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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

GPC II-204
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USNRC

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OFFICE OF SECRETARY
DOCKETING & SERVICE
SPACE

Docket Nos. 50-424, 50-425
License Nos. NPF-68, NPF-81

Georgia Power Company
ATTN: Mr. W. G. Hairston, III
Senior Vice President -
Nuclear Operations
P. O. Box 1295
Birmingham, AL 35201

Gentlemen:

SUBJECT: SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE
(NRC INSPECTION REPORT NOS. 50-424/90-23 AND 50-425/90-23)

The NRC Systematic Assessment of Licensee Performance (SALP) has been completed for your Vogtle facility. The facility was evaluated for the period of October 1, 1989 through September 30, 1990. The results of the evaluation are documented in the enclosed Initial SALP Report. This report will be discussed with you at a public meeting to be held at the Vogtle facility in Waynesboro, Georgia, on December 18, 1990, at 10:00 a.m.

The performance of your Vogtle facility was evaluated in the functional areas of Plant Operations, Radiological Controls, Maintenance/Surveillance, Emergency Preparedness, Security, Engineering/Technical Support, and Safety Assurance/Quality Verification. Overall, the assessment indicates that the Vogtle facility was operated in a safe manner. Radiological Controls practices were noted as being superior. However, demonstrated performance deficiencies in the Security and Emergency Preparedness areas indicate a need for continued aggressive and extensive management attention.

The loss of vital ac power event on March 20, 1990, and the resultant declaration of a Site Area Emergency was the dominant operational occurrence during this rating period. While the immediate response of site personnel was effective in precluding the endangerment of the public, performance deficiencies were identified. You have initiated an extensive corrective action program to correct the shortcomings and preclude their recurrence. It is essential that this program be continued and that the lessons learned be integrated into your daily operational activities.

A special NRC team inspection was performed in August 1990, to determine whether the facility was being operated in a safe manner. Based upon this inspection it was determined that Vogtle was being operated in a safe manner, but there were operational practices where weaknesses were identified. The results of this special team inspection will be transmitted under separate correspondence.

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NUCLEAR REGULATORY COMMISSION

Docket No. 50-424/425-OLA-3 EXHIBIT NO. II-204
In the matter of Georgia Power Co. et al., Vogtle Units 1 & 2
 Staff Applicant Intervenor Other _____
 Identified Received Rejected Reporter ST
Date 9/27/90 Witness SKINNER / HOOD / MATTHEWS

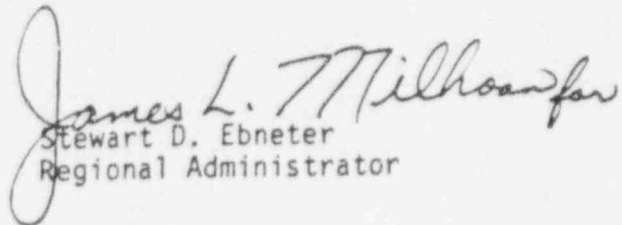
DEC 10 1990

The great diversity of categorical ratings within this report indicate that firm management is needed to ensure uniform, consistent guidance for operating the facility. NRC inspection efforts over the next SALP period will focus on evaluating whether this consistency is developed.

Any comment you have concerning our evaluation of the performance of your Vogtle facility should be submitted to this office within 30 days following the date of our meeting. These comments will be considered in the development of the Final SALP Report. Your comments and a summary of our meeting will be issued as an appendix to the Final SALP Report.

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,


Stewart D. Ebnetter
Regional Administrator

Enclosure:
Initial SALP Report - Vogtle

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(cc w/encl cont'd - see page 3)

ENCLOSURE
INTERIM SALP BOARD REPORT

U. S. NUCLEAR REGULATORY COMMISSION
REGION II

SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE
INSPECTION REPORT NUMBERS
50-424/90-23 AND 50-425/90-23

GEORGIA POWER COMPANY

VOGTLE, UNITS 1 AND 2

OCTOBER 1, 1989 THROUGH SEPTEMBER 30, 1990

I. INTRODUCTION

The Systematic Assessment of Licensee Performance (SALP) program is an integrated NRC staff effort to collect available observations and data on a periodic basis and to evaluate licensee performance on the basis of this information. The program is supplemental to normal regulatory processes used to ensure compliance with NRC rules and regulations. It is intended to be sufficiently diagnostic to provide rational basis for allocation of NRC resources and to provide meaningful feedback to the licensee's management regarding the NRC's assessment of their facility's performance in each functional area.

An NRC SALP Board, composed of the staff members listed below, met on November 20, 1990, to review the observations and data on performance, and to assess licensee performance in accordance with the guidance in NRC Manual Chapter NRC-0516, "Systematic Assessment of Licensee Performance". The Board's findings and recommendations were forwarded to the NRC Regional Administrator for approval and issuance.

This report is the NRC's assessment of the licensee's safety performance at the Vogtle Units 1 and 2 for the period October 1, 1989 through September 30, 1990.

The SALP Board for Vogtle was composed of:

- L. A. Reyes, Director, Division of Reactor Projects (DRP), Region II (RII) (Chairperson)
- A. F. Gibson, Director, Division of Reactor Safety, (DRS), RII
- B. S. Mallett, Deputy Director, Division of Radiation Safety and Safeguards, (DRSS), RII
- A. R. Herdt, Chief, Reactor Projects Branch 3, DRP, RII
- D. B. Matthews, Director, Project Directorate II-3, Office of Nuclear Reactor Regulation (NRR)
- D. Hood, Project Manager, Project Directorate II-3, NRR
- B. P. Bonser, Senior Resident Inspector, Vogtle, DRP, RII

Attendees at SALP Board Meeting:

- K. E. Brockman, Chief, Project Section 3B, DRP, RII
- S. E. Sparks, Project Engineer, Project Section 3B, DRP, RII
- R. F. Aiello, Resident Inspector, Vogtle, DRP, RII
- R. D. Starkey, Resident Inspector, Vogtle, DRP, RII
- G. R. Wiseman, Reactor Engineer, Technical Support Staff, DRP, RII

II. SUMMARY OF RESULTS

During this assessment period, Vogtle has been operated in a safe manner. Plant management has maintained an active involvement in directing daily plant operations. Concern has been expressed over the licensee's

commitment to fostering effective communications channels, both with the NRC and within its own organization. Also, operational occurrences and inspections have identified the licensee's commitments to conservative operations and implementation of effective risk management as areas requiring continuing attention.

On March 20, 1990, the site experienced a loss of vital ac power which resulted in the loss of all shutdown cooling for a period of 36 minutes. Overall, the response of the plant staff was successful in ensuring the health and safety of the public was maintained. However, numerous shortcomings were identified in areas such as procedural adequacy, command and control, and outage management.

Performance in the area of Radiological Controls continued to be very effective. A reduction in the number of personnel contamination events and a decrease in contaminated area was observed. The program to control and quantify radioactive effluents, as well as the program to reduce the number of out-of-service channels in process and effluent monitors, was considered a strength.

Satisfactory performance was identified in the Maintenance/Surveillance area. Improvements were noted in preventive and predictive maintenance programs. The material condition of the plant is being greatly improved. However, inadequacies were identified in the safety system outage program philosophy. Technical Specification (TS) surveillances also continued to be missed. Maintenance activities contributed to four reactor trips during the assessment period.

The March 20 event identified significant problems in the Emergency Preparedness area, as demonstrated by the site's failure to make timely notifications to emergency agencies, event classification procedure weaknesses, loss of command and control, and personnel accountability problems. Management attention and corrective actions were evident during the subsequent annual exercise.

The licensee continued to experience significant difficulties in the area of control and protection of safeguards information. Some improvement was noted in the security program in the areas of training, armed response capability, and search equipment. However, corrective actions to resolve weaknesses have been slow. Inadequacies were also identified in alarm assessment capabilities and the manner in which contingency drills were conducted.

Engineering/Technical Support effectiveness was inconsistent during the assessment period. Site engineering involvement in daily activities was evident, control over the design change process was demonstrated, and engineering evaluations were typically comprehensive. However, several engineering deficiencies were noted during the assessment period, such as drawing legibility, check valve testing, and recurring Emergency Diesel Generator (EDG) temperature switch problems. Communications between the

Overall, operational performance during the assessment period was adequate. Licensed and non-licensed operators displayed competence in performing their duties. Normal shift staffing levels exceeded TS requirements. However, past attrition of licensed operators prevented the licensee from attaining their goal of assigning extra personnel to shift coverage. In response, early in this SALP period, the licensee instituted a cash incentive program to promote licensed operator retention. While attrition during the past year has been low, whether this incentive program has resulted in a long term correction has yet to be determined.

Operators continued to display a professional attitude toward their responsibilities while maintaining a good control room demeanor. They were attentive to annunciators and knowledgeable of changing plant conditions. Turnover checklists were thorough and detailed. Shift crew briefings were adequate and provided necessary plant status for the oncoming crew. During the assessment period, Reactor Operators adopted the use of a twelve-hour shift schedule, resulting in improved continuity, fewer shift turnovers, and better implementation of the team concept. Control room log book entries were legible and accurately reflected plant status. An exception to good log keeping was identified with EDG start failures. Numerous EDG start failures were not considered to be valid and were, therefore, not appropriately logged. Proper logging of the EDG response could have led to an earlier recognition of the EDG air start valve problem discussed in Section IV.G.

The most significant operational event of the assessment period occurred on March 20, 1990, when Unit 1 experienced a loss of all safety (vital) ac power. In response to this event, an Augmented Inspection Team (AIT) was dispatched to the site on March 21, 1990. This inspection effort was subsequently upgraded to an Incident Investigation Team (IIT) which culminated in the issuance of NUREG-1410.

Overall, the plant staff's response to the event was successful in minimizing the threat to public health and safety. Aggressive actions were taken to re-establish shutdown cooling and containment integrity. Both short-term and long-term alternatives were pursued by the plant staff in trying to restore vital electrical power. However, numerous shortcomings were identified during the event. No procedures existed to assist the staff in re-establishing vital ac power from potential sources such as the non-vital buses, or Unit 2. Long-standing deficiencies in the protective trip system for the EDGs were discovered. Application of effective risk management

in the licensee's outage management philosophy was brought into question (Section IV.F). The ability of the licensee to accurately reconstruct the details of the event and to communicate these details and other information to the Commission was poor.

During this assessment period, one incident occurred in which operations personnel made decisions and took actions without sufficient support or input from either the applicable onsite or offsite organizations. This incident occurred during the Unit 1 refueling startup when shutdown bank E dropped to zero steps from a withdrawn position. Operations performed trouble-shooting activities and resumed the control bank worth measurements without obtaining any technical input from other plant groups for establishing proper procedural controls.

During the last two SALP periods, problems were identified within the Operations area concerning attention to detail. These problems have continued as exemplified by decisions to make a Mode change while in an LCO Action Statement, and by the removal of both trains of Containment Spray from service during a Mode which required one train to be operable.

Operations management continued to have an active involvement in daily plant operations. Daily operations status meetings were attended by both site and corporate management. This has promoted open discussions between all department managers concerning plant status. A general area of concern throughout this SALP period has been communications between management and the NRC. These communication channels have recently improved as was evidenced by an increase in licensee management interface with the resident inspectors on information regarding potential regulatory issues and maintenance problems. An additional example of management involvement has been the Management Observation Program. This program, which includes mandatory field observations by all levels of plant managers, has provided a formal means for management to evaluate plant activities.

During a Unit 1 walkdown conducted by an NRC inspector, several valves were identified as missing their label tags. This was the result of plant personnel failing to initiate actions to replace the tags in accordance with plant procedures. The licensee is currently conducting a retagging effort to resolve these discrepancies in Unit 1, scheduled to be completed in 1991. Labeling in Unit 2 was observed to be adequate. Based on inspector walkdowns, housekeeping was determined to be satisfactory.

transfer of data between the scheduling program and the work order database, and providing a method for closing the containment equipment hatch during loss of all power conditions. Furthermore, the sequence for performing the Engineered Safety Features Actuation System (ESFAS) testing and associated EDG inspections has been moved to the beginning of the outage to include as much safety equipment testing as possible.

An additional area of concern identified during this SALP period was the inadequacy of communications between the various technical departments supporting the plant. The March 20 event displayed this inadequacy in three ways - the use of incore thermocouples by the operating staff which were not indicative of core conditions, the discovery of a construction error on the Unit 2 main turbine differential overcurrent relay setting, and the inability to close the Unit 1 containment equipment hatch as required. This was further exemplified by the NRC identified condition where containment integrity was not maintained during hydrogen analyzer testing. In all three cases, lack of effective interdepartmental exchanges of information were contributing factors to these problems. However, there were instances of effective interdepartmental cooperation. An example was ESFAS testing, where site engineering's involvement in daily management meetings helped enhance communications and allowed the test to be conducted effectively.

During the last assessment period, communications between the corporate engineering staff and the NRC displayed some weaknesses. Since that time, communications have been good. This was demonstrated in the licensee's interface with the NRC on technical issues, including the surge line stratification and the Ten-year Interval ISI Program.

A strong licensed operator training program was demonstrated by the initial and requalification examination results. Initial examinations were administered to 16 Senior Reactor Operators (SROs) with 16 SROs passing. The requalification training program was rated as satisfactory based on a 94 percent pass rate. Six of 6 Reactor Operators (ROs), 10 of 11 SROs, and 4 of 4 crews passed requalification examinations. The simulator was upgraded to resolve modeling deficiencies identified in the previous assessment period. The simulator was on schedule for certification in late 1990.

The actions of the operators during the March 20 event also demonstrated the adequacy of the training program. Core exit thermocouple and water level indications were closely monitored so that core conditions could be evaluated. EOPs and AOPs were effectively used. However, some training deficiencies were