



Portland General Electric Company

David W. Cockfield Vice President, Nuclear

January 31, 1990

Trojan Nuclear Plant
Docket 50-344
License NPF-1

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC 20555

Dear Sir:

Nuclear Division Improvement Plan, Revision 1

Attached is Revision 1 to the Nuclear Division Improvement Plan (NDIP). This revision provides a status of recently initiated and ongoing activities; it provides information on additional "new" initiatives that have commenced since the submittal of the NDIP on September 29, 1989; it provides the measures that are being used to determine the effectiveness of the NDIP initiatives; and it outlines the structure for Revision 2 of the NDIP.

Portland General Electric Company (PGE) recognizes that management and system changes alone do not create an environment for excellence. In addition to these changes, many of the processes utilized by management are undergoing changes also. For example, more effective communication among all levels of management and between management and the employees is a key to ensuring that expectations and standards are met throughout the Nuclear Division. This enhanced communication is providing a mechanism to promote quality, teamwork, ownership, and accountability.

Enhanced communication, however, is only the first step in changing management processes. To ensure that lines of communication which are being established and the expectations which have been defined are being realized, the key roles of the supervisor are being defined and reasserted. The supervisor will be held accountable for the results of his/her organization and at the same time will be more responsible for the functioning of his/her group. In knowing more of what is expected of

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Portland General Electric Company

Document Control Desk

January 31, 1990

Page 2

them and having been given training, the necessary tools, the management support, and most importantly intense management followup to be certain supervisors are exhibiting the expected behaviors, the supervisors will be more successful in achieving excellence in day-to-day performance of activities.

PGE recognizes that this increases the responsibilities of the supervisors and the action level employees. In support of this role, PGE management is providing a better environment for its employees. This includes a Nuclear Division differential pay structure; new facilities at the Trojan site with some in place and more being developed; enhanced leadership and technical training programs across the board from upper-level management to the individual workers; and a commitment of resources to developing or obtaining the tools necessary to support achievement of excellence such as design basis document program, procedure and document control program improvements and an increase in technical and computerized equipment and programs.

Attachment 1 describes the process of development of a more comprehensive, integrated and proactive NDIP. The purpose of the original NDIP was to provide focused attention on a select set of key areas in which additional performance improvements were needed in the near term. This revision increases the scope of the NDIP as described above. Revision 2 of the NDIP will be more comprehensive in nature, integrating significant ongoing improvement initiatives especially the work currently in progress addressing key behavioral, cultural and leadership issues. This revision will be issued in April of 1990.

Attachment 2 to this letter provides a status for the individual initiatives identified in Revision 0 of the NDIP. This revision includes accomplishments to date and it identifies individual completion dates for other activities. Included, also, is the status of three areas which are receiving a particular focus: work control, procedure and document control and Technical Specification surveillances.

Attachment 2 also includes measures of effectiveness (performance indicators) which have been established to measure the achievement of expected results and are included for each category. These measures represent an initial subset of a broader set of measures that are being established as part of Revision 2 of the NDIP. These measures of effectiveness have been organized to be applied to the categories of Management Performance, Assurance of Quality and Other Improvement Actions.

In most instances they are designed to indicate overall results; in a few instances, individual measures of effectiveness are directed at the resolution of a discrete problem or the achievement of a specific

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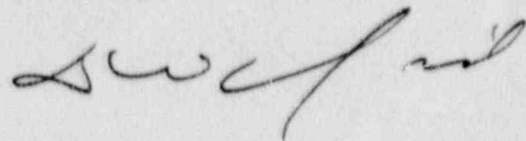
January 31, 1990

Page 3

enhancement. Specific measures have been established to address the areas of work control, corrective action program, procedure and document control, and Technical Specification surveillance program. These performance indicators, both individually and collectively, were established to provide representative measures of expected results as opposed to all-inclusive measures. By design, these indicators will measure how well we complete planned activities and how successful the completion of these activities is at enhancing our capabilities such that improved results are achieved.

I want to ensure you of PGE senior management's continued commitment to see that this plan succeeds and that management performance at Trojan meets our standards of excellence.

Sincerely,

A handwritten signature in black ink, appearing to be "D. Stewart-Smith", written in a cursive style.

Attachments

c: Mr. John B. Martin
Regional Administrator, Region V
U.S. Nuclear Regulatory Commission

Mr. David Stewart-Smith
State of Oregon
Department of Energy

Mr. R. C. Barr
NRC Resident Inspector
Trojan Nuclear Plant

ATTACHMENT 1

CONTINUED DEVELOPMENT OF THE NUCLFAR DIVISION IMPROVEMENT PLAN (NDIP)

PGE is committed to Nuclear Excellence. During the past two years, an ambitious set of improvement programs have been initiated to achieve this goal.

Several of these improvement programs were described in Revision 0 of the NDIP, which was submitted to the NRC on September 29, 1989. The original NDIP provided focused attention on a select set of key areas in which additional performance improvements were clearly needed in the near term. Three general areas were identified: Management Performance, Assurance of Quality, and selected Other Improvements Programs. Revision 0 of the NDIP was not intended to be a comprehensive statement of all aspects of improvement in PGE nuclear operations. As stated in the forwarding letter, it described only a subset of currently ongoing initiatives to improve performance at Trojan.

PGE Nuclear Division Management is building upon the set of current ongoing initiatives to develop an integrated, comprehensive, and proactive NDIP. Action has been underway in this regard since October. Revision 1 to the NDIP describes this work. Revision 2, which will be issued in April 1990, will be more comprehensive in nature. It will integrate and prioritize ongoing improvement initiatives and those additional initiatives that are identified as being necessary to achieve Nuclear Excellence. Some "fast track" improvement activities will be defined and initiated prior to the publication of Revision 2. (In this regard, additional initiatives in the areas of Work Control and Technical Specification Surveillances are discussed in Revision 1.)

Revision 2 of the NDIP should be viewed as documenting a point in time in the status and dimensionality of corporate growth - a growth focused on developing skills necessary for the achievement of excellence. Critical to our success is a continuing process of need for effective self-evaluation, implementation and follow up. Our view is that the NDIP itself should be an example of excellence and, as such, will provide us with a continuing learning experience. With Revision 2 we will stop referring to the NDIP as the Nuclear Division Improvement Plan. It will become the framework for achieving Trojan excellence - how we do things!

Development of NDIP Revision 2

Revision 2 of the NDIP will be based upon a clear definition of what results we must have for Trojan in the future; that is, it will directly reflect our Vision of Nuclear Excellence. It will define the actions necessary to reach our objectives, prioritize these actions, and set the timetable for their effective implementation.

Activities associated with the development of Revision 2 of the NDIP are already being conducted under the direction of a Leadership Team consisting of the Senior Vice President, Generating Division, the Vice President Nuclear, the five Nuclear Division General Managers, the Generating Division Controller and the PGE Organizational Effectiveness Director. An Excellence Team, consisting of key representatives from functional areas within the Nuclear Division, has been put in place to assist the Leadership Team in this endeavor. The constituency of the Excellence Team will ensure the provision of knowledgeable, broad-based input and evaluation of ideas and programs. The Leadership Team and the Excellence Team are being assisted by nuclear industry consultants knowledgeable in the execution of excellence programs and in management consulting.

Excellence is a function of human behavior. Our initiatives at Trojan must therefore focus on organizational systems as well as on technological systems. Moreover, we understand that some of the most basic facets of culture are not amenable to simple, programmatic initiatives. Accordingly, in addition to the critical technical and managerial issues we have already addressed, we have set out to further impact our culture consciously through the improvement process itself. We have adopted an improved way to establish our improvement program which recognizes the fundamental and penetrating cultural dimension to our overall improvement effort.

We are proceeding to focus on this cultural dimension both in terms of our analytic thought process and in terms of how we interact with each other.

We have begun by defining a desirable future for Trojan (a statement of Nuclear Excellence) both in terms of intended results and of required organizational characteristics and capability. From this beginning we have moved to expand our focus as follows:

- We are more rigorously integrating our improvement initiatives, i.e., focusing, combining, prioritizing, and pacing; experience is teaching us to be more realistic in our commitments; budgeting time for follow-through, iteration and for learning.
- We are strengthening our human resource perspective and our use of behavior science tools to design organization conditions supportive of effective human performance.
- We have formed our top-most management into a "Leadership Team" to direct the development and execution of the NDIP; we expect, and indeed are finding, great team-building value by engaging ourselves in a complex challenge.
- In forming the Leadership Team we have deliberately supplemented our managers with additional expertise and perspective, specifically: the Senior Vice-President of Generation, the Generating Division Controller, external nuclear industry consultants, and PGE Organization Effectiveness Director and human resource staff.

- We have formed an "Excellence Team" consisting of manager/supervisor representatives from functional areas within the Nuclear Division. The role of this team is to assist in identifications of core issues, to assist in development of solutions, and to be a source of ideas and a sounding board to ensure knowledgeable, broad-based input, to cause reaction and to develop ownership.
- We have performed an in-depth assessment of our vision and system by individual and group interviews of employees for their own evaluation and analysis of human issues and performance at Trojan and for their images of a desired future.
- We are enhancing our communication efforts to keep employees informed about the development of the NDIP, i.e., stronger use of media and face-to-face meetings.
- We have significantly increased our interactions with other nuclear operations to gain the benefit of their experience.

In broadening the dimension of our improvement effort, we are proceeding with the following steps and activities:

- Establishing desired results (objectives) with clear performance measures and long-term target performance levels.
- Identifying key behaviors (actions) and values that are critical to achieving the desired results.
- Describing the required organization capabilities (characteristics and conditions) to promote key behavior and values.
- Taking inventory of current improvement initiatives and revising them (consolidate, prioritize) to align with and achieve the required future organization capability.

The Nuclear Division has identified five key areas of accomplishment, toward which all efforts are being focused:

- Safety First,
- Reliable Generation,
- Competitiveness,
- Public Confidence,
- Employee Commitment.

At Trojan, our mission is:

- To safely, reliably and economically produce electric power for meeting our customers' needs.

Statements of commitment have been developed to support this mission statement:

SAFETY FIRST

- The way Trojan generates power is with nuclear fission; that technology demands the prerequisite of operating safely. Safety Foremost must therefore be a fundamental commitment defining the acceptable conditions within which Trojan may generate power.

RELIABLE GENERATION

- Trojan is in business to Generate Power Reliably. That is what Trojan contributes to society.

COMPETITIVENESS

- To sustain and succeed as a business, Trojan must be Economically Competitive as it safely generates power. Its product must be affordable for PGE customers and profitable for its investors.

PUBLIC CONFIDENCE

- Trojan intends to achieve Public Confidence thereby earning political commitment and community support to do business.

EMPLOYEE COMMITMENT

- Trojan intends to provide a Good Place to Work for employees to earn their commitment to perform.

Performance measures have been established and 1990 target performance levels are being developed to monitor our success against these objectives. They include:

SAFETY FIRST

- Take conservative actions,
- Performance to procedures and standards,
- Number of unplanned safety system actuations,
- Number of reactor trips per thousand hours,
- Reliability of fuel,
- Availability of safety systems,
- Radiological and other material releases,
- Amount of waste material generated,
- Collective radiation exposure for employees,
- Lost time accident rate/reportable injury trend,
- Effectiveness of fire protection program.

RELIABLE GENERATION

- Plant reliability,
- Amount of generation compared to planned,
- Effectiveness of managing outage schedules.

ECONOMICALLY COMPETITIVE

- Fuel cost per KWH of generation,
- Overall unit production cost per KWH of generation.

PUBLIC CONFIDENCE

- Election Results,
- Trends in NRC and independent external organization ratings,
- Trends in the nature and number of Notices of Violation,
- Trends in NRC open items.

COMMITTED WORK FORCE

- Trends in attendance rates,
- Trends in retention rates,
- Management development,
- Programs for recognizing superior employee contributions,
- Executive and General Manager communications effectiveness,
- Employee development.

These objectives and performance measures will provide a standard against which progress and success will be judged.

Additionally, Management has identified certain employee actions and attitudes believed to be critical to accomplishment of the above objectives. These values include:

- Integrity,
- Personal Accountability,
- Timely and Thorough Response to Problems,
- Role of the Supervisor,
- Environment for Success,
- Quality Teamwork,
- Attention to Detail,
- Adapting to Changing Standards of Performance.

At present we are validating objectively the organization characteristics and conditions we believe to be supportive of key behaviors, values and objectives. By April, we will be well into implementing a set of improvement initiatives to get there.

As we proceed, it is our desire to renew and expand our focus on accountability and management practices. As we implement the NDIP, we will be creating conditions that foster commitment (a sense of ownership)

by the employees. We will examine our principles for work assignment and proceduralization. We are working on a profile of the desired role and style of managers and supervisors. We will move our management style toward increased planning and accomplishing work through actions taken by employees. Most fundamentally we need to reduce counter-productive work pressure and unnecessary stress through planning, efficiency, and resourcing, so as to create space for cultural changes to take root and grow.

We reinforce that, in addition to specific initiatives, the improvement process is a distinct intervention in itself. The process aims to positively impact two backbones of culture: clarity and unity of purpose and leader-follower relations. We explicitly recognize that this process clarifies and strengthens our leadership accountability. We as leaders are the instruments of change. We will be aggressive in our self-examination using employee and consultant feedback, our QA organization, and in our own self-development. Through this process we will strengthen ourselves in our principal role as "Performance Managers" who set direction and expectations and then provide conditions for success.

Finally, we believe that solid long-term plans, supportive short-term actions, involvement, and forthright communication is the recipe for building employee optimism and the necessary patience to sustain a long-term pursuit for excellence.

ATTACHMENT 2

STATUS OF ACTIONS TAKEN TO IMPROVE PERFORMANCE NUCLEAR DIVISION IMPROVEMENT PLAN SECTION 2.0

In general, the following actions were identified in Section 2.0 of the NDIP. A Status is provided for each item on accomplishments to date using the broad categories of Management Performance, Assurance of Quality and Other Improvement Actions that were developed for the original NDIP. Three additional items have been added in the category of "Other Improvement Actions". These items address work control, procedures and document control and Technical Specification surveillances.

2.1 MANAGEMENT PERFORMANCE

2.1.3 Actions Taken/Planned

1. For over two years, PGE has been providing training for managers and supervisors to equip them to implement performance standards and expectations. This training has been referred to as the Trojan Excellence Program. This training has achieved success for those managers who have implemented the principles taught. A continued commitment to this training program will be made as the principles taught are sound and will, if implemented, improve performance. The emphasis of this commitment will be to have the remaining managers implement these principles. The successes which have been achieved will be utilized as examples in the training.

PRIMARY RESPONSIBILITY: Vice President

DUE DATE: Ongoing

ACCOMPLISHMENTS TO DATE:

A purchased program utilizing the concepts of Tom Peters' "In Search of Excellence" is being implemented at Trojan. This program is delivered through 15 key practices. An upper management team meets approximately once a month to become knowledgeable in each key practice. One key practice is normally addressed per session.

This same program is then instituted with Department Managers and Supervisors to equip all levels of management with these practices. Within each group, Managers/Supervisors make individual commitments to exercise the key practice taught in that session. Success with these practices is reported at the next session. Identified success styles are used as examples for other managers to implement.

This program was suspended during the 1989 Refueling Outage except for a two-day session which was held in July. The program

was resumed in November. All managers are participating in this program. The final key practice is scheduled for February 1990. After this session the program will be suspended for approximately two years with additional emphasis placed on FrontLine Leadership training (Item 6).

2. The Vice President and the General Managers in the Nuclear Division have hosted communications breakfasts for managers and supervisors for the purpose of communicating performance standards and expectations and allowing for an opportunity to provide feedback. These sessions have been beneficial to communication within the Nuclear Division and will be continued and expanded in the future.

PRIMARY RESPONSIBILITY: Vice President

DUE DATE: Ongoing

ACCOMPLISHMENTS TO DATE:

Several communication breakfasts have been held with more being scheduled on a quarterly basis. All managers and supervisors are invited to attend. The Vice President, Nuclear and General Managers attend the breakfasts. This program has been expanded to include invitations to other selected employees in the Nuclear Division.

3. The Vice President held a series of meetings to communicate to all employees what problems PGE is facing with regard to the operation of Trojan and to reinforce management expectations to correct performance deficiencies. These meetings will be followed by leadership meetings involving the General Managers and the leadership of each department reporting to them to reinforce both the expectations and how each manager and supervisor will be held accountable for their actions. Managers and supervisors will then be required to conduct similar meetings with working level employees. These latter meetings will be monitored by Department Managers or above to ensure the correct messages are communicated and to allow a forum for effective feedback. This action has already begun.

PRIMARY RESPONSIBILITY: Vice President, General Managers, Managers, Supervisors

DUE DATE: October 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. Leadership meetings have been held by all the General Managers, Department Managers and Branch Managers/Supervisors. Additional meetings continue to be held as necessary to discuss implementation of the NDIP and to provide a forum for feedback on the effectiveness of the new management team.

4. The information booklet entitled, "Guidelines for a Quality Working Environment", was issued in 1987. This booklet contains sound principles for achieving success. This booklet will be expanded to provide a clear statement of expectations and performance standards and will be reissued.

PRIMARY RESPONSIBILITY: General Manager, Plant Support
REVISED DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. The due date for issuance of the revised booklet "Guidelines for a Quality Working Environment" was changed from November 15, 1989 to December 31, 1989 per our letter dated November 29, 1989. This change was made to allow time for the inclusion of concepts from the articles which were being written and published in the "Quality Line" newsletter to be incorporated into the booklet. This booklet has been revised and is currently being issued to the employees in General Employee Training (GET). Employees are being indoctrinated in the subjects addressed in this booklet as part of GET and annual requalification training.

5. The existing "Quality Line" publication is being upgraded to include a discussion of management principles and expectations. It will also include a "lessons-learned" section to provide examples of how management expectations should be met. The "lessons-learned" articles will be prepared by Nuclear Division managers and distributed to employees.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: Ongoing

ACCOMPLISHMENT TO DATE:

Complete. The Quality Line publication has been reformatted to include a discussion of management principles and expectations and a "Lessons Learned" section. Five revised issues have been published. Beginning in January 1990 the name of the newsletter was changed to "Trojan News". The newsletter will continue to include articles on management principles, expectations and Lessons Learned.

6. Some managers and supervisors have been promoted from within the Division because they exhibited sound technical abilities. PGE recognizes that more than good technical knowledge, however, is required to develop good managers. The Trojan Excellence Program was begun, in part, to strengthen managements knowledge of sound management concepts. An additional management training program will be provided to selected managers and supervisors. This training will better equip these individuals for fulfilling their leadership role.

PRIMARY RESPONSIBILITY: Manager, Training and General Managers
DUE DATE: Ongoing; additional training to commence by December 15,
1989

ACCOMPLISHMENTS TO DATE:

A skills-based development program called Front Line Leadership has been instituted. This program is similar to the Trojan Excellence program but is skills based with actual classroom experience being provided. This training is being provided to Department Managers and other Managers, Supervisors and selected individuals. The program uses a team leader concept; these team leaders have been trained as facilitators in leading individual group sessions. Training commenced in December 1989 with the completion of the training expected by December 31, 1991.

FOLLOW ON ACTION DUE DATE: December 31, 1991

7. Incorporate presentations by selected management personnel on Nuclear Division performance standards and expectations as a part of the General Employee Training and Retraining Programs.

PRIMARY RESPONSIBILITY: General Manager, Plant Support
DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. Selected presentations by management personnel have been incorporated into the booklet "Guidelines for a Quality Working Environment". These presentations have been centered around performance standards and expectations and are reinforced during GET and annual requalification training programs. Additionally, a revised presentation by the Vice President, Nuclear has been prepared on videotape for use during GET and requalification training. These practices are available and are currently being administered to the employees.

8. A human resources assessment of key Nuclear Division managers/supervisors will be performed using an outside consultant. The assessment will identify strengths and weaknesses of these managers and will recommend corrective measures where needed.

PRIMARY RESPONSIBILITY: Senior Vice President, Generating Division
DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. A human resources assessment of the Nuclear Division General Managers, with the exception of the new General Manager, Trojan Excellence, was completed in November 1989 by a management consultant. The results of the assessment were provided to the Vice President, Nuclear and the individual General Managers. Although this particular assessment is complete and satisfies the

attention to detail, and the quality of our teamwork. We expect performance results to manifest in the following:

- Decreasing trends in procedural violations.
- Improving the time to respond to Nonconforming Reports (NCRs)/Nonconforming Activity Reports (NCARs).
- Increased senior management presence within the Plant protected area.
- Decreasing backlog in non-outage Maintenance Reports (MRs).

Reference: NDIP 2.1.3 (9)

2.2 ASSURANCE OF QUALITY

2.2.3 Actions Taken/Planned

1. Interdepartmental meetings have been taking place to enhance teamwork. These sessions included NQAD. PGE will further expand these team building sessions. These sessions will bring inter-dependent work groups together to clarify roles and identify and demonstrate support for common goals. These sessions will be aimed at increasing the understanding of different work group functions and reducing potential conflicts between these groups.

PRIMARY RESPONSIBILITY: General Managers and Department Managers
DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. Several team-building sessions have been held with various departments including Trojan Plant, Technical Functions, Plant Support and Quality Assurance. One specific team-building session was held on November 20, 1989 to address outstanding corrective action program actions and issues. Several team-building sessions were scheduled and completed by December 31, 1989. Additional team-building sessions continue to be held, as necessary.

2. Future and current vacancies in technical disciplines within NQAD will be filled by degreed personnel whenever possible.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: Ongoing

ACCOMPLISHMENTS TO DATE:

One offer has recently been made and accepted. This person has an engineering degree and reported to Trojan in November. Additional permanent staffing is being pursued.

3. An aggressive training program is being developed to expand the technical skills necessary to implement performance-based QA techniques. This training curriculum will include mechanical and electrical maintenance, instrument and control, plant systems, operations, radiation protection, chemistry, and radiochemistry.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: December 15, 1989

ACCOMPLISHMENTS TO DATE:

Complete. A technical training program has been established for Nuclear Quality Assurance Department personnel. Lesson plans and

schedules have been developed for the program as identified in memo CKS-142-89 dated December 14, 1989. The program was designed to meet the needs of the employees and NQA.

It is flexible enough for employees to pursue training in their individual areas of interest, within the constraint of fulfilling department needs and objectives. Subjects covered include Operations; Plant Systems; I&C Maintenance, Modifications and Tests; Radiation Protection; Chemistry; and Electrical and Mechanical Maintenance, Modifications and Tests. Additional programs are under consideration. Training will commence in early 1990 and will be an ongoing activity.

4. Specific measurable performance standards for NQAD personnel are being enhanced to improve communications of expectations and enhance accountability.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: October 31, 1989

ACCOMPLISHMENTS TO DATE:

Initial action complete. An NQAD mission statement was developed which included specific goals and objectives for each department within QA. These goals and objectives have been presented to the employees and will be used as the standard for measuring performance. Specific goals and objectives address people, quality and economic issues. Monitoring and evaluation of progress toward these goals and objectives is an ongoing activity.

5. Trojan's corrective action systems are currently being reevaluated with the assistance of a consultant to identify enhancements, eliminate duplication, and improve effectiveness.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. The reevaluation of Trojan's corrective action systems has been completed. To improve effectiveness and eliminate duplication, a number of enhancements are being implemented. Nonconforming Activity Reports (NCARs), Nonconformance Reports (NCRs) and Event Reports (ERs) are being combined into a single corrective action system called the Corrective Action Request (CAR).

Efficiency will be improved as the new program will routinely put problems in the hands of problem solvers within three working days of identification. Problem solutions will be routinely formulated within 35 days. This was accomplished, in part, by

establishing a parallel path for activities which complement corrective actions, such as reportability reviews and operability reviews.

A review of CARs by a management committee will occur within three working days of identification. The Management Corrective Action Committee (MCAC) is empowered to designate which organization is responsible to solve the problem. The committee also establishes a severity level to help define priorities.

This system will collect problems in a single place, which will help eliminate duplication. It will have the added benefit of helping to ensure that issues are collected in appropriate trending programs, which in the long term will enhance effectiveness.

An action plan has been prepared to facilitate implementation of the necessary program changes. The CAR program is scheduled to be implemented by February 28, 1990.

FOLLOW ON ACTION DUE DATE: February 28, 1990

6. Performance-based QA techniques are being established and implemented in NQAD audits and surveillances.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
DUE DATE: Ongoing

ACCOMPLISHMENTS TO DATE:

Recent audits have included performance-based techniques. Some of the techniques utilized included observation of work activities, review of the effectiveness of the implementation of improvement plans, observation of the 1989 Radiological Emergency Response Plan Integrated Drill, and observation of fire drills. Results of these audits have proven to be more effective in providing meaningful feedback on the status of these programs and ongoing organizations to Trojan management. To further highlight the use of performance-based techniques, future audit plans will include identification of specific techniques to be utilized. This will be incorporated into Nuclear Quality Assurance Procedure (NQAP)-110, "Quality Assurance Audits", by February 23, 1990.

FOLLOW ON ACTION DUE DATE: February 23, 1990

7. NQAD audit, surveillance and trend reports are being reevaluated for their effectiveness. Nuclear Division management input will be sought to ensure that QA data is presented in a concise, effective and usable format for management.

PRIMARY RESPONSIBILITY: General Manager, Quality Assurance
INITIAL DUE DATE: November 15, 1989

ACCOMPLISHMENTS TO DATE:

Initial action complete. Nuclear Division Managers and Supervisors were interviewed to obtain feedback on the various audit, surveillance and trend reports. A list of questions was developed to address items such as clarity, usefulness, meaningful information, format, distribution and implementation. These interviews were completed on November 13, 1989. Feedback from these interviews has been shared with the General Manager, Quality Assurance. A formal report documenting the results of the interview process was issued December 8, 1989 (JPF-069-89). Identification and implementation of improvement items is currently in progress. Identified changes will be in the next publication of each report.

8. An audit of NQAD has been requested by the General Manager, Quality Assurance and will be performed under the cognizance of the Trojan Nuclear Operations Board to evaluate the action outlined above and determine if additional actions are necessary.

PRIMARY RESPONSIBILITY: Chairman, Trojan Nuclear Operations Board
DUE DATE: December 31, 1989

ACCOMPLISHMENTS TO DATE:

Complete. An independent, comprehensive and in-depth audit of the Nuclear Quality Assurance Department (NQAD) was performed from November 27, 1989 to December 8, 1989. The purpose of the audit was to review, examine and evaluate the performance of activities required of the NQAD to meet established criteria. This audit included an independent assessment and performance-based evaluation of the implementation and effectiveness of the PGE Nuclear Quality Assurance Program.

This audit resulted in 14 findings and 10 observations. The audit team performed a preliminary review of each finding and determined that they were not reportable under 10 CFR 21, 10 CFR 50.72 or 10 CFR 50.73 and were not a violation of the Trojan Technical Specifications. PGE has reviewed this report and concurs with the findings and the determination of reportability.

The audit report was published on December 27, 1989. Audit findings and observations are being addressed by the Nuclear Quality Assurance Department and other Nuclear Division organizations, where appropriate.

2.2.4 MEASURES OF EFFECTIVENESS

The actions described in Section 2.2.3 of the NDIP are focused on enhancing the Nuclear Division's capacity to achieve quality in all aspects of Plant operations. They involve activities which are designed to improve the

technical quality of the Nuclear Quality Assurance Department in providing meaningful self-assessment and performance-based support to the Division. It is expected that the accomplishment of these actions will also impact several of the measures associated with management Performance. We expect performance results to manifest in the following:

- Increasing trend in the number of requests for assistance received by NQAD.
Reference: NDIP 2.2.3 (1)
- Greater number of degreed personnel in NQAD.
Reference: NDIP 2.2.3 (2)
- Improving trend in the number of quality assurance audits that are performance-based.
Reference: NDIP 2.2.3 (3)
- Increasing trend in issues that are identified and resolved internal to PGE.
- Technical depth of NQA identified issues will be greater.

2.3 OTHER IMPROVEMENT ACTIONS

2.3.1 Other Actions Taken/Planned

1. As a result of the most recent event involving the RHR system, enhanced planning is being implemented to provide additional assurance that maintenance will not be performed simultaneously on two trains of the same equipment. The Plan of the Day (POD) has been established as the controlling mechanism for work, such that only items on the POD can be worked in a given day. The POD is reviewed and approved by the Duty Plant General Manager.

PRIMARY RESPONSIBILITY: Plant General Manager
DUE DATE: Complete

ACCOMPLISHMENTS TO DATE:

Action is complete. A Temporary Administrative Order (AO-T-33) was issued September 14, 1989 to establish responsibilities and controls for the performance and sequencing of work at Trojan. Work control issues are further addressed in Item 8 of this section.

2. A qualified senior reactor operator or shift technical advisor will be involved in the maintenance and surveillance planning process to ensure the conditions required for the proposed activities are correctly determined. Emphasis will be placed on minimizing the number of times safety-related equipment is taken out of service and where prudent, maintenance will be deferred to modes where safety-related equipment is not required to be operable. Maintenance documentation relating to safety-related equipment will be marked to clearly indicate that safety-related equipment is involved.

PRIMARY RESPONSIBILITY: Plant General Manager
DUE DATE: November 30, 1989

ACCOMPLISHMENTS TO DATE:

Complete. A new position has been made available to the Planning/Scheduling Department to provide a licensed Shift Supervisor on a rotating basis. A person has been assigned and is actively supporting day-to-day planning and scheduling activities. Train-related, safety-related equipment is being identified in the POD. Work control issues are further addressed in Item 8 of this section.

3. Lessons-learned training will be conducted covering recent events at Trojan. Managers from each work group will be involved in giving this training to their groups to ensure the unique concerns faced by their

group in the day-to-day performance of work are fully understood and responded to. This training will be a continuing practice.

PRIMARY RESPONSIBILITY: General Manager, Plant Support
DUE DATE: April 30, 1990 (initial sessions)

ACCOMPLISHMENTS TO DATE:

Lesson Plan MS-C-09-LP has been prepared and issued to all managers and supervisors for conducting lessons learned training. Some classes have been held for this training. Based on feedback from these classes, the scope and content of the program are being reevaluated. The due date for this item is being changed to April 30, 1990 to allow for incorporation and integration into Revision 2 of the NDIP. This due date change was necessary to review the scope and methodology of the training program to ensure the training is beneficial and effective in communicating the proper messages.

4. The corporation's commitment to nuclear safety will be further demonstrated by establishing a proactive 'Quality Team' to collect, investigate, and resolve individual safety concerns. This team will monitor and respond to concerns including those on the current Quality Hotline system. Additionally, employees, including temporaries and contractors, leaving Trojan will be interviewed by the team to determine if they have any safety concerns.

PRIMARY RESPONSIBILITY: General Manager, Technical Functions
DUE DATE: January 31, 1990

ACCOMPLISHMENTS TO DATE:

To avoid confusion with Quality Assurance functions, an alternate title of "Excellence Response Program" has been selected.

This program establishes methods for identification, investigation and resolution of concerns. In addition to the Quality Hotline which provides direct access to the Vice President, Nuclear, an additional toll-free 24-hour hotline is being provided. All concerns regarding the safety of Trojan or its reliability can be reported on this service. All calls received on this Hotline are addressed by the TNOB.

Another portion of the Excellence Response Program is to solicit concerns from every person working at Trojan. People who leave will have the opportunity to be interviewed to collect information on issues that concern them. Contractors as well as full and part-time PGE employees will be given the opportunity to be interviewed and provided with information for future contact.

The Excellence Response Program was established and functional in January 1990. Employee indoctrination and dissemination of information on the program is being provided as part of General

Employee Retraining (GERT) and will be provided in General Employee Training (GET) starting in March 1990. This indoctrination will continue throughout the year until all Trojan employees have been informed. As part of GERT, this information will be reinforced on a yearly basis.

5. The existing Design Basis Document (DBD) program is being upgraded. All previously issued DBDs will be reviewed and revised to provide additional design basis information. In addition, walkdowns of the systems will be conducted by teams representing systems engineering, design engineering, and quality assurance.

PRIMARY RESPONSIBILITY: General Manager, Technical Functions
DUE DATE: December 31, 1990.

ACCOMPLISHMENTS TO DATE:

A total of 25 DBDs have been issued through the present time and eight more DBDs are in the approval process. A plan has been developed to rewrite, walkdown, and validate the existing safety-related DBDs. A detailed content criteria has been developed and published as Topical Report PGE-1055, "Content and Level of Detail Criteria for Design Basis Documents", dated December 1989. This document will be used for rewriting the DBDs. A new Nuclear Division Procedure, NDP 200-9, "System Design Basis Validation" was issued to provide direction for the walkdown and validation of the Design Basis Documents. This procedure was issued on December 15, 1989, and details the requirements for the conduct and documentation of system walkdowns and other review efforts to confirm the system design features exist as intended.

It is our intent to do a thorough walkdown and validation effort for the existing DBDs. A review of the work scope and the availability of the systems has resulted in a schedule which supports the walkdown and validation of seven systems during 1990. This effort requires that the Plant be shutdown and Containment access be available to complete portions of the work; the duration of refueling outage will limit the amount of work which can be accomplished. We expect to complete the walkdown portion of the effort for the initial seven systems by August 31, 1990. The DBDs for these seven systems will be revised and issued by December 31, 1990.

The remaining existing DBDs will be validated and revised during 1991 and 1992. We plan to walkdown and validate nine existing DBDs in 1991 and an additional nine DBDs in 1992. We expect that the validation of the remaining safety-related systems DBDs will be completed by the end of 1994.

We also plan to write four new DBDs during 1990, and are developing a schedule to prepare additional DBDs in subsequent

7. A document control improvement program is being developed. The first step is to increase the efficiency of the procedure review and revision process. The program involves enhancing the existing administrative capabilities of the electronic database; centralizing the accountability for administrative services; and identifying performance indicators to allow optimization of the document control processes.

ACCOMPLISHMENTS TO DATE:

An assessment of the existing Plant Operating Manual (POM) procedure processes has been completed. Process models have been developed to document present practices. Interviews with involved Plant personnel have been completed. An evaluation of the above revealed that the centralization of the Plant's administrative accountability which would lead to standardization for the procedure revision and review process will be accomplished by March 1, 1990. Implementation of recommended modifications to the procedure process will facilitate efficient, timely processing and will be complete by June 1, 1990.

The administrative business needs are being identified in order to assist in specifying hardware and software required for process enhancement. A technical services library has been established; an administrative service center has been created within the protected area; and the networking of protected area personal computers has commenced.

The number of controlled copies will continue to be reduced in staged reductions in conjunction with site users' relocations into: the Trojan North Building (1989), the outage trailers (1990), and the new support building (1992). Further reduction of registered copies will occur by June 30, 1991, when the enhanced electronic database is functional and the controlled procedures are entered and available at the user work stations. The application of the electronic database will provide commitment-to-procedure cross referencing by September 15, 1990. Establishment of the major document control center and its working satellites is scheduled to be complete by September 1, 1991.

This improvement action item of developing a program to resolve procedure processing and records management issues will continue its development through 1992 when the new service building is occupied.

FOLLOW ON ACTION DUE DATES: March 1, 1990
 June 1, 1990
 September 15, 1990
 June 30, 1991
 September 1, 1991

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 September 15, 1990
 June 30, 1991
 September 1, 1991

8. The Work Control System will be upgraded to ensure work is completed effectively and efficiently. Selected nuclear plants, recognized by the industry as having good work controls programs, will provide the base for Trojan's new program. The enhanced work control system will be implemented prior to March 31, 1990.

PRIMARY RESPONSIBILITY: Manager, Planning and Control
DUE DATE: March 31, 1990

ACCOMPLISHMENTS TO DATE:

Several programs are currently being reviewed. The Work Controls Task Force trip to the Fast Flux Test Facility (FFTF) identified several good concepts that have already been incorporated into the Trojan program with others in the process of being evaluated. A comprehensive action plan for implementation of the new work control system was developed and issued in December 1989.

The improved work control system will relieve the Shift Supervisor of some administrative duties so he can focus on directing the overall activities of the Plant. A centralized Work Control Center (WCC) containing Operations personnel will be part of the WCC and will have the primary responsibility to review maintenance requests and work packages for quality and completeness. Equipment clearances and surveillance testing will be controlled by the WCC to ensure that activities of all Plant work groups are coordinated. The number of times safety-related equipment is taken out of service will be reduced and the duration of the outages will be kept to a minimum.

Surveillances will be coordinated with equipment outages to ensure that both trains of safety-related equipment are never removed from service at one time.

The WCC will assign the priority of maintenance requests, with the exception of urgent requests, which will continue to be done by the Shift Supervisor. A detailed priority system is being developed. The enhanced work control system will be in place by March 31, 1990.

9. A Surveillance Improvement Program has been initiated to consolidate all Trojan Plant Technical Specification surveillance requirements into one controlled computer data base. Excluded from this data base are the surveillance requirements for the In-Service Inspection (ISI)/In-Service Testing (IST) program which has its own existing computerized data base. Related objectives include coordination of software development, verification of data base accuracy, and definition of manpower resources to maintain it.

PRIMARY RESPONSIBILITY: Manager, Planning and Control
DUE DATE: February 28, 1990

ACCOMPLISHMENTS TO DATE:

A project manager has been appointed and PGE team members have been selected. Consultant assistance with expertise in surveillance program development is currently being provided. A comprehensive action plan has been developed.

A cross-reference between Trojan procedures and the Technical Specification surveillances has been developed and exists in a computerized data base. These surveillances will be coordinated with the Trojan Scheduling System to ensure proper control of surveillance schedules. Procedures are currently being prepared to support the surveillance improvement program. These procedures are expected to be in place by February 28, 1990.

2.3.2 Measures of Effectiveness

The actions described in Section 2.3.1 of the NDIP are directed at resolution of specific issues and generally establishing higher levels of performance within each area such that items of the same or similar nature do not recur. We expect performance results to manifest in the following:

- No instances of two safety trains being out of service (i.e. when Mode required).
Reference: NDIP 2.3.1 (1)
- Improvement in safety system availability due to consolidation of planned maintenance.
Reference: NDIP 2.3.1 (2)
- Decrease in number of repeat occurrences of the same or similar nature to those associated with recent events.
Reference: NDIP 2.3.1 (3)
- Positive trend in employee exit interview data associated with the corporate commitment to nuclear safety.
Reference: NDIP 2.3.1 (4)
- Positive trend in the number of design input deviations associated with design changes for systems with revised DBDs using the new criteria.
Reference: NDIP 2.3.1 (5)
- Decreasing number of backlogged items such as Temporary Modifications, and improved designs resulting in fewer Field Change Notices.
Reference: NDIP 2.3.1 (6)
- Institution of changes to procedure revision and control process that will result in a reduction in processing time.
Reference: NDIP 2.3.1 (7) New Item

- Improving trends in the percentage of tasks actually worked/scheduled.
Reference: NDIP 2.3.1 (8) New Item
- Decreasing trend in the number of missed Technical Specification surveillances.
Reference: NDIP 2.3.1 (9) New Item

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