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Afternoon Session

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U.S. NUCLEAR REGULATORY COMMISSION

JOSEPH M. FARLEY NUCLEAR POWER PLANT

LICENSE RENEWAL APPLICATION

PRELIMINARY RESULTS OF ENVIRONMENTAL REVIEW

PUBLIC MEETING - AFTERNOON SESSION

SEPTEMBER 30, 2004

The meeting was held at 1:30 p.m. at the Quality Inn, 3053 Ross Clark Circle, Dothan, Alabama, Barry Zalcman, Facilitator, presiding.

PRESENT:

BARRY ZALCMAN, FACILITATOR

ANDREW KUGLER

JENNIFER DAVIS

CRYSTAL QUINLY

JACK CUSHING

A-G-E-N-D-A

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(1:35 p.m.)

FACILITATOR ZALCMAN: Well, good afternoon, everybody. My name is Barry Zalcman. I'm with the Nuclear Regulatory Commission and serve as Program Manager. It's going to be my privilege today and honor to serve as your facilitator and hopefully we'll be able to have a meaningful meeting with meaningful interaction between you, the public, and the NRC staff.

Our job today as part of NRC staff interaction with you is to try and make sure that you get the information that you need to participate and provide us insights that you may have on the work of the Agency.

The subject for today's meeting is a license renewal application that was submitted by the Southern Nuclear Operating Company, for the Farley plant, Units 1 and 2, and particularly the environmental review that is part and parcel of the license renewal. We're going to be focusing on environmental issues today.

Today's format has two parts. In this first

part, the staff will give you background information, give you insights as to the structure of license renewal and how we perform our renewal.

Then the second part of the meeting is when we go out to you. It will be a formal declaration as we begin that part of the meeting and we'll be asking you to come and share your views with us, if you have them at that time.

There will be some question and answer periods during the first part of the meeting where we will have an opportunity to expand a little further on some of the concerns that you may have.

So, if you have questions during those periods I'm going to allow the NRC staff to complete portions of the presentation and then I'm going to go out to the audience. And then, if you have questions of the staff, you can identify yourself and I'll either come over and give you this lavalier that you can talk to or you can come up to the podium and ask the questions about the process and the review completed to date.

Then, after the presentation by the staff, again, we're going to come back to you and give you an opportunity to share your views.

The staff will tell you a little more about the license renewal process. We're going to have a transcription of today's meeting so that all the comments that you make will actually become part of the record. And with us today is Sue Martin taking the transcript.

When we do have the opportunity for you to come up and either ask a question or make a presentation, I'm going to ask that you identify yourself and tell us your affiliation, if that's appropriate. We're going to have the opportunity to interact and I would like to have just one person speaking at a time so that we can, number one, get a clear transcript; number two, and more importantly, so that we can give full attention and respect to the individual that's speaking at the time.

When you do have a question after the staff presentation, I will just ask that you identify yourself, raise your right-hand,

we'll come over; eye contact, we'll come over.

When we get to the second part there are some folks that have pre-registered to speak. First, what I will do is give the opportunity to the applicant or representative of the applicant to make a presentation, and then those who are pre-registered in advance, and then the rest of you, if you have comments.

Some of you may just be here to collect information and take it back. During the course of our presentation we will give you some insight as to how you can share your views with us after the meeting.

I would ask when we do have the opportunity for your comments if you could be brief and concise, try and limit it to about five to seven minutes. If you do have prepared remarks then we'll be happy to take them. You can either provide us with a synopsis and put the full remarks on the record or, if you want to read it, you can also share a copy with us and we'll put it in the record.

For those of you that are comfortable

enough to come up to the podium you can make your presentation there. Those of you that would prefer to sit in your seat can make it from there. I will be happy to come over with the microphone.

In terms of the agenda today, all of you should have received one as you came in, the opportunity to register. If you don't have one, please identify yourself and we'll get one to you. Amy Barrett is helping up at the registration desk. Hopefully, all of you have copies of not only the agenda but also copies of the slides, as well.

Once again, NRC is going to provide a brief overview of the entire review license renewal process, both the safety activities, as well as the environmental activities. We're then going to give you a little description of the specific attributes of the review itself and the preliminary findings and conclusions of the staff and environmental team.

At the end of the staff presentation we'll give you some details on the schedule for the balance of the review, as well as how you can interact with the staff and

communicate with the staff with your comments.

So with that, let me take a few moments to introduce the speakers to you. The first one we're going to have today is Mr. Andy Kugler. Mr. Kugler is the Chief of the Environmental Impact Section in the Office of Nuclear Reactor Regulation at the NRC.

It's Andy's group that leads all the environmental reviews for any significant action for the Agency dealing with reactors; that's both power reactors and non-power reactors. So not only is it license renewal but all other licensing actions such as, power upgrates. All of the environmental work is done under Andy's supervision today.

Andy and his contractors from National Labs were responsible for developing the draft environmental impact statement that is the subject of today's meeting.

Andy did his undergraduate work at Cooper Union which is in New York in mechanical engineering; has done his graduate work in technical management at Johns Hopkins University in Maryland. He has over

twenty-five years of experience. Some work for the U.S. Navy. Some at the River Bend Plant also in the south. And joined the Agency over ten years ago and was a safety project manager, and more recently, an environmental project manager working on license renewal, as well.

He clearly has a very deep understanding not only of the environmental issues but also of the safety issues associated with the license renewal and plant operations. After that we'll go to Jennifer Davis.

12:43P After Mr. Kugler we'll go to Jenny Davis. Jenny will provide a general discussion of the environmental review, what we do and the process that we have. Jenny has come to us after several years of experience in both the private sector as well as the academic sector. She has a background in historic preservation, classical civilization, as well as archaeology.

She had her undergraduate work at Mary Washington College and is the point person today for the Office of Nuclear Reactor Regulation dealing with the National Historic

Preservation Act.

After that we'll go to Crystal Quinly. Crystal is the project team leader for us in that she coordinates and orchestrates the activities of the National Lab technical assistance that we have working on this project.

The NRC staff has technical experts that come to us from Lawrence Livermore and Los Alamos National Laboratory, both of which are operated by the University of California, as well as some specialists from the Pacific Northwest National Laboratory, which is operated by Battelle Memorial Institute.

Crystal is part of the environmental evaluations group at Livermore, has a technical background in environmental science with a focus on land use and she got her Bachelor's of Arts degree in environmental science at California State University at Hayward, California in 1994.

She also has over ten years experience working with environmental issues in the private sector, as well as with Livermore and the work under the Department of Energy.

Finally we're going to have a presentation by Jack Cushing. Jack is a Senior Environmental Project Manager and is the Project Manager for this activity. He's going to provide a very brief discussion on Severe accident analysis work that is part of this environmental review. Then he is going to go into some of the details on how you the public can share your insights with us and how we can capture the material that you are willing to send in as comments on the document.

We'll give you some discussion of the schedule and also talk about a feedback form that we would like you to consider filling out to help us improve the process for interactions with the public.

Jack is a Senior Environmental Project Manager. He did his undergraduate work in Marine Engineering at Massachusetts Maritime Academy. Jack was a licensed reactor operator for fifteen years so he can actually operate one of these plants we're talking about. He joined the NRC about five years ago and then joined the environmental group,

so Jack is currently the environmental project manager for the Farley project and also the first-of-a-kind early site permit. So, not only is he working in the license renewal arena but he's also working in the ESP arena, as well.

In addition to the four presenters that I talked about during the course of the staff's presentation, we'll also introduce other NRC folks that are here that may assist them in responding to some of those questions that you may have.

So, with that as the background, the formal discussion on the background of the individuals, we're going to hand it over to Mr. Kugler. And with that, I thank you for taking the time in this afternoon to share your interactions with us and let Mr. Kugler take it away.

MR. KUGLER: Thank you, Barry. And thank you all for coming out here today to participate in this meeting. I hope that the information that we provide today will help you to understand the process that we're going through, to understand where we are today in that process, and the role

that you can play in helping us to ensure that the final document that we prepare is accurate.

First, let me provide some general context for the license renewal process. The Atomic Energy Act gives the NRC the authority to issue operating licenses to nuclear power plants for a period of forty years. For Farley Units 1 and 2, those operating licenses expire in the years 2017 and 2021, respectively.

Our regulations also provide for twenty year extensions to those licenses. And the Southern Nuclear Company has applied for renewal for the Farley Units 1 and 2.

As part of the NRC's review of the license renewal application, we performed an environmental review to evaluate the impact of another twenty years of operation on the environment. We held a meeting here last January as an early part of that process to gather information from you on the scope of our review.

As we indicated at that time, we're returning now to explain what we found in our

review, in the Draft Environmental Impact Statement, and to give you an opportunity to ask questions and to provide comments on that draft.

Before I get into the discussion of the license renewal process itself, I would like to take a minute to talk about the NRC in terms of what we do and what our mission is.

As I mentioned, the Atomic Energy Act is The legislation that authorizes the NRC to regulate the civilian uses of nuclear material.

In exercising that authority, our mission is three-fold. One of our jobs is to protect the public health and safety. We also protect the environment and we provide for the common defense and security.

The NRC accomplishes its mission through a combination of regulatory programs and processes such as inspections, enforcement actions, assessments of licensee performance and evaluation of operating experience at nuclear plants throughout the country.

Turning now to the license renewal process itself, our review is similar to the

original licensing process for the plants in that there are two tracks. There is a safety review and there's an environmental review.

The safety review includes safety evaluation, audits and on-site inspections and an independent review by the Advisory Committee on Reactor Safeguards, which you will often hear us refer to as ACRS.

There are two types of safety issues that we have to deal with. There are current issues. These are dealt with on a day-to-day basis today. Then there are aging management issues which we'll address in the license renewal process.

Under the current operating license the NRC's regulatory oversight process deals with current issues. We don't plan to wait if there's a current issue and wait for a license renewal application to deal with it. We'll deal with it today.

Because some of these issues are being dealt with today, for example, security and emergency planning, and they're dealt with on an ongoing basis, we don't reevaluate them under the license renewal review.

Instead, the license renewal review focuses on the aging management issues and programs that the licensing has implemented or will implement to manage the aging of equipment and components. The results of that are documented in the Safety Evaluation Report.

As I mentioned, that report will then be independently reviewed by the Advisory Committee on Reactor Safeguards. This committee is an independent organization that is made up of nationally recognized technical experts in nuclear safety and they serve as a consulting body to the commission.

They review each license renewal application and they review our safety evaluation report. They come to their own conclusions and recommendations and then they provide those directly to the commission.

The environmental review, which Ms. Davis will discuss in more detail in a few minutes, evaluates the impact of license renewal in a number of areas. These are issues such as hydrology, ecology, cultural resources, and socioeconomic issues, among others.

Now this slide gives an overview of the entire license renewal process. As I discussed, there are really two tracks; the upper portion of this is the safety review and the lower portion is the environmental review. The safety review involves the NRC staff review and assessment of the safety information as contained in the licensee's application.

There's a team of about thirty technical reviewers working for the NRC either at headquarters or as contractors who are conducting that safety review.

I would like to introduce the Safety Project Manager. Her name is Tilda Liu and she is here with us today. Tilda, if you could just stand up for a moment. Tilda is leading the safety review.

The safety review will focus on the effectiveness of the aging management programs for the plant's systems and structures that are within the scope of license renewal. We review the effectiveness of these programs to ensure that the plant can be safely operated during the period of

extended operation.

The safety review process also involves audits and on-site inspections. These inspections are conducted by teams of inspectors brought together from both our headquarters and from our regional offices. There are representatives of our inspection program here today.

In particular, the senior resident inspector at the Farley plant Charles Patterson is here today. Charles, if you could. Thank you.

He is also assisted at the plant by the resident inspector Rodney Fanner who I don't believe he is with us today. No.

The results of the inspections are documented in separate inspection reports and these results combined with the results of the staff's review of the aging management program are documented in the safety evaluation report which we provided to the ACRS for their review.

The last of the on-site inspections is underway right now. And in fact, the exit meeting for that inspection will be held

tomorrow at the Houston County Commissioners' Chambers at nine o'clock in the morning.

We're also in the process of developing a Safety Evaluation Report.

The second part of the review process is the environmental review which includes scoping activities and the development of a Draft Environmental Impact Statement.

The Draft Environmental Impact Statement is a supplement to the Generic Environmental Impact Statement for license renewal of nuclear power plants, also refered by us often as the GEIS G-E-I-S.

The Draft Environmental Impact Statement has been published for comment and we're here today to briefly discuss the results and receive your comments.

In March of next year we expect to issue the Final Environmental Impact Statement, which will address the comments that we receive here today and any comments we receive in writing during the comment period.

So as you can see from the slide, the final Agency decision on whether or not to approve the application requires a number of

things to be done. There has to be a Safety Evaluation Report which documents results of our safety review, an environmental impact statement to document the environmental review, the inspection report and the independent report by the Advisory Committee on Reactor Safeguards.

I would like to point out the splash marks on the screen. These indicate places where there are opportunities for public involvement.

During scoping we were here in January for meetings and we also -- there was also an opportunity for the public to provide written comments.

During the comment period on the draft which we're in now, we hold the meetings here again and also you have the opportunity to provide written comments. You will see there is one over here for hearings on the far right. Nobody requested a hearing so that really doesn't apply in this review.

And finally, when the ACRS holds its meetings, those meetings are open to the public.

Now I would like to turn things over to Ms. Davis to discuss the environmental review, in particular. Thank you.

MS. DAVIS: Thank you. As Andy said, my name is Jennifer Davis. I'm the back up environmental project manager for the Farley license renewal review.

I would like to discuss in more detail today the environmental review. The reason we conduct an environmental review is because of the National Environmental Policy Act or NEPA, as it's commonly known.

NEPA requires a systematic approach in evaluating the impacts of proposed major federal actions. Consideration is given to impacts of the proposed action and mitigation of any impact believed to be significant.

Alternatives to the proposed action, including taking no action on the application, are also considered. Our environmental impact statement is a disclosure tool which involves public participation.

The Commission has determined that for all license renewals an Environmental Impact Statement will be prepared.

Now this slide contains some rather confusing language but to put it simply, our decision standard basically states are the environmental impacts of the proposed action great enough that maintaining the license renewal option of the Farley Units 1 and 2 unreasonable.

Now this slide is just a general overview, an expansion of what Andy had up earlier and basically it's detailing the bottom part of that slide. And basically, this is where we stand in the process.

Southern Nuclear submitted their application to the NRC on September 15th, 2003. In December of that same year we issued a *Federal Register* notice of intent to Prepare an environmental impact statement and conduct Scoping.

Now you may ask what is scoping. Scoping is a process whereby we receive comments from interested members of the public to help us scope out the bounds of our environmental review for various disciplines that we consider.

We also conducted an environmental site

audit. The NRC along with our team members and environmental experts came out to the site in January. In that same week we also held a public scoping meeting here in this room. Many of you may have attended those meetings and provided us comments.

All comments received during those meetings and during the scoping phase are included in the scoping summary report. All comments regarding this environmental review in particular are included in Appendix A of the Draft Environmental Impact Statement, which we're here to discuss today.

During the review we determined that we needed additional information, so in December we sent a formal request for additional information to the licensee. We took that information along with information received during the scoping process and performed an independent evaluation on the environmental issues.

We then published the Draft Environmental Impact Statement. Our draft is a supplement to the Generic Environmental Impact Statement or GEIS as Andy described earlier.

The GEIS evaluates environmental issues common to all nuclear power plants throughout the country.

Our meeting today is to present our preliminary findings and to gather comments on this draft EIS. Once we receive your comments we will go back, address your comments, make any changes as necessary to the document and in March of 2005 prepare to issue our final environmental impact statements regarding Farley.

And that concludes my remarks. And if there's anything else.

FACILITATOR ZALCMAN: Thank you, Jenny and Andy. We just completed the front end of the staff's presentation. We've talked at a high level about the process for license renewal and particularly the environmental review and this probably represents the first good stop in the presentation to ask whether or not you have questions of the staff.

We will be getting to the details of the environmental impact statement in the next two presenters of the material but are there any questions about the process either on the

safety side or on the environmental side? I'm sure the staff is prepared to respond.

Okay. If not, let me hand it over to Ms. Quinly.

MS. QUINLY: Good afternoon. As Barry said, I work for the University of California at Lawrence Livermore National Lab. The NRC contracted with us to provide the expertise necessary to evaluate the impact of license renewal at Farley.

The environmental review team consists of nine members from Lawrence Livermore National Laboratory, Los Alamos National Laboratory in New Mexico and Pacific Northwest National Laboratory in Washington.

The expertise we provided for the plant relicensing and for alternatives are shown on the screen. Atmospheric science. Socioeconomics and environmental justice. Archeology. Terrestrial ecology. Aquatic ecology. Land use. Radiation Protection. Hydrology. Nuclear safety and regulatory compliance.

The Generic Environmental Impact Statement for license renewal, the GEIS,

identifies 92 environmental issues that are evaluated for license renewal. 69 of these issues are considered generic or category one which means that the impacts are common to all reactors or common to all reactors with certain features, such as plants that have cooling towers.

For the other 23 issues referred to as category two, the NRC found that the impacts were not the same at all sites and therefore site specific analysis was needed.

Only certain issues addressed in the GEIS are applicable to Farley because of the design and location of the plant. For those generic issues that are applicable to Farley we assessed if there was any new information related to the issues that might change the conclusion in the GEIS.

If there is no new information, then the conclusions of the GEIS was adopted. If new information is identified and determined to be significant then a site specific analysis would be performed.

For the site specific issues related to Farley, a site specific analysis was

performed.

Finally, during the scoping period the public was invited to provide information on potential new issues, and the team during its review, also looked to see if there were any new issues that needed to be evaluated.

For each environmental issue identified, an impact level is assigned. For a small impact, the effect is not detectable or too small to destabilize or noticeably alter any important attribute of the resource.

For example, the operation of the Farley plant may cause the loss of adult and juvenile fish at the intake structure. If the loss of fish is so small that it cannot be detected in relation to the total population in the river, the impact would be small.

For a moderate impact, the effect is sufficient to alter noticeably but not destabilize important attributes of the resource.

Again, for example, if the losses cause the population to decline and then stabilize at a lower level, the impact would be

moderate.

And for an impact to be considered large, the effect must be clearly noticeable and sufficient to destabilize important attributes of the resource.

The final example is if losses at the intake cause the fish population to decline to the point it cannot be stabilized and continually declines, then the impact would be large.

When the Farley team, environmental review team evaluated the impacts from continued operations of Farley, we considered information from a wide variety of sources. We considered what the licensee had to say in their environmental report. We conducted a site audit during which we toured the site, interviewed plant personnel and reviewed documentation of plant operations.

We also talked to federal, state, and local officials, as well as local service agencies.

Lastly, we considered all of the comments received from the public during the scoping meeting. These comments are listed in

Appendix A, along with NCR's responses.

This body of information is the basis for the analysis and preliminary conclusions of the Farley supplement.

The central analyses in the Farley supplement are presented in chapters two, four, five and eight.

In chapter two we discuss the plant, its operations and the environment around the plant. In chapter four we looked at the environmental impact of routine operations in the twenty year license renewal term.

The team looked at issues related to cooling systems, transmission lines, radiological, socioeconomic, ground water use and quality, threatened or endangered species and accidents.

Chapter five contains the assessment of accidents.

At this point I would like to make a distinction. Environmental impacts from the routine, day-to-day operation of the Farley plant for another twenty years are considered separately from the impacts that result from the potential accidents during the license

renewal term.

I will discuss impacts from routine operations. Mr. Cushing will discuss impacts from accidents in the next presentation.

Chapter eight discusses the alternatives to the proposed license renewal and their environmental impacts. Each of these issue areas are discussed in detail in the Farley supplement. I'm going to give you the highlights but please feel free to ask me for details.

One of the issues we looked at closely is cooling system for the Farley plant. This slide shows cooling system process. The issues that the team looked at on a site specific basis included water use conflicts and microbiological organisms. We found that the potential impacts in these areas were small and additional mitigation is not needed.

There are also a number of category one issues related to the cooling system. These include issues related to discharges of sanitary waste, minor chemical spills, metals and chlorine.

Now recall that as category one issues, NRC already determined that these impacts were small. The team evaluated all of the information we had available to see if there was any that was both new and significant for these issues. We did not find any and therefore we adopted the NRC's generic conclusions that the impact of the cooling system is small.

Radiological impacts are a category one issue and the NRC made a generic determination that the impact of radiological release during nuclear plant operations during the twenty year license renewal period are small. But because these releases are a concern, I wanted to discuss them in some detail.

All nuclear plants release small quantities of radioactive materials within strict regulation. During our site visit we looked at the release and monitoring program documentation. We looked at how these gases and liquid effluents were treated and released, as well as how the solid wastes were treated, packaged and shipped.

We looked at how the applicant determines and demonstrates that they are within compliance with the regulations for release of radiological effluents.

We also looked at data from onsite and near-site locations that the applicant monitors for airborne releases and direct radiation and other monitoring stations beyond the site boundary, including locations where water, milk, fish and food products are sampled.

We found that the maximum calculated doses for a member of the public are well within the annual limits. Now there is a near unanimous consensus within the scientific community that these limits are protective of human health.

Since releases from this plant are not expected to increase on a year to year basis during the twenty year license renewal term and since we also found no new and significant information related to this issue, we adopted the generic conclusion that the radiological impact on human health and the environment is small.

There are seven aquatic species and eighteen terrestrial species listed as threatened, endangered or candidate species that could occur in the range of the Farley site and the transmission lines.

A detailed biological assessment analyzing the effects of continuing operation and relicensing of Farley was prepared and is included in Appendix E of the Farley supplement. Based on this and additional independent analysis, the staff's preliminary determination is that the impact of operation of the Farley plant during the license renewal period on threatened or endangered species would be small.

The last issue I would like to talk about from chapter four is cumulative impacts. These impacts may be minor when considered individually but could be significant when considered with other past, present or reasonably foreseeable future actions, regardless of what other agency or person undertakes the other actions.

The staff considers cumulative impacts resulting from operation of cooling water

system, operation of the transmission lines, releases of radiation or radiological material, sociological impact, groundwater use and quality impacts, and threatened or endangered species.

These impacts were evaluated to the end of the twenty year license renewal term and I would like to note that the geographical boundary of the analysis was dependent upon the resource. For example, the area analyzed for transmission lines was different than the area analyzed for the cooling water system.

Our preliminary determination is that any cumulative impacts resulting from the operation of the Farley plant during the license renewal period would be small.

The team also looked at these other environmental impacts. All issues for uranium fuel cycle and solid waste management as well as decommissioning are considered category one.

For these issues no new and significant information was identified.

In 2001, Farley generated about 13.7 million megawatts of electricity. The team

also evaluated the potential environmental impacts associated with the Farley plant not continuing operation and replacing this generation with alternative power resources.

The team looked at the no action alternative; that is the unit is not relicensed. New generation from coal-fired, gas-fired, new nuclear, purchase power, alternative technology such as wind, solar and hydro power and a combination of alternatives.

For each alternative we looked at the same type of issues -- for example, water use, land use, ecology and socioeconomics -- that we looked at for the operation of Farley during the license renewal term.

For two alternatives, solar and wind, I would like to describe the scale of the alternative because the scale is important in understanding our conclusions.

First, solar. Based on the average solar energy available in Alabama and Georgia and the current conversion efficiencies of solar cells, these cells would produce about 146 kilowatts per square meter per year. As

such, about 94 million square meters or about 36 square miles of cells would be required to replace the generation from the Farley plant.

Regarding wind power, Alabama and Florida do not have sufficient wind resources to use large scale wind turbines but Georgia has good wind resources in the uppermost portion of the state.

However, even exploring the full resources for all three states, the generation would replace less than four percent of the generation of Farley.

Due to the scale of reasonable alternatives, the team's preliminary conclusion is that their environmental effects in at least some impact categories reach moderate or large significance.

So in 1996 the NRC reached generic conclusions for 69 issues related to operating nuclear plants for another twenty years.

For category one issues, the team looked to see if there was any information both new and significant and whether or not we could adopt the generic conclusions.

For the remaining catergory two issues, the team performed an analysis specific for the Farley site. During our review the team found no new issues that were not already known.

Of the category one issues that apply to Farley, we found no information that was both new and significant, therefore, we have preliminarily adopted the conclusions that the impact of these issues are small.

The team analyzed the remaining category two issues in the supplement and found the environmental effects resulting from these issues were also small.

Again, during our review the team found no new issues.

Last we found that the environmental effects of alternatives, at least in some impact categories, reach moderate or large significance.

Now I would like to turn this over to Mr. Cushing.

MR. CUSHING: Thank you, Crystal. As Crystal said, my name is Jack Cushing and I'm the Environmental Project Manager for the

Farley license renewal project and I will be discussing the environmental impact of postulated accidents.

These impacts are discussed in chapter five of the Generic Environmental Impact Statement or the GEIS.

The GEIS evaluates two classes of accidents; design basis accidents and severe accidents.

Design basis accidents are those accidents that both the licensee and the NRC staff evaluated during the initial licensing and on an ongoing basis to ensure that the plant can safely respond to a broad spectrum of postulated accidents without undo risk to the public.

The environmental impacts of those design basis accidents was also evaluated because the plant has to demonstrate on an ongoing basis the design is still capable of meeting the design basis accidents.

The Commission has determined that the environmental impacts of design basis accidents are small.

Neither the licensee nor the NRC is aware

of any new or significant information on the capability of the Farley plant to withstand design basis accidents. Therefore, the staff concludes that there are no impacts related to design basis accidents beyond those discussed in the Generic Environmental Impact Statement.

The second category of accidents evaluated in the Generic Environmental Impact Statement are severe accidents. Severe accidents by definition are more severe than design basis accidents because they could result in substantial damage to the reactor.

The Commission found in the GEIS that the risk of severe accidents is small for all plants. Nevertheless, the Commission determined that alternatives to mitigate severe accidents must be considered for all plants that have not already done so.

We refer to these alternatives as severe Accidents mitigation alternatives or SAMA for short. The SAMA evaluation is a site specific evaluation.

The SAMA review for Farley is summarized in section 5.2 of the supplement to the GEIS

and in more detail in Appendix G.

The purpose of performing the SAMA evaluation is to ensure that the plant changes to prevent or mitigate severe accidents are identified and evaluated.

The scope includes SAMAs that would prevent core damage, as well as damage that improved containment performance given an event occurs.

The scope of potential plant improvements that were considered, included hardware modifications, procedure changes, training program improvements, basically a broad spectrum of potential changes.

The SAMA evaluation process is a four step process. The first step is to characterize overall plant risks and the leading contributors to plant risks. This involves extensive use of the plant specific probabilistic risk assessment study, which is also known as the PRA.

The PRA is a study that evaluates different combinations of system failures and human errors that are required for an accident to progress to either core damage or

containment failure.

The second step in the evaluation is to identify potential improvements that could further reduce risk. The information for the PRA is used to help identify plant improvements that would have the greatest impact on reducing risk.

Improvements identified in other NRC studies and in other industry studies are also considered.

The third step in the evaluation is to quantify the risk reduction potential and the implementation cost for each improvement.

The risk reduction and the implementation cost using SAMA are estimated using a bounding analysis, that is, the risk reduction is generally overestimated and assumes that the plant improvement would totally eliminate the risk of that accident sequence.

The implementation costs are underestimated and certain costs such as maintenance and surveillance costs are not considered. The risk reduction and cost assessments are then used in the final step to determine whether implementation of any of

the improvements can be justified.

In determining whether an improvement is justified, the NRC staff looks at three factors. The first is whether the improvement is cost beneficial. In other words, is the estimated benefit greater than the estimated implementation cost of the SAMA.

The second factor is whether the improvement produces a significant reduction in overall plant risk, for example, does it eliminate a sequence or a containment failure mode that contributes to a large fraction of plant risk.

The third factor is whether the risk reduction is associated with an aging effect during the period of extended operation. In which case if it was we would consider implementation as part of the license renewal process.

The preliminary results of the Farley SAMA evaluation are summarized on this slide.

124 candidate improvements were identified for Farley based on the review of the Plant Specific Probabilistic Risk

Assessments and studies on severe accidents and SAMA analyses performed for other plants.

This was reduced to a set of twenty-one potential SAMAs based on a multi-step screening process. Factors considered during this screening process included whether the SAMA was applicable to the Farley design or whether it hadalready been addressed in the existing Farley design procedures or training program.

A more detailed assessment of the design and cost was then performed for each of the twenty-one remaining SAMAs. This is described in detail in Appendix G of the GEIS supplement.

The cost benefit shows that three of the SAMAs are potentially cost beneficial when evaluated in accordance with NRC guidance for performance regulatory analysis.

The cost beneficial SAMAs involved increasing the charging pump lube oil capacity by adding supplemental lube oil reservoir for each charging pump; hardware and procedure modifications for the use of the existing hydro test pump for the RCP seal injection, and finally, developing a

procedure to permit local, manual operation of the feedwater pump when control power is lost, while the plant improvement further mitigates severe accidents they are not required as part of the license renewal because they do not relate to managing the effects of aging during the license renewal process.

However, Southern Nuclear Company stated that they plan to implement the feedwater SAMA and are evaluating the other two SAMAs for implementation.

Now I would like to take a moment and go over our overall conclusions for our environmental review. And in that review we found that the impacts of license renewal are small in all impact areas.

This conclusion is preliminary in the case of threatened or endangered species pending conclusion of our consultation with the Fish and Wildlife Service.

We also concluded that the alternative action, including the no action alternative, may have environmental effects in at least some impact categories to reach moderate or large significance.

Based on these results, our preliminary recommendation is that the adverse environmental impacts of license renewal for Farley Units 1 and 2 are not so great that preserving the option of license renewal for energy planning and decision matkers would be unreasonable.

Now I would like to share some upcoming milestones with you. We issued the Draft Environmental Impact Statement on August 6th, 2004. We're in the middle of our comment period, which runs from August 13th to November 5th. And we expect to gather all the comments, the ones we receive at this meeting and any that we may receive in the mail or through e-mail, and then address them and issue our Final Environmental Impact Statement in March of 2005.

Now I just want to give you some means of getting a hold of us and in case you have any comments or think of something after the meeting you can call me at the phone number provided. And if you would like to read the Draft Environmental Impact Statement, we do have copies in the back and they are

available at the Houston Memorial Library and the Lucy Maddox Memorial Library.

In addition, the draft EIS is available on the NRC's website at www.nrc.gov.

Now the purpose of this meeting is to get your comments on the Draft Environmental Impact Statement. And there are three ways to do that outside of this meeting. In the meeting where it's being transcribed so we will capture any of your comments. Outside of the meeting you can mail your comments to the address on the slide. If you happen to be in Rockville, Maryland for any reason you can drop them off in person. And an easier way is for you to e-mail them to us at FarleyEIS@nrc.gov.

I would also like to take a moment to mention that we have a public information feedback form, that you should have received when you came in. And if you have time, could you fill it out and drop it off on the way out or you can mail it to us. We appreciate getting some feedback so we can improve our meetings.

I would like to thank everyone for taking

the time out of your day to come and hear our presentation and we're interested in hearing your comments.

FACILITATOR ZALCMAN: Thank you, Jack and again, Crystal. This is the second break that we have where we can respond to any questions you have. The first was on the general overview and the processes.

This is now an opportunity to respond to any questions that you may have regarding the process for this review, the specific document that was prepared by the staff, as well as what steps you can take after this meeting is over to communicate with us, offer your comments in written form. I'm sure the staff is ready and prepared to respond to any questions.

I'm not seeing any. Thank you very much for listening to the staff and the presentation. What we will do now is go into the second part of today's meeting, where the staff is now prepared to formally accept any comments that you are prepared to make today.

We have a couple of folks that have

pre-registered. The first will be the representative of the applicant. That will be Michael Stinson. And I will give him the floor. And we do have one other person that is pre-registered and see if others have an interest to speak. Whether you have registered you will have an opportunity to share your views.

1:27P MR. STINSON: Good afternoon. My name is Mike Stinson. I'm vice-president of the Farley plant. The Farley Nuclear plant and I appreciate the opportunity to speak to you today. I want to begin by giving you a little background information about myself.

I've been with the Southern Company for more than thirty years. Most of that time was spent here at Plant Farley in the Dothan area. My wife and I raised our family here. We have many friends here and are very concerned about any potential effects that Plant Farley might have on the environment and this community.

I started working at Plant Farley in 1972 during the construction phase. Throughout my career I've held various positions at the

plant, including numerous engineering, supervisory and management positions. I also received a senior reactor operator's license while here at Farley.

Prior to becoming vice-president I served as the General Manager of Plant Farley here in Dothan and the General Manager of Nuclear Support in Birmingham. I share this with you because I want to give you some perspective about my affiliation with this plant and my experience in the nuclear industry.

Also, I want to thank the NRC for what I believe to be a very complete review. The Agency has put much time and effort in conducting this review. I believe it to be thorough and comprehensive.

Furthermore, the conclusions the Commission reached are consistent with the Plant Farley environmental report conclusions we reached for license renewal.

We wouldn't be going through this process in pursuit of license renewal if we didn't feel as a company that it's the right thing to do. And I wouldn't be promoting it personally if I didn't feel it was the right

thing to do, considering all of the contributions that Plant Farley makes to the state and local economy, as well as the local Wiregrass Community.

We have been working on the license renewal process since 2001. We've been involved in this project for some time and there's a tremendous amount of work that goes on. Not only in the environmental review but in other parts of the license renewal process which you will not be seeing here today.

I do believe the report summary of which you heard today demonstrates the same conclusions we reached. The impact of the renewal is small and certainly acceptable for the renewal period.

People that operate and maintain Plant Farley reside in the local area. This area is home to them and their families. They try to be good citizens and good environmental stewards. They are committed to being a good neighbor while we carry out our mission to generate electric power for this area of the country.

We think we make a significant

contribution to the local and state economy, as well as to the quality of life in this area by supplying electric power.

Availability of our product effects homes, schools, hospitals and businesses. It touches many people. Therefore, we think we have a mission that promotes improvement in the quality of life.

I want to thank all of our neighbors who have continued to support us. We appreciate the confidence you have placed in us and we will work hard to continue to earn your trust.

We certainly do have an impact on the local economy, on the environment and on the local area as far as civic organizations, charitable groups and community involvement are concerned.

We believe our employees participate in many efforts that help make the local economy and local community better.

In addition to our being good environmentmental stewards, we're significant contributors to the community. I also believe that Plant Farley provides safe,

secure and reliable electric power. It contributes to an energy plan made up of diverse sources. It is a viable and valuable contributor to energy security.

I believe that license renewal is the right thing to do. It's right for Plant Farley and it's right for the local economy.

I appreciate the review the NRC has provided. I believe that as time goes on we will continue to demonstrate that we are good environmental stewards of our facility and surrounding environment. Thank you.

FACILITATOR ZALCMAN: Thank you, Mr. Stinson. Next up, Mr. Walter Hill. Mr. Walter Hill is from Wiregrass United Way. And I will give you the floor.

1:32P MR. HILL: It's my pleasure to be here today and talk about other significant contributions made by Plant Farley and the employees out at Plant Farley.

Not only do I speak for myself, but we have five board of directors, we're a five county United Way, Coffeedale, Geneva, Henry and Houston Counties, which have a hundred board members in those five counties and then

a board of trustees with representatives of all five counties with thirty-two members.

In addition to that, I represent thirty-six agencies ranging from American Red Cross and Salvation Army to the Boys and Girls Scouts, Boys and Girls Clubs, House of Ruth and numerous other health and human service agencies in the Wiregrass area.

To tell you briefly about the impact that Farley as a corporation and Farley with its employees have had, just in the last several years we have had board members serve on at least two of our county boards for Houston and Henry Counties. We've had board chairs that have been Farley employees, numerous committee chairs representing our nominating committee, planning committee and most importantly our campaign chairs, as well as numerous volunteers on our funds distribution, which is a very important part of what we do because not only do we spend a lot of time raising money but we spend a great deal of time determining how that money is distributed. And that takes a lot of work and those volunteers that have been involved

with Farley have been very dedicated to that process.

And of course, they have a tremendous impact financially on our campaign each year raising just over the last several years hundreds and hundreds of thousand of dollars.

Last year alone was over a hundred and fifty-six thousand dollars out of the 3.2 million that we raised in this five county area, the majority of that coming from payroll deduction from employees but also corporate donation, as well.

And then on top of that has been the leadership positions that have just been important not only as I mentioned to our organization but to the agencies that we represent, the thirty-six different agencies, as well as numerous other agencies. Those agencies -- almost every agency today has a volunteer or a board member that's an employee out at Farley and many of them have leadership positions, people on their executive committee or officers that are employees at Farley. And they have a tremendous impact on our community and in so

many different ways. And I wanted to make sure that I took the opportunity to thank them today and to let you know the impact that they have on our community.

FACILITATOR ZALCMAN: Thank you very much, Mr. Hill. Now it's an opportunity for those of you that have thoughts or insights or would like the moment to share some views with us, we're happy to give you the podium or give you the microphone.

Okay. Let me indicate that the meeting will be coming to a close. We will have another meeting tonight. Open house begins at six o'clock. Public meeting again at seven o'clock.

Before I hand it over to Mr. Kugler to wrap it up for us, let me just indicate the staff will still be here after the meeting. We still have some of the open house material in the back so make sure if you do want a copy of the documents you can take it with you. Or if you want to chat with any of us that are here from the staff, particularly the environmental review team, the resident inspector or the safety project manager, we

will stay, as well.

MR. KUGLER: Well, I would just like to thank everyone again for coming out to our meeting today. Your participation in this process is very important to us.

If you do have comments on the Draft Environmental Impact Statement, we ask you to submit them in any form that Jack explained and that you prefer. We will be accepting those comments through November 5th. Jack is our main point of contact.

I did want to mention again the meeting feedback forms that were in the package of papers you received when you came in. We appreciate any comments we get on those forms. Anything you can tell us that would help us to serve you better in these meetings we would appreciate that. And you can either drop it off in the back, if you want to fill it out now or if you want to fill it out later you can mail it in. It's prepaid postage so you can send it in by mail.

As Barry mentioned, the NRC staff and our contractor will be staying after the meeting and if you want to talk to any of us we would

be happy to do that.

Other than that, again, I thank you all for coming and I guess we're adjourned. Thank you.

FACILITATOR ZALCMAN: With that, we'll close the record on the afternoon meeting. Thank you very much.

(Whereupon the meeting was concluded)