U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

DIVISION OF REACTOR PROGRAMS
PERFORMANCE APPRAISAL SECTION (PAS)

Report: 50-321/82-17, 50-366/82-17

Docket: 50-321, 50-366 License: DRP-57, NPF-5

Licensee: Georgia Power Company
P.O. Box 4545
Atlanta, Georgia 30302

Facility Name: Plant Hatch

Inspection at: Edwin I. Hatch Nuclear Plant near Baxley, Georgia
and Georgia Power Company, Atlanta, Georgia

Inspection Conducted: April 19-30 and May 10-13, 1982

Inspectors:

for D. G. Hinckley, Inspection Specialist - Team Leader — July 30, 1982 (Date)

for W. A. Hansen, Inspection Specialist — July 30, 1982 (Date)

for F. J. Jablonski, Inspection Specialist — July 30, 1982 (Date)

for W. T. Choules, Inspection Specialist — July 30, 1982 (Date)

for J. D. Woessner, Inspection Specialist — July 30, 1982 (Date)

for L. E. Foster, Inspection Specialist — July 30, 1982 (Date)

Accompanying Personnel: *J. M. Taylor, IE
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*R. F. Rogers, RII (Senior Resident)

*Present only during the exit interview

Approved by: _____ 8/16/82
J. G. Partlow, Chief, Operating Reactor Programs Branch — Date

Inspection Summary:

Inspection on April 19-30 and May 10-13, 1982
(Report 50-321/82-17, 50-366/82-17)

Areas Inspected: A special, announced inspection was performed of the licensee's management controls over selected licensed activities. The inspection (by six NRC inspectors) involved 525 inspector-hours onsite and at the corporate offices.

Results: The licensee's management controls for nine areas were examined, and conclusions were drawn in each area based on the observations presented in this report. The conclusions were presented as Category One, Category Two, or Category Three as follows:

Section 2, Committee Activities - Category Three
Section 3, Quality Assurance Audits - Category Two
Section 4, Design Changes and Modifications - Category Two
Section 5, Maintenance - Category Two
Section 6, Plant Operations - Category Two
Section 7, Corrective Action Systems - Category Two
Section 8, Training - Licensed - Category One
Section 9, Training - Non-Licensed - Category Two
Section 10, Procurement - Category Two

A number of observations were presented to the NRC Senior Resident Inspector as potential enforcement findings for followup as appropriate. These observations were also discussed with the licensee during the exit meeting on May 13, 1982.

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DETAILS

1. Inspection Scope and Objectives

The objective of the inspection was to evaluate the management control systems which have been established in support of licensed activities. The results will provide input to the NRC evaluation of licensees from a national perspective.

The inspection effort covered licensed activities in selected functional areas. In each of the functional areas, the inspectors reviewed written policies, procedures, and instructions; interviewed selected personnel; observed activities and reviewed selected records and documents to determine whether:

a. The licensee had written policies, procedures, or instructions to provide management controls in the subject area;

b. The policies, procedures, and instructions of (a) above were adequate to assure compliance with the regulatory requirements;

c. The licensee personnel who had responsibilities in the subject areas were adequately qualified, trained, and retrained to perform their responsibilities;

d. The individuals assigned responsibilities in the subject area understood their responsibilities; and

e. The requirements of the subject area had been implemented and appropriately documented in accordance with management policy.

The specific findings in each area are presented as observations which the inspectors believe to be of sufficient significance to be considered in the subsequent evaluation of the licensee's performance. The observations include areas within the licensee's management controls which may not have specific regulatory requirements or guidance. These observations were the perceived weaknesses or strengths of the mangement controls in the areas reviewed and were the bases for drawing conclusions in each inspected functional area. The conclusions represent the team's evaluation of the licensee's management controls in each functional area. Each functional area was identified as having the attributes of one of the following performance categories:

. Category One: Reduced NRC attention may be appropriate. Licensee management attention and involvement are aggressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that a high level of performance with respect to operational safety or construction is being achieved.

. Category Two: NRC attention should be maintained at normal levels. Licensee management attention and involvement are evident and are concerned with nuclear safety; licensee resources are adequate and are reasonably effective such that satisfactory performance with respect to operational safety or construction is being achieved.

. Category Three: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appear to be strained or not effectively used such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

The performance categories defined above have been developed to meet the NRC's latest guidelines for evaluating each licensee under the Systematic Assessment of Licensee Performance (SALP).

Some observations represent potential enforcement findings. These observations were discussed with the licensee and were presented to the NRC Senior Resident Inspector. The followup of these items will be conducted by the NRC Regional Office.

2. Committee Activities

The objective of this portion of the inspection was to evaluate the adequacy of the licensee's management controls associated with the activities conducted by the Plant Review Board (PRB) and the Safety Review Board (SRB).

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

A. Plant Review Board (PRB)

(1) The Technical Specifications (TS), PRB charter (FSAR, Section 13), and Plant Review Board Adminstrative Procedures (HNP-6, revision 8) defined the policies, goals, objectives, and provided guidance for PRB activities.

Both the charter and HNP-6 were comprehensive documents that generally complemented the TS. There were some features, however, not contained in either of these two documents that would have served to make them even more effective:

(a) The charter listed the TS review requirements but failed to include the requirement to review 24 hour LERs.

(b) There were numerous facility procedures that described PRB responsibilities. HNP-809, Plant Modification Approval and Implementation, revision 9, was one of these. None were referenced in the charter or HNP-6, and members interviewed were unsure as to which procedures or how many described PRB duties. This finding was also brought out in an SRB audit of the PRB in 1980; however, no corrective action was taken.

(c) There were no criteria established for the selection of alternates, other than for the Chairman, to ensure that an alternate could adequately serve in place of an appointed member.

(d) There were no guidelines on the use of alternates that included specifics on when an alternate could substitute for a member, and on the responsibility of each member to keep his or her alternate informed of committee activities.

(e) There was no designation of operating records to be reviewed by the committee.

(f) There were no requirements to review the following:

- Changes to the QA Manual or QA Program.
- SRB meeting minutes, reports, and correspondence (including SRB audit reports).
- Facility operations and records to detect trends that would not be apparent to the day-to-day observer.
- Training and re-training programs for non-licensed facility staff members.
- Fire Protection Plan, changes to the Plan, and implementing procedures.
- Non-routine event reports, including LERs, Deviation Reports (DRs), and Nonconformance Reports (NCRs).
- QA audit reports.

- NRC inspection reports, Bulletins, licensee responses to these, NRC Circulars, and NRC correspondence relative to the facility operation.

(g) There was no provision for handling dissenting opinions and for the use of minority reports.

Both the PRB charter and HNP-6 were in need of revision. Titles of individuals were not current with the organization, and paragraph designations in the charter were in error in several places. There were, however, some strengths in the documents:

- A Committee Secretary was designated.
- The use of consultants was addressed.
- Attendance at meetings for members was encouraged in both documents.
- A form was included in HNP-6 for making corrections to the meeting minutes.
- An additional review responsibility was added in HNP-6 for examining "NRC and QA open items each month."

(2) The most significant weakness found in examining PRB activities involved their review process. There were several elements to this process that revealed inadequacies.

(a) There were no provisions for committee members to review appropriate material prior to PRB meetings. The majority of items reviewed by the committee were brought to the meeting to be read by the members. The majority of members saw the material for the first time in a meeting. Few of the items were summarized for the members through presentations. The material was passed around and read at the beginning of each meeting. Comments or questions were to be written on comment sheets attached to the documents and discussed at the conclusion of the reading period. This was a review-by-exception type of review. Documents with blank comment sheets were not discussed and their review was considered complete and satisfactory. This review-by-exception process appeared to have several drawbacks.

Interviews indicated that many of the reviews were cursory in nature and may not have elicited many comments. Design Change Requests (DCRs) were reviewed for scope, their integration into the facility, and signatures on the forms, but not for their technical feasibility or correctness. Non-reportables (DRs) were not evaluated sufficiently to assign corrective action. Procedure changes, according to several sources, were given the briefest of examinations. Several individuals stated that they did not perform a "nuts and bolts" type of review.

Throughout all the interviews, members indicated a strong dependence on reviews performed by others prior to submittal to the PRB. There appeared to be a heavy reliance on Bechtel's expertise--for instance, on the technical aspect of DCRs and for the quality of the safety evaluations of DCRs.

Some members and individuals who had served as alternates indicated that there was not ample time to review all the material during the reading period. Although no time limit was set, the nature of the meetings, the precedents established on how to review material, and the different levels of familiarity with the material among participants apparently caused some of those interviewed to feel that the time set aside for review was insufficient.

(b) The time used to review material presented to the committee was small compared to other facilities inspected by the Performance Appraisal Team. PRB members claimed four to five hours per week in meetings. This was substantiated by records that showed an average of four and one-half hours per week for the month of February 1982. Of this time, over half was spent in reading. Less than two and one quarter hours were spent in PRB meetings each week in fulfillment of their TS responsibilities for both nuclear units. For the scheduled PRB meetings held in February, the average amount of time spent per item was one and one-half minutes. For example, the minutes for the February 11, 1982 meeting indicated that the following material was reviewed:

- 20 procedure changes;
- 6 DCRs;

- 1 proposed TS change;
- 1 QA audit report;
- 1 NRC inspection report;
- 1 set of past committee meeting minutes;
- 2 Significant Trend Reports;
- 19 LERs, Nonconformance Reports, or Deviation Reports;
- 4 Maintenance Requests; and
- 3 miscellaneous items.

The significance of these statistics is arguable, but at the rate of only one and one-half minutes per item, it appeared that the committee should examine its review process.

(c) The PRB's review of corrective action systems was limited. Deviation Reports (DRs) and Nonconformance Reports (NCRs) were reviewed for NRC reportability requirements. Those determined to be reportable to the NRC received substantial review; those determined not to be reportable did not. Few non-reportable DRs were evaluated for corrective action to prevent recurrence. No systematic approach existed to evaluate all DRs and ensure that appropriate corrective action was designated. The PRB did not follow up on the majority of non-reportable DRs to determine if any corrective action had been accomplished. According to records, there were 545 DRs written in 1981; 277 were determined to be reportable and 268 non-reportable. Of these 268 non-reportable DRs, the PRB followed 4 via their Open Items Log.

(3) The policy for use of alternates for committee members was weak. Members did not have assigned alternates; and consequently, did not have to keep anyone informed of committee activities in order to provide continuity in their absence. The structure of the PRB, however, precluded a concern about continuity. The PRB members reviewed whatever material was given to them at each meeting. There was very little that required followup or long term review activities. The minutes also reflected this process. They were mostly lists of the items reviewed and approved with little of the committee interactions or decisions recorded other than their recommendations for

approval. The minutes did not receive wide distribution. Most of the members saw the minutes only at a subsequent meeting when they were approved.

As stated in a previous observation, there were no criteria or qualification requirements for the selection of alternates. Records and interviews showed that many individuals in different positions were routinely used as alternates. The Operations Supervisor and any of the several Shift Supervisors, for instance, regularly alternated for the Superintendent of Operations. These individuals were probably entirely satisfactory, but there was no established policy on their use as alternates.

(4) No one on the committee was assigned the responsibility to ensure that all required documents were delivered to the committee for review. QA performed no audits of PRB activities and this was considered a significant weakness. The QA representative stated that he was present at nearly all PRB meetings to monitor activities but that he suffered from a certain natural loss-of-objectivity by being so close to the committee functions.

The SRB conducted two audits of the PRB. The first occurred in October 1980, and resulted in eight "recommendations," at least two of which were made to correct apparent noncompliance with procedures. The PRB did not respond to this audit until September 1981, 11 months later. In November 1981, the second SRB audit of the PRB was performed. It was not a comprehensive audit. It acknowledged the PRB response to the first audit and focused on a single issue for the current audit, the PRB's handling of procedure revisions. The SRB audits of the PRB and the response elicited from the first one did not appear effective as the sole audit of PRB activities, particularly considering the other weaknesses identified in this report.

Interviews with various members of the SRB revealed their awareness of many perceived problems with the PRB: too many items for them to review with insufficient time for proper reviews, inadequate meeting minutes, and inadequate response to the 1980 SRB audit. In spite of these concerns, no apparent corrective action was being taken.

B. Safety Review Board (SRB)

(1) The TS, SRB charter (revision 13), and the SRB procedures (SRB-001 through SRB-004 and SRB-008) defined the policies, goals, objectives, and provided guidance for SRB activities.

Compared to many of the documents governing the activities of offsite committees at facilities previously inspected, the SRB charter and procedures were generally complementary to the TS and were comprehensive. There were some features not contained in these documents that would have served to make them even more effective:

(a) Titles of individuals used throughout the charter and procedures were not current with the organization.

(b) There was no guidance on what constitutes an unreviewed safety question.

(c) There were no requirements to review the following:

- Non-routine Event Reports, including 30 day LERs, non-reportable Deviation Reports, and non-reportable Nonconformance Reports.
- Changes to the QA Manual or QA Program.
- Facility operations and records to detect trends that may not be apparent to the day-to-day observer.

Aside from the foregoing considerations, the guidance provided by the SRB charters and procedures was excellent. It was the most detailed and comprehensive guidance for an offsite committee examined to date. There were also many strengths in the charter and procedures, features that went beyond what might be expected in a typically strong offsite review program. Some of these were as follows:

- The charter gave specific frequency requirements and limitations for the TS 6.5.2.8 audit program.
- The charter stated that "Attendance for scheduled meetings is mandatory..." and gave specific instructions for obtaining excused absences.
- The use of consultants was addressed.
- The process of reviewing documents prior to scheduled meetings; the conduct of meetings; and the writing, approval, and distribution of minutes were spelled out in great detail in SRB-001, revision 2.

(2) The charter and TS listed the areas for which the SRB was to provide independent review and audit. These lists differed from the ANSI N18.7-1976 requirement, to which

the licensee was also committed, by not including the areas of "nondestructive testing" and "administrative controls."

The SRB maintained a list of "SRB Member Responsibilities." This list was apparently not meant to correspond to the areas of expertise mentioned in the foregoing paragraph, but it did assign to each member areas of responsibility that included many of the expertise areas. Not included were metallurgy, instrumentation and control, administrative controls, and nondestructive testing. In certain of the expertise areas, metallurgy and non-destructive testing being two of them, the licensee representatives stated that they would rely on consultants for advice. This was not as strong a program as it might have been. The ability to resolve a problem in metallurgy, using consultants for instance, appeared satisfactory; the ability to identify one appeared weak.

(3) The most significant weakness found in the SRB, like the PRB, involved their review process. There were several aspects of this process that revealed inadequacies.

(a) Most of the material to be reviewed at the scheduled SRB meetings received prior review by the members, unlike the PRB, but the result was the same: review-by-exception and the consequent loss of committee interaction. Material was routed to the members prior to the scheduled meetings. Any comments or questions that the member had were added to the routing sheet and passed on. Those routing sheets that had comments could then be brought to the attention of the committee at the next scheduled meeting. This apparently did not occur frequently, however, since there was a widely known but unwritten policy that anyone who had comments or questions on a document in routing was personally responsible for getting the problem resolved. There was little incentive, therefore, for making comments or asking questions regarding routed material. A review of routing sheets substantiated this; few comments were listed.

Another problem in this review process was the area of assigned responsibilities for SRB members. Interviews indicated that these assignments tended to restrict the scope of review by some members. Some stated that they reviewed in depth only those documents that fell into their assigned areas. Some felt unqualified to comment in areas other than their own and trusted that others with more expertise in those areas would do a more thorough review.

The most significant problem with this system was that there was effectively no committee review. There appeared to be no committee interaction on the bulk of material that the meeting minutes recorded were reviewed at scheduled meetings. The individual items routed were not mentioned during the meetings; there were no summary presentations on the material, and there was no followup by the committee. The items routed and reviewed in this fashion included the majority of the TS review requirements: PRB meeting minutes, LERs, Design Change Requests (DCRs), Document Change Requests (typically, proposed TS changes), and Test or Experiment Requests.

(b) Interviews indicated that the reviews of TS required items (TS 6.5.2.7) were somewhat superficial. There was no "nuts and bolts" technical review. For the offsite committee this did not seem totally inappropriate, but when compared with statements made by PRB members, it appeared that there was a heavy dependence on someone else's review. In tracing the review path of several DCRs, for example, some PRB members made statements indicating a substantial reliance on Bechtel, the contractor engineer, for technical expertise and an adequate design package. Interviews with SRB members revealed that they relied heavily on the PRB to make in-depth reviews of the DCRs. Upper level corporate management in turn depended to a great extent on the SRB to identify and resolve any problems with DCRs. The trend is one that may not have resulted in any specific problems to date, but requires management attention before it does.

(4) There were several weaknesses involving the SRB's review or lack of review of specific subjects.

(a) TS 6.5.2.7.e requires the SRB to review violations of TS and internal procedures or instructions having nuclear safety significance. TS 6.5.2.7.f requires review of "Significant operating abnormalities or deviations from normal...." TS 6.5.2.7.h requires review of "All recognized indications of an unanticipated deficiency...."

Contrary to these requirements, the SRB performed no review of Deviation Reports and Nonconformance Reports which the PRB had determined to be "non-reportable." An examination of the non-reportable Deviation Reports written for the month of

February 1982, revealed many that appeared to fall into one or more of the categories described by the requirements.

This observation was discussed with the licensee and presented to the Senior NRC Resident Inspector as a potential enforcement finding. Related to this was a weakness in the QA audit program. TS 6.5.2.8.c requires an audit of "The results of actions taken to correct deficiencies...." The responsibility for this audit was apparently shared by the SRB and QA. The SRB performed no audits, however, of corrective action systems; and QA did not include non-reportable Deviation Reports in their semiannual audit of corrective action systems.

The failure to audit one of the principal corrective action systems was discussed with the licensee and presented to the Senior NRC Resident Inspector as a potential enforcement finding.

(b) QA audit plans and schedules were routed to SRB members in similar fashion to TS required documents as previously described. Comments written on the routing sheets were collected by the SRB Secretary and sent to QA. Review of these plans and schedules by SRB members was considered to be a strength; however, the review performed provided feedback to QA that was limited in its value. There was no committee interaction on the plans and schedules, and the feedback represented no consensus of the committee membership.

(c) Interviews indicated that DCR safety evaluations provided by the principal consultant engineer, Bechtel, were frequently routed to SRB members separate from the DCRs due to time differences in when they arrived at the licensee's offices. This resulted in some confusion among the committee reviewers and consequent difficulty in performing adequate reviews. The only connection between the separate documents was the reviewer's memory.

(d) The SRB performed no review of changes to the QA Program or QA Manual. This was considered a weakness due to the fundamental importance of the QA program to the safe and reliable operation of the facility.

(e) The SRB did not follow, nor did interviews reveal that the SRB members were aware of the PRB Open Items.

(5) The SRB minutes were written in accordance with detailed guidance provided by procedure SRB-001. They did not, however, reflect all of the committee's activities in fulfilling their TS and procedure commitments.

(a) TS 6.5.2.7.e requires a review of violations of the TS and internal procedures. To fulfill this responsibility in part, the SRB reviewed NRC inspection reports and QA audit reports. Neither of these reviews were reflected in the meeting minutes. This appeared contrary to TS 6.5.2.10.b which requires that reports of reviews encompassed by TS 6.5.2.7 be prepared, approved, and forwarded to the Executive Vice President - Power Supply (formerly the Senior Vice President - Power Supply) within 14 days following completion of the review.

This observation was discussed with the licensee and presented to the Senior NRC Resident Inspector as a potential enforcement finding.

(b) Many of the committee's decisions, recommendations, and followup activities were not always reflected in the minutes. The SRB maintained a "Suspense File" of open items. These were followed and resolved separately from the meetings and were not described in the minutes.

(c) Subcommittee reports were not attached to the minutes, and interviews indicated that responsible corporate managers were often not aware of these.

(d) The review of QA audit plans and schedules and the corresponding recommendations were not reflected in the meeting minutes.

(e) The LERs, DCRs, DoCRs, Test or Experiment Requests, and PRB meeting minutes reviewed were not recorded in the SRB minutes. The identification numbers were listed on their respective routing sheets and the routing sheet numbers were listed in the minutes. A typical statement in the minutes consisted of the following standardized form, "The SRB confirmed review of Design Change Requests transmitted by routing sheets 246 through 263."

(6) One of the strengths of the SRB committee was the extensive training program provided its members. The program included new member orientation, consisting of extensive reading material and interviews with other members; periodic simulator training; system training; and site-specific training on procedures, problems, equipment,

and systems specific to the facility. Recently written, but not yet fully implemented, was a revised training program that included an intial 2 week orientation with 20 hours on the simulator and an annual refresher program consisting of 16 hours of training with 4 hours of simulator. This was by far the best training program for offsite committee members of any facility inspected. The SRB membership also included two who were licensed SROs and another with an equivalent SRO certificate.

In spite of the emphasis on training there appeared to be a significant lack of awareness and confusion among committee members as to what the SRB activities and responsibilities were. One example was the confusion over responsibility for the TS 6.5.2.8 audit program. Few members appeared sure or consistent with one another over who performed which audits, QA or the SRB, and which organization took credit for the audits. Procedure SRB-008 contributed to this problem with the following statements. "Each SRB member will audit, or review audits performed by others, [on] operating plant activities in conformance with his audit program...." This can be accomplished by either actual audits made by the SRB member or review and evaluation of the formal QA Department audits, NRC audits, insurance audits, etc or combination of these audits."

This procedural ambiguity resulted in an inconsistent handling of SRB audit assignments. One SRB member performed what appeared to be a thorough, in-depth audit using a formal and traditional audit report format. Another filled out a standard SRB audit form listing references of other audits and presenting a summation of the results. A third submitted a two page list of all the documents he reviewed for the year with no discussion of results, problems, or conclusions of any kind. Fortunately, QA had performed audits in all of these areas using ANSI N45.2.23 qualified auditors who followed more consistent and acceptable procedures based on well established industry standards. The duplication or overview of the SRB audit program was a positive addition to the overall review and audit effort, but there were many who indicated their belief that the SRB audits were, in fact, the TS 6.5.2.8 required audits. One demonstration of that belief was the interpretation of TS 6.5.2.10.c. This requirement states that TS 6.5.2.8 audits be sent to the Executive Vice President - Power Supply (formerly the Senior Vice President - Power Supply) within 30 days after completion of the audit. The licensee interpreted this by sending SRB audits, not QA audit reports. Mentioned previously as an example where the SRB audits did not

cover the TS audit requirements, the SRB performed no audits of corrective action systems (TS 6.5.2.8.c); QA performed that audit.

This last observation was discussed with the licensee and presented to the Senior NRC Resident Inspector as a potential enforcement finding.

Another example of the confusion committee members had over SRB activities involved the handling of SRB open items. The committee had one procedure to deal with this subject, SRB-004, SRB List of Concerns, revision 0. It dealt specifically with situations that members felt would compromise nuclear safety, and had never been used. Routine open items apparently did not occur frequently. They were maintained by the SRB Secretary in his "suspense file." They were not tracked in a formal sense with closure or delays, for example, being recorded in minutes or memoranda. Several members indicated a lack of awareness of these systems.

Some members seemed unsure of which categories of documents the committee reviewed. One member believed the SRB reviewed all Deviation Reports, even non-reportable ones; another stated that the committee reviewed QA Manual Changes. Other interviews and examinations of records indicated otherwise. Some members did not appear to be aware of audits performed by other members of the committee. The overall impression was that the qualification of members and the training program for them was excellent, but management attention was needed to clarify the issues identified here and to raise the level of awareness of committee members in each of the SRB areas of responsibility.

(7) The review performed by upper level corporate managers of information generated by the PRB, SRB, and QA was limited. There was no awareness of open items carried by either committee. Several were unaware of SRB audits and subcommittee reports, and most did not receive QA audit reports. There was infrequent or no participation as a guest in occasional PRB or SRB meetings, and there were misconceptions of the review processes used by both committees. Nearly all of the individuals interviewed expressed the belief that PRB members reviewed the required documents prior to the committee meetings. Most believed that the SRB reviewed non-reportable Deviation Reports; and they were unaware of those SRB review subjects not reported in the minutes, such as QA audit reports and NRC inspection reports.

b. Conclusions

The most significant strengths of the committees existed in the written guidance for both the PRB and the SRB and in the training program for the SRB members. With the possible exception of the areas of ongoing committee activities and responsibilities, the SRB training program appeared to be a model for this industry.

The most significant weaknesses were similar for both committees. They existed primarily in the review processes and in the monitoring of the committees' completion of assigned responsibilities. Both committees used review-by-exception techniques allowing little committee interaction. Many of the reviews by each committee appeared cursory, the members depending heavily on reviews by others. Neither committee reviewed non-reportable deviation reports to an extent sufficient to ensure that corrective action was taken to preclude recurrence on those having safety significance. The handling of open items by each committee showed several weaknesses. Upper level corporate managers demonstrated in interviews a lack of awareness of committee activities and responsibilities.

Based on the above considerations, the management controls associated with committee activities were considered to be Category Three.

3. Quality Assurance Audits

The objective of this portion of the inspection was to evaluate the adequacy of the licensee's management controls associated with quality assurance audit activities.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) The QA audit program was described in the Operational Quality Assurance Manual and implementing procedures, and endorsed by the Executive Vice President. With one exception, the QA audit program was comprehensive and well defined.

An adequate method of planning, scheduling, and maintaining status of audits had not been established. There was no summary document, matrix, or other cross referencing method used to assure coverage by audit of all applicable requirements, codes, standards, or plant procedures relating to department activities and functions. Audit plans did list several references; however, because of the above weakness, it was difficult to verify that many areas had been or would be audited as required by ANSI N18.7-1976, Sections 4 and 5.

(2) The audit staff was independent of site management control and included the corporate QA Manager, two staff auditors, a field supervisor, a site supervisor, and six field auditors. The QA Manager reported directly to the Executive Vice President - Power Supply. Based on interviews, most auditors appeared to be aggressive, dedicated, displayed positive attitudes, and had high morale. A strength of the audit program was that all auditors were lead auditors qualified to ANSI N45.2.23-1978, and all had completed an auditor training course. Most of the auditors were experience in some technical area, such as non-destructive testing or operations.

(3) Most persons interviewed who were not part of the QA organization appeared to be unaware of their responsibility in QA activities as described in management's statement of policy on QA. There was only minimal QA orientation and training given to site and corporate personnel.

(4) The procedures that described the corporate and site audit function were QA-05-01, Corporate Staff Audits, revision 4; and QA-05-06, Site Preoperational, Startup, and Operational Audits, revision 8. Both procedures referenced and met the requirements of ANSI N45, 2.12-1977. With the exception of the corrective action audit, discussed in Section 7 of this report, most of the other audit reports reviewed in the areas of operation, maintenance, QC, design change, and training were comprehensive and identified substantive problems. The independent review of audit plans by SRB members enhanced the effectiveness of the audit program. Implementation of the audit program and audit reporting were adequate with the following exceptions:

- Each time an audit was performed, a new checklist was prepared. There were limited guidelines established for the preparation of audit checklists. The guidelines did not include criteria for sample sizes, incorporation of the most recent changes to procedures, and inclusion of facility trends and industry identified problems. This weakness lessened the likelihood that all critical or required areas would be reviewed every time a particular audit was performed.

- Some audit summaries did not include a statement evaluating the effectiveness of the procedures or other QA elements audited. Further, the summaries did not address the adequacy and compliance of the audited activity, detection or correction of adverse trends, or recommendations to improve the area audited, as required by the licensee's procedures.

(5) 10CFR50, Appendix B, Criterion II, the Foreword to ANSI N18.7-1976, and ANSI N18-7, Sections 3 and 4 specify the necessity for a licensee to perform a review and assessment of the effectiveness of the QA Program. This was accomplished jointly by a QA Committee and the SRB.

The SRB evaluated the QA Program through a review of audit plans, audit schedules, audit reports, and the performance of audits. For further comments in this area, refer to Section 2 of this report.

The QA Committee did not review QA audit reports, but relied on the QA monthly summary. The Committee seemed to dwell on solving specific QA related problems rather than an evaluation of the QA program in terms of staffing requirements, authority, management support, or adequate long term corrective action to preclude recurrence.

(6) In an area not related to the QA audit program, it was noted that the site QA group had responsibility for review of procedures for inclusion of QA elements such as TS and ANSI Standards. The review was made in accordance with a procedure that included definitive acceptance criteria. This activity had the potential to reduce the number of findings associated with inadequate procedures.

b. Conclusions

The licensee had developed a program of planned and documented audits that verified compliance with administrative controls and the QA Program. The significant weaknesses included failure to develop a method to demonstrate assurance that all audit requirements would be met, to provide definitive guidelines for the preparation of audit checklists, and to provide adequate QA training and orientation to non-QA personnel.

The strengths included the depth and scope of the written program, the level of auditor qualifications, and the review of audit plans by SRB.

The performance category for the area of QA Audits was considered to be Category Two.

4. Design Changes and Modifications

The objective of this portion of the inspection was to evaluate the adequacy of management controls associated with engineering, design changes, and modifications.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) HNP 809, Plant Modifications Approval and Implementation, revision 9, HNP-8, Maintenance Request, revision 13, and HNP-501, Equipment Clearance and Tagging, revision 10, described control of Design Change Requests (DCRs) from concept through system modification. The process was well defined and controlled with one exception. The program did not include provisions to ensure that operations receive revised procedures, updated drawings, and training on system changes before a modified system was returned to normal operation. A modified system could be returned to service without the operations organization verifying that the above items had been completed.

(2) The method used to inform operators that a system had been modified was to inscribe the As-Built Notice (ABN) number on an aperture card or on hard copy drawings maintained in the Control Room. The ABN references on several drawings were tracked through the ABN Control System. One ABN number was listed as outstanding on a drawing but had been shown as completed and removed from the log. Interviews with QA personnel and further document reviews revealed that site QA had audited this area. This audit contained several problems with drawing and ABN control. Some of these items had been unresolved since 1979. Positive corrective action had not been taken to resolve this problem. (See Section 6.a.(7).)

(3) Procedure HNP-809 required that safety evaluations be performed, recorded, and filed with the modification package in accordance with 10 CFR 50.59. Modification packages reviewed during the inspection contained documented safety evaluations. The safety evaluations performed by the licensee considered the effect of the completed modification on the facility; however, the evaluations did not include the impact caused by the performance of the modifications on the operating facility. The following were examples of items not considered and documented in the safety evaluations:

. Presence of workmen, materials, vibration, dust, and equipment in safety-related areas.

. Noise or personnel congestion.

(4) Interviews and the review of the program for the control of design changes revealed that Bechtel corporation performed the majority of the engineering associated with the modification of

safety related systems. The licensee's overview appeared weak for the following reasons:

- Plant engineers utilized DCR packages prepared by Bechtel Corporation without any engineering organization overview.
- Since 1979, audits performed of Bechtel did not include a technical review of design change work.
- Document control personnel verify that ABNs are incorporated into drawings by reviewing the drawing revision block; however, there was no Engineering organization review of this activity.

b. Conclusions

The licensee had established and implemented a program to control safety-related design changes and modifications. Weaknesses included the inadequate control of as-built notices and drawings; the failure of safety evaluations to completely address the effect of modifications work on an operating facility; and the failure to provide a positive means of assuring that operations personnel were provided revised procedures, updated drawings, and training prior to returning a modified system to operation. Also, there was limited overview of engineering performed by Bechtel.

The Performance Category for the area of Design Changes and Modifications was considered as Category Two.

5. Maintenance

The objective of this portion of the inspection was to evaluate the adequacy of the licensee's management controls associated with corrective and preventive maintenance activities.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluation.

(1) Georgia Power Company (GPC) Administrative Procedures provided the administrative controls for performing preventive and corrective maintenance. Preventive maintenance was scheduled utilizing a computer program; corrective maintenance was scheduled and tracked manually. Three persons were assigned to schedule corrective maintenance activities; one for each of the three maintenance supervisors. These schedulers periodically reviewed the corrective maintenance backlog and in most cases

had identified the man-hours required to perform major maintenance work. This information was effectively utilized in scheduling of maintenance.

(2) HNP-8, Maintenance Request, revision 13, described the methods by which requests for maintenance were originated, documented, reviewed, and approved. A review of this procedure and the associated maintenance request (MR) form revealed the following weaknesses.

- Neither the procedure nor the MR addressed fire protection (See item (3).)
- The procedure did not address evaluating and reporting the causes of failures (See item (5).)
- The procedure did not define the maintenance work considered "skill-of-the-crafts" which would not require approved procedures.
- Step 12 of the procedure addressed the identification of a problem beyond the scope of the existing MR but did not require the issuance of a new MR.
- Neither the procedure nor the MR form addressed the release of systems or components for operation that had been modified in accordance with Design Change Requests (See item (6).)

(3) HNP-555, Control of Ignition Sources, revision 4, described the control of open flame work within the plant. All open flame activities were required to be controlled by use of a Hot Work Permit, approved by a maintenance foreman. Since there was no requirement to notify the Operations Shift Foreman prior to issuance of a Hot Work Permit, it did not appear that Operations had any control over open flame activities unless specifically identified on an MR. Even if open flame activities were specified on an MR, there was no assurance that Operations would be made aware of the actual performance of the work (See Section 6.a.(2).)

(4) The MR consisted of a multi-copy form. The original and green copies were maintained upon completion of maintenance. The originals were the permanent plant record kept in the Document Control Center, and the green copies were kept by the Maintenance Department and were considered the Machinery History File. Parts and materials used during maintenance were recorded only on the back of the original copy of the MR; consequently, the parts and materials histories were not utilized as part of the active Machinery History File.

(5) Although QC personnel periodically reviewed the Machinery History File for repetitive failures, there was no program implemented for review of MRs for root causes of failures. A Maintenance History Review and Evaluation program, however, was being established.

(6) HNP-809, Plant Modifications Approval and Implementation, revision 9, described the administrative controls related to requesting, approving, and implementing modifications to both safety-related and nonsafety-related systems. MRs were used to implement Design Change Requests (DCRs). HNP-809, Step E.12, specified the requirements to be completed prior to releasing any system to Operations upon completion of a DCR. These requirements included the following items:

- Successful completion and approval of functional test results.
- Changes made to all procedures required for safe operation of the plant.
- Information necessary to train operating personnel on changes to system operation forwarded to the training office.
- Applicable temporary as-built drawing notices (ABN) issued.

If any of the above requirements could not be met, the responsible engineer was required to obtain a clearance on the affected equipment. Interviews revealed that a clearance was seldom issued. An outstanding clearance was the only mechanism used to prevent a system from being returned to service upon successful completion of the required functional tests. There was no system to verify that the aforementioned items had been completed.

(7) There had been a steady increase in the backlog of corrective maintenance for both Units. In August 1981, the backlog was approximately 16,500 man-hours, and in April 1982, the backlog was approximately 24,000 man-hours. These figures did not include scheduled outage items. The licensee had recognized this trend but had not taken effective corrective action. The backlog items, taken individually, did not appear to be a safety problem; taken collectively, however, safety could become a factor.

(8) Vendor manuals were referenced extensively in maintenance procedures; however, the applicable sections were not always referenced. This was considered a weakness because of the difficulty in reviewing and approving procedures without specific references and the lack of specific guidance to maintenance personnel.

b. Conclusions

One strength in the Maintenance Program was the effective utilization of schedulers for corrective maintenance activities. Weaknesses included inadequacies in the Maintenance Request Procedure, an increasing backlog of corrective maintenance work, and the failure of the active Machinery History File to include the records of parts and materials used.

The performance category for the area of Maintenance was considered to be Category Two.

6. Plant Operations

The objective of this section of the inspection was to evaluate the adequacy of management controls associated with plant operations.

a. Observations

The following observations include the perceived strength and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) The Shift Foreman was required to be aware of active maintenance activities in the plant. He was required to approve work to be performed in the plant by signing a maintenance request (MR) for each maintenance activity. A copy of the MR was retained by the Shift Foreman as a record of work in progress. This would normally appear to be adequate information for the Shift Foreman to be aware of maintenance activities. However, a review of open MRs in the control room showed there were approximately two hundred or more outstanding MRs for each of the two units. Most of these were inactive for one reason or another, such as waiting for parts. There was no separation of active MRs from inactive MRs, and there was no requirement for maintenance personnel to inform the Shift Foreman when work was suspended or reinitiated. The system for the control of MRs did not provide the Shift Foreman with adequate information to keep him aware of all maintenance activities actually in progress on his shift.

(2) QA Audit Reports and interviews revealed that many of the operating procedures had discrepancies. The QA department personnel had reviewed 240 procedures in 1982 and found discrepancies in 161 procedures. The discrepancies included items such as procedures not in agreement with drawings, procedures that could not be performed as written, and valves that were not properly identified. It appeared that the biennial review of procedures required by the Technical Specifications (TS) had been inadequate.

(3) There was no written program to certify that operators were qualified to operate the fuel handling machine. Operators were trained on-the-job, but no formal checkout was required prior to assigning the operator to operate the fuel handling machine without supervision.

(4) Procedure HNP-504, revision 9, Lifted Wire and Temporary Jumper Control, defined the requirements and controls for the installation of jumpers and lifted leads. The procedure required that the Plant Review Board (PRB) review the jumper and lifted lead request if they were to be installed on a safety-related system. Interviews with Shift Foremen and Supervisors revealed that there was confusion among them as to when PRB review was required. The general interpretation was that if the system was not required to be operable, PRB review was not required, based on a very liberal interpretation of some of the words in HNP-504.

In addition to the procedure not being clear, the procedure did not require the PRB to evaluate the request for 10 CFR 50.59 considerations. The required review was only for the affect on operability of the system.

(5) The licensee had no written program for the control of mechanical jumpers such as spool pieces and hoses.

(6) Examination of drawing files for Operations personnel, located in the Control Room files, revealed many drawings were awaiting revision following the completion of design changes. The method used to inform the operator that a drawing had been changed was to mark the drawing referencing an "As-Built-Drawing Notice" (ABN). The ABNs which showed the drawing changes were located in Document Control away from the Control Room. This system did not provide the operators with marked up or revised drawings upon completion of installation of a design change.

(7) Procedure HNP-559, Control of Transient Combustibles, revision 3, required that weekly fire inspections be performed and identified problems documented on a plant fire inspection report form. However, there were no instructions in the procedure to initiate corrective action when required or to document the corrective action taken to correct identified problems.

(8) Procedure HNP-903, Record of Pulled Annunciator Cards, revision 1, did not contain a requirement for the operator to initiate compensatory measures, if necessary, when an annunciator card was pulled.

(9) Plant and corporate departments were required to prepare monthly reports on events, problems, and status of items concerning the plant. These reports were assembled into a book and copies distributed to corporate and plant management. A meeting of

most corporate and plant managers was held each month at the plant. A representative from each department discussed and answered questions regarding their department's monthly report. The reports and the associated monthly management meetings appeared to be a good means to keep management informed of many plant problems and activities.

(10) The Quality Assurance Department had performed several audits of plant operations. These audits appeared to be effective in identifying problems.

(11) The licensee had assigned a clerk to each operating shift for the purpose of performing such tasks as collecting and transmitting logs and procedures to Document Control, updating procedures with approved changes, auditing procedures and drawing files for correct revisions, and providing copies of surveillance procedures to operators. This appeared to be an effective means to relieve the Shift Supervisors, Shift Foremen, and Reactor Operators of many routine administrative duties.

b. Conclusions

The licensee had an established program for controlling plant operations. The most significant weaknesses identified included a large number of procedure discrepancies, and the need to improve maintenance control practices so that the Shift Foreman will be aware of ongoing maintenance activities. Significant strengths identified were the licensee monthly report and associated monthly management meeting to keep management informed of plant activities and the assignment of a clerk to each operating shift to relieve the operating shift of routine administrative duties.

The performance category for the area of Plant Operations was considered to be Category Two.

7. Corrective Action System

The objective of this portion of the inspection was to evaluate the adequacy of the licensee's management controls associated with corrective action systems.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have been specific regulatory requirements but may provide the basis for subsequent performance evaluations.

(1) The licensee's corrective action system was described in the QA Manual, FSAR, and various QA and plant implementing procedures. The corrective action system was a composite of licensee

event reports, nonconformance reports, audit finding reports, maintenance requests, and deviation reports.

Problems in the areas of fire protection, security, and radiation protection were not included in the overall corrective action systems. There was no overall procedure or other method which tied the individual corrective action methods into a cohesive program to identify, correct, and preclude recurrence of problems. Maintenance requests and deviation reports did not require a statement of action to preclude recurrence.

(2) The authority and responsibility for the identification and reporting of problems was given to all employees as delineated in various procedures. Specific training in the definition, purpose, or types of corrective action had only been provided to QA auditors. Interviews revealed a limited understanding of the corrective action system with the exception of certain QA and management personnel. Training in corrective action was not given to SRB members, some of whom had the responsibility to support, review, assess, and evaluate the overall corrective action system. As stated in Section 3, SRB members reviewed and commented on QA audit plans; however, this was not the case with corrective action. Comments concerning audit plans for corrective action were minimal. SRB audits of corrective action systems had not been performed.

(3) The QA audits of corrective actions did not adequately address trends, radiation occurrence, exposure reports, nonreportable deviation reports, security incidents, fire protection audits, training, surveillance, operating experience reports, and Part 21 reports.

Of the corrective actions reviewed, there were several that did not identify the actions taken to preclude recurrence. This problem was found in the review of QA audits, maintenance requests, and radiation protection reports. There was evidence that corrective actions were not always documented. An example was the failure of the licensee to initiate a deviation report for the failure of a diaphragm in the HPCI system. Procedure HNP-425, Deviation Report, revision 8, lacked adequate guidance for recognition of plant conditions that could degrade a safety system. The lack of a requirement to document such an occurrence for review by management may have contributed to the HPCI diaphragm problem.

(4) A strength of the corrective action system, and an effective management tool, was the comprehensive QA program for tracking and trending of NRC and QA identified problems. Reports generated from this program contained information on the total number of items identified, changes in the number of these items, and the implication of these trends on plant operations for

specific departments. Summaries of the reports were distributed to the QA Manager, Plant Manager, SRB, and all site department heads.

Reporting of significant trends in matters not identified by NRC or QA was the responsibility of each operating department, and was not handled as effectively as the QA trending program. Problems identified in areas such as fire protection, radiation protection, and security were presented to management during the monthly management meeting but were not trended, analyzed, or handled with the same care and expertise as those from QA.

b. Conclusion

Of the weaknesses identified, the most significant was that the corrective action systems lacked adequate guidance by failing to provide consistency in the identification of problems, their correction, analysis, and actions to preclude recurrences. Other weaknesses included the limited understanding of corrective action systems by facility staff members, inadequacies in the QA audits of corrective actions, and the lack of guidance for documenting some safety-related identified problems.

The most significant strength was the QA program for tracking and trending of NRC and QA identified problems.

The performance category for the area of Corrective Action System was considered to be Category Two.

8. Licensed Training

The objective of this portion of the inspection was to evaluate the adequacy of management controls over the licensed training program.

a. Observations

The following are observations regarding the licensee's management controls. Certain of the observations may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) The licensee had a comprehensive program for the control of licensed operator training. The program included requirements for classroom training, on-shift training, simulator training, and periodic evaluations. The licensee had under construction a reactor simulator which is expected to be operational by the end of the year.

In late 1980, the licensee changed from a 9 month licensed training program to an enlarged 18 month program. The 18 month program has resulted in considerable improvement in the number

of candidates that passed the NRC examination on the first attempt. In 1982, 80% of the candidates passed. Those that failed, failed only one section of the examinaton. This compared with 23% passing in 1981 under the 9 month program, 58% in 1980, and 53% in 1979. It should be noted that the new grading requirelments were in effect in 1981 which could have accounted for the lower than usual number of examinations passed.

(2) Interviews and review of the licensed operator training program revealed that there were no provisions included for training or retraining in QA practices.

(3) The licensee had established an Operator Training Review Committee in 1977 for the purposes of evaluating student performance and to oversee and suggest improvements in the licensed operator training program. Review of committee minutes indicated that they took an active, constructive part in the training program.

(4) Ten out of twelve licensed operators interviewed stated that they desired improvements in the requalification training program, such as more lecture time with less individual study. In 1981, 40% of the licensed operators failed portions of the annual requalification examination, indicating a need for better training. Interviews with licensee representatives revealed they were aware of concerns expressed by licensed operators and were in the process of improving the requalification program.

b. Conclusions

The licensee had established a licensed operator and requalification training program. The revised licensed operator training program was effective in increasing the number of candidates who passed the NRC examination on the first attempt. Only minor weaknesses were identified.

The performance category for the area of Licensed Training was considered to be Category One.

9. Non-Licensed Training

The objective of this portion of the inspection was to evaluate the adequacy of management controls associated with non-licensed training.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have

specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) HNP-203, General Employee Training, revision 7, described the General Employee Training Program for all personnel regularly employed at Plant Hatch. Training was provided in the following subjects: general procedures, radiological safety, security, industrial safety, and quality assurance. Retraining in general procedures, radiation, and security was required every three years. Between retraining sessions, personnel were required to demonstrate adequate familiarization with these subjects through an annual test administered to all personnel who had unescorted access to the plant.

Interviews indicated that retraining in industrial safety and quality assurance was conducted on a periodic basis as deemed necessary. A review of records, however, demonstrated that retraining in quality assurance had not been provided. Many of the craft and operating personnel interviewed lacked an adequate understanding of the role of the Quality Assurance Department.

(2) HNP-206, Non-Licensed Departmental Training, revision 5, described the training program for non-licensed operators; mechanical, electrical, and instrument personnel; engineering services engineers; QC personnel; and health physics technicians. Each calendar quarter, the Training Department was required to provide these personnel with six hours of training. Records revealed that this training was being given; however, there was no indication that training needs were periodically evaluated. All operators interviewed stated that the training for non-licensed Plant Equipment Operators (PEO) and Radwaste Operators had been insufficient. PEOs were normally qualified with six weeks of on-the-job training and no formal classroom training. In the past year, a six week classroom and in-plant training course had been conducted by the Training Department for some new personnel. However, the on-the-job training and the classroom training had not been integrated into one program for qualification PEOs. Radwaste training had been strictly on-the-job training. The licensee was aware of the need to improve the training program.

(3) Selected craft personnel had received skills training at the licensee's training facility in Milledgeville, Georgia. The licensee stated that all craft personnel were to eventually receive this training. In addition, on-the-job training was provided and controlled by each craft supervisor. This training, however, was not documented. HNP-209, Non-Licensed Training, revision 0, had recently been issued to provide guidance for documenting non-licensed training of plant personnel. This procedure, however, did not address the documentation of on-the-job training for individual craft personnel.

(4) Engineering Services personnel received limited retraining. A comprehensive engineering training checklist had been provided for completion by all new engineers. There was no time requirement, however, as to when this training was to be completed.

(5) Licensee representatives stated their intentions to provide facilities and manpower to support an extensive non-licensed personnel training program. A new training facility was under construction which included space for classroom and laboratory instruction for general and craft skills training. Comprehensive non-licensed training programs were under development for the mechanics, electricians, instrument and control technicians, health physics and chemistry personnel. These programs consisted of a 16 to 30 week program to be provided to all applicable personnel over a 3 year period. This training was scheduled to begin in July 1982. The training needs for other non-licensed personnel was also being evaluated.

The non-licensed training staff consisted of a supervisor and 10 instructors. A training program had recently been given to train the staff in teaching methods and techniques. This was considered a strength.

b. Conclusions

Weaknesses in the non-licensed training program were the failure to retrain personnel in QA, failure to periodically evaluate personnel training needs, and failure to document on-the-job training. The licensee had recognized the need to improve their non-licensed training program and was in the process of developing a comprehensive program to be implemented in July 1982.

The performance category for the area of Non-Licensed Training was considered to be Category Two.

10. Procurement

The objective of this portion of the inspection was to evaluate the adequacy of the licensee's management controls associated with the area of procurement.

a. Observations

The following observations include the perceived strengths and weaknesses in the licensee's management controls that may not have specific regulatory requirements but will provide the bases for subsequent performance evaluations.

(1) The licensee had prepared and issued a current "Qualified Supplier's List," which was updated every three months. This list (book) was the responsibility of the Supervisor of

Nuclear Procurement Standards. The Qualified Suppliers List (QSL) was divided into two sections, by commodity and supplier, therefore making it easier to select vendors. The QSL also included the method used to qualify the supplier, the qualification date expiration, and a quality rating for each supplier. Each supplier had been assigned a quality rating, 1 through 6, based on their qualification and prior record. Special attention (surveys, audits) was required for suppliers with a quality rating greater than 2.

(2) The licensee did not appear to have a comprehensive and current parts list from which information could be obtained for ordering spare or replacement parts. The present method for procuring parts was cumbersome in that the requisitioner had to research such documents as previous purchase orders and vendors manuals to obtain the necessary information. Finding correct information was sometimes difficult; therefore, the requisitioner specified what he thought was applicable. This apparent weakness was recently revealed when problems were encountered in procuring a correct diaphragm for a HPCI system control valve.

(3) A review of purchase orders and requisitions revealed that the description of spare and replacement parts was not well defined. Descriptions did not always specify the environment or system in which the parts were to be used, and shipping, storing, special inspection, and handling requirements were not always specified. Interviews revealed that persons initiating the requisitions anticipated that "someone else" during their review and approval would insert all of the technical and administrative data.

(4) Within the past 18 months, two new groups had been organized to enhance the procurement activity: a Nuclear Procurement Standards Group and a Procurement Technical Support Group.

The Nuclear Procurement Standards Group was organized to ensure that the procurement of replacement-in-kind equipment, spare or replacement parts, commodities, and services complied with National Codes and Standards, NRC Rules and Regulations, FSAR, and Georgia Power Company Procedures. To implement the above, this group had prepared Nuclear Procurement Standards and Instructions for the preparation, review, transmittal, approval, and control of requisitions, purchase orders, and other procurement documentation. This group had developed and were keeping current a Qualified Supplier List.

The Procurement Technical Support group was organized to handle minority contractor and vendor qualifications, consolidate files on vendors from all Georgia Power Company Plants, compile a history file on all vendors and contractors, and to set up a system for spare parts.

(5) The licensee had built a Material Testing Laboratory to further assure that electrical cables procured for Plant Hatch met bending, fire, current, vibration, moisture, and steam requirements. Cables from new vendors had also been tested for qualification in this laboratory.

(6) 10CFR50, Appendix B, Criteria VIII and XIII; and ANSI N45.2.2 require that measures be established to identify and control materials, parts, and components to prevent inadvertant use or degradation. During a walk-through inspection of Warehouse No. 6, the following adverse conditions were observed:

(a) The bearing surfaces of several spare pump shafts for Johnson and Ingersol-Rand pumps were not protected from dust and dirt.

(b) Several spare pump shafts (144 inches to 74 inches long) were supported near the ends but did not have a center support. Calculations had not been performed to determine if the shaft supports were adequate.

(c) Several other spare pump parts (impellers, seal rings, and bearing retainers) had been haphazardly placed together in a large storage box. Parts were not packaged properly nor separated from each other. It was noted that these parts (30 total pieces) had acceptance tags attached; therefore, they could be issued from the warehouse without further inspection.

(d) Several small AC motors did not have their end shafts protected and several of the shafts were rusty.

(e) Material was being stored in the aisles of the warehouse. The inspector was advised that the licensee had planned to construct another warehouse to eliminate congestion and excessive handling.

(f) Two bearing housings stored in the warehouse did not have any tags attached or any other identifying markings on them.

(7) The above observations were discussed with the licensee and presented to the NRC Senior Resident Inspector as a potential enforcement finding.

Procedure HNP-801, Nonconformance, revision 15, specified the control of materials, services, or activities that failed to meet specified requirements. The procedure further specified the use of hold tags, responsibilities for declaring an item as nonconforming, and the methods used to clear and document nonconformances. Procedure HNP-822, Materials Inspection Request, revision 11, specified a means of inspecting materials, components, spare parts, replacement parts, and consumable items

received or maintained as stock items. Paragraph C.4 of this procedure stated that if an item was found not conforming to purchase specifications or contract agreements, and the problem could not be solved by QC, Engineering, or the vendor, then a Nonconformance Report is required by Procedure HNP-801. The above two procedures appeared to be in conflict as HNP-801 stated that a Nonconformance Report be initiated if the equipment did not meet specifications, etc., and HNP-822 stated that if the problem could not be solved by QC, Engineering, or the vendor, then a Nonconformance Report would be written. The above procedures did not appear to satisfy Criterion XV, Nonconforming Materials, Parts and Components, of 10CFR50 as a nonconforming item could be released for use without having the benefit of a review by the Plant Review Board and documentation (equipment history) would not be complete.

(8) Procurement procedures required that requisitions and purchase orders contain the statement "This order contains "Q" Items, Level ( ) Procurement" or the statement "This order contains "Non-Q Items, Level ( ) Procurement." A review of 15 purchase orders revealed 5 that did not contain the required statement concerning "Q" or "Non-Q" items. The failure to include this statement could result in inadequate review and documentation.

(9) Procedure HNP-803, Material and Service Procurement, revision 14, stated that requisitions for laboratory supplies, janitorial supplies, detergents, soaps, dewaxers, gloves, protective clothing, bug and mosquito sprays, and other consumable items did not require QC approval or review for "safety significance." Blanket purchase orders allowed buyers to procure non "Q" items costing less than $250.00 without approval. Although the above items were not classified as "Q" items, they could adversely affect plant components, systems, and structures depending upon the chemical content of the products, where used, how used, and final disposal. The lack of procedures to evaluate and control the use of individual or combinations of these products is considered a program weakness.

(10) The licensee did not have a procedure or a controlling mechanism (except for an internal memorandum) to ensure that technical information bulletins from vendors were reviewed, evaluated, and corrective action initiated in a timely manner. This weakness may have contributed to the recent problem concerning the use of an incorrect diaphragm on a HPCI system control valve. The vendor had issued a Service Information Letter (SIL) concerning the diaphrams; however, the licensee had not taken action to correct the problem.

b. Conclusions

The licensee had established management control systems to control procurement activities. These systems controlled procurement

activities implemented by the licensee and their contractors or agents. Implementation of the procedures had been accomplished in most cases. Weaknesses were identified in some procedures and in the storage and handling of components in the warehouse.

The performance category for the area of Procurement was considered to be Category Two.

11. Management Exit Interview

An exit meeting was conducted on May 13, 1982, at the Georgia Power Company Corporate Office with the licensee representatives identified in Attachment A.

The scope of the inspection was discussed, and the licensee was informed that the inspection would continue with further in-office data review and analysis by team members. The Team Leader discussed the issuance of an appraisal report, containing observations, and that the team would draw a conclusion for each functional area inspected and classify the management controls for each area as Category One, Category Two, or Category Three. The licensee was informed that a written response may be requested for any areas designated as Category Three. The licensee was also informed that some of the observations may become potential enforcement findings that would be presented to the NRC Senior Resident Inspector for further disposition. The team members presented their observations for each area inspected and responded to questions from the licensee representatives.

ATTACHMENT A

A. Persons Contacted

The following list identifies (by title) the individuals contacted during this inspection. The columns to the right of the listing indicate the areas for which that individual provided significant input. The number at the top of each column refers to a specific section of the report. Other individuals, including technical and administrative personnel, were also contacted during the inspection.

Title of Individual Corporate of Individual	2	3	4	5	6	7	8	9	10
President	x	x	x	x	x	x	x	x	
Executive Vice President, Power Supply	x	x				x			
*Senior Vice President, Power Generation	x			x				x	
*Vice President and General Manager, Nuclear Generation	x		x	x		x	x		
Senior Vice President, Engineering, Construction, and Project Management	x								
*Manager, Nuclear Planning and Control	x			x	x			x	
Manager, Engineering Services	x	x	x		x			x	x
*Manager, Quality Assurance	x	x		x	x	x	x	x	x
*Manager, Nuclear Training				x		x	x		
*Project Manager, Engineering Service	x	x	x		x	x	x		x
Manager, Engineering		x		x		x		x	x
Supervisor, Engineering Technical Services			x						
*Vice President and Chief Engineer, Power Supply									x
*Vice President, Procurement and Materials									x
Manager, Power Generation Services									x
Manager, Purchasing									x
Manager, Procurement and Traffic									x
Manager, Procurement									x

	2	3	4	5	6	7	8	9	10
Supervisor, Nuclear Procurement Standards									x
Supervisor, Technical Specialization									x
Supervisor, Technical Services									x
QA Project Coordination Engineer	x	x			x				x
Engineering Services Project Coordination Engineer									x
Chief Engineers (3)		x		x		x		x	x
Senior QA Field Representative		x				x			
Senior Design Engineers		x	x			x			x
Design Engineers		x	x			x			
Associate Engineers			x						
Power Generation Engineer			x		x				x
S1213 Members (4)	x								
*Chairman Safety Review Board	x	x				x			
Nuclear Licensing Engineer					x		x		

Plant Hatch

	2	3	4	5	6	7	8	9	10
*Plant Manager	x	x		x	x	x	x	x	x
Assistant Plant Manager (2)	x			x	x		x	x	x
Superintendent, Operations	x	x		x	x	x	x	x	
Superintendent, Maintenance	x	x		x		x		x	
Superintendent, Training		x				x	x		
Superintendent, Plant Engineering and Services			x	x			x		
Superintendent, Regulatory Compliance	x		x						
Supervisor, Engineering			x	x				x	x
Supervisor, Instrumentation and Control (2)				x	x			x	
Supervisor, Operations	x		x		x		x		
Supervisor, Maintenance (2)				x		x	x	x	
Supervisor, Quality Control		x	x	x		x		x	x
Site Supervisor, Quality Assurance	x	x	x			x			
Superintendent, Health Physics				x				x	
Field Supervisor, Quality Assurance	x	x		x		x		x	x
Supervisor, Training								x	
Supervisor, Plant Materials									x
Maintenance Foreman				x				x	x
QA Field Representative (3)		x		x		x		x	x
Plant Engineer (10)			x	x				x	x
QC Specialist	x			x				x	x
Shift Supervisor (3)	x		x		x			x	
Shift Foreman (4)			x	x	x		x		
Plant Operator (3)	x	x	x	x	x	x	x	x	
Assistant Plant Operator (4)			x	x	x		x	x	
Plant Equipment Operator (2)				x	x		x	x	
Mechanic (2)		x		x		x		x	
Electrician (2)		x		x		x		x	
Technician (4)				x				x	
Shift Technical Advisor (2)					x		x		
Supervisor, Security		x				x			
Supervisor, Health Physics	x	x				x			
Materials Foreman									x
Storekeeper (3)									x
Warehouseman (2)									x

*Attended exit meeting on May 13, 1982

B. Documents Reviewed

The documents listed below were reviewed by the inspection team members to the extent necessary to satisfy the inspection objectives stated in Section 1 of the report. The specific procedures referenced in the report are listed by title and revision number, if applicable, when they first appear.

(1) Technical Specification (TS), Section 6.0, Administrative Controls
(2) Final Safety Analysis Report (FSAR)
(3) GPC Quality Assurance Manual
(4) Safety Review Board (SRB) Charter
(5) Plant Review Board (PRB) Charter
(6) Hatch Nuclear Plant Procedures (HNPs)
(7) Quality Assurance Procedures
(8) SRB Procedures
(9) Corporate and Site Organization Charts
(10) Management Procedures
(11) TS Surveillance Master Data Base
(12) Nuclear Manpower Planning Book
(13) Corporate Plan
(14) Generation Department Plan
(15) Hatch Plan
(16) Southern Company Services Policy and Procedures Manual
(17) Southern Company Nuclear Fuel QA Program
(18) Southern Company Services QA Department Procedures
(19) Nuclear Procurement Standards
(20) Engineering and Service Department Procedures
(21) Procurement Supplies Quality Manual
(22) GPC Qualified Suppliers List, April 1982
(23) Hatch Spare Parts Supplier Evaluation Program
(24) Nuclear Training Plan and Policy Handbook
(25) Selected Maintenance Requests (MRs)
(26) Selected Licensee Event Reports (LERs)
(27) Selected QA Audit Reports
(28) Selected QC Non-Conformance Reprots
(29) Selected Deviation Reports (DRs)
(30) Selected Design Change Requests (DCRs)
(31) Selected Logs and Checklists
(32) Monthly Management Meeting Reports
(33) Summaries of NRC and QA Open Items
(34) Selected SRB Audit Reports
(35) Selected SRB Subcommittee Reports
(36) Selected SRB and PRB Meeting Minutes (1980, 1981 and 1982)
(37) Selected Personnel Training Records
(38) Selected Training Plans, Guides, and Checklists
(39) Plant Hatch Training Administrative Instructions
(40) Selected Operational Experience Assessment Reports
(41) Records and Correspondence of the SRB and PRB
(42) Selected Personnel Position Descriptions