UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
GEORGIA POWER COMPANY, et al.	)	Docket No. 50-424
(Vogtle Electric Generating	)	50-425
Plant, Units 1 and 2)	)	

AFFIDAVIT OF FEMA EMERGENCY MANAGEMENT PROGRAM SPECIALIST CHERYL L. STOVALL IN SUPPORT OF APPLICANTS' MOTION FOR SUMMARY DISPOSITION OF JOINT INTERVENORS' CONTENTION EP-2/EP-2(c) (USE OF NOAA TONE ALERT RADIOS)

County of Fulton)
)
State of Georgia)

Cheryl L. Stovall, being duly sworn, deposes and says:

1. My present position is Emergency Management Program Specialist for the Federal Emergency Management Agency. Included among my responsibilities is the radiological emergency planning liaison function between FEMA Region IV and the States of Georgia, Alabama, Florida and Tennessee. In this position, I am responsible for the review of radiological plans and preparedness for these States and for the local governments within these States.

I have held this position since December 1981. I have been employed by FEMA since June 1980. A current statement of my professional qualifications is attached hereto. My business address is 1371 Peachtree Street, N.E., Suite 706, Atlanta, Georgia 30309. I have personal knowledge of the matters discussed herein and believe them to be true and correct.

2. I make this affidavit in response to Contentions EP-2, EP-2(c).

EP-2 contends:

> Applicants fail to show that provisions exists for prompt communications among principal response organizations to emergency personnel and the public as required by CFR 50.47(b)(6).

EP-2(c) contends:

> The plan provides for notification of the public in the Plume Exposure Pathway by use of tone alert radio receivers installed in each household in the EPZ. This provision ignores the fact that these devices are often shut off permanently by residents who become aggravated by its tendency to go off frequently without reason.

I have also reviewed the August 12, 1985, "Memorandum and Order (Ruling On Joint Intervenors' Proposed Contentions On Emergency Planning)".

In this Order the Board ruled:

> The fact that Applicants' plan to use the NOAA Weather Radio alert system lends credence to Joint Intervenors' argument. In an area which is subject to frequent summer thunderstorms, such as the coastal plain of Georgia and South Carolina, NOAA weather radios could sound off frequently during the passage of a storm front, as weather alerts such as severe storm watches and warnings, or marine interest watches and warnings, are broadcast. Since such alerts may not affect the entire broadcast area, it is not unreasonable to expect that some residents may turn off their weather radios to stop its warning signals, especially if the area affected by the storm is not the one in which they live.

3. FEMA's Planning Standards and Evaluation Criteria for Notification Methods and Procedures in the plume exposure pathway are found in NUREG-0654/FEMA-REP-1-Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Nuclear Power Plant." Specifically Planning Standard E, Notification Methods and Procedures, evaluation criteria number 6 provides:

> Each organization shall establish administrative and physical means, and the time required for notifying and providing prompt instructions to the public within the plume exposure pathway Emergency Planning Zone. (See Appendix 3). It shall be the licensee's responsibility to demonstrate that such means exists, regardless of who implements this requirement. It shall be the responsibility of the State and local governments to activate such a system.

As referenced above, Appendix 3 applies directly to alert and notification systems and provides:

> B. Criteria for Acceptance
>
> 1. Within the plume exposure EPZ the system shall provide an alerting signal and notification by commercial broadcast (e.g., EBS) plus special systems such as NOAA radio. A system which expects the recipient to turn on a radio receiver without being alerted by an acoustic alerting signal or some other manner is not acceptable.

4. In September 1983, FEMA implemented interim guidelines for assessing the adequacy of a nuclear power plant's alert and notification system in a document titled Standard Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants, FEMA-43. Prior to the issuance of FEMA-43, FEMA approvals of offsite radiological emergency plans and preparedness included a caveat statement that the alert and notification systems would be evaluated

at a later date. FEMA-REP-10/November 1985, Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants superseded FEMA-43 and addresses the basis for a federal evaluation of the alert and notification aspects of a state and local offsite radiological emergency plan.

The Criteria for Tone Alert Radios is found in E.6.2.3. on page E-13 of FEMA-REP-10. In pertinent part, the criteria states:

> Although absolute control of tone alert radios is forfeited once they are given to the public for use in residences, the following steps can be taken to ensure that the public (in geographical areas where the radios are used as a primary alerting method) is offered the opportunity to benefit from the availability of tone alert radios. At a minimum, an effective and continual tone alert radio distribution and maintenance program should be established that included the following:
>
> . Tone alert radios should be offered to the public in geographical areas (where needed) and a "best-effort" attempt must be made to place the radios. A record system (register) containing an accurate list of addresses (names are optional) must be maintained for those geographical areas using the tone alert radios. The addresses of residents refusing tone alert radios should also be noted.
>
> . A maintenance program offering operating checks should be available at least annually to the public in geographical areas using the tone alert radios. This maintenance program and the register program (mentioned above) may be integrated.
>
> . Tests offering the public a means to self-test its receivers are desired at least monthly. However, a final determination of testing frequency rests with appropriate state and local government officials. These test results need not be monitored.
>
> . Written guidance should accompany the tone alert radio. These instructions should address, where applicable, a tone alert radio's:

- General usage;
- Self-testing frequency and method;
- Suggested location (to facilitate efficient monitoring);
- Maintenance program; and
- Telephone numbers for repair or replacements.

. As a reminder, this written guidance should be provided annually to each tone alert radio recipient. This portion of the tone alert program may also be integrated with the register and maintenance programs (mentioned above).

. A determination should be made that the broadcast medium for initiating the tone alert signal has adequate availability (24-hours a day, 7 days a week), signal strength, and signal quality.

When a tone alert program (as defined above) has been implemented, NUREG-0654/FEMA-REP-1, Revision 1, criteria are satisfied for the tone alert portion of an alert and notification system.

5. In the Burke County Radiological Plan on page 52, Attachment G, Notification and Warning, the following alerting system is described.

A. Prompt Notification System (PNS)

The utlity has installed a notification system throughout the Plume Exposure Pathway Emergency Planning Zone (EPZ) by placing tone alert radio receivers in each household within the area. The total system meets the performance specifications for notification as required by NUREG-0654/FEMA-REP-1. The system will be used to advise the population living in the Plume Exposure Pathway EPZ that a problem exists at the power plant and to turn on their radios/television sets to receive emergency information and instruction on what actions to take.

B. Supplementary Notification System

As a backup system and for use as deemed necessary, the population living in the Plume Exposure Pathway EPZ may be notified of an emergency situation at the plant by means of the following local area resources:

1. Law Enforcement vehicles equipped with sirens or public address systems traveling the road network throughout the affected area.
2. Burke County Emergency Management Agency and Department of Natural Resources Law Enforcement Section vehicles will move through wooded areas near boat landings and boats will travel portions of the Savannah River in the affected area of EPZ to warn sportsmen. The U.S. Coast Guard will close the river to water traffic at points outside the Plume Exposure Pathway EPZ. Reference Map 2, Evacuation, Page 57, for location of control points and boat landings.
3. Emergency Management Agency workers and volunteers traveling the road network area in EPZ for door-to-door canvass.
4. Locally based state agency personnel from Departments of Transportation, Natural Resources and Forestry Commission traveling road networks in affected area.
5. Activation of local EBS, Common Program Control Station (CPCS-1), by designated officials of local government and broadcasting information and instructions to the public.

It should be noted that the Burke County Plan is a preliminary draft dated April 1985. This plan does not reflect the additional siren system identified in paragraph number 10 of David Keast's affidavit.

6. The State of South Carolina in the Vogtle Electric Generating Plant Site Specific Radiological Emergency Response Plan, Part 7, SCORERP, identifies the alert and notification system to be utilized. This plan was prepared in January 1986 and does include the additional siren system. The plan states the following in Annex A, Alert and Notification on page A-1:

A. General

1. Alert

Sirens, both fixed and mobile and tone alert radios will be used to ALERT both

the residents and transient population in the VEGP 10-mile EPZ.

2. NOTIFICATION

The resident populace will be initially notified through the NOAA tone-alert radio and through mobile sound equipment for the transient population. Follow-up public information will be made by the respective states over the Emergency Broadcast System (EBS). Savannah River Plant (SRP) will notify workers and members of the public within their boundaries, including persons travelling through SRP on the public highway and hunters.

7. I have reviewed the affidavit of David N. Keast in support of the applicants' Motion for Summary Disposition. Mr. Keast indicates in paragraph number 6 that, "extensive operating experience with NOAA weather radios demonstrates that they do not go off frequently without reason." I have no reason to question this statement, although I also recognize that some people may disconnect the NOAA radios. However, I have no information to indicate that a different tone alert radio system is more reliable than the NOAA tone alert radio.

Keast further states in paragraph number 10 that Georgia Power Company is installing a fixed siren system throughout the Vogtle EPZ. The affiant has confirmed that a fixed siren system will be installed in the Vogtle plume EPZ. Mr. Keast indicates the design of the siren system provides a minimum of 60 dBC coverage to all residents within the EPZ. Provided the siren system design meets the 60 dBC criteria the siren system can be considered an additional primary notification system.

It should be noted that at this time a technical report of the notification system for Plant Vogtle has not been received by FEMA. Therefore, a technical evaluation of the system has not been accomplished.

I am not aware of any other nuclear power plant in the southeastern United States that has both tone alert radios and 60 dBC siren system coverage throughout the entire 10-mile EPZ.

8. Both the State of Georgia and South Carolina as indicated above identify route alerting as a backup notification system.

In addition, informal notification (word of mouth) and EBS as recognized by the Licensing Board in Catawba, provide means of notification which supplement the tone alert and siren systems. This clearly establishes redundant systems for prompt notification to the public as required by CFR §50.47(b)(6).

9. As stated by the Licensing Board in Catawba,

> The requirements of FEMA-43 (Now FEMA-REP-10) and NUREG-0654 were not intended as a guarantee that 100% of the population in the EPZ will actually hear the sirens in an emergency but rather were meant to establish a design objective for the siren system (see FEMA-43, at E-4 to E-5). We find Catawba sirens meet this objective and are in compliance with the acceptance criteria. (Parentheses added).

An analogy may be drawn to the NOAA tone alert radio system. The requirements for establishing a system are not intended as a guarantee that a 100% of the population will hear the tone alert radio in an emergency.

10. While there may be an issue of fact between the Intervenor's allegations and the Applicants' experience concerning the percentage of operating NOAA tone alert radios, there is not a material issue of fact because of the redundant systems in place to promptly alert and notify the public and because the NUREG-0654/ FEMA-REP-10 criteria do not constitute a guarantee that everyone will hear the initial notification warning.

Cheryl L Stovall
CHERYL L. STOVALL

Sworn to and subscribed before me this 3rd day of March 1986.

Linda Allison
Notary Public for the State of Georgia

My Commission Expires: 9.

CHERYL L. STOVALL

670 Sunstede Drive
Decatur, Georgia 30033
(404) 633-2361

PRESENT EMPLOYMENT

1980 - Community Planner / Emergency Management Program Specialist
Federal Emergency Management Agency
Region IV
1371 Peachtree Street N.E., Suite 736
Atlanta, Georgia 30309
(404) 881-7068

Responsibilities: The management of a Radiological Emergency Preparedness (REP) program for State and local governments. Review and evaluate operating plans for off-site emergency response to nuclear power plant incidents. Provide technical assistance to State and local governments in developing and maintaining emergency plans. Coordinate and evaluate exercises and drills which test the preparedness and effectiveness of plans. During exercise development, assist State and local governments in writing and designing objectives, scenarios and timelines.

EDUCATIONAL BACKGROUND

1977-1979 Georgia Institute of Technology
Atlanta, Georgia
Master of City Planning, Environmental Speciality
Thesis Option: Floodplain Damage Estimates for the State of Georgia.

1971-1975 Ball State University
Muncie, Indiana
B.S., Urban & Regional Planning/Political Science

HONORARIES & PROFESSIONAL AFFILIATIONS

President, Graduate Student Body
Georgia Institute of Technology

Omicron Delta Kappa (ODK)
Alpha Era Circle
Georgia Institute of Technology

The High Museum of Art
Chairman, Young Careers
Atlanta, Georgia

American Planning Association
Washington, D.C.

Outstanding Performance Awards
1981,1982,and 1984
Federal Emergency Management Agency

Outstanding Young Women of America
1984 Award

Girl Scouts of America
Troop #1199 - Co-Leader

PRESENT EMPLOYMENT - DETAILED
(Other Previous Program Responsibilities)

Acquisition and Relocation

Coordinated and implemented the purchase of flood damaged properties under Section 1362 of the National Flood Insurance Program. Supervised and reviewed the development of an open-space reuse plan for the properties. (Gulf Shores, Alabama; Mobile, Alabama; Saraland, Alabama; Jackson, Mississippi.)

Hazard Mitigation Plans

Assisted State governments in the preparation of hazard mitigation plans. Once plans were developed, coordinated internal FEMA review of documents and assisted in necessary revisions or changes.

Floodplain Management

Provided technical assistance to communities participating in the National Flood Insurance Program. Conducted monitoring activities with local governments for compliance. Assisted State agencies in strengthening capabilities for floodplain management. Reviewed development proposals for compliance with environmental concerns of the wetlands and flood areas.

Interagency Hazard Mitigation Teams

Assisted in the organization and coordination of an Interagency Hazard Mitigation Team for Region IV. Participated in the first team activation for FEMA Disaster in Mobile, Alabama. Coordinated and assisted in team report and status reports. Responsibile for implementation of certain team recommendations which related to floodplain management.

Emergency Response Team (ERT) Plan

Assisted in the development of the response plan and design of team training. Participated in the development of the first team exercise.

EMPLOYMENT EXPERIENCE

1979 Cabinet Research Advisor/Planner
Office of Policy and Program Analysis
Department for Natural Resources/Environmental Protection
Frankfort, Kentucky

Responsibilities: Evaluation of State and Federal legislative proposals and their potential impact on Kentucky in the areas of hazardous materials, coal, air, water, forestry, pollution control, flooding and soil erosion; interaction with outside agencies and organizations; evaluation of public participation activities and preparation of a public participation plan; and economic analysis of litter control/bottle bill legislation.

1978 Special Projects, Atlanta Urban Design Commission
Atlanta, Georgia

Responsibilities: Participation in the research and writing of the Proposed Terminus Historic District Plan.

1975-1976 Planner, City of Jeffersonville
Jeffersonville, Indiana

Responsibilities: Zoning ordinance review and revision, planning administration study, road reclassification, grant writing, research and technical assistance.

1975 Intern, Kentuckiana Regional Planning/Development Agency
Louisville, Kentucky

Responsibilities: Inventory phase of the regional solid waste plan, zoning ordinance revisions, land use planning and soils inventory.

1973 Intern, State Senate
Indianapolis, Indiana

Responsibilities: Research of legislation, press releases, mail and correspondences.

1972 Intern, Congressman David W. Dennis
Washington, D.C.

Responsibilities: Newsletter, survey and case work.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
GEORGIA POWER COMPANY,	)	Docket Nos. 50-424
et al.	)	50-425
	)	(OL)
(Vogtle Electric Generating Plant,	)	
Units 1 and 2)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF RESPONSE TO 'APPLICANTS' MOTION FOR SUMMARY DISPOSITION OF JOINT INTERVENORS' CONTENTION EP-2/EP-2(c) (USE OF NOAA TONE ALERT RADIOS)'" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 6th day of March, 1986.

Morton B. Margulies, Esq., Chairman*
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Gustave A. Linenberger, Jr.*
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Oscar H. Paris*
Administrative Judge
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Bradley Jones, Esq.
Region 1 Counsel
U.S. Nuclear Regulatory Commission
Suite 3100
101 Marietta Street
Atlanta, GA 30303

Bruce W. Churchill, Esq.
David R. Lewis, Esq.
Shaw, Pittman, Potts & Trowbridge
1800 M Street, N.W.
Washington, D.C. 20036

Douglas C. Teper
1253 Lenox Circle
Atlanta, GA 30306

Atomic Safety and Licensing
Board Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docketing and Service Section*
Office of the Secretary
U.S. Nuclear Regulartory Commission
Washington, D.C. 20555

James E. Joiner, Esq.
Troutman, Sanders, Lockerman,
& Ashmore
127 Peachtree Street, N.E.
Candler Building, Suite 1400
Atlanta, GA 30043

Tim Johnson
Executive Director
Campaign for a Prosperous Georgia
1083 Austin Ave. NE
Atlanta, GA 30307

Steven M. Rochlis
Regional Counsel
Federal Emergency Management Agency
Suite 700
1371 Peachtree Street, N.E.
Atlanta, Georgia 30309

Atomic Safety and Licensing
Appeal Board Panel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Ruble A. Thomas
Southern Company Services, Inc.
P.O. Box 2625
Birmingham, AL 35202

NRC Resident Inspectors
P.O. Box 572
Waynesboro, GA 30830

H. Joseph Flynn, Esq.
Assistant General Counsel
Federal Emergency Management Agency
500 C Street, S.W.
Washington, D.C. 30472

Bernard M. Bordenick
Counsel for NRC Staff