

SUPPLEMENTAL AFFIDAVIT OF DAVID N. KEAST

)

ON CONTENTION EP-2/EP-2(c)

COUNTY OF FULTON STATE OF GEORGIA

I, David N. Keast, being duly sworn according to law, depose and say as follows:

1. My name is David N. Keast. I am a Vice President and Senior Project Manager with HMM Associates, Inc., where I specialize in public warning system studies. HMM Associates has been retained by Georgia Power Company to design the public alerting system for the Vogtle plume exposure pathway Emergency Planning Zone ("EPZ"). A detailed summary of my professional qualifications is included as Exhibit A to the "Affidavit of David N. Keast on Contention EP-2/EP-2(c)," filed February 14, 1986.

В604220204 860417 PDR ADOCK 05000424 G PDR 2. The purpose of this affidavit is to provide more detailed information in support of "Applicants' Motion For Summary Disposition of Joint Intervenors' Contention EP-2/EP-2(c)," which concerns the use of NOAA tone alert radios (in lieu of some other type of radio alerting system) for public alerting within the Vogtle EPZ. I have personal knowledge of the matters set forth herein and believe them to be true and correct.

4

3. National Weather Service data for the survey period January 1, 1980 through September 30, 1985 (69 months) have been analyzed to determine the expected frequency of activation of NOAA weather radios in the Vogtle EPZ due to severe weather watches and warnings. (The NOAA weather radios in the Vogtle EPZ will not be activated for marine interest watches and warnings.) The table below provides a 24-hour, hour-by-hour breakdown of survey data.

-2-

Hour	Total Watches and Warnings for 69-month Survey Period	Average Annual* Number of Watches and Warnings		
1-2 am	4	0.6957		
2-3 am	0	0.0000		
3-4 am	1	0.1739		
4-5 am	3	0.5217		
5-6 am	4 0 1 3 0 0 0 0 0 0 3 1 2 4 7	0.0000		
6-7 am	0	0.0000		
7-8 am	0	0.0000		
8-9 am	0	0.0000		
9-10am	3	0.5217		
10-11am	1	0.1739		
11-12noon	2	0.3478		
12-1 pm	4	0.6957		
1-2 pm		1.2174		
2-3 pm	21	3.6522		
3-4 pm	25	4.3478		
4-5 pm	17	2.9565		
5-6 pm	13	2.2609		
5-7 pm	14	2.4348		
7-8 pm	10 9	1.7391		
8-9 pm	9	1.5652		
9-10pm	11	1.9130		
10-11pm	1	0.1739		
11-12midngt	1 2 3	0.3478		
12-1 am	3	0.5217		

\* Calculated by dividing each entry in the first column (the total number of watches and warnings issued, by hour, during the 69-month period) by 5.75 years (the survey period).

4. The fixed siren system being installed within the EPZ is a second, fully redundant primary notification system, since it has been designed to provide the required sound coverage to all residences, in accordance with Appendix 3 of NUREG-0654.

5. No other nuclear plant in the country has two primary public alert/notification systems -- each of which independently meets the regulatory guidance to which the systems at other nuclear plants across the country are designed.

Sworn to and subscribed before me this 1600 ay of April, 1986.

Port Notary Public

Notary Public, Clayton County, Georgia My Commission Expires Dec. 12, 1989

My Commission Expires:

### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

> SUPPLEMENTAL AFFIDAVIT OF DAVID N. KEAST ON CONTENTION EP-2/EP-2(c)

COUNTY OF FULTON ) STATE OF GEORGIA )

I, David N. Keast, being duly sworn according to law, depose and say as follows:

1. My name is David N. Keast. I am a Vice President and Senior Project Manager with HMM Associates, Inc., where I specialize in public warning system studies. HMM Associates has been retained by Georgia Power Company to design the public alerting system for the Vogtle plume exposure pathway Emergency Planning Zone ("EPZ"). A detailed summary of my professional qualifications is included as Exhibit A to the "Affidavit of David N. Keast on Contention EP-2/EP-2(c)," filed February 14, 1986. 2. The purpose of this affidavit is to provide more detailed information in support of "Applicants' Motion For Summary Disposition of Joint Intervenors' Contention EP-2/EP-2(c)," which concerns the use of NOAA tone alert radios (in lieu of some other type of radio alerting system) for public alerting within the Vogtle EPZ. I have personal knowledge of the matters set forth herein and believe them to be true and correct.

3. National Weather Service data for the survey period January 1, 1980 through September 30, 1985 (69 months) have been analyzed to determine the expected frequency of activation of NOAA weather radios in the Vogtle EPZ due to severe weather watches and warnings. (The NOAA weather radios in the Vogtle EPZ will not be activated for marine interest watches and warnings.) The table below provides a 24-hour, hour-by-hour breakdown of survey data.

-2-

1-2 am       4       0.6957         2-3 am       0       0.0000         3-4 am       1       0.1739         4-5 am       3       0.5217         5-6 am       0       0.0000         6-7 am       0       0.0000         7-8 am       0       0.0000         8-9 am       0       0.0000         9-10am       3       0.5217         10-11am       1       0.1739         11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         12-1 pm       7       2.9565         1-2 pm       7       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652	Hour	Total Watches and Warnings for 69-month Survey Period			
2-3 am       0       0.0000         3-4 am       1       0.1739         4-5 am       3       0.5217         5-6 am       0       0.0000         6-7 am       0       0.0000         7-8 am       0       0.0000         8-9 am       0       0.0000         9-10am       3       0.5217         10-11am       1       0.1739         11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652					
2-3 am       0       0.0000         3-4 am       1       0.1739         4-5 am       3       0.5217         5-6 am       0       0.0000         6-7 am       0       0.0000         7-8 am       0       0.0000         8-9 am       0       0.0000         9-10am       3       0.5217         10-11am       1       0.1739         11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       2.9565       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652	1-2 am	4	0.6957		
3-4 am       1       0.1739         4-5 am       3       0.5217         5-6 am       0       0.0000         6-7 am       0       0.0000         7-8 am       0       0.0000         8-9 am       0       0.0000         9-10am       3       0.5217         10-11am       1       0.1739         11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		0	0.0000		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		1	0.1739		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		3	0.5217		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		0	0.0000		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		0	0.0000		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		0	0.0000		
11-12noon       2       0.3478         12-1 pm       4       0.6957         1-2 pm       7       1.2174         2-3 pm       21       3.6522         3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		0	0.0000		
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3-4 pm       25       4.3478         4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		21	3.6522		
4-5 pm       17       2.9565         5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652		25	4.3478		
5-6 pm       13       2.2609         6-7 pm       14       2.4348         7-8 pm       10       1.7391         8-9 pm       9       1.5652			2.9565		
6-7 pm142.43487-8 pm101.73918-9 pm91.5652			2.2609		
7-8 pm         10         1.7391           8-9 pm         9         1.5652		14	2.4348		
8-9 pm 9 1.5652			1.7391		
		9	1.5652		
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\* Calculated by dividing each entry in the first column (the total number of watches and warnings issued, by hour, during the 69-month period) by 5.75 years (the survey period).

4. The fixed siren system being installed within the EPZ is a second, fully redundant primary notification system, since it has been designed to provide the required sound coverage to all residences, in accordance with Appendix 3 of NUREG-0654.

5. No other nuclear plant in the country has two primary public alert/notification systems -- each of which independently meets the regulatory guidance to which the systems at other nuclear plants across the country are designed.

Sworn to and subscribed before me this //oteay of April, 1986.

Clout Public Notary

Notary Public, Clayton County, Georgia My Commission Expires Dec. 12, 1989

My Commission Expires:

### UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

## CERTIFICATE OF SERVICE

I hereby certify that copies of "Applicants' Motion For Reconsideration of Denial of Summary Disposition of Intervenor's Contention EP-2/EP-2(c) (Use of NOAA Tone Alert Radios)" and "Supplemental Affidavit of David N. Keast on Contentica EP-2/EP-2(c)" were served this 17th day of April, 1986, by deposit in the U.S. mail, first class, postage prepaid, upon the parties listed on the attached Service List, except that those whose names are marked by an asterisk were served by hand delivery this 17th day of April, 1986.

Adissa A. Lidgway

Delissa A. Ridgway

Dated: April 17, 1986

## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

# Before The Atomic Safety And Licensing Board

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

#### SERVICE LIST

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