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R. P. McDonald
 Senior Vice President



Alabama Power

the southern electric system

March 31, 1988

Docket 50-348
 50-364

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

SUBJECT: FEMA ANALYSIS OF THE PROMPT ALERT AND NOTIFICATION
 SYSTEM FOR THE FARLEY NUCLEAR PLANT

Dear Sir:

This letter is in response to Mr. Douglas M. Collins' letter of February 19, 1988, regarding the subject FEMA analysis. Alabama Power has reviewed both the FEMA letter of February 1, 1988, forwarded by your letter and the status of the FNP A&N system relative to the concerns expressed in the FEMA evaluation. Enclosure 1 provides details of the Alabama Power Company review of the FEMA letter and the actions that have occurred which would influence the areas in which FEMA expressed concerns. Corrective actions associated with the three sirens around FNP were thorough and we believe have fully addressed the root cause of the siren malfunctions during the test. Issues raised in the FEMA evaluation relative to the tone alert radio portion of the FNP A&N system have been adequately addressed by the design of the FNP system and the routine on-going public information program conducted in support of the program. On the basis of that review, we feel that the FNP A&N system currently meets the requirements of NUREG-0654/FEMA-REP-1 and FEMA-REP-10. However, the FEMA report did not provide adequate post test survey details for Alabama Power to evaluate the results of the test and ensure that the areas of concern identified by FEMA and their recommended corrective actions comprehensively addressed all potential problem areas. Mr. Collins' letter requested that planned corrective actions and the date for the second survey be provided within 45 days. A 30 day extension to the specified response time is necessary in order that questions regarding the FEMA report may be resolved and that the exact nature of additional corrective action needed, if any, may be determined.

From February 25 to the present, Alabama Power has worked with FEMA to obtain additional details regarding the survey results. Mr. John Heard has attempted to respond to our inquiries. However, he has not been able to provide all the information requested. The need to proceed with determining the scope of needed corrective action, to respond to the Nuclear Regulatory Commission, and to schedule necessary retest activities has caused APCo to conclude that a formal request to FEMA from the State of Alabama for the needed information is appropriate. We feel that sufficient detail should be provided regarding the FEMA report methodology and survey

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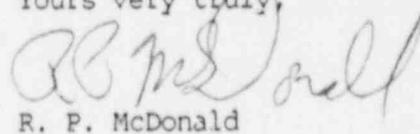
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results for Alabama Power, the State of Georgia and State of Alabama to understand the evaluation methodology that was applied to the test data and to conclude that appropriate and sufficient corrective actions have been identified. Toward that end, I have requested that the Alabama Emergency Management Agency initiate a request for responses to the questions contained in Enclosure 2. Since these questions involve analysis of a relatively small quantity of data, I would hope that the information could be made available within a week. Any assistance that the NRC can render by encouraging an expeditious response from FEMA to the State of Alabama will be appreciated.

In order to allow time for resolution of this information request and for subsequent development of a corrective action plan and schedule, the 30 day extension referred to above is hereby requested.

If there are any questions, please advise.

Yours very truly,



R. P. McDonald

RPM/KWM:emb

Enclosures

cc: Mr. L. B. Long
Dr. J. N. Grace
Mr. E. A. Reeves
Mr. W. H. Bradford
Mr. John Heard

REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY LETTER FROM
GRANT C. PETERSON TO MR. VICTOR STELLO, JR. (NRC)
DATED FEBRUARY 1, 1988 AND ASSOCIATED CORRECTIVE ACTIONS

SIREN OPERABILITY

1. The third paragraph discusses siren performance during the test. The Columbia siren malfunction was an isolated event as evidenced by the operability statistics for the 12 months preceding the A&N test and the last 12 months, both of which exceed 90%. Siren performance was significant, however, in that the failure of the Columbia siren prevented verification of the Columbia area siren coverage and was also significant to the extent that it may have affected the outcome of the phone survey. The FEMA letter did not provide sufficient data to give insight into the effect of the Columbia siren failure on the outcome of the phone survey statistics or to indicate if there were any deficiencies in siren coverage in Ashford or Gordon. FEMA has indicated verbally that 65% to 75% of the 115 negative responses were outside the siren areas, but specific numbers for Columbia have not been provided. If 25% to 35% of the negative responses were due to the Columbia siren failure, then the alerting percentage following correction of the malfunction would be 75% to 78%, assuming no negative responses in the siren areas. The malfunction which precluded manual activation of the siren (a bad battery) was corrected the day following the test. During the test the Gordon siren was locally activated in order to continue its remote activations for the planned three (3) minute duration. That action eliminated any possible impact on the survey results in Gordon. In an actual emergency, the limited duration of the Columbia siren (following battery replacement) and of the Gordon siren could have been compensated for by repeated remote activations and therefore did not affect system operability. The activation duration problems were fully corrected by October 30, 1987, following receipt of required printed circuit board replacements from the vendor. The operability record for the FNP sirens since the A&N test has exceeded 97% and has included a full cycle test of each siren.

FEMA SURVEY RESULTS

2. Paragraph four begins with a statement that 527 households within the Joseph M. Farley Nuclear Generating Plant EPZ were contacted. The paragraph goes on to correct the statement by indicating that 103 of the 527 households were found to lie outside the EPZ. This indicates that the phone list used by the contractor was not screened in advance to ensure that only residences inside the EPZ were selected.

The survey form attempted to determine each residence location by asking the distance to the nearest cross roads, but such a method is of questionable reliability considering the very rural nature of the area. Local EMA directors have previously related to APC personnel that residents well outside the EPZ have thought that they were within the EPZ and requested tone alert radios. The apparent lack of reliable phone list screening makes it important to verify either by physical inspection of the residence locations or by confirmation that the residences are listed on APC tone alert radio distribution lists that the negative responses thought by the FEMA contractor to be in the outer fringes of the EPZ are actually in the EPZ. Each non-alert that was actually outside the EPZ would add approximately .2% to the test score when deleted from the calculation.

3. Review of the numbers provided in paragraph four reveals that 269 households indicated that they received an alerting signal (527 households contacted minus 258 respondents not alerted). This figure is in conflict with the 230 notifications used in the FEMA calculation of 66.6%. When asked about this discrepancy, FEMA indicated that of the 39 household discrepancy, 7 non EPZ residents indicated that they had received an alerting signal and 32 EPZ residents who were not home at the time of the test indicated that they had received an alerting signal. FEMA did not indicate any knowledge of where these 39 people were when they received an alerting signal. To the extent that they were either transients or permanent residents inside the EPZ at the time of the test (whether they were at home or not), their notifications indicate proper design of the A&N system. If credit were given for the total 39, the test result would be $(230 + 39) / (345 + 39) = 70.1\%$.

TONE ALERT RADIO EFFECTIVENESS

4. The fifth paragraph of the FEMA letter indicates that some households within the EPZ had not received the new tone alert radios. No specific number of households where this condition was found was given, but the fact that it was considered worth mentioning implies that the number was significant to FEMA. Since the radio distribution effort was conducted by a thorough door-to-door canvas of the EPZ, APCo feels that the number of actual EPZ residents outside of siren zones that may not have received radios should have been insignificant and that the FEMA comment either: indicates a statistical anomaly; or reflects that the contractor made contacts outside the EPZ and failed to screen them out of the data base; or reflects that the contractor failed to understand the FNP A&N design and treated siren zone residents as if they should have received radios. Nevertheless, further information is desired to ensure that the number of tone alert radio area residents without radios

is insignificant.

5. The fifth paragraph states that "most households appeared to have been issued two tone alert radios" and discusses public confusion over which radio was to provide the alerting signal.

APCo has made a major effort to convey to the public information about the tone alert radio changeout both by direct mail letter (Attachment 1), direct mail news letters (Attachments 2, 3 and 4), by use of electronic media (Attachment 5) and by personal door-to-door contact when the new radios were distributed. During radio distribution, anticipating that some residents might no longer have their old radio, might have misplaced it or might want to retain it for the short period of time that remained before the NOAA broadcast would be terminated, APCo directed its distribution personnel not to insist on receiving the old radio back if a resident indicated that they wanted to keep it, but rather to emphasize that the NOAA broadcast and use of the old radio for A&N purposes would cease September 1. The fact that the NOAA broadcast would terminate September 1 was also periodically transmitted by the National Weather Service office over the old radio's NOAA broadcast between May and September (Attachment 6). The NOAA transmission was terminated the first week of September and anyone turning the old style radio to "monitor" after that time would receive only static. Concurrent with distribution of the new style radios, broadcast of a "routine" message (see Attachment 7) was begun. This three minute message is broadcast repeatedly 24 hours a day, 7 days a week and includes information on the purpose of the system, how it works, how to test the radios and battery, and where to call for information or repair assistance. Any resident placing the new style radio to "monitor" will receive this message. The routine weekly testing program, also initiated when radio distribution began, causes the radios to activate weekly and after the 30 second test message (see Attachment 8) is played, the routine message resumes and is heard until the resident resets the radio. This arrangement amounts to a weekly training session on the A&N system operation. APCo has continued to supplement this public information with information in the FNP direct mail newsletter sent periodically to EPZ residents (see Attachments 4) and in its annual Emergency Planning Calendar (see Attachment 9).

Eighty-seven percent of the radio distribution records indicate disposition of the old NOAA radios. Review of records indicates that only 34% of the residents kept their old radio. Thus the statement quoted above that "most households appeared to have been issued two tone alert radios" is an erroneous conclusion by the FEMA contractor. Additionally, APCo does not understand the relevance of this issue to the A&N system alerting capability. As long as the

new style tone alert radio is in the residence and plugged in or powered by a battery, the alerting signal will be received and a recorded message will be heard directing the resident to tune to a local EBS station. The presence of an old style radio in addition to the new style will not prevent the new radio from functioning. Nevertheless, in light of the fact that transmissions on the old style radio frequency have been terminated for over six months and the weekly testing and continuous routine broadcast message now have been in place for over nine months, there now should be no confusion over which radio is part of the A&N system.

FEMA CONCLUSIONS

6. The sixth paragraph summarizes the FEMA rationale for not being able to reach a favorable conclusion regarding the FNP A&N system. Three reasons are given:

A. "confusion of the EPZ resident^r regarding the tone alert radios" -- As discussed in 5 above, APCo does not understand the relevance of this issue to the functioning of the A&N system. Nevertheless any confusion should have been alleviated by this point by virtue of the termination of the NOAA broadcast, continuous transmission of a routine message on the new system explaining its use, and continued distribution over the last year of newsletters explaining the new system.

B. "the malfunctioning of the sirens during the telephone survey" -- As discussed in 1 above, only one siren, the Columbia siren, malfunctioned in a fashion so as to potentially affect the results of the survey. It should be noted that the FEMA testing of siren coverage is for confirming the APCo A&N system design manual and FEMA contractor theoretical calculations which show adequate siren coverage. Because of the malfunction, the results of the A&N test for the Columbia area are indeterminate, i.e., they are insufficient to confirm the system's adequacy. They do not, however, indicate that the siren coverage is inadequate. This is consistent with the wording of the FEMA conclusion. Conclusions regarding the adequacy of the remainder of the A&N system would have to consider the alerting percentage when the Columbia siren zone data is excluded. Details to allow that evaluation are not in the FEMA report.

C. "and the low percentage of alerted households" -- As discussed in 2 and 3 above, APCo does not adequately understand the methodology, criteria and screening of the FEMA contractor's survey data used to calculate the alerting percentage. Alabama Power feels that the

rationale should be given for excluding those EPZ transients who were alerted and those EPZ residents who, in spite of the fact that they were not at home at the time of the test, were alerted. Negative responses near the periphery of the EPZ should be verified to actually be inside the EPZ boundary. Accounting for the effect of the Columbia siren failure could indicate a significantly greater overall alerting percentage for the A&N system.

In the context of the three rationales discussed above and the fact that the theoretical Columbia siren coverage greatly exceeds the 60 dB FEMA criteria for the majority of the Columbia siren zone residences, any conclusion that the FNP A&N system is inadequate appears premature.

CORRECTIVE ACTION RECOMMENDATIONS

7. The ninth paragraph listed three "minimum" corrective actions:

- A. "Collection of any remaining old tone alert radios" -- As discussed in 5 above, any confusion that existed at the time of the test should have been alleviated by the termination of the NOAA broadcast in September and by the other public education and information actions already taken. Nevertheless, APCo will give consideration to collecting any old style radios that can be determined to still be in siren zone residences.
- B. "Implementation of a comprehensive public education program to explain the integration of the new tone alert radios into the system and to explain the proper use of the tone alert radios" -- As demonstrated by the discussion in 5 above and shown by the attachments to this document, such a program is already in place and in fact has existed since implementation of the new tone alert radio system. APCo feels that continuation of the existing program is adequate relative to the issues raised by FEMA.
- C. "Implementation of a better siren maintenance and operability program with more frequent siren testing (preferably monthly full-cycle tests) to ensure proper operation of the sirens" -- As conveyed to FEMA on December 28, 1987, (Attachment 10) Alabama Power conducted thorough corrective action following the siren malfunctions during the A&N test and initiated an enhanced siren testing program beginning in November 1987 to include full cycle testing three times each year (during the annual exercise and during biannual siren maintenance). This is three times the FEMA required full cycle test frequency. It should be noted that the

Enclosure 1

last 12 month (3/87 - 3/88) siren operability statistics exceeds 93% and that the siren operability since the A&N test exceed 97%. APCo feels that the revised program is adequate and that a monthly full cycle test is not necessary and would be an irritant to siren zone residents.

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Post Office Box 2841
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Telephone 205 250-1835

Attachment 1



Alabama Power
the southern electric system

R. P. McDonald
Senior Vice President

May 5, 1987

Dear Farley Plant Neighbor:

Over the next few weeks, Alabama Power employees will be calling on residents around the Farley Nuclear Plant to replace the emergency information radios which have been in use for several years.

Your present radio is on the National Weather Service broadcast frequency. Many of you have expressed displeasure over the tone-alert warnings which sound when severe weather is forecast. These warnings, of course, have no relationship to nuclear plant notifications.

Your new radio will not be on the weather station frequency, and you will no longer receive weather warnings. Your new radio will sound a tone-alert only during nuclear plant drills and in the unlikely event of an actual nuclear emergency.

We believe you will find this new system assuring and less of a problem than the current system. PLEASE KEEP YOUR RADIO PLUGGED IN.

When the Alabama Power representative calls on you, he or she will be wearing an identification badge. If you're not sure if someone asking for your radio is an Alabama Power employee, ask to see the badge.

We look forward to our visit with you. Please give us a call at 899-6666 if you have questions that are not answered at the time of our visit.

Thank you for your cooperation.

Sincerely,

R. P. McDonald

Alert Radios: Our Link to You



Even if you've only been living near Plant Farley a short while, it doesn't take long to notice that each home and business in the 10-mile radius of Plant Farley (except Ashford, Gordon and Columbia where sirens are installed) is equipped with an alert radio distributed by Alabama Power Company. The radio's sole purpose in the event of an emergency is to alert you to listen to local radio and television stations for important emergency information. Therefore, it's extremely important that your radio be plugged in at all times.

"It's really important for each home which has a radio issued to it to keep it plugged in," says Allan McDonald, who's responsible for the alert radio program. "With some 3,000 radios within the 10-mile radius of the plant, some may not work properly all the time. If your radio isn't working, please call us at 899-6666 and a new

radio will be provided to you."

McDonald, who has coordinated the radio distribution since 1983, is a familiar face to many of Farley's neighbors.

"I've probably talked to hundreds of people during the past four years about the plant and our safety procedures. Occasionally it may take a little time to correct a problem, however, everyone is always patient and understanding," he said.

McDonald urges all people moving away from the area to return their radios to the plant. Those radios can then be made available to individuals and families moving into the area.

"Radios may be turned in at Alabama Power's Office in Ashford, the local Georgia Power Company office, and at the offices of Three Notch, Wiregrass Electric and Pea River cooperatives," McDonald said.

Believe it or not, some people living in the 10-mile radius of Plant Farley don't keep their emergency radios plugged in. In the unlikely event of an incident at the plant, your radio will provide important information. So as a safety precaution, keep it plugged in.

Over the Fence is published by Alabama Power Company for residents living within a 10-mile radius of Farley Nuclear Plant. Comments or suggestions about the publication should be addressed to:

Joe Beckham
Farley Visitors Center
P.O. Drawer 470
Ashford, AL 36312



Residents to Get New Radios



During May and June, residents within a 10-mile radius of the Farley Nuclear Plant will receive new alert radios, which will be activated only during nuclear drills or in the event of an actual nuclear emergency. The new radios will replace the weather alert radios which were distributed to residents several years ago. Those radios also carried messages from the nuclear plant.

Because the old radios sound a warning whenever a severe weather bulletin is broadcast by the weather service, some residents in the area disconnected the radios to avoid being disturbed by weather announcements. Therefore, the radios would not work in the unlikely event of an emergency at the nuclear

plant.

"The new radios will only activate during drills or if there is an actual emergency at the plant," said Allan McDonald, an information specialist at Farley. "The new radios will not carry any kind of weather news."

THE NEW RADIOS WILL BE DISTRIBUTED TO RESIDENTS NEAR THE PLANT BY ALABAMA POWER EMPLOYEES. THE EMPLOYEES WILL WEAR ALABAMA POWER IDENTIFICATION CARDS, COMPLETE WITH THE EMPLOYEES' PICTURES.

Should there be any questions about the new radios, residents can call 899-6666 for further information.

Radio Distribution Near Completion

Distribution of tone alert radios in the 10-mile radius of Farley Nuclear Plant is nearly complete according to Allan McDonald, coordinator of the emergency notification program.

McDonald said more than 2,500 radios have been delivered since spring. The weather alert radio system has been replaced with the tone alert radio system. This was done to eliminate problems caused by frequent weather alerts which irritated many people in the 10-mile radius.

"We hope people are pleased with the new system. It totally eliminates weather dispatches. The new radios will sound only during tests on Wednesdays and in the highly unlikely event of an accident at the plant. I want to stress that people should keep their radios plugged in at all times. If there are any problems or questions about the system, please call 899-6666 collect," McDonald said.

Distribution teams tried to call on every home in the 10-mile radius that should receive a radio. However, in some cases

people were not home, and a note was left asking them to phone so a delivery could be arranged. Follow-up calls were made, but still some persons have not been reached. Therefore, if you have not received a new tone alert radio, please call 899-6666 collect. Delivery arrangements will be made.

Another option is to simply come by the Farley Visitors Center and pick up a radio. The center's hours are 9 a.m. until 4 p.m. Monday through Friday and 2-5 p.m. on Sunday.

Need a New Radio?

Last summer Alabama Power began handing out Tone Alert Radios. These radios replace the old Weather Alert Radios which were handed out for the past several years. They look the same, however, the new radios are clearly marked "Tone Alert Radio" on the front. If you have not yet received a Tone Alert Radio, or if you have one, but it is not working properly, please call the visitors center collect at 899-6666. We will be happy to deliver a new one to you or pick up the one that is not working and repair it. Your radio is your direct link to the plant. In the unlikely event of an incident at the plant, your radio will provide important information. So as a safety precaution, it should be plugged in at all times.

Channel 18 News
Dothan, Ala.
Sept. 2, 1987

Anchor: If you live within a 10-mile radius of the Farley Nuclear Plant, you probably have a warning radio that sounds off in the event of an emergency. Those radios cause problems for some people and Renelle Smith tells us that you should soon have a new radio from Farley Nuclear Plant.

Reporter: This is the new radio that residents within a 10-mile radius of the plant now use as the warning system for accidents at Farley Nuclear Plant. It looks almost exactly like the old one, but the new one does not include broadcasts from NOAA Weather Radio.

Resident: It would go off all during the night when it was warning you of severe weather. We would get up in the middle of the night and turn it off.

Joe Beckham (Alabama Power) People were turning off their radios due to severe weather warnings that came on in the middle of the night, which disturbed them. And after a survey was done, the company looked at several options and decided to change out the radio system so the residents would not be bothered and so they could keep their radios plugged in, which is part of the federal requirement for the plant.

Reporter: The difference between the radios is that the old one says "alert monitor" on it while the new one you need now says "tone alert radio" and also "property of Alabama Power Company" on the front. If you don't have a new one, you must contact the Farley Nuclear Plant at 899-6666. People who live within a 10-mile radius get them free -- except for people who live within the city limits of Ashford, Gordon and Columbia. Those towns have sirens they use for warnings.

Joe Beckham: The main difference is there will be no weather reports going off on the radio at all -- strictly messages transmitted from Farley Nuclear Plant to the residents.

Resident: I feel a lot more comfortable having the new one than the old one with the weather on it, because the radio is tested once a week on Wednesday from 11 to 12. I feel if we should have an emergency over at Farley Nuclear Plant, that this radio would better advise us to listen to our local tv station or to a radio station.

Reporter: Again, if you live within a 10-mile radius of the plant, and do not have a new radio, call Farley Nuclear Plant at 899-6666. Renelle Smith, NewsWatch 18.

Anchor: On Sept. 22, a special testing will be done and Alabama Power will be graded on the number of people who have their radios on during this special test. So keep that date in mind and have your radio on Sept. 22.

PRESS RELEASE

Attachment 6

May 11, 1987

FOR IMMEDIATE RELEASE
Contact: Chris Conway
205-832-3475

Alabama Power to Install New Warning Radios;
NOAA Weather Radio Transmission to be Discontinued

DOTHAN----Alabama Power Company and the National Oceanic and Atmospheric Administration (NOAA) announced today that effective September 1, 1987, the Farley Nuclear Plant NOAA Weather Radio Station transmission will be discontinued. This termination is in conjunction with Alabama Power's plans to replace the NOAA weather radio station and distribute new warning radios within the ten-mile radius around the plant.

The NOAA weather station transmission on 162.425 MHz has been used by the plant for the purpose of providing a nuclear emergency notification system for area residents since 1981. In addition the system has also provided forecasts and severe weather warnings from NOAA. The dual purpose served by the weather radios in sounding tone alert warnings for severe weather on a 24-hour-a-day basis as well as in the event of a nuclear emergency has been bothersome to some residents living near the plant. Therefore, the new warning radios will tone alert only during nuclear drills and in the unlikely event of an actual nuclear emergency.

Alabama Power is required as part of its operating license to have a public warning system that could alert essentially 100 percent of the residents within a ten-mile radius of the plant of an emergency.

Throughout May and June Alabama Power representatives will be visiting area residents and replacing weather radios with new radios. The new radios will not sound the weather alerts.

Persons who have been listening to NOAA broadcasts from the Farley transmitter on privately purchased weather radios will no longer receive the signal, although they might be able to receive broadcasts from one of two other NOAA transmitters in South Alabama, one in Dozier in Crenshaw County transmitting on 162.550 MHz and one near Louisville in Barbour County operating on a frequency of 162.475 MHz. An outside directional antenna may be needed. The weather alert radios previously distributed by Alabama Power which received the Farley transmission on 162.425 MHz will not pick up the other weather broadcasts from Crenshaw and Barbour Counties.

-continued-

Anyone having questions about Alabama Power Company's new warning radios should contact Alabama Power. Questions about NOAA weather radio in South Alabama should be directed to either the Montgomery or Birmingham National Weather Service office.

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Title: Normal Broadcast Message

This is WNGG 636 broadcasting from Farley Nuclear Plant in Houston County, Alabama.

This station is operated as a part of the alert and notification system around Farley Nuclear Plant. The system is designed to notify you in case of an emergency at the plant. Sirens in Ashford, Gordon and Columbia and tone alert radios tuned to this station would alert you to listen to local radio and television stations for information and instructions.

Alabama Power Company provides tone alert radios to homes and businesses within approximately five miles of the Farley Nuclear Plant. Between approximately five miles and ten miles of Farley Nuclear Plant, Alabama Power Company provides tone alert radios to homes and businesses except in Ashford and Gordon. People living in Ashford and Gordon do not receive radios because sirens have been installed there. If you move, your radio should be returned to Alabama Power. Call area code 205 899-6666 collect and arrangements will be made for receiving or returning a radio.

The radio is designed to run off a normal electrical outlet - please keep it plugged in. In case your power goes off, the radio has a battery that will keep it running. You will need to check the battery every 6 months and when the radio has not been plugged in. Also check the battery after power has been off for a long time. To check the radio, place the MONITOR-ALERT switch to MONITOR and unplug the radio for a short time. If the radio fails to work when it's unplugged, replace the battery. Be sure to use a 9 volt alkaline battery. It can be bought at any local hardware or drugstore. If you need help replacing your battery, call area code 205 899-6666 collect.

The warning system is tested regularly. The testing is routinely done between 12:00 noon and 1:00 p.m. Central time on Wednesday of each week. During these tests, your radio should turn on and you will receive a brief test message. You must operate the reset switch to turn the radio off.

If your radio does not turn on during the tests, if it is damaged or you feel it isn't working right, call Alabama Power Company at area code 205 899-6666 collect and we will check the problem out. Please don't try to repair the radio yourself. All repairs or replacements of radios will be handled by Alabama Power Company free of charge.

Each year Alabama Power gives out a booklet or calendar discussing the emergency plan for Farley Nuclear Plant and actions you should take during an emergency. If you have not received a copy, call the company collect at area code 205 899-6666 and one will be provided.

For information about Farley Nuclear Plant, you may call area code 205 899-5108 or come by the Farley Nuclear Plant Visitors Center on Highway 95, Houston County, Alabama. The visitors center is open 6 days per week year-round except holidays. Its hours are 9:00 a.m. to 4:00 p.m. Central time Monday through Friday and 2:00 p.m. to 5:00 p.m. Central time on Sunday.

TITLE: TEST MESSAGE

SOUND ALERT TONE

This is a test of the Alert and Notification system around the Joseph M. Farley Nuclear Plant. Repeat - this is a test. In the event of an actual emergency you will be instructed to tune your television or radio to the appropriate Emergency Broadcast Station.

This concludes the test of the alert and notification system. Please reset your receiver.

(This message will repeat until the system is returned by Dothan/Houston County EMA to the normal broadcast message.)

1988 EMERGENCY PLANNING CALENDAR

Joseph M. Farley Nuclear Electric Generating Plant

Page 14



HOW WOULD YOU KNOW IF THERE WAS AN EMERGENCY?

TONE ALERT RADIOS

Tone alert radios have been distributed to all homes and businesses within 10 miles of the plant. This excludes Ashford, Gordon and Columbia where there are sirens. The radios will warn you to listen to a local radio or television station for more details.

Radios are tested each Wednesday. If the test day is a legal holiday, the testing is done the next work day.

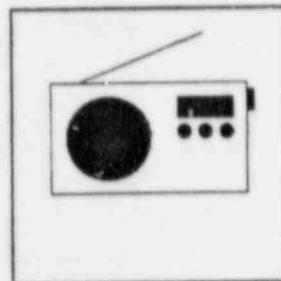
SIREN SYSTEMS

Sirens have been set up in Ashford, Columbia and Gordon. These sirens warn people to listen to a local radio or television station. The sirens have a sound different from fire trucks, etc.

The sirens are tested in January, April, July and October (see calendar). They are also tested during Plant Farley's yearly emergency drill. The sirens are turned on shortly for the tests.

OTHER ALERTS

Officials would also spread the word of an emergency by sound trucks, police sirens, bullhorns and knocking on doors. Be a good neighbor and contact others who live near you. But please leave phone lines clear for emergency uses.



EMERGENCY BROADCAST STATIONS

When alerted you should tune to the emergency broadcast stations for information. Follow the instructions you are given at that time.

Radio

WOOF-AM	560-Dothan
WOOF-FM	99.7-Dothan
WBBK-AM	1260-Blakely
WBBK-FM	93.5-Blakely

Television

WTVY-TV	Channel 4-Dothan
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WBBK-AM and WOOF-AM don't normally broadcast at night. But they would resume broadcasting within 15 minutes of an emergency.



KINDS OF EMERGENCIES

Unusual Event. This is not a true emergency. Something has happened which could mean a reduction in plant safety. There is no danger to the public.

Alert. There has been a real or potential decline in the safety level at the plant. There is no danger to the public. An alert gets emergency workers ready if the event became more serious.

Site Area Emergency. This means there has been a real or likely problem. Government officials may order evacuation or sheltering of the public as a precaution. Emergency workers would be ready to take actions if needed.

General Emergency. This means that there may be reactor core damage. Release of radioactivity is possible. Government officials would tell the public what to do.

EMERGENCY ACTION

Officials will tell you what to do based on the type of emergency. You may be told that your area is not affected and no action is needed. You may be told to shelter and stay indoors to reduce radiation exposure. You may be ordered to leave your home—evacuate—prevent lengthy radiation exposure. Or you may be told to take shelter or evacuate as a precaution only.

Whatever you're told to do, keep calm and follow directions.



STATE OF ALABAMA
EMERGENCY MANAGEMENT AGENCY
520 SOUTH COURT STREET • MONTGOMERY, ALABAMA 36130 • (205) 834-1375

GUY HUNT
GOVERNOR

J. DANNY COOPER
DIRECTOR

December 28, 1987

Mr. Glenn Woodard
Natural and Technological Hazards Division
Federal Emergency Management Agency, Reg. IV
1371 Peachtree Street, N.E.
Atlanta, GA 30309

ATTN: Mr. John Heard

Dear Mr. Woodard:

The attached information is forwarded as requested by Alabama Power Company. If your staff has any questions, please contact Bob Lilly, AEMA, REP Plans.

Sincerely,

J. Danny Cooper
Director

JDC:BL:ah

Attachment

Info copy to: Mr. W. G. Hairston, III
Vice President, Nuclear Generation
Alabama Power Company

Mr. K. W. McCracken
Alabama Power Company



Intracompany
Correspondence



Alabama Power

NT-87-0505

Gen. 1193

Subject Post-ANS Test
Siren Operability

To File: A-29.13.2.7

Date December 15, 1987

From F. M. Jessup, III
At Nuclear Generation

On September 22, 1987, FEMA sponsored a test of the Alert and Notification System (ANS) in accordance with guidance set forth in Guidance Memorandum AN-1, "FEMA Action to Qualify Alert and Notification Systems Against NUREG-0654/FEMA-REP-1 and FEMA-REP-10." FEMA contracted International Energy Associates Limited (IEAL), of Fairfax, Virginia, to coordinate and evaluate the test. Chilton Research Services of Radnor, Pennsylvania was used to conduct the telephone survey following the test.

The test was scheduled to begin at 5:52 P.M. CDT and conclude by 6:07 P.M. The telephone survey was to immediately follow the test. The test was to include three siren bursts of three minutes each with a minute pause between each burst and two activations of the alert radios. EBS messages were scheduled to be played on WOOF AM & FM and WBBK AM & FM; WTUV was scheduled to scroll an EBS message and broadcast a prepared text during their Evening News. All of these activities were scheduled to occur during the 15 minute time period between 5:52 P.M. and 6:07 P.M.

The test began with all three sirens and tone alert radios activating as scheduled. Each siren is designed to run for three minutes after receiving a remote signal to activate; however, two of the three sirens (Gordon and Columbia) did not run the full three minutes in any of the three scheduled siren bursts (see Attachment 1). Personnel at the Gordon siren manually completed the three-minute sequence in each of the three bursts after the siren automatically terminated one minute and 40 seconds into each burst.

The Columbia siren only ran one minute during the first scheduled burst and 30 seconds in each of the remaining two bursts. Manual efforts to complete the three-minute schedules failed. In each of the three bursts, only a garbled noise could be heard from the siren after the normal siren sound ended.

The Columbia siren failure was determined to have been caused by bad (degraded capacity) batteries, and the problem was corrected the day following the test. It was determined that the batteries installed in the Columbia siren were not suitable for the service conditions (continuous trickle charge). The siren vendor was consulted and the bad batteries were replaced with appropriate batteries having a higher ampere capacity and a longer reserve time thus increasing the reliability of the siren. The remaining two sirens have been verified to have at least the same ampere capacity and reserve time rating as the upgraded batteries; however, the Gordon siren's batteries were not on the vendor's approved battery list and were replaced with identical batteries as used in the other sirens. It should be noted that a successful full cycle test had been performed on the Columbia siren on July 2, 1987.

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In order to verify the Columbia siren operability after the battery replacement, a full cycle test was performed on October 1, 1987. The test was successful with the exception of the run-time. As already determined in tests after battery replacement, the run-time fell short of the design three minute period by one minute. On October 16, 1987, this timing problem was corrected by replacement of the timing circuit electronics and the new siren timing circuit was verified to run the full three minute period.

Efforts to restore the Gordon full cycle operation time to greater than or equal to three (3) minutes began the day following the test. Initial adjustment efforts on the Gordon siren the following day increased the run-time to two minutes. Continued repair efforts over the next few weeks increased the run-time to two minutes and forty five seconds. By 10-30-87, the siren run-time was increased to three minutes by replacement of the timing circuit electronics and the run-time verified to be a full three minutes. This problem could have been corrected earlier; however, problems were encountered in obtaining functional replacement parts from the siren manufacturer.

Semiannual maintenance, including full cycle testing, was performed on all three sirens on November 19 and 20, 1987. All sirens were operable and all sirens ran the full three minute design period. Full cycle tests have been performed annually under the surveillance plan used to date; however, future semiannual siren maintenance will include full cycle testing.

FMJ:emb

xc: W. C. Carr
K. W. McCracken
Allen White

SIREN ACTIVATION TIMES

	Remote Activation	Off	Manual On	Manual Off
<u>Ashford</u>	5:52 5:56:40 6:02:12	5:55:20 6:00:00 6:05:32		
<u>Gordon</u>	5:52 5:56 6:02	5:53:40 5:57:40 6:03:40	5:53:42 5:57:42 6:03:42	5:55 5:59 6:05
<u>Columbia</u>	5:52 5:56 6:02	5:53 5:56:30 6:02:30		

Questions Regarding FEMA survey:

1. What qualified as "notification" when calculating the percent of residents notified? Was notification by EBS (radio announcement on WOOF or WBBK or scrolled message on WTVY) counted? Was notification by another family member counted? By a neighbor? If any of these means of notification was not allowed, how many EPZ residences were alerted in each of the disallowed categories (See survey question 3) and not counted as a notification? If any are not counted as a notification, what rationale was used to disallow them?
2. For the 39 people notified but not at home during the test (survey Question 4), how were they notified? Since the system is designed to notify transients, what is the justification for not treating these as valid notifications?

How many people indicated that they did not have radios (Survey Question 4B)? Have the names of these people been compared to the APCo radio distribution list and how many of them are on it? How has it been verified that they are not in a siren zone and that they are in the EPZ? (Listings of siren zone residents were provided by APCo to the FEMA contractor.)

4. How has it been verified that other negative respondents are actually located in the EPZ? Have negative respondents not located in siren zones been checked against the APCo radio distribution list?
5. How many of the negative respondents indicated that they had radios which were turned on during the test? Turned off? (Survey Question 4C)
6. How many of the residences surveyed were in the Columbia siren zone? (An alphabetical listing of Columbia siren zone residents was provided by APCo to the FEMA contractor.) How many of these respondents were counted as not having been notified when the percent notification was calculated? How many were counted as having been notified?
7. How many of the residences surveyed were in the Ashford siren zone? (An alphabetical listing of Ashford siren zone residents was provided by APCo to the FEMA contractor.) How many of these respondents were counted as not having been notified when the percent notification was calculated? How many were counted as having been notified?
8. How many of the residences surveyed were in the Gordon

siren zone? (An alphabetical listing of Gordon siren zone residents was provided by APCo to the FEMA contractor.) How many of these respondents were counted as not having been notified when the percent notification was calculated? How many were counted as having been notified?

9. The February 1, 1988 letter from Mr. Peterson to Mr. Stello indicated that confusion over the old NOAA radio and the new tone alert radio constituted a problem with the alert and notification system. Please explain how any confusion that existed impacted the number of EPZ households which were notified.