance with respect to emerging industry issues, and to integrate industry experience into self-assessments.

#### **OBJECTIVE**

Increase the availability of, usefulness of, and confidence in operating experience review information.

#### **ACTIVITIES**

The activities to achieve the objectives of this program plan include:

### Historical OE review

The overall philosophy of this review is that only documents that directly contribute to the NPG top level goals of nuclear safety, plant reliability, and economic performance will receive the highest level of review. Within these parameters, the review will focus on documents related to current or recent CNS performance issues, documents directly applicable to CNS systems or equipment, and documents which are considered especially important by virtue of their type (i.e., generic letters, NRC bulletins, and SOERs).

As much as practicable, documents relating to similar events or issues will be reviewed as a group. The review effort will take advantage of document reviews recently conducted, such as during the design basis reconstitution effort or as the result of a Condition Report investigation. While the CNS OER Group will provide overall guidance and direction for the effort, reviews will actually be conducted by personnel most appropriate for the task; for example, if a group of documents to be reviewed is closely aligned with another phase 3 program, the review may be performed as a part of that program plan.

A general outline of the activities required to achieve this philosophy is as follows:

- 1.1 From the list of document types currently included in the CNS OER process and licensing area, identify the types of documents to be included in the scope of the review. Present a screening process to senior management that meets our OE review commitment.
- 1.2 Conduct an initial screen, using the results of the 1994 OER startup review, to determine which documents can be immediately eliminated from further consideration. Develop the remaining guidance for reviews and communicate the plan for meeting our commitment.
- 1.3 Identify the initial list of documents to be reviewed and group them according to event or issue. Develop guidance for reviewing events or issues.
  - 1.3.1 Conduct a review of current and recent CNS performance.
    From the types of problems or issues present, identify the OE documents that have dealt with similar problems in the industry
  - 1.3.2 Identify documents that deal with issues that are directly applicable to CNS (e.g., by virtue of equipment vendor)
  - 1.3.3 Identify the remaining high level documents (generic letters, NRC bulletins, and SOERs)
  - 1.3.4 Consolidate the documents selected into groups by event or issue
- 1.4 Review the events or issues identified against the top level NPG goals; eliminate from further consideration those events or issues that do not directly impact achieving these goals
- 1.5 Identify those events or issues that have been recently reviewed by other processes or programs. Validate that the reviews conducted meet the needs of the OE historical review effort. Take additional action, as appropriate

- 1.6 Identify the appropriate organizations to review each remaining group of documents. Work with the organizations to define the required level of detail for the review and gain their acceptance for work to be done. The OER Group will retain overall responsibility for the reviews, utilizing the technical organizations to provide evaluation, assessment, and action plan development input
- 1.7 Conduct the reviews under the guidance and direction of the OER Group
- 1.8 OER Group review the results of the reviews, determine the need for additional actions, and document the results of the review effort
- 1.9 Conduct a review of a portion of the documents not subjected to the detailed review above to gain additional assurance that adequate consideration has been given to the entire OE document population

## 2 OER process improvement

The approach to improving the OER process will include application of state-of-the-art process management principles to evaluate the current process and incorporate improvements, as appropriate. This effort will include evaluation of the OE document review process and evaluation of how industry operating experience is communicated throughout the NPG.

Activities accomplished to support this approach are as follows:

Designated a process improvement team under OER Supervisor direction

Assessed the current OER process, both as proceduralized and as performed

Interviewed users of operating experience to determine their information needs and their assessment of the current process

Benchmarked the CNS process against other utilities

Identified possible process improvements

Piloted selected improvements, continuously evaluating and adjusting the new techniques, as appropriate

### The following is needed:

- 2.1 Incorporate process enhancements into station procedures
- 2.2 Communicate process changes to NPG personnel
- 2.3 Perform a self assessment of OER program effectiveness
- 2.4 Conduct a peer evaluation of OER program effectiveness

## 3 NPRDS backlog reduction

Steps will be undertaken to reduce the number of component failure reports and equipment identification records awaiting entry into NPRDS. Additionally, cross-functional training will be administered to broaden the knowledge and use of NPRDS by the NPG and various instructions and procedures will be updated to include cross-references to NPRDS requirements.

### Detailed activities include:

- 3.1 Conduct shop training to educate personnel on NPRDS functions and how NPRDS can be used to facilitate maintenance activities
- 3.2 Develop an Engineering Department Instruction outlining the NPRDS requirements
- 3.3 Develop an NPRDS users guide to assist personnel in collecting the appropriate data for input into the system
- 3.4 Identify NPRDS interface requirements with other procedures and instructions

- 3.5 Eliminate the backlog of NPRDS failure reports
- 3.6 Implement the latest revision to the NPRDS Component Scoping Manual
- 3.7 Develop the NPRDS interface requirements
- 3.8 Eliminate the component equipment identification record backlog
- 3.9 Communicate program changes to NPG personnel

## SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
Historical OE Review	D. Reeves			
1.1 ID document types	D. Reeves	8	6/12/95	7/31/95
1.2 Initial screen	D. Reeves	264	8/1/95	8/31/95
1.3 ID documents to review	D. Reeves			
1.3.1 Performance review	D. Reeves	504	8/1/95	10/31/95
1.3.2 ID CNS specific documents	D. Reeves	504	11/1/95	12/31/95
1.3.3 High level document review	D. Reeves	168	1/1/96	1/31/96
1.3.4 Consolidate documents	D. Reeves	336	1/15/96	6/30/96
1.4 Filter against NPG goals	D. Reeves	144	2/15/96	3/15/96
1.5 ID issues recently reviewed	D. Reeves	144	3/15/96	3/31/96
1.6 ID evaluation teams	D. Reeves	72	4/1/96	4/10/96

Activity	Accountable Person	Hours	Start Date	End Date
1.7 Conduct reviews	D. Reeves	8000	4/10/96	6/21/96
1.8 Review results	D. Reeves	504	6/1/96	6/30/96
1.9 Review additional documents	D. Reeves	672	7/1/96	7/31/96
2. OER Process Improvement	J. Long			
2.1 Incorporate improvements	J. Long	4	6/12/95	6/30/95
2.2 Communicate changes	J. Long	20	Periodically	6/30/95
2.3 Perform self assessment	J. Long	20	8/8/95	8/10/95
2.4 Conduct peer evaluation	J. Long	240	9/26/95	9/28/95
3. NPRDS Backlog Reduction	S. Freborg			
3.1 Conduct shop training	S. Freborg	80	6/12/95	7/31/95
3.2 Develop NPRDS EDI	S. Freborg	240	6/12/95	11/9/95
3.3 Develop NPRDS Users Guide	S. Freborg	240	6/12/95	11/9/95
3.4 ID NPRDS interface req'ts	S. Freborg	40	6/12/95	6/19/95

Activity	Accountable Person	Hours	Start Date	End Date
3.5 Eliminate failure report backlog	S. Freborg	750	6/12/95	1/9/96
3.6 Implement CSM revision	S. Freborg	40	6/12/95	6/30/95
3.7 Develop interface requirements	S. Freborg	100	6/12/95	8/31/95
3.8 Eliminate EIR backlog	S. Freborg	240	1/10/96	7/9/96
3.9 Communicate changes	S. Freborg	50	6/12/95	7/9/96

#### PROGRAM TITLE

Assessment

PROGRAM MANAGER

C. Moeller

PROGRAM COMPLETION DATE

June 30, 1996

#### DESCRIPTION

As part of the Continuous Improvement Strategy, a critical self-assessing attitude will be established within the NPG as demonstrated through improved processes and products, and reductions in the impact and recurrence of problems. During Phase 3, the Self- Assessment Program developed under the Phase 2 Plan will be further enhanced and implemented within the organization. This will be accomplished by: 1) developing in each department essential skills required to create and maintain effective self-assessment activities; and 2) facilitating self-assessments of key processes and programs having significant operational impact as identified in the Operations Critical Work Processes Phase 3 Plan. Implementation will be focused through departmental self-assessment action plans that provide detail and scope based on each department's role and function within the NPG organization. The Independent Review Group (IRG) will play a pivotal role through facilitating the development of departmental self-assessment action plans, mentoring departmental assessment teams, and serving as a self-assessment resource for the line organization.

This Phase 3 Plan, integrated with the Corrective Action and Operating Experience Review Plans, will produce a culture which seeks event-free operations at CNS through continuous improvement at all levels of the organization.

This program includes:

- Develop self-assessment action plans for each department based on its processes, products, and customers, and provide the tools necessary for departments to identify, schedule, and perform self-assessments in order to promote the Nuclear Power Group finding its own problems by creating an environment where self-assessment and a questioning attitude are used to recognize weaknesses and improvement opportunities.
- 2. Facilitate self-assessments of key processes and programs identified in the Operations Critical Work Processes Phase 3 Plan in order to achieve focused improvement on those processes and programs critical to the safe and efficient operation of Cooper Nuclear Station such that safe operations becomes the central focus of the Nuclear Power Group.
- Promote the benefits of a self-assessment culture and equip key personnel with the tools necessary to implement the Self-Assessment Program effectively in order to achieve personal ownership and responsibility for work safety, quality, and efficiency in all employees.
- Periodically monitor improvements in the self-assessment culture within the NPG in order to gauge the effectiveness of management in communicating and enforcing expectations with regard to self-assessment and a questioning attitude.

#### **OBJECTIVE**

Improve the skills and tools available to line management for self-assessment.

#### ACTIVITIES

1. The IRG will assist managers in developing their departmental self-assessment action plans and provide the tools necessary to identify when an assessment would be beneficial, establish scope, define team composition, and evaluate findings. These plans will also provide for assessments of organizational effectiveness when required (e.g., the engineering organizational assessment included in the Organizational Focus Phase 3 Plan). To ensure that assessments are used to recognize improvements opportunities as well as problems, the plans will go beyond compliance issues. This will be

accomplished by each department focusing on their customers and products using tools such as performance indicators, corrective action program trends, operating experience, industry peers, etc. Where practical, assessments will focus on the process in addition to the product. Actions required to develop the departmental plans are summarized below:

- 1.1 Generate a schedule for working with each department to develop their departmental self-assessment action plan. The schedule must be aggressive while integrating with other Phase 3 Plans, departmental reorganizations, the refueling outage, etc.
- 1.2 Create the generic strategy to be used for developing the departmental self-assessment action plans. Although each plan will be tailored to the department's role and function within the Nuclear Power Group, the steps taken by the IRG to develop the plan will be similar.
- 1.3 Interface with each department manager to:
  - Provide an overview of the methodology to be taken to develop the departmental plan.
  - Obtain a point of contact who will coordinate the department efforts during plan development.
  - Gain concurrence and support for the draft schedule.
- 1.4 Finalize and implement the strategy and schedule for developing departmental self-assessment plans.
- The IRG will facilitate self-assessments of key processes and programs. Areas
  for assessment and schedule development are addressed in the Operations
  Critical Work Processes Phase 3 Plan.
- 3. The IRG will promote the benefits of a self-assessment culture and equip key personnel with the tools necessary to effectively implement the Self-Assessment Program. The concept of event free operation through continuous improvements to significant operations and processes will be stressed. This will be accomplished through the following actions:

#### STRATEGY: CONTINUOUS IMPROVEMENT PROGRAM: ASSESSMENT

- 3.1 Develop methods to enhance employee awareness of the benefits of self-assessment. This would include articles in the NPG Overview, direct mailings, posters, etc.
- 3.2 Emphasize the benefits of self-assessment in the Indoctrination Training being developed to replace portions of the current GOT Program (for example, the portions dealing with the Corrective Action Program).
- 3.3 Interface with department managers to identify the target population for self-assessment training.
- 3.4 Develop self-assessment training that includes assessment fundamentals, process analysis techniques, performance indicator development and use, etc. Where possible, the training will build on, and matrix with, other existing training lesson plans. Note that the IRG will work closely with Training in lesson plan development and will continue to provide departmental coaching in this area until the training lesson plan is implemented.
- 3.5 Schedule and conduct the training.
- Assess the effectiveness of improvements in the Program, including changes in NPG culture.

#### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
Develop Departmental     Action Plans				
1.1 Generate Schedule	C.Moeller	10	6/12/95	6/19/95
1.2 Create Strategy	C.Moeller	20	6/12/95	6/19/95
1.3 Interface With Managers	C.Moeller	40	6/12/95	6/26/95
1.4 Finalize & Implement	C Moeller	2400	6/26/95	3/30/96
2. Support Cross- Functional Assessments (See Operations Critical Work Processes Phase 3 Plan)				
Promote Benefits &     Provide Training				
3.1 Enhance Employee Awareness	C.Moeller	80	7/5/95	7/31/95
3.2 Incorporate Self- Assessment Into Indoctrination Training	J.Dutton	80	9/4/95	10/6/95
3.3 Identify Target Population	C. Moeller	40	9/4/95	9/18/95
3.4 Develop Self- Assessment Training	J. Dutton	200	9/4/95	12/31/95
3.5 Schedule & Conduct Training	J.Dutton	100	1/2/96	4/1/96

#### STRATEGY: CONTINUOUS IMPROVEMENT PROGRAM: ASSESSMENT

Activity	Accountable Person	Hours	Start Date	End Date
4. Assess Program & Culture Change	C.Moeller	40	6/1/96	6/30/96

#### 7.5 Management Practices and Systems Strategy

This strategy implements systems and practices that communicate and link the NPG vision and business objectives to individual performance expectations and accountability.

The strategy is implemented through six programs:

- Business and Strategic Planning
- Setting Management Expectations
- Performance Management
- Performance Appraisal
- · Incentive System
- Management Information Systems for Management

Strategy Sponsor: J. Herron

FIGURE 7.5
MANAGEMENT PRACTICES AND
SYSTEMS
Phase 3 Expanded View

### MANAGEMENT PRACTICES AND SYSTEMS

[J. Herron]

STRATEGY: Implement systems and practices that communicate and link the NPG vision and business objectives to individual performance expectations and accountability

#### **Business and Strategic Planning**

[J. Dillich]

Objective: Develop and implement an integrated management planning process that monitors CNS and industry performance and adjusts plans accordingly.

#### **Setting Management Expectations**

[E. Mace]

Objective: Establish a process for management expectations to be identified, communicated and enforced.

#### Performance Management

[V. Kincheloe]

Objective: Develop a performance indicator program that provides feedback to management and employees.

#### Performance Appraisal

[M. White]

Objective: Develop and implement a performance appraisal system that ensures individual managers and employees are accomplishing organizational goals.

#### Incentive System

[M. White]

Objective: Develop an incentive system that encourages managers and employees to exert maximum effort to achieve organizational goals.

#### Information Systems for Management

[T. Hottovy]

Objective: Provide the appropriate information tools that enable NPG management to monitor performance and adjust priorities in order to achieve NPG goals.

#### PROGRAM TITLE

Business and Strategic Planning

#### PROGRAM MANAGER

J. Dillich

#### COMPLETION DATE

December 31, 1996

#### DESCRIPTION

A map must be used when travelling the road of continuous improvement. The NPG's business plan will provide that map. The District must be run as a competitive business and the NPG needs to make periodic assessments (internal and external) in order to chart its course. The purpose of the Business Plan is to provide an up-to-date strategy for achieving fundamental goals.

NPG performance must support the District's goals. To focus NPG's efforts, we must achieve and maintain top performance compared to other producers of electricity in the areas of safety, generation and cost. The top level quantifiable measures in these area are NRC SALP ratings, capacity factor and plant production costs. These performance measures provide consistent industry-wide indicators of CNS performance.

Top performance in all three areas is needed for long-term success. A cornerstone of NPG strategic planning hinges on the renewal of long-term contracts for electric power in the early part of the 21st century. It is expected that any future contracts will be based solely on sound financial grounds.

#### **OBJECTIVES**

Develop and implement an integrated management planning process that periodically monitors CNS and industry performance and adjust plans and strategies accordingly to achieve an advantage over our competition.

### STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: BUSINESS AND STRATEGIC PLANNING

#### ACTIVITIES

- 1 Assign responsibility for the development and implementation of the core business planning process. Schedule and conduct bench-marking.
- Assemble a diverse team and become familiar with the ways of developing/implementing a Business Plan. Determine the preferred kind of business plan and make recommendations accordingly.
- 3 Develop a formal planning process that incorporates:
  - Long-range planning
  - Resource allocation
  - Ownership of the Business Plan
  - Periodic feedback and assessment
  - Business Risk Management
- Implement the planning process for the planning period beginning in 1997; develop the initial business plan; incorporate any activities remaining in the Phase 3 Plan to be completed.
- Readjust the business plan process based upon competitive developments, NPG performance, approaches used in other top-performing companies, and experience in 1996. Develop and issue the plan for the planning period beginning in 1997.

## STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: BUSINESS AND STRATEGIC PLANNING

#### SCHEDULE

Activity	Person	Hours	Start	End
1	J. Dillich	40	7/1/95	9/30/95
2	J. Dillich	80	7/15/95	9/30/95
3	J. Dillich	160	4/1/96	4/30/96
4	J. Dillich	400	5/1/96	7/31/96
5	J. Dillich	160	5/1/96	11/30/96

#### NOTE:

It is expected that the competitive positioning strategy (CPS) and NPPD strategic planning may go hand-in-hand with some aspects of this plan.

#### PROGRAM TITLE

Setting Management Expectations

#### PROGRAM MANAGER

E. Mace

#### PROGRAM COMPLETION DATE

December 20, 1996

#### DESCRIPTION

This aspect of the Phase 3 Plan is to continue to improve NPG teamwork, ownership and accountability. This will be accomplished through frequent communication management expectations, to improve workforce performance and keep personnel appraised of progress during the Phase 3 Plan.

Management most provide focus and communicate expectations related to teamwork, ownership, and accountability. Expectations are to be identified, communicated, and enforced to enable employees to accept ownership and personal responsibility for their work.

Management expectations that spell out standards of performance are well-established and documented. These policies are clearly communicated and are well-understood by all personnel and are routinely reinforced in training and in the daily conduct of business. There is continuity of fundamental beliefs at each level within the organization

Management practices encourage communication and require teamwork among groups that operate, maintain, and support the overall "team", with successful operation of the plant being a common goal. Management conscientiously examines issues on an ongoing basis.

#### **OBJECTIVE**

Establish a process for management expectations to be identified, communications and enforced.

#### **ACTIVITIES**

- 1 Communications to the NPG workforce long-term goals and objectives and the Phase 3 Plan.
  - 1.1 Develop management presentation focused on the top three goals.

    Provide an overview of the Phase 3 Plan
    - 1.1.1 Department Managers express their current expectations
  - 1.2 Institute a quarterly status meeting with all employees (cross-discipline attendance). Consider using senior management for presentation.
  - 1.3 Provide NPG Phase 3 Plan Orientation to new employees
  - 1.4 Provide expectations for the fall outage to all workers.
- 2 Conduct workshops to establish and set key management expectations
  - 2.1 Conduct Senior Management workshops to:
    - 2.1.1 Clearly define teamwork, accountability and ownership
    - 2.1.2 Establish management key expectations
  - 2.2 Conduct manager workshops with Senior Management to:
    - 2.2.1 Finalize items discussed in the Senior Management workshops
    - 2.2.2 Communicate plan to convey key management expectations to the existing workforce and new employees

- 2.3 Conduct Supervisor workshops with Managers to :
  - 2.3.1 Finalize communications plan
  - 2.3.1 Review and discuss key management expectations to ensure continuity and a clear understanding (provide clear examples where appropriate)
- 2.4 Conduct tailgate sessions led by Supervision to:
  - 2.4.1 Communicate management expectations
- 2.5 Develop methods to continuously identify and communicate new management expectations.
- 3. Revise semi-annual "culture index" surveys
  - 3.1 Incorporate into the survey the determination of effectiveness of management communications, paying particular attention to:
    - 3.1.1 Management expectations
    - 3.1.2 Teamwork, ownership, and accountability
    - 3.1.3 Phase 3 planning
  - 3.2 Establish a feedback mechanism to NPG management for survey results
- Develop an environment and the skills for the workforce to improve teamwork, ownership and accountability
  - 4.1 Conduct cross-discipline team skills training
  - 4.2 Evaluate and develop, where appropriate, a self-directed team approach to plant activities

- 4.3 Provide recommendations to the self assessment program to ensure it:
  - 4.3.1 Evaluates the elements of teamwork, ownership, and accountability
  - 4.3.2 Conducts departmental assessments of performance with input from other departments
  - 4.3.3 Assesses programs and processes to push accountability lower in organization to develop a stronger sense of ownership

#### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Communicate to and educate the workforce in the NPG long-term goals and objectives and Phase 3 Plan				
1.1 Develop management presentation focused on the top three goals, plus an overview of the Phase 3 Plan, upcoming outage expectations and current key performance expectations	J. Dillich	16	6/12/95	8/31/95
1.2 Institute a quarterly status meeting with all employees (cross discipline attendance)	E. Mace	30	7/1/95	9/30/95
1.3 Provide NPG Phase 3 Plan Orientation to new employees	M. White	16	6/12/95	6/26/95
1.4 Provide Fall Outage expectations	E. Mace	24	7/1/95	9/30/95

	Activity	Accountable Person	Hours	Start Date	End Date
2	Conduct workshops to establish and set key management expectations				
	2.1 Conduct Senior Mgmt. workshops	E. Mace	72	1/8/96	1/22/96
	2.2 Conduct Mgr. workshops with Sr. Mgmt.	E. Mace	36	2/12/96	2/26/96
	2.3 Conduct Supv. workshops with Mgrs.	E. Mace	36	3/11/96	3/25/96
	2.4 Conduct tailgate sessions led by Supervision	E. Mace	100	4/8/96	5/3/96
	2.5 Develop methods	E. Mace	40	4/8/96	5/17/96
3	Revise semi-annual "culture index" surveys				
	3.1 Incorporate into the survey the determination of the effectiveness of management communications	S. Bray	24	6/19/95	6/30/95

	Activity	Accountable Person	Hours	Start Date	End Date
	3.2 Establish a feedback mechanism to NPG Management for survey results	S. Bray	24	7/5/95	7/14/95
4.	Develop an environment and the skills for the workforce to improve teamwork, ownership, and accountability				
	4.1 Conduct cross-discipline team skills training	B. Ackerman	400	6/26/95	1/15/96
	4.2 Evaluate and develop, where appropriate, a self-directed team approach to plant activities	E. Mace	200	6/30/94	12/20/96
	4.3 Recommend to the self assessment program	C. Moeller	100	8/1/95	2/1/96

### STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: PERFORMANCE MANAGEMENT

#### PROGRAM TITLE

Performance Management

#### PROGRAM MANAGER

V. Kincheloe

#### PROGRAM COMPLETION DATE

February 28, 1996

#### DESCRIPTION

This program will establish performance indicators to monitor and sustain long-term improvement of CNS in meeting its goals for safety, plant, and commercial performance. Additionally, the program will establish mechanisms to assess the effectiveness of the indicators and establish new performance indicators as needed. This program supports the Management Practices and Systems Strategy by establishing performance standards linked to the NPG vision and business objectives.

#### **OBJECTIVES**

Develop a performance indicator program that provides management and employees with accurate and timely feedback in order to keep focused on safe operations, promote accountability, provide a rational basis for management decisions, and communicate results inside and outside NPG.

#### **ACTIVITIES**

- 1 Review criteria for selection of performance indicators. Evaluate the performance indicators presently in use and recommend any changes to senior management.
- 2 Implement approved changes to the performance indicator system.
- 3 Communicate program concept, procedures, and expectations to plant personnel in conjunction with the Phase 3 Plan setting management expectations.

#### SCHEDULE

#### STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: PERFORMANCE MANAGEMENT

#### SCHEDULE

Activities	Accountable Person	Hours	Start	End
1 Revise criteria for selection of performance indicators. Evaluate performance indicators presently in use and recommend any changes to senior management.	V. Kincheloe	80	6/12/95	7/31/95
2 Implement approved changes to the performance indicator system.	V. Kincheloe	40	8/1/95	8/30/95
3 Communicate program concept, procedures, and expectations to plant personnel	E. Mace	80	12/15/95	2/28/96

#### PROGRAM TITLE

Performance Appraisal

PROGRAM MANAGER

M. White

#### PROGRAM COMPLETION DATE

January 31, 1997

#### DESCRIPTION

A critical element in achieving Phase 3 performance objectives will be the effective performance of all CNS managers and employees. Performance standards that are linked directly to organizational goals and objectives must be established and communicated to all levels of employees, and individual employee performance must be measured against established standards.

Individual employee strengths and weaknesses must be identified and communicated to employees in a timely, consistent manner to encourage positive performance and correct deficiencies.

An effective performance evaluation system must be developed that (1) ties individual performance to the accomplishment of organizational objectives, (2) accurately measures and feeds back individual performance to employees in a timely manner, (3) ties rewards to performance, and (4) provides for employee development.

#### **OBJECTIVES**

Develop and implement a performance appraisal system that ensures individual managers and employees are accomplishing organizational goals and objectives, challenges and develops individuals to achieve their maximum potential, promotes accountability, and communicates expectations.

#### **ACTIVITIES**

- Develop and implement a performance appraisal process that establishes correct competencies, is simple to use, provides honest feedback, ties rewards to performance and is linked to NPG goals and objectives.
  - 1.1 Managers & Supervisors: Implement the "Enhanced Performance Appraisal System For Managers/Supervisors" recently approved.
    - 1.1.1 Secure approval to conduct all manager and supervisor evaluations during September of each year.
    - 1.1.2 Solicit input from Phase 3 teams working to determine appropriate organizational goals and objectives.
    - 1.1.3 Meet with senior managers and managers to determine appropriate performance objectives for managers and supervisors to meet or exceed established organizational goals/objectives.
    - 1.1.4 Train senior managers and managers to use the new performance evaluation system.
    - 1.1.5 Communicate new performance expectations and evaluation procedures to managers and supervisors who will be evaluated under the new system.
    - 1.1.6 Facilitate the presentation of individual performance objectives to each manager/supervisor to be evaluated under the new system.
    - 1.1.7 Evaluate managers and supervisors under the new system.

- 1.2 Non-Managerial/Supervisory Exempt Employees: Develop a performance evaluation system similar to the enhanced system for managerial/supervisory employees and implement.
  - 1.2.1 Meet with managers, supervisors and incumbents to determine correct competencies for non-managerial/supervisory exempt employees.
  - 1.2.2 Secure approval to conduct all non-managerial/supervisory exempt employee evaluations during September of each year.
  - 1.2.3 Present recommended performance appraisal system for non-managerial/supervisory exempt employees to senior management for final approval.
  - 1.2.4 Meet with supervisors to determine appropriate performance objectives for non-managerial/supervisory exempt employees to meet or exceed established organizational goals/objectives.
  - 1.2.5 Train supervisors to use the new performance evaluation system.
  - 1.2.6 Communicate new performance expectations and evaluation procedures to non-managerial/supervisory exempt employees.
  - 1.2.7 Facilitate the presentation of individual performance objectives to each non-managerial/supervisory exempt employee to be evaluated under the new system.
  - 1.2.8 Evaluate non-managerial/supervisory exempt employees under the new system.

- 1.3 Non-Exempt Employees: Develop a performance evaluation system for non-exempt employees that is consistent with the goals and objectives of this Phase 3 Plan.
  - 1.3.1 Evaluate most effective method for scheduling non-exempt performance appraisals to enhance pay for performance criteria
  - 1.3.2 Solicit performance appraisal systems from other top quartile nuclear facilities and evaluate.
  - 1.3.3 Evaluate the effectiveness of the enhanced performance evaluation systems for managerial, supervisory and exempt employees to determine the appropriateness of using similar formats for non-exempt employees.
  - 1.3.4 Develop a performance appraisal system for non-exempt employees that meets established objectives.
  - 1.3.5 Present recommended non-exempt performance appraisal system to senior management for approval.
  - 1.3.6 Meet with supervisors to determine appropriate performance objectives for non-exempt employees to meet or exceed established organizational goals/objectives.
  - 1.3.7 Train supervisors to use the new non-exempt performance appraisal system.
  - 1.3.8 Communicate new performance expectations and evaluation procedures to non-exempt employees.
  - 1.3.9 Facilitate the presentation of individual performance expectations to each non-exempt employee who will be evaluated under the new system.
  - 1.3.10 Evaluate non-exempt employees under the new system.

- Develop methodology for periodically re-evaluating the performance appraisal system and determining its effectiveness in achieving organizational objectives and developing employee skills/competencies
  - Develop method for ongoing assessment through performance evaluation feedback.
    - 2.1.1 Develop assessment method and conduct first review.
    - 2.1.2 Conduct second review.
  - 2.2 Periodic evaluation/review by Senior Management

#### SCHEDULE

Activities	Accountable Person	Hours	Start	End
1 Develop and implement a performance appraisal process that establishes correct competencies, is simple to use, provides honest feedback, ties rewards to performance and is linked to NPG goals and objectives.	M. White			
1.1  Managers/Supervisors: Implement "Enhanced Performance Appraisal System For Managers & Supervisors."	M. White			
1.1.1 Secure approval to conduct all manager & supervisor appraisals during September.	M.White	20	6/12/95	6/30/95
1.1.2 Solicit input from Phase 3 teams to determine appropriate organizational goals & objectives.	M. White	40	6/12/95	7/31/95

Activities	Accountable Person	Hours	Start	End
1.1.3 Meet with senior managers and managers to determine appropriate individual performance objectives for managers and supervisors to meet or exceed org. goals & objectives.	M.White & J.Dillich	40	6/12/95	7/31/95
1.1.4 Train senior managers and managers to use the new performance appraisal system.	J. Douglas	100	6/12/95	8/31/95
1.1.5 Communicate new performance expectations and appraisal system to managers & supervisors to be evaluated.	M. White	40	6/12/95	7/31/95
1.1.6 Facilitate the presentation of individual performance objectives to each manager/supervisor to be evaluated.	M. White	40	6/12/95	7/31/95

Activities	Accountable Person	Hours	Start	End
1.1.7 Evaluate managers & supervisors under the new system.	M. White	120	9/1/95	9/30/95
1.2 Non-Mgr./Spr. Exempt Employees: Develop a performance appraisal system similar to the enhanced system for mgrs. & sprs.	M. White		6/12/95	9/30/95
1.2.1 Meet with mgrs., sprs., & incumbents to determine correct competencies for non-mgr./spr. exempt employees.	M. White & Consultant	40	6/12/95	7/31/95
1.2.2 Secure approval to conduct non-mgr/spr. exempt appraisals during September.	M. White	20	6/12/95	7/31/95
1.2.3 Present recommended performance appraisal system for non-mgr./spr. exempt employees to senior mgt. for approval.	M. White	20	6/12/95	7/31/95

Activities	Accountable Person	Hours	Start	End
1.2.4 Meet with sprs. to determine performance objectives for non-mgr./spr. exempt employees to meet or exceed established org. objectives.	M. White & J. Dillich	40	6/12/95	7/31/95
1.2.5 Train supervisors to use the new performance appraisal system.	J. Dutton	120	7/1/95	8/31/95
1.2.6 Communicate new performance expectations and appraisal system to non-mgr./spr. exempt employees.	M. White	40	7/1/95	7/31/95
1.2.7 Facilitate the presentation of individual performance objectives to each non-mgr./spr. exempt employee to be evaluated.	M. White	40	7/1/95	7/31/95
1.2.8 Evaluate non- mgr./spr. exempt employees under the new system.	M. White	150	9/1/95	9/30/95

Activities	Accountable Person	Hours	Start	End
1.3 Non-Exempt Employees: Develop and implement a performance appraisal system for non-exempt employees that is consistent with the goals and objectives of this Phase 3 Plan.	M. White			
1.3.1 Evaluate most effective method for scheduling non-exempt performance appraisals to enhance pay-for-performance criteria.	M. White	40	10/1/95	4/30/95
1.3.2 Solicit performance appraisal systems from other top quartile nuclear facilities and evaluate.	M. White	80	10/1/95	11/30/95

Activities	Accountable Person	Hours	Start	End
1.3.3 Evaluate the effectiveness of the enhanced performance appraisal systems for mgr.,spr. and exempt employees to determine the appropriateness of using similar formats for non-exempt employees.	M. White & J. Mueller	40	10/1/95	11/30/95
1.3.4 Develop a performance appraisal system for non-exempt employees that meets established objectives.	M. White	120	11/1/95	11/30/95
1.3.5 Present recommended non-exempt performance appraisal system to senior management for approval.	M. White	20	11/1/95	12/20/95

Activities	Accountable Person M. White	Hours 40	<b>Start</b> 1/1/96	End 2/15/96
1.3.6 Meet with supervisors to determine appropriate performance objectives for non-exempt employees to meet or exceed established organizational goals/objectives.				
1.3.7 Train supervisors to use the new non-exempt employee performance appraisal system.	J. Dutton	120	1/15/96	3/31/96
1.3.8 Communicate new performance expectations and evaluation procedures to non-exempt employees.	M. White	40	1/15/96	2/20/96
1.3.9 Facilitate the presentation of individual performance objectives to each non-exempt employee to be evaluated.	M. V√hite	40	1/20/96	2/28/96
1.3.10 Evaluate non-exempt employees under the new system.	M. White	400	4/1/96	4/30/96

Activities		Accountable Person	Hours	Start	End
2	Develop methodology for periodically re-evaluating the performance appraisal system and determining its effectiveness in achieving organizational objectives and developing employee skills/competencies.	M. White		10/1/95	1/31/97
	2.1 Develop method for ongoing assessment through performance evaluation feedback	M. White	40	10/1/95	12/15/95
	2.1.1 Method and first review	M. White	40	10/ /95	12/15/95
	2.1.2 Second review	J. Mueller	10	5/1/96	5/31/96
	2.2 Periodic evaluation/review by Senior Management	J. Mueller	40	1/1/97	1/31/97

#### PROGRAM TITLE

Incentive System

PROGRAM MANAGER

M. White

PROGRAM COMPLETION DATE

December 31, 1996

#### DESCRIPTION

Maximum effort and commitment from all employees will be necessary to accomplish the goals and objectives of the Phase 3 Performance Improvement Plan. An incentive system that ties monetary or other rewards directly to individual and departmental performance will augment existing performance improvement programs, support the ongoing Competitive Positioning Strategy efforts, and encourage employees to perform up to their maximum potential.

An incentive program should be developed that (1) provides monetary or other rewards to employees and departments which accomplish organizational objectives, (2) ties rewards directly to performance, and (3) is fair, objective, clearly defined, simple to understand and administer.

#### **OBJECTIVES**

Develop an incentive system that encourages managers and employees to exert maximum individual effort to achieve organizational goals and objectives, promotes accountability, and aligns rewards with results.

### STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: INCENTIVE SYSTEM

#### **ACTIVITIES**

- Develop and implement a pilot incentive program for senior managers and other key employees.
  - 1.1 Meet with senior management to determine employees eligible and appropriate performance indicators. Define the scope of participation by identifying the finite number of key employees.
  - 1.2 Solicit incentive program information from other top quartile nuclear producers. Establish the goals.
  - 1.3 Solicit input from Division Management and Human Resources to implement an incentive program for senior managers and other key employees at CNS.
  - 1.4 Develop a pilot incentive program and present to senior management for approval.
  - 1.5 Obtain the Board of Directors approval.
  - 1.6 Implement the pilot program.
- Develop a system that links incentives to successful group and individual performance for the remainder of CNS employees.
  - 2.1 Meet with Division Management and Human Resources to solicit input to expand the incentive program to other CNS employees. If approved:
  - 2.2 Solicit input from Phase 3 teams to determine appropriate organizational goals and objectives.
  - 2.3 Meet with Senior Management to determine appropriate group and individual performance indicators.
  - 2.4 Solicit incentive program information for other employees from other top quartile nuclear producers.

### STRATEGY: MANAGEMENT PRACTICES AND SYSTEMS PROGRAM: INCENTIVE SYSTEM

- 2.5 Develop an incentive program that ties desired rewards to individual and departmental performance.
- 2.6 Develop method to track progress and disburse awards.
- 2.7 Present recommended incentive system to Senior Management for approval. Present final proposal to the Board of Directors.
- 3 Develop communication process for incentive program
  - 3.1 Determine appropriate methods of communicating new incentive system to affected employees and carry out.
- Train managers and supervisors in effectively utilizing the incentive system to motivate employees.
  - 4.1 Determine most effective method for training managers and supervisors and conduct training.
- 5 Implement the system.
- 6 Develop a system for periodically re-evaluating the effectiveness of the incentive system.
  - 6.1 Ongoing through periodic review of organizational performance indicators.
  - 6.2 Periodic evaluation/review by Senior Management and Board of Directors.

### SCHEDULE

Activity		Accountable Person	Hours	Start	End	
1	a pil	lop and implement of incentive program enior managers and key employees.				
	1.1	Meet with senior management to determine eligibility and performance factors.	M. White	10	6/12/95	6/3095
	1.2	Solicit incentive program information from other top quartile plants.	Anderson & M. White	40	6/12/95	7/31/95
	1.3	Solicit approval from Division Management and HR to implement a pilot incentive plan.	M.White & G. Kruse	40	6/12/95	7/31//95
	1.4	Develop a pilot program and present to senior management for approval.	M. White	80	6/12/95	7/31/95
	1.5	Board approval	M. White	40	7/1/95	7/14/95
	1.6	Implement the pilot program.	M. White	80	7/14/95	7/31/95

		Activity	Accountable Person	Hours	Start	End
2	links succe indivi for th	lop a system that incentives to essful group and idual performance ne remainder of employees.			8/1/95	12/31/96
	2.1	Solicit approval from Division Management and HR to expand the incentive program to other CNS employees. If approved:	M. White & G. Kruse	80	8/1/95	9/30/95
	2.2	Solicit input from Phase 3 teams to determine appropriate organizational goals and objectives	M. White	40	8/1/95	9/30/95
	2.3	Meet with Senior Management to determine appropriate group and individual performance indicators.	M. White	10	8/1/95	9/30/95

		Activity	Accountable Person	Hours	Start	End
	2.4	Solicit incentive program information for other employees from top quartile nuclear producers.	Anderson & M. White	40	8/1/95	9/30/95
	2.5	Develop an incentive program that ties desired rewards to individual and departmental performance.	M. White	80	9/30/95	11/30/95
	2.6	Develop method to track progress and disburse awards.	M. White & S.Hollinrake	40	9/30/95	11/30/95
	2.7	Present recommended incentive system to Senior Management for approval.	M. White	10	11/15/95	11/30/95
3		elop communication ess for incentive ram.			12/1/95	12/31/95

	Activity	Accountable Person	Hours	Start	End
	3.1 Determine appropriate methods of communicating new incentive system to affected employees and carry out.	M. White	40	12/1/95	12/31/95
4	Train managers and supervisors in effectively utilizing the incentive system to motivate employees.				
	4.1 Determine most effective method for training managers and supervisors and conduct training.	J. Dutton	100	12/1/95	1/31/96
5	Implement the system.	M. White	160	2/1/96	4/31/96
6	Develop a system for periodically re-evaluating the effectiveness of the incentive system		8.	11/1/95	12/31/96
	6.1 Ongoing system for periodic review of organizational performance indicators.	M. White	80	11/1/95	12/31/95

	Activity	Accountable Person	Hours	Start	End
6.2	Periodic J. Mueller evaluation/review by Senior Management.	10	1/1/96	1/31/96	
	6.2.1 Method & first review	M.White	40	11/1/95	12/31/95
	6.2.2 Second review	J. Mueller	10	7/1/96	7/31/96
	6.2.3 Third review	J. Mueller	10	12/1/96	12/31/96

#### PROGRAM TITLE

Information Systems For Management (ISM)

#### PROGRAM MANAGER

T. Hottovy

#### PROGRAM COMPLETION DATE

November 29, 1997

#### DESCRIPTION

This Phase 3 Program will provide NPG management with information tools, referred to hereinafter as Information Systems for Management (ISM), that allow timely assessment of individual and department performance in achieving organizational goals and business objectives. The ISM are to provide *real-time* information, while being user-friendly and practical.

This program will also develop a process for the continuous monitoring of computer resources. The process will include review of computer requests/requisitions to ascertain that each supports the long-term ISM plan. Emphasis is to be placed on using "off-the-self" software while minimizing the reliance on software developed specifically for CNS.

#### **OBJECTIVE**

Provide the appropriate information tools that enable NPG management to monitor performance and adjust priorities to achieve NPG goals and to enhance management practices and organizational effectiveness by providing timely communication of information relative to station and employee performance expectation and results.

#### **ACTIVITIES**

- 1 Develop and Implement an Information Systems for Management (ISM) Plan
  - 1.1 Define information requirements and needs, which include accessibility and presentation preferences
    - 1.1.1 Get input from NPG management
    - 1.1.2 Consider other utility ISM
    - 1.1.3 Review corrective action commitments (e. g. CRs, LERs, etc) for inclusion in ISM
  - 1.2 Assess current NPG information systems
    - 1.2.1 Inventory the current system
    - 1.2.2 Identify strengths/weaknesses
  - 1.3 Identify ISM needs (allocation of resources)
    - 1.3.1 Benchmark against other industry ISM
    - 1.3.2 Define options for upgrading ISM
  - 1.4 Present recommendations to management and obtain feedback
  - 1.5 Develop plan for managing ISM changes
    - Organizational impact
    - Hardware/software changes
    - Budget needs
    - Training requirements
  - 1.6 Present plan to management for approval
  - 1.7 Implement the ISM plan

- 1.8 Conduct on-going effectiveness evaluations to assure the ISM meets the program objectives and requirements/needs defined in 1.1.
- 2 Establish Control Process
  - 2.1 Coordinate charter development and activation of ISM Review Group to provide immediate ISM control mechanism
  - 2.2 Define mechanism for the on-going review of computer requests/requisitions and periodic assessment of ISM
  - 2.3 Develop a procedure and/or directive for ISM control process
  - 2.4 Finalize transition of control process to working committee(s)

### SCHEDULE

	Activity		Accountable Person	Hours	Start Date	End Date
1	Develop and Implement an Information Systems for Management (ISM) Plan					
	1.1	Define information requirements and needs	S. Jobe	480	7/5/95	8/31/95
	1.2	Assess current NPG information system	R. Lomax	240	9/1/95	9/29/95
	1.3	Identify ISM needs	M. Bird	360	10/2/95	12/29/95
	1.4	Present recommendations to management	T. Hottovy	40	1/2/96	1/12/96
	1.5	Develop plan for managing ISM changes	M. Dixon	960	1/12/96	4/15/96
	1.6	Present plan to management for approval	T. Hottovy	60	4/16/96	4/30/96
	1.7	Implement the ISM plan	T. Hottovy	4000	5/1/96	10/31/97
	1.8	Conduct on-going evaluations of the ISM program	S. Jobe	320	11/1/97	11/29/97
2	Estal	olish control process				

	Activity	Accountable Person	Hours	Start Date	End Date
2.1	Coordinate charter development and activation of ISM Review Group	R. Lomax	400	7/5/95	8/31/95
2.2	Define mechanism for on-going review and ISM assessment	S. Jobe	240	5/1/97	6/30/97
2.3	Develop a procedure and directive	M. Bird	320	7/1/97	8/29/97
2.4	Finalize transition to working committee(s)	R. Lomax	120	9/1/97	9/30/97

### 7.6 Skills and Qualifications Strategy

This strategy develops the capabilities and depth of the organization by defining required organizational development attributes, evaluating personnel against these attributes, and developing or recruiting individuals accordingly.

The strategy is implemented through three programs:

- Assessment of Managers, Key Staff, and Supervisors
- Organizational Development/Required Skills
- Succession Planning

Strategy Sponsor: M. Peckham

FIGURE 7.6 SKILLS AND QUALIFICATIONS Phase 3 Expanded View

### Organizational Development/Required Skills

[M. Peckham]

Objective: Develop the capabilities and depth of the organization by defining required organizational development attributes, evaluating personnel against these attributes, and developing or recruiting individuals accordingly.

### Assessment of Managers and Supervisors and Key Staff

[M. White]

Objective: Develop and implement effective tools and methods to assess staff against required skills in order to communicate expectations, develop bench strength, and assign human resources effectively.

### Organizational Development/Required Skills

[J. Dutton]

Objective: Develop and implement required training and development programs for managers, supervisors and key staff.

#### Succession Planning

[J. Dillich]

Objective: Put in place effective succession planning to select the best qualified individuals for key positions in order to build and maintain bench strength.

## STRATEGY: SKILLS AND QUALIFICATIONS PROGRAM: ASSESSMENT OF MANAGERS, SUPERVISORS AND KEY STAFF

#### PROGRAM TITLE

Assessment Of Managers, Supervisors and Key Staff

#### PROGRAM MANAGER

M. White

#### PROGRAM COMPLETION DATE

August 31, 1996

#### DESCRIPTION

A critical element in achieving Phase 3 objectives will be the effective performance of all three management levels. The essential skills and qualifications necessary for exceptional performance in each supervisory and management level position must be identified. Once determined, the current CNS management and supervisory staff must be evaluated against those essential skills and qualifications and methods developed to address individual deficiencies.

Effective tools must be developed for assessing individual abilities. Weaknesses must be identified and programs developed to assist managers and supervisors in improving skills.

Assessment programs must be (1) driven by corporate and site vision statements, (2) customized for all three levels of management, (3) tied directly to management development and performance appraisal programs and (4) periodically reviewed and updated to accommodate changes in organizational objectives and individual developmental needs.

#### **OBJECTIVES**

Develop and implement effective tools and methods to assess staff against required skills in order to communicate expectations, develop bench strength, and assign human resources effectively.

#### **ACTIVITIES**

- Determine appropriate skill requirements (competencies) for all three levels of management.
  - 1.1 Solicit input from Phase 3 teams working to determine appropriate performance indicators.
  - 1.2 Meet with members of all three management levels to determine appropriate skill requirements (competencies) to meet or exceed the established performance indicators.
  - 1.3 Coordinate with organizational development team to begin developing training programs.
- Evaluate internal and external assessment tools and methods for application to all management levels.
  - 2.1 Review existing internal assessment tools and programs.
  - 2.2 Solicit information from other external sources concerning assessment programs available.
  - 2.3 Analyze various assessment tools and methods available and make appropriate recommendations to meet CNS assessment needs for all three management levels.
  - 2.4 Present recommendations to Senior Management for approval.
- 3 Communicate assessment program, methodologies and schedule to affected managers and supervisors.
  - Core competencies
  - Assessment Programs
  - Schedule
  - Program impact, benefits, integration with overall strategies, etc.

### STRATEGY: SKILLS AND QUALIFICATIONS PROGRAM: ASSESSMENT OF MANAGERS, SUPERVISORS AND KEY STAFF

- 4 Implement selected assessment strategies using corporate resources, as appropriate, in a phased approach.
  - 4.1 Determine and implement short term assessment program for senior management and coordinate with Succession Planning Program.
  - 4.2 Determine and implement long term assessment program and coordinate with organizational development.
- Communicate program objectives and results achieved throughout imp'ementation process.
- Develop and implement mechanism to ensure this program is integrated with hiring, promotion, and performance appraisal systems.
- Develop and implement methodology for periodically re-evaluating the assessment program and determining its effectiveness in identifying individual strengths and weaknesses based on organizational needs.
  - 7.1 Ongoing assessment through performance evaluation feedback
  - 7.2 Periodic evaluation/review by senior management

# STRATEGY: SKILLS AND QUALIFICATIONS PROGRAM: ASSESSMENT OF MANAGERS, SUPERVISORS AND KEY STAFF

### SCHEDULE

	Activity	Person	Hours	Start	End
requiremen	nine appropriate skill ts (competencies for all s of management.		7.7		
1.1	Solicit input from Phase 3 teams working to determine appropriate indicators	M.White	40	6/12/95	7/31/95
1.2	Meet with members of all three management levels to determine	M.White J.Dillich	40	6/12/95	7/31/95
1.3	Coordinate with organizational development team	M.White J.Dutton	20	6/12/95	7/31/95
assessment	e internal and external t tools and methods for to all management.				
2.1	Review existing internal assessment tools and programs	W.Irby	10	7/1/95	8/31/95
2.2	Solicit information from other external sources concerning assessment programs available	W.Irby	40	7/1/95	9/30/95

## STRATEGY: SKILLS AND QUALIFICATIONS PROGRAM: ASSESSMENT OF MANAGERS, SUPERVISORS AND KEY STAFF

	Activity	Person	Hours	Start	End
2.3	2.3 Analyze various assessment tools and methods available and make appropriate recommendations to meet CNS assessment need for all three management levels.		40	7/1/95	9/30/95
2.4	Present recommendations to Senior Management for approval	M.White	10	7/1/95	9/30/95
program, m	unicate assessment nethodologies and affected managers.	M.White	40	1/1/96	2/1/96
strategies u	nent selected assessment using corporate as appropriate, in a proach.				
4.1	Determine and implement short term assessment program for senior management and coordinate with Succession Planning Program.	M.White	100	3/1/96	5/31/96
4.2	Determine and implement long term assessment progrational coordinate with Organizational Development team plan	M.White	300	3/1/96	8/31/96

# STRATEGY: SKILLS AND QUALIFICATIONS PROGRAM: ASSESSMENT OF MANAGERS, SUPERVISORS AND KEY STAFF

	Activity	Person	Hours	Start	End
5 Communicate program objectives and results achieved throughout implementation process. 6 Develop and implement mechanism to ensure this program is integrated with hiring, promotion, and performance appraisal systems		W. Irby	80	3/1/96	8/31/96
		M.White	100	6/1/95	10/31/96
methodology evaluating the and determine			100		
	Ongoing assessment method through performance evaluation feedback	M.White	40	8/1/96	12/31/96
	Periodic evaluation/review by senior management				
	7.2.1 Method and first review	M.White	40	2/1/97	2/28/97
	The state of the s				

#### PROGRAM TITLE

Organizational Development / Required Skills

#### PROGRAM MANAGER

J. Dutton

#### PROGRAM COMPLETION DATE

June 30, 1997

#### DESCRIPTION

The long term success of the NPPD Nuclear Organization is primarily dependent on the ability of the management team to proactively and cooperatively plan for future challenges and provide effective, timely guidance for the work force. The focus for management's efforts is provided by the NPG Vision, and implemented through the top level goals associated with the Vision.

The Organizational Development / Required Skills program is a reflection of the Organizational Effectiveness component of the NPG Vision; specifically addressing "Fully developed management development programs preserve 'bench strength' and allow NPG to manage both routine and emergent issues without shortchanging either." The activities associated with the program are designed to clearly identify the desired management competencies and behaviors necessary to support this Vision, and to produce effective, on-going development of the management team to emphasize and encourage the adoption and practice of these competencies in the workplace.

An underlaying theme to the Organizational Development / Required Skills program is to reinforce and enact the necessary management attributes required for the NPG to achieve world class performance. These attributes are fundamental to achieving a strong Nuclear Safety culture, a reliable power generation facility, and an efficient, cost-conscious operation, thus ensuring the long term success of Cooper Nuclear Station.

#### **OBJECTIVES**

Develop and implement a highly responsive organization that directly supports the vision and top-level goals of the Nuclear Power Group with a highly skilled team.

#### **ACTIVITIES**

- Analyze Skills, Knowledges and Abilities
  - 1.1 Receive competencies from assessment project
  - 1.2 Develop skills, knowledge, and abilities (SKAs) for key management positions Competencies
  - 1.3 Develop skills, knowledge, and abilities (SKAs) for management competencies
  - 1.4 Develop skills, knowledge, and abilities (SKAs) for first-line supervisor competencies
- 2 Design Management Classes and Curriculum
  - 2.1 Integrate SKA into program structure
  - 2.2 Compare SKA against existing NPPD lessons
  - 2.3 Specify treatment and objectives for undeveloped classes
  - 2.4 Obtain senior management approval for design
- 3 Develop necessary courseware
  - 3.1 Develop or procure necessary courseware
  - 3.2 Develop schedule for pilot classes

- 3.3 Develop program description documentation
- 4 Implement pilot
  - 4.1 Identify NPG participants for management from assessment
  - 4.2 Conduct pilot program
    - 4.2.1 Management program
    - 4.2.2 First-line supervisor program
- 5 Revise programs from results of pilot
  - 5.1 Revise management program
  - 5.2 Revise first-line supervisor program
  - 5.3 Review and approve revised programs of senior management
- Schedule a management development refresher workshop at appropriate intervals to ensure continued focus.

### SCHEDULE

Activity		Accountable Person	Hours	Start Date	End Date
Anal Abilit	yze Skills, Knowledges and ties				
1.1	Receive Competencies from Assessment project	M.White	20	8/1/95	8/1/95
1.2	SKA' for key management position Competencies	J.Dutton	40	8/1/95	8/28/95
1.3	SKA's for management competencies	J.Dutton	40	8/29/95	9/25/95
1.4	SKA's for first-line supervisor competencies	J.Dutton	40	9/26/95	10/31/95
	gn Management Classes Curriculum				
2.1	Integrate SKA into program structure	J.Dutton	40	1/2/96	2/12/96
2.2	Compare SKA against existing NPPD lessons	W.Irby	40	9/1/95	2/12/96
2.3	Specify treatment and objectives for undeveloped classes	J.Dutton	80	2/13/96	3/18/96
2.4	Obtain management approval for design	J.Dutton	40	3/19/96	3/25/96

Activity  Develop necessary courseware		Accountable Person	Hours	Start Date	End Date
3.1	Develop or procure necessary courseware	W. Irby	320	3/26/96	7/29/96
3.2	Develop schedule for pilot classes	W. Irby	8	7/30/96	8/5/96
3.3	Develop program description documentation	J.Dutton	40	8/5/96	8/5/96
Imple	ement pilot				
4.1	Identify NPG participants for management from assessment	M.White	20	7/8/96	8/5/96
4.2	nduct pilot program	W.Irby	80	8/26/96	12/20/96
	4.2.1 Management program	W.lrby	80	10/21/96	12/20/96
	4.2.2 First-Line program				

Activity		Accountable Person	Hours	Start Date	End Date
Revis Pilot	se Programs from Results of				
5.1	Revise management Program	W.lrby	80	1/5/97	3/15/97
5.2	Revise First-Line Supervisor Program	W.lrby	80	3/16/97	5/15/97
	Supervisor Frogram	J.Dutton	40	5/16/97	6/5/97
5.3	Review and Approve revised programs				
6.	Conduct a management development refresher workshop	J.Dutton	70	1/1/96	3/31/96

PROGRAM TITLE

Succession Planning

PROGRAM MANAGER

J. Dillich

PROGRAM COMPLETION DATE

December 31, 1995

#### DESCRIPTION

The selection and development of capable leaders to fill key positions within the NPG is of vital importance. Successful leaders require skills in communications, strategic planning, human resources, quality management, financial management, and conservative decision-making. Broad knowledge with experience related to understanding station operations, activities, problems, and events is required. A deliberate and systematic approach to succession planning for certain key positions will ensure selection of capable leaders with a focus on operations.

Formal programs are established to select and develop individuals to fill those key management positions that involve significant business risk. Management development and selection practices reflect the fact that work in plant operations provides the broad, integrated view of plant activities needed by key nuclear managers. Individuals with experience in day-to-day plant operations and maintenance are considered as an important source of management talent. The policies and practices that govern career development ensure that individuals are aware of the opportunity to develop into management positions and that selected individuals are encouraged and provided with opportunities to pursue this career path.

#### **OBJECTIVES**

Put in place effective succession planning to reinforce management development priorities in support of selecting the best qualified, most capable individuals for key positions in order to build and preserve bench strength.

#### **ACTIVITIES**

- Identify key positions for succession planning based upon formal criteria. The number of high-potential individuals identified for development should be sufficient to meet the organization's anticipated needs, yet small enough to focus effectively on development and assessment activities.
- Develop and implement the process used to identify individuals with high management and leadership potential. The selection process should reflect the importance of the following attributes:
  - Demonstrated superior performance
  - Desire for additional challenges and positions of increased responsibility
  - Strong potential to master management and leadership competencies associated with positions of increased responsibility
  - Commitment and demonstrated values that support organization goals

Individuals at levels below senior manager positions are also considered in the identification process. The process emphasizes the core competencies of the performance evaluation system. The process distinguishes those individuals who are experienced, are qualified, or demonstrate potential in the key areas.

- 3 Implement stop-gap succession plan for the near term.
- Establish required management and leadership development plan that includes training, rotations of assignment, and promotions to support longterm succession program.

## STRATEGY: SKILLS AND QUALIFICATION PROGRAM: SUCCESSION PLANNING

### SCHEDULE

Activity	Person	Hours	Start	End
Develop written selection Guidance	J. Dillich	40	6/12/95	8/1/95
Establish key Positions selection process	J. Dillich	10	6/12/95	8/1/95
Implement stop-gap succession plan	J. Mueller	40	6/12/95	8/15/95
Establish long-term succession plan	J. Mueller	160	9/1/95	12/31/95

### 7.7 External Relations Strategy

This strategy establishes mechanisms to communicate operational and regulatory status and issues to Participants and regulators, including holding periodic meetings with Participants to ensure coordination of longer-term business plans.

The strategy is implemented through three programs:

- NRC Communications Plan
- Operations-Related Communications With External Parties Program
- Onsite Pubic Relations Program

Strategy Sponsor: B. Houston

# FIGURE 7.7 EXTERNAL RELATIONS Phase 3 Expanded View

#### **External Relations**

[B. Houston]

Objective: Establish the mechanisms to communicate operational and regulatory status and issues to Participants and regulators. Hold periodic meetings with Participants to ensure coordination of longer-term business plans..

#### **NRC Communications**

[M. Bennett]

Objective: Develop and implement a program that will ensure communications between NPG and NRC are open, responsive and timely. All commitments are tracked to closure.

#### Operations-Related Communications With External Parties

[M. Krumland]

Objective: Develop and implement a program that will ensure operations related communications with external parties are timely and effective.

#### Onsite Public Relations

[J. Sayer]

Objective: Establish an Onsite Public Relations activity to improve internal and external communication.

#### PROGRAM TITLE

NRC Communications

#### PROGRAM MANAGER

M. Bennett

#### PROGRAM COMPLETION DATE

March 31, 1996

#### DESCRIPTION

This program will establish a formal protocol for communications with the NRC. The goal of this program is to foster a relationship with the Nuclear Regulatory Commission (NRC) that is open and forthright, and instills confidence in the District's ability to generate electricity in a safe, reliable, and efficient manner. This program ensures that all information provided to the NRC is complete and accurate in all respects, internally consistent, and provided promptly.

- 1 Ensure communications with the NRC are maintained at various management levels across disciplines, and by appropriate personnel.
- 2 Ensure that the District's communications with the NRC are responsive to their informational needs, are complete and accurate in all respects, and are effective and consistent.
- 3 Ensure that commitments to the NRC are clearly identified, tracked, and correctly implemented.
- 4 Ensure that the District's conservative safety philosophy, self-improvement initiatives, and the specific results of those initiatives are consistently and accurately conveyed to (and understood by) NRC senior management.

#### **OBJECTIVE**

Develop and implement a program that will ensure communications between NPG and NRC are open, responsive and timely. All commitments are tracked to closure.

#### **ACTIVITIES**

- 1 Develop NRC communications program
  - 1.1 Develop approach and communication matrix. Start from Winston & Strawn outline. Include:

Routine communications with resident/regional and headquarters personnel,

Preparation and support of team inspections, and

Event driven notifications

Generation and maintenance of a white paper that addresses salient issues

Assessment of effectiveness of NRC correspondence procedure and revision as appropriate

- Develop procedures/directives.
- 1.3 Benchmark against other top quartile plant programs
- 1.4 Review with Management and NRC.
- 1.5 Revise and implement.
- 2 Develop NRC commitment tracking program.
  - Develop commitment tracking process.
  - 2.2 Integrate into station tracking program (NAIT).

### STRATEGY: EXTERNAL RELATIONS PROGRAM: NRC COMMUNICATIONS

- 2.3 Develop procedures/directives.
- 2.4 Benchmark against other top quartile plant programs.
- 2.5 Review with Management and NRC.
- 2.6 Revise and implement.
- 3 Develop open item resolution program.
  - 3.1 Define process for closing NRC open items.
  - Develop procedure/directives.
  - 3.3 Benchmark against other top quartile plant programs.
  - 3.4 Review with Management and NRC.
  - 3.5 Revise and implement.
- 4 Train station personnel on programs and responsibilities.
- 5 Assess effectiveness and timeliness of programs revise as required.

### SCHEDULE

	Activity	Accountable Person	Hours	Start Date	End Date
1	Develop NRC communications program				
	1.1 Develop approach and matrix	G. Sen	40	6/12/95	8/31/95
	1.2 Develop procedures/ directives	G. Sen	40	7/1/95	8/31/95
	1.3 Benchmark against top quartile plants program	G. Sen	40	7/1/95	8/31/95
	1.4 Review with Management and NRC	G. Sen	20	9/1/95	9/15/95
	1.5 Revise and implement	G. Sen	20	9/15/95	9/30/95
2	Develop NRC Commitment Tracking program				
	2.1 Develop commitment tracking process	B. Victor	20	6/12/95	8/31/95
	2.2 Integrate into station tracking systems (NAIT)	B. Victor	20	6/12/95	8/31/95

	Activity	Accountable Person	Hours	Start Date	End Date
	2.3 Develop procedures/ directives	B. Victor	40	7/1/95	8/31/95
	2.4 Benchmark against top quartile plants	B. Victor	40	7/1/95	8/31/95
	2.5 Review w/Mgmt and NRC	B. Victor	20	9/1/95	9/15/95
	2.6 Revise and implement	B. Victor	20	9/15/95	9/30/95
3	Develop open item resolution program				
	3.1 Define process for closing NRC open items	D. Madsen	20	6/12/95	7/31/95
	3.2 Develop procedures/ directives	D. Madsen	20	7/1/95	8/31/95
	3.3 Benchmark against top quartile plants	D. Madsen	20	7/1/95	8/31/95
	3.4 Review w/Mgmt and NRC	D. Madsen	20	9/1/95	9/15/95
	3.5 Revise and implement	D. Madsen	20	9/15/95	9/30/95
4	Train Station personnel on program and responsibilities	M. Bennett	20	12/1/95	1/31/96

Activity	Accountable Person	Hours	Start Date	End Date
5 Assess effectiveness and timeliness of communications: revise as required	M. Bennett	40	3/1/96	3/31/96

#### **PROGRAM**

Operations-Related Communications With External Parties

#### PROGRAM MANAGER

K. Krumland

#### PROGRAM COMPLETION DATE

September 30, 1995

#### **DESCRIPTION**

This program supports the following statements in the NPG Vision:

- Customers know their input is valued and they are viewed as partners
- Regulators, the public, and our partners have confidence in our ability to operate safely. There are no surprises.

The purpose of this program is to provide accurate information about Nuclear Power Group operations to external audiences. This program will ensure Nebraska Public Power District communication with external audiences is open, proactive, and in line with NPPD's expectations.

Operations-related communications with external audiences is all communication except for the Nuclear Regulatory Commission and those defined by the onsite public relations program. The eternal audiences for communication include but is not limited to; NPPD Board of Directors, plant participants, and governmental agencies.

### **OBJECTIVE**

Establish a communications plan to share information relative to NPG operations with external audiences.

- Ensure communications with the external audiences are continuously maintained at various management levels and across appropriate disciplines.
- Ensure that the District's communications with the external audiences are responsive to their information needs and are effective and consistent.

### ACTIVITIES

- 1 Continue to enhance communications with NPPD Board of Directors at their regularly scheduled meetings.
- 2 Utilize the Boards' Nuclear Subcommittee as a vehicle to ensure effective communication is maintained.
- 3 Utilize the Board's Nuclear Subcommittee to ensure operations related communication is responsive to their informational needs.
- Establish a regular meeting of the plant participants with District Management. The meeting should discuss regulatory issues, budgets, outages, fuel management, and other potential issues of interest. The meeting should be structured such that the plant participants are include in the development of the agenda.
- Maintain routine contact, through telephone calls or direct meetings, with sate and county government officials. Information exchanged through this contact should include plant operational status; NPPD's position on issues affecting both entities, and NPPD's operational plants that may affect or impact the government agency.
- Develop a plan to ensure the NPPD governmental agency points-of-contacts know the District's position on the pertinent issues. Ensure a mechanism is included in the plant to inform various management levels within the District of results/impact of each meeting.

### SCHEDULE

	Activities	Accountable Person	Hours	Start Date	End Date
1	NPPD Board of Director's meeting attendance	G.Horn	16	6/13/95	9/15/95
2	NPPD Board of Director's Nuclear Subcommittee attendance.	J.Mueller	16	6/13/95	9/15/95
3	Establish a regularly scheduled meeting with NPPD management and the plant participants.	K. Krumland	20	8/1/95	8/31/95
4	Identify governmental agencies that interface with Cooper Nuclear Station.	K. Krumland	16	6/19/95	7/21/95
5	Identify a point of contact for each governmental agency, and a meeting frequency	K. Krumland	16	6/19/95	7/21/95
6	Develop a plan to ensure the NPPD covernmental agency points-of-contact know the District's position on the pertinent issues. Ensure a mechanism is included in the plan to inform various management levels within the District of results/impact of each meeting.	K. Krumland	40	7/21/95	9/30/95

### PROGRAM TITLE

Onsite Public Relations

PROGRAM MANAGER

J. Sayer

PROGRAM COMPLETION DATE

July 1, 1996

#### DESCRIPTION

Improvements in the Public Relations area are needed to support the accurate and timely conveyance of information concerning CNS and NPG to Nebraska Public Power District (NPPD) employees, plant participants and other customers, the media and the general public. It is important that the information pertaining to accomplishments and status of the NPG be presented to these audiences in a manner that is positive for NPPD and the NPG. Perceptions formed by these audiences are important to the success of the NPG in fulfilling its Vision Statements. Open and honest communications, including recognition and acknowledgment of the accomplishments of the NPG, are vitally important to ensuring the long term success of Cooper Nuclear Station.

Another aspect of the Onsite Public Relations Program is to improve internal relations. Improving communication of general information, policies, plant and industry issues, and other important issues will greatly aid in the employees understanding of the NPG/NPPD visions. Having everyone aware and working to accomplish the right thing at the right time significantly improves the likelihood of meeting our vision, goals and objectives.

### **OBJECTIVES**

Establish an Onsite Public Relations activity to improve internal and external communications.

### STRATEGY: EXTERNAL RELATIONS PROGRAM: ONSITE PUBLIC RELATIONS

### ACTIVITIES

- 1 Establish Onsite Public Relations position.
- 2 Interview Senior Management to determine program expectations.
- 3 Benchmark against industry practices:
  - 3.1 INPU
  - 3.2 Nuclear Utilities
  - 3.3 Midwest Industries
- 4 Develop internal Public Relations Program
  - 4.1 Develop internal public relations program to incorporate management expectations and benchmark findings.
  - 4.2 Senior Management review and approve.
  - 4.3 Implement internal public relations program.
- 5 Develop external Public Relations Program
  - 5.1 Develop external public relations program to incorporate management expectations and benchmark findings
  - 5.2 Senior Management review and approve.
  - 5.3 Implement external public relations program.
- 6 Assess effectiveness of Onsite Public Relations program with team

### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Establish onsite position	Management	48	6/12/95	8/1/95
2 Interview senior management	B.Houston *	24	6/19/95	6/30/95
3 Benchmarking				
3.1 INPO	B.Houston *	2	6/12/95	6/16/95
3.2 Nuclear utilities	B.Houston *	24	6/16/95	6/30/95
3.3 Midwest industries	B.Houston *	8	7/10/95	7/14/95
4 Internal Public Relations	-			
4.1 Develop program	Incumbent	160	8/1/95	9/1/95
4.2 Management review	J. Mueller	8	9/1/95	9/6/95
4.3 Implement program	Incumbent	80	9/11/ 95	6/30/96
5 External Public Relations				
5.1 Develop program	Incumbent	160	10/1/95	11/1/95
5.2 Management Review	J. Mueller	8	11/1/95	11/6/95
5.3 Implement Program	Incumbent	80	11/13/95	11/30/95

# STRATEGY: EXTERNAL RELATIONS PROGRAM: ONSITE PUBLIC RELATIONS

Activity	Accountable Person	Hours	Start Date	`End Date
6 Assess Effectiveness	Incumbent/ B. Houston	200	1/1/96	9/1/96

<sup>\*</sup> Team - B. Houston, J. Sayer, J. Dutton, D. Reeves

### 7.8 Station Capacity and Reliability Strategy

This strategy establishes the management systems and processes that will focus on systematic improvements in plant reliability and promote consistently high levels of plant production capacity. It will also instill efficiency improvements in operating practices as a standard business method.

The strategy is implemented through five programs:

- Fuel Cycle Optimization
- Capacity Increases
- Plant Reliability
- Maintenance
- Power Up-Rate

Strategy Sponsor: R. Gardner

FIGURE 7.8
STATION CAPACITY AND
RELIABILITY
Phase 3 Expanded View

#### STATION CAPACITY AND RELIABILITY

[J. Herron]

STRATEGY: Establish the management systems and processes that will focus on systematic improvements in plant reliability and promote consistently high levels of plant production capacity. Instill efficiency improvements in operating practices as a standard business method.

### **Fuel Cycle Optimization**

[E. Lanning]

Objective: Implement a process that will ensure the timely generation of the fuel cycle strategy and assumptions to support NPG's goals for capacity factor and energy cost.

### Capacity Increases

[J. Salisbury]

Objective: Establish a program that will maximize the efficient generation of power.

#### **Plant Reliability**

[S. Freborg]

Objective: Focus resources on the identification and resolution of precursors to conditions affecting plant reliability.

#### Maintenance

[M. Boyce]

Objective: Develop a program that will ensure the effective implementation of a maintenance program that supports NPG's goals and meets statutory requirements.

### Power Up-Rate

[J. Salisbury]

Objective: Develop and implement a program to increase the plant's licensed thermal power.

### PROGRAM TITLE

Fuel Cycle Optimization

PROGRAM MANAGER

E. Lanning

PROGRAM COMPLETION DATE

April 30. 1997

### **DESCRIPTION**

This Phase 3 Plan will establish a program that will ensure that the assumptions used in the design of core reloads reflect the NPG's goals. It will also address the need to ensure that the Nuclear Fuels Department is positioned to be responsive to management's expectations and the market conditions in order to minimize fuel costs and maximize capacity factor.

#### **OBJECTIVE**

Implement a process that will ensure the timely generation of the fuel cycle strategy and assumptions to support NPG's goals for capacity factor and energy cost.

#### GOALS

Implement a process for the timely generation and approval of the fuel cycle strategy and assumptions for the reload fuel design in order to support CNS's economic and capacity factor goals. Specific activities to be addressed include:

CNS Capacity Factor Goals
Outage Schedule
System Operations' Requirements
Core Analysis Requirements

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: FUEL CYCLE OPTIMIZATION

- Develop and implement a program that will allow NPPD NPG to evaluate various options and procure nuclear fuel and fuel services in a manner that is responsive to normal conditions and the spot market in order to minimize fuel costs.
- Put in place a strategy for spent fuel management and a process for maintaining it consistent with NPG strategic goals.

### **ACTIVITIES**

- 1 Finalize the Fuel Reload Design for Cycle 17.
  - 1.1 Develop strategies, assumptions, risks, and uncertainties for energy utilization plan including:

cycle duration scheduled outages planned coast down

- 1.2 Present to NPG management and participants for discussion and approval.
- 1.3 Implement the approved assumptions and finalize reload design.
- 2 Formulate and implement a process for the timely generation and approval of the fuel cycle strategy and assumptions.
  - 2.1 Establish a team to develop the process. NPG Engineering, Operations, Maintenance, NPPD System Operation, and CNS participants should be represented.
  - 2.2 Develop a preliminary process.
  - 2.3 Evaluate the analytical tools required (software and hardware) to insure that capabilities are consistent with expectations for response.
  - 2.4 Implement the process for Cycle 18.

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: FUEL CYCLE OPTIMIZATION

- 2.5 Implement the process for Cycle 18.
- 2.6 Evaluate the process and results. Modify the process if required.
- Develop and implement a process that will allow NPPD NPG to evaluate and procure any form of fuel and fuel services responsive to normal market and "spot market" conditions.
  - 3.1 Determine the required attributes for the fuel procurement process.
  - 3.2 Develop the process. Benchmark against other top quartile utilities.
  - 3.3 Implement the process.
  - 3.4 Evaluate the process and modify if required.
- Develop a strategy for spent fuel management and implement a process that will meet NPG's strategic goals.
  - 4.1 Identify factors influencing spent fuel costs.
  - 4.2 Evaluate analytical tools required (software).
  - 4.3 Integrate spent fuel costs into fuel cost and has bus bar minimization strategies.
  - 4.4 Ensure the strategy is compatible with other NPG programs and goals.
  - 4.5 Present strategy, assumptions, and risks to management for review.
  - 4.6 Implement the approved strategy; provide for periodic review.

# STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: FUEL CYCLE OPTIMIZATION

### SCHEDULE

Activity	Accountable Person	Hours	Start Date	End Date
1 Finalize Design for Reload 17	E. Lanning			
1.1 Develop energy utilization plan	E. Lanning	16	In Progress	6/9/95
1.2 Present to management and participant owners	E. Lanning	4	In Progress	6/9/95
1.3 Implement and finalize the reload design	E. Lanning	20	In Progress	6/6/95
2 Formulate and implement a process to generate the fuel cycle strategy and assumptions	E. Lanning	400	12/5/95	9/30/96
3 Develop and implement a process for the procurement of fuel and fuel services.	E. Lanning	400	5/1/96	9/30/96
4 Develop a strategy and implement a process for spent fuel management.	E. Lanning	320	9/1/96	4/30/97

### PROGRAM TITLE

Capacity Increases

### PROGRAM MANAGER

J. Salisbury

### PROGRAM COMPLETION DATE

December 31, 1996

#### DESCRIPTION

This program will be directed toward improvements in the station's capacity to provide the maximum possible electricity to the NPPD electrical grid system within the constraints of the plant design and license. This electricity will ultimately be sold as useable electrical power to NPPD customers.

#### OF JECTIVES

Establish a program (and program ownership) to: 1) minimize power reductions, 2) reduce house loads, 3) maximize cycle efficiency, and 4) improve plant availability to meet or exceed the 85% CF goal in a cost effective and safe manner.

#### **ACTIVITIES**

- 1 Minimize power reductions:
  - 1.1 Identify all required down-powers and areas of improvement. This includes Technical Specifications or non-TS required down-powers.
  - 1.2 Determine potential value in changing specific Technical Specifications to reduce testing. Use industry experience to support changes.
  - 1.3 Determine potential value in changing other non-Technical Specification down-power requirements to reduce testing.

- 1.4 Evaluate down-power scheduling effectiveness.
- 1.5 Develop a plan to implement the changes identified in 1.2, 1.3, and 1.4 above in a cost effective and safe manner.
- 1.6 Develop or verify that down-powers are reviewed from a cumulative standpoint periodically to identify potential problems and areas of improvement. This review should also identify industry trends and innovations in this area.

### 2 Minimize house loads:

- 2.1 Evaluate station lighting efficiencies.
- 2.2 Evaluate house loads to determine major power uses.
- 2.3 Determine efficiencies of major house loads and areas of potential savings.
- 2.4 Recommend changes to achieve optimum house loading.
- 2.5 Verify these changes are implemented.
- 2.6 During the periodic review in 1.6 above review new issues. This review should also identify industry trends and innovations in this area.

### 3 Maximize cycle efficiency:

- 3.1 Research and list the inputs into the condenser. List by most critical to least critical. Determine isolation valve and current method of testing.
- 3.2 Research the plant design for isolation valves between high energy and low energy systems for potential losses, i.e. MSL to Heaters.
- 3.3 Research and implement (as appropriate) improvements in the testing of trap stations and drain valves.

- 3.4 Determine the appropriate methods of monitoring feedwater Heater performance.
- 3.5 Determine the appropriate methods of monitoring main condenser performance. (Potentially open backwash valves, inoperable Nash float valves, pump performance, or more computer points.)
- 3.6 Investigate governor valve curve efficiencies and changes that would improve efficiency.
- 3.7 Compare reading on E002/C250 and compare with switchyard reading.
- 3.8 Attempt to determine if BPV are leaking and determine usefulness of downstream flow elements.
- 3.9 Evaluate FW flow venturi accuracy. If appropriate, calibrate feedwater flow differential pressure transmitter (static pressure calibration). (River Bend question)
- 3.10 Determine feasibility of continuing PSP increase and its affect on net power output.
- 3.11 Investigate and eliminate or reduce leakage from the FW pump minimum flow valve.
- 3.12 Reduce condenser air in-leakage.
- 3.13 Determine if a HP Optimization or turbine uprate is required. This depends on the thermal power uprate question.
- 3.14 Can we improve FW heater drain efficiencies. Determine possible ways or deficiencies in current design.
- 3.15 Investigate formal thermal performance program. What do other utilities do? Would it be cost effective at CNS? Potential performance monitoring upgrades.

- 3.16 Identify and implement the correct thermal performance monitoring program. This will involve bench-marking and implementing changes to the plant as required to support this program.
- 3.17 Maintain communication with the industry and other applicable industries to improve and/or maintain capacity factor continuously.

### 4 Miscellaneous:

- 4.1 Identify quick benefits for improvement
- 4.2 Promote the culture of energy efficiency by providing information to and requesting suggestions from plant personnel. This can be done in part by the use of flyers (if available and appropriate), Employee Suggestion forms and who to contact. Other methods will be investigated, evaluated, and their implementation recommended.
- 4.3 Investigate industry organizations promoting energy efficiencies. Participate in these organization as deemed appropriate.
- 4.4 Promote active involvement of A/E and OEMs in capacity factor improvements.
- 4.5 Revisit all potential cycle improvements and make recommendations to plant Management for their consideration

### SCHEDULE

	Activities	Accountable Person	Hours	Start	End
1	Minimize power reductions:				
	1.1 Identify all required down powers and areas of improvement. This includes TS or non-TS required down-powers	TG/BOP Engineer	200	12/1/95	3/15/96
	1.2 Determine potential value in changing specific Technical Specifications to reduce testing. Use industry experience to support changes	TG/BOP Engineer	200	1/1/96	8/1/96
	1.3 Determine potential value in changing other non-Technical Specification power requirements to reduce testing	TG/BOP Engineer	200	1/1/96	8/1/96
	1.4 Evaluate down- power scheduling effectiveness.	TG/BOP Engineer	80	1/1/96	4/1/96

	Activities	Accountable Person	Hours	Start	End
	1.5 Develop a plan to implement the changes identified in 1.2, 1.3, and 1.4 above in a cost effective and safe manner	TG/BOP Engineer	40	8/1/96	8/31/96
	1.6 Develop or verify that down-powers are reviewed from a cumulative standpoint periodically to identify potential problems and areas of improvement. This review should also identify industry trends and innovations in this area	TG/BOP Engineer	20	6/1/96	6/30/96
2	Reduce house loads:				
	2.1 Evaluate station lighting efficiencies	TG/BOP Engineer	40	6/12/95	9/30/95
	2.2 Research the plant design for isolation valves between high energy and low energy system for potential losses. i.e. MSL to Heaters	TG/BOP Engineer	80	6/12/95	9/30/95
	2.3 Determine efficiencies of major house loads and areas of potential savings	TG/BOP Engineer	40	6/12/95	9/30/95

	Activities	Accountable Person	Hours	Start	End
	2.4 Recommend changes to achieve optimum house loading	TG/BOP Engineer	20	8/1/95	9/30/95
	2.5 Verify these changes are implemented	TG/BOP Engineer	40	8/1/95	1/31/96
	2.6 During the periodic review in 1.6 above review new issues. This review should also identify industry trends and innovations in this area	TG/BOP Engineer	20	1/1/96	1/31/96
3	Maximize Cycle efficiency:	M. Metzger			
	3.1 Research and list the inputs into the condenser. List by most critical to least critical. Determine isolation valve and current method of testing	TG/BOP Engineer	40	6/12/95	8/4/95
	3.2 Research the plant design for isolation valves between high energy and low energy systems for potential losses. i.e. MSL to Heaters	TG/BOP Engineer	40	6/12/95	8/4/95

Activities	Accountable Person	Hours	Start	End
3.3 Research improvements in the testing of trap stations and drain valves	TG/BOP Engineer	20	6/12/95	8/4/95
3.4 Determine the appropriate methods of monitoring feedwater heater performance	TG/BOP Engineer	20	6/12/95	8/4/95
3.5 Determine the appropriate methods of monitoring main condenser performance. (Potentially open backwash valves, inoperable Nash float valves pump performance, more computer points.)	TG/BOP Engineer	20	6/12/95	8/4/95
3.6 GV valve curve efficiencies and changes that would improve efficiency	TG/BOP Engineer	20	6/12/95	8/4/95
3.7 Compare reading on E002/C250 and compare with switchyard reading	TG/BOP Engineer	8	6/12/95	8/4/95

Activities	Accountable Person	Hours	Start	End
3.8 Attempt to determine if BPV are leaking and determine usefulness of downstream flow elements	TG/BOP Engineer	20	6/12/95	8/4/95
3.9 Evaluate FW flow venturi accuracy. Calibrate feedwater flow differential pressure transmitter. (River Bend question)	TG/BOP Engineer	20	6/12/95	8/4/95
3.10 Determine feasibility of continuing PSP increase and its affect on net power output	TG/BOP Engineer	20	6/12/95	8/4/95
3.11 Investigate leakage from the FW pump minimum flow valve	TG/BOP Engineer	20	6/12/95	8/4/95
3.12 Reduce condenser air in- leakage	TG/BOP Engineer	20	6/12/95	8/4/95
3.13 Determine if a HP Optimization or turbine uprate is required. This depends on the thermal power uprate question	TG/BOP Engineer	20	6/12/95	8/4/95

	Activities	Accountable Person	Hours	Start	` End
	3.14 Can we improve FW heater drain efficiencies: Determine possible ways or deficiencies in current design	TG/BOP Engineer	20	6/12/95	8/4/95
	3.15 Investigate formal thermal performance program. What do other utilities do? Would it be cost effective at CNS? Potential performance monitoring upgrades	M. Metzger	20	6/12/95	8/4/95
	3.16 Identify and implement the correct thermal performance monitoring program. This will involve benchmarking and implementing changes to the plant as required to support this program.	M. Metzger	20	6/12/95	8/4/95
	3.17 Maintain communication with the industry and other applicable industry to continuously improve and/or maintain capacity factor	TG/BOP Engineer	8	8/4/95	9/1/95
4	Miscellaneous:				

Activities	Accountable Person	Hours	Start	End
4.1 Identify quick benefits for improvement	J. Salisbury	120	In Progress	9/15/95
4.2 Promote the culture of energy efficiency by providing information to and requesting suggestions from plant personnel.	J. Salisbury and TG/BOP Engineering	40	6/12/95	8/4/95
4.3 Investigate industry organizations promoting energy efficiencies. Participate in these organization as deemed appropriate.	J. Salisbury and TG/BOP Engineering	20	6/12/95	8/4/95
4.4 Promote active involvement of A/E, OEMs in capacity factor improvements	J. Salisbury and TG/BOP Engineering	8	6/12/95	8/4/95
4.5 Revisit all potential cycle improvements make recommendations to plant Management for their consideration	J. Salisbury and TG/BOP Engineering	80	1/1/96	12/31/96

**PROGRAM** 

Plant Reliability

PROGRAM MANAGER

S. Freborg

PROGRAM COMPLETION DATE

October 31,1996

#### DESCRIPTION

This program will enhance long-term station reliability by identification and resolution (when cost-beneficial) of those issues which could adversely affect reliable plant operation. The issues to be addressed include 1) lessons learned from industry and CNS experience, 2) equipment aging and obsolescence, 3) CNS employee feedback, and 4) excessive surveillance testing.

### **OBJECTIVE**

Focus resources on the identification and resolution of precursors to conditions potentially affecting plant reliability to meet or exceed NPG performance goals in a cost effective manner.

### **ACTIVITIES**

- Lessons learned
  - 1.1 Perform a comprehensive review of CNS forced outages/power reductions and verify corrective actions to prevent recurrence were adequately addressed (e.g. have forced outage/power reductions due to drywell FCU's been adequately addressed).

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: PLANT RELIABILITY

- 1.2 Perform a comprehensive review of industry data (e.g., solicit directly from other plants and/or review of BWROG scram frequency reduction) to determine if lessons learned from industry have been adequately addressed by CNS. This should include focus on other BWR 4 plants with Westinghouse Turbines.
- 1.3 Solicit data/information from the BWR fleet (with focus on BWR 4 plants) to identify barriers for achieving 100% power following plant outages.
- 1.4 Perform a comprehensive review of events when returning the unit to power looking for common mode failure (i. e. steam leaks, air leaks, tube leaks).
- 1.5 Incorporate lessons learned into Planning/Scheduling activities.

### 2 Equipment Aging/Obsolescence

- 2.1 Identify BOP single failure point equipment with components susceptible to aging (e.g., discreet electronic components) which, upon failure, could challenge steady state plant operations. (Evaluate necessary actions to preclude potential aging failure [e.g., PMs, Design Changes, etc].)
- 2.2 Identify NSSS equipment with components susceptible to aging which upon failure, could challenge steady state plant operations. Implement necessary actions to preclude potential aging failures.
- 2.3 Review APA Electrolytic Capacitor Study and verify adequate actions were implemented as a result.
- 2.4 Review CNS and Industry NPRDS failure history to identify susceptible CNS equipment and implement actions accordingly.
- 2.5 Screen existing backlog of open EWRs for reliability issues.

### STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: PLANT RELIABILITY

- 3 Non-Technical Specification Surveillance Testing
  - 3.1 Identify excessive non-tech. spec. surveillance testing which pose an unnecessary risk to plant operation (e.g., Reactor Feed Pump Thrust Bearing surveillance).
- 4 Employee Feedback
  - 4.1 Implement CNS Employee Survey with the purpose of identifying equipment/procedure/human performance issues which could potentially be a threat to reliable plant operation. Provide appropriate examples in the survey.
- 5 System Operating Conditions/Configurations
  - 5.1 Identify key system operating conditions/configurations which are adverse to plant reliability (e.g., those that are of concern to the operators) and implement controls to insure these conditions are minimized.
  - 5.2 Talk with other BWR plants and compare system operating condition configurations evaluate the differences.
  - 5.3 Initiate changes which improve system/plant reliability and are cost beneficial.

### SCHEDULE

	Activity	Accountable Person	Hours	Start	End
1	Lessons learned				
	1.1 Perform a comprehensive review of CNS forced outages/power reductions and verify corrective actions to prevent recurrence were adequately addressed	B.Fisher	200	1/1/96	10/31/96
	1.2 Perform a comprehensive review of industry data to determine if lessons learned from industry have been adequately addressed by CNS. This should include focus on other BWR 4's with Westinghouse Turbines	B.Fisher	200	1/1/96	10/31/96
	1.3 Solicit data/information from the BWR fleet to identify barriers for achieving 100% power following plant outages.	J. Dykstra	200	1/1/96	10/31/96

# STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: PLANT RELIABILITY

Activity		Accountable Person	Hours	Start	End
	1.4 Review events when determing the unit power				
	1.5 Implement changes	S. Freborg	40	5/1/96	10/31/96
2	Equipment aging/obsolescence				
	2.1 Identify BOP single failure point equipment with components susceptible to again which, upon failure, could challenge steady state plant operations.	J. Dyksra	200	1/1/96	10/1/96
	2.2 Identify NSSS equipment with components susceptible to aging which upon failure, could challenge steady state plant operations. Implement necessary actions to preclude potential aging failures	M.Halkens	200	1/1/96	10/1/96

# STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: PLANT RELIABILITY

Activity		Accountable Person	Hours	Start	End
	2.3 Review APA Electrolytic Capacitor Study and verify adequate action were implemented as a result	M. Baldwin	100	1/1/96	7/31/96
	2.4 Review CNS and Industry NPRDS failure history to identify susceptible CNS equipment and implement actions accordingly	L. Haneline	200	1/1/96	7/31/96
	2.5 Screen existing backlog of open EWRs for reliability issues	S.Freborg	50	7/1/95	9/15/95
3	Non Tech Spec Surveillance testing				
	3.1 Identify excessive non tech spec surveillance testing which pose an unnecessary risk to plant operation	M.Hannaford	200	1/1/96	7/31/96
4	Employee feedback				

# STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: PLANT RELIABILITY

	Activity	Accountable Person	Hours	Start	End
	4.1 Implement CNS Employee Survey with the purpose of identifying equipment/ procedure/ human performance issues which could potentially be a threat to reliable plant operation.	K. Wheeldon		1/1/96	8/1/96
5	System operating conditions/ configurations				
	5.1 Identify key system operating conditions/ configurations which are adverse to plant reliability and implement controls to insure these conditions are minimized	M.Hannaford	100	1/31/96	8/31/96
	5.2 Talk with other BWRs concerning system operation conditions/ configuration	M.Hannaford	80	1/1/96	8/31/96
	5.3 Implement changes	M.Hannaford	40	1/1/96	8/31/96

#### PROGRAM TITLE

Maint anance

PROGRAM MANAGER

M. Boyce

PROGRAM COMPLETION DATE

December 31, 1997

#### DESCRIPTION

In this program, Cooper will develop and implement a more effective planned maintenance program. The program will balance the need to use practical and analytical methods to focus resources effectively; it will support the NPG's performance goals while meeting regulatory requirements, such as the Maintenance Rule (10CFR50.65, Requirements for Monitoring the Effectiveness of Maintenance in Nuclear Power Plants.)

Regulatory Guide 1.160, Guidelines for Implementing the Maintenance Rule, and NUMARC 93-01 and 93-02, which document recommendations for implementation of the Maintenance Rule and experience from pilot implementing programs, also provide input. By taking a practical and rehability centered approach, resources can be used in an optimum fashion.

#### **OBJECTIVES**

Implement a cost-effective maintenance program that will support achievement of Cooper's performance goals, reduce recurring equipment failures, and meet regulatory expectations. Continual monitoring of plant equipment per the Maintenance Rule (10CFR50.65) is an integral part of this program.

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: MAINTENANCE

### **ACTIVITIES**

- Form a task force with representation from appropriate departments to develop a reliability-centered, systematic approach to the maintenance program
- 2 Establish objectives and constraints for optimized maintenance program
- 3 Establish roles and responsibilities; staff the NPG organization for the optimized maintenance program.
- 4 Review current program with current contractor
- 5 Review approaches taken elsewhere in the industry
  - 5.1 Contact the NRC, INPO, and/or EPRI for insight about other utility program addressing the Maintenance Rule
  - 5.2 Contact other utilities (for example, Union Electric) that have taken a practical and lower-cost approach to reliability based maintenance
  - 5.3 Review utility programs addressing the Maintenance Rule to determine early feedback from these programs
- 6 Make adjustments to the maintenance program, as necessary and appropriate.
- Coordinate development of the maintenance program with the Operating Experience Review Program in order to benefit from Cooper's and the industry's operating experience
- 8 Conduct initial implementation program
- 9 Determine approach and scope of remaining program (other systems)
- 10 Implement the remaining program

# STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: MAINTENANCE

### SCHEDULE

	Activities	Accountable Person	Hours	Start Date	End Date
1	Form task force	M. Boyce	20	6/12/95	7/15/95
2	Establish objectives	M. Boyce	60	7/1/95	8/1/95
3	Establish roles	M. Boyce	60	7/1/95	8/1/95
4	Review current program	M. Boyce	80	8/1/95	8/31/95
5	Review other approaches	M. Boyce			
	5.1 Contact the NRC, INPO, and EPRI	M. Boyce	40	9/1/95	12/31/95
	5.2 Contact other utilities	M. Boyce	80	9/1/95	12/31/95
	5.3 Review other utility Maintenance Rule program	M. Boyce	80	9/1/95	12/31/95
6	Restructure the program	M. Boyce	160	1/1/96	2/1/96
7	Coordinate with the OER Program	M. Boyce	200	1/1/96	7/10/96
8	Conduct trial implementation	M. Boyce	2000	3/1/96	7/10/96
9	Determine approach and scope of remaining program	M. Boyce	200	7/1/96	9/1/96
10	Implement remaining program	M. Boyce	TBD	9/1/96	12/31/97

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: POWER UPRATE

### PROGRAM TITLE

Power Uprate

### PROGRAM MANAGER

J. Salisbury

### PROGRAM COMPLETION DATE

May 31, 1997

### DESCRIPTION

This program will be directed toward the possible uprating of reactor thermal power production to 105% or 2500 MWth of its current rated power of 2381 MWth.

### **OBJECTIVE**

Establish a program to determine the feasibility of uprating the plant to 2500 MWth and, if feasible, implement the change during the 1997 refueling outage in a cost effective and safe manner.

#### **ACTIVITIES**

- 1 Assemble the project team:
  - 1.1 Assemble the project team with membership from the following

Licensing
Fuels group
Design Engineering
Reactor engineering
TG/BOP engineering
Training and simulator group
Program Control

- 1.2 Assign the Program Manager.prate before proceeding.
- 2 Conduct Cost Benefit Analysis.
  - 2.1 Develop cost estimate (order of magnitude) for :

NPPD labor Hardware upgrades Contracted support NRC review fees

- 2.2 Develop benefit analysis.
- 2.3 Evaluate payback/net present value/internal rate of return.
- 2.4 Present to SRB and Site Manager for approval to proceed
- 3 Formulate Project Plan and Schedule
  - Establish initial milestone schedule for implementation (consider 1997: RE17).
  - 3.2 Evaluate potential conflicts; i.e. upgrade to improved technical specifications

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: POWER UPRATE

- 3.3 Benchmark other plants that have performed this type modification. Discuss good, ban and what should be done differently.
- 3.4 Investigate industry groups involved in this type[e [process; i.e. NEI, INPO, BWORG, EPRI.
- 3.5 Discuss with NRC(NRR) to determine what BWRs had done this recently and the success of their plans.
- 3.6 Develop spend plan/cash flow.
- 3.7 Review with Management.
- 4 Implement the Program Plan.

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: POWER UPRATE

## SCHEDULE

	Activities	Accountable Person	Hours	Start	End
1	Assemble the project team				
	1.1 Select a project team	R. Gardner	8	6/12/95	6/19/95
	1.2 Select a program manager	R. Gardner	8	6/12/95	6/19/95
2	Conduct cost benefit analysis				
	2.1 Develop cost estimate	PM	20	6/29/95	7/15/95
	2.2 Develop benefit analysis.	PM	120	6/29/95	7/31/95
	2.3 Evaluate payback/net present value/internal rate of return	M/ Dixon	20	7/29/95	7/31/95
	2.4 Present to SRB and Site Manager for approval to proceed	PM	4	7/29/96	7/31/95
3	Formulate Project Plan and Schedule.				
	3.1 Establish initial milestone schedule for implementation.	PM	80	8/4/95	8/31/95
	3.2 Evaluate potential conflicts	PM	40	8/4/95	8/31/95

## STRATEGY: STATION CAPACITY AND RELIABILITY PROGRAM: POWER UPRATE

	Activities	Accountable Person	Hours	Start	End
	3.3 Benchmark other plants that have performed this type modification. Discuss good, ban and what should be done differently.	PM	20	8/4/95	8/11/95
	3.4 Investigate industry groups involved in this type[e [process; i.e. NEI, INPO, BWORG, EPRI.	PM	16	9/1/95	9/15/95
	3.5 Discuss with NRC(NRR) to determine what BWRs had done this recently and the success of their plans.	PM	16	9/1/95	9/15/95
	3.6 Develop spend plan/cash flow.	PM	16	9/1/95	9/30/95
	3.7 Review with Management	PM	8	9/30/95	10/1/95
4	Implement the Program Plan	PM	40	9/1/95	5/31/97

#### APPENDIX A

1 Fire Protection

Action: Establish and fully staff the fire protection

organization.

Due: 9/15/95

Responsibility: M. Spencer

2 Quality Control

Action: Develop a plan/schedule for long-term improvements;

develop additional methods for measuring program

effectiveness.

Due: 7/15/95 Responsibility: H. Roup

3 Radwaste Storage

Action: Initiate an amendment to DC 91-077 to allow for

storage of higher activity RWCU HIC's; complete

modification to allow for HIC processing.

Due: 7/15/95

Responsibility: T. Hoeman

4 Radiological Data Management

Action: Upgrade RDMS

Due: 10/13/95 Responsibility: J. M. Hale

5 Surveillance Testing

Action: Develop and implement a formal surveillance

evaluation process, which includes interface

requirements.

Due: 12/31/95

Responsibility: D. Bremer

#### 6 Predictive Maintenance

Action: Develop a training program for personnel conducting

thermography.

Due: 12/8/95

Responsibility: R. Gardner

## 7 Process Instrumentation Calibration

Action: Revise procedure 0.38 to include simplification of the

Cal Requirements Data Sheets and performance

indicators.

Due: 1/31/96

Responsibility: H. Jantzen

### 8 Preventive Maintenance

Action: Complete development of the PM program, including

clarification of which require MWR's.

Due: 1/31/96

Responsibility: M. Unruh

## 9 Maintenance Work Practices

Action: Enforce management expectations concerning

housekeeping, post-job cleanup, tool return, etc.

Due: 10/10/95

Responsibility: R. Gardner

## 10 Shift Technical Advisor

Action: Complete transition to the Shift Technical Engineer

Program.

Due: 8/31/95

responsibility: J. Gausman

## 11 Welding

Action: Specify the welding program owner; evaluate the

recent performance in the welding area and

determine if actions are warranted.

Due: 7/15/95

Responsibility: S. Freborg

## 12 System Engineering

Action: Provide a plan and schedule for professional

development of Engineering Department personnel, including higher education and professional licensing. Provide a plan for modifying the engineering and engineering technician progression series to allow for more advancement opportunities over the career life of an individual. Provide a plan for system engineers to attend operations' (ailuate sessions on interface

issues that concern both work groups.

Due: 12/31/95

Responsibility: J. Gausman

13 Component Aging

Action: Evaluate the GEMAC controllers for age related

concerns and revision o procedures or PMS to incorporate visual inspections for component

discoloration or degradation.

Due: 8/31/95

Responsibility: S. Freborg

14 Shelf Life

Action: Provide guidance to tie together the functions of

various departments involved in the shelf life

program.

Due. 7/31/95

Responsibility: T. Hottovy

15 Commercial Grade Dedication

Action: Update the procedures to assign the Procurement

Engineering Supervisor the responsibilities of the

EPD Supervisor.

Due: 7/30/95

Responsibility: T. Hottovy

#### 16 CNS Vendor Manual Program

Develop a plan to pursue management's buy-in to Action:

elevate the priority of the VMCF reviews by other involved groups to allow final approval of the

backlogged VMCF's.

Due:

7/30/95

Responsibility:

T. Hottovy

#### 17 Erosion/Corrosion Program

Complete Erosion/Corrosion Program upgrade and Action:

include the following:

Establish a computerized A) erosion/corrosion data base.

Incorporate the use of computerized B)

data analysis.

Update and expand the predictive C) modeling work on high energy systems.

Establish/formalize all the wall thinning D)

programs.

Due:

9/15/95

Responsibility:

M. Spencer

#### Vendor Manuals 18

Action: Implement changes to program procedures to

enhance the understanding of individual

responsibilities, streamline and coordinate processes and department interface, and establish guidance for

categorizing/prioritizing vendor information.

Due:

8/31/95

Responsibility:

T. Hottovy

19 Program Assessment Open Items: Seismic Qualification of Equipment

Program

Action:

Determine wifether to adopt the OBE exceedance

issue that could eliminate an unnecessary plant shutdown if the licensing basis OBE is exceeded.

Due:

8/15/95

Responsibility:

D. Buman

Action:

Complete development of MOV Task Force chaired by the MOV Program Manager, that represents all organizations responsible for the design, operation and maintenance of MOV's.

- Provide periodic MOV Task Force meetings to determine resource requirements.
- B) Determine long term direction of MOV Program improvement efforts including the transition of MOV program responsibilities to CNS.

Determine and evaluate other performance indicators that are useful in measuring MOV Program performance. Visit other plants that will achieve GL 89-10 closeout prior to CNS and apply lessons learned at CNS. Develop a specific plan for preparing a closure package following completion of the planned RE16 MOV testing.

Due:

9/30/95

Responsibility:

P. Graham

## 21 Security

Action:

Complete range upgrade to include a training mock-

up used for force-on-force paint gun activities.

Complete plans for Security crew drills coordinating

with operations simulator scenarios.

Due:

9/1/95

Responsibility:

M. Hamm

## 22 Communicate Expectations for the Conduct of Operations

Action:

Reenforce expectations in the following area: procedural use and adherence, job completion standards, communications, and equipment status control. (Phase 2 follow-on-May be included in

Phase 3 Program.)

Due:

9/15/95

Responsibility:

J. Dillich

## 23 Safety System Availability

Action: Formulate, communicate, and implement

expectations for managing safety system

unavailability

Due: 9/15/95

Responsibility: P. DiRito

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

PRIMARY CONTAINMENT PRESENTATION

TO

NUCLEAR REGULATORY COMMISSION

JUNE 27, 1994



## NEBRASKA PUBLIC POWER DISTRICT ATTENDEES

- ROBERT WILBUR DIVISION MANAGER
   NUCLEAR ENGINEERING AND CONSTRUCTION
- MICHAEL BOYCE DESIGN BASIS SUPERVISOR
- KENDALLL CURRY MECHANICAL ENGINEER
- MICHAEL SPENCER ENGINEERING PROGRAMS SUPERVISOR
- GREGORY SMITH LICENSING MANAGER



# NRC PRESENTATION JUNE 27, 1994 COOPER NUCLEAR STATION PRIMARY CONTAINMENT

MICHAEL BOYCE
DESIGN BASIS SUPERVISOR



## TOPICS OF DISCUSSION

- HOW THIS PROBLEM WAS DISCOVERED
- DESCRIPTION OF IDENTIFIED CONCERNS AND CORRECTIVE ACTIONS TAKEN
- SHORT TERM CORRECTIVE ACTIONS AND RESULTS
- CONCLUSION



## HOW WAS THIS PROBLEM DISCOVERED

Inspection 93-11 - containment disign would found which started program

## THREE STEP PLAN FOR PRIMARY CONTAINMENT DESIGN BASIS RECONSTITUTION

- PREPARE DESIGN CRITERIA DOCUMENT

   DED direct
- CONDUCT PRIMARY CONTAINMENT WALKDOWN
- EVALUATE WALKDOWN DATA AND CONDUCT SYSTEM VALIDATION AND VERIFICATION



## HOW WAS THIS PROBLEM DISCOVERED (CONTINUED)

 PLANNED PRIMARY CONTAINMENT WALKDOWN SPECIAL PROCEDURE 94-202 APPROVED ON MAY 17 AND STARTED ON MAY 18, 1994

• SP 94-202 COLLECTED AS-BUILT DATA FOR EACH PENETRATION & See

 SP 94-202 COLLECTED AS-BUILT DATA FOR EACH CONTAINMENT ISOLATION BARRIER



## HOW WAS THIS PROBLEM DISCOVERED (CONTINUED)

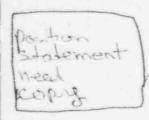
- FIRST MAJOR CONCERN ON PENETRATION X-218 IDENTIFIED ON JUNE 2ND (CR 94-241)
- FOUR MORE EXAMPLES OF SIMILAR PROBLEM IDENTIFIED ON JUNE 6TH X-209A D (CR 94-261)
- STARTED PENETRATION-BY-PENETRATION REVIEW OF WALKDOWN DATA ON JUNE 6TH
- TO DATE, CONCERNS IDENTIFIED ON 99 PENETRATIONS, RANGING FROM CAPS MISSING TO INADEQUATE DESIGN

independent prices conducted



## DESCRIPTION OF IDENTIFIED CONCERNS

• TYPE 6 - FSAR QUESTION 5.5; SINGLE MANUAL VALVE OUTSIDE CONTAINMENT 
30 PENETRATIONS - in majority of easie providing and manual valve - valve - advising closely.



- TYPE 7 ELECTRICAL PENETRATIONS SEAL 9 PENETRATIONS ACCEPTED AS FOUND mostly
  outpinal penetrations nothered by GE
- TYPE 8 NONESSENTIAL COMPONENTS
  WITHIN THE CONTAINMENT BOUNDARY APPROX. 35 PENETRATIONS with improperty clainfied



Reviewing RO. E, maintenance ( Instouis. - they are being requalitied or dedicated will be desired to present

to start up

## DESCRIPTION OF IDENTIFIED CONCERNS

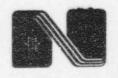
- TYPE 1 DRYWELL VENT EXPANSION

  BELLOWS PENETRATIONS X-5A THROUGH H

  Will be documented-
- TYPE 2 MISSING CAPS FROM VENT, DRAIN AND TEST CONNECTIONS-15 PENETRATIONS

  All are being fixed Pedmin control of valves
- TYPE 3 FAILURE TO CONDUCT TYPE C
  LOCAL LEAK RATE TESTING 12
  PENETRATIONS
  All 12 will have lurt performed
- TYPE 4 USE OF A SINGLE CAP OR A CAP AND A MANUAL VALVE 24 PENETRATIONS

  Plant control of manual valves of adding ear valves where there is early a cap.
- TYPE 5 INADEQUATE DESIGN 8 PENETRATIONS 5 therms couple penetrations



## DESCRIPTION OF IDENTIFIED CONCERNS

TYPE 9 - INSTRUMENTS VALVED OUT DURING

TYPE A TEST - 4 PENETRATIONS will all be steaded prior to stand-ups

Contain spray introducing 1 All accident 1

HTSI mitration 1 All accident 1

Jon range

TYPE 10 - REVERSE DIRECTION TESTING

Took at:

Evaluation

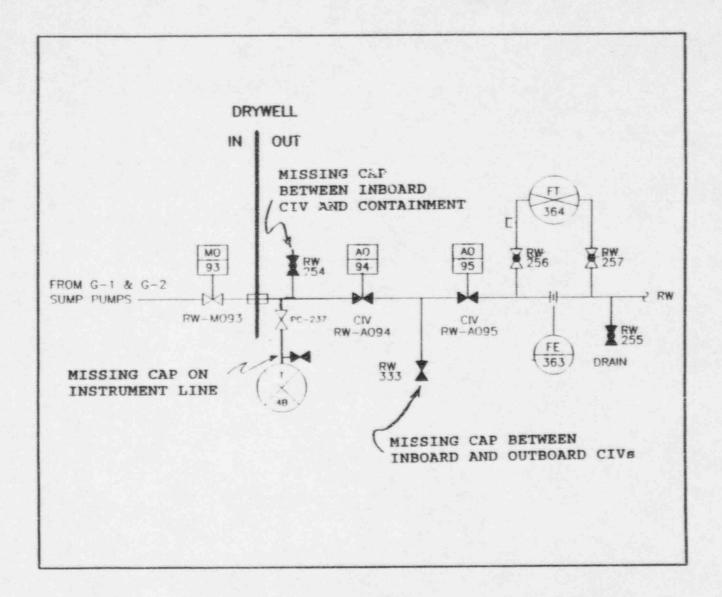
Type 10 - Reverse DIRECTION TESTING

Type 10 - Reverse DIRECTIO

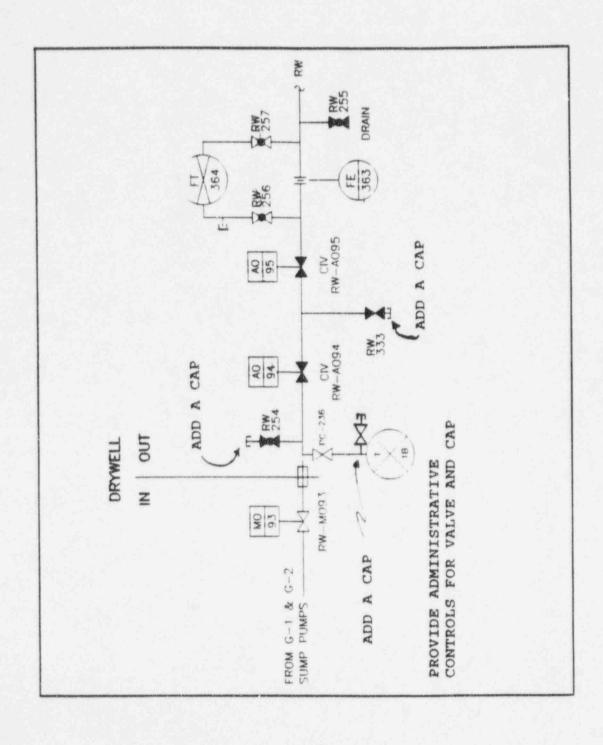
• TYPE 11 - CODE CLASSIFICATION OF CONTAINMENT PENETRATIONS - 25 PENETRATIONS

materialis, fluir - House nort found material problems - CATTRS on call materials wolding in question. PT





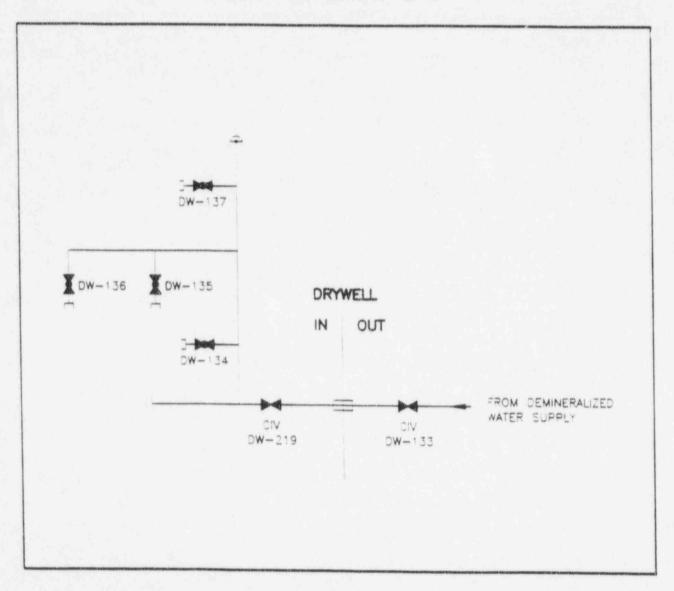






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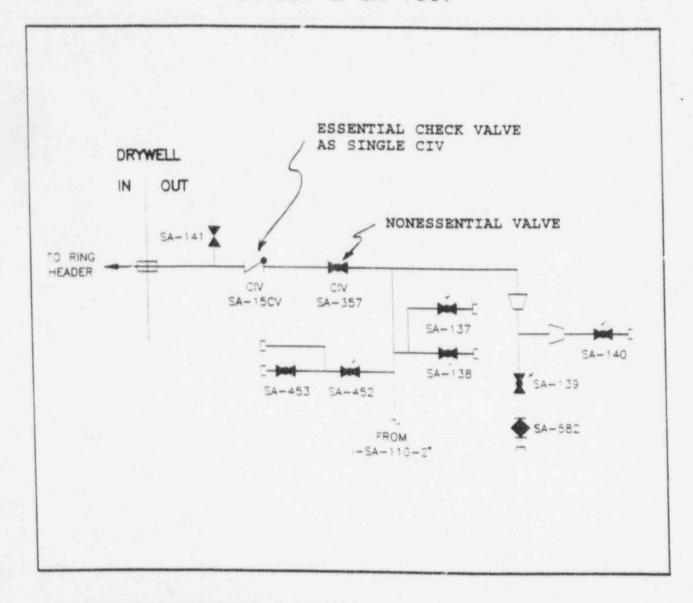
# PENETRATION X-20 DEMINERALIZED WATER SUPPLY CONTAINMENT ISOLATION VALVES DW-133 & DW-219



NOTE		Committee of the Commit	RIPTION				100 A 100 TOWN		Name of Street, Street, and Address.	THE PARTY OF THE P
1			INFORMATION				å	4262	(TYPE	
2	DESIGNATION OF THE PARTY OF THE	POINT	PRODUCE STREET, STREET			Annual Valorino Walk	ORDINATION OF	Modern Committee Manageria	COLUMN AVENUE CON	The second second
3	TEST	CONN	ECTION	THE CHICARGO STREET	STATE STATE STATE AND ADDRESS.	CARL STATE OF THE STATE OF THE STATE OF		TALL DESCRIPTION OF THE PARTY O		TOTAL CONTRACTOR

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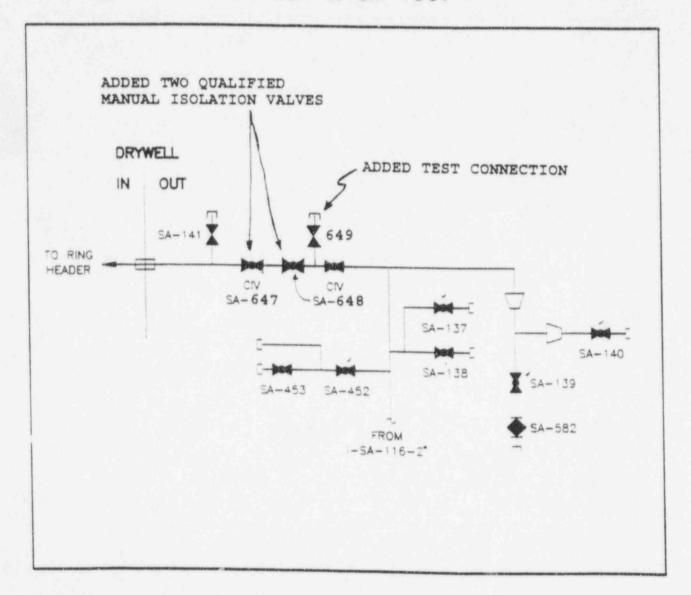
# PENETRATION X-21 SERVICE AIR CONTAINMENT ISOLATION VALVES SA-357 & SA-15CV



		DESC	RIPTION				TO COLOR VERNE ASSESSMENT			Diskus	er can consu		or and the second	OFFICE VALUE
1	FOR	MORE	INFORMATIO			&	ROE	#2010	SHT	3	åc	4262	(TYPE	3)
2		POIN		A CONTRACTOR DESCRIPTION OF THE PARTY OF THE		NINCHOLD IN	-			100,000	e Sales Streets		CHARLES THE PARTY OF THE PARTY	E ACHIEN AND AND AND AND AND AND AND AND AND AN
3	TEST	CONN	NECTION	Pinin lett minerammaene	THE PART OF THE PARTY OF THE PA		Chorage in success				SACHER PRO	A. Andrews		

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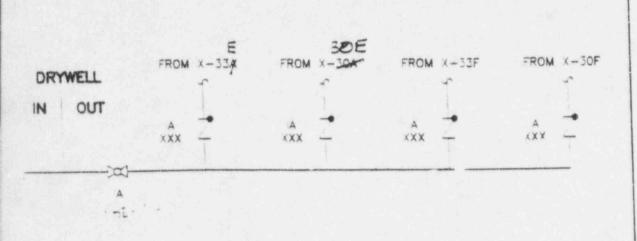
# PENETRATION X-21 SERVICE AIR CONTAINMENT ISOLATION VALVES SA-357 & SA-15CV



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1	FOR N	ORE	INFORMATI	ON	SEE	BURNS	&	ROE	#2010	SHT	3	&	4262	(TYPE	3
2	VENT			-		The second second	DESCRIPTION	THE RESERVE OF THE PERSON NAMED IN	Marie Print Street and		HISTORY (1970)	*********			- NAME
3	TEST	CONN	IECTION			Manufaction and Associates associated	NA COLUMN			TO SERVICE OR SERVICE	-	NAME AND ADDRESS OF	TO SERVICE OF THE SER	STATE OF THE PARTY	TOWN COMP

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## PENETRATION X-45D SOV AIR EXHAUST TO DRYWELL CONTAINMENT ISOLATION VALVES IA

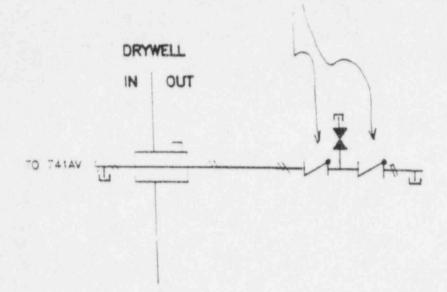


NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2028
2	VENT POINT
3	TEST CONNECTION

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## PENETRATION X-45D SOV AIR EXHAUST TO DRYWELL CONTAINMENT ISOLATION VALVES IA

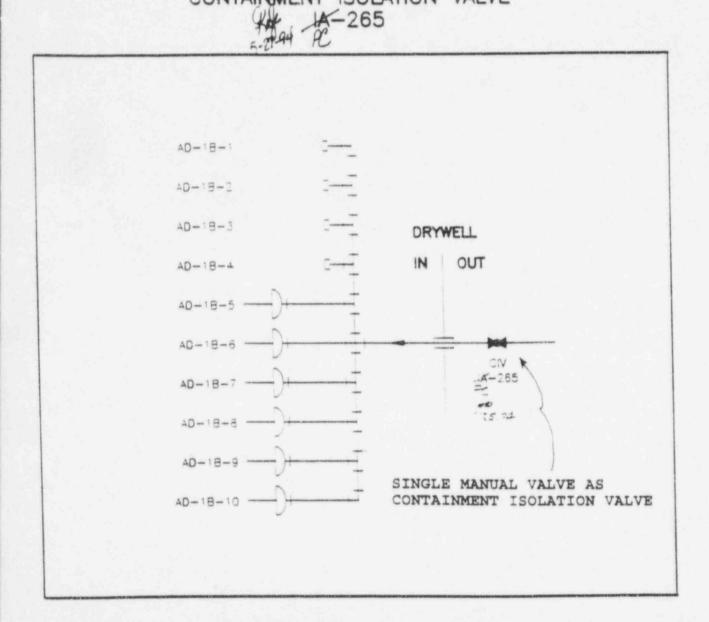
PROVIDE TWO QUALIFIED CHECK VALVES AND TEST CONNECTIONS



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2028
2	VENT POINT
3	TEST CONNECTION

-	Procedure No.	Rev.	Page	
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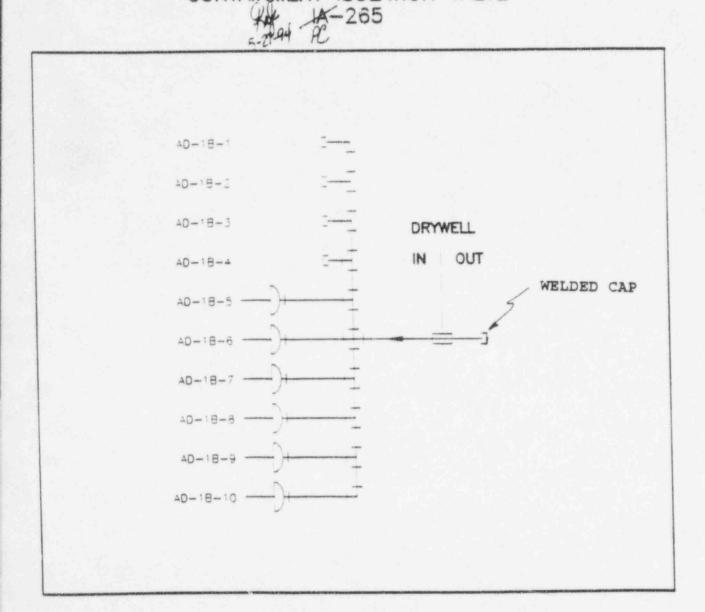
## PENETRATION X-46A AIR TO DRYWELL ZONE BALANCING DAMPERS CONTAINMENT ISOLATION VALVE



1	FOR MORE INFORMATION SEE B&R #4262 (TYPE 14), IL-E-70-3 SHT. 28
2	VENT POINT
3	TEST CONNECTION

Procedure No.	Rev.	Page

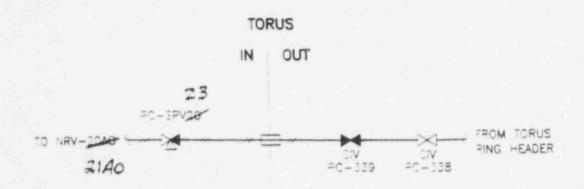
## PENETRATION X-46A AIR TO DRYWELL ZONE BALANCING DAMPERS CONTAINMENT ISOLATION VALVE



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE B&R #4262 (TYPE 14), IL-E-70-3 SHT. 28
2	VENT POINT
3	TEST CONNECTION

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# PENETRATION X-229A VACUUM BREAKER ACTUATING AIR CONTAINMENT ISOLATION VALVES PC-338 & PC-339



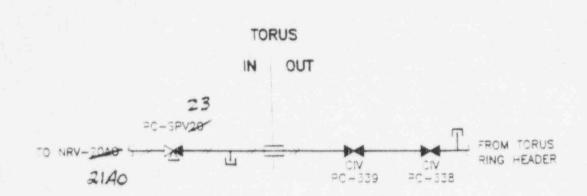
ONE NORMALLY OPEN AND ONE NORMALLY CLOSED MANUAL VALVE AS DOUBLE ISOLATION

NO PROVISIONS FOR LLRT

NOTE			RIPTION	GAMME SHAPE			E Muanumo Was		
1	FOR		INFORMATION				4262	(TYPE	6)
			THE PARTY OF THE P			THE STREET, ST		CONTROL OF STREET WESTER	
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		Made Service assessment alreades			CONTRACTOR OF STREET			Control of the Control	

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# PENETRATION X-229A VACUUM BREAKER ACTUATING AIR CONTAINMENT ISOLATION VALVES PC-338 & PC-339



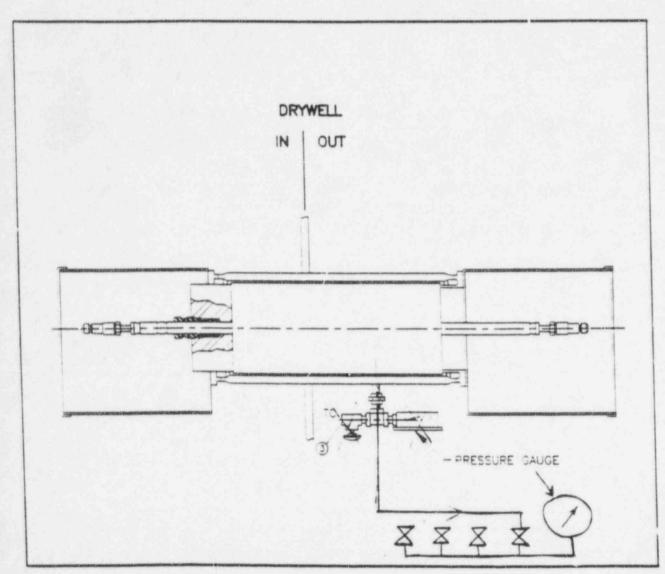
PROVIDE TWO SEALED CLOSED MANUAL ISOLATION VALVES

PROVIDE TEST CONNECTIONS

NOTE		DESC	RIPTION						
4	FOR	MORE	INFORMATION	SEE	B&R	#2027,	4262	(TYPE	6)
				******	A CONTRACTOR OF SPECIAL PROPERTY.		-		
		NAME OF TAXABLE PARTY OF				THE WASTE STATE OF THE PARTY OF	ANT DESCRIPTION OF THE PARTY OF	A STATEMENT OF THE PARTY OF THE	
M SEW LONDON	Different mental and a second			THE PERSON NAMED IN COLUMN	AND RESIDENCE ADVISOR	District Williams and The State of	CARLOS AND AND STREET, MADE	SAMELAN SIMBORON PRO	

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## PENETRATION X-49C INDICATION & CONTROL



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NOTE	DESCRIPTION	
1	FOR MORE INFORMATION SEE CONAX #7T26-20000	
2	VENT POINT	
3	TEST CONNECTION	THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON NAMED I

## COMPONENT QUALIFICATION ISSUE

- REVIEWED CLASSIFICATION OF COMPONENTS
- APPROXIMATELY 35 PENETRATIONS WITH COMPONENTS CLASSIFIED AS NONESSENTIAL
- PRIMARILY INSTRUMENTS AND ROOT VALVES
- PURCHASE AND MAINTENANCE HISTORY REVIEW NO UNQUALIFIED COMPONENTS
- COMPONENTS WILL BE PROPERLY QUALIFIED PRIOR TO STARTUP



## REVIEW OF ILRT PROCEDURE

- INDEPENDENT LEAK RATE TEST CONSULTANTS REVIEWED ILRT PROCEDURE
- REVIEWED PROCEDURE FOR CORRECT ILRT BOUNDARY, TEST METHODS, AND COMPLETENESS
- IDENTIFIED 13 PRESSURE SWITCHES AND 2 TRANSMITTERS VALVED OUT DURING ILRT
- THESE PRESSURE INSTRUMENTS WILL BE LLRT TESTED PRIOR TO STARTUP



## REVERSE DIRECTION TESTING

- IDENTIFIED 6 ADDITIONAL VALVES DURING REVIEW OF LLRT PROCEDURE TESTED IN REVERSE DIRECTION (4 GLOBE, 2 GLOBE STOP CHECK)
- ENGINEERING HAD ANALYZED THESE GLOBE VALVES AND DETERMINED THAT REVERSE DIRECTION TESTING WAS CONSERVATIVE
- VALVES: RHR-MOV-38A/B, TORUS SPRAY RHR-MOV-167A/B, RHR HX VENT HPCI-V-44, HPCI TURB. EXHAUST RCIC-V-37, RCIC TURB. EXHAUST

Two globe values will be tested in necessary derection



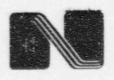
## RHR-MOV-38A/B

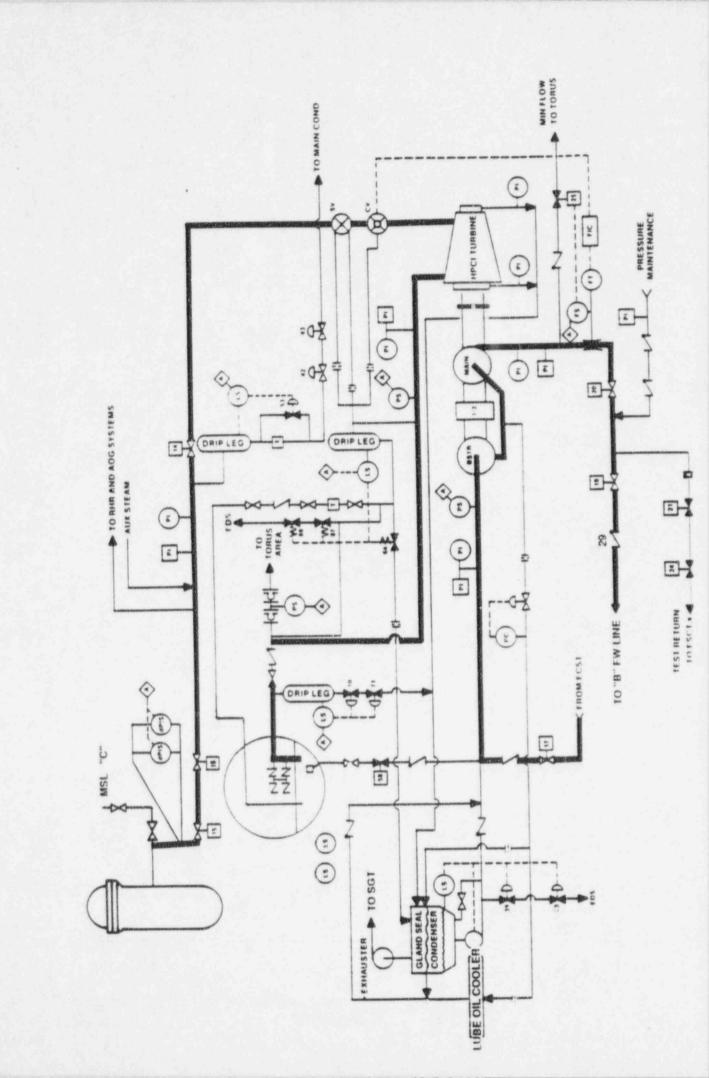
- A METHOD HAS BEEN DETERMINED TO TEST IN THE ACCIDENT DIRECTION
- PLUGS WILL BE INSTALLED IN PLACE OF THE TORUS SPRAY NOZZLES
- THE SYSTEM WILL BE PRESSURIZED TO ACCIDENT PRESSURE
- THE VALVE SEAT, PACKING AND BONNET GASKET WILL BE EXPOSED TO ACCIDENT PRESSURE



## **RHR-MOV-167A**

- IN ORDER TO TEST THIS VALVE IN THE ACCIDENT DIRECTION, IT WILL BE NECESSARY TO INSTALL A BLOCK VALVE
- THE PACKING AND BONNET GASKET OF THE BLOCK VALVE WILL NOT BE TESTABLE
- THE ONLY REASON FOR TESTING IN THE ACCIDENT DIRECTION IS TO TEST THE PACKING AND BONNET GASKET THIS DEFEATS THE REASON FOR THE RULE
- SEAT LEAKAGE WILL BE CONSERVATIVE AS IS





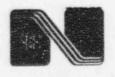
#### HPCI-V-44 AND RCIC-V-37

- SEAT LEAKAGE IS CONSERVATIVE IN REVERSE DIRECTION
- VALVE HAS A BACKSEAT
- BONNET GASKETS ARE HIGHLY RELIABLE
- RUN HPCI AND RCIC MONTHLY WOULD IDENTIFY LEAKS
- ILRT DOES TEST SEAT, PACKING AND GASKET
- MODIFICATIONS ARE EXTENSIVE



#### PENETRATION CODE QUALIFICATION ISSUE

- REVIEW OF CODE QUALIFICATION OF EACH PENETRATION
- IDENTIFIED 36 PENETRATIONS WHICH WERE CLASSIFIED IIIN OR IVP SHOULD BE IIN
- IDENTIFIED APPROPRIATE DOCUMENTATION FOR MATERIALS AND COMPONENTS
- WHERE NDT WAS NOT IN ACCORDANCE WITH CLASS IIN CONDUCTING APPROPRIATE RTs/PTs
- ANY DISCREPANCIES WILL BE RESOLVED PRIOR TO STARTUP



#### SHORT TERM CORRECTIVE ACTIONS

- REVIEW PENETRATIONS (COMPLETE)
- RESOLVE IDENTIFIED CONCERNS (IN PROGRESS)
- ENSURE THAT PRIMARY CONTAINMENT IS FUNCTIONAL AND OPERABLE



#### ACTIONS TAKEN TO ENSURE PRIMARY CONTAINMENT IS FUNCTIONAL AND OPERABLE

- RESOLVE IDENTIFIED DISCREPANCIES
- REVIEWED PCIS LOGIC
- REVIEWED SURVEILLANCE TESTING
- REVIEWED CIV OPERATING TIMES
- REVIEWED ILRT PROCEDURE
- REVIEWED LLRT PROCEDURE
- REVIEWED OPEN CORRECTIVE ACTION DOCUMENTS
- REVIEWED SAFETY CLASSIFICATION OF COMPONENTS WITHIN CONTAINMENT BOUNDARY
- REVIEWED CODE CLASSIFICATION



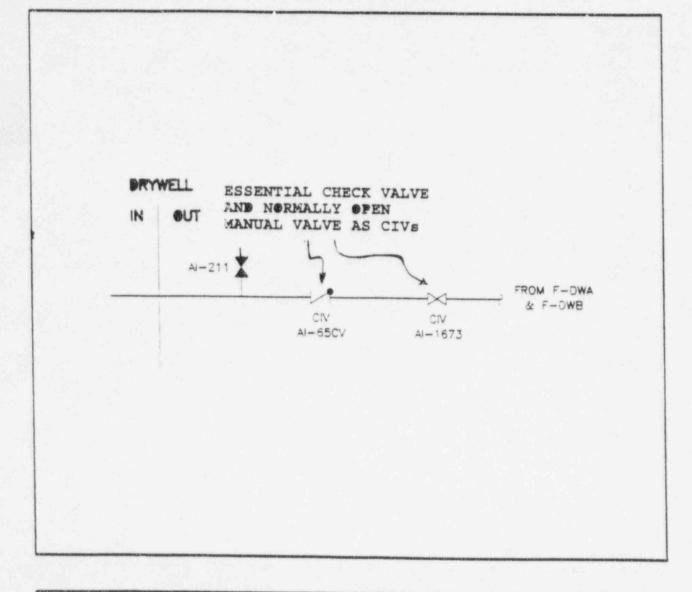
#### CONCLUSION

- PRIOR TO STARTUP DEFICIENCIES IN PENETRATION DESIGNS WILL BE RESOLVED
- PENETRATIONS REQUIRING TYPE B AND C TESTING WILL BE TESTED
- REVIEWS WILL HAVE BEEN COMPLETED OF OTHER MAJOR ASPECTS OF THE PRIMARY CONTAINMENT SYSTEM
- THE PRIMARY CONTAINMENT WILL BE FULLY FUNCTIONAL AND OPERABLE PRIOR TO STARTUP



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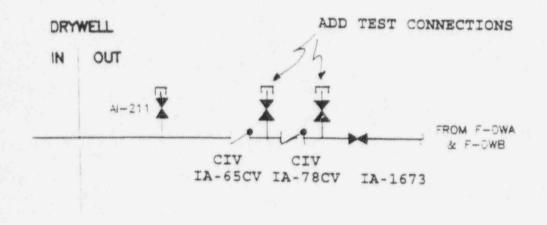
### INSTRUMENT AIR CONTAINMENT ISOLATION VALVES AI-1673 & AI-65CV



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2010 SHT. 2
	VENT POINT
3	TEST CONNECTION

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### PENETRATION X-22 INSTRUMENT AIR CONTAINMENT ISOLATION VALVES AI-1673 & AI-65CV



PROVIDE TWO QUALIFIED CHECK VALVES AS CIVS

NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2010 SHT. 2
2	VENT POINT
3	TEST CONNECTION

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PER DM 6/15/94
PENETRATION X-23
DEMINERALIZED WATER SUPPLY
CONTAINMENT ISOLATION VALVES
REC-M0702 & REC-15CV

CIV NOT IN LLRT PROGRAM NO PROVISIONS FOR LLRT DRYWELL IN OUT X REC MO 702 REC 282 ₹ REC 689 ☐ REC | REC | REC | REC | REC | REC | MO702 DRAIN DRAIN D.W. EQUIP. DRAIN TO RECIRC. TO FAN COIL UNITS HEAT EXCHANGER TO RECIRC. COOLER X REC PUMP 18 COOLER

MORE	INFORMATION	CEE		District of the last		TOWNS CO.	***	-				
11.000	HAL OLIMALIOIA	SEE	BURNS	&	ROE	#2031	SHT	1	&c	4262	(TYPF	8)
T POIN	T	ALADA PARAMERA		TO THE OWNER OF THE OWNER	WAY DE			*********	PHOMPHEY	THE SPECIAL PROPERTY AND	The state of the s	· /
T CONN	NECTION	MAN TOO SHOWING RANGE AND	A STATE OF THE PARTY OF THE PAR		***************************************	Defender over the Best at		MINI WHEN	NAME OF STREET	-	Water Sandar and Am	***********
	T POIN	T POINT T CONNECTION	T POINT	T POINT	T POINT	T POINT	T POINT	T POINT	T POINT	T POINT	T POINT	T POINT

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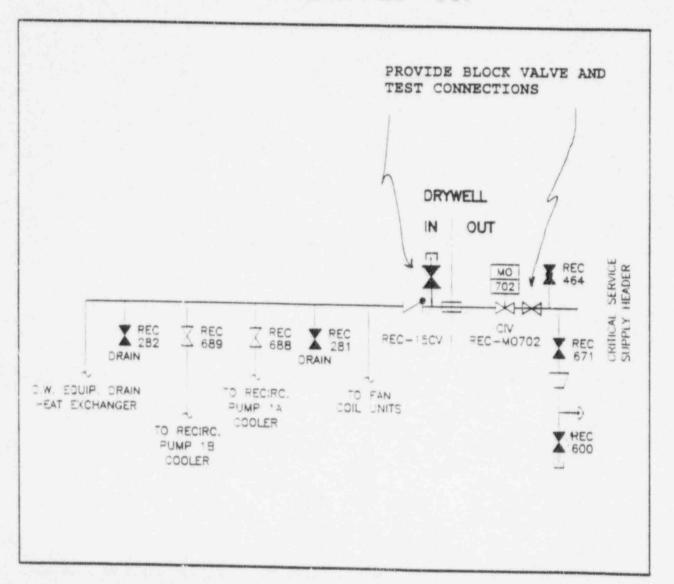
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PENETRATION X-23

DEMINERALIZED WATER SUPPLY

CONTAINMENT ISOLATION VALVES

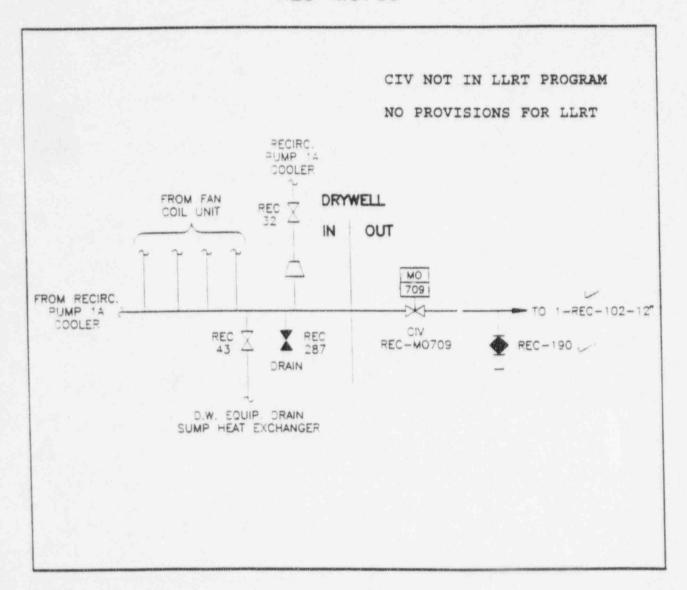
REC-M0702 & REC-15CV



			MONEY CAN	NORTH AND ADDRESS OF THE PARTY	Ministration To the second reserve	The second second	MARKE MARKE			CRIPTION	DESC		NOTE
FR	(TYPE	& 4262	1 &	SHT	#2031	ROE	&	BURNS	SEE	INFORMATION	MORE	FOR	1
	(1110			MARKA MILIANA	THE RESERVE TO SERVE THE PARTY OF THE PARTY	-	-		-	T	FOIN	VENT	2
**********	-			Thomas Andrews	Manuser Valley	AND THE PERSON NAMED IN	-			NECTION	CONN	TEST	3
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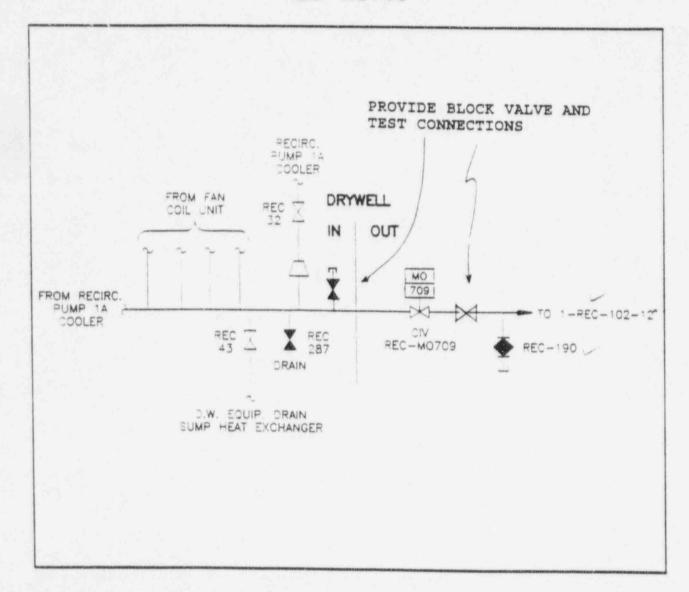
#### PENETRATION X-24 RBCCW SYSTEM RETURN FROM DRYWELL CONTAINMENT ISOLATION VALVE REC-M0709



NOTE		DESC	RIPTION										-
1	FOR	MORE	INFORMATION		 STREET, SQUARE,	The state of the s	ACCRETATION AND PROPERTY OF THE PERSONS ASSESSMENT	SHT	1	&	4262	(TYPE	3)
2	VENT	POINT			POLICE THE P			Comments over 10 miles	AND REPORT	CONTRACT LINEAR			
3	TEST	CONN	ECTION	MANUAL PROPERTY.	THE REAL PROPERTY.	AND DESCRIPTION OF	THE STREET, ST	of the paper and the said	LEMPO NAME	ette punkt in		AMARINA	

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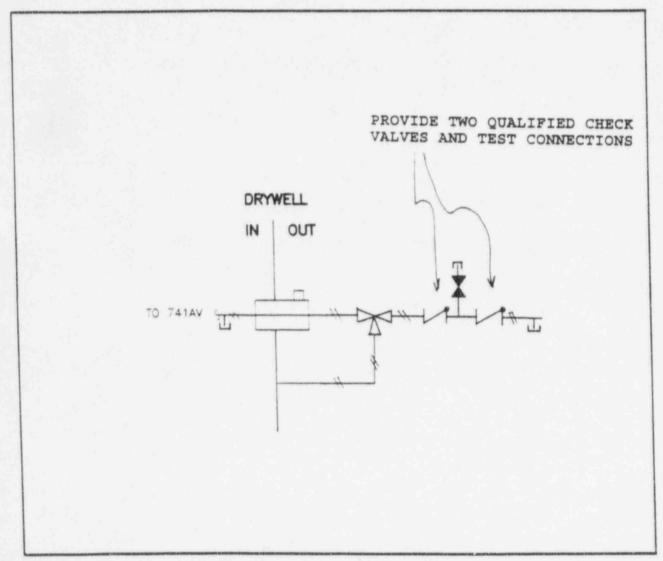
# PENETRATION X-24 RBCCW SYSTEM RETURN FROM DRYWELL CONTAINMENT ISOLATION VALVE REC-M0709



1 FOR MORE INFORMATION SEE BURNS & ROE #2031 SHT 1 & 4262	(TYPE 3
The state of the s	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN
3 TEST CONNECTION	PARTICIPATE STATE OF STREET

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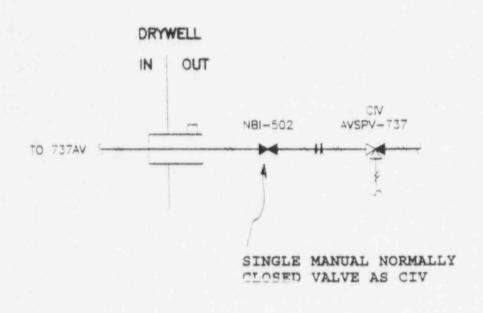
# PENETRATION X-29E AIR TO RR SAMPLE VALVE CONTAINMENT ISOLATION VALVE IA-227 RR



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2027 & 4262 (TYPE 9)
2	VENT POINT
3	TEST CONNECTION

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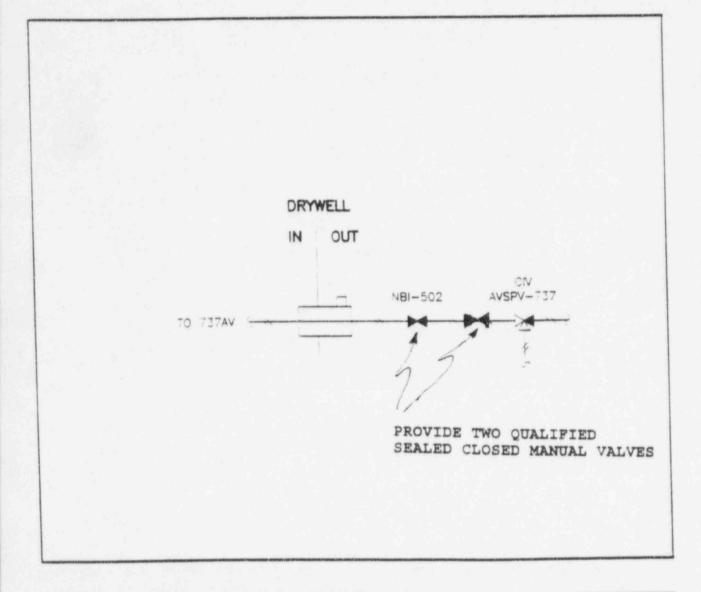
### PENETRATION X-30E AIR TO VESSEL FLANGE LEAK-OFF DETECTION AOV CONTAINMENT ISOLATION VALVE AVSPV-737



1	FOR MORE INFORMATION SEE BURNS & ROE #2028 & 4262 (TYPE 9)
A SHOULD MAKE E BRANCH	& IL-E-70-3 SHT 24
2	VENT POINT
3	TEST CONNECTION

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# PENETRATION X-30E AIR TO VESSEL FLANGE LEAK-OFF DETECTION AOV CONTAINMENT ISOLATION VALVE AVSPV-737

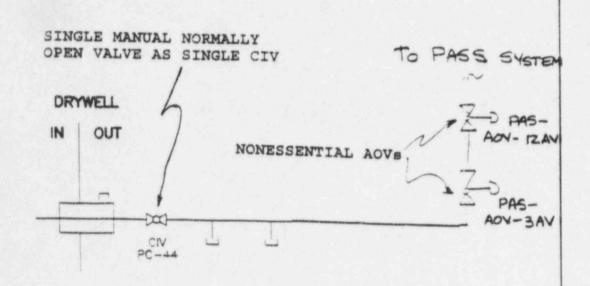


NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2028 & 4262 (TYPE 9)
AND ASSESSMENT OF THE PARTY OF	& IL-E-70-3 SHT 24
2	VENT POINT
7	TEST CONNECTION

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# PENETRATION X-51F DRYWELL SAMPLE CONTAINMENT ISOLATION VALVE PC-44

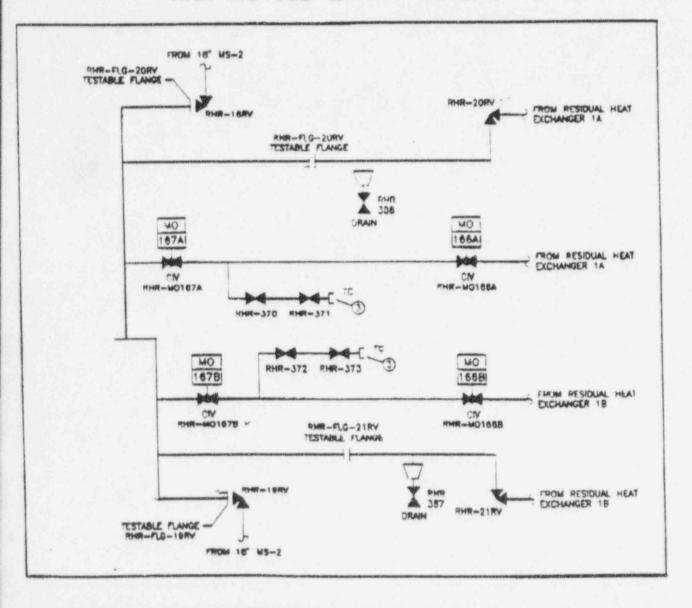


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L	FOR MORE INFORMATION SEE B&R #2022 & S&W #13095.12-FSK-1-1
	& B&R #4262 (TYPE 9)
T	VENT POINT
T	TEST CONNECTION

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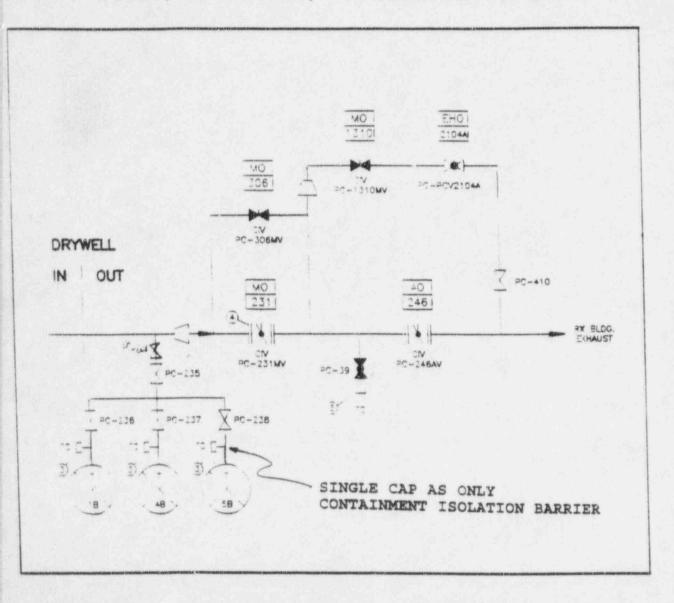
# PENETRATION X-214 HPCI TURBINE EXHAUST CONTAINMENT ISOLATION VALVES RHR-M0166A & RHR-M0167A RHR-M0166B & RHR-M0167B



NOTE		DESC	RIPTION					
1	FOR I	MORE	INFORMATION		BURNS	 -	requirements and the fight for a transmitter beautiful and the first flow and the first and the firs	CHA CHINAYAC
2	VENT	POINT		-				AND WANT SHOPS
3	TEST	CONN	ECTION	Afficia and supplicated the				OC BOOK AND A COLO

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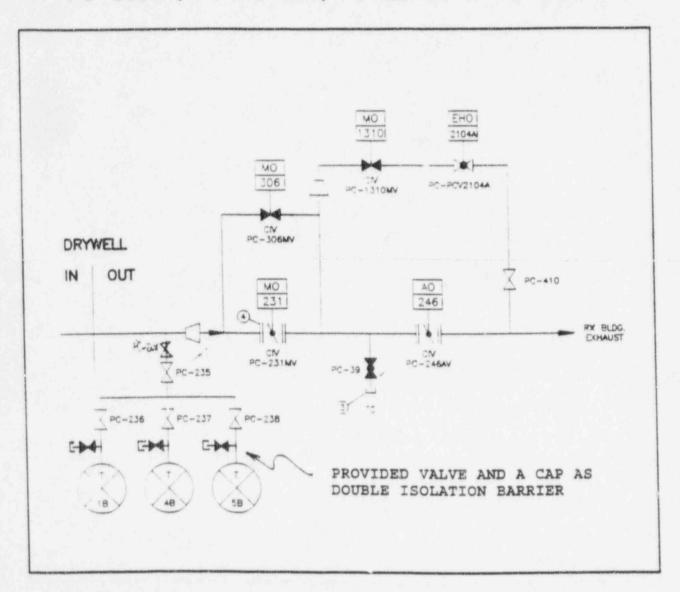
## PENETRATION X-26 DRYWELL PURGE & VENT EXHAUST CONTAINMENT ISOLATION VALVES PC-306MV, PC-1310MV, PC-231MV & PC-246AV



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2022 & #2084
2	VENT POINT
3	TEST CONNECTION
1	TEST PORT FOR LOCAL LEAK RATE TESTING DRILLED IN DRYWELL SIDE
	PIPE FLANGE PER DC87-059

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## PENETRATION X-26 DRYWELL PURGE & VENT EXHAUST CONTAINMENT ISOLATION VALVES PC-306MV, PC-1310MV, PC-231MV & PC-246AV

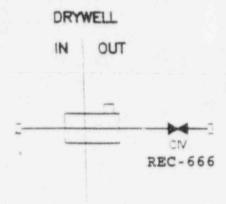


NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2022 & #2084
2	VENT POINT
3	TEST CONNECTION
1	TEST PORT FOR LOCAL LEAK RATE TESTING DRILLED IN DRYWELL SIDE
NO. WHALLO PRODUCTION AND	PIPE FLANGE PER DC87-059

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#### PENETRATION X-27E SPARE CONTAINMENT ISOLATION VALVE REC-666

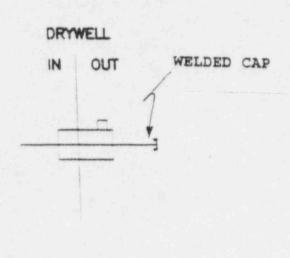
NO PROVISIONS FOR LOCAL LEAK RATE TESTING



1	FOR MORE INFORMATION SEE BURNS & ROE #2031 & 4262 (TYPE 9)
2	VENT POINT
3	TEST CONNECTION

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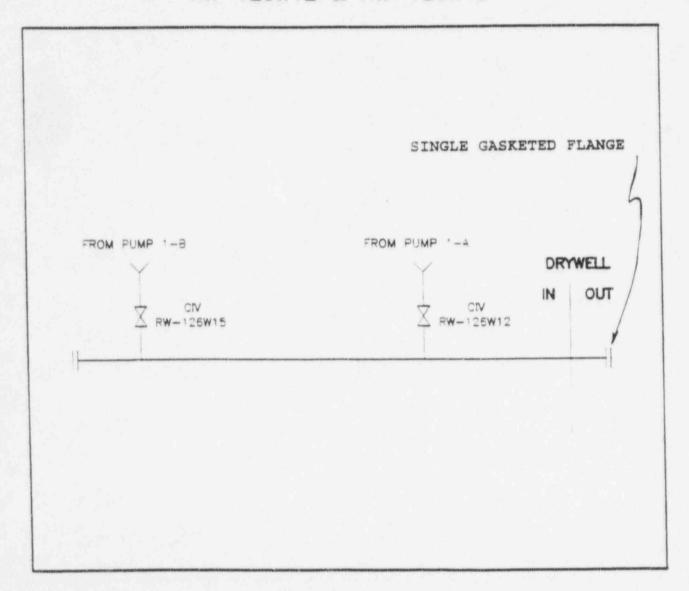
#### PENETRATION X-27E SPARE CONTAINMENT ISOLATION VALVE PC-666



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2031 & 4262 (TYPE 9)
2	VENT POINT
3	TEST CONNECTION

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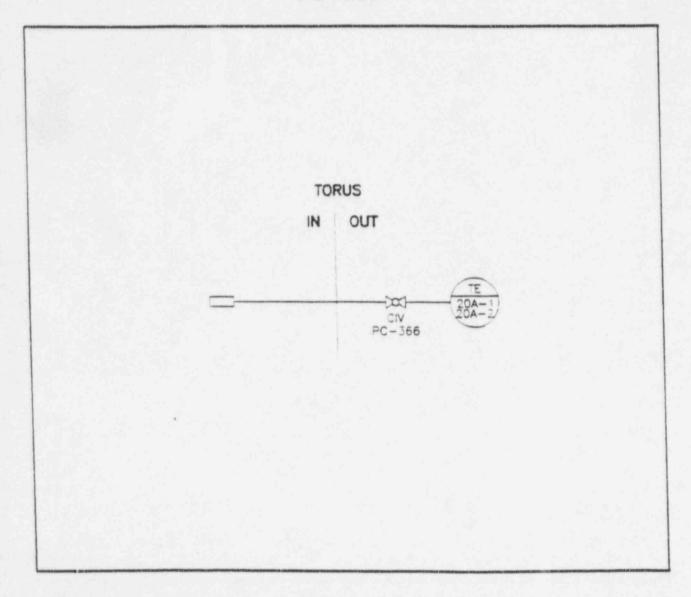
# PENETRATION X-43 PUMP FLOOR DRAINS CONTAINMENT ISOLATION VALVES RW-126W12 & RW-126W15



1	FOR MORE INFORMATION SEE BURNS & ROE #2038
2	VENT POINT
3	TEST CONNECTION

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# PENETRATION X-209A TORUS AIR TEMP. CONTAINMENT ISOLATION VALVE PC-366



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #2027
2	VENT POINT
3	TEST CONNECTION

COOPER NUCLEAR STATION JOB NO. 2520-02

ATTACHMENT TO CR SERIAL # 01534
Pg 2 of 3

SEE DETAIL "A" O WAKE A POS-X 10 SUPPORT CLAMPS EVERY 2 FEET \$ & ELEV. 876-72" LWL -SUPPRESSION CHAMBER

RECRIVED

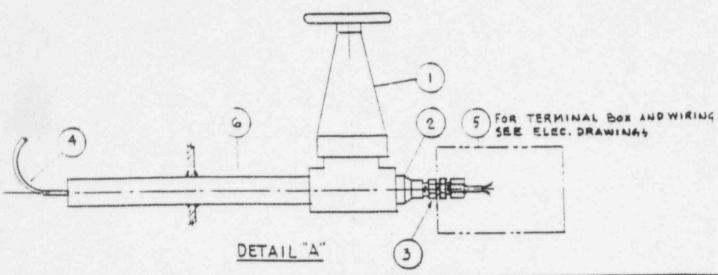
N.P.P.D. D.C.C

DWG. NO. 1. D. 123

ATTACHMENT TO

CR GERIAL #01534

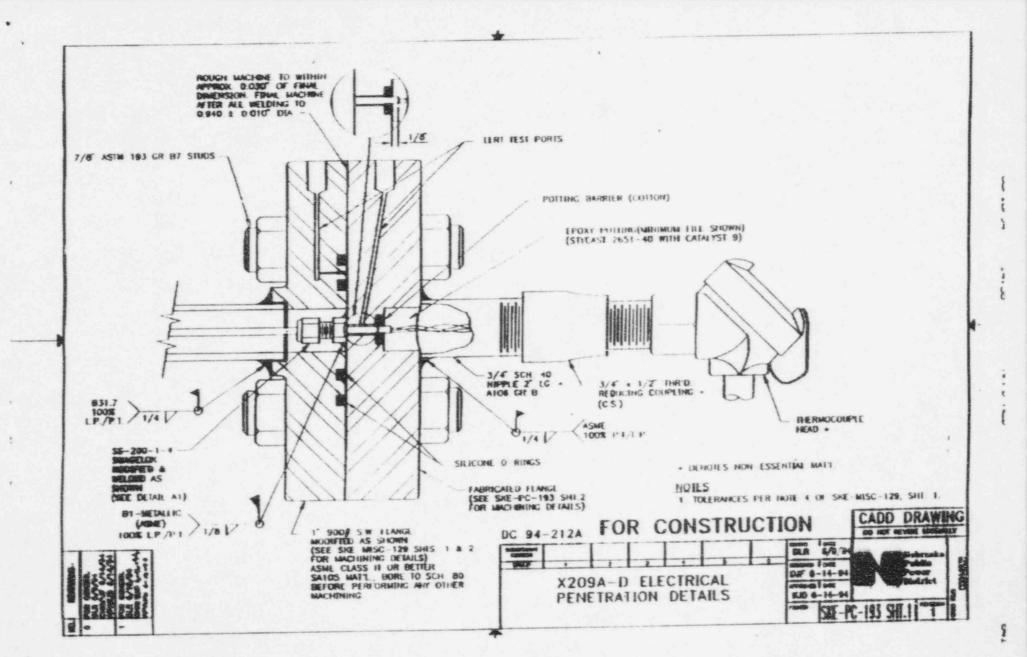
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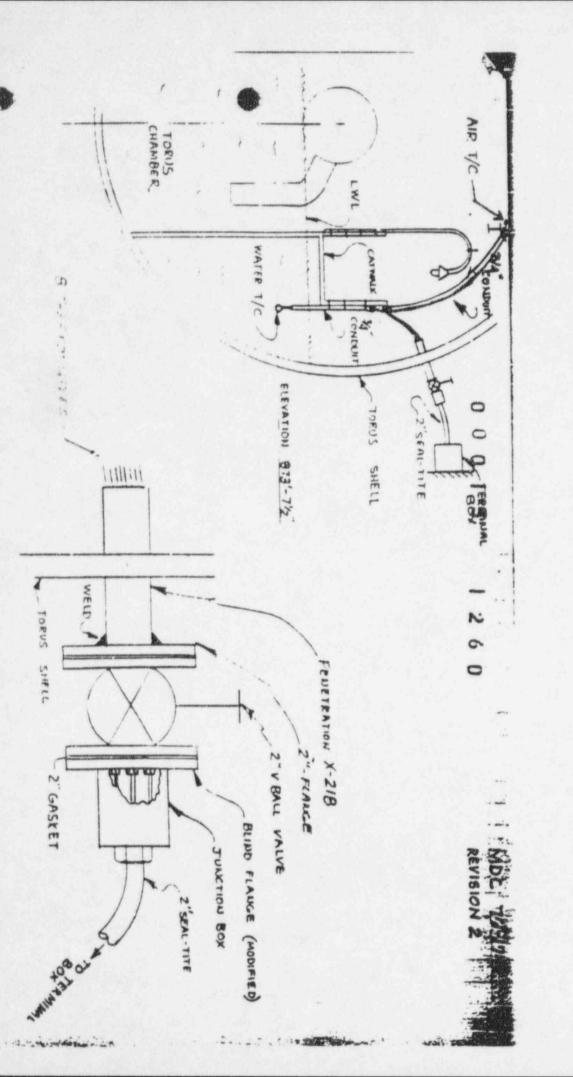


NO	DESCRIPTION			FURN. BY
1	1"- 600 FORGED STEEL GATE VALVE	SOCKET WELD EN	95	E-70-3
2	I" SOCKET WELD TO "A" FEMALE PIPE TH		CONTRACTOR OF STREET,	E-70-3
3	S200-1-2 BT 316 SS SWAGELON THERM	NAME OF TAXABLE PARTY OF TAXABLE PARTY.	MANAGEMENT AND AND AND AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERS	E-70-3
4	"O.D. STAINLESS STEEL METAL SHEATHE			E-70-3
5	TERMINAL BOX (SEE ELEC. DW45.)			**********
6	1" SUPPRESSION CHAMBER PENETRATION	X-209A FOR TE-20 A X-209B FOR TE-20 B X-209C FOR TE-20 C X-209B FOR TE-20 C	SEE DWG. 4260	OTHERS

NOTE: 1-ALL EQUIPMENT TO BE MOUNTED AND CONNECTED BY E-70-3 CONTRACTOR

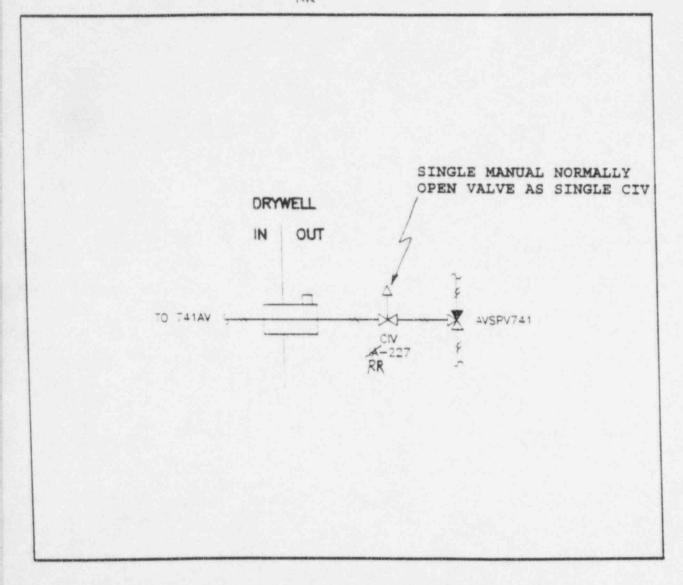
S. SENDING ELEMENTS TO BE COMPLETTY ENCLOSED BY S.S. SHEATH COPPER SHALL NOT MAKE CONTACT WITH WATER OR.





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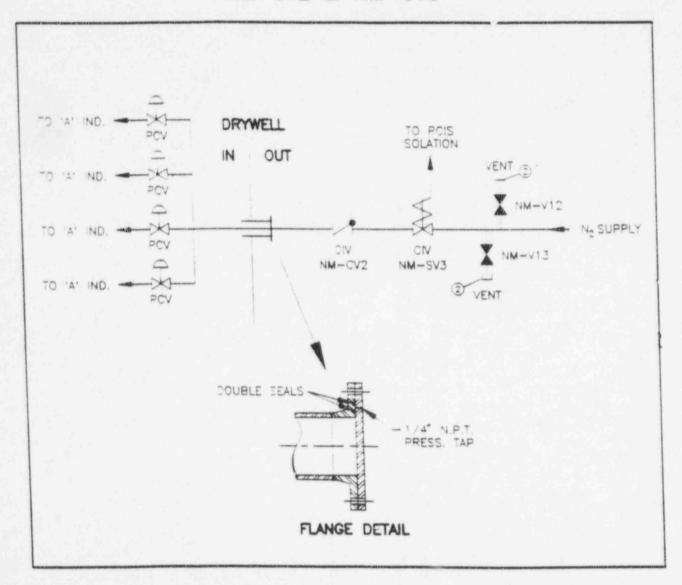
# PENETRATION X-29E AIR TO RR SAMPLE VALVE CONTAINMENT ISOLATION VALVE IA-227 RR



NOTE		DESC	RIPTION	district out the way	NATIONAL COMPANY MANAGEMENT	OF STREET, ST.	Indiana Maria					ernekounterensker
1	FOR M	ORE	INFORMATION	SEE	BURNS	&	ROE			Mary Mark Street Street Street		9)
2	VENT	POINT				Charles Save Dates		THE REAL PROPERTY OF THE PERSON NAMED IN COLUMN	NOOM ASSESSED.			
3	TEST	CONN	ECTION	A STATE OF THE STA	STATE ACTIVITIES HEREPYTHENE SAM		N. Politica de la Constitución d		Nation and		Part Scar Symptom	AND AND PERSON NAMED IN

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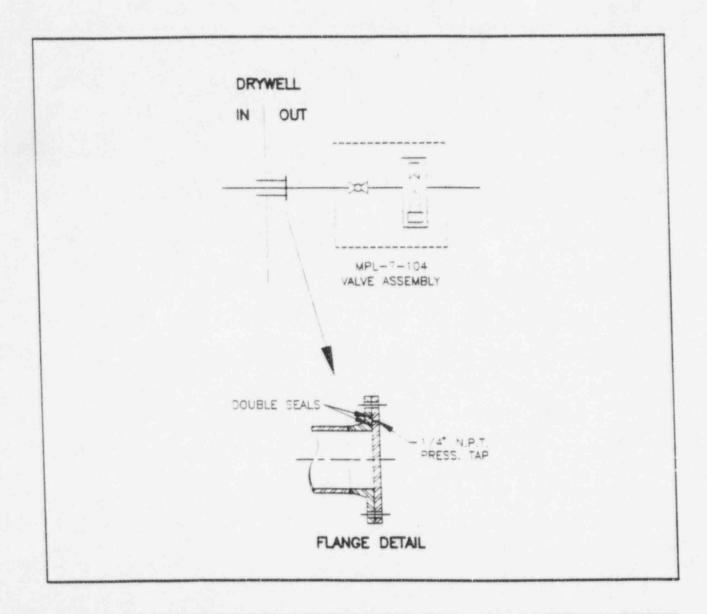
#### PENETRATION X-35E TIP N₂ PURGE CONTAINMENT ISOLATION VALVES NM-CV2 & NM-SV3



NOTE	DESCRIPTION
1	FOR MORE INFORMATION SEE BURNS & ROE #4262 & 2083. CBI #33.
	G.E. #1173317
2	VENT POINT
3	TEST CONNECTION

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#### PENETRATION X-35A TRAVELLING IN-CORE PROBES



NOTE		THE REAL PROPERTY.	RIPTION							i wasanin		
1	FOR	MORE	INFORMATION	SEE	BURNS	28	ROE	#4262	&	2083.	CBI	#33
2	VENT	POIN	Γ		***************************************				CHECKTON			
T.	TEST	CONN	IECTION	AZES SERVICE AREA S	MITA-STREET, TOTAL CONTROL OF THE STREET, STRE	and announce to	MINISTER STATE			STANSON STANSON STANSON STANSON	BOLDINGS HOUSE	