



7240005

RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) REQUEST

FOIA - 91-468

RESPONSE TYPE

FINAL

PARTIAL

DATE

DEC - 4 1991

DOCKET NUMBER (SEE TOP OF PAGE)

REQUESTER

Mr. J. Lamberski

PART I - AGENCY RECORDS RELEASED OR NOT LOCATED (See checked boxes)

No agency records subject to the request have been located.

No additional agency records subject to the request have been located.

Requested records are available through another public distribution program. See Comments section.

Agency records subject to the request that are identified in Appendix(es) _____ are already available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.

Agency records subject to the request that are identified in Appendix(es) A are being made available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number.

The nonproprietary version of the proposal(s) that you agreed to accept in a telephone conversation with a member of my staff is now being made available for public inspection and copying at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number.

Agency records subject to the request that are identified in Appendix(es) _____ may be inspected and copied at the NRC Local Public Document Room identified in the Comments section.

Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.

Agency records subject to the request are enclosed.

Records subject to the request have been referred to another Federal agency(ies) for review and direct response to you.

Fees

You will be billed by the NRC for fees totaling \$ _____

You will receive a refund from the NRC in the amount of \$ _____

In view of NRC's response to this request, no further action is being taken on appeal letter dated _____, No. _____

PART II. A - INFORMATION WITHHELD FROM PUBLIC DISCLOSURE

Certain information in the requested records is being withheld from public disclosure pursuant to the exemptions described in and for the reasons stated in Part II, B, C, and D. Any released portions of the documents for which only part of the record is being withheld are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC in a folder under this FOIA number.

COMMENTS

This is a partial response. Review of other relevant documentation is ongoing.

SIGNATURE, DIRECTOR, DIVISION OF FREEDOM OF INFORMATION AND PUBLICATIONS SERVICES

9208060220 911204
PDR FOIA
LAMBERS91-468 PDR

APPENDIX A

RECORDS ENCLOSED

<u>NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION</u>
1.	3/20/90	Presentation to Region II, NRC, on Vogtle Site Area Emergency (12 pages)
2.	5/14/90	Letter to NRC from W. G. Hairston, III, re Corrective Actions for Site Area Emergency with enclosure (6 pages)
3.	6/21/90	Memo to T. Murley, et al., from J. M. Taylor, re Staff Actions Resulting from the Investigation of the March 20, 1990 Incident at Vogtle Unit 1 (NUREG-1410) with annotations with enclosure (12 pages)
4.	6/21/90	Memo to T. Murley, et al., from J. M. Taylor, re Staff Actions Resulting from the Investigation of the March 20, 1990 Incident at Vogtle Unit 2 (NUREG-1410) with annotations with enclosure (10 pages)
5.	6/28/90	Memo to J. M. Taylor from S. J. Chilk, re Staff Requirements - Briefing on IIT Report on Vogtle Event, 10:00 A.M., Friday, June 8, 1990, Commissioners' Conference Room, One White Flint North, Rockville, Maryland (2 pages)
6.	7/25/90	Memo to J. M. Taylor from E. L. Jordan, Re Staff Actions in Response to Vogtle IIT Findings (NUREG-1410) (3 pages)
7.	8/8/90	Memo to S. D. Ebnetter from E. L. Jordan, re Closeout of Staff Action 4.b (2) in Response to Vogtle IIT Findings (NUREG-1410) (1 page)

APPENDIX A

RECORDS ENCLOSED

<u>NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION</u>
8.	9/24/90	Memo to R. F. Fraley from J. M. Taylor, re 364th ACRS Meeting Follow-Up items with enclosure (2 pages)
9.	11/29/90	Memo to T. E. Murley from E. L. Jordan, re Evaluation of Policy for Determining When the NRC Will Enter the Standby Mode (5 pages)
10.	1/9/91	Memo to R. Lloyd from K. E. Brockman, re Plant Specific Actions from the Investigation of the March 20, 1990 incident at Vogtle Unit 1 (NUREG-1410) with enclosures (47 pages)
11.	1/10/91	Memo to J. M. Taylor from S. D. Ebnetter, re Plant-Specific Staff Actions from the Investigation of the March 20, 1990 Incident at Vogtle Unit 1 with enclosures (NUREG-1410) (7 pages)
12.	1/22/91	Memo to J. M. Taylor from E. L. Jordan, re Status of AEOD Actions Resulting from the Investigation of the March 20, 1990 Incident at Vogtle Unit 1 (NUREG-1410) with enclosure (3 pages)
13.	1/22/91	Memo to J. M. Taylor from E. L. Jordan, re Status and Closeout of Staff Action 5(b) Resulting from Vogtle Incident Investigation (3 pages)
14.	1/30/91	Plans and Status for Resolution of Vogtle IIT Staff Action Items (9 pages)

APPENDIX A

RECORDS ENCLOSED

<u>NUMBER</u>	<u>DATE</u>	<u>DESCRIPTION</u>
15.	2/26/91	Memo to D. Hood, et al., from R. L. Spessard, re ACRS Briefing on Status of Staff Follow-up Actions Resulting from the Investigation of the March 20, 1990 Incident at Vogtle Unit 1 (NUREG-1410) with enclosure (13 pages)
16.	3/25/91	Memo to D. Ward from R. L. Spessard, re ACRS Briefing on Status of Staff Follow-up Actions Resulting from the Investigation of the March 20, 1990 Incident at Vogtle Unit 1 (NUREG-1410) with enclosure (15 pages)
17.	4/11/91	Status Report on the Vogtle IIT Staff Actions (26 pages)

TROUTMAN, SANDERS, LOCKERMAN & ASHMORE

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

ATTORNEYS AT LAW

CANDLER BUILDING, SUITE 1400

127 PEACHTREE STREET, N.E.

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JOHN LAMBERSKI

WRITER'S DIRECT DIAL NUMBER

404-558-8442

October 22, 1991

Mr. Donnie H. Grimsley, Director
Division of Freedom of Information
and Publications Services
Office of Administration
U. S. Nuclear Regulatory Commission
Washington, DC 20555

FREEDOM OF INFORMATION
ACT REQUEST

FOIA 91-468

Rec'd 10 29 91

Re: Freedom Of Information Act Request

Dear Mr. Grimsley:

I hereby request, pursuant to the federal Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, as amended, and Nuclear Regulatory Commission ("NRC") regulations, 10 C.F.R. Part 9, copies of all "records" as defined in 10 C.F.R. § 9.13 which formed the basis of the NRC's April 12, 1990 letter from Mr. Stewart D. Ebnetter (NRC Region II Administrator) to Mr. W. George Hairston, III (Georgia Power Company) entitled "Completion of Confirmation of Action Letter Commitments." Additionally, I request a copy of all records, as defined above, constituting or relating to any internal NRC Task Interface Agreement(s) addressing follow-up NRC actions in connection with the NRC's review of the March 20, 1990 loss of off-site power event at the Vogtle Electric Generating Plant (see attached NRC Staff Guidelines Concerning Plant Restart Approval, dated November 23, 1988, Part I, item 3).

For your information, I believe that records encompassed by this FOIA request are or were in the possession of Mr. Stewart D. Ebnetter (Region II), Mr. Kenneth E. Brockman (Region II), Mr. Rick Kendall (NRR) and Mr. Alfred E. Chaffee (Region V).

I am willing to pay the applicable charges for production of the requested records in accordance with 10 C.F.R. Part 9 up to a maximum amount of \$1000.00 and those charges in excess of \$1000.00 of which I am notified, and which I approve, in advance.

If you have any questions concerning this FOIA request, please feel free to contact me.

Very truly

John Lamberski

400-2802



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30322

APR 2 1990

Docket No. 50-424
License No. NPF-68

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

Gentlemen:

SUBJECT: COMPLETION OF CONFIRMATION OF ACTION LETTER COMMITMENTS

In a letter from the NRC to Georgia Power Company (GPC), subject "Confirmation of Action Letter," dated March 23, 1990, certain matters were agreed to be completed prior to Vogtle, Unit 1, reattaining criticality. Additionally, your commitments concerning the needs and requirements of the Incident Investigation Team dispatched to review the March 20, 1990, loss of vital AC power event on Unit 1, were delineated. This letter confirms the satisfactory resolution of item number 1 and documents the Regional Administrator's concurrence that appropriate corrective actions have been taken and the plant can safely return to operation.

On April 9, 1990, Georgia Power Company briefed GPC management on their event critique results and the short- and long-term corrective actions they plan to implement. These items were specified in a letter from GPC to the NRC, dated April 9, 1990, and included additional items which GPC has committed to submit to the NRC.

Based upon the information provided by GPC and the short-term actions which have been implemented, Georgia Power Company is authorized to return Unit 1 to Mode 2, attain criticality, and proceed to subsequent power operation. Items 2-5 of the March 23, 1990, Confirmation of Action Letter remain applicable and are not relieved by this letter.

If your understanding differs from that set forth above, please call me immediately.

Sincerely,

Stewart D. Ebnetter
Regional Administrator



CAL-50-424/90-01

cc: (See page 2)

900424/35

APR 12 1990

cc: IIT Leader
NPC Office Directors
Regional Administrators

R. P. McDonald
Executive Vice President-Nuclear
Operations
Georgia Power Company
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Birmingham, AL 35201

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Vice President-Nuclear
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General Manager, Nuclear Operations
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Waynesboro, GA 30830

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Trowbridge
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Washington, D. C. 20037

J. E. Joiner, Esquire
Troutman, Sanders, Lockerman, and
Ashmore
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127 Peachtree Street, NE
Atlanta, GA 30303

D. Kirkland, III, Counsel
Office of the Consumer's
Utility Council
Suite 225, 32 Peachtree Street, NE
Atlanta, GA 30302

(cc cont'd - see page 3)

APR 12 1990

cc: (Continued)
Office of Planning and Budget
Room 615B
270 Washington Street, SW
Atlanta, GA 30334

Office of the County Commissioner
Burke County Commission
Waynesboro, GA 30830

J. Leonard Ledbetter, Director
Environmental Protection Division
Department of Natural Resources
205 Butler Street, SE, Suite 1252
Atlanta, GA 30334

Attorney General
Law Department
132 Judicial Building
Atlanta, GA 30334

State of Georgia

NOV 28 1988

PDR

MEMORANDUM FOR: NRC Office Directors
 NRC Regional Administrators

FROM: Victor Stello, Jr.
 Executive Director for Operations

SUBJECT: STAFF GUIDELINES CONCERNING PLANT RESTART APPROVAL

In my memorandum of July 21, 1988, guidelines regarding management of the staff's activities associated with plant restart approval were issued. The enclosure expands these guidelines to include general criteria on the issues to be considered during the staff's evaluation.

Original signed by
 Victor Stello, Jr.

Victor Stello, Jr.
 Executive Director
 for Operations

Enclosure:
 Plant Restart Approval Guidelines

DISTRIBUTION

Central File
 EDO Reading Stello
 PDI-2 Reading Taylor
 JBlaha PDR
 TMurley
 JSniezek
 DCrutchfield
 SYirga/BBoger
 JHaltamac, AEOD
 WButler
 RMartin/RClark
 MO'Brien
 Drossburg (WITS 880114)

*Previously Concurred

PDI-2/PH*
 RMartin:mr
 10/26/88

PDI-2/D*
 WButler
 10/26/88

BBoger
 10/27/88

TRPV/II*
 SYirga
 10/28/88

DCrutchfield
 11/3/88

JSniezek
 11/11/88

TMurley
 11/11/88

EDO
 VStello
 1/1/88

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STAFF GUIDELINES CONCERNING PLANT RESTART APPROVAL

This paper establishes the framework for the authorization of the restart of a nuclear power plant, after a voluntary or involuntary shutdown due to a significant event or serious management deficiencies. No attempt is made to precisely define these terms, and judgement as outlined below is needed. The guidelines presented (1) provide for more effective coordination of NRC resources between Regions and Headquarters, (2) clarify responsibilities, and (3) ensure that there is consistency in the actions of NRR and Regional management personnel involved in major NRC decisions directly affecting licensees.

Licensed commercial nuclear power plants are shutdown, voluntarily or not, for a variety of reasons. When a plant is shutdown for reasons stemming from license conditions or technical specifications, the licensee normally can develop and implement a clearly defined correction plan; when the criteria of this plan are met, the plant is allowed to restart without special authorization from NRC. However, plants occasionally are in a shutdown condition as a result of a significant event or serious management deficiencies. These are the cases at which this statement is directed. Examples of this type of shutdown include plants that were shut down because of performance problems during the past few years; e.g., Sequoyah, Browns Ferry, Rancho Seco, Pilgrim and Peach Bottom.

The NRC has reacted to these types of facility shutdowns in a variety of ways depending on the severity of the event that led to the shutdown. Historically, the NRC has approached each event individually, and an individual plan of action has evolved. The results have been satisfactory, but the process has not been approached in a uniform manner. The guidelines presented in this statement will ensure that (1) NRR and Regions will be appropriately involved in all restart decisions and (2) the NRC will present a unified position to the licensees. However, because each plant shutdown situation is different, a detailed generic procedure for restart approvals is not appropriate.

The general guidelines for NRC reaction to the events of concern are provided in two parts. Part one deals with the management of the staff's activities associated with the restart review efforts and part two deals with the various issues that are considered in the reviews.

Part I

1. When a Region believes that a particular situation at a plant represents a significant event or serious management deficiencies warranting increased regulatory attention, the Region should discuss the issue with NRR. Except for special circumstances, the initial discussion should be between the appropriate Region management and the NRR Division Director for Operational Events Assessment (DOEA). The discussion should include a

description of the event or circumstances, as well as the Region actions already taken, and proposed future actions. Potential NPC reactions could include the establishment of an Incident Investigation Team (IIT), Augmented Inspection Team (AIT), a Regional Assessment Team (RAT), or a special inspection, and including, as appropriate, the need for a Confirmatory Action Letter or Order. All of these individual reactions would be conducted in accordance with appropriate standard office policies, procedures, and Manual Chapters. Special circumstances involve significant, rapidly occurring events, where discussions could be initiated directly at the level of the Regional Administrator, the Director, NRR, or the DEDRO.

2. The NRR Division Director for Operational Events Assessment will promptly notify the appropriate NRR Projects Division Director of the results of the discussion with the Region. The focal point for discussions within the NRC for follow-up actions will be the appropriate Projects Division Directors in the Region and in NRR. They will coordinate participation in conference calls and management discussions to ensure that the Regional Administrator and the Director, NRR, are directly involved in important decisions. The Project Divisions will coordinate and carry out the actions prescribed in the follow-up plan.
3. After the Region and NRR decide on a course of action, including notification of the EDO and Commission as appropriate, the respective Projects Divisions will jointly initiate a Task Interface Agreement (TIA) to document the assignment of responsibility for follow-up actions. For rapidly occurring events leading to a quick restart of a plant, the coordination between the Region and NRR may be done orally. However, for events that take more than about a week to resolve, a formal TIA should be drafted. Elements of the TIA should include the following:
 - a. The TIA format must be flexible to account for the diverse nature of events. However, all TIA's should define (1) what must be accomplished, as a minimum, to authorize plant restart, (2) who has lead responsibility for each action, and (3) who has responsibility for actual plant restart authorization.
 - b. The TIA should fully document all actions that must be taken before a plant is authorized to restart, even if they are not related to the initiating event.
 - c. The Commission needs to be kept adequately informed of the staff's restart actions on a continuing basis. The TIA will document lead responsibility within the agency for interactions with the Commission. The lead office will keep the Commission informed of the staff's and licensee's restart actions through the use of Commission papers, daily reports, and/or verbal communications via the EDO. Based on these staff/Commission interactions, the need for Commission briefings will be determined by the circumstances and

Commission desires. However, the staff should anticipate Commission briefings with licensee participation (a) after a corrective plan is agreed to and implemented, (b) about a month before plant restart is anticipated, and (c) a few days prior to the scheduled restart. At the anticipated final briefing, the NRC staff would be required to give the staff position as to their basis for recommending or not recommending restart. The Commission will express its views concerning restart at any time during the process, but normally a formal vote is not taken until the last briefing.

Part II

1. Licensee Restart Plan: Root Cause Identified and Corrected

First, the root cause of the event or conditions requiring the shutdown must be properly identified. Then the root cause of the event or conditions requiring the shutdown must be addressed by a comprehensive corrective action plan which addresses all applicable issues. The plan must carry the issues through their corrective action, implementation and verification phases.

The above actions are taken by the facility licensee. The NRC reviews and determines the acceptability of these actions to support safe operations using any or all of the tools available to it in the regulatory program. These could include any or all of the following: a Headquarters staff review, SALP, the inspection program including regular inspections, specialist inspections or team inspections and enforcement conferences. Resulting actions are set forth in safety evaluations, license amendments, orders, confirmatory action letters, inspection reports, enforcement documents, etc. The staff's review includes the applicable areas outlined below.

2. Licensee Management Organization

The licensee's management organization is reviewed to ensure that the proper environment and resources are provided to ensure that the problems and their root causes have been rectified. The organization must demonstrate that it can coordinate, integrate and communicate its objectives so that they are appropriately prioritized for safety significance and are achieved in a timely manner.

This requires an appreciation on the part of that management, of what the safety issues are, coupled with a positive attitude toward ensuring that they are resolved. This in turn requires that personnel with adequate qualifications and experience be provided for all key management positions. The resulting organization should: (a) exhibit good teamwork among its subelements; (b) provide strong engineering support for plant activities; (c) have the internal ability to recognize safety problems, develop adequate corrective actions, and verify their implementation and effectiveness; and (d) have an independent self-assessment capability that can identify situations not sufficiently dealt with by the regular functioning of the principal organization.

3. Plant and Corporate Staff

The operations staff must recognize and carry out their responsibilities in ensuring public health and safety as required of them by their individual licenses as well as by the facility license to operate the plant. These responsibilities must be met while working within the environment established by the licensee's management as discussed above.

This, in turn, requires that an adequate number of formally qualified licensed operators be provided. A positive proactive attitude towards safety issues should be demonstrated across the board in all aspects of operations. In this regard operators should display attentiveness to duty, fitness for duty, a disciplined approach to activities, a sensitivity for trends on what is happening in the plant, security awareness, and an openness of communications and desire for team work which supports effective relations between different groups (e.g., management, operations, health physics, maintenance, security, contractors).

4. Physical State of Readiness of the Plant

This is of principal importance for those cases where the reason for the shutdown was based on a physical event or deficiency but it is also important for other types of events as well.

For equipment problems the cause should be identified and appropriate corrective actions taken in the manner discussed in (1) above. These issues will warrant a strong focus on the pre-operational or initial operational testing which verifies that the problem is resolved. For complex issues this testing program may also be complex and of an extended duration.

For other types of problems as well as equipment problems the complete spectrum of pre-operational and startup testing programs may need to be expanded to consider the more complex types of problems or to consider the effects on plants which have been shut down for extended periods.

The licensee should be able to demonstrate that all needed safety equipment is operational prior to the restart without excessive reliance on the minimum levels of equipment availability permitted by technical specification Limiting Conditions for Operation. Surveillance tests should also be up to date without excessive reliance on the minimum level of testing permitted by TS.

The maintenance backlog should be reduced to nominal levels which do not reflect chronic problems with equipment readiness nor postponement of long unmet needs.

Procedures should be updated and plant staff trained to reflect resolution of the issue at hand as well as any extensive long unmet needs. For example, procedures which conflict with other procedures or with the as-built plant, procedures which have not undergone their periodic review, or procedures which do not reflect "the way it is really done" should be considered for updating.

The as-built design of the plant should be known to agree with the safety design basis including analyses, drawings, etc. In some cases, especially for some of the older plants, fully documented design bases may not be available. For these cases, reliance on engineering judgement may be appropriate.

5. Other Agencies, Government Organizations, the Public

The decision to restart should consider the need for formal action prior to restart as well as the value of effective relations with other Federal agencies such as FEMA, DOJ, state and local government representatives and interested members of the public.

For example, this may include the need for action on the Emergency Plan by FEMA, responses to correspondence to state Governors or members of Congress and responses to 2,206 Petitions.

6. "Legal" Requirements

Notwithstanding all of the above, the plant and its prospective operation is not known to be in conflict with any regulations (GDC, etc.) and all requirements of any document authorizing restart (license amendments, orders, etc) are expected to be met.

Restart would not conflict with any matter before a Hearing Board.

Georgia Power Company
333 Piedmont Avenue
Atlanta, Georgia 30308
Telephone 404 526 3195

Mailing Address
40 Inverness Center Parkway,
Post Office Box 1295
Birmingham, Alabama 35201
Telephone 205 868 5581

05-333 90
1

THE SOUTHERN ELECTRIC SYSTEM

W. G. Hairston, III
Senior Vice President
Nuclear Operations

May 14, 1990

ELV-01632
0379

Docket No. 50-424
50-425

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Re: Correspondence ELV-01516, dated 4-9-90

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

Georgia Power Company hereby submits a summary of the corrective actions resulting from the Site Area Emergency, as indicated in the referenced letter.

Should you have questions, please inquire.

Sincerely,

W. G. Hairston III
W. G. Hairston, III

WGH, III/NJS/gm

Attachment

cc: Georgia Power Company
Mr. C. K. McCoy
Mr. G. Bockhold, Jr.
Mr. R. M. Odom
Mr. P. D. Rushton
NORMS

U. S. Nuclear Regulatory Commission
Mr. S. D. Ebnetter, Regional Administrator
Mr. T. A. Reed, Licensing Project Manager, NRR
Mr. R. F. Aiello, Senior Resident Inspector, Vogtle

9005170134

A/2

ATTACHMENT

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

On March 20, 1990, a Site Area Emergency was declared due to a loss of offsite power concurrent with a loss of onsite Emergency Diesel Generator capability. In accordance with Vogtle Electric Generating Plant (VEGP) Procedures, an Event Review Team has investigated the events leading up to and following the Site Area Emergency. This review team identified four main issues associated with the event. These issues involved low voltage switchyard access controls, Diesel Generator failures, Emergency Plan implementation, and procedures for shutdown plant conditions. A summary of each issue and completed or planned corrective actions follows.

The cause of the event was a lack of attention on the part of the driver of the truck, compounded by inadequate procedural controls for access to the low voltage switchyard. Furthermore, while site procedures required a security officer to accompany the vehicle in the protected area, due to visibility restrictions he was unable to assist the driver.

To prevent this type of initiating event from recurring, the following corrective actions have been, or are being, implemented.

- o The truck driver was disciplined for lack of attention and alertness in backing the truck when visibility was impaired.
- o Although the Vogtle site safety manual required the use of flagmen for backing large trucks, this requirement had not been incorporated into site procedures. A memo has been issued to site personnel to ensure understanding of this policy and site procedures have been revised to incorporate this requirement. The use of flagmen will be added to the next cycle of General Employee Training. Security officer training will be revised to emphasize that officers have authority and responsibility to assist vehicle operators to assure safe vehicle operation. Specifically, security escorts will ensure that ground guides (flagmen) are used when large vehicles are maneuvered inside the protected area. This security training will be completed by 6-1-90.
- o Outage Area Coordinators have been instructed to stage welding machines and other materials on the east and west ends of the Turbine Building, whenever possible, to avoid unnecessary equipment and vehicle traffic in the low voltage switchyard.

ATTACHMENT (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

- o Maintenance procedures will be revised to restrict staging of equipment in the low voltage switchyard. The procedures will be revised by 6-15-90.
- o Barriers were installed with signs which require authorization from the Unit Shift Supervisor for vehicle access to the low voltage switchyard.
- o Sensitive plant areas have been identified and plant procedures have been revised to control vehicle access, hazardous materials and transient combustibles in these areas.

Another issue involved the failure of Diesel Generator (DG) 1A to remain running to provide emergency power. The event review team, utilizing utility and vendor technical experts, reviewed the two sequential failures of the diesel engine. The cause of the first trip can only be postulated, but most likely is the same as the second trip. The ongoing investigation indicates the most likely cause of the second trip was intermittent actuation of the jacket water temperature switches. A problem with restarting the diesel occurred because the Engineered Safety Features Actuation System (ESFAS) sequencer logic and diesel generator start logic (as designed) resulted in the diesel engine being locked out following the initial trip until the sequencer logic was reset.

As a result of the event investigation, the following actions have been or are being implemented to ensure a high state of diesel generator reliability.

- o The suspected switches were replaced and extensive diesel generator testing was performed to ensure operability prior to return to service.
- o Investigation of the suspect temperature switches has been performed by an independent testing laboratory and a formal report is expected by 5-18-90. The investigation revealed that the temperature switches are sensitive to calibration techniques and foreign material within the switches.
- o Maintenance procedures for temperature switches will be revised by 5-15-90 to include lessons learned from laboratory testing. All jacket water high temperature switches will be cleaned and calibrated using the revised procedure by 5-31-90. Other non-essential trip temperature switches will be cleaned and calibrated by the end of the next refueling outage for the associated unit.
- o Vendor failure analysis of a low lube oil pressure switch is expected to be completed by 6-30-90 and results of this analysis will be used to determine if procedure changes, cleaning or re-calibration is necessary for various pressure trip switches on the DG.

ATTACHMENT (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

- o The Corporate Maintenance Support Department will review the diesel generator instrumentation. This review will include determining the feasibility of upgrading the existing pneumatic sensors to those of a different manufacturer or replacing portions or all of the entire system with either an electrical or electronic system. Corrective actions or improvements will be made if appropriate. This review, along with an implementation schedule, if required, will be completed by 9-1-90.
- o The Under Voltage (UV) diesel start was changed in both Units 1 and 2 to be similar to a Safety Injection emergency start. This provides a higher degree of reliability for UV bus conditions. A broader review of diesel start and trip logic, to be completed by 7-31-90, will determine the need for any further change.
- o Instructions on the emergency start and restart features of the DG have been provided to operators at shift briefings and have been incorporated into operating procedures. Additional training will be provided in the normal operator requalification program by 9-15-90.
- o A policy detailing guidelines for logging pertinent alarms and indications to assist in evaluation of equipment or system malfunctions has been developed and applicable procedures have been revised.
- o After engine overhauls, functional diesel engine testing will be enhanced to include bubble testing to ensure any air logic system leakage is acceptable.
- o Trend program data is being reviewed to ensure DG component failures are adequately included. The data review will be completed by 6-5-90.

Notification of state and local government agencies was not timely due to a loss of power to the Emergency Notification Network (ENN). Communication inaccuracies, a lack of understanding of the source of the ENN power, and inadequate supervision of the notification process were also identified as Emergency Plan implementation issues. Information flow to the Corporate Emergency Response Organization (ERO) resulted in some inaccurate information (i. e., time of declaration of event and magnitude of RCS heatup) being provided to the media. There was some confusion among plant personnel concerning assembly and accountability procedures.

The following actions have been implemented.

- o The State of Georgia and Burke County have been added to the backup ENN circuit.
- o The General Manager has issued memos to the plant staff to ensure proper understanding of:
 1. Assembly and Accountability procedures.

ATTACHMENT (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

2. ENN Communications procedures.

The following corrective actions will be implemented by the dates indicated.

- o Battery backup power will be provided to the primary ENN in the control room by 9-1-90.
- o An evaluation will be performed to review and recommend further improvements in notification systems. This evaluation will be completed by 6-1-90.
- o A memo to all Emergency Directors (EDs) has been issued explaining the communications duties and responsibilities of EDs. The Manager Operations and the Manager Training and Emergency Preparedness will conduct further training for all EDs to review the role and responsibilities of the ED including lessons learned from this event by 8-1-90.
- o Control room communicators and EDs have been informed by memorandum that there are alternative means of making notifications in the event of a failure of the primary ENN circuit. These alternative means are the backup ENN circuit, now extended to include all agencies, or the ENN in the TSC which has a different power supply. Control room communicators and EDs will receive additional training in the operation of and power supplies for emergency communication equipment by 8-1-90.
- o The Emergency Preparedness group will establish a monthly test program to validate Emergency Response Facility (ERF) computer data by 6-15-90.
- o The Corporate ERO will be added to the ENN by 7-15-90 to provide another means of ensuring the transmittal of accurate information to the Corporate Office during emergencies.
- o The Corporate ERO will be re-trained in the use of available communication systems to talk with the site by 6-15-90.
- o A full-scale assembly and accountability drill will be performed by 6-15-90.
- o A full-scale assembly and accountability drill will be included as a periodic emergency plan objective. Procedure 91602-C "Emergency Drills and Exercises", will be changed by 8-1-90 to reflect this commitment.
- o Changes to Emergency Action Levels (EALs) in the Emergency Plan will be requested from the NRC based on NUMARC's EAL report presently under review by the NRC.

ATTACHMENT (CONTINUED)

VOGTLE ELECTRIC GENERATING PLANT
CORRECTIVE ACTIONS FOR SITE AREA EMERGENCY

Plant procedures did not sufficiently address plant shutdown conditions encountered during the emergency.

- o The Abnormal Operating Procedure covering loss of Residual Heat Removal (RHR) will be revised by 7-1-90 to include various Reactor Coolant System (RCS) and containment conditions present during either an outage or a Loss of Offsite Power (LOSP) event.
 - 1. A loss of power condition will be specifically addressed in the procedure.
 - 2. The time-to-boil curves will be adjusted to address a ≤ 100 degree F starting point for accidents.
- o An evaluation will be performed for system lineups and power sources during planning for Unit outages. In addition, we will continue to monitor the industry issue of loss of AC power during shutdown modes and will take appropriate actions in response to regulatory initiatives arising from this issue.
- o A study of alternate means of feeding ESF busses has been performed and is being reviewed by management. Initial review of this study indicates that a viable alternate power source is available by backfeeding using the main power transformer and the Unit Auxiliary Transformers. This review will be completed by 6-15-90. As appropriate, procedures will be revised by 8-31-90. A copy of this report will be available at the site for NRC review.
- o A study of alternate sources of cooling water to mitigate a loss of RHR during reduced RCS inventory operation had been performed and included in site procedures prior to this refueling outage. An additional study of alternate sources of cooling water during a loss of all AC power event while at reduced RCS inventory will be performed by 8-1-90. Any appropriate procedure changes will be implemented prior to the next refueling outage.
- o A means of closing the equipment hatch without electrical power will be evaluated by the next refueling outage.
- o Senior Reactor Operators will receive training on reduced inventory boiling and cooling mechanisms during the requalification cycle which will be completed by 9-15-90.