December 1, 1983

Docket Nos: 50-424
and 50-425

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MEMORANDUM FOR: Roger Mattson, Director
Division of Systems Integration, NRR
Richard Vollmer, Director
Division of Engineering, NRR
Harold Bassett, Director
Division of Data Automation and Management

THRU: Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

Elinor G. Adensam, Chief
Licensing Branch No. 4
Division of Licensing

FROM: Melanie A. Miller, Project Manager
Licensing Branch No. 4
Division of Licensing

SUBJECT: EVALUATION FOR SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE (SALP) - GEORGIA POWER COMPANY, ALVIN W. VOGTLE NUCLEAR PLANT, UNITS 1 AND 2

Enclosed is a draft of the NRR input for the SALP for Georgia Power Company, Vogtle Nuclear Plant. This draft report is based upon input solicited from selected staff personnel who have had contact and involvement with Georgia Power Company's licensing material. Please review the draft evaluation and provide any comments you feel appropriate. All comments received by December 9, 1983, will be considered in the final report. In order to meet this deadline, oral comments directed to the project manager, X24259, would be adequate. To assist you with review and comment, the following persons were contacted for input: A. Ibrahim, GSB; J. Lehr, C. Billups, EHEB; J. Fairobent, METB; T. Mo, M. Lamastra, RAB; D. Gupta, SGEB; and B. Lovelace of Resource Management.

/s/ Elinor Adensam

Melanie A. Miller, Project Manager
Licensing Branch No. 4
Division of Licensing

Enclosure:
1. Evaluation Matrix
2. Input for SALP Report

8312190393 XA

DL:LB#4	DL:LB#4	AD:DL
MMiller/hmc	EAdensam	TNovak
11/30/83	11/30/83	12/1/83

Vogtle Evaluation Matrix

Licensing Action	Management Involvement	Approach to Resolution-Tech	Responsiveness	Enforcement History	Reportable Events	Staffing	Training
Category 1 Compaction	N/A	2	1	N/A	N/A	1	N/A
Caseload Forecast	1	N/A	1	N/A	N/A	1	N/A
Overall Rating	1	2	1	N/A	N/A	1	N/A

Content of FSAR Category 2

Content of ER Category 2

FACILITY NAME: Alvin W. Vogtle Nuclear Plant, Units 1 and 2

LICENSEE: Georgia Power Company

NRR PROJECT MANAGER: Melanie A. Miller

I. INTRODUCTION

This report presents the results of an evaluation of the applicant, Georgia Power Company, in the functional area of licensing activities. It is intended to provide NRR's input to the SALP review process as described in NRC Manual Chapter 0516. The review covers the period November 1, 1982, to October 31, 1983. A distinction of activities between Units 1 and 2 was not considered feasible or appropriate.

The basic approach used for this evaluation was to first select a number of licensing issues which involved staff manpower. Comments were then solicited from the staff. In most cases the staff applied the evaluation criteria for the performance attributes based on their experience with the applicant or his products. Finally, this information was assembled in a matrix which allowed an overall evaluation of the applicant's performance.

Due to the limited number of licensing activities over this period, the NRR staff has commented on the content of the Final Safety Analysis Report (FSAR) and the Environmental Report (ER). Evaluation of these documents does not conform to the seven criteria, therefore, they were not utilized.

The quality of information provided in the FSAR was rated as Category 2. In some instances the staff found that not enough detail was supplied to adequately address a topic.

The content of the ER also ranks a Category 2. While references to the FSAR are allowed, it was indicated that the licensee did this too frequently; sometimes to the point of hindering the review in some areas. In some sections of the ER, as in the FSAR, not enough detail was provided on a given topic.

II. Summary of Results

NRC Manual Chapter 0516 specifies that each functional area evaluated will be assigned a performance category based on a composite of a number of attributes. The single final rating should be tempered with judgement with respect to the significance of the individual elements.

Based on this approach, the performance of Georgia Power Company in the functional area - Licensing Activities - is rated Category 2.

III. Criteria

Evaluation criteria, as given in NRC Manual Chapter Appendix 0516, Table 1, were used for this evaluation.

IV. Performance Analysis

The applicant's performance evaluation is based on a consideration of seven attributes as given in the NRC Manual Chapter. For most of the licensing actions considered in this evaluation, only three or four of the attributes were of significance. Therefore, the composite rating is heavily based on the following attributes:

- Management involvement
- Approach to resolution of technical issues
- Responsiveness to NRC initiatives
- Staffing

There was no NRR evaluation basis for Enforcement History, Reportable Events and Training.

The evaluation was based on our evaluation of the following licensing activities:

- Category 1 Compaction
- Caseload Forecast
- Content of the Final Safety Analysis Report
- Content of the Environmental Report

A. Management Involvement in Assuring Quality

Overall rating for this attribute is Category 1, based on a very favorable impression made by GPC management at the Caseload Forecast Panel (CFP) site visit and subsequent meetings with the staff. High levels of management were represented at the CFP visit. More important than mere representation, the individuals in attendance were very knowledgeable about the Vogtle project and they appeared to place appropriate emphasis on assuring quality at the plant.

B. Approach to Resolution of Technical Issues from a Safety Standpoint

The overall rating for this criterion is Category 2. This rating is based on resolution of compaction of Category 1 backfill around safety-related piping. The applicant, once staff concerns were identified, addressed them in a timely manner. After discussions on the compaction issue, the licensee proposed a satisfactory solution which accounted for staff safety concerns.

C. Responsiveness to NRC Initiatives

The overall rating for this area is Category 1. The licensee was prompt and very responsive to NRC inquires, particularily offering cooperation and information on the compaction issue when the review required several telecons and supplemental submittals. However, this approach is typical of the licensee's response on most licensing issues.

D. Enforcement History

There is no important basis for an NRR evaluation of this attribute.

E. Reportable Events

There is no important basis for a NRR evaluation of this attribute at this time.

F. Staffing

Category 1 is assigned based on involvement with the licensee's staff at the Caseload Forecast Panel visit and on the compaction issue. The staff appeared technically competent with the appropriate people involved on both issues.

G. Training

There is no important basis for a NRR evaluation of this attribute at this time.

V. CONCLUSION

Based on the evaluation of Georgia Power Company's performance for a limited number of activities in the functional area of licensing, an overall performance rating of Category 2 is determined.

The evaluation is limited due to the early licensing review stage of Vogtle. Even on the selected activities, the contact and involvement has been very slight and does not provide a basis for a detailed evaluation. For typical licensing activities such as the Caseload and the compaction issue, the licensee's performance has been rated Category 1 in most applicable areas. However, the content of the FSAR and ER has been rated Category 2 and needs upgrading before the staff can adequately review the plant. Based on the activities rated, the licensee's performance is judged to be Category 2.

ORIGINAL

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of:

VOGTLE ENVIRONMENTAL MATTERS

Docket No.

Location: Waynesboro, Georgia Pages: 1 - 119

Date: Tuesday, March 21, 1984

TAYLOE ASSOCIATES
Court Reporters
1625 I Street, N.W. Suite 1004
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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

PUBLIC MEETING ON VOGTLE ENVIRONMENTAL MATTERS

- - - - - -

Burke County Office Park Auditorium
West Sixth Street
Waynesboro, Georgia

March 21, 1984

The above-entitled matter came on for hearing, pursuant to notice, at 7:00 o'clock p.m., Mayor George DeLoach, presiding.

PRESENT:

GEORGE DELOACH, Mayor of Waynesboro, Georgia

ELINOR ADENSAM, Chief, Licensing Branch 4, Division of Licensing
MELANIE MILLER, Project Manager, Licensing Branch 4 Division of Licensing
JOHN LEHR, SR., Environmental Engineer
CHARLIE BILLUPS, Aquatic Scientist
GERRY LA ROCHE, Terrestrial Biologist
TIN MO, Health Physicist
LOU BYKOSKI, Regional Environmental Economist
AL BRAUNER, Site Analyst
TONY POLICASTRO, Noise Specialist
VIRGINIA TOLBERT, Aquatic Scientist
ROGER KROODSMA, Terrestrial Biologist
FELVA TUZUNER, ORNL
HUGH DANCE, Chief, Project Branch No. 2, Region II
DAN MONTGOMERY, Section Chief, IMEPS, Region II
JOE GILLILAND, Public Affairs Officer, Region II
BILL SANDERS, SR., Resident Inspector, Vogtle
BOB PERLIS, Attorney, OELD

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I N D E X

P R O C E E D I N G S

MAYOR DELOACH: Before we start tonight, I'd like to ask Charles Evans to ask invocation, please.

(Whereupon, Mr. Evans said the invocation.)

MAYOR DELOACH: This meeting has been called as a public meeting to address the environmental concerns related to the operation of Plant Vogtle Unit 22. Earlier today, the NRC staff members, and area public officials, toured the Vogtle site located in Burke County on the southwest side of the Savannah River. The site is about 26 miles southeast of Augusta. Georgia Power, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia, are co-owners of the plant, and applicants for the operating license. Each Vogtle pressurized water reactor unit is designed to have an electrical output of about 1160 megawatts.

The NRC staff members are from headquarters offices located in Washington, D.C., and the regional staff is located in Atlanta. I'll give you some of the rules of the meeting that we're going to try to go by, and we're going to limit comments to five minutes. We have a signup sheet here, for those who would like to speak tonight, and the NRC staff will respond, as appropriate. And the meeting is being transcribed,

so please state your name before speaking, and at this time, I'm going to turn the meeting over to Elinor Adensam, Chief of the Licensing Branch No. 4 in the Division of Licensing for NRC.

MS. ADENSAM: Good evening. My name is Elinor Adensam, Chief of Licensing Branch 4, Division of Licensing, with Nuclear Reactor Regulation, USNRC. I'm here tonight with Melanie Miller, who is Project Manager for Vogtle, and other members of the NRC staff who are involved in the environmental review, and who will be responsible for writing the draft and final environmental impact statement.

Now the purpose of this meeting is to give you, the public, who are living here near Vogtle, an opportunity to communicate to the staff any concerns you have in the environmental areas.

We're interested in hearing your views. We have a transcribed transcript of the meeting, and we'll have an opportunity to go back and look over them again, and see -- we can address them in doing our review, as appropriate.

Miss Miller will be introducing the members of the staff later. We want you to understand that while we're here for the purpose of addressing environmental areas, that you may have other questions. We'll attempt to

answer them if we can. But we'd like to ask you, if you possibly can, to focus on these environmental review, because we're better prepared to respond to you. As I said, this will be transcribed. A copy of the transcript will be available to you in the public document here.

MS. MILLER: Right. Fourth Street, the Burke County Public Library.

MS. ADENSAM: Thank you. I'd like to turn it over to Ms. Miller.

MS. MILLER: O.K. I have some information sheets I'd like to hand out. If everybody could please pass them down to the person next to them, I would appreciate it. I'd like to thank everyone for taking the time tonight to come out, and participate in this public meeting, because it certainly is valuable to the NRC staff, for us to be aware of what the citizens in Burke County think about the operation of Vogtle, and its effect on the environment.

I think it's important, before we get into your comments and discussion this evening, to have some background on the licensing process, what has taken place in regards to licensing Vogtle over the past year, and also, to indicate what we're doing here this week, and what will continue on in the coming months.

The NRC has what is called a two-stage licensing

process, and those two stages consist of the construction permit, or CP stage, and the operating license, or OL stage.

In both stages, the staff undertakes an environmental review, which, in both cases, culminates in the publication of a final environemental statement, or FES. Now, the FES for the construction permit stage was published in March of 1974, and subsequent to that, construction permits for Vogtle Units 1 through 4 was issued in June of 1974.

Now in September of '74, Units 3 and 4 of Vogtle were cancelled, so the licensing process has therefore continued on only Units 1 and 2.

Now, since 1974 when the CP was issued, Georgia Power has continued to construct the plants, and they are now at the point where they feel they should start, or the NRC should start the review for the operating license. And in order for us to start that, they have submitted an application for an operating license, and in so doing that, they submitted two major documents which the NRC will be reviewing.

One is the final safety analysis report, and the second document is the environmental report, which is what we are here this evening to discuss, and what we are here this week, at the site, looking into, and

questioning. Now the two documents that the Georgia Power submitted have been accepted by the NRC for us to start the OL review, and that is what we are presently doing. The OL review commenced in February of this year.

Now this week, to give you some perspective of what we're doing here, really represents the kicking off of the environmental review on Vogtle.

This week, the staff came down to the site. Today we spent viewing various aspects of the site in the areas of aquatic resources, radiological impact, terrestrial biology, land use, socio-economics, site analysis, et cetera.

And the staff, in doing that, is able to formulate questions to the Applicant, for which they are required to respond. Now, after the question and answer period is finished on the environmental report, the staff will issue a document called a draft environmental statement, which, if you'll look at the pages that I handed out, it is scheduled to be issued in late September of this year.

Once the draft environmental statement is issued, there will bea notice published in the Federal Register. The Federal Register, a copy of that will be put in your area newspaper, so everyone here will be very

well aware of when the draft environmental statement is issued. Following issuance of the DES, members of the public have a 45-day period in which to comment on the DES. If you do have any comments related to the DES, you should send them to the address on the lower portion of that page.

Any comments that the staff receives on the DES will be addressed in the final environmental statement, which is due to come out in March of 1985. Therefore, if you do have comments, or concerns on the DES, please do send them to us, because we will evaluate them, and comment on them in the final environmental statement.

It's also important to point out, that that address at the bottom of the page also represents the address to write to, if you are interested in receiving a copy of the DES. We will send copies of the draft environmental statement to members of the public that request it, and you do not have to wait until the Federal Register notice, in order to request the DES. You can do that right away.

So that really represents the entire process. This week, we're here starting our review, we'll ask the Applicant questions, they will respond, and we will put out a document called the draft environmental

statement, on which the public is allowed to comment, and then the NRC will issue a final environmental statement. It's also important to point out, as Elinor mentioned, that there is a public, a local public document room. All correspondence related to Vogtle, from the NRC, and to the NRC, is published in that local public document room. The environmental report, which the Applicant has submitted to the NRC, can be found in the local public document room, in addition to the draft and final environmental statements.

Now, since that really summarizes the ER licensing process, I feel it's important to let members of the staff stand up and introduce themselves, and give you an idea of the scope of their review, so that you'll have an idea of the sort of things that we're here looking for this week, and the sort of questions that we'll be expecting from the audience in the discussion period.

Before the staff goes, I would like to introduce two individuals who are with invited agencies here this week, helping us with the environmental site visit, are giving us comments and input very similar to the sort of comments and input you'll be providing here tonight.

Glen McVey -- is he here tonight?

MR. LEHR: No, he's not.

MS. MILLER: O.K. Glen McVey is with the Fish and Wildlife Service, and he did participate in our meeting today, and has given the staff comments on the environmental report. Additionally, Al Gueden -- do you want to wave your hand out -- is with the Georgia State Department of Natural Resources, and he has also been helping out this week.

At this time I'm going to introduce the technical people. First, I want to introduce some additional key people sitting at the front table.

Bill Sanders is the Senior Resident Inspector at Vogtle, and Hugh Dance is a Project Branch chief out of Region II.

Charlie, do you want to start?

MR. BILLUPS: O.K. My name is Charlie Billups. I'm with Headquarters NRC. I'm in the branch called the Environmental and Hydrologic Branch, and my particular concern is in aquatic resources, aquatic biology, ecology, fish resources, and the potential impacts of the plant intake and discharges on those aquatic resources.

MR. LEHR: My name is John Lehr. I'm also in the Environmental and Hydrological Engineering Branch, NRC. My area of interest is in water quality, chemical discharges from the plant, and the interaction of plant

discharges with off-site water, in compliance with applicable laws and regulations.

MR. MO: My name is Tin Mo. I'm with the Radiological Assessment Branch, Office of Nuclear Reactor Regulations. I'm responsible for reviewing the radiological impacts to the environment resulting from the proposed normal operation of the Vogtle nuclear plant's Unit 1 and 2.

MR. LA ROCHE: I'm Gerry La Roche. I'm also in the Environmental and Hydrological Engineering Branch, and my concern is with the effect of the plant's operation, and its transmission corridors on the terrestrial ecology.

MR. PERLIS: My name is Bob Perlis. I'm a lawyer with the NRC, and I'll be handling any hearing work that comes up with the Vogtle facility.

MR. KROODSMA: My name is Roger Kroodsma. I'm from the Oak Ridge National Laboratory. I'm a terrestrial biologist or wildlife ecologist. I'll be helping to prepare the impact statement in the areas of effects of transmission lines and cooling tower drift.

MS. TOLBERT: I'm Virginia Tolbert. I'm with Oak Ridge National Laboratory. I'm an adquatic scientist, and I'll be helping NRC with the evaluation of the intake and discharge effects, and also plant chemical discharges.

MR. BRAUNER: Al Brauner. I'm interested in the current population as well as the growth in the area, and also, the potential hazards from toxic or explosive materials that might affect the plant if there's an accident, off-site, somewhere.

MR. BYKOSKI: I'm Lou Bykoski. I'm interested in the socio-economic impacts as they're related to the operation and maintenance of the plant.

MR. POLICASTRO: I'm Tony Policastro from Argonne National Laboratory. My responsibility is noise impacts to the community. I'm looking at sources such as cooling towers and transformers, and transmission lines, and --

VOICE FROM AUDIENCE: Speak up.

MR. POLICASTRO: My responsibility is noise impacts to the community, and I'm looking at sources such as transformers, and cooling towers, and transmission lines, and I'm interested in determining compliance with state and local regulations. And also, to determine if there's any annoyance to community population.

MS. MILLER: Is there anyone else who'd like to repeat what they do? O.K. I will turn the meeting back over to our moderator, Mayor DeLoach. Has everyone signed the sign-in sheet? If not, please do so.

MAYOR DELOACH: I'd like to take this time to welcome the NRC staff to our community. I hope you enjoy our

Southern hospitality. So at this time we will begin with our speakers. Like I said, this is a public meeting and we want to limit each talk to about five minutes.

Charles Evans. He's Chairman of our Burke County chamber of commerce.

STATEMENT BY MR. CHARLIES EVANS

MR. EVANS: I am Charlies Evans, and I might say, gentlemen, I think you all will have it all covered, if all of you do your job. I don't think we've really got a problem. I can't think of anything else you could name that the plant could effect. Do let me say this, though, please, to begin with. The two ways that I look at environmental impact is, what good? and what bad? I could speak for a week in telling you how much good that we've received of Plant Vogtle being here: our employment, the people, the leaders in our community. There have been men from the plant to join our churches, our civic organizations, and believe me, there's been a big welcome.

And not only that, but whether you know Burke County, or not, we've had a tough time in agriculture, which has been our biggest industry, and its brought many to our knees. This has given us a chance for people to work there, to subsidize their income, and to build a future for themselves, and even more importantly,

to really keep them in our community. Now, our commercial development, of course, has increased tremendously. Our merchants have propsered, and that's the good side. The second thing we always look at, as far as I'm concerned, in environmental impact, is the danger, if any, to the community.

I'm no engineer, I'm no scientist, but I have spent quite a few years here on Earth, and I've seen some remarkable things happen. I've seen this country grow in scientific growth.

A country that God has given to man, and which he has given to man both wisdom and knowledge, to accomplish things beyond our wildest dreams. A country that can put a satellite into the sky, and we sit in our own living room, and know what's going on in the whole word, as it happens. And we can send both man and machine to the moon, and give them a car to ride in while they're up there.

Then I cannot conceive, that these brilliant minds, cannot build a plant here on Earth, without enough failsafe systems, to make it a safe community in which to live. We're in favor of it one hundred percent. Thank you for the time.

MAYOR DELOACH: Thank you. Next will be Dr. Judith E. Gordon.

STATEMENT OF DR. JUDITH GORDON

DR. GORDON: I'm Dr. Judith E. Gordon representing the Savannah River Group and the Sierra Club of Georgia. Statewide, we have over three thousand three hundred members, with nearly one hundred members in the surrounding counties, including Burke County.

Before I read the rest of my prepared statement, I'd like to comment that this meeting was not publicized in the Augusta papers. August is certainly within a fifty mile radius of this facility, and I'm hoping that in the future, when these meetings are held, that this information will be sent up to Augusta.

Repeatedly, we are hearing people express concern for jobs. To some people in this area, Plant Vogtle represents jobs that they feel would not otherwise be available to them. We can certainly sympathize with their needs and concerns for employment.

However, their jobs are costing the consumers of Georgia billions of dollars, without providing the sound economic base on which employment should be based.

In 1972, Georgia Power estimated that the Vogtle complex would cost $731 million. In January of this year, they admitted that the cost was now up to $6.6 billion. Georgia Power has obviously made serious management errors, and now expects the people of Georgia

to pick up the tab, all the while claiming they are the "good guys" providing jobs, jobs, jobs. We get the impression that had Georgia Power been in the lantern business, they would have argued, that in order to provide jobs, they must continue to make lanterns and not get involved with Mr. Edison's new-fangled electric light bulb, whose technology was unproven at that time.

Likewise, today, there are good viable alternatives to nuclear power generation. These alternatives center on labor-intensive areas involving the development of (1), solar energy resources, and (2), energy conservation techniques.

Surely we cannot put ourselves in the position of arguing that any pursuit is all right as long as it provides jobs. State and federal governments have failed to pursue solar and conservation alternatives because governments typically operate on a short-term basis, and in response to utility lobbyist pushing their own self-interests.

Georgia Power has only lately begun to explore solar possibilities, and, more importantly, is not all that interested in conservation, since it stands to make money, more money, by selling more electricity.

Further, conservation devices such as insulation, and energy-efficient appliances do not add to the profits

of the utility companies. The electrical utilities argue that there is a future need for the power they will generate with their nuclear plants, but according to the respected financial analyst, Standard & Poor Corporation--and I'm quoting--"Utilities should be able to meet the nation's demand for electricity through 1990, even if every nuclear plant now under construction is cancelled." And I have attached this statement, in the article that it appeared in, from the Augusta Herald, Sunday edition.

Indeed, we have only to look at what happened in the Pacific Northwest last year with the Washington public power supply system, otherwise known as "WHOOPS", to see what this nuclear generating fiasco has cost consumers. Even with the $2.25 billion invested in nuclear facilities in that region, the consumers were willing to take that loss, rather than sink more money into unneeded, overly expensive, and dangerous facilities.

Ironically, this is just about what Georgia Power has sunk into the Vogtle complex thus far, and it's time for Georgia Power to admit their mistakes and get out now, before things get worse.

Given the facts, we believe most consumers would prefer to spend money on energy conservation, rather than pay the utilities for unneeded and environmentally

damaging facilities. The truth is, many utilities in the United States were sold on the idea of nuclear generation by the federal government. No one stopped to carefully consider the safety factors associated with nuclear technology, as witnessed by the many mishaps and accidents such as Three Mile Island, Browns Ferry, Salem, and also, some of Georgia Power's own facilities.

No agency serious considered itself, concerned itself until recently, with the transport and storage of both the low and high-level waste produced by nuclear fission.

Half of the low-level commercial nuclear waste generated in the United States comes from electrical utilities. To this date, Congress has failed to approve any regional low-level waste compact, and is not likely to do so in the near future.

Meanwhile, the Nuclear Regulatory Commission continues to license nuclear plants as though the problem will solve itself.

The problem of dealing with high-level nuclear waste is even less close to being solved. Jobs. Certainly we are concerned about jobs, but they should be in financially-sound businesses, which do not threaten the environment, or add to the misery of others.

Georgia Power is employing nuclear blackmail in

Burke County. In a sense, the people of this area are being sent down the river, and the trip back may be very expensive. Thank you.

MS. MILLER: Before Mayor DeLoach continues with the meeting, I would just like to make one comment. Dr. Gordon, I certainly sympathize with you, by your not being able to read the advertisement in the local newspapers, and maybe this is some indication that the NRC should try harder, or that maybe we should contact the papers, because in a February 8th, 1984 letter that the NRC sent to Donald Foster of Georgia Power, we indicate that arrangements for newspaper advertisements concerning this meeting, have been published in the Augusta Herald, and the Savannah Evening Press, on March 13th, 15th, and 19th, and on March 7th, 14th, and 21st, in the True Citizen, Waynesboro, Georgia. And as I indicated, possibly the newspapers did not follow up on that, and we're paying them money for something they didn't do.

So maybe that's something for us to look into. In addition to this, our Region II public affairs officer has contacted public TV stations, and radio stations. So I apologize.

VOICE FROM AUDIENCE: They published it back in the want ads.

MAYOR DELOACH: Are there any other responses? Yes?

VOICE FROM AUDIENCE: The Council notified the newspapers. We have a big mailing list.

MAYOR DELOACH: Any other response from the NRC staff, or comments? Next will be Dr. John R. Palmer.

STATEMENT OF DR. JOHN R. PALMER

DR. PALMER: Thank you, Mr. Mayor. My name is John R. Palmer. I'm a 67-year-old retired physician, who's spent most of his life in the United States Navy. I've traveled extensively, and I'm fully aware of the hazards of ionizing radiation.

Now we have undertaken a project here, in Burke County which has aroused comment, not only here, but all over the nation. These plants have not gone unchallenged. For a while, it appeared that technology could cope with any problem that these plants might generate.

However, it's been shown that we are still dependent on the integrity of a containment vessel, and a cooling device, both of which have yet to show themselves to be failsafe.

I live twenty miles from this monster. I've been over and looked at it, and like most of you, I'm awed by its magnificent size and configuration, but I'm

not mislead by the fact that mass, in itself, is a solution. The reason it was put in a rather remote place is because there's an inherent fear on the part of those who are building the plant, and everyone else who give it a thought. You want to get as far from it as possible, and you put it where it is because of an abundant flow of water. Now this water has been there since long before man, and other creatures occupied this area. The Savannah River is a historical landmark, and you hate to see a thing like this defiled.

It's a magnificant stream, and the water simply cannot be overheated, and at any point introduced with radioactive isotopes which might escape this plant.

It's situated on a high bluff and can be seen for miles around. We have rather strong prevailing winds here. We have lots of rainfall. And should there be any leak from this vessel that contains these, this tremendous storage of energy, the effects can be anywhere from minor, negligible, to catastrophic.

Now I'll mention once more about the cooling of these plants, and should there be a failure in the cooling system, then we face the same thing that was faced, that Dr. Gordon mentioned earlier, in the Three Mile Island event, and surely, should this happen, if it is dealt with, from that point on, the whole

nuclear industry might be threatened, because it's been stated that the near miss that occurred at Three Mile Island, awakened the nation's consciousness as to the real hazard of such an event.

Ponder these thoughts. They're not to be taken lightly. We have assembled America's greatest minds to bring about these apparent solutions to our energy needs, and yet, have we done the right thing?

Now radioactivity is not without merit. Certainly, nature put it here for some reason, probably to bring about mutations, to bring about advances in life forms, which may or may not be viable. However, we may have come to be what we are because our germ plasm was irradiated and led to man's ultimate development.

So there may be some possible good in radioactivity in itself. However, when we concentrate such a huge amount at any one point, we threaten not only the surrounding area, but for an indefinite distance.

There's a tremendous need here for an economic transfusion. This has been a deprived area, and certainly, we can't deny that from this point on, should the plant be completed, Burke County will experience a certain amount of economic merit.

However, when you weigh the cost benefit ratio, in my mind, we pay a dear price. Now if everything

goes well, fine. But I think that the risk is still quite tremendous, and that we must keep that foremost, as we ponder these questions. The cost factor has been discussed, and in my own mind, the area can ill afford to pay the tremendous cost that will accrue. It's going to be paid for by the user in the long run. The consumption of resources is tremendous. The quality control is another esrious concern. If we can't build an American automobile that people can trust, and not have to nave recalled because of structural defects, how on earth can we put faith in a plant which is more complicated than any automobile ever dreamt of? So, I'm not sure that we have the technology to do what we've set out to do.

We're into something that I seriously doubt there can be a happy outcome to. So I'm here to raise certain concerns.

I speak not only for the people that share my views, but for the plants and animals of this region. I stay outside a great deal. I live in nature. I'd class myself as a naturalist. It's a beautiful country, and to see it defiled by what I can see on the horizon over there, it makes me a little ill. So I'm very, very concerned about it, and I hope that maybe I've raised a few thoughts in your minds. Thank you very much.

MAYOR DELOACH: This time we'll give the NRC staff appropriate time for response to those questions, statements. O.K. Next we have Doug Teeper from Atlanta, Georgia.

STATEMENT OF DOUG TEEPER

MR. TEEPER: My name is Doug Teeper. I'm from DeKalb County, and I am helping Georgians Against Nuclear Energy in its intervention against Georgia Power Company's application for an operating license at the Vogtle Nuclear Plant.

I would first like to thank Mayor DeLoach, Miss Adensam, and Miss Miller, and the rest of the NRC staff, for the opportunity to speak tonight.

I am introducing myself to let you know why I am opposing the licensing permit. No. 1, the plant's capacity is not needed in order to guarantee growth and jobs in the future.

No. 2, the company is not able to build the plant correctly, to ensure the good folks of Waynesboro, Burke County, Georgia, and South Carolina, that they will be safe from radioactive accidents.

Third, I am currently looking at the quality assurance, and quality control plans for Plant Vogtle. I am concerned by the quality breakdowns by Bechtel, and other utilities, which have resulted in the cancellation of Plant Zimmer

in Cincinatti, license denial at Plant Byron in Illinois, and fines and reworking at numerous plants around the country.

One major question I have is why, almost ten years after construction has begun here, in Burke County, has the power company now changed its quality control on procurement? That's one major question.

I have literally hundreds, and maybe thousands of other questions, which I think will be addressed at the licensing hearings, but I just wanted to come here, to Waynesboro, and introduce myself, and tell you that I am a friend of the community.

I'm here to help make sure that the company builds the plant correctly. I want to ensure the good health, and a good economy for the area. Thank you very much.

MAYOR DELOACH: Miss Miller, would you like to respond to anyone?

MS. MILLER: Not yet.

MAYOR DELOACH: O.K. Danny Feig.

STATEMENT OF DANNY FEIG

MR. FEIG: My name is Danny Feig. I'm also from Atlanta, and I'm also working with Georgians Against Nuclear Energy on the intervention process, on the licensing process. I come here tonight as a citizen of the great state of Georgia, as a ratepayer, and

a stockholder in the Southern Company and Georgia Power. I'm a carpenter, a small businessman. I'm concerned about both our state's economic and environmental future. I had a few other comments. I was going to focus somewhat on economics, but I think your focus obviously is much more directed towards environmental concerns. So I'll address my remarks to those aspects. One of my major concerns--and this has been a concern of mine for a number of years--is that there are already existing in the area a number of nuclear facilities at the Savannah River Plant, and the nuclear waste burial ground at the Chem nuclear facility in Barnwell.

And these facilities, over the years, have been a major concern, in particular, of the last three governors--the last two governors, and current Governor of Georgia, Joe Frank Harris.

They have all expressed very, very serious concerns for the health and safety of all citizens of Georgia, and while, tonight, the focus is not necessarily on SRP, which is under the regulations of the Department of Energy, I think it's very crucial for this staff to study the total impacts of another nuclear facility in the area.

The concerns of the governors have been stated in numerous letters, and this year, Joe Frank Harris

stated in a press release, that Georgia continues to maintain, that the Department of Energy should identify and submit for public review, the cumulative effects of all present and proposed facilities at the Savannah River Plant. The studies should also consider any contiguous commercially operated and proposed facilities, which are under the regulatory authority of other federal agencies.

The governors of the State of Georgia are very concerned about Plant Vogtle, these past governors, and again, Governor Harris. They have mentioned that in numerous letters. And they say that no more facilities should be built in this area until a cumulative study of all radiological impacts from the Savannah River Plant, both existing facilities, future facilities, as well as the commercial plants that are going to be built in the area, is done.

Now their concerns I think are very legitimate, and I think it's stated in some of their responses, the states' responses to the draft environmental impact statement, which was performed, the draft was performed by the DOE to study the impacts of the L reactor, the opening of what is considered the L reactor at the Savannah River Plant. And in the review, they have very serious questions about the, once again, the cumulative

impact. There has never been a study done, of either the cumulative impacts of radionuclides in the entire area, within a hundred miles of the Savannah River Plant, nor has there ever been an epedimiological study of the area in the past twenty-five years of operation of that facility.

This town, the town of Waynesboro, Burke County, are all within that radius, and I think it is crucial, that this study be performed before any license be granted to operate Plant Vogtle.

I'll speak very briefly to some -- some of these are quite technical, and I don't claim to have a full understanding. But the impacts are of this, for this whole area, and they speak as comments to this draft statement, environmental impact statement. It says, in one of their comments, one of the state's comments is, "That cumulative impacts, radiological source terms, release rates, and curies per year, are not presented for any of the facilities listed. The absence of release rate information prevents thorough technical review of this section." That's a particular section, which means that, if the State of Georgia, Environmental Protection Division, cannot understand, or cannot thoroughly review what is happening at the Savannah River Plant, then I present to you the fact that nobody can understand

what is really happening there. And nobody really has any idea without any thorough study ever being done, what is happening to the entire community within a hundred or two hundred miles of that facility.

Another concern is presented, stating that, in Section 522 of the draft environmental -- 5242 of the draft environmental impact statement, that "Plant Vogtle will discharge blowdown water through a diffuser to the river." "This statement is incorrect", they state. That's the State of Georgia. "Plant Vogtle will not use a diffuser but will use a single point discharge pipe. This may, or may not have, may not impact the conclusion reached in the draft environmental impact statement related to the interactions of the Vogtle and Savannah River Plant thermal plumes." I'm not a technician but I do have some questions, and I would like to have these questions answered before, obviously, before any operator's license is granted.

There are a number of comments that could be addressed to this, to the Savannah River Plant, but I think you get the gist of my argument.

Another major concern is the fact that the U.S. Geological Survey, over the past couple of years, has found a major earthquake fault within seven miles of the facility. Now this earthquake fault, according

to a study done by Georgia Power, and I think the Southern Company, showed that there had not been any activity in that fault, I believe within twenty thousand years. But I will refer to you the 1889 Charleston, South Carolina Yearbook, where a major earthquake, considered probably the second worst earthquake this country's ever experienced, occurred in Charleston in 1889, and shockwaves were felt within a thousand miles of Charleston, South Carolina.

The Yearbook also goes on to quote that dams were cracked in Aiken, South Carolina. I just would have some serious arguments with the fact that there hasn't been any activity in that particular area.

Side 2-- Another job that you have to undertake is, you have to study whether conditions have changed from when a construction permit was granted, to the time when an operator's license is studied, or an application is studied, and, with regards to the Savannah River Plant, the earthquake fault, I can tell you that things have changed considerably.

There has been numerous data published on the effects and the problems with the Savannah River Plant, and the entire area, and also with this earthquake study, things have changed. And I think that in the interest of the health and safety of this county,

and the State of Georgia, all those issues must be taken into consideration. And the final thing I'd like to say. I really appreciate the fact that you're here listening to people, and hearing what they've got to say to you, because this is the democratic process, and I think this is the way it's got to be done.

And with all due respect -- and Mr. DeLoach, I appreciate this opportunity greatly, and to the Commissioner of the county -- I think that something really has to be considered here. And I'm not here to really anger people of the community. I understand that jobs are being provided, and it's very important, this plant, right now, that the economy of this county is booming, and things are very good.

But you've got to look at the long-term picture, and I'm afraid -- I just have this horrible feeling that the long-term picture is not being looked at.

Currently there are some six thousand jobs being provided at Plant Vogtle. That's a lot, and it is a great boon for the economy and the society around here, but when that plant is completed -- this is perhaps one of the last nuclear plants that will be built in this country, and the people who have the skills to build these things, there's not going to be any other nuclear plants to build, and they're not going to be

built in a project ever this large, I don't believe, in Burke County. There's never been any kind of construction project ever done in the State of Georgia this large. So I think there is some serious concerns about the long-term impacts on the economy, the number of people, and the qualitative aspect of the types of jobs that are going to be provided at Plant Vogtle, should definitely be looked at. They're going to be hiring highly-skilled technical engineers, and people who are experts in the field of running a nuclear plant.

That does not provide the jobs that are being provided there now, and I think this is a very serious concern that must be looked at.

Another impact that this is going to have on the state is, that if electric rates in Georgia go up thirty to forty dollars a month because -- and they most likely will when this plant is completed, if it is completed, then the economy of Burke County as well will be severely impacted.

It's the kind of thing that could force -- a six to ten billion dollar nuclear plant could force our electric bills up thirty to forty dollars a month.

That kind of impact on businesses in the community could be severe, it could be very severe. It has a devastating impact on the entire state. So, I come

from Atlanta, and I have to say that I'm a concerned citizen for the entire economy, of not only Burke County, but of the State of Georgia. And I just--I hope that the short-term blessings, that are right now going on in this county, are not forcing you to overlook the long-term devastating impacts that this plant may have. Thank you.

MAYOR DELOACH: Do we have a response from the NRC staff?

MR. BILLUPS: My name is Charlie Billups, and as I indicated before, I'm involved in the assessment of the aquatic resource impacts. I'm going to respond to the one question about the thermal discharge structure, because I have been involved in the review of the change that has come about since '74 with the original. As has been mentioned, the original design was the four unit design, and that was with the discharge diffuser, which was to go out into the river, into the bottom near the navigation channel, or actually, right in the navigational channel, which is supported, occasionally, by dredging by the Corps of Engineers.

After the two units were, the third and fourth units were cancelled, Georgia Power came back in with a proposed change, for one thing, in the diffuser, and applied to the Corps of Engineers for an application

to construct. Anything that is constructed in the flood plain, or on the river bank, requires a Corps of Engineers permit. At that time, the Corps of Engineers indicated that the diffuser could not be placed out in the channel, due to the possibility that the Corps would dredge it up, or, pull it up as they were trying to remove snagged logs that were on the bottom.

So, at that point, Georgia Power proposed a change in the design, and that application came in in May of '81, and since it was a construction matter, the NRC reviewed that on that basis, as a construction permit amendment, and the Applicant, Georgia Power, did a thermal analysis, a modeling study. The NRC did an independent analysis with our thermal hydrologist, Dick Kodel, who is still with us, still with the NRC. We found similar results, but actually, the size of the thermal plume was smaller than the original design.

Now the original design of course included the four units and not the two, but the design included a high speed jet, a very high velocity out of the discharge pipe, the single, the single port, which increases the rapid dilution immediately in the vicinity of that discharge pipe.

So the major impact, as we found, was in an area of about thirty feet, of the end of that discharge pipe,

and the sorts of impacts expected would first be scour of the bottom, and our assessment was, that the shifting sand bottom of the Savannah in this area, was such that it was not a very suitable habitat for aquatic biota, the benthick component of the community, and that scour, although there'd be some local impact, would not affect any major portion of a food source for fishes.

So that amendment to the construction permit was issued in January of 1982, which was more or less the NRC's acceptance of that proposed change. But you have to realize that it was also, at that point, reviewed by the Corps of Engineers, since it was a construction permit required by them. At the same time, I personally asked for EPA's review of my assessment of the aquatic biota sorts of impacts, and received a letter which is in the docket file, and should be available in the public document room.

So that that response from EPA, Atlanta region, should also be in the public document room. Some time around the date of January of '82.

At the same time we asked for both Georgia -- well, I think only Georgia, in this case, Department of Natural Resources, to also consider that.

And as I recall the final line of the assessment,

though, was that the discharges are, of course, covered by the Clean Water Act. So at the time of the operation, it will be necessary for the Applicant to receive a NPDES permit, and that NPDES stands for National Pollutant Discharge Elimination System permit, which is a permit required under a section of the Clean Water Act, Section 402, and originally, EPA issued this permit, but now has delegated that authority to the state. And in this case, the Department of Natural Resources, Environmental Protection Division, I believe is their title.

So ultimately, the permit to operate this discharge, the thermal discharge, will be reviewed and assessed by the state as the permitting authority.

We will also again look at any changes. A point was made that we should look at updated information, and of course that's part of what our review is at this point, is to look at additional information that has been collected since the construction permit, and to decide whether there is any need to do any update of our earlier analysis.

MR. FEIG: Can I ask a question?

MS. MILLER: Sure.

MR. FEIG: Will the rapid discharge from the jet in this thirty foot area, will that increase silting in the river, since you mentioned that it does have

a shifting sand bottom, and sand will continue to enter the scorch area?

MR. BILLUPS: No, the immediate impact would be more of cleaning an area, a small area, actually, on the bottom; but due to the temperature of the plume, you'll get an immediate rise. So it's not like it continues to spread out. So it will be the same local area that would first be scoured, and only that area would be scoured.

MR. FEIG: What is the temperature of the water as it exits?

MR. BILLUPS: I am not real sure. I'll answer it, I'll answer the question on the basis that the cooling tower is there for the purpose of cooling the water to a temperature at which it will not impact the environment. Now that's on the basis of definitions in the Clean Water Act. The temperature is probably in the ten degree, but it's on, you know, the discharge is from the cold side of the cooling tower, or the coolest water possible out of the cooling tower. So it's a small amount, but it is a thermal impact as such.

MR. FEIG: Over a hundred degrees Farenheit?

MR. BILLUPS: I'd have to look at the numbers, but that's -- it's available in the, in Georgia Power's application, the environmental report, and the section,

the one page I was looking at to get the dates for the analysis of the thermal plume, is in a particular section under -- Chapter 5 was called "The Thermal Plume Analysis." So right now you could look at that in the public document room, and then we'll have that in the draft environmental statement also.

DR. PALMER: Have you considered now the change in temperature that can be affected from the restarting of the L reactor? Will the temperature rise of the water at Vogtle be different from what it is now?

MR. BILLUPS: We haven't done any analysis at this point, but I have written down your points made concerning the cumulative impacts. Now as we were doing the analysis for the design, we were looking at ambient river temperatures at that point, so if there is a change in the Savannah River Plant, and the temperature discharge, or the background temperature of the river, then we would have to look at that also again.

DR. PALMER: When the water returns to the river from the cooling tower, were you just going to do that -- is there a central point, or is it diffused across the river, the release I'm talking about?

MR. BILLUPS: It's a single point discharge. It's actually a pipe, thirty inch diameter, I believe.

I don't know that I have the exact number of this sheet of paper, but, of that size. That discharge is angled slightly downstream from the river bank, so that it's actually pointing out in toward the channel of the river. But due to the river flow, the discharge will more or less stay to the right side of the river. So there is no possibility of a blockage due to that discharge alone.

And we looked at that possibility, and, of course, other agencies also, of course, look at the possibility of blockage of migratory pathways for fishes to move up into the river.

DR. PALMER: Considering the third issue now, the river flow, as you know we have prolonged droughts here at times and you can just about walk across. Has that been considered in the planning for --

MR. BILLUPS: Yes. Yes. I think the NRC is accused by the utilities of doing worst case analysis in a lot of things, and we -- in any of these thermal analyses, we try to pick the worst case, at least the once, once in ten years sort of low flow condition, or, even worse, one in a hundred years, or greater. So the analyses have been done for real low water conditions.

MS. MILLER: I would just like to make an additional point on what Mr. Feig brought up regarding the fault

discovered by the USGS. The NRC's analysis of earthquakes and faults, seismology, geology, is covered in the final section of the analysis report by the Applicant, and then the safety evaluation report by the staff. When USGS brought up the charge of a fault approximately seven miles from the Vogtle site, the utility and the NRC take such a charge very seriously. And I know, on the part of the staff, many staff hours were spent investigating the USGS claim that a fault was nearby.

Our geologists and seismologists visited the site, saw core samples, went up and down the river in a boat looking at the land formations. Flew over the site in a helicopter to see if there were any unique land formations that they could detect from the air.

They also intensely reviewed a two volume report that the utility had done by a geology/seismology consultant, and the conclusion by the NRC staff is that the fault is not capable, i.e., that it is not, has not had movement for millions of years. And I believe you quoted twenty thousand.

And I'm not sure exactly how many million, but it was on that magnitude. Other questions related to earthquakes and seismology will be addressed in the safety evaluation report, which is on the schedule

of information I've given you.

MR. BILLUPS: Let me correct a couple of numbers that I was trying to remember from heart, and my heart wasn't big enough. The water inlet temperature to the cooling tower--and this is, this I believe is a worst case condition--is indicated at 122 degrees F. Now that's before it's cooled. And then the water outlet temperature in that condition would be 89 degrees. That would mean that within a few feet of the discharge pipe, the temperature would be something above ambient, because the ambient would not be expected to be 89 degrees.

And the other clarification. The pipe necks down to a twenty-four inch pipe, not a thirty inch, which I had mentioned. And the utilities analysis indicated that the five degree isotherm, the area enclosed by an imaginary line, that would enclose water that was five degrees warmer than the background river water, would be thirty-two feet to forty-one feet, depending on which severe low flow you took. And the width of that plume would be six to, about six to nine feet wide.

So you can probably imagine the size of that, just looking at the size of this table. You know. Twice the width and three times as long would be

the area that would enclose that five degree isotherm. Now of course, the area that enclosed the one degree isotherm would be down river, somewhat larger. The staff's analysis indicated thirty-five feet long by four feet wide. So we actually, by our thermal model, felt that the Applicant had predicted a larger plume than we predicted.

MR. FEIG: Can I ask you what the width of the river is at that discharge point?

MR. BILLUPS:It'd be a guess, without looking at documents. If anybody knows.

DR. PALMER: A hundred yards? Three hundred feet?

MR. BILLUPS: I would guess that, just looking at the -- well, we were on the river today, and it's pretty much uniform through that section as far as width. I would guess that three hundred, three hundred feet. The channel at that point is over toward the Georgia side of the river, so that dredging would be closer to the Georgia bank.

MAYOR DELOACH: At this time, Tim Johnson.

STATEMENT OF TIM JOHNSON

MR. JOHNSON: Thank you. I'm glad to be here. I'm Tim Johnson. I'm with the --

MR. MILLER: Before you speak, can I just mention something. When Mayor DeLoach had first started the

meeting, we had mentioned that we would like to keep comments to five minutes, in order to fit everybody in. Once everyone that has signed up has a chance to speak, we will be opening the floor to questions, because we can stay here until ten o'clock. But you know, at the rate we're going, I'm afraid we may not be able to fit everyone in.

MR. JOHNSON: I'm Tim Johnson with the Campaign for a Prosperous Georgia. We're an organization with members all over Georgia, including Waynesboro citizens, Augusta citizens, and other citizens of this area, and we're concerned about economic and environmental impacts on Georgia.

Never in history has a technology promised so much and delivered so little as nuclear power. There's no better example of this failed promise than Plant Vogtle.

Nuclear power was once touted as providing electricity too cheap to meter, yet we found that reactors that have come on line in the last few years, actually cost as much as producing electricity with oil that costs over a hundred dollars a barrel.

In other words, electricity produced from nuclear power plants is more expensive than electricity produced with OPEC oil. We were told that Plant Vogtle would

cost about $250 million per unit when Georgia Power originally said they wanted to build it. Georgia Power today says that the two units will cost $6.6 billion. That's more than a thousand percent cost overrun. We always hear about government cost overruns, but Plant Vogtle makes the government look efficient.

Plant Hatch, which is a nuclear power plant operated by Georgia Power, has been broken down more than fifty percent of the time. It's operated less than half the time that it's been on line, or since it came on line. It hasn't been on line most of that time.

We were told that there would be a solution to the waste disposal problem, and yet here we are, nearly four decades after the bombs were dropped on Hiroshima and Nagasaki, and we still don't know what to do with nuclear waste, other than put it in a hole in the ground.

And we can develop all sorts of technologies for packaging it, but we're talking about essentially keeping it protected from the environment forever, and they just don't know how to do that.

We're told that nuclear power is safe, and yet almost every day, certainly every week, or every month, a new safety problem comes out, and we hear about the famous ones, like Three Mile Island, the Fermi

plant in Detroit, that had a partial meltdown in the '60s, Brown's Ferry in Alabama. But every day, or every week, there are smaller ones. Like just today's Wall Street Journal, the diesel engines that provide backup power to nuclear power plants in case of emergencies, they found that they don't work most of the time, and this includes the type of diesel generator that they're going to use at Plant Vogtle. And these kind of problems come out over and over, and over.

There's been some discussion of the earthquake problem, and someone mentioned the Charleston earthquake. I'd like to read you what the U.S. Geologic Survey said about it. Quote: "The area within which motion was sufficient to attract attention would be somewhat more than that circumscribed by a circle of a thousand miles radius--that's two thousand miles diameter. Six hundred miles from the origin, the long swaying motion was felt, and was often sufficient to produce nausea. In Eastern Kentucky and Southeastern Ohio, chimneys and bricks were shaken down." This is from a earthquake in Charleston. "The quake was felt in the Adirondacks, Ontario, Canada, Michigan, Milwaukee, Green Bay, Wisconsin, and even Cuba. In all the large towns within 200 miles of Charleston, more or less, damage was suffered. Dams were broken on the Savannah

River, and near Barnwell. At Augusta, one hundred and ten miles distant from the epicenter, the damage to buildings was considerable. For example, at the arsenal, the commanding officer's residence was so badly cracked and shattered as to necessitate practical reconstruction. In Atlanta, 250 miles distant, there was no worse injury than falling chimneys and some slight cracks in the walls, but the houses were instantly abandoned in great alarm and confusion by their occupants, and many preferred passing the night in the streets to reentering their dwellings."

Now I'd like to read a quote from the Charleston Yearbook from that year. This was 1886, the earthquake occurred. Now I think this is important for people who live in this community. Now everything seems fine. This is what one of the people who survived the destruction in Charleston said about it. "It was on such a scene of calm and silence, that that shock of the Great Earthquake fell, with the suddenness of a thunderbolt launched from the starlit skies, with the might of ten thousand thunderbolts falling together, with a force so far surpassing all other forces known to man, that no simultude can truly be found for it. The firm foundation upon which every home had been built, in unquestioning faith in its stability for

all time, was giving way. For a few moments, all the inhabitants of the city stood together in the presence of death in its most terrible form. Within one minute, every home in the city had been broken or shattered, and beneath the ruins lay the lifeless or bruised and bleeding bodies of men, women, and children, who had been stricken down in the midst of such security as may be felt by him who reads these lines at any remote distance in time or space."

The discovery of the Miller earthquake fault by the U.S. Geologic Survey has been mentioned, and the NRC staff person said that they have concluded that it is not a capable fault. I might point out that the U.S. Geologic Survey which is the expert in this issue, and which first pointed out the existence of the fault, has not said that it is an incapable fault.

In addition to that particular earthquake fault, the USGS has studied for years, and years, the Charleston earthquake, and yet they still say--and this is from a USGS letter on the issue. "After several years of intensive study in the Charleston region, no geologic structure or feature can be identified, unequivocally, as the source of the 1886 Charleston earthquake." So they still don't know what earthquake fault caused it. It was the second worst earthquake in American

history. The only worse one was the one that made the Mississippi River flow backwards. This earthquake was worse than the San Francisco earthquake that you've all read about in your history books.

The utilities, of course, say, "Nothing to worry about; everything's under control. We're the experts. We'll operate the plant safely." Yet the Southern Company, which owns Georgia Power, testified before the U.S. Congress, that they would not operate nuclear power plants without a limit on their liability.

The Price-Anderson Act was passed in the 1950's, and it has been repassed several times, and is in existence today, and it limits the liability of an electric utility, if there is an accident at a nuclear plant. It limits it to less than one-half of one percent of what the NRC studies have estimated the worst credible accident would cause.

If the utilities think the plants are so safe, they why won't they put their money where their mouth is? Why do they require these limits on their liability? Look at your homeowner's policy. In your homeowner's policy, it says that that policy shall not apply to damage suffered from a nuclear accident.

The insurance industry knows what's safe and what's not. It would be nice if we could count on the government

to protect us. But I might point out, in 1918, the U.S. life insurance industry stopped insuring asbestos workers. They wouldn't give life insurance to asbestos workers because the death rate was so high. It was 1971 before the federal government took any action to protect the workplace for asbestos workers. Countless people, workers, died because of that inability to act, plus we discovered that the asbestos even in our schools and homes causes health problems throughout the society. So we can't rely on the government, and I think we should look to what the industry itself feels, when they won't put their money where their mouth is.

Now the right thing about all this is that Plant Vogtle is just not needed. The Standard & Poor study was mentioned, that says that we'd have enough electricity even if we didn't complete any of the nuclear plants now under construction.

Well, the Environmental Action Foundation did a study, nationwide, and they said Georgia Power, out of all of those overbuilt utilities, is the most overbuilt in the country, in terms of dollar impact on consumers.

When they got their construction permit, Robert Scherer said that demand for electricity in 1983 would be 22,728 megawatts. In fact it was barely over half

of that. At the time consumer advocates said that it would not be needed, the company said it would, and NRC agreed with the company. The consumer advocates have been proven right. Even if we did need the energy, which we clearly don't, it would be cheaper to pursue alternatives. We could put a solar water heater on every household in the State of Georgia. Every single household could have a solar water heater, providing more energy than will be produced at Plant Vogtle, at a cheaper cost, that would also provide more jobs, the money would stay in the communities, and it would be far better for the economy as well as the environment. That concludes what I have to say. Thank you.

MAYOR DELOACH: Any responses? Herman Lodge, Waynesboro.

STATEMENT OF HERMAN LODGE

MR. LODGE: I'm Herman Lodge, County Commissioner, and I represent approximately 3500 people in my district, and I'm not a biologist, and I surely don't know what the impact of the, the environmental impact would be on the Savannah River, and about the fish and all this. But I like to speak from the socio-economic aspect of Plant Vogtle. But I'm pretty sure, and I would assume, that the experts would assure us that the river will be fairly safe. There's nothing really safe. I mean, we wake up in the morning. We don't know what's going

to happen to us. We have farmers who plant grain, and hoping that they're going to yield a good crop. They don't know. They're gambling. And I think everybody gambles, every morning they get up, to live. But socio-economic point is that several years ago in Burke County, the average education level of Burke County was about a fifth grade. The average income was about, family income was about two thousand dollars a year.

And this county was basically a poverty stricken county. There were possibly a lot of wealth, but it was always in the hands of a few people.

When Georgia Power came, they did provide jobs, and it's real difficult -- we had an unemployment rate of between 15 and 16 percent. Now, the unemployment rate is down to about five percent. And it's real difficult to tell a man who has ten children and a wife, and doesn't have a job, and no way to feed them that, the impact that Plant Vogtle will have. I mean you just can't explain to them. The only thing that man can see is that there--he needs a job to feed ten hungry kids. So this is what we think that Plant Vogtle has done for the social and economic of Burke County. Also, it has increased the educational level of Burke County. It has increased the housing stock, which we had like a tremendous number of rundown houses in Burke. I wonder

about the -- we talk about nuclear energy, and then I wonder sometime, I think about nuclear medicine. You know, why would somebody--when you use nuclear medicine for diagnostic and treatment purpose, and you've got it contained, and you can control it in a hospital environment, I can't see why we can't control nuclear energy at Plant Vogtle.

The other thing that, that when we talk about this, we talk about that the -- he says that Georgia Power has enough energy to last so many years, and then we talk about this and that. Then we wonder why somebody challenges the defense budget of the United States. Now we've got enough weapons, enough nuclear energy, enough nuclear weapons to blow up the whole world, but nobody is, complains about the defense budget, you know, and we've got a defense budget here, you know, which is -- and yet we've got people in the United States who are hungry, are starving, but here we're going to blow up the world, you know, with nuclear bombs.

But nobody complains, nobody worries about this. Well, what I'm simply saying is, that Georgia Power, Plant Vogtle, has had a tremendous socio-economic impact on Burke, and, because I know, I live -- well, I guess I live within fifteen miles of the plant.

And like I said, I have no fears about it, and maybe I'm selfish, and I probably am. I might be biased. I probably am, because we are enjoying a good tax base, and I have to be selfish, and I have to be biased, and I have to be for Plant Vogtle. But certainly, you know, I would rather live and see people I know, who have suffered in the past for a lack of income, that would now be able to live good. Maybe ten years from now they won't be able to. I don't know. I don't know. But it's real difficult to tell folk, when they are starving, when they are living in shacks, that that plant is not a life-saver for them. Thank you.

MAYOR DELOACH: Louis Abbott.

STATEMENT OF LOUIS ABBOTT

MR. ABBOTT: My name is Louis Abbott, and I'm a small businessman operating a business within the city limits of Waynesboro, which is obviously inside Burke County, and within the environmental area that Plant Vogtle would be, and we would be concerned with.

I'm a native of Burke County and Waynesboro, so I have a deep interest in it, and in its future. I have three children, two who live within the county, and I have three grandchildren that obviously I'm vitally concerned with, and I would be concerned with their health and their safety. And it is true that

I've done business with subcontractors, and others that did do business with Plant Vogtle, and with Burke County. So economically speaking, obviously, I would be supporting the plant. But I support the plant also because I think it's good for Burke County, and as for the fear of Plant Vogtle, I have no more fear of Plant Vogtle than I do of the Savannah River Plant across the river, and it's almost as close to Burke County as Plant Vogtle. It has been there for some 25 or 30 years, and there have been more people killed on the highway between here and Augusta in the last twelve months, than have been killed at the Savannah River Plant.

So I'm not that much concerned with the operation of Plant Vogtle, and I'll restrict my remarks to a short length of time by saying this. One of the first things that I remember, as a young businessman after World War II, was a slogan that Georgia Power had out then. I don't know, even know why they dropped it, for that matter. But they had a little slogan, "We're a citizen wherever we serve." And I remember being on the city council in Waynesboro, and in civic organizations in Waynesboro, that they were just that. They would do anything from putting up street lamps at Christmas-time, which might have been contrary

to their rules and regulations. Maybe their local district manager had a little close affiliation with the town by living here. To rescuing a cat up a tall pine. So they've been that. I think if they've invested the money that they have in Plant Vogtle, and have spent the money that they have in training people to operate Plant Vogtle, that they would still be a citizen wherever they serve, and I'm proud to say that Plant Vogtle has done much for Burke County, and you've already had that explained to you. And I'm glad it's in Burke County, and I sincerely hope it's completed. Thank you.

MAYOR DELOACH: Ray DeLaigle.

STATEMENT OF RAY DELAIGLE

MR. DeLAIGLE: I'm Ray DeLaigle, member of the Board of County Commissioners. First of all, I'm a Baptist. I believe in the creation of God. God gave it all to us. Secondly, I'm a veteran of World War II. I served my country. I have faith in this country, in the State of Georgia, and Burke County. I'm a farmer. I have a family. I have three daughters and some grandchildren. Their future, to me, is what I'm here for.

I've got just a few remarks, and those are, that the experts are building, but I want a future for Georgia, and without Georgia Power, or some electric

company building this future for us, we'll have no future. So I support it. And I ask Georgia Power to build the plant, and I ask the United States Nuclear Regulatory Commission to license this plant for the future of future genreations of this district. Thank you.

MAYOR DELOACH: Next will be Harvey Sapp, Councilman from Waynesboro.

(Continued on the next page.)

end Art/

MR. SAPP: My name is Harvey Sapp, and I am a member of the City Council of the City of Waynesboro, a native of Waynesboro, and vitally interested in this community's growth and its wellbeing.

I want just two or three remarks. I listened very attentively to the learned experts that have been up here in the anti field and I respect them for their learning and apparent deep study.

Some things confused me a little bit, however. The same Sierra Club seems to oppose the use of coal in some places because it causes acid rain.

I am acquainted with one of the speakers. I went to school with Jack Palmer. We went to high school together. I didn't know he was that much of an expert in the nuclear field, however.

Thank you, Jack. You told me something that I didn't know about.

But I noticed his reference to automobiles and how unsafe they were, but he didn't advocate failing to license any more of them, for some reason.

That is to say, we are aware that all human endeavor carries some danger. If we weren't willing to take that chance, we wouldn't have put a man on the moon, I don't think.

And I am not an expert in any of these fields,

fields of earthquake and faults and I know nothing about the disposal of nuclear waste. The closest I have ever been to one was I did go to the site of the first ones that were dropped in Hiroshima and saw the monument they put up there, and it is a nice monument.

But let me say this, I have had a long association with the Georgia Power Company and they are competent business people, and I don't think -- and I, too, own a little bit of Southern Company stock -- and I don't think these people would invest this kind of money in a plant like that on that location if it wasn't needed, if they didn't think they could get the money out of it, and I don't think any of you do either. It doesn't make any sense, does it? These are good business people.

If they don't produce the business for the stockholders, they won't be in that job long, I will tell you that, and you know it, too.

So, all this malarkey about the Georgia Power Company trying to impose something on somebody just so they can spend an awful lot of money to run your light bill up is just what it sounds like, malarkey, as far as I am concerned.

These are business people and they are doing a job.

And let me further way that I am glad that Georgia

Power Company has built the plant here and I hope we are going to enjoy their company for the next 40 years.

Thank you.

MAYOR DeLOACH: Okay. Leonard Hill.

XXXXX

MR. HILL: My name is Leonard Hill. I feel kind of out of place. All the knowledge that is in this room, I admit that I don't possess near what you all do. But I am a farmer of Burke County and I have been here probably about 20 years, and I am married and got two children.

And I have got neighbors that have been in farming but couldn't make it and have had to get down at Vogtle and get some employment to get some money.

We have been tight around here and that is one aspect of Vogtle that I appreciate, that they picked Burke County to come to.

And the part of the nuclear energy and radio-activity, that is something you have to bear in mind that we wasn't guaranteed to be here two days, three days. You just have to take one day at a time. We had no guarantee how long we were going to be here, and that is something that I bear in mind every day, that I was raised on the farm and I have been around risks every day.

The farm is one of the most accident prone jobs there is, just about, and then I have been raised around chemicals. The EDB, I put out probably four or five hundred

gallons of it just last year. I know what it can do. I was raised around ethyl parathon. That is a cotton poison that if you get it on your skin it will go into your blood stream and kill you.

I am used to being around risks. I live every day with risks with the farm. You have no guarantee with it at all, and that is something we have to bear in mind with Vogtle down there, that once you -- I believe with all the knowledge here, once Vogtle is or if it will be completed and in operation, on line, that I believe that that is not where the knowledge is going to stop, that it is going to continue on.

And the farther it goes, if they see anything they need to correct, I believe they will. It is not going to just end when it gets on line. It is going to continue on, and I think that is the way it should be.

So, if it does get a license, that doesn't mean that they are not going to stop with the regulations and watching it. They are going to be watching it all the time.

And that is -- I have got some very close neighbors that work out there and have got a neighbor that is one of the bosses out there with Georgia Power, and he tells me of the changes they have made. And my wife was employed out there for a while.

And I got firsthand knowledge of the things that

go on at Vogtle and the changes they do make to improve, and the safeguards that they do have down at Vogtle.

So, that is what I look at in regards to the nuclear part of it.

Now, the environment, just like Mr. Evans and some of the rest of them have said, unless you have been there you really don't know, because I was laid off and my wife had a job out there and she supported us until I could find work again, and that is part of it. I had had a public job because I couldn't make it in the farm at that time, and that is what it has helped for us. It provided groceries and food and clothes, and that is the same story all over the county, that if it wasn't Vogtle right now Burke County would be in foul shape. It is a farming county and with the farming going down, we would be crippled. But with Vogtle out there, it has helped the economy just in Burke County alone. I know it has helped all over.

So, that is about all I have got to say. I hope you all do go ahead and open Vogtle up, because with the knowledge that is out there I believe that it will be a safe thing and be a long term safety with Vogtle. That is the thing that I am basing my statement on, that I have had some dealings with the government and once you get with the government you can't leave the government. It is going to

be with you just about as long as you go. That is the assurance that I have.

And I thank you.

MAYOR DeLOACH: This completes all of those that signed up to make a statement.

At this time, I think Melanie said we will have questions and answers from the audience, and we would like to, like I say, limit this to environmental issues, please.

MS. MILLER: And please state your name.

MR. TEPER: My name is Doug Teper.

Ms. Miller, how many people will the nuclear plant employ once construction ends and on line operation goes?

MS. MILLER: I don't know. I am not sure. That would be a question for Georgia Power.

MR. TEPER: Okay. But am I safe to assume that it will not be the same number of jobs that are presently going on at the site?

MS. MILLER: Yes, that is a safe assumption.

MR. TEPER: Would it be a dramatic decrease in the number of jobs here in Wayne County -- Burke County?

MS. MILLER: Yes, I think so. I think it is also important to point out that many of the construction workers that are working on Plant Vogtle are not from Burke County to begin with. So, how the operation of the plant would affect particularly those people that live and work in Burke

County, I don't know.

MR. TEPER: Thank you.

MAYOR DeLOACH: Dr. Palmer?

DR. PALMER: What do you expect the operational life of the plant to be, and on decommissioning how is the radioactive plant going to be disposed of?

MS. MILLER: Okay. I will answer your first question first. The operational life of these plants is 40 years from the point that we grant them a license.

As far as decommissioning, I don't know if I have an answer to that.

MS. ADENSAM: I don't think we have anyone here to address that for you right now.

DR. PALMER: Well, this has a serious effect on the environment again because it is my impression that over a period of 40 years these plants do become highly radioactive. So, you can imagine the mass of metal and concrete that is going to have to be disposed of. Or will it simply be a fence built around it and guarded the rest of -- to eternity? The radioactivity will last forever. So, it either has to be dismantled and shipped out, or what can be done with it? You see, the life of this plant is relatively short. Forty years is a little while in this world we live in. So, we should be concerning ourselves now with the disposal of this huge amount of concrete and steel.

MS. ADENSAM: Dr. Palmer, the NRC is well aware of the potential problems associated with decommissioning, and to the best of my knowledge -- and perhaps my legal counsel can help me here -- we are in the process of working on rules for decommissioning.

Now, exactly what the state is, I am not sure. Has that been issued as a proposed rule yet?

MR. PERLIS: There are proposed rules. I don't think any have been adopted yet.

MS. ADENSAM: Yes. For requirements on the utilities for how they are going to decommission these plants, and those rules have not been finalized. But we are well aware of your concern and we share it, that, you know, we can't just waltz away from them once we shut the plants down after their useful life.

MR. JOHNSON: Tim Johnson. Why does the NRC have a regulation prohibiting need for plant and availability of alternatives from being considered in reviewing environmental impacts of an operating license?

MS. ADENSAM: Bob?

MR. PERLIS: I will be happy to. That is now done at the construction permit stage and the theory that the Commission has advanced for that is that once the plant is built and the investment has been put into it, that it doesn't make sense at that stage to determine essentially

whether it should have been built in the first place.

MR. JOHNSON: But if you are looking at the environmental impacts of an operating license, then if you are comparing that to other things, then whether the plant is needed or not seems very relevant to what environmental impact is because operation of the plant is different from construction of the plant.

MR. PERLIS: Okay. The other assumption the Commission makes is that a nuclear plant will have less of an environmental impact than a coal plant that is operating at the same time, and therefore you would operate the nuclear plant instead of older capacity.

MR. JOHNSON: But you are not looking at alternatives such as solar or conservation or even whether it is needed at all?

MR. PERLIS: That is correct.

MR. FEIG: Danny Feig. When does the evacuation plan or the emergency response plan have to be completed and presented? Is that not considered at this point right now?

MR. PERLIS: It is not being considered at this point. It has to be submitted and approved by FEMA before an operating license is given. And petitioners, such as CPG, would have an opportunity to comment.

When it is developed depends a lot on the local

counties and government bodies to help develop the plan, so I just don't know what their schedule is.

MS. MILLER: That is something that is analyzed by the staff in the review of the applicant's final safety analysis report and will be reported in the staff safety evaluation report.

MS. MERICAN: Susan Merican. If you could please answer for me, I didn't know anything about this until I drove in to visit with my parents this evening, and I called Taylor of the News and perked up and drove down to the hearing tonight.

I looked in the paper before I came and saw nothing in the paper today, and that concerns me, that citizens haven't been made aware.

MAYOR DeLOACH: It was on the radio and on TV.

MS. MERICAN: Well, there was nothing in the paper.

My question is that I have been reading as much as I can about the hearing process that is going on. Is this the first in-stage hearing tonight? Will there be others?

MS. MILLER: Okay. First of all, this is not a hearing. This is a public meeting. And there is a definite distinction between a public meeting and a hearing.

In a hearing, people are under oath, there are legal counsel, there are judges, et cetera. A public meeting

is simply an informational exchange between the NRC staff and members of the public, in this case Burke County.

And is this the first step in a hearing process? The answer would be no, since this really isn't a hearing. Hearings are something that are requested by members of the public, and in this case there are several members that have requested a public hearing.

A first step in that process is a prehearing conference, which at this point is set up for May 30th and 31st of this year.

As far as what happens after that point, the board appointed to hear the contentions by interested members of the public will make a decision as to whether or not those contentions are admissible and as to whether or not they have merit.

If the board decides that they are admissible and they have merit, then the case will go to hearing and, as indicated in the sheet I had handed our early, right now the hearing is scheduled to start in February of 1986.

Okay.

MR. PALMER: Another concern I have indirectly concerns the environment, because should there be a breach in security, as you know, the world is very concerned about terrorist activities, and recently at the Savannah River plant, I am told, the security was breached by a group who

were not indeed truly terrorists, but who are simulated terrorists, who did get into the plant area and could have wreaked havoc with the Savannah River plant.

So, I am not sure that we have the capability of providing the security that the plant is going to need. You see, the plant may function quite well left to its own devices, but it is still very vulnerable to outside attack, and we can't disregard this.

Terrorist activity is a worldwide concern, and you can't separate Vogtle Plant from terrorist activity is my point. No way.

MS. MILLER: That is a very good point and that is certainly something which the NRC does evaluate. We have specialists in the area, in the physical security area, who do review the security of the plant. And, you know, as you mentioned, sabotage is a very tricky sort of situation because it is very hard for any person to estimate, but to the best of our ability we review that, and that again is a safety issue which will be addressed in our safety evaluation report.

MS. ADENSAM: You might be interested further that the physical security plan becomes a condition of the license. So, once the license is issued to the utility, they are required by that license to keep that physical security plan in action, and our regional inspectors make

sure that that is done.

MR. JOHNSON: If there were a -- I give a hypothetical for example -- if there were a major accident, say at Plant Vogtle, and they had to evacuate even the Savannah River plant -- I mean, it was that major. And that could very well happen in any nuclear plant. And there hasn't really ever been a commercial plant, I don't believe, built so close to such a large defense facility.

What plan and how does the NRC interact in looking at the emergency response and who is going to protect the Savannah River plant and how do you deal with security and things like that?

MS. MILLER: Okay. That is a very good question, and I am going to answer this, even though we don't have staff members here to particular address this.

But I presented a very similar question to our emergency planning reviewer and I presented it similar to the way you have stated it, that it seems like it would be a problem because of the Savannah River plant facility.

And, you know, granted, he is the person who has done these reviews, he has the experience in this area, and he explained it to me as no, the training and the drills that have taken place at Savannah River Plant are really a plus if there were an accident at Vogtle, because the people there are used to undertaking routine drills. They know how

to react in this sort of situation, and it would certainly facilitate the evacuation of the area, you know.

And again, that will be covered more fully in our safety evaluation report. That was just, you know, a very brief conversation that he and I had, giving us a short flavor of what things looked like.

MR. JOHNSON: There are guards, then, that guard the plant? I mean, there is ---

MS. MILLER: Which plant?

MR. JOHNSON: The Savannah River Plant.

MS. MILLER: Oh, sure.

MR. JOHNSON: Somebody has to ---

MS. MILLER: I would presume. You know, I don't know because we haven't gotten into the detail yet of that sort of review, since we are just starting our review of the license.

DR. GORDON: Judy Gordon. Assuming that Congress does not approve the regional waste compact as anticipated, and that appears to be very likely, at least according to the Philadelphia Inquiror and many other studies that have been done, what plans does the Nuclear Regulatory Commission have to take care of waste that are being generated at facilities such as Vogtle given that by 1992 South Carolina is probably going to close their low level waste dump at Barnwell?

MS. ADENSAM: I don't know that we really have anyone here that can address that question for you directly. I think Mr. Perlis may be able to help you.

MR. PERLIS: I can try. At this point, again it is the expectation that the states will develop low level waste sites. If they should not, it is then, as I understand the law, still the responsibility of the utility to find a site for its low level waste or to stop producing it.

There are a number of possible options here. One is they could continue to send it to Barnwell, if Barnwell would accept it.

A second would be possibly storage, interim storage on-site, or someplace else in the State of Georgia going by itself, if there is no low level waste site done on an area compact basis.

And finally, as I understand it, if there is no place to store low level waste, they would have to stop producing it. But it is not expected that it would come to that stage.

DR. GORDON: Will this be addressed in the environmental statement?

MS. ADENSAM: Are you asking if the possibility that there is no action by Congress, would that be addressed in the environmental impact statement? I can't tell you at this time.

DR. GORDON: Thank you very much.

MS. ADENSAM: Thank you.

VOICE: All the waste from this plant, low level waste, that is the question. In my opinion, these residual rods that come out of the plant still are highly radioactive and have to be disposed of in a suitable manner.

As far as I know, most of these plants are storing this material on-site.

As you know, Burke County is underlain by a tremendous aquifer. The flow is from the coast toward -- in our direction. That is where we get our drinking water. And this plant is going to sit right on top of that aquifer.

Now, Hanford, Washington had leaks already from its on-site storage. As far as I know, there is no satisfactory way of storing high level nuclear waste.

You talk about embedding it in glass and crap like that, it has never been perfected.

So, this plant is being built with no concern, or at least no satisfactory method of getting rid of that waste. Where are you going to ship it to? Nobody wants it. So, it is going to be left on the ground over there to contaminate our water. That is what is going to happen. It is no kidding now. I am just telling you the truth. There is no satisfactory way of disposing of high level radioactive waste. This is not low level, it is high level.

MAYOR DeLOACH: Anyone else?

MS. ADENSAM: I would just like to make one comment, that high level waste, the spent fuel, is not left lying on the ground. Those plants that have spent fuel storage, they are stored in pools that contain water and there is a great deal of control on where that water is going. It is just simply cooled and recycled.

So, it is not laying out there, and these pools are seismically designed for the seismic -- whatever seismic event that the plant is designed for.

VOICE: Admitted that there may be seismic events. To interpret for someone not familiar with that word, that means earthquake. A seismic event is an earthquake.

MS. ADENSAM: There is a seismic design criterion for all safety related structures at the plant, yes.

VOICE: These are real horrow stories we are talking about, and we don't underestimate. That is what I want the public to realize, that they are weighing jobs against real threats.

Now, sure, you have got to work, you have got to make a living. But do you want to risk you and your family the rest of your lives by something that we don't know that much about yet?

I am sure glad this discussion was started tonight.

I think we can commend the company and the Commission for granting a public hearing, and I hope there will be more of them, because these questions arise all the time and they have to be answered.

MR. McCOY: Dwayne McCoy from August, and I came down here at the invitation of Gaines.

I have been here in Georgia approximately five years now. I came down here from northeastern Ohio. I lived in Cleveland until I was 26 years old. I lived in the vicinity of two operating plants with two new plants with construction permits and a new plant -- a new plant at the time that I left Ohio was -- they were planning on licensing it for construction and they never got beyond the initial stages.

It scared the hell out of me. The State of Ohio in 1977 had a referendum on the State Constitution to outlaw the building of any further nuclear plants in the State of Ohio.

They also had a referendum to allow waste disposal and provide for waste disposal within the State of Ohio.

They voted down the proposal to the constitution to make room for waste disposal. They voted against the proposal to eliminate further construction of nuclear plants.

Since then the plant in Toledo, after it was

built and commissioned, was found to have a fault line under it.

Beyond that, immediately within about two months after the commissioning of the plant, in the first few kilowatt hours of electricity coming off of the lines, we were immediately told, as consumers, that we would be starting to pay for the decommissioning of the plant very shortly, that it would be added in, written into our bills so we wouldn't have to pay for it in a lump sum later on.

I would like to indicate that these plants are built to the best -- supposedly to the best available human technology with the limiting factor of the dollar.

I am strictly and definitely opposed as a father, as a citizen of the United States, to the building of any further nuclear plants and their operation.

I don't feel that any possible economic benefit that can be gained from them can be justified.

That is all I have to say. Thank you.

MAYOR DeLOACH: Anyone else?

MS. HATHWAY: I am Betty Hathway. I, too, live in Augusta. We came down here from New York State five years ago.

I don't know how many of you are familiar with the one in Lewiston that holds high level waste, in Lewiston, New York, near Niagara Falls, the Love Canal fiasco, and the

West Valley, which was only one of two reprocessing high level fuel rod plants in the U.S.A. It lasted exactly six years.

I can't tell you how much cancer -- I worked in the medical building -- mutations, mutant animals, and so forth, and the difficulty, the great difficulties to farmers.

And there that plant sets with its fuel rods in their pools of water with -- the last time we heard it just had a barbed wire fence around it and cows were grazing up next to it and children were playing.

But we did know when we left there that the water, they had found that the water was contaminated and so forth.

And I just do not think, in this beautiful State of Georgia, I cannot understand why solar energy is not pursued.

If as much money and capabilities were put into solar energy as you are wasting in nuclear energy, we would be much farther ahead.

That is all I have to say.

MR. McCOY: I would also like to make one further statement.

From the time that I was, I believe, around 12 years old until the present time, my father has been employed in the nuclear industry as a sales person. He makes

a lot of money that way, and he raised me on that money. I am sorry.

I am not proud of it or happy about it, and I tell him every day to get out of it.

MAYOR DeLOACH: Any other statements?

If not, I have this announcement. Anybody who would like to be placed on the mailing list for the NRC press releases notify Joe Gilliland, right over here. Joe will give you the address, his address.

MS. MILLER: If that is all the comments and questions, we are going to close here tonight. I would once again -- one more?

MR. LIVELY: I want to say one thing. I will be the last one and then we will go home.

I look around here and I live closer to that

MAYOR DeLOACH: State your name, Mr. Lively.

MR. LIVELY: I am Q. U. Lively, and I am just an old country boy from out here right next to where that plant is being built.

As I look around here, I don't see anybody that lives any closer to it than I do, and I want to tell you that I am not afraid of it. And all these people that come in and testify against it, they have an ulterior motive, I don't know what it is.

VOICE: Nobody paid me anything, sir.

MR. LIVELY: But ---

VOICE: I came here with a great deal of difficulty to get here. I am sorry.

MR. LIVELY: I have an ulterior motive, and it is financial.

VOICE: And I have none, sir.

VOICE: We have none, so you have more than we have.

MR. LIVELY: What are you doing here ---

MAYOR DeLOACH: Let's hold that comment. Let the man talk.

MR. LIVELY: I just want to be given the opportunity. This is a democratic country. I didn't interrupt you.

MS. MILLER: Yes, this gentleman has the floor.

MR. LIVELY: I live out there. I am 67 years old, born and raised in the county, and these are environmentalists. They took DDT away from me and if you were born and raised in Burke County and you are 50 years old, you know what malarial fever is, you have had it. DDT got rid of it.

If you are 25 years, 30 years or younger, you don't know what malarial fever is. You never saw it. You never saw a bedbug, you don't know what it is. And this is the same group of people that -- oh, the snail darter deal, they holler earthquakes, they are specialists, they know

more about producing electricity than the people that do it. They didn't come here to do us any favor.

VOICE: We came to save the nation.

(Applause.)

MS. MILLER: Are there any other comments?

MS. BATH: I just have one last feeling. I am Susan Bath, and I left Burke County, Waynesboro, and moved away several years ago, and came home a few weekends ago and went fishing with my father, and saw this monster staring me in the face -- I hadn't seen it up until then.

I guess everyone here knows my feelings about it. I am not very happy that it is here, and I guess, if anything, I am happy that I am not near it.

I challenge the NRC to undertake the most comprehensive study they have ever undertaken before allowing Plant Vogtle to operate in this county.

Thank you.

MAYOR DeLOACH: Jimmy. One more, Jimmy Bennett.

MR. BENNETT: My name is Jimmy Bennett. You know, a question just came to mind. Plant Hatch has been operating since what, the 70's? For 10 or 12 years. And I am sure the NRC is very much aware of what goes on there. And, you know, you hear these people talk about mutants and cows that look funny and all these things.

How many mutants have been born in that county,

you know, since that plant started? You know, how many problems have they had in that county?

And the technology here is so far greater than what is going on there at that plant, can somebody tell me what -- you know, what has it done in that county?

VOICE: Nobody has studied it.

MR. BENNETT: I am asking the NRC people, not the people sitting out here.

MAYOR DeLOACH: Any other comments from the staff?

MR. LaROCHE: I am Gerry LaRoche, terrestrial ecologist, and I have investigated the charges that around TMI and some of the plants up in New York State caused damage to farm animals, plants and so forth, and we had a whole team of people investigating it, and we could definitely know that certainly some animals had problems. Farmers have problems with animals all the time. But we never found any kind of a causal relationship between the problems the farmers had and the operation of the plant or the accident at TMI.

And if you have any evidence to the contrary, I would certainly appreciate knowing about it.

Yes?

VOICE: Well, you know that radiation induced cancers take more than three our four years to occur, and as

a scientist I think you should include that in your comment.

MR. LaROCHE: Certainly. But how much radiation was given off at TMI?

VOICE: I don't know, and I think it is very difficult for anyone to know. But that is one of the points, is we really don't know and that is one of the problems with the whole industry, nobody knows. And you don't keep going ahead and ahead and ahead and ahead until you really know. And you can't say after four years you know that there have been no effects.

MR. LaROCHE: Well, certainly the animals that the farmers have problems with that either died or -- a lot of them died, and so forth -- and that certainly didn't have to wait four years or any longer to happen. Some of it was just diseases. Some of it natural disasters that occur on animals. It wasn't cancer.

MS. MILLER: Your point is very well taken and, you know, it is transcribed and we will consider it. But, you know, we are not going to answer any questions related to TMI here tonight. That is certainly beyond the scope of the meeting.

MAYOR DeLOACH: Yes?

VOICE: Aren't there an awful lot of studies that would certainly contradict any claim that there are safe levels of -- aren't there reasonably credible studies that

would indicate that ionizing radiation is a lethal poison in probably any amount?

MR. LaROCHE: Well, I wouldn't go so far as saying in any amount. Certainly it is not something to play with. That is right. There is so much concern about it, that is why we have so many rules and regulations and all these investigations. It is certainly something that you are very careful with. There is no argument there, absolutely.

VOICE: The objection between the civilian sector, the nuclear industry and the defense of the necessity of the civilian sector to the proliferation of weapons grade material, is is that really not an issue here?

MR. LaROCHE: That is not an issue here.

VOICE: Before this issue gets clouded by rhetoric, I want to ask again and make sure I understood your answer. Millions of dollars and billions, whatever, has been spent studying this and there has been no evidence that a nuclear plant has caused problems in cows, people -- is that what I understood you to say?

MR. LaROCHE: Around TMI and some of the plants up in New York State that I have investigated ---

VOICE: No. Automobiles make a lot of people mutilated every day, and you know, it makes me wonder. Thank you.

VOICE: Mr. LaRoche, did you study the radioactive emissions effect around Plant Hatch? I believe the gentleman referred to Plant Hatch.

MR. LaROCHE: No, I am not a radiobiologist.

VOICE: Okay. Have you seen any reports put out by Georgia Power on the -- I believe that is ---

MR. LaROCHE: That is not my area. You will have to ask somebody else.

VOICE: I just thought you might know that there are less amount of cattle to do the testing on, which hasn't been done, around Plant Hatch than there was initially when the plant was first built.

MR. LaROCHE: I am not sure I understand. Well, I couldn't answer you anyway.

VOICE: Thank you.

VOICE: What were the isotopes you were concerned about? What were --identify them.

MR. LaROCHE: I wasn't concerned with the isotopes. I am not a radiobiologist. I was concerned with some of the allegations that the farmers claimed that they had problems with their animals or with their plants and that this potentially could be caused by the plant. Okay. And all of these, the ones that we were able to investigate, were shown to be normal types of problems that a farmer would have from other causes, and not from radiation.

VOICE: And what are your qualifications to make that ---

MR. LaROCHE: I wasn't the only one on the team. I was just one member. Okay. I am a Ph.D. ecologist. And we had veterinarians from the state, from the EPA, people who -- not only veterinarians, but radio -- in the field of radiobiology, and they know what the effects of radiation are on animals, on this team.

VOICE: Do you believe in your own conscience that you can reassure the community that there were no radioactive effects on the people and animals of that community? Are you sure of that in your own mind?

MR. LaROCHE: That is not my field.

VOICE: Okay. I believe you were asked to reassure the fact. If there is someone better qualified, I think he should.

MR. MONTGOMERY: Let me introduce myself. I am Dan Montgomery. I am from the Region II office and I have responsibility for inspection in the areas of environmental protection and effluent monitoring at all the nuclear plants in Region II.

I just wanted to make a few comments regarding some of the questions. There seems to be kind of a feeling I got that some people thought that somehow the emissions from these plants are not well known, and that is, you know --

it is not true.

The emissions from nuclear plants are very well controlled. They are required to be measured and we know a lot about effects and how radionuclides are transferred in an environment.

Previous to working with the NRC, I spent six years with the U. S. Environmental Protection Agency involved in environmental studies around nuclear plants and waste disposal sites.

And I think I could say that we feel -- and I think there is scientific evidence -- that the routine emissions from nuclear plants are so low that you would not be able to discern any deleterious effects among plants, animals or humans. I don't think there is any problem saying that. As a scientist, I have no problems.

VOICE: Can you apply that, however, to the Three Mile Island incident in which far beyond allowable escapes occurred?

MR. MONTGOMERY: I spent three weeks at Three Mile Island involved in surveys around the facility, making measurements involved in the environmental program around TMI. The accident at TMI from a radiological, from a safety point of view, the effect on the public was -- the projected medical effects are so low as to be virtually indiscernible even at TMI.

The biggest disaster at TMI was the economic problems associated with the plant recovery.

Now, one of the other things I wanted to address just briefly was the concept that I believe you raised about liquid waste at Hanford.

These are liquid wastes that were generated in the reprocessing of highly irradiated fuel for the weapons program. The residual radioactivity was stored as a liquid, in a liquid form in underground tanks. And over a period of years these tanks started to leak.

And there is no parallel in commercial nuclear plants. We do not store -- the NRC does not allow storage of high level liquid waste or even low level liquid waste for any significant period of time. The liquid wastes are processed and then into a form which they are eventually solidified and sent for disposal.

MR. WEEKS: My name is Gene Weeks, from Augusta. And we have spoken a lot about releases from nuclear power plants in day to day operation.

I think one thing I would like to bring up, even as an environmentalist, is that a coal fired generating plant releases more radioactivity than lots of nuclear plants.

But one thing that I am most concerned with is what would happen in the event of a meltdown? That is, if

the core suddenly could not be cooled down, as happened at TMI -- TMI didn't go on to be a meltdown. But what would be the worst case analysis if indeed a meltdown did occur, say, at Plant Vogtle? Could you comment on that?

MR. MONTGOMERY: I am really not prepared, you know, to discuss the implications of a major accident, but simply I think you have to remember that when we start looking at accidents you start looking at probabilistic risk and all this, and that these worst case scenarios are very, very, very improbable.

MS. ADENSAM: Dan, I would like to -- one of the areas of review that will be in the draft environmental impact statement does address postulated accidents and environmental impact for postulated accidents. It does get into risks and, you know, the total risk concept. But that will be in the draft environmental impact statement, the staff's assessment. We are just not there yet.

VOICE: Well, meltdowns are a big risk because of the considerable times in this country already, and as more and more nuclear plants get put on line, more and more possible meltdowns will probably occur. One might occur one of these days.

As an environmental meeting, I am surprised the word "meltdown" hasn't even been mentioned yet. Meltdown is the most feared -- at least that is what I fear most from

a nuclear power plant. That would kill tens of thousands of people. It would affect a lot of people in a non-voluntary way.

When you get out in your car on the road and drive, you are taking your own life in your hands. But most traffic accidents don't kill millions of people. They hurt people because they don't drive right or they are driving drunk. Nuclear power plants will kill lots of people when they really don't deserve it.

VOICE: I would just like to respond to the question about health effects. There haven't been any studies of Plant Hatch or indeed in the vicinity of any nuclear plant for long range effects, so you wouldn't know what the cancer effect is going to be anyway.

But there have been two major federal studies that were undertaken to look at the health effects of low level radiation.

One of them was undertaken in the 60's by the director of the Burkett Laboratory for the Atomic Energy Commission. John Goffman and Arthur Hanlon, they concluded that the NRC, or then the Atomic Energy Commission standards were at least one/one hundredth -- or they should be one/one hundredth of what they were allowing.

Their funding was cut off. They were told to change their -- well, first they were told to change their

results. As scientists, they refused to change their results, and their funding was cut off. That is how much the Atomic Energy Commission cared about the public safety.

Then in the late 70's another major federal study that would have taken years, epidemiological survey, headed by Dr. Vancusa and including a team of internationally renown experts in epidemiology.

Their initial preliminary results were showing much higher health effects than had been previously expected. Again, this was a federal study.

The Department of Energy then terminated their contract.

And those are the only two major studies that were ever undertaken, and I assume that since the results said there were serious health effects, the money was taken away and the studies were never completed.

VOICE: Well, I could kind of like to hear you-all's side of it. I like to hear both sides of the story. So, I have got a question for you all. You all have toured the other nuclear plants and toured Vogtle. How do you all fell about it as far as it is compared with the rest of the nuclear power plants already in operation?

MAYOR DeLOACH: Can you all comment on that?

MS. ADENSAM: From an environmental area, I guess I would ask the environmental staff if they see anything

particularly unique about Plant Vogtle compared to other sites they have visited?

MS. MILLER: You know, bearing in mind, this is the start of our review. You know, you will see the results of our review when the draft environmental statements and final environmental statements come out.

If anybody has anything to comment -- it is kind of early.

VOICE: It is much too early to say whether there are any impacts. Obviously, there are some differences.

The intake design at Vogtle is a novel design and we have looked at that under the construction permit. And the Fish and Wildlife Service, Glen McBey, whose name was mentioned, has interest in that intake design because of it being a different type design, and because of the presence of anadromous fishes, the various shads and stripped basses.

So, I think we will be looking in particular at that question. I don't know if there are others that have any other points of interest, but that is one that I had.

MR. PALMER: Well, any criticism I have to make of this meeting tonight is the fact that most of our questions have been directed toward the two ladies who are primarily public relations people.

MS. MILLER: Wrong, wrong, wrong.

MR. PALMER: Being that that is the way they handle it, that the experts -- and I don't mean this in a derogatory way, this is just the way it seems to me. This is one man's opinion.

Experts in the background are rather noncommittal. In the future, they should field these questions. These ladies have, in a very nice way, sort of settled, and yet these are provocative questions that need a response on the part of experts.

Now, we presume these people who are here are well qualified to handle these questions, but they simply are not speaking up. I came here to get educated. I didn't come here to freeze. I am trying to get an answer, trying to get an answer.

And, you know, you can get just so much by reading and listening, but here we have got the opportunity to hear people who should pick these questions up just like that. If they have got the answers, let's hear them. We don't want them to sit over there like, you know, islands and not say anything.

MR. BILLUPS: I will say one more thing. The people here aren't the staff members that cover all of the safety aspects, the emergency planning and so forth.

The two ladies are very technically qualified and they can give you their expertise.

MS. ADENSAM: I just would like to let Dr. Palmer know that although I don't hold a doctorate, that both Ms. Miller and I do hold graduate degrees in nuclear engineering and that part of our job is to take the input from the technical staff who do both the environmental work and the safety review and put together the documents that the staff issues.

We are responsible for putting those documents out. We are responsible for coordinating the testimony at hearings, and we are responsible for dealing with our advisory committee on reactor safeguards. We direct the project.

So, I will apologize if we appear to be public relations people. We don't intend to.

Those questions that you have asked that we have tried to field are, as Mr. Billups points out, in areas that are beyond the expertise of the people we have with us here, and we have been trying to respond as best we can with what knowledge we have in those areas based on our interaction with the members of the staff who are the technical experts in those areas.

MR. PALMER: I would state, I would not be reluctant if I were you to be more forthcoming. Take it and run with it. We need to hear what you feel, because, really, I don't think you have responded to the level at which you

could respond, and that is what we need to know.

MS. MILLER: Right. The purpose of this meeting, though, is really to hear your concerns. We want to be made aware of your concerns. And as we have tried to emphasize, we are not in a position at this point to answer questions in detail because this week represents the start of our review.

Maybe it is unfortunate, the timing of this meeting, but that just happens to be the case in point. I understand where you are coming from.

MR. PALMER: I hope our audience and other participants share some of this, that there should be people who -- and I better understand now what this is all about. It is a sounding board and I do feel we have had an opportunity to express ourselves and our concerns and next time you will be better able to respond.

MS. MILLER: Well, picking up on your comments, I certainly hope that once the draft environmental statement is issued by the staff, people here do take the opportunity to write down your concerns, mail them in to the staff and we will address them. We will technically analyze them and respond to your comments in a final environmental statement.

DR. GORDON: I would ask you how it is that Georgia Power has already spent more than two billion dollars building this facility and we are still asking environmental questions that seem to me should have been addressed long

before this point in the process?

MS. MILLER: The environmental questions that we are addressing at this point primarily deal with changes which have taken place since the construction permit, and that is why we are addressing them. We are addressing impacts of operation of the plant and changes which have occurred since the CP was issued.

VOICE: One recommendation, I guess, would be at a hearing like this that ---

MS. MILLER: It is not a hearing.

VOICE: A meeting like this, I am sorry, that Georgia Power officials be here, since they evidently do know, and be up there with you, as a panel, to answer questions. Perhaps they know more.

MS. MILLER: Right, right. But the NRC and Georgia Power aren't necessarily a team and we don't want to be up here with the utility giving the image of a team, because it is not like that.

The purpose of this meeting is specifically for the NRC to explain to you what we are doing, answer the technical questions that are directed towards the technical people here and, you know, take your comments back with us. Georgia Power has nothing to do with this meeting.

VOICE: I am curious just what the function of the NRC exactly is in this case. I have already told you my

position. I am adamantly opposed to nuclear power in any form.

And my understanding, I suppose what you -- are you here to sort of coach Georgia Power through it and build the plant so that it is supposed to be sound? Are you going to make them sell it to somebody else if you decide they can't run it? Or are you going to make them scrap it? What is the likelihood that the Plant Vogtle will not go on line as a result of the NRC Hearing? It has never happened.

MS. ADENSAM: Sure it happened. Haven't you heard of Byron.

VOICE: Has a plant ever been scrapped because the NRC said it ---

MS. ADENSAM: Have you heard of Byron?

MS. MILLER: We don't know that a plant has been scrapped because of the results of NRC hearings, no. There have been utility decisions that have been made while the hearings were still in process, but that was up to the utility.

The agency's function is established by congressional act and it is our job to regulate. We are not here to coach them, we are not here to help them build a plant, we are not here to make management decisions for them.

We have regulations, we have what we call regulatory guides where we have provided the utility what we perceive as an interpretation of how to meet those regulations, and we do a review of what the utility proposes to do.

We have inspectors. Not only is Mr. Sanders here at the site as an inspector, but Mr. Vance has access to other inspectors in the regional staff and he has access to inspection teams from the inspection enforcement staff in Bethesda, in Washington.

And our job is to regulate. We make sure that the plant is built the way they say it is built and that it is built according to the regulations, and that the utility of competent to operate it in conjunction with the regulations.

That is all our job is. And if they don't meet our regulations, they don't get a license.

VOICE: I would like to address this question to Mr. Sanders.

MR. SANDERS: Go ahead.

VOICE: How many inspectors do you have working under your authority?

MR. SANDERS: The way we are staffed, I am the resident. I am at the site all the time. I live in Augusta and I am available at any time and I am there every

day.

In Atlanta we have a staff of specialists, electrical engineers, civil engineers, mechanical engineers, and non-destructive testing, radiographers, and so forth, and as our program develops and at certain phases and certain things that happen, these people are brought in from the region and they perform the detailed inspections.

VOICE: So, what you are telling me is with somewhere around 6,000 construction workers at the site, you are the only inspector day to day to watch everything that happens on that site?

MR. SANDERS: I am the only inspector there.

VOICE: Thank you.

VOICE: I don't think that tells the story.

VOICE: It is my responsibility to make sure the NRC inspection program gets carried out at Vogtle. Mr. Sanders works within my group. And Dr. Montgomery works within Region II, Region II being Atlanta.

I think if you look at any plant within Region II in a year's time you will have not only the resident inspectors that are on-site, but you will also have at least 25 other inspectors coming out the region every year, health physics types, mechanical, electrical, nuclear, whatever the discipline is. We have security inspectors.

So, you have the whole gamut of inspection

disciplines being inspected. We think we have an aggressive program. I know we have an aggressive program, and I think our records speaks for it.

VOICE: Can I follow up and ask you how many stop work orders have been issued by your inspection office since construction has begun?

MR. SANDERS: There have been a number of stop work orders, but I don't issue stop work orders.

VOICE: Thank you.

DR. PALMER: Since we are getting down to specifics, all of you who live in this area have from time to time heard rumors of misuse of drugs at Plant Vogtle. Have any of your workmen been discharged for shoddy workmanship that could be traced to drug abuse?

MS. MILLER: The workmen at Plant Vogtle do not work for the NRC, so that would be a question that Georgia Power would have to answer.

DR. PALMER: In other words, you are not prepared -- that is an evasive answer. I don't mean to be rude, but you see, that is a real nasty question. It demands an answer.

MS. MILLER: And what I am saying is the NRC is not the people to ask. We don't hire and fire workers at Georgia Power. You would have to direct that question to the Georgia Power Company.

VOICE: I could probably answer that question. I do a good bit of welding there. I know several people out there at Vogtle that do weld, that weld just about anything out there at Vogtle and I know several people that do different jobs, and the procedure that I understand that Vogtle operates on is -- and this is just in the welding aspect of it -- that they make a weld, they also x-ray it, gas it, so you would think that the fellow out there that is doing the welding might be on drugs or something, but every -- just about everything out there is checked by inspectors, not necessarily you all's inspectors, but Georgia Power's, if I am right, has their own inspectors and they do inspect this. They don't inspect it by looking at it.

So, if the fellow is not capable of doing the job, it will show up and they will redo it. I know several -- just the little bit of knowledge I have got of it, I know several things that have had to go back and be redone.

MAYOR DeLOACH: Let's try to limit our statements on environmental issues.

DR. PALMER: Every one of these things is environmentally related, you see. Why not prevent environmental damage by correcting the things before. After the environment is damaged, there is very little you can do about it. What we are here for tonight is to see that this

doesn't happen.

And those welds are vitally important. What happened at Hatch, Hatch was shut down and in the process of inspection several faulty welds were discovered. Now, the same welders move from site to site. They carry out the same techniques. So, the welding is a very vital part of that conduit that carries this cooling material. So, if there is any failure there, that is what leads to meltdown.

So, the fact that that fellow is doing a weld is the most important thing about the whole doggone thing. So, we get right down to the nitty-gritty, how good is the inspecting process, because we know that there are going to be breaks in technique unless somebody is there to correct them.

I asked a simple question about people being let go because of drug abuse, and when I say drugs, I mean alcohol just the same as I mean marijuana or heroin or whatnot. But under conditions of drugs it can lead to terrible faults in construction.

So, the question was a simple one and I know pretty well that certainly there have been people down there let go because drugs were being abused. So, I just wanted you to answer a question question.

MAYOR DeLOACH: I was just asked to monitor this meeting and it was to be ---

VOICE: Let me address that. We do hear from time to time of people using drugs -- not speaking specifically of Vogtle, but we have become aware from different sources of people using drugs at some of our sites. We are assured that each one of these is investigated.

And I know for a fact that Georgia Power looks very hard and tough at drug use and don't tolerate it.

MAYOR DeLOACH: Yes, Dr. Gordon?

DR. GORDON: With respect to the inspections that are done at the plant, I understand that that is your area of expertise and that the Nuclear Regulatory Commission is in charge of the inspections overall.

Was this also not true for the Zimmer Plant in Ohio which was to be a nuclear plant, was 97 percent completed and then -- and now it is going to have to be converted to coal because of failures in the inspection system?

What guarantee do we have, if that inspection was not sufficient, that it will also not occur with this particular facility?

VOICE: Yes. I can't address the Zimmer Plant.

DR. GORDON: Well, that is under the province of the Nuclear Regulatory Commission.

MS. ADENSAM: Please don't be misled. The NRC inspection program, we are not responsible for total

inspection of the whole plant. That belongs to the utility.

DR. GORDON: Then the utility is monitoring itself.

MS. ADENSAM: Of course.

DR. GORDON: I think that is sort of a conflict of interest.

MS. ADENSAM: I would hope that they would.

VOICE: There is an answer to your question. We are in Region II. I am not prepared to speak of another region's responsibility.

VOICE: Dr. Palmer's question about the drug questions, it is not just rumors. There were 13 workers at the site who were arrested and accused of dealing drugs in the entire community, not just at Plant Vogtle. So, 13 workers at the site were in this larger drug ring.

And to follow up on his question, what has NRC done to investigate and see what effects on the quality of workmanship did the use of drugs, at least by those 13 workers and perhaps others, have? Have you specifically checked to see if there were impacts on workmanship because of that, or do you just consider that because of your general inspection program that you would pick up any problems?

VOICE: No. I don't know about the specific 13, or I don't know the results of what happened to those. For

any drug rumors, the investigation, one of our follow-up items of that drug use is where have they done the work and what is the results of that.

So, we address that very question you are asking, yes.

VOICE: I just think for the record that people ought to be aware that Georgia Power initiated that investigation that led to those arrests because of their concern.

VOICE: I got one other thing to say. You know, I think you are here to find out the concerns of this community and this area about the environmental impact. And, you know, we have drifted off into other areas.

And outside of Dr. Palmer, who has some very real fears, you know, there is nobody -- and I think it speaks well of this community's confidence that there are not many local people here worried about Plant Vogtle outside of some professional protesters from Cleveland and New York and all these places.

VOICE: I am not a professional protester.

VOICE: You know, there are no local people here really complaining.

VOICE: We are local people.

VOICE: I am local.

VOICE: I mean, to a certain extent, and I think

that -- yes, but, you know, you are very well versed in nuclear -- you know, nuclear concerns and I think people here are just not concerned and I think that ---

MAYOR DeLOACH: Let's address our questions to the staff. Okay, Doctor?

DR. PALMER: I want to reassure Mr. Bennett and others that this is not a conspiracy. There has been no predetermined step here. I don't know these other people.

VOICE: I know you don't, Dr. Palmer.

DR. PALMER: I don't believe they know each other, either. I think it is about the most benign group I have ever seen. So, you haven't heard anything yet.

And if we don't get some answers, they will be coming in with us. So, I think the people of Waynesboro are not here because maybe they don't know what is happening or just not knowing, not caring, I don't know.

VOICE: That is point.

MAYOR DeLOACH: You can talk to him after the meeting.

VOICE: I mean, I don't care. All I am saying is, I think all the racket -- it is interesting that people are not here protesting and they are aware of it. You know, there doesn't seem to be a lot of concern among the local people about the environmental impact.

MAYOR DeLOACH: Let's hold our comments to the

staff.

VOICE: May I ask him ---

MAYOR DeLOACH: You can ask him after the meeting.

VOICE: Dr. Montgomery, is it true that geneticists sometimes use radiation to induce mutations in specimens?

MR. MONTGOMERY: One of the things I think you have to remember when you start dealing with the effects of radiation, I think people alluded to the fact that no one denies that radiation, especially at high doses, you know, causes biological effects.

I think one thing you have to remember, that the radioactive releases from commercial nuclear power plants are very well regulated. We know very well what is released, the potential effects. We know what the dose rates would be. We have very strong regulations requiring the monitoring of all releases at the point of release.

We have environmental monitoring programs which the licensees are required to carry out. The state has an environmental monitoring program.

We, the NRC has a whole network of what we call TLD's which would be around all the sites in the country and which we measure the direct radiation from these plants.

We know what contribution there is to the environment from these plants. In most cases it is almost

impossible to even measure the level of radioactivity in an environment, these levels are so low.

That is part of the operational philosophy and on the design of the plants, to keep what we call the releases of radioactivity as low as reasonably achievable. That is taking in the costs, risks, benefit, all factors.

There are systems that are installed, that are required, to reduce the level of emissions, and as I said, we look at -- on a routine basis we inspect the programs, and once the plant becomes operational we inspect the systems used to monitor effluents.

In the region we have a mobile laboratory which we take to all the sites, that are unannounced inspections. The facility has no idea when we will show up. We drive this mobile -- what we call a mobile laboratory -- into the site. It has radiation measuring equipment and we ask the plant to give us samples of various types of effluent.

We split the samples with the utility. They measure and we measure. And it is part of our program to ensure that their measurement systems are capable of making accurate measurements.

In addition, we have the environmental programs, we have programs with the state to collect and split environmental samples, and we are quite comfortable with the fact -- and professionally I am very comfortable with the

fact that the impact from the routine operation of nuclear power plants is ---

VOICE: Dr. Montgomery, would you like to answer my question? I asked you, do geneticists sometimes use radiation to induce mutations in specimens?

MR. MONTGOMERY: Yes. They use chemicals ---

VOICE: Do nuclear utility plants also have unplanned releases? Has a nuclear power plant in the United States ever had an unplanned release of radioactivity into the environment?

MR. MONTGOMERY: Yes.

VOICE: Thank you.

MR. LaROCHE: I would like to add a little bit more on that. Back in the early 50's when radiation was -- radioactive material was available, agriculturalists and geneticists, plant biologists thought they had a great tool for producing mutant plants and they started radiating plants all over the place, and they may have gotten one or two mutants out of this. It has been a big failure. They just have not been able to routinely in any way, shape, form or manner produce these mutant plants. So, they have gone to other methods.

DR. PALMER: There is no question but what radiation does produce nuclear effects. The safe levels of radiation have never been established. We might as well

admit that. You can argue it all night and you won't know anymore than you know now.

So, I think there are a lot of unknowns. I do feel reassured by what this gentleman just said as to the extent that the effort is being made to monitor the leakage from these plants.

Now, he hasn't said what could be done should more than a reasonable amount escape, as inevitably there will. That is a question of being able to cope with unplanned releases. I think the monitoring sounds pretty good, but humans being what they are, we all are fallible, and I think you would admit that the failure on the part of an inspector can bring about great harm.

So, there is always that question of failure to do one's job. You can't rely on instruments entirely. There is a human element there.

So, this is, again, a concern that Burke Countians should share, that this Plant Vogtle will have the very best inspection and constantly, and it is hard to get people in that position day in and day out who do a routine job and the moment you doze off that is when the thing is going to happen.

So, we have got to have assurance by a method that these safeguards will be in effect and maintained.

MR. MONTGOMERY: Just one more thing on this

question of unplanned releases, just to give you some information.

Most releases from the plants or the significant releases are what we call batch releases. And before they start releases to the air or to the river or whatever, there is an analysis performed to ensure that what they are releasing is well within regulatory limits.

With respect to unplanned releases, the various effluent pathways have systems which have what we call on-line monitors to sense what levels of radioactivity are going outside these, and they are set -- there are what we call set points that if the activity exceeds a certain level, there is an automatic shutoff.

So, even though there are many cases -- you can go back and look at all the cases of unplanned releases, and there are many -- there is no question about that -- but I think you have to look at what the impact was and did they eventually lead to any, you know, high levels of releases that had an impact on the environment and the surroundings. And I think the record is excellent. In fact, it is outstanding.

There are cases, but on the routine operation I cannot in my own mind recall a case where unplanned releases were of such a high level that there was any significant impact on the environment.

DR. PALMER: The audience needs to know how you define the term effluent, so everyone will know.

MR. MONTGOMERY: Okay. Effluent, when I speak of -- speak of liquid effluents, which in many cases they have treatment systems to treat the radioactive waste and in some cases there is a small residual amount of radioactivity that may be left in the water that cannot be processed for further use within the plant. And if it is well within regulatory limits, they are allowed to discharge this into the environment, into the river. In this case, the Savannah River.

Recognizing in the case of Plant Vogtle that these types of releases are controlled, okay, that prior to release they know exactly what they are going to release and there are administrative limits that the utility has and they have to meet the limits set by the Nuclear Regulatory Commission also.

Then you also have radioactive gasses which are collected within the plant and these can also be released to the atmosphere. They are quickly diluted and in most cases these are strictly gasses which are inert and they do not concentrate in the environment. They are diluted into the atmosphere.

Those are the two types of effluents.

DR. PALMER: How about the radon gas? That is

quickly diffused into the environment?

MR. MONTGOMERY: Well, there is no radon gas produced by a nuclear reactor. Radon gas is a natural part of the decay chain, the naturally occurring isotope, and that is just all over.

VOICE: No noble gases that are produced by any reactions inside the nuclear plant?

MR. MONTGOMERY: Yes. The noble gas is the primary gases that are released from a nuclear reactor.

VOICE: Do those tend to diffuse rapidly?

MR. MONTGOMERY: Yes, they diffuse very rapidly. They are inert, they do not react, they do not concentrate in the environment. That is why they call them noble gases. Noble means not reacting.

VOICE: How do you go about deciding on what is an acceptable level?

MS. MILLER: Could you state your name, please?

MS. MEREDITH: My name is Terri Meredith. How do you go about deciding what is an acceptable level and have those decisions ever been changed? You decided ten years later that that wasn't an acceptable level.

MR. PERLIS: I would like to answer that one. The limits are set out in the NRC regulations. They are actual numerical limits. I wouldn't want to quote chapter and verse as to when they have been changed, but I know that

there is EPA input, FDA input and NRC input into those numbers, and perhaps some other agencies, as well. And I would think certainly if there were information that would indicate that they should be changed, they would be changed.

One point that has been alluded to but I think should be stressed, if those limits are exceeded, enforcement action can be taken against a facility up to and including shutting the facility down for revoking the license.

MS. MEREDITH: Who checks the limits and how often are there checks?

MR. MONTGOMERY: Well, again, we have a routine inspection program and the inspection -- you have to remember that we look at not just what they are doing in specific areas, we look at their whole management system, looking at the training of employees to ensure that they have an adequate staff, and the whole management program to ensure that our regulations are met. That is a very important aspect that should be brought out.

In addition, you know, we go in and actually look at operations, too, but we also look at the whole management structure.

But we have the annual inspections as a minimum in the areas in which we go in and look at all their effluent --- the effluent measurement systems, the mobile laboratory I

mentioned. We look at how the monitors are calibrated. We look at all their records relating to effluence, that they are within regulatory limits.

They are also required to submit to us twice a year a report which quantifies, which basically lists what isotopes are released, the quantities released.

They are required to submit to us on an annual basis an environmental report which gives the results of all environmental monitoring.

In addition, they are required to basically calculate the radiation dose which may be associated with a release of effluence, and a lot of this is based on measurements or calculations.

MS. MEREDITH: So, all the measurements and the calculations are made, the checks are done, the reports are reported, but I still don't understand how that level can be decided that it is safe.

MR. MONTGOMERY: Well, you alluded to the NRC. There are a lot of -- associated with what types of -- eventually you get down to you are talking about radiation, how much is safe, the questions like this.

These standards are set by many different organizations involved and eventually international organizations, like the International Council on Radiation Protection, the National Council for Radiation Protection.

This is based on scientists, radiobiologists, people who understand radiation effects and have determined which levels basically are low enough in what you are talking about so as they would not produce significant harmful effects.

Now, we start talking about words like "significant", there are studies by the National Academy of Sciences which actually quantify and say, you know, if you get a population a certain dose, this is the type of effects you are going to see, and we wouldn't be prepared to discuss that in that depth at this point.

But you can order these reports, which are from the National Academy of Sciences. This is experts that are not NRC people, that are not, you know, utility people. These are people that are M.D.'s, university people who have done research into the effects of radiation.

And we have also looked at the effects from Hiroshima and places like this and tried to determine what health effects are known.

More is probably know about health effects of radiation than probably any other form of pollutant.

DR. PALMER: How many people in the radius surrounding Waynesboro could be expected to receive doses of cancer during the period of time that Vogtle is allowed to operate? Has anybody done any calculations on specifically

what percentage of this population might be affected? Or aren't we supposed to talk about these at these hearings? Are we just supposed to mail in for the report and figure it out for ourselves with a calculator?

MAYOR DeLOACH: I think we have got time for one more question.

DR. PALMER: I apologize for talking too much. Anyway, the audience needs to have a definition and say at least three isotopes that come out of the plant, and their half life. Define what you mean by half life? Because these things hang around for a long time. I think we need to be aware that there are numerous emissions that occur, that their distribution varies, wind currents, atmospheric conditions have a profound effect on where they come down, what quantity. There are so many variables it is hard to quantify.

MR. MONTGOMERY: These things are very difficult to quantify. I believe you said you were a retired M.D. For example, I think probably the dose, the radiation dose that people would receive in the vicinity of the facility from routine operations would be less than the dose they would receive from a chest x-ray.

DR. PALMER: Go a step further now. I asked you to define what you meant by half life, a given half life of three isotopes.

MR. MONTGOMERY: Half life is the time it takes for half of the initial level of radioactivity to decay to half that amount. And in a routine operation you are usually dealing with things like iodine 131, which is one of the critical -- what we call critical things you have to look at. It may be the one that determines how much critical dose, and that is an eight day half life.

Xenon 133 is also one of the major constituents, and that has a five day half life, in that range, on the order of a few days.

And then there are a multitude of other noble gases which have varying half lives from the order of seconds to days.

In the case of krypton 85, an order of years.

DR. PALMER: How about tridium?

MR. MONTGOMERY: Tridium has a ten year half life.

DR. PALMER: How about plutonium?

MR. MONTGOMERY: Is this stump the expert?

DR. PALMER: That is the biggy.

MR. MONTGOMERY: Plutonium is not released in the normal effluent process from a plant.

DR. PALMER: There are innumerable isotopes possible and their half life may be very short, as indicated, and our discussant named three with very short half lives. However, I think cesium is a common one.

MR. MONTGOMERY: Cesium is 30 years.

DR. PALMER: Okay. Then you get into somewhat longer period and cesium has been emitted from the Savannah River Plant and does fill the swampland over there.

So, we are talking about lingering radiation. It is given off in small amounts, but it lies around for years. So, we have to be concerned about not only the background radiation that we are getting all the time from natural sources, but added to this the radioactive materials that have longer half lives.

MR. MONTGOMERY: Our regulations which govern the emissions take all these things into account. In other words, the fact that it can release longer lived isotopes and you have these fall out of a plume or, you know, they are basically on the ground, that the doses that would be received, even over the entire period of the plant, would be very low.

In fact, as I said, it is virtually difficult to measure any cesium from a normal operation of a facility. What cesium that you normally measure is still a residual from the fallout from nuclear weapons testing. It is not from a commercial plant.

DR. PALMER: How wide a radius do you intend to monitor?

MR. MONTGOMERY: Well, the facility has a

requirement to monitor -- if you are talking about the NRC system for measuring direct radiation around the plant, we usually go out to at least ten miles.

DR. PALMER: So, ten miles would not include all of Burke County?

MR. MONTGOMERY: We also have stationed in areas that there are more populations, like schools or hospitals or anything like this, the higher density areas.

MAYOR DeLOACH: Excuse me. I think our time has run out. They don't pay me overtime. It is ten o'clock, and we are going to adjourn the meeting at this time.

MS. MILLER: Thank you very much for coming.

(Whereupon, at 10:01 p. m., the meeting was concluded.)

CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the NRC COMMISSION

In the matter of: VOGTLE ENVIRONMENTAL MATTERS

Date of Proceeding: Tuesday, March 21, 1984

Place of Proceeding: Waynesboro, Georgia

were held as herein appears, and that this is the original transcript for the file of the Commission.

Sid Rich
Official Reporter - Typed

Sid Rich
Official Reporter - Signature

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Georgia Power Company
ATTN: Mr. R. J. Kelly
Executive Vice President
P. O. Box 4545
Atlanta, GA 30302

Gentlemen:

SUBJECT: REPORT NOS. 50-321/84-01, 50-366/84-01, 50-424/84-01, AND 50-425/84-01

The NRC Systematic Assessment of Licensee Performance (SALP) Board has completed its periodic evaluation of the performance of the subject facilities. The Hatch and Vogtle facilities were evaluated for the period November 1, 1982 through October 31, 1983. The results of the evaluation are documented in the enclosed SALP Board Assessment. This evaluation will be discussed with you at your offices in Atlanta, Georgia on _____.

The performance of your Hatch facility was evaluated in the functional areas of plant operations, radiological controls, maintenance, surveillance, fire protection, emergency preparedness, security and safeguards, refueling, licensing activities, and operational quality assurance program.

Construction performance at the Vogtle facility was evaluated in the functional areas of soils and foundations, containment and other safety related structures, piping systems and supports, safety related components, electrical power supply and distribution, instrumentation and control system, licensing activities and construction quality assurance program.

The SALP Board's evaluation of your performance in these functional areas is contained in the SALP Board Assessment which is enclosed with this letter.

The SALP Board evaluation process consists of categorizing performance in each functional area. The categories which we have used to evaluate the performance of your facilities are defined in section II of the enclosed SALP Board Assessment. Any comments which you have concerning our evaluation of the performance of your facility should be submitted to this office within twenty days following the date of our meeting in Atlanta, Georgia.

Your comments, if any, and the SALP Board Assessment, will both appear as enclosures to the Region II Administrator's letter which issues the SALP Board Assessment as an NRC Report. In addition to the issuance of the assessment, this letter will, if appropriate, state the NRC position on matters relating to the status of your safety programs.

In accordance with 10 CFR 2.790 (a), a copy of this letter, the enclosure and your response, if any, will be placed in the NRC's Public Document Room unless you notify this office, by telephone, within ten days following the date of our meeting in Atlanta, Georgia, and submit written application to withhold information contained therein within twenty days following the date of our meeting. Such application must be consistent with the requirements of 10 CFR 2.790 (b)(1).

8405070461

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

Sincerely,

Richard C. Lewis, Director
Division of Project and
Resident Programs
Region II SALP Board Chairman

Enclosure:
SALP Board Assessment for
Georgia Power Company

cc w/encl:
J. T. Beckham, Vice President
and General Manager, Nuclear
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H. C. Nix, Site General Manager
C. E. Be'flower, Site QA Supervisor

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U. S. NUCLEAR REGULATORY COMMISSION
REGION II

SYSTEMATIC ASSESSMENT OF
LICENSEE PERFORMANCE
BOARD ASSESSMENT

GEORGIA POWER COMPANY
EDWIN I. HATCH NUCLEAR PLANT UNITS 1 AND 2
DOCKET NUMBERS 50-321 AND 50-366

ALVIN W. VOGTLE NUCLEAR PLANT UNITS 1 AND 2
DOCKET NUMBERS 50-424 AND 50-425
NOVEMBER 1, 1982 THROUGH OCTOBER 31, 1983

INSPECTION
REPORT NUMBERS
50-321/84-01; 50-366/84-01
50-424/84-01; 50-425/84-01

CONTENTS

I. INTRODUCTION

A formal licensee performance assessment program has been implemented in accordance with the procedures discussed in the Federal Register Notice of March 22, 1982. This program, the Systematic Assessment of Licensee Performance (SALP), is applicable to each operator of a power reactor or holder of a construction permit (hereinafter referred to as licensee). The SALP program is an integrated NRC staff effort to collect available observations of licensee performance on a periodic basis and evaluate performance based on these observations. Positive and negative attributes of licensee performance are considered with emphasis placed on understanding the reasons for a licensee's performance in important functional areas, and sharing this understanding with the licensee. The SALP process is oriented toward furthering NRC's understanding of the manner in which: (1) the licensee directs, guides, and provides resources for assuring plant safety; and (2) such resources are used and applied. The integrated SALP assessment is intended to be sufficiently diagnostic to provide meaningful guidance to the licensee. The SALP program supplements the normal regulatory processes used to ensure compliance with NRC rules and regulations.

II. CRITERIA

Licensee performance is assessed in certain functional areas depending on whether the facility has been in the construction, preoperational, or operating phase during the SALP period. These functional areas encompass a wide spectrum of regulatory programs and represent significant nuclear safety and environmental activities. Functional areas may not be assessed because of little or no licensee activities in these areas, or lack of meaningful NRC observations.

One or more of the following evaluation criteria were used to assess each functional area:

- Management involvement in assuring quality
- Approach to the resolution of technical issues from a safety standpoint
- Responsiveness to NRC initiatives
- Enforcement history
- Reporting and analysis of reportable events
- Staffing (including management)
- Training effectiveness and qualification

The SALP Board has categorized functional area performance at one of three performance levels. These levels are defined as follows:

Category 1: Reduced NRC attention may be appropriate. Licensee management attention and involvment are aggressive and oriented toward nuclear safety; licensee resources are ample and effectively used such that a high level of performance with respect to operational safety or construction is being achieved.

Category 2: NRC attention should be maintained at normal levels. Licensee management attention and involvement are evident and are concerned with nuclear safety; licensee resources are adequate and are reasonably effective such that satisfactory performance with respect to operational safety or construction is being achieved.

Category 3: Both NRC and licensee attention should be increased. Licensee management attention or involvement is acceptable and considers nuclear safety, but weaknesses are evident; licensee resources appear to be strained or not effectively used such that minimally satisfactory performance with respect to operational safety or construction is being achieved.

III. SUMMARY OF RESULTS

A. Overall Utility Evaluation

B. Overall Facility Evaluation - Hatch 1 and 2

The licensee, as discussed in the previous SALP assessment, has continued to demonstrate strong corporate management support for, and commitment to, the improvement of overall plant performance. Major strengths in this assessment were in the areas of ..... Major weaknesses were in the areas of ..... However, corporate management involvement, management's application of resourses to resolve technical issues, and site management organizational and personnel changes have not been completely effective in correctly evaluating and solving several problem areas (e.g., adherence to procedures,and identification and elimination of the "root cause" of problems). Overall plant operations have not continued to improve due to lack of attention to details and failure to follow procedures. Performance in the maintenance area has deteriorated, apparently due to inadequate procedures for performing maintenance and specifying appropriate Post Maintenance testing. In addition, surveillance testing may have insufficient after maintenance had been performed.

C. Facility Performance - Hatch 1 and 2

Tabulation of ratings for each functional area:

Operations (Units 1 and 2)

1. Plant Operations - Category
2. Radiological Controls - Category
3. Maintenance - Category
4. Surveillance - Category

5. Fire Protection - Category
6. Emergency Preparedness - Category
7. Security and Safeguards - Category
8. Refueling - Category
9. Licensing Activities - Category
10. Quality Assurance Program - Category

D. Overall Facility Evaluation - Vogtle 1 and 2

The licensee continues to implement a vigorous construction project management effort with well qualified and experienced personnel. Major strengths were noted in the area of ... Major weaknesses were identified in the areas of ...

Although the number and severity levels of the violations in the areas inspected were significant, they do not indicate a programmatic breakdown; they appear to be a result of a failure to prepare adequate procedures to implement NRC requirements and licensee commitments. There were no significant weaknesses identified.

E. Facility Performance - Vogtle 1 and 2

Tabulation of rating for each functional area:

Construction (Units 1 and 2)

1. Soils and Foundations - Category
2. Containment and Other Safety Related Structures - Category
3. Piping Systems and Supports - Category
4. Safety Related Components - Category
5. Support Systems - Category
6. Electrical Power Supply and Distribution - Category
7. Instrumentation and Control Systems - Category
8. Licensing Activities - Category
9. Quality Assurance Program - Category

F. SALP Board Members:

R. C. Lewis, Director, Division of Project and Resident Programs (DPRP) (Chairman), Region II (RII)
J. A. Olshinski, Director, Division of Engineering and Operational Programs (DEOP), RII
J. P. Stohr, Director, Division of Emergency Preparedness and Materials Safety Programs (DEPMSP), RII
H. C. Dance, Chief, Project Branch 2, DPRP, RII
E. A. Adensam, Chief, Licensing Branch 4, Division of Licensing (DL), Office of Nuclear Reactor Regulation (NRR)

G. SALP Board Attendees:

V. W. Panciera, Chief, Project Section 2B, DPRP, RII
M. V. Sinkule, Chief, Operational Support Section, Program Support Staff (OSS), DPRP, RII
R. V. Crlenjak, Senior Resident Inspector, Hatch, DPRP, RII
W. P. Sanders, Senior Resident Inspector, Vogtle, DPRP, RII
R. G. Rivenbark, Project Manager, Operating Reactors Branch 4, Division of Licensing (DL), Office of Nuclear Reactor Regulation (NRR)
M. A. Miller, Project Manager, Licensing Branch 4, DL, NRR
P. Holmes-Ray, Resident Inspector, Hatch, DPRP, RII
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T. C. MacArthur, Radiation Specialist, OSS, DPRP, RII
K. P. Barr, Chief, Facilities Radiation Protection Section, DEOP, RII
J. J. Blake, Chief, Materials and Mechanical Section, DEOP, RII
T. E. Conlon, Chief, Plant Systems Section, DEOP, RII
F. Jape, Chief, Test Programs Section, DEOP, RII
C. M. Upright, Chief, Management Programs Section (MPS), DEOP, RII
G. A. Belisle, Reactor Engineer, MPS, DEOP, RII
G. N. Huffman, Emergency Preparedness Team Leader, DEPMSP, RII
W. J. Tobin, Physical Security Inspector, DEPMSP, RII
A. D. Tillman, Physical Security Inspector, DEPMSP, RII

IV. PERFORMANCE ANALYSIS FOR HATCH UNITS 1 AND 2

A. Functional Area Evaluations

Licensee Activities

During the assessment period, major licensee activities at Hatch included refueling, torus modifications and recirculation piping weld overlay (Units 1 & 2), and restoration of safety related cable trays.

Inspection Activities

During the assessment period, the routine inspection program was conducted by resident and regional inspection staffs. Special inspections were conducted of the full-scale emergency preparedness exercise, safety related cable tray restoration, an event involving the shut down of unit 2 reactor by an unapproved method and the monitoring of weld overlaying of units 1 and 2 recirculation piping.

1. Plant Operations

a. Analysis

During this evaluation period, routine and reactive inspections of plant operations were performed by resident and regional inspection staffs.

Management involvement and control increased during this assessment period. An Operations Manager was added to the plant staff providing an additional level of management. Corporate management was involved in site activities on a frequent basis. Decision making was usually at a level which ensures adequate management review. Resolution of technical issues was generally performed in a timely manner.

Events were reported in a timely manner; however, some information may have been lacking or not clear. Corrective action was usually timely but tended to overlook "root causes". It was also noted that the licensee does not report component failures to the nuclear plant reliability data system.

Procedures were occasionally violated as shown by several of the violations listed below.

During this assessment period a plant power reduction was perfomed in a manner not covered by procedures and outside of Final Safety Analysis Report (FSAR) analyzed events (1) below). This event was indicative of a weakness in the management control systems relating to licensed personnel, shift technical advisors and supervisor's decision making responsibilities.

Responsivness to NRC initiatives has been generally sound and thorough. Generally, acceptable resolutions were proposed.

Areas of improved performance since the previous SALP assessment included:

- New management techniques which were implemented in the area of shift-to-shift communications;
- Licensee Event Reports (LERs) contained a narrative section which provided a greater amount of information than was possible on the LER form;
- A reduction in traffic flow through the control room which was accomplished by addition of another air lock; and
- A better and more comprehensive outage scheduling and tracking system was put into use.

Areas in which the licensee should continue efforts to improve performance include:

- Providing new operators with training regarding the philosophy of proper operations and a periodic reinforcement during requalification.
- Ensuring management effort is directed towards procedural compliance. The number of violations identified has decreased during this assessment but continues to be a problem.

Twenty-two senior reactor operator exams, twenty-one reactor operator exams and eleven instructor certification exams were administered. Seventy-Seven percent of the senior reactor operators, forty-eight percent of the reactor operators and forty-eight percent of the instructor certification exams were passed. A special NRC training assessment identified some weakness in lesson plans, problem research techniques, and simulator lesson plans for initial training. These weaknesses have contributed to the significant failure rates identified above for reactor operators and instructors. Strong areas identified were in non-licensed operator training, lesson plans, simulator lesson plans for requalification training, and in health physics and chemistry training.

~~Six~~ violations were identified during the assessment period:

(1) Severity Level II violation for a reactor power reduction by means not analyzed in Final Safety Analysis Report. (83-23)

(2) Severity Level IV violation for failure to follow procedure concerning the use of adjustable wrenches to override spring loaded key switches. (83-07)

(3) Severity Level IV violation for failure to follow procedures concerning valves not locked in position. (83-15)

(4) Severity Level IV violation for failure to follow procedures regarding revising procedures. (83-08)

(5) Severity Level V violation for failure to follow procedure concerning a valve out of position and a valve not locked in position. (83-37)

(6) Severity Level V violation for failure to follow procedure concerning an improper valve alignment. (83-07)

b. Conclusion

Category

c. Board Comments

None

2. Radiological Controls

a. Analysis

During this evaluation period, routine inspections were performed by the regional inspector staff. This included a confirmatory measurements inspection using the Region II mobile laboratory and an environmental protection inspection.

Senior site management and corporate officals have exhibited a responsive awareness to radiological concerns and have initiated actions for improvements.

To strengthen the radiological safety program a Health Physics/Chemistry Manager position was ~~created~~ established and filled during this past year. Also, a technical group to support the health physics/chemistry operation was ~~created~~ established and partially filled. The number of health physics personnel has been increased with emphasis being placed on company hires as opposed to contract personnel. Rigid qualifications were established for the hiring of contract personnel. The licensee was negotiating with a contractor to establish and coordinate the radiation protection controls and coverage of

the forthcoming unit 2 outage of to replace the recirculation piping.

A radioactive waste sorting and storage facility was completed during this assessment period. Assignment of personnel in the waste management area appears to be adequate to ensure proper management of radioactive wastes. Because of leaking fuel the unit 1 power level was reduced to approximately 70 percent of full power. A resequencing of the control rods was used to maintain radioactivity levels of gaseous effluents at acceptable values. The fuel was reconstituted in November 1983, in an effort to eliminate the leaking fuel. Effluent releases were considered normal for an operating plant of this type and rated capacity.

Licensee audits of the radiological controls program have identified weaknesses and problem areas that need attention. Audit reports show that the licensee has been responsive and taken corrective actions to improve the program.

Radiation exposures to individuals have not exceeded regulatory limits. Total radiation exposure doses were directly related to, and consistent with the outage work performed during the assessment period. Management controls and ALARA considerations have been effective in reducing exposures to individuals.

Four violations and one deviation were identified during the evaluation period. These were not indicative of significant programmatic deficiencies. Licensee management was adequately involved in radiological controls and was generally responsive to NRC concerns.

One quality control (QC) and confirmatory measurement inspection was performed during the evaluation period using the Region II Mobile Laboratory. One violation was identified for failure to properly evaluate the adequacy of changes in computer software for the gamma spectroscopy systems resulting in an overstatement of the quantity of radioactivity released in gaseous effluents. Other analyses between the licensee and NRC were in agreement. The inspection identified a need to determine the cause of a high systematic bias in H-3 analysis of ground water samples. All other aspects of the laboratory program were satisfactory.

The following violations and deviation were identified:

(1) Severity Level IV violation for failure to conduct annual audits of the radioanalytical program to ensure conformance of facility operation to all provisions of

the environmental technical specifications. (Report Nos. 50-321/83-40, 50-366/83-38)

(2) Severity Level IV violation concerning the disposal of radioactive waste in an unauthorized method in that a container of compacted radioactive waste shipped to the Chem-Nuclear burial site contained free standing liquid. (Report Nos. 50-321/83-83-17, 50-366/83-17)

(3) Severity Level IV violation concerning the use of an inaccurate computer software program for computing gaseous effluents results from radiometric analyses. (Report Nos. 50-321/83-21, 50-366/83-22)

(4) Severity Level V violation for failure to notify the NRC Operations Center of an event which required the initiation of the licensee's emergency plan or any section of that plan. (Report Nos. 50-321/83-04, 50-366/83-04)

(5) Deviation for failure to implement a commitment to develop and conduct annual QA audits of contractor activities related to the environmental monitoring program. (Report Nos. 50-321/83-36, 50-366/83-34)

b. Conclusion

Category

c. Board Comments

None

3. Maintenance

a. Analysis

During this evaluation period, routine inspections were performed by the resident and regional inspection staffs. Two special inspections were also conducted. One concerned the failure to properly restore safety related cable trays after maintenance, and a second involved the failure to restore systems to an operational status.

Management involvement and control in assuring quality has been generally satisfactory. There was evidence of prior planning and assignment of priorities. In some cases poorly stated or ill understood procedures for the control and maintenance of safety related equipment resulted in violations (2, 3, 4, 5, and 7). Inspections were performed relative to the repair of recirculation system stress corrosion cracking. There seemed to be a lack of concern by

the licensee for adherence to procedures. The site personnel made the decision to deviate from procedures but did not change the procedures, since what they were doing was considered by them to be technically acceptable.

Decision making was usually at a level that ensures adequate management review, with corporate management usually involved in site activities. Records were complete, well maintained, and available. ~~Management reviews were generally timely, thorough, and technically sound. However~~, reviewers sometimes overlooked or did not properly identify the problem, "root causes", of a violation.

Recent reviews of LER's, related to maintenance activities, have revealed problems in identifing specific "root causes". The corrective action was usually limited to what was done to effect repairs and not ~~particular to~~ the cause of failure.

Proper evaluation of maintenance activities to determine the adequacy of functional testing was sometimes weak. ~~Involvement of the quality assurance~~ QA and QC organizations in maintenance activities had been at times inadequate as evidenced by the initial work personnel on cable trays, prior to the licensee's corrective action.

Overall performance in the maintenance category has deteriorated ~~determined~~ since the previous SALP assessment. NRC and licensee management should devote additional attention to insuring "root causes" of maintenance type violations are identified and corrective actions carried out.

Six violations were identified:

(1) Severity Level III violation and associated civil penalty for improper cable tray restoration. ($40,000 civil penalty 83-09)

(2) Severity Level IV violation for improper return to service of systems required by technical specifications (83-36)

(3) Severity Level IV violation for the improper return to service following maintenance on main steam isolation valve leakage detection system. (83-36)

(4) Severity Level IV violation for failure to follow maintenance procedures during repair of Recirculation and inside heat removal system. (3 examples). 83-01

(5) Severity Level V violation for improper procedure change being used for qualification of class 1 pipe welders. (82-41)

(6) Severity Level V violation for failure to color code cables as required by maintenance procedures. (83-20)

b. Conclusion

Category

c. Board Comments

None

4. Surveillance

a. Analysis

During this evaluation period, routine inspections were performed by the resident and regional inspection staffs.

GENERAL SURVEILLANCE ACTIVITIES

Overall, the surveillance program appeared to be an effective and smoothly operating program.

A major strength in the surveillance program was the computer tracking system effectively used to ensure surveillances are scheduled and performed as required.

Although the number of violations in this area have doubled since the last SALP assessment this is not indicative of a degradation of the overall program at Hatch. Three of the violations were caused by failures to follow procedures or by personnel error and were not attributable to an inadequate surveillance program or a programmatic problem. Corrective actions taken by the licensee should be effective in preventing recurrence of the violations.

In general decision making was usually at a level which ensured adequate management review, audits were complete and thorough, and reviews were timely and technically sound.

INSERVICE INSPECTION

Licensee management involvement in inservice inspection (ISI) and inservice testing (IST) activities appeared to be adequate. Corporate management was usually involved in site activities. Reviews were generally timely, thorough and technically sound. Records were generally complete, well

maintained and available. Procedures and policies were occasionally violated as evidenced by the violations below. Corrective action systems generally recognized and addressed non-reportable concerns.

Resolution of technical issues sometimes lacked thorougness or depth, and resolution was sometimes delayed as illustrated by the violation. This problem was first identified in March, 1982, and was not resolved until May, 1983.

Licensee response to NRC initiative was generally timely and there were few long standing regulatory issues attributable to the licensee. Viable and generally sound and thorough responses were offered by the licensee.

Minor violations, as noted below, were not repetitive and were not indicative of programatic breakdown. Corrective action appeared to be timely and effective in most cases.

Key positions were identified, and authorities and responsibilities defined. However, the licensee level III examiners need to be more involved in disposition of ISI findings.

CONTAINMENT LEAK RATE TESTING

During the performance of local leak rate testing an inadequate surveillance procedure was used. The procedure failed to identify position of all valves involved in Type C tests as well as several other inadequacies.

The weaknesses in this local leak rate procedure indicated at least in this instance, that the level of management involvement and control was not sufficient to assure a quality product. Further, the licensee's response to the violation resolving ~~the technical issue of~~ the quality of the type C tests was ~~borderline~~. The resolution was accepted after further communications with the licensee and considering ~~the fortuitous condition~~ that an integrated leak rate test (ILRT) had been performed this same outage after type C testing had been completed. The licensee's resolution to the technical issue did not indicate a sound, thorough, conservative, and timely approach to the issue.

~~The other area of~~ surveillance inspected by the regional ~~staff was the~~ ILRT. The licensee and consultant (Bechtel) performed an adequate intergrated leak rate test using an acceptable procedure. However, without the presence of the NRC inspector during the test, the licensee may not have met the requirement to stabilize the containment for four hours prior to the test. The licensee was two hours into the four hour stabilization period when increasing temperature in

containment forced the licensee to blowdown the containment to readjust the containment to test pressure. The decision to not restart the four hour stabilization period, at that point, was not indicative of a sound, conservative technical decision.

Four violations were identified as follows:

(1) Severity Level IV violation for use of unapproved valve lineups for local leak rate testing. (82-38)

(2) Severity Level IV violation for failure to take control room ventilation system filter samples when required (83-13)

(3) Severity Level IV violation for failure to properly change a surveillance procedure. (Report 83-08)

(4) Severity Level V violation concerning failure to follow procedure for evaluation of ISI non-destructive examinations (liquid penetrant) indications. (Report 83-16)

b. Conclusion

Category

c. Board Comments

None

5. Fire Protection

a. Analysis

During this assessment period, limited inspections were conducted by the resident inspection staff. During this period, certain weakness were noted as discussed in the maintenance section. These involved a number of cable trays which were not adequately protected from fire because of improper restoration following maintenance in that protective jackets and fire stops were not reinstalled. The large number of deficiencies found should have been identified by site personnel who were tasked with fire protection responsibilities. In general, fire protection information provided to NRC to support reporting requirements has not provided a complete picture of the status of fire protection systems.

b. Conclusion

Category

c. Board Comments

None

6. Emergency Preparedness

a. Analysis

During the evaluation period, inspections were performed by the resident and regional inspection staff. These inspection included evaluation of two full-scale exercises (December 1982 and October 1983), and one routine inspection (July 1983). There were no violations or deviations identified. There was one emergency plan deficiency identified.

Subsequent to the 1982 emergency exercise, the NRC issued a letter to Georgia Power Company acknowledging the substantial improvement in the Hatch emergency preparedness program as demonstrated by that exercise, as well as the innovative use of the plant simulator in the exercise.

An emergency plan deficiency was identified during the routine inspection in July 1983. The plan deficiency was significant in that the licensee's emergency plan and implementing procedures did not adequately address general emergency protective action recommendations based on plant accident conditions prior to any substantial release of radioactivity.

Of four inspector follow-up items identified during the exercise in October 1983, one involved the identity of scales on meteorological instruments in the control room. The licensee had identified to NRC a prior open item on the issue as complete and ready for inspection. However, the NRC found that the problem had not been solved, and supported the finding by requesting a trained operator to make readings. The operator made several errors which the NRC attributed to the equipment.

Withe the exceptions noted above regarding the meterological instrumentation, the licensee's approach to the resolution of technical issues was quite thorough. The licensee generally evaluated each NRC identified problem from the perspective of identifying and resolving the underlying cause.

As in the previous year, the 1983 Hatch exercise was fully successful. In the months prior to the exercise, the

licensee devoted special effort through meetings, training, and resource assistance to the state and counties to assist in resolving off-site issues that were identified during the 1982 exercise.

The licensee has been responsive to expressed NRC concerns and has taken generally prompt action on all open items. Consequently, NRC has relatively few outstanding open items. Also there is definite evidence of management commitment to the emergency preparedness program. For example, for the October 1983 exercise, the scenario was exceptionally detailed and contained contingencies for possible unplanned events. The licensee also made a large commitment to training and to providing personnel for control and evaluation of the exercise.

b. Conclusion

Category

c. Board Comments

None

7. Security and Safeguards

a. Analysis

Routine inspections were performed by the resident and regional inspection staffs.

The licensee provided prompt and thorough corrective actions to the violations and all identified technical issues raised during security inspections. These violations were not indicative of the total effectiveness and proficiency of the security program at the Hatch plant.

Corporate and site managements' support and security awareness was positive as indicated by their professional approach to providing a safe and secure environment onsite; their responsiveness to all NRC comments and discussions; and the non-adversary relation with onsite personnel. The proprietary security guard force was adequately staffed to meet all commitments of the security plan and of the contingency plan. Review of the training and qualification plan, observations of on-the-job training, and interviews with security force personnel indicated that the security training, as programmed, was being efficiently and effectively implemented. This was also demonstrated by the positive morale of the security force.

The licensee had instituted an intensive drug and alcohol abuse prevention program for all employees, with initial attention given to employees and contractors at the nuclear facility. This self-intiated effort exceeded proposed NRC criteria.

While the identified violations reflected continued deficiencies in the area of access controls to the facility, the licensee has taken strong measures to prevent security personnel error, provide improved procedures, and renovate access portal hardware. During the most recent security inspection the issue of access controls received extensive review and resulted in no violations being identified.

Two violations were identified:

(1) Severity Level IV violation for an authorized employee wearing the wrong picture badge inside the protected area. (83-12-01)

(2) Severity Level IV violation for escorts not maintaining contact with visitors while within the protected area. (83-12-02)

b. Conclusion

Category

c. Board Comments

None

8. Refueling

a. Analysis

Unit 1 and Unit 2 refuelings were monitored by the resident inspection staff, however, no indepth review of the refueling program was conducted. No violations or deviations were identified.

During the Unit 2 refueling problems were encountered by the licensee with the refueling bridge, grapple and mast. Corrective action was prompt and adequate. Problems were also encountered when rigging the steam seperator back into the reactor vessel, causing some damage to the separator and the vessel. Repairs were made and reassembly of the vessel was completed with no further problems

b. Conclusion

Category

c. Board Comments

None

9. Licensing Activities

a. Analysis

The assessment was based on an appraisal of the following significant licensing activities.

- Appendix R activities
- MK 1 torus modifications
- Equipment environmental qualification
- Safety Relief (S/R) valve failure evaluation
- Reload reviews
- Scram discharge volume system modifications
- Appendix I activities
- Purge and vent system modifications
- Pipe crack inspection and repair
- Low low set points modifications
- Inservice inspection program
- Control of heavy loads activities
- Missing pipe whip restraints
- Temporary technical specification (TS) change to lower reactor low water limit (emergency basis)
- Temporary TS change to extend allowable time to inert containment (emergency basis)
- Temporary order change related to leak detection requirements (emergency basis)

Management Involvement in assuring quality varied. For the licensing actions in the above list, while there were some exceptions, there was usually evidence of prior planning and assignment of priorities, and the reviews were generally timely, thorough and technically sound. An area that needed improvement, however, was in the preparation of evaluations supporting the no significant hazards consideration determination. These determinations have been required only since May of 1983 and everyone is on a learning curve. However, the quality and thoroughness of these determination evaluations have not measured up to the quality/balance of the submittals. NRC did not factor these new determinations into this evaluation; we believe the licensee should focus greater management attention on this facet of its submittals.

The licensee's approach to the resolution of technical issues could benefit from improvement. The licensee has demonstrated an understanding of the safety consequences of technical issues and has generally provided acceptable resolutions to problems that exhibit conservatisms. Resolutions were sometimes slowed by the need to factor in the inputs of Southern Services and Bechtel, whose offices are geographically separate from the licensee's corporate headquarters, and the scheduling of reviews of items by the site review committee.

The licensee's responsiveness to NRC initiatives was generally adequate. The licensee sometimes required extensions of time for scheduled submittals and sometimes the submittals lacked sufficient thoroughness and depth. Generally, however, timely, viable, sound, and thorough responses were provided.

b. Conclusion

Category

c. Board Comments

None

10. Quality Assurance Program

a. Analysis

During this evaluation period routine inspections were performed by the resident and regional inspection staff.

Licensee quality assurance policies were adequately stated and understood. The licensee revised the Quality Assurance (QA) procedures for pursuing and resolving problems identified by NRC and the QA procedures related to audit finding categorization. The licensee also issued new procedures for conducting QA surveillance activities and for annual QA Department assessments of line organization performance.

Decision making appeared to be at a level that ensured appropriate management review. Corporate management was closely involved in site activities. The General Manager of Quality Assurance and Radiological Health and Safety was acting as the site QA manager until a suitable replacement could be found. Audits were generally complete and timely; however, corrective actions for audit findings were inadequate. This problem had been recognized by upper licensee management and newly created QA staff provisions were implemented to provide timely resolution of audit

findings. Establishing this new system received total upper management support. The licensee's QA staff categorized all previously identified audit findings according to their safety significance and firm commitments for their resolution were established.

Records were generally complete and available for review. A new record vault has been proposed and is due for construction during 1984. Procurement activities were generally well controlled and documented.

Design change activities were controlled by a procedure that was marginally acceptable. The procedure met regulatory requirements; however, it was difficult to use. A backlog of design changes has been completed for which documentation was being gathered to permit closeout. The engineering staff responsible for design changes was being supplemented by consultants to assist in design change closure. Satisfactory progress had been achieved and licensee management should continue their efforts to close out completed design changes.

The licensee's responsiveness to NRC initiatives was technically sound. Their response to inadequate corrective actions on previously identified QA staff audit findings was vigorous and well managed. Corrective actions were handled by the regulatory compliance group; however, this system had not been totally tested under heavy workload conditions.

Staffing appeared to be adequate, although some QA personnel on site have relatively new. These personnel were being effectively trained, but it will take time for positive results. Plant personnel were being rotated into the QA department to provide needed expertise in various areas. One qualified senior reactor operator on loan to the QA Department was being trained as a lead auditor.

The following violations were identified:

(1) Severity Level IV violation for failure of the QA Department to assure conditions adverse to quality are promptly corrected. This is a repeat violation. (82-42/82-40)

(2) Severity Level IV violation for failure to respond to audit finding within required timeframes. (82-42/82-40)

(3) Severity Level V violation for failure to annually update qualification records of lead auditors. (82-42/82-40)

b. Conclustion

Category

c. Board Comments

None

B. Supporting Data

1. Reports Data

a. Licensee Event Reports (LERs)

During the assessment period, there were 110 LERs reported on Unit 1 and 134 on Unit 2. The distribution by Licensee Cause Code and SALP Functional Area is as follows:

Cause Code	Unit 1	Unit 2
Personnel Error	12	24
Design, Manufacturing, Construction/Installation	5	5
External Cause	0	1
Defective Procedures	6	3
Component Failure	64	78
Other	23	23
Total	110	134

Functional Area	Unit 1	Unit 2
Plant Operations	50	61
Radiological Controls	2	1
Maintenance	4	3
Surveillance	44	45
Fire Protection	2	3
Security	0	0
Refueling	3	2
Quality Assurance	4	15
Other	1	23
Total	110	134

Of the 110 LERs submitted on Unit 1, 58% were due to some kind of component failure. Of these failures, 42% were mechanical, 45% were electrical, and the remaining were attributed to other miscellaneous causes. There were 134 LERs submitted for Unit 2 during the evaluation period, of which 58% were due to component failure. Of these failures,

37% were mechanical and 45% were electrical. The remainder were assigned various miscellaneous causes.

b. Part 21 Reports

None

2. Investigation and Allegation Review

(LATER)

3. Enforcement Actions

a. Violations

Severity Level I, II - __ violations
Severity Level III - __ violations
Severity Level IV - __ violations
Severity Level V - __ violations
Severity Level VI - __ violations

b. Civil Penalties

Three violations classified as a single Several Level II event with a civil penalty was assessed on December 27, 1983, for a July 14, 1983 improper shutdown of the Unit 2 plant.

One violation classified as a Severity Level III with a civil penalty was assessed on June 2, 1983, for failure to provide required quality controls following modification and maintenance relating to electrical cable trays.

c. Orders

No orders relating to enforcement matters were issued.

d. Administrative Actions - Confirmation of Action Letters

No Confirmation of Action Letters were issued during this review period.

4. Management Conferences

Two management meetings were conducted on March 18 and 22, 1983, to discuss the quality control problems associated with the modification and maintenance of electrical cable trays.

A management meeting was held on April 29, 1983, to discuss the status of the recirculation system weld inspections.

An enforcement conference held on July 21, 1983, to discuss the management control over reactor operation pertaining to the July 14, 1983 improper shutdown of Unit 2.

An enforcement conference held on August 10, 1983, to discuss the adequacy of startup preparations for Unit 2.

An enforcement conference held on November 2, 1983, to discuss with personnel involved in the July 14, 1983 improper shutdown the significance of the event.

A management meeting held on September 28, 1983, to brief NRC on the scheduling of the Hatch outage to support the replacement of recirculation system piping on Unit 2.

V. PERFORMANCE ANALYSIS FOR VOGTLE UNITS 1 AND 2

A. Functional Area Evaluations

Licensee Activities

Between November 1, 1982 to October 31, 1983, the construction project has progressed from 37.1% to 51.8% completion. Unit 1 and common progressed from 43% to 61%. Unit 2 is 19.9% complete. Staffing for the project has gradually increased to the present level of manpower:

	Present	Previous SALP Report
Construction	7416	7626
Engineering	852	797
Power Generation	354	141
Others	139	32
	8761	8596

The manpower is distributed over the following shifts:

A Shift - (4) days, ten-hour shifts, Monday to Thursday

B Shift - (4) nights, ten-hour shifts, Monday to Thursday

C Shift - (3) days, twelve-hour shifts, Friday to Sunday

Work on the containment buildings continued to progress. In the Unit 1 containment building, the first dome placement was completed on October 29, 1983, and continued to be erected at the required rate. In th Unit 2 containment building, interior concrete placement continued, with the secondary shield and refueling canal walls being completed to the 217 foot elevation.

Progress in the other power block buildings continued. In the auxiliary building, large bore piping and hanger installation progressed on levels A, B, C, and 1, and the erection of small bore piping and hanger continued in all available areas. Work in the fuel handling building continued, with heating, ventilation and airconditioning (HVAC) duct installation progressing on levels 1 and 3 of the center section and on level 1 of the east wing. In the control building, civil activities continued to progress with work on the west wing level 1 having the greater emphasis.

Turbine building work continued to progress. In the Unit 1 turbine building, large piping was being erected on levels A, 1, and 2, and small bore pipe erection continues on level A. Work continued on the Unit 1 turbine-generator schedule; the General Electric Company is expected to start the main turbine work in February 1984.

Inspection Activities

Routine inspection programs were performed during this evaluation period. The Regional Construction Assessment Team conducted an indepth review of the site project management.

1. Soils and Foundation

   a. Analysis

      Routine inspections were performed by the resident and regional inspection staffs. The NRC reviewed quality assurance implementing procedures, observed back fill operations, examined calibration controls on soil testing equipment, and made observations of concrete placement.

      The quality assurance and quality control procedures met NRC requirements and industry standards. Work activities were performed in accordance with procedure requirements and testing was being done with equipment having current calibration data. Discussions with QC inspectors indicated that the inspectors were knowledgable in specification and procedure requirements and were documenting their inspections on applicable documents.

      Management involvement, resolution of technical issues, and staffing were adequate for the level of activity involved.

      No violations or deviations were identified.

   b. Conclusion

      Category

   c. Board Comments

      None

2. Containment and Other Safety Related Structures

   a. Analysis

      Routine inspections were performed by the resident and regional inspections staffs. The inspections involved review of QA implementing procedures; observation of work activities including containment structural steel; containment concrete; rebar installation; layout of walls and lines; grounding cable; embed plates; review of quality records; observation of polar crane support installation; lifting and setting of containment dome; and review of spare penetrations.

Two violations involving a concrete placement and installation of structural steel were identified. The violations were not indicative of a programmatic breakdown, but were a result of failure to prepare adequate procedures to implement licensee commitments. A similar problem regarding inadequate procedures was identified in the previous SALP evaluation. With the exception of the identified violations, QA and QC procedures and controls were found to meet NRC requirements and work activities were found to have been performed in accordance with QA and QC procedure requirements. QA records are generally complete, well maintained, and retrievable.

Management involvement, resolution of technical issues, staffing, and training were adequate for the level of activity involved. The licensee was responsive in correcting the violation concerning the concrete placement. Response to the violation concerning structural steel was inadequate in that it did not address all of the examples cited in the violation. The licensee was preparing a supplemental response on this item at the close of the assessment period.

The following violations were identified:

(1) Severity Level IV violation for failure to implement procedures and drawings or provide acceptance criteria for bolting, modification or removal of structural steel, and verifying that expansion anchors and embed plates comply with design requirements. (83-13)

(2) Severity Level V violation for failure to provide proper cold weather protection on a concrete placement. (83-04)

b. Conclusion

Category

c. Board Comments

None

3. Piping Systems and Supports

a. Analysis

Routine inspections were performed by the resident and regional inspection staffs. Additionally, a major inspection by the Regional Construction Assessment Team was also performed.

The licensee was in the early construction phases for the installation of safety-related supports. The NRC inspection

identified a weakness in that instructions were not adequate with respect to weld size, dimensions, and tolerances. These problems were identified for four pipe hangers which have been inspected and accepted by the hanger QC inspectors. The licensee was very responsive to this concern and has taken appropriate action to correct the problem. Part of this corrective action demonstrated a thoroughness on the part of the licensee to correct the problem while still in the early part of construction; this action has been to conduct an extensive retraining program for QC inspectors, craft personnel, engineers and supervisors involved with support work.

The licensee has also been attentive to NRC concerns as well as the reportability of a situation. For instance, in the same support concern, the licensee has organized a task force of cognizant personnel to perform an in-depth review and evaluation of the Pullman Power Products program for the installation of piping systems, which was expected to focus heavily on pipe support installation and inspection. This task force will also complete the evaluation being conducted to support the potential construction deficiency report.

One strength of the licensee's program appeared to be in the arrangement for the use of the Westinghouse Vogtle Structural Anaysis Mobile Unit (V-SAMU). The V-SAMU was to be used for analysis and design of class 2, 3 and non-nuclear small bore piping systems. This on-site capability will expedite resolution of many engineering or construction problems as they are identified.

The procedures for control of construction activities appeared to be adequate to insure a quality product in the area of supports and restraints.

Practices used in welding large diameter reactor coolant loop piping appear excellent as are the quality of the welds being produced. The practices and procedures for weld on other piping and piping supports are adequate.

One violation was identified:

Severity Level IV violation concerning a failure to provide adequate instructions, procedures and drawings with respect to weldings, dimensions, and tolerances for pipe supports. (83-13)

b. Conclusion

Category

c. Board Comments

None

4. Safety-Related Components

a. Analysis

Routine inspections are conducted by the resident and regional inspection staffs. These inspections involved the preparation and setting of the reactor pressure vessel and steam generators; storage of safety-related equipment; load test of the containment dome lifting equipment and NDE of the reactor pressure closure head cladding.

The procedures and controls utilized to perform the movement and placing of various large pieces of safety-related components provided evidence of prior planning and assignment of priorities. The proper precautions, commensurate with the potential damage, were in place at the time of the move. The licensee incorporated the lessons learned from another construction site which had dropped a piece of equipment being moved.

The licensee demonstrated a technically sound and through response to an ~~NRC concern~~ involving the reactor vessel closure head cladding. A complete reinspection of the head cladding has been completed and the repairs are planned. The resolution of this problem has been timely due to the adequate staff attention which the licensee placed on this item.

~~One~~ violations ~~was~~ identified:

(1) Severity Level IV violation concerning ~~with~~ failure to provide for code required penetrant examination of a completed weld. (83-15)

(2) Severity Level V violation concerning the proper performance of liquid penetrant examination on the reactor vessel closure head. (83-16)

b. Conclusion

Category

c. Board Comments

None

5. Support Systems

a. Analysis

During this evaluation period, resident monitoring of the activities in correcting the licensee identified problem with the Heating, Ventilation and Cooling Systems (HVAC) concerning the duct work supports.

Licensee management has demonstrated excellent involvement and control in resolving the HVAC problem. The licensee identified the problem during a corporate quality assurance audit and has since determined the root cause to be a quality assurance program breakdown at the fabrication shop for the duct supports. The licensee has also taken appropriate action to prevent a recurrence by designating the architect/engineer to perform a review of slop detail drawings for conformance to design drawings. The licensee completed an evaluation and finalized a report in a timely fashion.

No violations were identified in this area.

b. Conclusion

Category 1

c. Board Comments

None

6. Electrical Power Supply and Distribution

a. Analysis

During this evaluation period, routine inspections were performed by resident and regional inspection staffs. The areas inspected included electrical component receipt, storage and handling; in-place storage of electrical equipment; quality assurance; followup on the licensee's inspection of control panel weld problems; and training, qualification and certification of technical inspectors.

Management involvement to assure quality has been evident on two issues regarding electrical components. The first issue, pertaining to the welds in the control panels, was quickly expanded in scope when the inspection identified problems with component identity, incorrect wiring, and questionable qualification of connectors. It should also be noted that, concern of the welding on control panels was transmitted in IE Notice 82-34, Revision 1. In addition to this review the

licensee decided to make an inspection of electrical terminations. This resulted in a full inspection, a considerable amount of field correcting work by the vendor, and the issuance of a construction deficiency report and a Part 21 report.

The second issue was in the area of in-plant storage of electrical components. NRC raised a concern that the equipment was being stored with little protection. The licensee response to this issue was very prompt and extensive. The corrective action consisted of a complete inspection of the equipment, the installation of protective covering and, in some instances, cages, the erection of to prevent unauthorized access. The one weakness on the part of the licensee was in the area of self identification of the problem. In this regard, the indications of the problem had been identified by QC inspectors, but the licensee did not require the magnitude of the problem. The storage of electrical equipment in the warehouse was found to not have the same problems as identified for the in-plant storage.

Electrical installation of cable has in the very early stages and inspections have been correspondingly limited. The licensee appeared to be well organized and prepared to commence cable pulling. It was noted that the start of cable pulling has been delayed due to the installation of Uni-strut support locking fasteners. The extensiveness of the fastener problem may have been indicative of a need to review the QC inspection procedures for the electrical area.

The following violation was identified:

> A Severity Level IV violation concerning the in-place electrical cabinets not being adequately protected for dirt, moisture, vandalism, and rodents. (82-29)

b. Conclusion

Category

c. Board Comments

None

7. Instrumentation and Control Systems

a. Analysis

No inspections were performed in this area due to the status of construction.

b. Conclusion

Not Rated

c. Board Comments

8. Licensing Activities

a. Analysis

The evaluation was based on NRC evaluation of the following licensing activities:

- Category 1 Compaction
- Caseload Forecast
- Content of the Final Safety Analysis Report
- Content of the Environmental Report

Management involvement in assuring quality was considered ~~excellent~~ based on a very favorable impression made by licensee management at the Caseload Forecast Panel (CFP) site visit and subsequent meetings with the NRC staff. High levels of management were represented at the CFP visit. More important than mere representation, the individuals in attendance were very knowledgeable about the Vogtle project and they appeared to place appropriate emphasis on assuring quality at the plant.

The licensee's approach to the resolution of technical issues from a safety standpoint appeared adequate. This conclusion was based on resolution of compaction of Category 1 backfill around safety-related piping. The licensee, once staff concerns were identified, addressed them in a timely manner. After discussions on the compaction issue, the licensee proposed a satisfactory solution which accounted for staff safety concerns.

The licensee was prompt and very responsive to NRC inquiries, particularily offering cooperation and information on the compaction issue when the review required several telephone conversations and supplemental submittals. However, this approach was typical of the licensee's response on most licensing issues.

The licensee appeared ~~to be highly~~ technically competent based on the involvement with the licensee's staff at the Caseload Forecast Panel visit and on the compaction issue. ~~The staff appeared technically competent with the~~ appropriate persons involved on both issues.

This assessment area was limited due to the early licensing review stage of Vogtle. On the selected activities, the contact and involvement has been very slight and does not provide a basis for an overall detailed evaluation. For typical licensing activities, such as the caseload and the compaction issue, the licensee's performance has been excellent. However, the content of the FSAR and ER needs upgrading before the staff can adequately review the plant.

b. Conclusion

Category 4

c. Board Comments

None

9. Quality Assurance Program

a. Analysis

Routine inspections were performed by the resident and regional inspection staffs. A special team inspection was conducted to assess overall management control of the Vogtle project. ~~Violations were not identified in this area.~~

Significant corporate QA organizational changes were implemented during the assessment period. The licensee created and filled a new position, General Manager, Quality Assurance and Radiological Health and Safety (GMQA). The GMQA is responsible to the Executive Vice President Power Supply for the overall control of the licensee QA program. Further reorganization details depict the following corporate level QA personnel reporting directly to GMQA: the Plant Vogtle QA Manager (VQAM), the Plant Hatch QA Manager (HQAM), the QA Engineering/Support Manager (QAE/SM), the QA Coordinator for Fossil and Hydro Projects, the QA Special Projects Assistant (QASPA), and a Radiological Health and Safety Representative (RHSR). The RHSR has no line QA functions.

The Vogtle and Hatch QA Managers have reporting to them their respective QA Site Manager (QASM) located at the plant site. The VQAM also has reporting to him a Project QA Engineer (PQAE). The VQAM has three QA engineers assigned to perform engineering evaluations on QA activities.

The new QA Engineering/Support Manager position was established to support the Hatch and Vogtle QA programs by providing increased participation in solving quality-related problems, increased oversight of architectural/engineer (A/E)

and contractor QA activities, regulatory and associated document review, assessment of trends, and procurement QA activities.

The QASPA position was created to develop and direct QA training programs for organizations performing quality-related activities. Additionally, the QASPA will direct or accomplish special QA projects as directed by the GMQA.

The above mentioned organizational changes have been beneficial to the QA program. The job title of Manager to the GMQA, VQAM, and VQASM has upgraded the QA organization image in the eyes of construction and GPC management. Under this revised organization, identical QA manager positions have been established for both Vogtle and Hatch making them solely responsible for the QA programs of their respective projects subordinate to the GMQA. The creation of an QAE/SM and his necessary staff appears to be a major improvement in that it strengthens GPC's QA capability to assess their program and should provide increased QA oversight of A/E design activities (oriented more towards technical/engineering review versus the usual program compliance verification approach), suppliers, and vendors. Additionally, it appears the licensee has appointed a strong GMQA who possesses valuable broad experience in nuclear and QA activities. He appears dedicated to strengthening and upgrading GPC's overall QA program and has necessary management support and attention in this endeavor.

There was evidence that licensee management has re-examined the QA program, worked toward upgrading standards, obtained better qualified personnel, and in general promoted QA acceptance at all levels. The GMQA presented to GPC management an assessment audit of the QA Department operations identifying particular concerns and needed improvement areas for which resolutions were proposed and management responded with affirmative support.

Management periodically reviewed the QA program. The design assurance audits, the audit plan, the audit followup of corrective actions for the audit findings, and the tracking of Bechtel, licensee and NRC audit findings were reviewed and were generally complete and thorough.

The licensee's responsiveness to NRC initiatives was considered adequate. The construction quality assurance program update was submitted as required by 10 CFR 50.55(f), a new regulation.

There was evidence of prior planning, assignment of priorities, and defined procedures used to control activities. QA policies were adequately stated and understood.

The procurement activities were reviewed and found well controlled and documented. There has been no indications of QA programatic breakdowns.

Staffing of QA positions appeared to be adequate. Key positions were identified, and authorities and responsibilities were defined. Management independence was retained. QA staffing has increased with the expanded workload.

The training and qualification program contributed to an understanding of work and a reasonable adherence to procedures. A defined program was being implemented.

Staffing has been adequate for the status of construction. Positions were clearly identified with authorities and responsibilities well defined. Personnel were adequately trained to understand the authority and responsibilities of their positions.

During this reporting period, the onsite QA staff has been increased from 14 to 19 persons.

The licensee has demonstrated sound technical decision making commensurate with quality assurance concerns. This was exemplified best by the licensee response to IE Bulletin 82-01. This bulletin pertains to problems where two vendors supplied knowly altered radiographs. The licensee expanded the scope of the bulletin by performing an independent review of the radiographs for all of the shop fabricated welds for the components furnished by six other vendors. This inspection has identified numerous nonconformances with these radiographs. The licensee is working with the vendors to resolve the issue. This action appears typical for the Vogtle project, where the specifics of a problem are expanded in a generic fashion to assure that a problem does not exist in related areas.

Two violations were identified:

(1) Severity Level V violation concerning the failure to properly store radiographic records. (83-13)

(2) Severity Level V violation concerning the failure to review and approve weld acceptance criteria. (83-13)

b. Conclusion

Category

c. Board Comments

None

C. Supporting Data

1. Reports Data

a. Construction Deficiency Reports (CDR)

During the period, seventeen CDRs were reported. Eight were caused by errors associated with the design of the component; nine were due to manufacturing/fabrication errors. Three additional items were considered and later determined to be not reportable.

The reports were reported in a timely manner; occasionally some information was lacking. The initial reports could provide a more detailed description of the problem to provide NRC with sufficient information to allow evaluation. The events are properly identified and analyzed. Corrective action was effective as indicated by a lack of repetition.

2. Investigation and Allegation Review

(LATER)

3. Enforcement Action

a. Violations

Severity Level I, [illegible] No violations
Severity Level IV - [illegible] tions ~~for each unit~~
Severity Level V - [illegible] violations ~~for each unit~~
Severity Level VI - No violations

b. Civil Penalties

None

c. Orders

None

d. Administrative Action

No Confirmation of Action Letters were issued during this review period.

4. Management Conferences

A management meeting was held on January 14, 1983 to discuss the results of INPO related Self-Initiated Evaluation.

A management meeting was held on March 2, 1983 to discuss field change controls.

A management meeting was held on June 24, 1983 to discuss quality workmanship by field contractors.

A management meeting was held on August 22, 1983 to discuss the GPC findings concerning quality workmanship by field contractors.

1/17/83

	Management Involvement in Assuring Quality	Approach to Resolution of Technical Issues From a Safety Standpoint	Responsiveness to NRC Initiatives	Enforcement History	Reporting and Analysis of Reportable Events	Staffing (including Management)	Training and Qualification Effectiveness	
...ls and Foundation	2	2	2	1	-	2	-	2
...ainment and Other ...ty Related Structures	2	3	-	2	3	-	-	2
... Systems and Supports	2	1	1	2	1	2	1	1
... Related Components	2	1	1	2	-	-	-	2 1
...port Systems	1	1	-	1	1	-	-	1
...trical Power Supply ... Distribution	1	2	2	2	2	-	-	2
...umentation and ...rol Systems	2	2	1	2	1			
... Activities								2
... Assurance Program	1	1	1	1	1	-	-	1

SALP

Corrections to Hatch Section

OPS

Delete Violation (4) - Moved to Surveillance

SURVEILLANCE

Add Violation (5) - Severity Level IV violation for improper PRB review which changed the ADS surveillance to a method difference from TS (366/83-29)

FIRE PROTECTION

Add Violation (1) - Severity Level IV violation for failure to establish a fire watch within one hour (321/83-30)

Violation (2) - Severity Level V violation for failure to report within twenty-four hours to NRC when both fire suppression water supplies were below TS Limit (366/83-02)

Violation Recap

Hatch Severity	Total	Vogtle Severity	Total
1	0	1	0
2	1	2	0
3	1	3	0
4	17	4	4
5	8	5	4
0	1	0	0

ALLEGATIONS

VOGTLE

2G089	QA Procedure - Substantiated - Closed - NOV issued
A0062	Suspected Marijuana use - Turned over to GPC - Closed
A0096	QC Inspector Signed off welds without proper inspection - Substantiated - Procedure change - Closed
A0077	Intimidation of QC Inspector - OPEN
A0022	Management Intimidation of QC Inspectors - Closed - Referred to DOJ
A0019	Use of uncertified construction materials - Unsubstantiated - Closed
A0013	Construction of Reactor vessel shims - Unsubstantiated - Closed
A0072	Inadequate welding - OPEN

could endanger health and cause economic hardship.

In the case of a release of radionuclides to the ground at Plant Vogtle, the water table aquifer would be the first and the most seriously impacted owing to its close proximity to the surface. In the area of Plant Vogtle, soils are permeable and virtually no runoff of rainwater occurs. Any release of radionuclide contaminated water would seep immediately into the ground and eventually reach the water table aquifer. The sandy nature of the soils and the aquifer material would offer little retention of radionuclides. The radionuclides would migrate with the groundwater and contaminate larger portions of the aquifer.

A significant contamination incident could result in contamination migrating vertically downward from the water table aquifer into the deeper Lisbon Sand Formation and the Tuscaloosa Aquifer. While a clay separating the water table from the deeper aquifers may provide some protection for the deeper aquifers, the 50 feet of hydraulic head on the water table aquifer acts as a vertical force on the groundwater, pushing it through fractures or more permeable sections of the clay. It is known that just south of the plant site, this clay changes into a limestone, becoming part of a major regional water supply aquifer, the Principal Artesian Aquifer.

The Georgia Power Company's record of groundwater protection is not encouraging as demonstrated by events at the Hatch Nuclear Plant. Groundwater underlying Plant Hatch has been contaminated with tritium from a source or sources never fully identified.

GANE 8

Applicant has failed to enforce a quality assurance program in the construction of Plant Vogtle that provides adequately for the safe functioning of diverse structures, systems and components, as required by 10 CFR 50 Appendix B.

The success of a quality assurance program is ultimately tied to the generation of adequate confidence concerning the correct functioning of critical nuclear power

PLANT VOGTLE DOCKET 50- 424 425

AMEND	DATE	ACTION
1	11/11/83	Copy in mail 12/15/83 – Replaced p 1.4-65 - 66 NRC Forwarded to Melinda w/copy of 1.4-65 J 1/12/84
2	12/10/83	Received from Melinda – See next page No 17.2 changes J 2/[illegible]/84
3	1/27/84	No significant change J 2/9/84
4	2/24/84	Replaced a couple of pg in Chap 13 – Nothing significant Forwarded complete set to Melinda J 3/24/84
5	4/[illegible]/84	No significant change – J 4/25/84
6	5/9/84	No QA ~~Print~~ To Melinda J 5/21/84
7	5/24/84	Some changed pages in 1.8 & 17.2. Reproduced the new 17.2 pages & forwarded to Melinda. J 6/13/84

ACCESSION NBR:8
FACIL:50-424 A
50-425 A
,TH.NAME
rUSTER,D.O.
RECIP.NAME
DENTON,H.R.

SUBJECT: Appli
Amend

DISTRIBUTION C
TITLE: Licensi

NOTES:PNL 1cy

	RECI	
	ID CO	
	NRR/DL	
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INTERNAL:	ELD/HD	
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	NRR/DH	
	NRR/DH	
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	NRR/DS	
	NRR/DS	
	NRR/DS	
	NRR/DS	
	RGN2	
EXTERNAL:	ACRS	
	DMB/DS	
	LPDR	
	NSIC	
NOTES:		

12/29/83

Jack:

This copy of Amend 2 to the Coyle FSAR is for you. I made a Xerox copy for myself.

Did you ever hear anything on our copy of Amend 1?

Attached.

Melinda

P.S. If you would, please send in the Amendment receipt acknowledgement.

2) J. Strand
DOCKET #
r 05000424
r 05000425

if

5+39

ience

05000424

Note to self:
I have kept here with the pages revised by Amend 2 in case Reg II has some questions.

1/3/84

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Melinda - Thanks. Note that the Region will do the review of the 17.1 changes and we will continue to review 17.2 only.

60

Also, I think the Docket Room acknowledges the receipt of the copies such that we don't have to.

TOTAL NUMBER OF COPIES REQUIRED: LTTR 54 ENCL 47

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

July 28, 1983

Walt,

Attached is Ch. 17 to the Vogtle FSAR which you need to do the acceptance review.

Please provide any questions to me (MS116) by COB Aug. 10.

Thanks for your cooperation.

Melanie A. Miller
Vogtle PM
24259

LB A

Received 2:20 8/4/83

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REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8307010183 DOC.DATE: 83/06/22 NOTARIZED: NO DOCKET #
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50-425 Alvin W. Vogtle Nuclear Plant, Unit 2, Georgia Power 05000425
AUTH.NAME AUTHOR AFFILIATION
Georgia Power Co.
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: Vogtle Electric Generating Plant,Units 1 & 2,FSAR, [redacted]

DISTRIBUTION CODE: L002S COPIES RECEIVED:LTR 1 ENCL 15 SIZE: 249,011
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	% NRR/DE/SAB		1	1	%W 2	ONLY	0	0
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	(NRR/DSI/CPB		1	0	(W 4,15	ONLY	0	0
	*NRR/DE/QAB		1	1	*W 3,9,13,17	ONLY	0	0
	,,NRR/DE/GB		1	1	,,W CH 2		0	0
	-NRR/DE/MTEB		1	1	-W CH 3,4,5,6,9		0	0
	...W CH 2,3		0	0	.NRR/DSI/METB		1	1
	.W CH 11		0	0	NRR/DE/CEB	07	1	1
	NRR/DE/EHEB		1	1	NRR/DE/MEB	15	1	1
	NRR/DE/SGEB		1	1	NRR/DSI/ADCPS		1	0
	NRR/DSI/ASB	11	1	1	NRR/DSI/ICSB	13	1	1
	REG FILE	04	1	1	RGN2		1	0
	W CHAPTER 12		0	0				
EXTERNAL:	LPDR	03	1	1	NRC PDR	02	1	1
	NTIS		1	1				
NOTES:			1	1				

305 E/W/S

7/14/83

62

TOTAL NUMBER OF COPIES REQUIRED: LTTR 27 ENCL 20

Note Due date revised
to 4-15-84

J 4/5/84

This is the Vogtle RAI that is due to the LPM on 12/15. It is the work that is being used as indoctrination for Melinda & her input and/or considerations are not included. If Jim back 12/12 I may be able to handle the coordination that week.

I presume you'll do what's right.

J 11/23/83

C3

4/30/84 Jack:

Thanks for your vote of confidence in my work on the Voetle review. I hope Jim & Ted are likewise happy.

I've gone thru my review pkg & your notes on same. I have no arguments with your disposition of my questions. Your notes were very self explanatory.

When will we be making a trip to GPC? How soon will they answer our questions?

Melinda

Melinda

Melanie Miller X-24259

→ Questions to applicant by letter dated 4/25/84
Trip to site to discuss draft responses towards end of June - early July. Schedule such that they have draft response ready for our review —

5/1/84

4/8/84

NOTE TO: J

FROM: M

SUBJECT: R

Jack - If necessary, Please feel free to look at my Vogtle review notes. They are on top of my short bookcase, next to the tall one, in my office.

I have comp with yours, yours and a between my

Enclosure 2 not able to

Whenever co differences applicable

Melinda

Enclosures:
1. Questio Revie
2. New Que

Melinda -

I did not feel it was necessary to review your notes as I found the attached package understandable & think you did a good job, and I've noted my comments herein. I'd like this back to keep my file complete. You're on distribution of the Grace to Novak memo of the question.

Thanks,

J 4/9/84

cc: WA Alt
JL Mil

NIRS

Nuclear Information and Resource Service
1346 Connecticut Avenue NW, 4th Floor, Washington, D.C. 20036 (202) 296-7552

June 1, 1984

James M. Felton, Director
Division of Rules and Records
Office of Adminstration
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

FREEDOM OF INFORMATION ACT REQUEST
FOIA-84-463
Rec'd 6-5-84

FREEDOM OF INFORMATION ACT REQUEST

Dear Mr. Felton:

Pursuant to the Freedom of Information Act, 5 U.S.C. 522, as amended, the Nuclear Information and Resource Service requests the following documents regarding the Safety Evaluation Report for the Vogtle nuclear power plant for the operating license stage. Please consider "documents" to include reports, studies, test results, correspondence, memoranda, meeting notes, meeting minutes, working papers, graphs, charts, diagrams, notes and summaries of conversations and interviews, computer records, and any other forms of written communication, including internal NRC Staff memoranda. In your response, please identify which documents correspond to which requests below.

Pursuant to this request, please provide all documents prepared or utilized by, in the possession of, or routed through the NRC related to:

1. Analysis, review and preparation of the Safety Evaluation Report for the operating license stage for the Vogtle Nuclear power plant, including all memoranda, correspondence and draft inputs.

In our opinion, it is appropriate in this case for you to waive copying and search charges, pursuant to 5 U.S.C. 552(a)(4)(A) "because furnishing the information can be considered as primarily benefiting the general public." The Nuclear Information and Resource Service is a non-profit

Dupe 8501180281

organization serving local organizations concerned about nuclear power and providing information to the general public.

Sincerely,

Nina Bell
Nuclear Safety Analyst

cc: File