

PUBLIC SERVICE ELECTRIC AND GAS COMPANY

RESPONSE TO

BASIC ENERGY TECHNOLOGY ASSOCIATES, INC.

REPORT TITLED

" 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 "

AUGUST 26, 1983

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PSE&G COMPANY
RESPONSE TO BETA REPORT DATED MAY 27, 1983
STATUS

BETA
Paragraph
Number

Actions

Status

B.1	Vendor confirmation that breakers are satisfactory	Complete
B.2	SORC & NRB review of short term actions	Complete
C.2.a	Measure trip & release forces	Complete
C.2.b	PSE&G should request the vendor to recommend life cycle and maintenance programs	Test program and vendor recommendations are scheduled for
C.2.b.1	Select a conservative replacement interval and periodically replace UTAs	Complete
C.2.b.2	Use new maintenance and surveillance program	Complete
C.2.c.1	(Item A.5.B) Include shunt trip in automatic trip circuitry	Westinghouse design modification expected by September 1983
C.2.c.2	Consider breakers of different design or manufacturer	To be considered in conjunction with Westinghouse Owners Group program results
C.2.d	(Item B.3.b.2) First-out annunciator modification	PSE&G is evaluating information recently received from the manufacturer. Evaluation to be completed in Oct. 1983
C.2.e	(Item C.10.a) Nuclear Oversight Committee	PSE&G plans to establish a NOC and PSE&G Action Plan Section 2.2.1 will address this issue.
C.3.a	Evaluate function of organizational plan	PSE&G Action Plan Sections 2.1.1, 2.1.4, 2.1.5, & 2.4.5 will address this issue

BETA
Paragraph
Number

Actions

Status

C.3.b	Review prestart test requirements	Complete
C.3.c.1	Increase SORC quorum	PSE&G Action Plan Section 2.2.1 will address this issue
C.3.c.2	Senior Engineering Manager on SORC	PSE&G Action Plan Section 2.2.1 will address this issue
C.3.c.3	Prereview of SORC material	PSE&G Action Plan Section 2.2.1 will address this issue
C.3.d	Continue efforts to reduce trips	Complete
C.3.e	Change form of machinery history records	PSE&G Action Plan Section 2.6.2 will address this
C.3.f	Expand AP-6 Formal ENR for each incident	Revised AP-6 to be issued in Sept. 1983. Remaining action complete.
C.3.g	Integrate engineering into plant operation	PSE&G Action Plan Section 2.4.5 and will address this issue

IV. PSE&G SHORT AND LONG TERM ACTIONS

B. SHORT TERM ACTIONS

1. THE BETA LETTER INCLUDED THE FOLLOWING RECOMMENDATIONS RELATIVE TO THE SHORT TERM ACTIONS:

1. PSE&G should obtain confirmation in writing from the reactor trip breaker vendor that the installed breakers are satisfactory for plant operation and that Salem Maintenance Procedure M3Q-2 will provide the necessary basis to assure continuing operational reliability.

RESPONSE This has been completed.

2. PSE&G's Station Operations Review Committee and the Nuclear Review Board should complete their reviews of the short term aspects of the trip breaker failures. Written reports should be available documenting their concurrence with restart."

RESPONSE This has been completed.

C. LONG TERM ACTIONS

2. COMMENTS ON PSE&G'S PROPOSED LONG TERM ACTIONS:

a. Long Term Action (BETA) proposed)

BETA's Letter of April 14, 1983, had the following recommendation concerning PSE&G's proposed long term action plan:

"The Salem breaker maintenance procedure, M3Q-2, will use periodic measurements of trip and release forces to identify degradation of breaker performance. As another indicator of possible breaker degradations, PSE&G should consider the use of the periodic data obtained from the voltage dropout measurements which are also in the Breaker Maintenance Procedure (Step 9.7.3.10)."

RESPONSE This recommendation has been incorporated into the maintenance procedures. This item is complete.

b. Long Term Action (Item A.2.b.1)

"Submit a test program with provisions for a statistically significant sample to determine the life cycle and replacement interval for the UTAs and to verify the

adequacy of the new maintenance and surveillance programs used on the reactor trip circuit breakers - May 1983."

Beta Recommendation

Establishing the cycle life, replacement interval and development of maintenance and surveillance programs for the UTAs (and the breaker itself) should be the responsibility of the component vendors. The vendors not only have the design experience, but also have access to a larger operating experience base than is available to PSE&G. In addition, if the vendors are responsible for developing these parameters, there is some assurance that the results will be extended, as necessary, to engineering modifications incorporated in replacement components.

PSE&G should request that the breaker vendors supply the recommended life cycle, replacement interval, and the recommended maintenance and surveillance programs. In addition, the vendors should be able to supply the necessary technical information to support these recommendations.

RESPONSE The breaker vendor has developed a test and evaluation program for the DB-50 reactor trip breakers. This program will be used to verify the adequacy of the PSE&G surveillance and maintenance program, and to establish a basis for UTA replacement intervals. The test program including analysis is scheduled to be completed in October 1983.

In the interim:

(1) PSE&G should select a conservative replacement interval and periodically replace the UTAs.

RESPONSE The UTAs will be replaced at every refueling until Westinghouse completes their program and a permanent replacement interval is established.

(2) Use its new maintenance and surveillance programs to maintain the equipment and monitor its performance.

RESPONSE This is being done. Required actions are complete.

c. Long Term Action (Item A.5.B)

"Providing at the Salem facility diversity in activating (tripping) the reactor trip breakers, for example, by incorporating the breaker shunt trip function into the automatic trip circuits of the reactor protection system."

BETA Recommendation

BETA recommendations with respect to the above long term action item were contained in the attachment to BETA letter of April 14, 1983, and still apply. They were:

(1) The manual trip switch trips both the undervoltage and shunt trips. In order to provide a greater assurance of breaker action, it is suggested that the automatic trip also use the shunt trip device. The automatic trips use only the undervoltage trip. A safety grade power supply will be required to support the shunt trip. It is understood that PSE&G is investigating the feasibility of providing a shunt trip.

RESPONSE PSE&G is a member of the Westinghouse Owners Group (WOG). The WOG has contracted Westinghouse Corporation to develop a design for incorporation of the shunt coil trip feature into the automatic trip system. PSE&G will incorporate this modification subject to NRC review and approval.

(2) In order to further decrease the possibility of a common mode failure, consideration should be given to replacing one of the two sets of installed breakers with breakers or contactors of another design or manufacture. If possible, the breaker design should incorporate a molded case. If an alternate device is selected it should be included in the PSE&G and NRC test programs.

RESPONSE PSE&G will consider this recommendation in conjunction with results of the WOG program. The WOG program will provide reliability performance data of the DB-50's.

d. Long Term Action (Item B.3.b.2)

"Modifications to clarify first-out annunciator alarms."

BETA Recommendation

If possible, the first-out annunciator panel and SSPS should be modified to assure that the first-out annunciator panel alarms latch only when accompanied by a valid trip of the SSPS. The ATWAS procedure should then be changed to require a manual trip in the event the first-out annunciator panel alarms without requiring verification of the validity of the alarm.

RESPONSE PSE&G is investigating revisions to the first-out annunciator to eliminate alarming spurious or momentary trip signals. The manufacturer of the annunciator has proposed a change in design to eliminate the spikes from causing the first-out annunciator to latch-in. PSE&G will complete their evaluation of the proposed design modification in October, 1983.

e. Long Term action Item C.10.a)

"Nuclear Oversight Committee (NOC)"

BETA Recommendation

BETA concurs with the desirability of obtaining outside overview relative to the operation of the Salem plants. Such an input can provide a valuable stimulus to the management and staff. However, BETA does not consider it necessary nor desirable to establish another committee to obtain this objective. PSE&G already has a Nuclear Review Board, a Station Operators Review Committee, and a Safety Review Group. In addition, a Nuclear Assurance and Regulation Department has recently been established. To some extent, the functions of these groups, including the proposed NOC, overlap and each group's operations will impose some demands on the resources available for plant operation.

BETA recommends that the Nuclear Review Board (NRB) membership be changed to increase its independence from plant operations and to provide a greater outside input to its activities. The outside input proposed for the NOC should, instead, be located within the NRB. PSE&G membership on the board should be limited to management personnel not having direct responsibility for plant operations. Board reviews could be supplemented by the use of subcommittees utilizing plant staff.

The proposed objective of the NOC, where different from the NRB, could be incorporated into the NRB. It is believed that this outside input plus a greater emphasis by management on the importance of the newly structured NRB could improve its effectiveness without placing a greater burden on the activities of the plant operating staff.

RESPONSE BETA's recommendations have considerable merit. A prime purpose of PSE&G Action Plan Section 2.2.1 is to review and evaluate the numerous review groups and organizations existing in the Company and to make proposals to improve the safety review process. BETA's recommendations will be considered during this effort. For the near term, PSE&G will move forward to comply with the commitment to establish a Nuclear Oversight Committee. This item is complete.

3. ADDITIONAL BETA FINDINGS AND RECOMMENDATIONS

a. Finding

The major organizational change PSE&G embarked on in October 1981, is well-founded and appropriate, but continued effort is needed to assure these changes are meeting the intended goals.

BETA Recommendation

PSE&G senior nuclear management should develop a better capability to determine how well their new organizational plan is functioning, particularly at the lower levels. Where it is found lacking, corrective action should be taken. This may mean slightly altering the organizational plan. BETA agrees with the PSE&G plan to achieve better coordination between the divisions by greater use of rotation of personnel between the divisions. This will become even more important as the Hope Creek plant gets closer to operation.

RESPONSE This recommendation will be addressed in the following PSE&G Action Plan Sections developed as a result of a management diagnostic conducted by Management Analysis Company:

2.1.1 Functional Analysis of Vice President - Nuclear and all direct reports.

2.1.4 Communications between the Nuclear Department and Corporate.

- 2.1.5 Detailed Transition Management Process.
- 2.4.5 Coordination between Engineering and Operations.

b. Finding

Changes to procedures were made to assure testing of the breakers prior to startup. PSE&G did not fully extend this concept of additional testing to other safety related equipment.

BETA Recommendation

PSE&G should review existing pre-start test requirements to determine if additional testing of safety related components or systems is desirable. In addition, this review should also be extended to pre-startup status checks.

RESPONSE: The present procedures in effect at the Station for testing prior to mode change are sufficient to address the concerns of pre-start up testing. In addition to the requirements of the Technical Specifications and the Mode Sign-Off Sheets, Administrative Procedure AP-9, Control of Station maintenance, now specifies Post Maintenance Operability Testing and Retesting procedures which will ensure the operability of equipment and systems prior to return to service. This change, in conjunction with the institution of the Managed Maintenance Program presently planned for the Station, will ensure a more reliable and safe operation of safety related equipment. This item is complete.

c. Finding

As stated in PSE&G's April 8, 1983 report, the Station Operations Review Committee (SORC) effectiveness needs enhancement.

BETA Recommendation

(1) The minimum number of full time members required to constitute a quorum should be increased.

RESPONSE: This recommendation will be addressed in PSE&G Action Plan Section 2.2.1 "Safety Review Management".

(2) A senior management representative of Nuclear Engineering should be made a full-time member of the Committee.

RESPONSE: PSE&G is in the process of formally assigning a member of the Safety Review Group (SRG) to SORC as a voting member. The individuals assigned to the SRG are technically qualified to entertain questions involving engineering subjects. Their input to the meetings will be as beneficial as that of an engineering representative. In addition, sponsors will continue to be requested and encouraged to attend SORC meetings when items involving their systems are represented. This item is complete.

(3) Items requiring Committee review should be reviewed and concurred in by the appropriate inter-departmental organizations prior to being forwarded to SORC for review. The PSE&G administrative procedure for SORC should be revised to assure these technical (including nuclear engineering) and operational reviews are performed prior to SORC review.

RESPONSE: A formal review program of material to be presented to SORC is currently in practice. Each station department has an established review process whereby the material is looked at by various members in the department and finalized by a review and approval of the manager of that station department. The effectiveness of SORC review will also be addressed by PSE&G Action Plan Section 2.2.1 "Safety Review Management". This item is complete.

d. Finding

The number of unplanned reactor trips at the Salem plants exceed an average of one per month.

BETA Recommendation

PSE&G should continue their efforts to reduce the number of unplanned reactor trips at the Salem plants.

RESPONSE: The major cause of unplanned reactor trips has been caused by problems in the feedwater system and in control of steam generator levels. Modifications have been made to improve the operation of the feedwater system. PSE&G will continue to investigate problem areas to reduce the number of unplanned reactor trip events. This item is complete.

e. Finding

The machinery history records are not in a form which readily permits the effective use of the information contained in these records.

BETA Recommendation

PSE&G should develop a data base which would permit using the machinery history records to analyze and evaluate equipment problems.

RESPONSE This recommendation will be addressed by PSE&G Action Plan Section 2.6.2 "Maintenance, Planning, Monitoring, and Control."

f. Finding

The Salem incident report system should be strengthened.

BETA Recommendation

Administrative Procedure No. 6 should be expanded. The procedure should be applied to a broader class of events. In addition, an Event Narrative Report (ENR) should be prepared for each incident report.

RESPONSE A revision of AP-6 is planned to be issued by the end of September, 1983.

A formal ENR for each incident report would be impractical due to the number of insignificant incident reports. However, in view of the proposed NRC changes to the LER reporting requirements, it is recognized that a reporting mechanism must be implemented to document and track significant events not requiring an LER. The intent is to document and track safety significant events and possible precursors.

g. Finding

PSE&G's Nuclear Engineering Department needs to be more closely tied to the operational aspects of the plant.

BETA Recommendation

Continued action should be taken to integrate more fully the nuclear engineering organization into plant operations.

RESPONSE This recommendation will be addressed by PSE&G Action Plan Section 2.4.5 "Coordination Between Nuclear Engineering and Operations."

CROSS REFERENCE DOCUMENT

BETWEEN

PSE&G ACTION PLAN FOR IMPROVEMENT OF NUCLEAR DEPARTMENT OPERATIONS

AND

MANAGEMENT ANALYSIS CORPORATION

MANAGEMENT ASSESSMENT AND ACTION PLAN FOR IMPROVEMENT OF SALEM
STATIONS 1 AND 2 OPERATIONS

AUGUST 26, 1983

2.1.1' Action Plan for Functional Analysis of the VPN
Position and All Direct Reports

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.1.1.1	C.3.a	2.1.1.1
4.1.1.2		2.1.1.2
4.1.1.3		2.1.1.3
4.1.1.4		2.1.1.4
4.1.1.5		2.1.1.4
4.1.1.6		2.1.1.4
4.1.1.7		2.1.1.5
4.1.1.8		2.1.1.5

The PSE&G Action Plan does not deviate from the intent of the MAC recommendations.

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

MAC Action Plan	PSE&G Action Plan
4.1.2. 1	2.1.2. 1
4.1.2. 2	2.1.2. 2
4.1.2. 3	2.1.2. 3
4.1.2. 4	2.1.2. 4
4.1.2. 5	2.1.2. 6
4.1.2. 6	2.1.2. 7
4.1.2. 7	2.1.2.10
4.1.2. 8	2.1.2. 8
4.1.2. 9	2.1.2. 9
4.1.2.10	2.1.2.10
4.1.2.11	2.1.2.11

The PSE&G Action Plan does not deviate from the intent of the MAC recommendations.

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

MAC Action Plan	PSE&G Action Plan
4.1.3.1	2.1.3.1
4.1.3.2	2.1.3.2
4.1.3.3	2.1.3.3
4.1.3.4	2.1.3.4
4.1.3.5	2.1.3.5
4.1.3.6	2.1.3.6
4.1.3.7	2.1.3.6
4.1.3.8	2.1.3.6
4.1.3.9	2.1.3.7

2.1.3 Continued

The PSE&G Action Plan exceeds the MAC recommendations by including an activity to develop a list of VPN procedures that would enhance the effectiveness of the Nuclear Department. These are in addition to those already written but not yet approved.

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

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.1.4.1	C.3.a	2.1.4.1
4.1.4.2		2.1.4.2
4.1.4.3		2.1.4.2
4.1.4.4		2.1.4.3
4.1.4.5		2.1.4.4
4.1.4.6		2.1.4.5

The PSE&G Action Plan does not deviate from MAC recommendations.

2.1.5 Action Plan for an Organizational Transition Management Process

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.1.5.1	C.3.a	2.1.5.1
4.1.5.2		2.1.5.2
4.1.5.3		2.1.5.4
4.1.5.4		2.1.5.5
4.1.5.5		ASSUMPTION

The PSE&G Action Plan does not deviate for the MAC recommendations.

2.2.1 Action Plan to Improve Safety Review Management Activities

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.2.1.1	C.2.e	2.2.1.1
4.2.1.2		2.2.1.3
4.2.1.3		2.2.1.4
4.2.1.4		2.2.1.5
4.2.1.5		2.2.1.5
4.2.1.6		2.2.1.5
4.2.1.7		2.2.1.6
4.2.1.8		2.2.1.7

2.2.1 Continued

The PSE&G Action Plan meets the intent of the MAC Action Plan with the emphasis on evaluating the various organizations within PSE&G associated with Safety Review Management. Safety Management as used in the MAC Action Plan does, in fact, address Safety Review Management.

2.2.2 Action Plan to Improve Commitment Identification, Tracking and Closeout

MAC Action Plan	PSE&G Action Plan
4.2.2. 1	2.2.2. 3, 4, 5,
4.2.2. 2	2.2.2. 9, 10, 11
4.2.2. 3	2.2.2. 5
4.2.2. 4	2.2.2.10, 11
4.2.2. 5	2.2.2. 6, 7
4.2.2. 6	2.2.2. 7, 12
4.2.2. 7	2.2.2.11, 12
4.2.2. 8	2.2.2.12
4.2.2. 9	2.2.2.12
4.2.2.10	2.2.2.12

The PSE&G Action Plan meets the intent of the MAC Action Plan with an emphasis on the internal PSE&G functions related to commitment making and commitment tracking.

2.3.1 Action Plan to Implement a Fully Integrated Configuration Management Program

MAC Action Plan	PSE&G Action Plan
4.3.1.1	2.3.1.1, 2, 3, 4 5
4.3.1.2	2.3.1.7
4.3.1.3	2.3.1.6

The PSE&G Action Plan meets the intent of the MAC Action Plan recognizing the current existence of most, if not all, of the elements of an integrated configuration management program.

2.3.2 Recommended Action Plan to Improve Change Control Process

MAC Action Plan

PSE&G Action Plan

4.3.2.1

2.4.5

4.3.2.2

2.3.2.1, 2

4.3.2.3

2.3.2.3, 4, 5

4.3.2.4

2.3.2.2

The PSE&G Action Plan meets the intent of the MAC Action Plan with a strong emphasis in the PSE&G Plan being placed on improving the design change process.

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

MAC Action Plan

PSE&G Action Plan

4.4.1.1

2.4.1,2

4.4.1.2

2.4.1,3, 6

4.4.1.3

2.4.1,3, 4, 5,

The PSE&G Action Plan is consistent with the recommendations originally submitted by MAC. However, it also provides for team building, recognition for achievement programs and an evaluation for the organization and manpower required to maintain housekeeping as a high priority. The objective has been reworded without changes of intent.

2.4.2 Action Plan for Compliance Monitoring of Technical and Equipment Specifications

MAC Action Plan

PSE&G Action Plan

4.4.2.1

2.4.2.1

4.4.2.2

2.4.2.2, 3

4.4.2.3

2.4.2.4

The PSE&G Action Plan meets the intent and purpose of the MAC Action Plan.

2.4.3' Action Plan for Post Modification/Post Repair Testing

MAC Action Plan

4.4.3.1
4.4.3.2
4.4.3.3

PSE&G Action Plan

2.4.3.1
2.4.3.2
2.4.3.2

The objective of strengthening Post Modification/Post Repair (PM/PR) testing requirements and procedures is accepted as valid. In reviewing the proposed actions by MAC, some clarification is in order. Action Item 3 proposed by MAC calls for the establishment of requirements and procedures for development and review of test parameters and specifications on safety related systems and equipment. With some exceptions, i.e. room coolers, safety related equipment has test procedures and parameters established as part of the technical specifications for Salem Units 1 and 2.

Discussion of this item with MAC personnel indicates the proposed action came from their review of the Operations Test Group test specification process. At that time, test requirements were not always reviewed by Nuclear Engineering and/or an independent approval of test results was not always in place. Since the MAC assessment, the Operations Test Group has begun to develop and implement appropriate procedures for review of test parameters and procedures. Further development of these procedures is continuing.

Completion of the actions proposed by Public Service on this item constitutes a comprehensive review of PM/PR testing and should assure a cohesive, coordinated, program with proper utilization of references, documentation, and review and support from the Nuclear Engineering Department. The PSE&G Action Plan meets the intent and purpose of the MAC Action Plan.

2.4.4 Action Plan for Site Protection and Emergency Preparedness

MAC Action Plan

4.4.4.1
4.4.4.2
4.4.4.3
4.4.4.4
4.4.4.5
4.4.4.6

PSE&G Action Plan

2.4.4.2
2.4.4.2
2.4.4.2
2.4.4.3
2.4.4.2
2.4.4.2

2.4.4 Continued

The PSE&G Action Plan is consistent with the original recommendations. A recent analysis has been completed of the security system. Implementation of the resulting security plan, as well as the emergency preparedness and personnel safety plans, has continued since the MAC assessment.

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

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.4.5.1	C.3.a	2.4.5.1
4.4.5.2	C.3.g	2.4.5.9, 10
4.4.5.3		2.4.5.4, 5, 6
4.4.5.4		2.4.5.4, 5
4.4.5.5		2.4.5.4, 5
4.4.5.6		2.4.5.3
4.4.5.7		2.4.5.8

The PSE&G Action Plan meets the intent of the MAC Action Plan with specific improvement activities such as working groups and planning meetings being developed by the team building activities rather than being dictated.

2.5.1 Action Plan for Improving the QAD Organization

MAC Action Plan	PSE&G Action Plan
4.5.1.1	2.5.1.1.
4.5.1.2	2.5.1.2,.3
4.5.1.3	2.5.1.4,.5
4.5.1.4	2.5.1.6
4.5.1.5	2.5.1.7
4.5.1.6	2.5.1.8
4.5.1.7	2.5.1.9
4.5.1.8	2.5.1.10

The PSE&G Action Plan is consistent with the intent of the MAC recommendations.

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

MAC Action Plan	PSE&G Action Plan
4.5.2.1	2.5.2.1

2.5.2 Continued

MAC Action Plan

4.5.2.2
4.5.2.3
4.5.2.4
4.5.2.5
4.5.2.6

PSE&G Action Plan

2.5.2.2
2.5.2.3
2.5.3.4
2.5.2.5
2.5.1.10

The PSE&G Action Plan is consistent with the intent of the MAC recommendations

2.5.3 Action Plan for Improving the QAD Procedures and Work Activities

MAC Action Plan

4.5.3.1
4.5.3.2
4.5.3.3
4.5.3.4
4.5.3.5

PSE&G Action Plan

2.5.3.1, 2
2.5.3.1
2.5.3.3
2.5.3.1
2.5.3.1

MAC QA Assessment

2.1
2.2
2.3
2.4
2.5
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2.7
2.8
2.9
2.10
2.11
2.12
2.14
2.15
2.16
2.17
2.18
2.19

PSE&G Action Plan

2.5.3.1.b
2.7.1, 2.5.3.1c
2.7.2
2.2.2, 2.5.3.1f
2.7.4, 2.5.3.1e
2.5.3g, h, i
2.5.3j, k
2.4.1
2.5.3.1.1, m
2.5.1.3.3
2.6.4, 4.5.3.1d
2.5.3.1g, i
2.5.3.1i
2.5.3.1n
2.5.3.1d
2.5.3.1g, i, n, o, p
2.5.3.1a, 2.1.3
2.5.3.1p

The PSE&G Action Plan is consistent with the intent of the MAC recommendations.

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

MAC Action Plan	PSE&G Action Plan
4.6.1.1	2.6.1.1
4.6.1.2	2.6.1.2
4.6.1.3	2.6.1.2
4.6.1.4	2.6.1.2
4.6.1.5	2.6.1.3
4.6.1.6	2.6.1.3

The PSE&G Action Plan to determine a Maintenance Management Organization and to define clear lines of responsibility is consistent with the recommendations of MAC. A thorough study of the maintenance function, in conjunction with the study of the outage management function, described in Action Plan 2.6.5 began in July 1983. The recommendations of the working group will form the basis for any revised Maintenance Management Organizations.

2.6.2 Action Plans for Enhancing Maintenance Planning; Monitoring and Control

MAC Action Plan	BETA Finding	PSE&G Action Plan
4.6.2.1	C.3.e	2.6.2.1
4.6.2.2		2.6.2.1
4.6.2.3		2.6.2.2
4.6.2.4		2.6.2.5
4.6.2.5		2.6.2.2
4.6.2.6		2.6.2.7
4.6.2.7		2.6.2.8
4.6.2.8		2.6.2.9
4.6.2.9		2.6.2.10, 11

The PSE&G objective and actions are consistent with the intent of the MAC recommendation. The PSE&G objective and actions clearly identify the relationship of the RAMPS Program to improvements in non-outage planning, monitoring and control of maintenance activities.

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

MAC Action Plan	PSE&G Action Plan
4.6.3.1	2.6.3.1
4.6.3.2	2.6.3.1

2.6.3 Continued

MAC Action Plan

4.6.3.3
4.6.3.4
4.6.3.5
4.6.3.6
4.6.3.7

PSE&G Action Plan

2.6.3.4
2.6.3.7
2.6.3.5
2.6.3.5
2.6.3.6

The PSE&G Action Plan exceeds MAC recommendations by requiring classification of work orders to support a root cause analysis, includes an assessment of prudent contract support for implementation and requires an evaluation of the manpower resource of the maintenance work force to assure it is adequate to perform corrective maintenance while minimizing a backlog. The objective has been reworded for clarification without changing the intent.

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

MAC Action Plan

4.6.4.1
4.6.4.2
4.6.4.3

PSE&G Action Plan

2.6.4.1, 2
2.6.4.3
2.6.4.4

The PSE&G action is consistent with the MAC recommendations.

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

MAC Action Plan

4.6.5.1
4.6.5.2
4.6.6.1
4.6.6.2
4.6.6.3
4.6.6.4
4.6.6.5
4.6.6.6
4.6.6.7
4.6.6.8
4.6.6.9

PSE&G Action Plan

2.6.5.1
2.6.5.1
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3
2.6.5.3

2.6.5 Continued

MAC Action Plan

4.6.6.10
4.6.6.11
4.6.6.12

PSE&G Action Plan

2.6.5.3
2.6.5.3
2.6.5.3

PSE&G agrees with MAC's general concern that a thorough review with recommendations for improvement, where practical, be conducted of our present organization for outage management. The specific objective in the MAC Report "Establish an outage management function and consolidate activities under one manager" is in fact, a possible outcome. However, it is not accepted as a necessary or desirable action unless a study of our present assignment of authorities and responsibilities establishes that as the preferred alternative for managing outages. A Working Group was established in July 1983 to conduct a review and propose recommendations with respect to our present maintenance organization within the Nuclear Department, including appropriate responsibility assignments for the management of outages. The recommendations of that committee will form the basis for any revised organization or activities associated with outage management.

To implement the approved outage management organization, a detailed outage plan will be developed to strengthen the communications, planning, monitoring and control in preparing for and conducting an outage. As the concerns related to outage management organizational structure encompass the activities related to planning, monitoring and controlling outages; MAC Action Plans 4.6.5 and 4.6.6 have been combined in this PSE&G Action plan.

The PSE&G Action Plan is consistent with the intent of the recommendations originally submitted.

4.7.1 Action Plan to Establish an Effective Records Management Program

MAC Action Plan

4.7.1.1
4.7.1.2
4.7.1.3
4.7.1.4

PSE&G Action Plan

2.7.1.1, 2
2.7.1.4, 5
2.7.1.5
2.7.1.5

2.7.1 Continued

MAC Action Plan

PSE&G Action Plan

4.7.1.5	2.7.1.5
4.7.1.6	2.7.1.5
4.7.1.7	2.7.1.6, 7
4.7.1.8	2.7.1.5
4.7.1.9	2.7.1.5
4.7.1.10	2.7.1.5
4.7.1.11	2.7.1.5
4.7.1.12	2.7.1.5
4.7.1.13	2.7.1.7
4.7.1.14	2.7.1.9
4.7.1.15	2.7.1.8
4.7.1.16	2.7.1.10

The PSE&G Action Plan is consistent with the intent of the MAC recommendations.

2.7.2 Action Plan for Integrating Document Control Function

MAC Action Plan

PSE&G Action Plan

4.7.2. 1	2.7.2.1, 2
4.7.2. 2	2.7.1., 2.7.3
4.7.2. 3	2.7.2.4,5
4.7.2. 4	2.7.2.6
4.7.2. 5	2.7.2.5
4.7.2. 6	2.7.2.5
4.7.2. 7	2.7.2.5
4.7.2. 8	2.7.2.7
4.7.2. 9	2.7.2.7
4.7.2.10	2.7.2.8
4.7.2.11	2.7.2.9

The PSE&G Action Plan is consistent with the intent of the MAC recommendations.

2.7.3 Action Plan for Information Systems

MAC Action Plan

PSE&G Action Plan

4.7.3.1	2.7.3.1
4.7.3.2	2.7.3.2
4.7.3.3	2.7.3.3

2.7.3~Continued

MAC Action Plan

PSE&G Action Plan

4.7.3.4
4.7.3.5

2.7.3.4
2.7.3.6

The PSE&G Action Plan is consistent with the recommendations originally submitted in the MAC Report. The objective has been reworded for clarification without a change in intent.

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

MAC Action Plan

PSE&G Action Plan

4.7.4.1
4.7.4.2
4.7.4.3
4.7.4.4
4.7.4.5
4.7.4.6
4.7.4.7

2.7.4.1
2.7.4.2
2.7.4.3
2.7.4.3
2.7.4.3
2.7.4.4
2.7.4.5

This PSE&G Action Plan is consistent with the intent of the MAC recommendations.