Richard A. Uderitz
Vice President -
Nuclear

Public Service Electric and Gas Company P.O. Box 236, Hancocks Bridge, NJ 08038 609 935-6010

August 26, 1983

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch 1
Division of Licensing

Gentlemen:

PSE&G ACTION PLAN FOR IMPROVEMENT OF
NUCLEAR DEPARTMENT OPERATIONS
SALEM GENERATING STATION
DOCKET NOS. 50-272 AND 50-311

PSE&G hereby transmits, as an enclosure to this letter, twenty (20) copies of its Action Plan for Improvement of Nuclear Department Operations. This Plan addresses the recommendations made by Management Analysis Company (MAC) in their management diagnostic of the structure, management systems and staffing of PSE&G's Nuclear Department and in their assessment of our Operations Quality Assurance Program, which were transmitted to you on June 29 and July 29, 1983 respectively.

The PSE&G Action Plan contains an analysis of each recommendation made by MAC, the action to be taken in response to each, and a schedule for implementation.

Also enclosed is the PSE&G response to the Basic Energy Technology Associates (BETA), Inc. report entitled, "A Report on a Review of Public Service Electric and Gas Company Corrective Action Program Related to Reactor Trip Breaker Failures at Salem Generating Station, Unit No. 1", dated May 27, 1983. Most actions in response to this report are complete; some are addressed in the PSE&G Action Plan in

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response to the MAC assessments; and the remainder are addressed separately in the enclosure and will be included in our bi-monthly status reports on the PSE&G Action Plan.

The final attachment is a Cross Reference Document that provides a cross reference between the PSE&G Action Plan transmitted by this letter, the above referenced Management Analysis Company assessments, and those BETA Report items which are also part of the PSE&G Action Plan.

Should you have any questions, do not hesitate to contact us.

Sincerely,

Enclosures
cc: Mr. Richard W. Starostecki, Director (20 copies)
Division of Project and Resident Programs
Region 1

Mr. Donald C. Fischer
NRC Licensing Project Manager

Mr. Leif J. Norrholm
NRC Senior Resident Inspector

EXECUTIVE SUMMARY

The Public Service Electric and Gas Company "Plan for Improvement of Nuclear Department Operations" is a result of a comprehensive review of Nuclear Department programs and activities. PSE&G engaged Management Analysis Company (MAC) to perform an independent assessment of PSE&G's Nuclear Department to make recommendations for improvements in organization structures, management systems, and quality assurance programs. The results of the MAC diagnostic studies were documented in reports given to the Nuclear Regulatory Commission (NRC). The MAC management assessment concluded:

> "In MAC's judgment, the diagnostic uncovered no deficiencies of sufficient significance to require immediate corrective action or attention for continued safe operation of the plants. However, there were weaknesses identified which do need attention in the near term and future if the expectations of PSE&G management are to be fully realized."

The PSE&G "Plan for Improvement of Nuclear Department Operations" incorporates responses to both MAC assessments, by establishing specific objectives for improvement and developing Action Plans to accomplish these objectives.

The individual Action Plans were created by a dedicated task force of experienced Nuclear Department managers. These managers were relieved of their regular duties at Artificial Island and brought together in one location under the direction of a senior manager to accomplish their mission. The preparation of the "Plan for Improvement of Nuclear Department Operations", with the help of support personnel, was a two month effort by the Task Force. During this period of Plan development, PSE&G has begun initial activities on several Action Plans. These efforts are an indication of PSE&G's dedication to the expeditious implementation of this Plan and are reflected in the scheduled completion dates.

The PSE&G management task force developed twenty-six Action Plans with an integrated schedule for their implementation. The twenty-six issues are grouped into seven topical areas. They are:

1. Organization Management
2. Safety and Compliance Management
3. Configuration Management
4. Operations and Operations Support
5. Quality Assurance
6. Maintenance and Plant Betterment
7. Nuclear Department Services

The overall responsibility for the implementation of the Action Plans contained herein rests with the Nuclear Department Vice President. The execution of each individual Plan will be assigned to a Department Manager. To assist the Vice President, a full-time Program Director will be appointed who will be responsible to monitor, coordinate, and report Action Plan progress. The Nuclear Oversight Committee will also be charged to assist the Vice President in the coordination and implementation of this Plan.

The completion of all the activities described in the Action Plans contained in this report will require an estimated 46,000 man-days. All but one activity will be completed by December 1985. This one, Management Information Systems, is a major development program which will be completed in June 1987. This extensive effort by PSE&G reaffirms the Company's long-standing commitment to achieve excellence in the management and operation of the nuclear facilities at Artificial Island.

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1.0 INTRODUCTION

1.1 Background and Purpose

Public Service Electric & Gas Company (PSE&G) has established a Nuclear Department to provide centralized management control of the operation, administration and technical support of its nuclear facilities located on Artificial Island. Management Analysis Company (MAC) was retained by PSE&G to perform an independent assessment of the organizational structures, management systems, quality assurance program, and staffing of the Nuclear Department with the goal of identifying areas of potential improvement and recommending appropriate actions.

The MAC Action Plan Report dated June 24, 1983, contained twenty-seven recommended Action Plans grouped in seven catagories: Organization Management, Safety and Compliance Management, Configuration Management, Operations and Operations Support, Quality Assurance, Maintenance and Plant Betterment, and Nuclear Department Services. PSE&G formed a team of management level personnel to validate the MAC Report recommendations and to develop PSE&G Action Plans that would respond to each issue. The PSE&G Team also addressed the MAC Quality Assurance assessment dated July 29, 1983.

The results of the PSE&G validation investigations are documented in this report entitled "Plan for Improvement of Nuclear Department Operations". Each of the individual PSE&G Action Plans described in Section 2.0 describes the action steps which will be taken to achieve the identified objectives. The implementation of these Action Plans is discussed in Section 3.0, Program Implementation.

The PSE&G "Plan for Improvement of Nuclear Department Operations" will enhance PSE&G's present operations by improving upon programs which are presently in place. Although existing programs satisfy current regulatory requirements to provide for the safe operation of the company's operating nuclear facilities, PSE&G is committed to ongoing improvements in the effectiveness of its operations and to maintaining its role as a leader in the nuclear utility community.

1.2 DEVELOPMENT OF ACTION PLANS

A full time working team of senior and middle managers assisted by consultants and support personnel was established on June 27, 1983 to address the following tasks:

- Validate the objectives of the Management Analysis Company's management and quality assurance assessments dated June 24, and July 29, 1983 respectively.
- Develop appropriate PSE&G Action Plans to address the valid concerns and meet the stated objectives.
- Review alternative solutions and schedules to develop an integrated implementation plan.
- Estimate the resources required to successfully accomplish the Plan requirements in a timely manner.
- Assign priorities among the various Plan requirements to assure all issues are addressed in proper sequence.
- Determine and assign responsibility for Action Plan items to the appropriate cognizant PSE&G personnel for implementation.
- Establish an implementation process to monitor and direct the accomplishment of the Action Plans.

The Action Plans presented herein are the result of that dedicated effort on the part of PSE&G and represent an effort in excess of 1000 mandays.

Two particularly important elements of the PSE&G Plan development process should be understood. They are the priority assignment and resource scheduling activities.

PSE&G Team Members performed a priority rating of the Action Plans. The rating was based upon an assessment of how significant each individual action item was to: a) plant safety, b) regulatory compliance, c) plant operation or d) Nuclear Department operations. Through assignment of weighting factors and consideration of the relative strength of existing programs and procedures, a final priority designation was assigned to each Action Plan. The resulting priority ratings were used in the scheduling for implementation of the PSE&G "Plan for Improvement of Nuclear Department Operations."

The proper scheduling of resources and the timely coordinated implementation of the Plan are essential to assure overall program effectiveness and success. The broad scope of these Action Plan commitments necessitated the use of a computerized integrated network project schedule. PSE&G utilized the Project/2 system. Project/2 is a state-of-the art computer software system for integrated project schedule and cost control. Critical path schedules, allocation of costs and resources, time and resource constraints, and prioritization were considered in the development of the Integrated Plan. The use of this integrated schedule approach enhanced PSE&G's ability to focus clearly on the goal and objectives of improving Nuclear Department Operations.

2.0 ACTION PLANS

2.1 Organization Management

2.1.1 Action Plan for a Functional Analysis of the Vice President - Nuclear Position and Direct Reports

Objective:

Perform a comprehensive functional analysis of the Vice President - Nuclear position and all direct report positions to determine priority functions. Recommend viable structural and/or procedural strategies for maintaining centralized and effective management control of the Nuclear Department.

Actions:

1. PSE&G will investigate all specific Nuclear Department functions with which the Vice President - Nuclear is presently involved through direct reporting relationships to determine: 1) prioritization of concerns within each functional area; 2) determine how these priorities are presently being addressed by the Vice President - Nuclear; 3) if there are additional priority functions not presently reporting to the Vice President - Nuclear.

2. This investigation will also identify all specific corporate role functions for which the Vice President - Nuclear is or should be responsible to determine priority concerns and how these priorities are presently being addressed by this position.

3. PSE&G will assess the present work load and time demands on the Vice President Nuclear to determine if his present span of control realistically allows him to: maintain centralized management control; address all Nuclear Department priority concerns in a timely and complete manner; and also attend to appropriate corporate role responsibilities. This assessment will require:

    a. Analyzing typical and projected time demands for all activities related to management of each functional reporting relationship, with

special attention to addressing priority concerns; all general Nuclear Department management functions not covered under the item above; all relevant corporate role responsibilities.

b. Identifying any critical gaps in Vice President - Nuclear management activity in these areas due to lack of time, procedural strategies, organization structures, or management style.

4. Planning and problem-solving discussions between all relevant management personnel will be coordinated to test the feasibility of any recommended procedural and structural changes and implement the changes as appropriate.

5. PSE&G will insure that a follow-up assessment of the effectiveness of procedural/structural changes is conducted six months after they have been implemented and report assessment conclusions to the Senior Vice President - Energy Supply and Engineering and the Vice President - Nuclear.

Implementation:

PSE&G will initiate this action plan in September, 1983 and complete items 1 through 5 by October 1984.

2.1.2 Action Plan for Improving the Effectiveness of Working Relationships Between the Nuclear Department and Corporate Public Relations, Human Resources and Purchasing Departments.

Objective:

Improve the effectiveness of the working relationships between the Nuclear Department and Corporate Public Relations, Human Resources and Purchasing Departments; assess the feasibility of retaining these functions as matrix agreements; clarify and formalize all working agreements, including agreements about employee performance evaluations between administrative and functional managers, and concerns related to personnel acquisition and procurement procedures.

Actions:

1. Using organization development (OD) techniques, PSE&G will conduct interviews with the Vice President - Nuclear; the Vice President - Public Relations; the Vice President - Human Resources; and the Vice President - Corporate Services to reassess the Corporate commitment to long-term use of the three matrixed relationships (as compared with alternative organizational structures) and communicate this decision to all involved Vice Presidents. Unless immediate steps are to be taken to change the existing matrixed structures, the following action items should be addressed to ensure increased effectiveness of the matrixed organizations.

Actions to Address Nuclear Public Affairs Matrix:

2. Utilizing OD techniques, PSE&G will conduct a group problem-solving session attended by all managers involved with the matrixed Nuclear Public Affairs organization, the Vice President - Nuclear and the Vice President - Public Relations.

3. PSE&G will take the necessary follow-up steps to implement the results from the group session, if required. (e.g., organize further discussions between relevant functional and administrative managers to clarify and negotiate working agreements; review relevant corporate policies; develop and document new or previously undocumented interface procedures; formalize the matrix organization charter).

4. The results of Action Item 2 will be presented in a second group session involving the same personnel and any additional personnel deemed appropriate to ensure understanding of and commitment to new or changed working agreements and procedures. All participants at this meeting should be made aware of senior management's requirement that the policies, procedures, and informal working agreements documented at this point are to be strictly adhered to.

5. Simultaneously with the above, the Vice President - Nuclear will make written recommendations about any needed corporate policy changes or clarification in regard to his matrix-reporting relationships with Public Relations/Affairs, if required.

6. A follow-up assessment of the effectiveness of Nuclear Public Affairs working relationships will be conducted six months after new agreements and procedures have been implemented. These findings and recommendations will be reported to the Vice President - Nuclear.

Actions to Address Human Resources and Purchasing Matrices:

7. Concurrent with the above activity, PSE&G will review corporate policies related to the matrixed reporting relationships to identify any omissions, inconsistencies, or the lack of adherence to existing policies within the Nuclear Department Human Resources and Purchasing matrixed organizations.

8. A group problem solving session will be held with all relevant matrixed managers and staff, the Vice President - Nuclear and Vice President - Human Resources to address problems with timely acquisition of personnel for the Nuclear Department. This session will identify the specific policy and procedural issues which are most problematic and develop formal and/or informal working agreements to resolve potential conflicts.

9. Individual problem-solving discussions will be conducted as needed between relevant functional and administrative managers in the Nuclear Department/Human Resources and Nuclear Department/Corporate Purchasing matrix organizations to address concerns related to matrixed employee performance reviews, personnel utilization concerns, or other problems with policies and procedures.

10. New procedures or informal coordination agreements resulting from Action Items 7, 8 and 9 will be documented to ensure that all relevant PSE&G personnel are informed of these changes.

11. The Nuclear Department shall incorporate new working agreements and corporate responses to any recommended policy changes into written matrix organization packages for review and formal approval by the appropriate PSE&G management personnel.

Implementation:

PSE&G will initiate this Action Plan in September, 1983 and conclude all actions except number 6 by October 1984.

2.1.3 Action Plan for Completion and Implementation of the Nuclear Department Policy Manual, VPN-1 and Supporting Department Procedures

Objective:

Complete the ongoing development of the policy manual, Nuclear Department Manual, VPN-1 and ensure the department-wide implementation of policies contained therein. Establish a program for the development and control of implementing procedures and directives.

Actions:

1. The Vice President - Nuclear will assign overall responsibility for completion and promulgation of VPN-1 to the Manager - Methods and Administration. To complete VPN-1 a Procedures Development Team will be established.

2. The Procedures Development Team will conduct a series of review meetings with organizational units to identify: policy areas on which there is agreement; policy areas which are incomplete and/or problematic; departmental interface issues relevant to policy statements; and additional activities that need to be proceduralized as a result of the establishment of the Nuclear Department and the major relocation to Artificial Island.

3. Based on these review meetings, the Team shall submit to the Manager-Methods and Administration a status report on each policy section and an action plan (with time schedules) for each section where there are remaining problems, interface issues, and recommended activities to be proceduralized.

4. Upon concurrence with this report and plan by the Manager - Methods and Administration and approval by the Vice President Nuclear, the Team shall implement all action plans, in accordance with

approved schedules, to insure quick acceptance and approval of VPN-1 at the policy level. As each policy statement is completed, it will be processed through the appropriate approval levels.

5. To support the effective use of the Policy Manual, the Procedures Development Team shall review related administrative and working level procedures for consistency and completeness and modify them as appropriate.

6. Each department will assign staff for writing or rewriting the necessary procedures, as required. If PSE&G staff is not available because of other duties, a combination of contract procedure writers and consultants familiar with implementation strategies for effective policy and procedure integration will be utilized.

7. Six months after this distribution and educational process has been implemented, the Procedures Development Team will reconstitute itself to assess the level of awareness, and adherence to department policies and procedures. The Team will collect data via Quality Assurance audit reports, interviews, or surveys of Nuclear Department personnel and report its conclusions to the Manager-Methods and Administration along with any recommendations for needed additional implementation efforts.

Implementation:

PSE&G will initiate this Action Plan beginning in September 1983, or as soon as the staffing of the Procedures Development Team can be accomplished. The determination of what procedures need to be developed or revised will establish the final level of effort and attainable completion date, but the objective will be to have up-to-date and adequate procedures in place and implemented by September 1985. The effectiveness of the completed new procedures program will be assessed six months later.

2.1.4 Action Plan for Improving Communications Between the Nuclear Department and Corporate

Objective:

Assess formal and informal communication systems between Corporate and the Nuclear Department to recommend improved information flow processes. Although the focus of this effort is to increase each organization's understanding of the other's operational realities and the efficiency of their interactions, the accomplishment of this objective will also have a positive impact on improving external relations between PSE&G and regulatory agencies, the media and the public.

Actions:

1. Organization development (OD) techniques will be used to identify all formal and informal communication channels regularly used between PSE&G Corporate and Nuclear Department management.

2. Upon completion of Action Item 1, the identified formal and informal communication channels will be assessed for any critical gaps or overlaps in Corporate/Nuclear Department communications and these findings and any recommendations will be reporsed to individual PSE&G management personnel as appropriate.

3. PSE&G management will facilitate any necessary problem-solving discussions based on the recommendations and develop and record any new procedural agreements.

4. The Senior Vice President - Energy Supply and Engineering will prepare and present results of recommendations and discussions to the management group contacted in Action Item 1, placing emphasis on any new procedural agreements.

5. A follow-up assessment of the effectiveness of procedural changes will be conducted three months after they have been implemented.

Implementation:

PSE&G will initiate this Action Plan in September, 1983. It will be completed by September 1984.

2.1.5 Action Plan for an Organizational Transition Management Process

Objective:

Develop and implement an integrated organizational transition management process which will assist management to:

1. Identify and address any remaining adverse effects of the recent Nuclear Department reorganization and relocation in terms of employee perceptions and attitudes (e.g., perceived barriers between the plant organization and other departments which relocated from Newark; confusion about responsibilities and resulting lack of ownership).

2. Clarify (and/or develop as necessary) organizational procedures, including departmental interface agreements, and functional responsibilities for the implementation of management control systems.

3. Identify and resolve intra- and inter-departmental communication problems.

4. Address facilities planning as this relates to problems with geographic fragmentation of work functions or adequate housing of staff resources.

5. Develop realistic plans and implementation schedules for the management of future organization transitions.

Actions:

1. PSE&G will establish within the Nuclear Department a full-time organization development staff position, reporting to the Manager-Methods and Administration.

2. The Vice President - Nuclear will establish a Transition Management Team comprised of selected representatives from each Nuclear Department Organization.

3. The Manager - Methods and Administration will prepare a written charter for the Transition Management Team with a description of objectives, operating ground rules, membership criteria and required time commitments.

4. An orientation/team building session for the Transition Management Team and organizational development staff member will be conducted.

5. With the input of management, the OD staff person will prepare for and facilitate Transition Management Team meetings on a regularly scheduled basis.

   For those action recommendations approved by management, the Transition Management Team and organizational development staff person will develop specific action plans including resource requirements, responsibility assignments, milestones and time lines. Reports and recommendations from the Transition Management Team will be made directly to the Vice President Nuclear.

Implementation:

PSE&G will initiate this Action Plan after commencement of the Action Plans 2.1.1 through 2.1.4. Target completion for this task is November 1984.

2.2 SAFETY REVIEW AND COMPLIANCE ACTIVITIES

2.2.1 Action Plan to Improve Safety Review Management Activities

Objective:

Evaluate the existing safety review management activites to address improvements that would maximize the effective use of resources in a manner consistent with the need to assure safe, reliable operation of the plants.

Actions:

1. PSE&G will evaluate the specific objectives of the Safety Review Management Program, and identify all organizations within the Nuclear Department and PSE&G Corporate that are involved with safety review, safety assessment, safety audit or safety management to determine:

    a. Specific functions each organization performs related to safety.

    b. Procedures which define the role each organization has in safety matters.

    c. The authority each organization has for safety matters.

    d. The resources of that organization devoted to safety.

2. Using data from Action Item 1 to develop an interview plan, PSE&G will conduct a series of interviews with the manager and selected representatives from each of the organizations identified to determine the perceived role and effectiveness of that organization in safety review management.

3. The results of the interviews and the review of the collected documents will be evaluated to identify the following:

    a. Overlapping, inconsistency or duplication in responsibilities or authorities.

b. Areas where compliance with regulatory requirements can be improved.

4. Using the information gained from Action Items 1 through 3, a workshop will be designed and conducted for key personnel from the identified organizations if necessary.

5. Following Action Items 3 or 4, PSE&G will prepare a report which will include the following:

   a. A summary of the review process including the workshop if it is utilized.

   b. Specific recommendations that will maximize the effective use of resources.

   c. The actions necessary to implement the recommendations.

   d. A proposed schedule for implementation of recommendations.

   The report will be reviewed with workshop participants and other affected organizations before being submitted to management for approval.

6. After obtaining management approval of the report, implement the recommendations including:

   a. Discussions with the NRC of any organizational revisions proposed by the evaluation of the safety review process.

   b. Preparing revised procedures and charters as necessary.

   c. Developing a training program that will instruct all affected personnel of changes to be implemented.

   d. Formalization of the schedule for the implementation program.

7. Following implementation, management will conduct periodic evaluations of the effectiveness of this program.

Implementation:

PSE&G will initiate this action plan in September 1983. The implementation program, including procedures and a training program, will be completed by October 1984. A schedule for implementation of those procedures and training will be developed at that time.

2.2.2 Action Plan to Improve Commitment Identification, Tracking and Close-out

Objective:

Identify and implement changes to consolidate and improve PSE&G commitment tracking systems to assure that established commitments are acceptably closed-out in reasonable time frames. An additional objective is to clearly define the authority to make commitments within the Nuclear Department.

Actions for Commitment Tracking:

1. PSE&G will identify and assign one individual (Commitment Improvement Coordinator), within the Nuclear Department, to be responsible for this program.

2. Establish a Management Advisory Group with management representatives from Nuclear Support (Licensing and Regulation), Salem Operations, Methods and Administration and Quality Assurance. This Management Advisory Group will provide direction to the Coordinator in the completion of the action plan.

3. The Commitment Improvement Coordinator will identify the types of commitments and tracking systems that exist within the Nuclear Department. Both manual and automatic tracking systems currently used within the Nuclear Department or in associated departments in the corporate headquarters will be identified. During this process the responsible party for each of these tracking systems shall be delineated and copies of the procedures governing each of the tracking

systems shall be obtained for further evaluation. PSE&G will prepare a detailed questionnaire using the information obtained above to aid in interviewing.

4. After identifying the commitments and the tracking systems, the Coordinator will interview the responsible manager and/or individual within that organization who directly controls the tracking system to determine:

   a. The purpose of the tracking system.

   b. How and by whom the information from the tracking system is used.

   c. The procedures that govern the use of the tracking system and whether or not the procedures are followed.

   d. The actual needs of that manager or organization for a tracking system (i.e., what data does the manager have versus what data does he actually require).

   e. The effectiveness of the feedback mechanism associated with that tracking system.

5. The Coordinator will correlate and evaluate the results of these interviews to determine:

   a. The actual needs for commitment tracking systems within the Nuclear Department.

   b. Any duplication and overlaps between the various tracking systems.

   c. The effectiveness of each tracking system and the procedure(s) associated with that system.

   d. The effectiveness of the feedback that is obtained from each of the tracking systems.

   e. Whether a consolidated tracking system is practical for use within the Nuclear Department.

6. If a consolidated system is deemed appropriate (or a small series of systems) then appropriate specifications will be prepared to define what the systems will be and how they will work.

7. Based on Action Items 5 and 6, evaluate the various tracking systems currently available to determine which will best meet the specification requirements.

8. In parallel with the evaluation of Action Item 7, review the existing systems to determine the status of items in each system and the frequency with which dates are not met or extensions to commitment dates are required.

Actions for Commitment Making:

9. As an initial effort the Commitment Improvement Coordinator will identify who within the Nuclear Department currently makes commitments to the NRC.

10. He will interview these people to ascertain commitment responsibility.

11. The Commitment Improvement Coordinator will consolidate and evaluate the results of these interviews.

Coordinated Actions:

12. The Commitment Improvement Coordinator will consolidate the commitment making and commitment tracking evaluations described above into a Nuclear Department program with procedures that would clearly identify and define the authority for making commitments, along with the associated commitment tracking systems. He will develop associated training programs for all parties within the Nuclear Department to assure proper understanding of this consolidated commitment program. A schedule will be developed for administering the training program and follow-up evaluation of the effectiveness of the consolidated program.

13. PSE&G will conduct a follow-up evaluation nine months after implementation of a revised department program to determine the effectiveness and efficiency of the program.

Implementation:

PSE&G will initiate this Action Plan in November 1983. Completion of a consolidated Nuclear Department Program and Procedures will be by December 1984.

2.3 Configuration Management

2.3.1 Action Plan to Implement a Fully Integrated Configuration Management Program

Objective:

Ensure that the Nuclear Department has an integrated program which will effectively control the configuration of the nuclear stations.

Configuration management is a program comprised of many individual elements within the areas of configuration identification, configuration control, configuration status and configuration verification. Most, if not all, of the individual elements currently exist within the Nuclear Department. The goal of this action plan is to ensure that all elements of a configuration management program are fully integrated and implemented.

Actions:

1. To direct the activities of this action plan, PSE&G will establish a Management Advisory Group to include management level representatives of Nuclear Engineering, Nuclear Services, Salem Operations, and Quality Assurance.

2. The Management Advisory Group will develop the goals and specific elements of an integrated configuration management program.

3. The Management Advisory Group will review the procedures which address the specific elements of Configuration Management to determine if they provide sufficient definition of that element and evaluate the effectiveness of the current procedures.

4. The synergistic effect of the various existing program elements will be evaluated against the Configuration Management Program goals developed in Action Item 2.

5. For those elements identified as needing improvement and/or revision or identified as not

currently existing, specific action plans and scoping documents will be prepared to effect implementation.

6. PSE&G will prepare a formal report delineating overall recommendations, implementation steps identified in Action Item 5 and an implementation schedule for the integrated Configuration Management Program.

7. The Management Advisory Group will obtain management approval and implement the approved program.

8. After implementation, PSE&G will perform periodic reviews to evaluate the effectiveness of the program and recommend refinements if determined necessary.

Implementation:

PSE&G will initiate this Action Plan in September 1983. The goals and definition of the specific elements would be completed by November 1983 with overall recommendations in a final report prepared by August 1984.

2.3.2 Action Plan to Improve Change Control Process

Objective:

Make the design change process more efficient and more effective. Give particular consideration to screening potential changes, streamlining the Design Change Request/Design Change Package process and incorporating completed changes into appropriate key design documents.

Actions:

1. The Management Advisory Group established in Action Plan 2.3.1 will direct this activity.

2. A consultant will be utilized to address the various aspects of the design change process.

3. The consultant will develop recommendations for improvements to the Design Change Program and the existing Design Change Procedure. These recommendations will be presented to the Management Advisory Group.

4. The recommendations of the consultant will be reviewed first by the Management Advisory Group and, through that group, by other affected organizations within the Nuclear Department. After the review is complete, an implementation program and schedule of implementation will be developed.

5. The Management Advisory Group will obtain management approval and implement the approved recommendations.

6. Following completion of the implementation program, reviews of the effectiveness of the new program will be performed annually.

Implementation:

PSE&G will initiate this Action Plan in October 1983. Procedures will be developed and an implementation program ready to start by November 1984.

2.4 OPERATIONS AND OPERATION SUPPORT

2.4.1 Action Plan for Maintaining Plant Cleanliness and General Appearance at a High Standard

Objective:

Establish and implement a plan by which the cleanliness and general appearance of the station can be maintained at a high level, appropriate to operating conditions.

Actions:

1. As a one-time effort, PSE&G will form a working group to develop and organize a "Plant Pride Cleanup Program" which will upgrade plant cleanliness and improve the condition of the working environment.

2. PSE&G will develop a program of "team building" which will commence during the "Plant Pride Cleanup Program" implementation. This program will include department and station activities that correspond with the completion of the plant housekeeping upgrade, and that will foster general attitude improvements.

3. A committee will be assigned to develop a plan to maintain the upgraded plant cleanliness achieved by the "Plant Pride Cleanup Program".

4. After the plan identified in Action Item 3 is developed, the committee will analyze the resources required to assure implementation of the upgraded housekeeping criteria on a continuous basis appropriate to plant operating conditions.

5. Obtain Nuclear Department management approval and support for the above programs including manpower, organizational modifications and responsibilities.

6. Salem Operations will review Station Procedures for compliance with the requirements of an ongoing program and make revisions accordingly. It will implement the continuous Programs of Plant Pride Cleanup based on upgraded attitudes and housekeeping criteria.

Implementation:

The one time "Plant Pride Cleanup Program" is scheduled to be initiated in December 1983 and for completion by December 1984. Concurrent with the start of this program will be the initiation of the plan for maintaining upgraded plant cleanliness standards.

2.4.2 Action Plan for Compliance Monitoring of Technical and Equipment Specifications

Objective:

Enhance the existance of a complete and viable technical and equipment specification program for safe, efficient and reliable operations.

Actions:

1. PSE&G will review the merits of establishing the position of an overall station operations cognizant engineer with specification responsibility for the operating facility.

2. PSE&G will determine that existing methods assure that all technical and equipment specification documents within the Nuclear Department are appropriately documented, tracked, reviewed and incorporated into applicable procedures and programs.

3. PSE&G will assess the methods and procedures currently employed to monitor technical and equipment specification compliance.

4. For those items not presently addressed, PSE&G will implement appropriate corrective actions, and update appropriate documentation to incorporate any required changes.

Implementation:

Although the current program is functional and largely successful, efforts will be made to review and strengthen all aspects and areas of the program. This review will be initiated by November 1984 and conclude by September 1985.

2.4.3 Action Plan for Post Modification/Post Repair Testing

Objective:

Strengthen the post modification and post repair testing requirements and procedures.

Actions:

1. PSE&G will organize a working group representing the Nuclear Department Operations, Services, and Support Departments to review existing requirements for uniformity and consistency.

2. The working group will ensure the adequacy of the process for the development and review of test parameters and specifications assuring that test specifications and results receive appropriate approval.

3. The working group will evaluate the merits of combining the responsibilities for post modification and post repair testing within the Nuclear Services Department.

4. The results of all reviews and evaluations will be documented in a report with appropriate recommendations to management.

Implementation:

PSE&G will initiate activities on this action plan no later than March 1984. All actions will be completed by November 1984.

2.4.4 Action Plan for Site Protection and Emergency Preparedness

Objective:

Ensure that plant security, emergency preparedness, fire protection and personnel safety are maintained at high performance levels.

Actions:

1. PSE&G will conduct separate reviews of the following programs:

   a. Emergency Preparedness
   b. Personnel Safety
   c. Fire Protection
   d. Plant Security

2. Each review conducted by PSE&G will include the following activities, and will be concluded with written recommendations for revisions in policy or procedures, if applicable.

   a. Review and spot check past violations and corrective action plans to assure that root causes were determined and the potential for reoccurrence has been minimized.

   b. Review and verify that procedures address all requirements and are clearly defined.

   c. Determine internal group support requirements including staffing levels to assure sufficient resources have been allocated.

   d. Determine external support requirements from other Nuclear Department groups, including staffing levels, to assure sufficient resources have been allocated.

3. The recommendations for program and/or procedure changes will be implemented as they are approved by PSE&G management. Appropriate training will be provided to assure that key personnel are cognizant of procedural requirements and their responsibilities and accountabilities in each area.

Implementation:

PSE&G will begin independent reviews of each program in September 1983. Each review will be completed and appropriate changes incorporated by December 1984.

2.4.5 Action Plan to Strengthen the Nuclear Engineering Organization and Improve Coordination Between Nuclear Engineering and Operations

Objective:

Strengthen the Nuclear Engineering organization and improve coordination between Engineering and Operations.

Actions to Assist Nuclear Engineering Staffing

1. PSE&G will expeditiously staff the open supervisory positions within Nuclear Engineering with qualified personnel.

2. PSE&G will develop a new hire orientation program to provide background training for new Nuclear Department Engineering professional personnel. The orientation will include specifics on the particular plant to which an individual might be assigned.

Actions to Improve Inter-departmental Relations Between Nuclear Engineering and Operations

3. A series of team building sessions and related activities with Nuclear Engineering and Salem Operations personnel will be conducted by PSE&G.

4. PSE&G will conduct separate team building sessions for the supervisory and group head level personnel in the two organizations.

5. PSE&G will evaluate the results of the team building sessions to determine the following:

   a. The identified "problems" and recommended solutions for those problems.

   b. The most effective manner for implementing the recommendations.

   c. The most effective way to establish a rapport between the Nuclear Engineering sponsor engineers and station personnel.

6. Recommendations resulting from Action Item 5 will be developed, formalized and presented to Nuclear Department management for approval with a proposed implementation schedule.

7. Subsequent to management approval, each department will develop any required procedures and prepare an informal training program for presentation to applicable personnel.

8. The department General Managers will convene a series of joint quarterly meetings between the managers and supervisors in the two organizations specifically to evaluate the effectiveness of this program and to identify and resolve any problems that may still exist.

Actions to Improve Nuclear Engineering Management Information Systems

9. As a parallel effort to the above described programs, representative from Nuclear Engineering and Methods and Administration shall review the present Management Information Systems (MIS) available for status tracking of work and other managerial information requirements.

10. PSE&G management will approve and implement the approved Management Information System.

    This item will be done in full coordination with Action Plan 2.7.3., the Recommended Action Plan for Information Systems.

Implementation:

PSE&G will initiate this Action Plan in September 1983. The Action Plan will be completed by October 1984 except for Action Items 9 and 10. Action Items 9 and 10 will be initiated consistent with development of overall goals from Action Plan 2.7.3.

2.5 QUALITY ASSURANCE

2.5.1 Action Plan for Improving the Quality Assurance Department Organization

Objective

Improve the internal capability of the Quality Assurance Department (QAD) to manage the Salem Quality Assurance (QA) program through enhanced communications.

Actions

1. PSE&G will staff open positions within the QA Department in a timely manner. Priority will be given to selection of personnel with Reactor Operator experience.

2. The QA Manager and his supervisors will conduct a team building session to identify priority concerns within the department, to delineate support actions required from the Vice President - Nuclear and to define associated responsibilities.

3. The Vice President - Nuclear and the QA Department Manager, will meet to discuss priority concerns for the QA Department and how these should be resolved.

4. A QA Department team building session for all management and supervisory personnel to identify and initiate resolution of departmental concerns will be conducted.

5. The QAM will perform appropriate follow-up actions to the team-building session.

6. A study of the feasibility of relocating all QA Department functions together geographically on Artificial Island will be conducted.

7. PSE&G will expedite the relocation of all QA Department personnel to the site.

8. PSE&G will evaluate the positions of the QA Manager and his supporting staff to ensure they are commensurate with assigned responsibilties.

9. The QA Manager will assess the total QA Department personnel requirements and allocation to the various groups. This will be done prior to beginning and subsequent to completion of the Action Plan investigations.

10. Upon completion of all relevant action items in the Action Plans 2.5.1 and 2.5.2, the QA Manager will review and revise the QA Department organization charter as necessary, and submit for appropriate management approval.

Implementation

PSE&G will initiate this Action Plan to enhance the internal capacity of the QAD to manage the Salem QA program in November 1983, with completion in September 1984.

2.5.2 Action Plan for Improved Interdepartmental Relationships Between the Quality Assurance and Other Nuclear Department Organizations

Objective

Improve coordination procedures and working relationships between the Quality Assurance (QA) and other Nuclear Department organizations.

Actions

1. The QAD Manager, will initiate a series of individual meetings with all Nuclear Department organization managers to:

   a. review organizational charters and clarify any confusion or concern about overlaps in jurisdictional scopes.

   b. discuss concerns identified in the meeting with the Vice President Nuclear (see Action Plan 2.5.1).

   c. solicit input about specific QA Department programmatic, or interface concerns and recommendations from each manager.

   d. develop agreements about future informal coordination processes between specific departments and the QA Department.

2. The QA Manager will meet with the QA Manager of the Plant Betterment Contractor to:

   a. review the charters of the two organizations and clarify any confusion or concerns about overlaps in jurisdictional scopes.

   b. develop formal procedures for improved interface between the two groups.

   c. agree upon informal communication processes to be utilized on a regular basis for coordination purposes.

   Existing documentation will be updated to incorporate the results of the meeting as needed.

3. PSE&G will review current departmental responsibilities for attendance at NRC exit interviews to assess if provisions currently exist for QA attendance at the subject interviews. Appropriate action will be taken to assure prior QA notification and attendance by QA representatives at NRC exit interviews and document the results of this review.

4. PSE&G will identify common concerns relative to QA acceptability standards, review and approval process, interface responsibilities, etc.

5. The QA Manager will meet with the Vice President - Nuclear and his direct reports to resolve any remaining concerns.

Implementation

PSE&G will initiate the above actions to improve interdepartmental relationships by December 1983. The Action Plan will be completed by March 1985.

2.5.3 Action Plan for Improving the Quality Assurance Department Procedures and Work Activities

Objective

Improve Quality Assurance procedures and work activities as these relate to auditing, monitoring and Quality Control inspection functions. Improve quality engineering review during the procurement cycle. Improve QA nonconformance control activity.

Actions

1. Subsequent to the reorganization of the QA function on January 3, 1983, QA Nuclear Operations had initiated actions to assess previous philosophies, methods of implementation, degree of involvement and procedural acceptabililty. This assessment resulted in a plan to restructure the previous QA Manual and update QA procedures to reflect the new organization and revised methods of implementing the QA Program. The plan is presently being implemented. Completion of this activity will be addressed here and includes the following:

   a. Revision to the Salem updated Final Safety Analysis Report Section 17.2 to reflect the current organization.

   b. Clarification of work order traceability requirements for Commercial Catalog Items (CCI).

   c. Provision for additional guidance for classification of QA records by Technical Document Room (TDR) in addition to documenting the requirements for the TDR storage area.

   d. Modification of the QA monitoring schedule to reflect varying work activities and their importance. Provide for additional QA monitoring of critical activities such as calibration and repair.

   e. Final approval, issuance and implementation of the QA Training and Certification Manual.

   f. Provision for systematic QA verification of corrective actions and regulatory commitments.

   g. Procurement control process including procurement document review, safety classification of items, establishment of Quality Assurance requirements including documentation, storage and handling requirements.

   h. Review of contractor procured non-safety related items for consistent and correct classification.

i. Consolidation and standardization of the QA receiving inspection functions including evaluation of sampling plans and more detailed receiving inspection guidance.

j. Revision to the corrective action follow-up system to provide more timely close-out and escalation as required.

k. Development of trend analysis program to include data items such as Correction Action Requests and Deficiency Reports.

l. Strengthening the QA audit program to provide for more in-depth assessment of the control systems to assure adequate coverage of all required subjects/areas.

m. Enhancement of QA auditor training to include additional operation exposure.

n. Provision for guidance in establishing QC inspection points and necessary interface requirements with the applicable performing departments.

o. Provision for additional guidance for QA review of contractor work packages.

p. Formalization of the QA final walkdown and acceptance of contractor work activities including the use of working sketches.

2. Subsequent to final review and revision of the QA procedures, workshops will be held with all applicable QA personnel to assure adequate understanding of associated responsibilities and implementation requirements.

3. PSE&G will establish an evaluation team to investigate the feasibility of developing a uniform Deficiency Report (DR) system. The team will evaluate current control programs and proposed information systems. Based upon the results of the team evaluation, PSE&G will identify responsibility for control of DRs and develop the necessary system and procedures. This action item will be coordinated with the larger effort to develop Information Systems (2.7.3).

Implementation

PSE&G has already initiated action to assess and update applicable QA procedure to reflect the recent reorganization, increased involvement in activities and current QA practices. The draft QA procedures will be reviewed and revised, as required, in accordance with the actions of 2.5.1 and 2.5.2 The estimated completion date for this activity is December 1984. Completion of item 2.5.3.3 is contingent on Action Plan 2.7.3.

2.6 MAINTENANCE AND PLANT BETTERMENT

2.6.1 Action Plan for Clarifying Organizational Responsibility and Interfaces in the Maintenance Area

Objective

Clarify organizational responsibilities and accountabilities associated with the Maintenance function and establish a maintenance management structure that effectively and efficiently meets the needs of the Nuclear Department.

Actions

1. PSE&G will establish a review group including Nuclear Operations, Nuclear Services and Support, and an outside consultant to evaluate the present responsibilities of the maintenance organizations for all activities associated with the maintenance of the nuclear units. The review group will prepare recommendations for the effective and efficient management of the maintenance activities for management approval.

2. A working group will develop the details of, and establish the approved Maintenance Management Organization Plan.

3. The plan will address the necessary steps and actions to designate:

    a. Administrative activities such as: personnel, budgeting, procurement, documentation and records, industrial relations, procedural approvals, etc.

    b. Planning activities such as: Repair and Maintenance Procedure System (RAMPS), managed maintenance programs, outage, etc.

    c. Priority staffing needs with appropriate time lines for implementation.

    d. Routine repair, preventative maintenance and outage maintenance responsibilities.

    e. The use and role of the Plant Betterment Contractor during and following plan implementation.

f. Housekeeping for the plant and site environs.

g. Facility needs.

4. The plan will assure that appropriate personnel are instructed in proper implementation of the Maintenance Management Plan.

5. During the implementation of the Maintenance Management Plan, an organizational development advisor will monitor plan progress to assure all objectives and broader ranged criteria are met.

Implementation

PSE&G initiated implemention of this Action Plan in July 1983. A transitional phased approach for completion of the Plan will occur over a scheduled time interval to be determined with the final approved Maintenance Management Plan. All plan activities will be completed by December 1984.

2.6.2 Action Plans for Enhancing Maintenance Planning, Monitoring, and Control

Objective

Provide a managed maintenance program to facilitate the planning, scheduling and analysis of maintenance work activities.

Actions

1. Through the use of a working group, the Nuclear Department will analyze the requirements for a managed maintenance program which will assure an efficient methodology for planning, scheduling and control of work orders. The working group will evaluate enhancing the Repair and Maintenance Procedure System (RAMPS) to perform these functions.

2. The working group will review the various automated maintenance information systems and techniques currently in use at the station and identify their scope and capability. They will also evaluate the cost effectiveness of consolidating various maintenance information systems.

3. The working group shall analyze the merits of non-outage scheduling of daily activities as part of a computerized managed maintenance program.

4. They will evaluate how the non-outage managed maintenance program can be integrated with outage planning and scheduling.

5. It will be determined how data to support the information needs identified above could be most efficiently inputted and collated.

6. The hardware and software requirements needed to implement the enhanced programs will be analyzed.

7. As required, the working group will submit for approval recommendations for enhancing maintenance planning, monitoring, and control. PSE&G will implement approved recommendations.

8. The working group will revise or write procedures that will support the timely input and retrieval of maintenance work order information. These procedures will address the use of corrective maintenance and preventive maintenance (PM) data in the analysis of equipment performance and maintenance planning.

9. Maintenance and Training Departments will jointly develop and implement a training program to instruct appropriate personnel on the use of managed maintenance programs.

10. PSE&G will establish a program to update the Repair and Maintenance Procedure System (RAMPS) data base and integrate inventory and work order records into the configuration management system.

11. This program will update the storeroom and warehousing support portions of the managed maintenance program.

12. The working group will analyze the maintenance, I&C planning and storeroom organizations to assure they can meet the staffing requirement and structure to implement the enhanced management programs.

Implementation:

PSE&G will initiate this Action Plan in September, 1983. Complete implementation of the programs including the upgrade of storeroom and warehousing, as it affects planned maintenance, will be completed by June 1985.

2.6.3 Action Plan to Reduce the Number of Backlogged Maintenance Work Items

Objective

Reduce the non-outage work order backlog to permit current maintenance activities to be completed in a timely, well planned manner.

Actions

1. PSE&G will delineate and classify the backlogged work orders by design changes, priority, system, component,work orders on hold due to spare parts availability or engineering support, preventative maintenance, corrective maintenance, plant location.

2. PSE&G will evaluate the cause or history of the work order backlog by analyzing the classifications identified in Action Item 1, and determine if a root cause can be identified.

3. PSE&G will review each non-outage work order to assure it has an identified scope, procedural requirements, manpower required, time duration, material, tools or special services required.

4. PSE&G wil determine which corrective work orders can be cascaded to the next due date for preventive maintenance or planned future maintenance for that component.

5. A resource loaded schedule will be developed to reduce the work order backlog and integrate this schedule into overall corrective maintenance demands. PSE&G will analyze the schedule assessing the need for prudent use of overtime and contractor support and implement the resultant program.

6. The work order backlog will be monitored to assure milestones are being met and efforts are being made to keep the backlog minimized.

7. PSE&G will analyze the department manpower resources to determine if they are adequate to minimize or limit future backlogs while staying within the station overtime guidelines.

Implementation

PSE&G will initiate this Action Plan with the classification and review of all outstanding work orders beginning in September, 1983. This will facilitate the reduction of work order backlog as outlined in the objective by January, 1985. Sufficient information exists for each backlogged work order to facilitate the detailed categorization and root-cause identification.

2.6.4 Action Plan for Improved Maintenance, Calibration and Control of Measuring and Test Equipment

Objective

Ensure that calibration and control of measuring and test equipment is maintained at a high level of performance.

Actions

1. A working group representing the Operations, Services and Quality Assurance Departments will conduct a review of present station and site facilities and procedures used in the calibration and control of measuring and test equipment. The working group will identifiy personnel resources and facility arrangements necessary to assure positive program control.

2. The group will revise any procedures or facility arrangements to assure that they are satisfactory. They will evaluate the potential benefits and disadvantages of assigning responsibility for control of measuring and test equipment to one organization. The present plans to develop a centralized calibration laboratory will continue.

3. The Quality Assurance Department will increase the level of monitoring in this area in conjunction with QA staffing increases addressed in Section 2.5 of this report.

4. The Nuclear Training department will conduct a review of the present formal courses for supervisory and bargaining unit personnel to assure that these courses emphasize strict adherence to established requirements for calibration and control of measuring maintenance and test equipment. Appropriate revision will be made to training courses as required.

Implementation

PSE&G has initiated action on this plan with the procurement of some equipment and provisions for an initial staff to operate the centralized calibration laboratory. Completion of these actions including changes in procedures and facilities which may be required to meet proposed revisions, will be accomplished by August 1984.

2.6.5 Action Plan for Organizing for Outage Management and Improving the Planning, Monitoring and Controlling of Outage

Objective

Review and strengthen the outage function including management systems and procedures which will aid in the planning, monitoring and controlling (including costs) of outages.

Actions

1. PSE&G will establish a working group to review the existing assignment of authorities and responsibilities for all activities associated with preparing for and conducting outages. The group will prepare and submit recommendations for the effective management of pre-outage and outage activities, including organizational relationships, staffing requirements and analysis of important parameters.

2. Management will review and approve an organizational structure for managing the outage function.

3. The working group will develop an Outage Management Plan and schedule to implement the approved outage management organization. Included in this Plan will be necessary actions to strengthen the planning, monitoring and controlling of outages. The plan will specifically address:

   a. Establishing management systems and procedures to delineate authorities and responsibilities during all phases of planning for and conducting outages.

b. Defining those activities to be performed by each organization and establishing clear lines of responsibility for these activities.

c. Ensuring procedures provide all necessary input and records for outage management and documentation.

d. Developing a listing of work items that can be performed during an unplanned outage and a mechanism for keeping the listing current.

e. Determining the need for facilities and programs to efficiently and effectively utilize contractor personnel.

Implementation

PSE&G initiated the activities contained in this plan in July of 1983. Final implementation of this strengthened outage function will be in place by April, 1985.

2.7 Nuclear Department Services

2.7.1 Action Plan to Establish an Effective Records Management Program

Objective

Establish an effective, centralized records management program within the Nuclear Department.

Actions

1. PSE&G will perform a survey and analysis of the Nuclear Department's Records Management System. This study will define the baseline of PSE&G's current records management program. The study will develop specific recommendations for upgrading current capabilities to ensure that the program supports all users within the Nuclear Department.

2. PSE&G will establish a working group to review the survey and analysis recommendations, and prepare an implementation plan for developing an effective records management program.

3. The working group will obtain management's approval for the implementation plan and the committed resource schedule.

4. PSE&G will develop functional specifications for a records management retrieval system which supports all user requirements along with procedures and system documentation.

5. The procedures and system documentation will address the following:

    a. A policy statement that centralizes for records identification, collection, encoding, microfilming, storage and retrieval.

    b. Organizational requirements, interfaces and resource requirements to effectively maintain a records management program.

    c. Development of a record type list which shall be determined by reviewing PSE&G policies, procedures, records, files and other instructions.

d. Forms and procedures that ensure standard indexing requirements for each record type are established.

e. The capturing of all records and forwarding them to the records management organization for processing.

f. Report writing capabilities within the records retrieval system which will allow the elimination of redundant reports and overlapping data contained in other information systems as well as eliminating manual logs, lists and indexes where practical.

g. Review the attributes of the indexing data in the Computer Assisted Records Management System (CARMS) and other retrieval systems for compliance with upgraded indexing standards. Develop a method to correct computer records to agree with indexing standards.

h. Identification of all regulatory, licensing and commercial records management related requirements.

i. Development of user manuals, programming documentation, satellite station instructions and other procedures for implementing an effective records management program.

6. PSE&G will install an upgraded records retrieval system on company computers using inhouse software and vendor supplied programs where possible.

7. Facilities and equipment will be provided as needed, to accommodate the upgraded records retrieval system.

8. All records retention schedules will be updated to ensure compliance with regulatory and commercial requirements.

9. PSE&G will develop a training program for the Records Management Program.

10. PSE&G will assure that mechanisms are in place to routinely audit organizations generating documents for compliance with records turnover requirements.

Implementation

A survey and analysis of the Nuclear Department's Records Management Program was initiated in July 1983 to provide observations and recommendations for its upgrade. This Action Plan will be coordinated with the Document Control Action Plan 2.7.2. An effective Records Management Program will be developed by July, 1985.

2.7.2 Action Plan for Integrating the Document Control Function

Objective

Integrate document control functions performed by all PSE&G organizations that support the Nuclear Department. This applies to both safety and non-safety related documents which support and control the design basis for the plant including drawings, specifications, design criteria, procedures, etc.

Actions

1. PSE&G will perform a survey and analysis of the Nuclear Department's existing document control activities. The study will provide observations and specific recommendations for upgrading current capabilities to ensure that the procedures support all users within the Nuclear Department.

2. Following Action Item 1, a PSE&G working group will review the survey and analysis recommendations and prepare an implementation plan to develop an integrated document control function. The working group will be the same working group discussed in the Records Management Action Plan (2.7.1)

3. The working group will obtain management approval for the implementation plan and the committed resources schedule.

4. PSE&G will implement an integrated document control program within the Nuclear Department that includes the preparation of functional specifications for document control activities along with procedures and system documentation.

5. The procedures and system documentation will include:

   a. Organizational requirements and interfaces to effectively maintain integrated document control functions.

   b. An on-line, computer based, design document index system and the maintenance of this system on a current basis.

   c. An evaluation of the feasibility of incorporating automated distribution capabilities into the system; utilization of existing information systems to the maximum extent possible.

   d. Report writing capabilities within the on-line system which eliminate manual logs, lists and indexes where practical.

   e. Identification of all regulatory, licensing and commercial requirements related to document control.

   f. Necessary forms for requesting, processing or transmitting design documents.

   g. Assurance that the system is properly documented, controlled and proceduralized.

6. The working group will identify all design documents and their current revision or issue status along with associated change documents applicable to Nuclear Department activities, and input this data into the design document index system.

7. The working group will assure that documents in the custody of control stations are current.

8. PSE&G will develop department wide training programs for the document control functions.

9. PSE&G will establish a continual internal audit function within document control to assure that documentation is maintained properly by individuals and control stations, and corresponds to the design document index and the record copy maintained by document control.

Implementation

The development of the document control function will be coordinated with the implementation of the Records Management Action Plan. PSE&G initiated a survey and analysis in July 1983. The integrated document control function will be in place by July, 1985.

2.7.3 Recommended Action Plan for Information Systems

Objective

Determine the management information needs of the Nuclear Department, evaluate how these needs can be met via a common data base management system and construct a plan to implement an integrated system.

Actions

1. PSE&G will establish a working group to review the Phase II Information Management Task Force Report on information systems and reassess the current needs of the department.

2. The working group will develop a rolling three year implementation plan that addresses:

   a. organizational structure and development.
   b. responsibilities.
   c. staffing requirements.
   d. intra-departmental relationships.
   e. inter-departmental relationships.
   f. overall resource requirements including. hardware, software and consultant services.
   g. prioritized implementation schedule.

3. The working group will obtain management's approval for the plan and the committed resource schedule.

4. The working group will analyze the technical requirements of system development personnel to assure the necessary level of experience is available in all application areas.

5. PSE&G will implement data base information systems programs.

6. The working group will establish the necessary management controls to assure that all information is correct, current and is supportive of work procedures and responsibilities of the department.

Implementation

PSE&G will re-initiate a working group to analyze past information systems efforts and the current needs of the Nuclear Department. A rolling three year plan will be completed by September 1983, for approval and implementation. The implementation phase itself will be completed in June 1987.

2.7.4 Action Plan for Enhancing the Training Program's Capacity to Effectively Support Nuclear Department Training Needs

Objective

Continue to develop and improve the Nuclear Training Department organization and training programs provided by staff.

Actions

1. PSE&G will expeditiously staff key Nuclear Training Department positions (Department Heads and Training Supervisors) with qualified personnel.

2. The Nuclear Training Department will assess its present system for incorporating design changes and changes in policy and procedures into training program content. Appropriate revisions to current Training Department practices will be implemented and documented if the assessment indicates such action will strengthen the program.

3. An interdepartmental training oversight committee will be established as well as review groups for each job area.

4. PSE&G will conduct a review of current qualification and training programs for QA/QC personnel to assure compliance with applicable requirements. Discipline oriented training certification course outlines and procedures will be developed as required. Training will be conducted as necessary for the certification of applicable QA personnel.

5. PSE&G will evaluate the reassignment of QA/QC training and certification to the Nuclear Training Department.

Implementation

The Action Plan activities are underway at this time. All action items will be completed by the end of April,1984.

3.0 PROGRAM IMPLEMENTATION

The Action Plans addressed in this report will be implemented over the next three years. However, the majority of the activities will be completed in 1984. The overall responsibility for successful completion of all Action Plan implementation activities rests with the Nuclear Department Vice President. To discharge this responsibility, the Vice President - Nuclear will assign a Nuclear Department Manager to execute each Action Plan as an Action Plan sponsor. Action Plan sponsors will have the managerial authority and support of the Nuclear Department to ensure appropriate implementation success.

Each Action Plan sponsor will be knowledgeable about the details and intent of Action Plans under his sponsorship. All manager sponsors will give Action Plan implementation activities high priority consistent with, and second only to, the safe operation of the nuclear units at Artificial Island. Where direct reports to the Vice President - Nuclear are Action Plan sponsors, they will be provided with additional resources to manage the Action Plan implementation process as necessary.

Table 3-1 outlines Action Plan sponsor assignments and responsibility. Figure 3-1 depicts the management of Action Plan implementation activities.

To assist the Vice President - Nuclear in monitoring and controlling the overall Action Plan implementation program, a full-time Program Director will be appointed. The Program Director will be responsible to the Vice President - Nuclear to provide overall program coordination and direction.

The Director will monitor program status by establishing administrative controls with the Action Plan sponsors, other contributing PSE&G personnel and consultants assigned to Action Plan tasks. He will identify areas requiring management attention to ensure the progression of an integrated implementation process. This will include coordinating meetings between various principles in order to resolve responsibility issues and coordinating working sessions to preclude duplicated efforts. He will provide a weekly written status summary to the Vice President - Nuclear. This summary will include: status update on all Action Plans, difficulties encountered, issues requiring higher management resolution and recommendations for required actions. The Director will be responsible for the preparation of any reports or presentations required by the NRC or corporate.

The PSE&G Nuclear Oversight Committee will provide an oversight function during the Action Plan implementation phase.

Figures 3-2 and 3-3 present PSE&G's schedule for the implementation of Action Plan activities presented in this report. Many of the Action Plans rely heavily upon the assistance of contractors, consultants and the direct hiring of additional personnel. Every effort will be made by PSE&G to maintain the identified implementation schedules; however the timely availability of such personnel resources could become a constraining factor. Another factor which could affect schedule completion dates is an unforeseen change in the present priority assignments.

Figure 3-2 presents a detailed bar chart implementation schedule broken down to the Action Plan activity level. Figure 3-3 presents this same information at the summary level for each of the major Plan sections.

The Action Plans described herein are essentially guidelines describing the work to be done to achieve the goals of a particular Action Plan. Although they represent the best efforts of the dedicated task force assigned to their preparation, departures in approach by the Action Plan sponsor may be taken so long as the end objective is met. The Plans will be implemented in conjunction with an integrated resource-loaded computerized scheduling network showing the interrelationship between individual Plans. This network will facilitate more efficient tracking of progress.

TABLE 3-1
ACTION PLAN RESPONSIBILITY

		SPONSOR
2.1.1	Functional Analysis of the VPN Position and all Direct Reports	R. Burricelli
2.1.2	Working Relationships between Nuclear Department and Corporate Public Relations, Human Resources, Purchasing	R. Burricelli
2.1.3	Completion and Implementation of the Nuclear Department Policy Manual, VPN-1, and Supporting Departmental Procedures	R. Gehret
2.1.4	Communications between the Nuclear Department and Corporate	R. Burricelli
2.1.5	Development and Implementation of an Effective Transition Management Process	R. Burricelli
2.2.1	Safety Review Management Activities	P. Krishna
2.2.2	Commitment Identification and Tracking	E. Liden
2.3.1	Integrated Configuration Management Program	D. Jagt
2.3.2	Change Control Process	D. Jagt
2.4.1	Plant Cleanliness and General Appearance	L. Fry
2.4.2	Compliance Monitoring of Technical and Equipment Specifications	L. Miller
2.4.3	Post Modification/Post Repair	F. Meyer
2.4.4	Site Protection and Emergency Preparedness	P. Moeller

TABLE 3-1
ACTION PLAN RESPONSIBILITY

		SPONSOR
2.4.5	Strengthen Nuclear Engineering and Coordination Between Nuclear Engineering and Operations	J. Boetgger
2.5.1	Quality Assurance Department (QAD) Organization	A. Nassman
2.5.2	Interdepartmental Relationships between the QAD and Other Nuclear Department Organizations	A. Nassman
2.5.3	QA Procedures and Work Activities	A. Nassman
2.6.1	Organization Responsibilities and Interfaces in the Maintenance Area	H. Midura
2.6.2	Maintenance Planning, Monitoring and Control	J. Gallagher
2.6.3	Backlogged Maintenance Work Items	J. Gallagher
2.6.4	Maintenance, Calibration and Control of Measuring and Test Equipment	F. Meyer
2.6.5	Organizating for Outage Management and Improving Planning, Monitoring and Control of Outages	H. Midura
2.7.1	Records Management Program	R. Gehret
2.7.2	Document Control Function	R. Gehret
2.7.3	Information Systems	R. Gehret
2.7.4	Nuclear Training Program	H. Hanson

FIGURE 3-1
ACTION PLAN IMPLMENTATION ORGANIZATION
PUBLIC SERVICE ELECTRIC AND GAS COMPANY

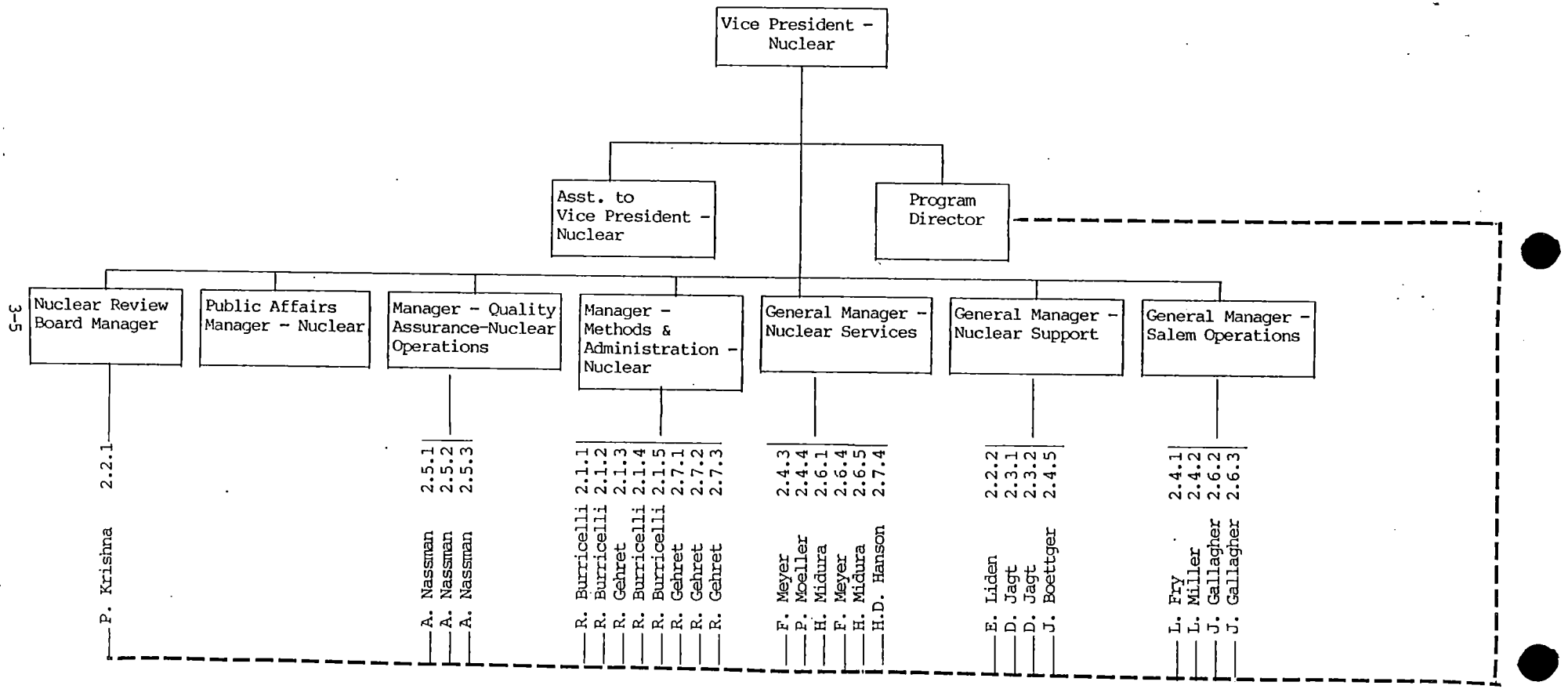

FIGURE 3-2
ACTION PLAN SCHEDULE

NUMBER	DESCRIPTION	1983	1984	1985	1986	1987
2.1.1.	FUNCTL ANALYSIS VP POS & DIR REPORTS	Sxxxxxxxxxxxxxxx	O			
2.1.2	ND & CORP MATRIX RELATIONSHIPS	Sxxxxxxxxxxxxxxx	O			
2.1.3	ND POLICY MANUAL & SUPPORT PROCED	Sxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	S			
2.1.4	ND & CORP COMMUN	Sxxxxxxxxxxxxxx	S			
2.1.5	ND TRANSITION MGMT PROCESS	Dxxxxxxxxxxxxx	N			
2.2.1	SAFETY REVIEW MANAGEMENT	Sxxxxxxxxxxxxxxx	O			
2.2.2	COMMIT TRACKING AND CLOSEOUT	Nxxxxxxxxxxxxxxx	D			
2.3.1	INTEGRATED CONFIGURE MGMT	Sxxxxxxxxxxxxx	A			
2.3.2	CHANGE CONTROL PROCESS	Oxxxxxxxxxxxxxxx	N			
2.4.1	MAINTAINING PLANT CLEANLI-NESS	Dxxxxxxxxxxxxxx	D			
2.4.2	COMPLIANCE MONITOR OF TECH & EQUIP SPEC		Nxxxxxxxxxxx	S		
		JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND

FIGURE 3-2
ACTION PLAN SCHEDULE

NUMBER	DESCRIPTION	1983	1984	1985	1986	1987
2.4.3.	POST MOD AND POST REPAIR TESTING		MxxxxxxxN			
2.4.4	SITE PROTECTION & EMERG PREPARD	SxxxxxxxxxxxxxxxxD				
2.4.5	NUCL ENG & OPER COORDINATION	SxxxxxxxxxxxxxxxO				
2.5.1	QA DEPT ORGANIZATION	NxxxxxxxxxxxS				
2.5.2	QA RELATIONSHIPS WITH OTHER DEPTS	DxxxxxxxxxxxxxxxxxxxM				
2.5.3	QA PROCED & WORK ACTIVITIES	AxxxxxxxxxxxxxxxxxD				
2.6.1	MAINT AREA ORGAN RESONSE & INTFC	JxxxxxxxxxxxxxxxxxxD				
2.6.2	MAINT PLANNING MONITORING & CONTROL	SxxxxxxxxxxxxxxxxxxxxxxxxJ				
2.6.3	BACKLOGGED MAINT WORK ITEMS	SxxxxxxxxxxxxxxxxxxxJ				
2.6.4	MEASURING AND TEST EQUIPMENT	JxxxxxxxxxxxxxxA				
2.6.5	ORGANIZING FOR OUTAGE MGMT	JxxxxxxxxxxxxxxxxxxxxxxxxA				
2.7.1	RECORD MGMT PROGRAM	JxxxxxxxxxxxxxxxxxxxxxxxxxxxJ				
		JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND

FIGURE 3-2
ACTION PLAN SCHEDULE

NUMBER	DESCRIPTION	1983	1984	1985	1986	1987
2.7.2.	DOCUMENT CONTROL FUNCTION	JxxxxxxxXxxxxxxxxxxxxxxxxxxxxJ				
2.7.3	INFORMATION SYSTEMS	SxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxJ				
2.7.4	NUCLEAR TRNG PROGRAM	AxxxxxxxxxA				
		JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND

FIGURE 3-3
ACTION PLAN
MILESTONE SCHEDULE

NUMBER	DESCRIPTION	1983	1984	1985	1986	1987
2.1	ORGANIZATION MANAGEMENT	SxxxxxxxxxxxxxxxxxxxxxxxxxxxS				
2.2	SAFETY REVIEW AND COMPLIANCE	SxxxxxxxxxxxxxxxxD				
2.3	CONFIGURATION MANAGEMENT	SxxxxxxxxxxxxxxxN				
2.4	OPERATIONS AND OPERATIONS SUPPORT	SxxxxxxxxxxxxxxxxxxxxxxxxxxxS				
2.5	QUALITY ASSURANCE	AxxxxxxxxxxxxxxxxxxxxxxM				
2.6	MAINTENANCE AND PLANT BETTERMENT	JxxxxxxxxxxxxxxxxxxxxxxxxxxJ				
2.7	NUCLEAR DEPARTMENT SERVICES	JxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxJ				
		JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND