UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

A PUBLIC MEETING

TO DISCUSS ENVIRONMENTAL SCOPING PROCESS FOR

UPDATE TO THE GENERIC ENVIRONMENTAL IMPACT STATEMENT (GEIS)

FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS, NUREG-1437

AZALEA BALLROOM

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6120 Peachtree-Dunwoody Road

Atlanta, Georgia

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F. CAMERON, Facilitator

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PROCEEDINGS

MR. CAMERON: Good evening, everyone, and welcome to the Nuclear Regulatory Commission's public meeting on the update of the Generic Environmental Impact Statement on License Renewal for Nuclear Power Plants.

My name is Chip Cameron, I am the Special Counsel for Public Liaison at the Nuclear Regulatory Commission, and it is my pleasure to serve as your facilitator for tonight's meeting.

In this role I will try to assist all of you in having a productive meeting, namely to get the information that you need from the NRC staff on the update process, and also let all of you have an opportunity to share your concerns and your recommendations with the NRC staff tonight.

The objectives of the meeting are pretty straightforward. One is to make sure that we clearly explain the GEIS update process to you, and answer your questions, and also that we listen to you on the update issues that you will be hearing about, including the criteria that the staff will be using to decide when and if to revise the Generic Environmental Impact Statement, and I really wanted to emphasize the information-sharing objective of the meeting tonight.

Any comments that you give us either at the formal comment part of the meeting, or a lot of times comments actually come up during the question and answer and discussion,

and those comments are going to be considered and evaluated by the NRC staff just as a written comment would be.

But these meetings are often useful to get information to inform or illuminate the written comments that you might want to submit to the staff, so I want to make sure that you have a chance to ask all the questions and we clearly explain the concepts behind this.

Because of the importance of the information-sharing we are going to do something a little bit different than we traditionally do in these meetings. Usually in the first part of the meeting there are some NRC staff presentations and then questions and answers with all of you, and then we go to the people who want to make a formal comment.

The second part of the meeting we will have the presentation by the NRC staff, we'll have questions and answers, we will go to the formal comment part of the meeting, and then we'll take a break during the formal comment part to go back for questions and answers to see if there's anything that you've heard that was raised that we need to answer, and then we'll go back to formal comments.

In terms of ground rules, they're very simple also.

If you have a question that you want to ask, just signal me and

I'll bring you this cordless microphone, also known as a

talking stick.

And please give us your name and affiliation if

appropriate, and we are taking a transcript tonight, and we have Mr. Len Partain as our stenographer, and so I would ask you to just speak one at a time so that we can get a clean transcript and so that we give our attention to whomever has the floor at the time.

I would ask you to try to be concise, and I know that that's difficult sometimes; there's a lot of interest in this issue. So we'll just go with it, and get all the questions out.

If you will keep your comments when we go to formal comments down to five to seven minutes that will ensure that everybody gets a chance to speak, and that we get all the questions answered.

In terms of the agenda, we are going to first have a presentation by Mr. John Tappert who is right here, and John is going to talk about the license renewal program generally, and the relationship of the Generic Environmental Impact Statement to that program.

Most of you may know John at this point. John is the Chief of the Environmental Review Section, and that's where all environmental reviews for any type of nuclear reactor activity is done, including all of the environmental reviews for the license renewal applications, and obviously the Generic Environmental Impact Statement.

He has been with the NRC for about twelve years.

During that time he served as a resident inspector at nuclear power plants that the NRC licenses and regulates; he was in the nuclear Navy before that; a Bachelor's Degree from Virginia Tech in Oceanographic and Atmospheric Engineering, and a Master's Degree from Johns Hopkins University in Environmental Engineering.

We're then going to go right on to our next presentation, and this is really the heart of the matter tonight, the Generic Environmental Impact Statement update process, and we have Mr. Barry Zalcman right here, and Barry is the Project Manager for the update, and also I think that it's safe to say that we can say he is the architect of the license renewal [environmental] program at NRC, and all the planning that goes into that.

Before Barry was involved in license renewal he was involved as a supervisor in emergency planning work at the NRC, and also a program manager of the early site permit program. He has been a Congressional Fellow for Senator Harry Reid of Nevada, and he has a Bachelor's Degree from Rutgers in Atmospheric Sciences, and has done graduate studies on geophysical fluid dynamics.

And after Barry is done, we will go to questions for all of you, and then take it from there. At some point we'll break and start the formal comment process.

I wanted to introduce one other person. We do have

as usual NRC staff and our expert consultants with us tonight to be able to answer questions and talk to you after the meeting.

We do have a senior NRC manager here, that's Mr. P.T. Kuo who is right here. P.T. is the Branch Chief of the License Renewal and Environmental Impact Program at the NRC, and that's where all the license renewal work is done, not only the environmental reviews, but the safety review that's done on individual license renewal applications.

So I think we have the people here to try to answer all your questions, and we're certainly interested in hearing from you tonight, and thank you for being here.

I know that a lot of you have come from various places in the South, and not just the Atlanta area, so we appreciate the fact that you're here.

And with that, I pass it on to John Tappert to talk to us, and then we'll go to Barry, and then we'll have a discussion.

MR. TAPPERT: Thank you, Chip.

I also want to welcome you to tonight's meeting.

This is the first of four we're having around the nation on this topic. Thank you for attending.

I would like to start off by telling you why we're having this meeting, and introduce the license renewal process and the role of the environmental review in that process, and

tell you what we hope to accomplish today.

We are holding this meeting to invite the public to participate in the scoping process that will assist the NRC in framing the environmental issues that should be considered as we update the Generic Environmental Impact Statement, or the GEIS.

This Generic Environmental Impact Statement, or GEIS, the NRC has implemented reflecting the findings and conclusions of the GEIS are fundamental components of the NRC's license renewal program.

The findings of the GEIS are used by NRC in conducting the environmental review. The environmental review is an important part of the license renewal program, and combined with the safety review and on-site inspections forms the basis for the staff recommendation to renew or not to renew operating licenses for nuclear power plants.

Nuclear power plants can be licensed by the NRC to operate for a period of 40 years. While there is no engineering limitation to that period, the United States Congress in the Atomic Energy Act of 1954 envisioned the 40-year period to be the right balance between the nation's long-term energy planning needs and financial considerations.

Congress also envisioned that licenses could be renewed, and stated so in the act. However, it did not provide further guidance, and left the implementation details to the

1 | Commission.

Since that time nuclear power has grown to be a significant part of the nation's energy mix, making up about 20 percent of the electrical energy produced in the United States today.

Over the years nuclear technology has matured, and the focus on reactor safety and environmental protection has been strengthened. The industry has expressed interest in renewing the licenses of virtually all of the nuclear power plants to provide safe and economic power for the next generation.

The NRC's role in this is not to promote nuclear power, but rather to ensure that the public and the environment are protected, and that nuclear materials are secure.

I will discuss more about the status of license renewal in a later slide.

This slide depicts the license renewal process. As nuclear power plants progress through their 40-year licenses the NRC initiated the license renewal program and established the regulatory framework to permit renewal.

The license renewal program was created in the late 1980s to establish a systematic review of those important safety attributes of nuclear power plants that are associated with the aging of these facilities.

The safety activities are focused on aging management

programs, prepares a long list of systems, structures and components, and require a reassessment of this time-limited analysis that assumed 40 years of use.

These activities involve the energy staff development, the safety evaluation report, conducting inspection activities, making independent evaluations of the Commission's Advisory Committee on Reactor Safeguards.

This committee was established by the Atomic Energy
Act as a collection of experts in the nuclear arena to provide
independent advice to the Commission.

The reason that the Commission felt that it could narrow its safety focus to aging management programs is that for other aspects of operation there are ongoing regulatory processes that monitor and ensure safety, and have provisions for key programs such as emergency planning and security.

In addition to the safety review, the staff conducts an independent review of the environmental impacts associated with continued operation of the facility during the renewal period.

The Commission determined that the actions to consider whether or not to renew the license of an operating power plant should allow for a high level of public participation during the environmental review, and decided that the NRC would develop a site-specific environmental impact statement for each license renewal.

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Whereas the NRC safety activities are governed by the Atomic Energy Act, the environmental activities are governed by the National Environmental Policy Act, or NEPA.

The NRC has established its implementing regulations for license renewal in Title 10 of the Code of Federal Regulations, or 10 CFR in Part 54, and the regulations for environmental protection in Part 51.

As part of the license renewal program initiated in the late 1980s the NRC undertook a comprehensive review of environmental issues associated with the continued operation of nuclear power plants beyond the term of their current operating licenses, and the specific activities associated with the refurbishment that may be necessary for continued operation during that renewal period.

The results of this comprehensive review were issued in 1996 as NUREG-1437, the Generic Environmental Impact Statement for License Renewal for Nuclear Power Plants.

In total, 92 environmental issues were identified across ecological, physical, social, and radiological sciences that need to be considered for refurbishment activities and for continued operations.

The findings of the GEIS that was issued in 1996 were codified in the NRC regulations at 10 CFR Part 51.

In so doing, the Commission indicated its intent to revisit the GEIS and its implementing regulations on a ten-year

cycle to determine whether the technical bases or conclusions needed to be updated.

As the program has been implemented changes have occurred, and the staff has captured these changes as they were identified in each site-specific environmental impact statement that was prepared to support consideration of each application.

The GEIS represented a snapshot in time, and now it's time to determine whether the changes that have occurred should be included in an update to the GEIS.

To date the NRC has received 14 applications for the renewal of 30 power reactor licenses, and the NRC has actually renewed licenses for the operators of 16 power reactors.

All indications are that multiple renewal applications will continue to be filed every year over the next decade, and virtually the entire fleet of nuclear power plants will seek renewal of their licenses.

We are here today to listen to your views, and look forward to your participation in helping the NRC to determine the scope of the GEIS update.

I have tried to provide a brief outline of the role of the environmental review in our license renewal activities and its importance in the NRC's regulatory framework.

You have an important role in identifying generic environmental issues that we should consider for all nuclear power plants.

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In our notice for these meetings -- and extra copies are available at the registration desk -- we have guided you to the relevant work product to assist you in understanding how the license renewal process works and the results of this process to date.

As we consider changes to update the GEIS, we will continue to evaluate new applications within existing regulatory framework and insights gained from this GEIS update process may very well be implemented in the current applications that are under review.

Were we going to wait until the end for questions?

And that's it for my presentation.

MR. CAMERON: Yes. And while you and Barry are switching the lavaliere at this time I would remind everybody that we do have a meeting evaluation form, it's called a Feedback Form, and they're out at the desk outside the room, and they're for any comments you have about the meeting process, and if you want to put in a comment on the substance that will be okay too.

As I mentioned, we do have various NRC staff people here, including representatives from the Office of General Counsel, and they will be here after the meeting to talk to you as long as you want to talk.

Barry.

MR. ZALCMAN: Thank you, Chip.

I too would like to extend a warm welcome to this meeting.

For those of you that have participated over the last decade or more in developing this license renewal process, I welcome you back. For those of you that have either just begun participating in recent years, or if this is your first opportunity to participate, welcome.

This is an important program within the agency. It is a well-established program within the agency, and it's meaningful to continue on John's initial presentation to talk about background, and I will continue with that now.

Let me start tonight's discussion with a brief frame of reference dealing with the National Environmental Policy Act. It is the landmark piece of environmental legislation. It was enacted by Congress in 1969, signed into law by President Nixon on January 1st, 1970.

And so far as it is that landmark piece of legislation it is the one that expresses the view of elected officials, your representatives in government, that the Federal Government should consider and disclose to the public and to decision-makers the effects of certain of its governmental actions on the human environment.

The Nuclear Regulatory Commission has already determined that license renewal, that licensing action is a Federal Action in this case associated with the request by an

applicant seeking renewal of its license, warrants the development of an environmental statement.

That, in turn, results in the highest level of participation that the public can have in an environmental review at the NRC or any other Federal agency.

The Commission also determined that the environmental review for license renewal may have some common attributes for some, but not necessarily all, environmental issues.

The Commission directed the staff as John indicated in the late 1980s to begin a systematic evaluation to assess whether or not there were attributes across all facilities, across all designs, that could be evaluated on a common basis. They were in pursuit of an effective process to deal with license renewal.

And while Chip may have referred to me as an architect, my work is on the environmental side, and P.T. Kuo, Dr. Kuo has been here from the outset dealing with the safety activities. So, between P.T. and I, we do have a long legacy, and, over time we have developed a wonderful corps of individuals that participate with us, that share in the understanding and implementation of the program.

Those environmental issues that could be resolved generically were in fact resolved generically, in the Generic Environmental Impact Statement or GEIS. Just as important, those issues that were unique because of a site-specific

attribute of the issue, or a peculiar site setting, unique plant interface with the environment, or variability from site to site, were deferred and they must be addressed when a specific applicant seeks a request for license renewal.

They are required to be resolved at the time of license renewal. The burden is placed upon an Applicant to address those issues in its submittal to the agency so we initiate or start our independent environmental review process.

And the rule that codified the results of the Generic Environmental Impact Statement also enumerated the requirements placed not only on Applicants, but also placed on the staff in developing a site-specific supplement to the GEIS for each and every environmental impact statement for each and every license renewal application.

Each applicant is required to submit an environmental report, a detailed evaluation of those issues that could not be resolved generically, and those issues that are unique to each and every site.

Each NRC supplement to the Generic Environmental Impact Statement results from an independent review. We review the information presented by the applicant; we have intergovernmental interactions whether or not an applicant has done that previously; we conduct environmental audits; we conduct interviews; we perform independent analyses; and we engage the public in our review.

The NRC relies, in part, on the findings of the GEIS, and the staff assesses whether or not there is new and significant information to bring into question any of the conclusions that were made in the GEIS.

NEPA, the National Environmental Policy Act, requires a systematic approach in evaluating environmental impacts associated with license renewal actions. Mitigative measures to reduce those impacts are also evaluated; however small, it's considered to be an impact. And alternatives including the noaction alternative to the proposal must be considered.

NEPA and the environmental statements are disclosure mechanisms. It is a tool that Federal agencies use to share with the public and its decision-makers, and, in the language of NEPA and interpretations, and even the President, what the environmental impacts are, what actions are contemplated by that agency.

The range of issues originally involved in developing the GEIS, and, again, the review of each and every license renewal application, is comprehensive. For this GEIS update, and for every site-specific review, we establish a team of NRC experts supported by experts at four national laboratories, many of whom are experts in their own right at headquarters and the regions as well as at the national labs.

For this GEIS update the team consists of staff experts, some of which are here tonight as Chip indicated, and

John. Our contract is with the Pacific Northwest National Laboratory for this specific license renewal application dealing with the GEIS, dealing with the GEIS update.

In total there are more than 250 years of environmental and siting experience that are being brought to the table for this effort.

This slide gives you a good feel for the number of environmental issues that we consider, and a number of the processes that are involved in either refurbishing or renewing licenses.

Now let me briefly address some of the issues leading up to the development of the GEIS. Some of this actually predates me, and I've only been involved in it since the early 1990s. The GEIS, NUREG-1437 specifically applies to license renewals. As we consider license renewals, the environmental equilibrium that has been established after some period of plant operation is well understood. The situation clearly differs from new reactor licensing where lands may be disturbed; where new demands may be placed on resources; where new discharges may need to be permitted; such issues would have to be considered individually and cumulatively without the benefit of real operating experience and real interfaces with the environment.

As we stated earlier, the Commission envisioned that there were issues that would be common across all operating

plants with real supporting information.

The NRC staff and its contractors obtained a wealth of information leading up to the 1996 GEIS across the entire spectrum of technical issues as the basis of the initial hard look at environmental impacts. And that effort, just as this and any other NRC effort to develop an environmental impact statement began with the scoping process, and ultimately led to the draft and final environmental impact statement.

The NRC establishes significance tests to assess the magnitude of impacts, and considered whether mitigation, in fact, was warranted. From that process the NRC organized environmental issues and categorized them into those that could be generically dispositioned, or we refer to those as Category-1 issues, or those that require a site-specific resolution, and those are the Category-2 issues.

For Category-1 issues, the agency bears the burden of proof; for Category-2 issues, the applicants address the Category-2 issues in their environmental report, and the staff must evaluate that and address it in its supplemental environmental impact statement.

Even though Category-1 issues have been addressed within the GEIS, the staff looks for new and significant information regarding Category-1 issues during each environmental review, to see if they challenge the conclusion made in the GEIS and the license renewal rule for environmental

1 | protection.

Aside from Category-1 or Category-2 issues there are two issues that were not categorized, and these are ripe for NRC assessment.

The scoping process for NUREG-1437, the GEIS, involved public stakeholders as well as governmental officials representing State and Federal agencies. Our notice invited them all to participate again in this effort.

The findings and conclusions of the GEIS were codified in NRC Regulations at 10 CFR Part 51. Those are our environmental protection regulations, which again establish requirements not only for applicants, but also for NRC.

In all, 92 issues are currently identified with 69 considered Category-1 issues, 21 considered Category-2 issues, and two, as I indicated before, uncategorized, they deal with Environmental Justice, and the chronic human health effects from electromagnetic fields.

At the outset I indicated license renewal was an important program in the agency, it's a large part of the licensing framework for power reactors today, and has become a large part of its workload.

The NRC anticipates that the program will grow to about one application submitted every two months for the foreseeable future.

John indicated at least one-third of the nuclear

power plants have already applied to have their licenses renewed. During this GEIS update process license renewal will continue.

One of the obvious goals is to preserve the regulatory stability that exists to date so that the public can participate in a predictable fashion.

The goals for processing applications are clearly defined, and the opportunities for public participation are prescribed at key milestones within the published schedules.

For the update project with the ultimate target in 2006 the NRC staff has initiated this scoping process early to invite public participation so that the scale of the effort can be accommodated and still meet the Commission's goals.

The NRC is seeking your input to help determine the scope of the addendum to the GEIS and identify whether there are any significant issues that should be analyzed in depth that have not been before, any issues that should be reevaluated because of changes, or any issue that should no longer be considered germane to the environmental review for license renewal.

The scoping process can also help identify and eliminate from detailed study those issues which are peripheral, unrelated to license renewal.

For those which are not significant which I think are covered by other prior environmental reviews, for example they

[environmental reviews] don't have to be just those undertaken by NRC (and we perform environmental reviews for operating reactors all the time), some of those environmental reviews can and must inform the environmental review process for license renewal.

As examples, the NRC had recently completed the update to the Generic Environmental Impact Statement for decommissioning. The NRC in the next several years anticipates seeing applications for extended power uprates at a number of facilities around the United States; there are sister regulatory agency environmental impact statements; and, for example, those issued by the Department of Energy. Some of you are aware of those as well.

The scoping process also invites other governmental agencies to assess whether they should be considered a cooperating agency under the regulatory structure issued by the Council on Environmental Quality.

If they have particular expertise on an issue, that may be invaluable to the NRC, we would like to hear that.

There are consultation roles under other statutes -The Endangered Species Act, or Historic Preservation, or
Coastal Zone Management -- that may have a bearing on generic
as opposed to site-specific issues.

The purpose of the need for this update is to review the findings and conclusions made by the NRC in 1996, and again

in 1999 with the first addendum to the GEIS, to determine whether or not they need to be revisited.

Since 1996 new information may have come to light that should be considered to determine whether or not it's significant. Science and the natural environment march on, and our understanding of issues, methods, and assumptions may need to be refined.

Experience gained in using the regulatory framework may identify situations where we used less than optimal language and approaches to address issues and state conclusions, and changes in statutes and regulations, policies and practices and, frankly, even the structure of the power market may have a cascading impact on NRC's regulatory framework.

To date NRC has received 14 applications for license renewal for power reactors at 17 sites. The NRC has issued 11 final EISs, Environmental Impact Statements, and the NRC has acted on eight of those environmental impact statements already renewing the licenses of 16 power reactors.

In processing these applications the staff, the public, and applicants have gained extensive experience in using the GEIS and the companion license renewal and environmental protection regulations and rules.

The staff continues to compile its lessons learned, and from that list has identified groupings of candidate

drivers that may prompt the consideration for change.

As a framework, the staff has compiled these seven criteria to help guide whether an environmental topic identified by the staff or by the scoping process, namely by you, is appropriate for consideration for this update project.

We are also looking for feedback on the criteria, as well as your specific input characterizing one or more environmental topics, and your description of the bases for consideration by the staff.

At the outset it's absolutely fundamental that we begin this process with the GEIS and its Addendum 1 as the starting point, as our frame of reference.

It is as important to note that this update effort is not going to serve as a platform for wholesale changes in the license renewal process. Other avenues exist if that's the path of interaction with the NRC that you desire, namely a petition to the Commission for a rule change.

On a related point that could serve as an illustrative example, the industry previously petitioned the Commission to amend the rules and eliminate a particular license renewal environmental issue from review, namely severe accident mitigation alternatives, or SAMAs.

The petitioner articulated the bases and its rationale for change, the staff sought public input on the proposal, made a recommendation to the Commission, and the

Commission denied the request of the petitioner. That is the mechanism to be considered for changes to the underlying rule structure.

The focus here is on the 92 issues that were addressed in the GEIS, which in turn were codified in the rule.

As for the petition I just mentioned, it would not be productive to revisit the SAMA issue as part of this process unless there is a significant change in the rationale presented earlier.

As you consider these criteria we believe it would be useful to provide you examples of each. You can reflect on them in preparing your comments either tonight or in written form before the end of the scoping period.

So, if you will bear with me for a few more minutes let me identify an example, if I can, for each of these.

New and Significant. The staff-identified isolated instances of new information that had not been previously considered, for example extremeophiles, but not information that is new and significant. Changes in staff practice have resulted from evolutions that have occurred since the issuance of the GEIS and its Addendum 1, as examples actions related to the investigation of Yucca Mountain to serve as a national repository, and the expression of interest by the industry and

Congress for the deployment of new nuclear power plants.

Consequently, our environmental impact statements now reflect the Presidential declaration on Yucca Mountain and an alternative involving new nuclear power plants as an alternative to license renewal, as part of our environmental review.

The second item, Statutory or Regulatory Changes, the NRC is tracking the EPA initiative on cooling water intake structures for existing facilities. As this issue matures it may have a bearing on the conclusions of the GEIS. As a result of prior precedents, NRC is obligated to adopt EPA's technical conclusions regarding the Clean Water Act.

Industry Structural Changes. Obviously the deregulation of the power market and unbundling of services, that is the generators versus the distributors of power, may have some bearing on the influence or control over activities that the current license-holder may have compared to the original license-holder. We're interested to hear about the environmental topics that may be affected by this, and the rationale for changes in the rule for the GEIS.

Keep in mind some utilities still do own both the plant and transmission lines, some others do not, so a single provision in the GEIS may not apply to all of these utilities.

Should a change be made to the GEIS to account for merchant plants that do not have a particular service area, and, therefore, do not control the power distribution or transmission line system? This is the question we need to resolve.

Incorrect Characterization. The GEIS states that license renewal is a major Federal action significantly affecting the quality of the human environment. The Commission was not swayed by arguments for or against the point. Rather it elected to require the staff to develop an EIS, a supplement to the GEIS, for the license renewal action to ensure the public had the highest level of participation on the action.

This decision was taken in concert with recommendations from CEQ, the Council on Environmental Quality, the Environmental Protection Agency, the EPA, State officials, and public comments.

So the agency today issues an environmental impact statement because we have elected to issue an environmental impact statement associated with license renewal.

Omitted Issues. As an example, in recent reviews the staff has considered the impacts associated with dredging activities that may occur periodically during the operating life of the facility. Dredging may not be required at all

facilities, but where it is necessary, it may be performed at some point during the period of extended operations.

Whether it's to be treated generically, because all need an analysis to support the permitting requirements of the Army Corps of Engineers, or site-specifically, it should be addressed in the GEIS, either way. Whether or not it's resolved as a Category-1 issue may be a different outcome.

Confusion. I talked about severe accident mitigation alternatives before, or SAMAs. SAMAs are evaluated as a site-specific issue unless previously evaluated under another licensing action such as the initial licensing (which has occurred for a limited number of facilities).

Associated with SAMAs, the environmental impact of severe accidents was determined to be small for all plants. In reality, the impact from severe accidents is another issue separate from SAMAs. Consequently, the staff will consider whether it's warranted to call this out to eliminate confusion.

Realignment. Currently, there are 92 issues addressed in the GEIS. Apart from the SAMAs, the severe accident issue just discussed, some of these are solely related to the continued operation during the renewal period; some are related to refurbishment activities; some are related to both.

For specific applications the enumeration of issues

becomes complicated when, for one or more issues that are supposed to apply to both refurbishment and the renewal period, [an issue may] apply only to the renewal period because no major refurbishment is contemplated. The potential solution is realignment so that one issue is either for refurbishment or for renewal, but not both. The consequences would be an increase in a number of issues, solely for accounting purposes, with an expected improvement in clarity.

Hopefully, this provides a sense of what the staff experiences during license renewal reviews has been. The list continues to grow as more environmental reviews are conducted. So, we would appreciate not only your input on specific environmental issues, but also reflecting upon the criteria we have identified as targets as we conduct the actual review after the scoping period.

As mentioned, we are at an intermediate step in the scoping comment period. All comments from this transcribed meeting and the three other public meetings will be considered.

Written comments postmarked by September 2nd will be considered in this scoping process and will have the same weight, as Chip indicated, as comments offered tonight.

After the end of the scoping period the staff will issue a scoping summary report that will detail those comments on environmental issues that will go forward as part of the

1 | update process.

We expect we will receive comments that are not related to environmental issues associated with the GEIS, and some of these comments will be forwarded to other programs for their consideration and response.

We expect to issue the scoping summary report in early 2004, depending upon the breadth and depth of the issues posed to the agency. And from this input we will be in a better position to refine the balance of the schedule for both the draft, the finals EISs, and, if warranted, the proposed and final rule changes.

We expect to meet the Commission's goal, the ten-year update, in 2006.

As I wind down with this background discussion let me reiterate that I'm the NRC point of contact for the GEIS. I have also included Stacey Fox's name as an alternative to me. She may be in a better position to respond to you a little quicker than I since I cover many different programs and projects within the agency.

We will be working together to manage the project and the team of experts, some of which are here tonight.

The scoping summary report as I previously mentioned will be available to the public on the NRC's Web page, as well as our public document room in the Washington, D.C. area.

This slide points out where you can view the

associated documents. In addition, we will mail a copy of it to you, and a copy of all future work products associated with this project if you have filled out a card on the way in and would like to be put on the distribution list. And if you haven't, we will be happy to take it on the way out.

Beyond today's meeting there are three ways to provide written comments on or before September 2nd: In writing to us through the Rules and Directives Branch; in person if you happen to be in the Rockville, Maryland, area we would be happy to visit with you; or by e-mail. All comments will be collected, considered, and we have already received some.

Let me remind you that you do have an important role in this effort. We look forward to your participation.

I will say at the outset we may or may not agree with your views, but we will consider them in our work.

And with that I think both John and I are prepared to take any follow-up questions you have on the process, what our goals and objectives are, what some of the criteria are when we go forward before you have the opportunity for formal presentations.

MR. CAMERON: Thank you very much, Barry.

As you can see, that was a pretty comprehensive overview of what the update process is.

Now we will answer your questions. Bonnie is back

here, if you could just introduce yourself to everybody. 1 2 MS. FLOYD: I am Bonnie Floyd, and I was just wondering if you have already -- I'm wondering in the ballpark 3 4 how much is the environmental scoping process costing us, the 5 whole process. MR. ZALCMAN: Let me try and give you a response. 6 7 The environmental scoping process is probably limited to about three staff months of effort, and probably sixty days, 8 9 maybe seventy days worth of contract effort, so we're talking a 10 total investment that probably does not exceed \$100,000. 11 MS. FLOYD: Including all the materials, documents, 12 and everything? 13 MR. ZALCMAN: Correct. The key question is to what 14 degree do we get comments that may require a binning process, 15 or a comment response process. That may grow depending upon 16 the level of public interaction. 17 MR. CAMERON: Does that answer your question, Bonnie? 18 MS. FLOYD: That's for the whole period? MR. ZALCMAN: That's for the scoping process, which 19 20 will be through the issuance of the scoping summary report. 21 MR. CAMERON: Let's to go Rita. 22 MS. KILPATRICK: My name is Rita Kilpatrick, and I 23 just want to hear now what is the agency's reason for pursuing

Are you just saying this is the basic logic behind

relicensing in the first place, for doing it at all.

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it? Because it baffles those of us who are working in the industry and are following this very closely. What's your reasoning?

MR. TAPPERT: I guess the rationale for -- The NRC doesn't necessarily pursue relicensing. The utilities take it upon themselves to apply for relicensing, and what we try to do is provide a regulatory vehicle that, if they choose to seek relicensing, that it's done in a safe and effective manner.

So just to put a different spin on it, what we're trying to do is make sure there's a process to operate these plants for the continued period of operation in a safe manner, and that aging is adequately managed, and the environmental effects are adequately characterized before that decision is made.

MS. Kilpatrick: Adequately managed?

MR. TAPPERT: Right. Part of the safety review, not necessarily what we do in the environmental space, but as we indicated earlier there are several parts of the review.

There's the environmental review, there's the safety review, and there's actually on-site inspections, and the principal focus of that safety review is to ensure that the aging effects of the plant are adequately managed.

As I said, they were originally licensed for forty years, and we want to make sure that the systems, the structures and components were allowed to function for an

1 | additional twenty years.

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- MS. Kilpatrick: A follow-up question. I heard
 during the presentation that forty years was chosen to get a
 balance between meeting energy needs and --
 - MR. TAPPERT: Financial.
 - MS. Kilpatrick: What's going on beyond forty years? What's that about, managing aging?
 - MR. TAPPERT: Right. I mean the original 40-year license was set by the law, by Congress, and part of that had to do with depreciation laws at the time.
 - There's really no engineering reason why the license should be limited to forty years, and we have in fact found that with appropriate programs out there that these facilities can be safely operated for up to sixty years.
 - MR. CAMERON: And I guess one thing that I think you said, John, is that under the Atomic Energy Act a licensee has the right to request their license be renewed, and the Commission is obligated to review that.
 - MR. TAPPERT: To review that and provide a process to effectively review that.
- 21 MR. CAMERON: All right.
- 22 MS. Kilpatrick: Is it obligated to approve?
- 23 | MR. TAPPERT: It is not obligated to approve.
- 24 MR. CAMERON: Very important point.
- 25 Let's go over here, and if you could give us your

1 | affiliation too.

MS. STEELE: I am Joanne Steele with Action For a Clean Environment, Oconee Project.

I came in after the renewal of the Oconee Nuclear Plant, but I have questions about that process that went on when the time when I wasn't looking at it.

But there were some questions that the NRC had for the Oconee Plant, and I haven't seen any documents available in the reading room about the responses in the licensing processes, and some of them and the aging effects of corrosion on structural steel, the rebar, and embedded in the concrete because of the accumulation of ingressive water through the cracks in the concrete that weakens the containment structure, and another thing was thermal fatigue, the effects that it has on the containment heat removal system.

And perhaps these things have been -- another thing is providing the effects of temperatures and radiation on structural properties of the reactor cavities of spent-fuel buildings, and the spent-fuel buildings, and I don't know whether it's because of 9/11 that these responses aren't made public so that we don't know of any weaknesses that terrorists can get to, or what the reason is, but as someone concerned about what Duke Energy has to say in response to this, the fact that we might relicense them when we didn't hear how those issues were resolved.

1 MR. TAPPERT: These were questions that the NRC had 2 asked the utility? 3 MS. STEELE: Yes. 4 MR. TAPPERT: As part of a review process, the 5 utilities will send in an application, and during the staff's review of that application it is typical for the staff to have 6 7 questions, and we send out what we call a request for additional information to help the staff conduct their review. 8 9 If we sent those out, there is a response out there 10 back to the NRC responding to those, and then the staff makes a 11 safety judgment when they develop their safety evaluation 12 report. 13 MR. CAMERON: Those are made public? 14 MR. TAPPERT: Yes, they should be publicly-available. If you have not found them, we can contact you offline and see 15 16 if we can assist you in identifying those. MS. STEELE: I would appreciate that, because there 17 18 are a lot of documents in the -- I mean just because you need 19 them to analyze, it doesn't mean --20 MR. TAPPERT: We appreciate that. 21 MS. STEELE: So I would like the responses to those 22 things, because I can't see how you can deal with the 23 structural integrity of the buildings themselves without 24 rebuilding the building after so much --

MR. TAPPERT: And actually those issues were

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addressed as part of the safety review, but certainly we can put you in contact with staff who can help you do that, so please after the meeting if you'll just buttonhole one of us and we'll get your information.

MS. STEELE: Okay.

MR. CAMERON: Thank you. Other questions at this point? Mary.

MS. OLSON: This is a compound question. My name is Mary Olson, I'm the director of the Southeast Conference for Nuclear Information and Resource Service based in Asheville, North Carolina. Our home office of course is in Washington, D.C. and in Amsterdam.

This is a little bit of a compound question, so I'll review it if you need it.

But you mentioned how many renewals there were, but I missed it that you actually granted, and how many was pending now. How many have had interventions, and how many of those interventions have gone to the ASLB?

MR. TAPPERT: I would have to look back to the slide, but I believe we have granted 16, and that 30 have applied, and 14 are under review.

As far as the number that have gone to the ASLB, there are current -- ASLB is reviewing the McGuire-Catawba applications. They have not determined whether that's going to go to hearing yet, but that's before them right now.

MR. CAMERON: And further for the record ASLB is
Atomic Safety and Licensing Board.

- MS. OLSON: Do you know the answer as to how many petitions to intervene have been filed of those 30?
 - MR. ZALCMAN: I'm familiar with two other applications. On Turkey Point there was a petitioner that raised issues, individuals were given standing. As I understood it, none of the contentions were admitted.

We also had a challenge on the Oconee facility. I think that one was the Chatooga River Watershed Coalition where they had raised a concern regarding one issue, but the Commission directed the staff, and ultimately the Addendum 1 to the GEIS addressed that issue. And it was raised I think in the Federal Circuit, and it was denied.

So I think those are the other issues.

MS. OLSON: I just want to comment that I am very proud of the Southeast.

MR. CAMERON: All right. Let's go to Reverend Utley.

MR. UTLEY: Just a quick question. If I could just get clarity on -- you mentioned two categories, Category-1 and Category-2. Who determines those categories?

MR. ZALCMAN: A very good question. The structure in developing the Generic Environmental Impact Statement as we developed it through the 1996 time frame originally proposed three categories.

The final rule, the final GEIS ultimately dealt with two categories. It is within that review process and developing the draft and final environmental impact statements, and therefore the rule, that we established this framework.

The Category-1 had to meet certain conditions that would be common to all facilities, that the level of significance [of the impact] be the same at all facilities, and that no further mitigation was warranted.

Under those conditions we could come up with a generic conclusion and ultimately deal with that as the Category-1 issue.

The Category-2 issue is one where we couldn't resolve those three criteria, and more importantly, the issues that must be resolved on a site-specific basis. For example, endangered species are unique from site to site to site; you couldn't possibly resolve that generically. So those are preserved for the site-specific review.

And the third was the uncategorized issues. The Commission felt that the science was still out, or the regulatory process had not been fully refined yet, so Environmental Justice, the Presidential Order had barely been issued. It took a while for the staff to come to grips with that, and as a matter of fact there's a request in to the agency today to revisit Environmental Justice to see how it applies in licensing actions.

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The other was the chronic effects of electromagnetic fields. The science is still out, and we're still relying upon the National Academy of Sciences and their judgment until it's defined. If there is a definitive resolution, then we'll consider whether or not we can revisit it as a Category-1 issue.

So that process in establishing Category-1s and Category-2s fell out of this exact activity [preparation of the GEIS], but it is now within the rules, and that is a process for the rules. It is not an issue that we will consider for GEIS update.

If that's an issue that you want to revisit, there's a different mechanism to address that before the Commission.

MR. CAMERON: That was Reverend Charles Utley of the Blue Ridge Environmental Defense League.

MS. OLSON: I kind of understand what you just said. I don't fully understand what you just said, so forgive me if this question is asking you to repeat something you just said.

My name is Mary Olson, and my question is I understand in my point of view why we do a site-specific analysis and Environmental Justice impacts for license renewal.

Was there any generic analysis of Environmental Justice done?

MR. ZALCMAN: No.

MS. OLSON: At all?

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MR. ZALCMAN: At all. The consideration that we have today is the staff evaluating Environmental Justice under the Presidential Order and the Commission's adoption -- the Commission elected to fulfill an obligation under Environmental Justice, and they revisit that, but we are an independent executive agency. We elected to follow Environmental Justice.

MS. OLSON: So you can elect not to is what you're suggesting, but I guess another question though is with regard to environmental impacts that are in the GEIS currently that do have Environmental Justice implications, and so therefore is it correct to say that the agency has not evaluated those?

MR. ZALCMAN: No, I would say that the agency did some evaluation, but did not draw a generic conclusion to take it off the table. That's a bad characterization. But it does not lend itself to being resolved as a Category-1 issue. It must be addressed on a site-specific basis.

MS. OLSON: Let's be specific. Fuel cycle impacts.

MR. ZALCMAN: Fuel cycle impacts --

MS. OLSON: Are a generic issue, have an Environmental Justice component.

MR. ZALCMAN: Well, the fuel cycle impacts, certain fuel cycle impacts that are associated with matters other than Environmental Justice are resolved. Environmental Justice as an issue has to address the full scope of socioeconomic and other types of activities that fall under that rubric. So if there

1 are --2 MS. OLSON: So in other words you have kept track of which uranium was mined for which reactor? 3 4 MR. ZALCMAN: No. What the agency has done is 5 addressed the impacts associated with the entire fuel cycle generically; it has resolved it in Part 51. 6 7 MS. OLSON: With an Environmental Justice review? MR. ZALCMAN: Without Environmental Justice. 8 9 Environmental Justice is being considered in its entirety as 10 part of license renewal as a Category-2 issue. The fuel cycle 11 issues that we had resolved previously still stand. 12 MS. OLSON: Without an Environmental Justice review? 13 MR. ZALCMAN: Except the Environmental Justice issue 14 was still on the table. MS. OLSON: For all issues? 15 16 MR. ZALCMAN: All issues associated with 17 Environmental Justice have to be resolved as part of the 18 license renewal application. 19 MS. OLSON: We will wait and do that in writing. 20 MR. CAMERON: Okay. Let's to go Jen. Introduce 21 yourself. 22 MS. KOTA: I am Jen Kota, I'm with the Sierra Club. 23 Your response to Mary confused me. What it seems to

me she's saying is that if you consider your EIS for fuel cycle

complete without the Environmental Justice angle attached then

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1 | it's not complete.

And then again you're saying that you are looking at the Environmental Justice angle for license renewal. This doesn't include the fuel cycle portion? And so therefore it sounds like you're saying that EJ issues for fuel cycle treatment are not being considered at all.

So please be very clear, break it down for me.

MR. ZALCMAN: Okay. Let me try again. For a license renewal application we identify that there are 92 issues. For a specific application there's no one applicant that must address all 92 issues. Why is that? Some have cooling towers, some don't.

And the Commission in 10 CFR Part 51 has addressed fuel cycle impacts, and at the time of the construction permit required that all facilities address that issue, and the Commission is relying upon the conclusions not only that was made part of -- I'll refer to this as W-A-S-H (the predecessor to NUREG documents -- NRC issues NUREG documents today. The series of documents issued before the NUREG series was created was the WASH documents W-A-S-H), those documents provide the technical basis for what we considered in a generic resolution of fuel cycle impacts. The President issued a declaration dealing with Environmental Justice subsequent to that.

The agency has elected to consider Environmental Justice in its regulatory actions today. As part of license renewal, Environmental Justice is not one small subset of an issue; it covers a variety of different issues.

We address Environmental Justice, those attributes of Environmental Justice that may have socioeconomic impacts, socioeconomic attributes, and we look at those under the umbrella of Environmental Justice.

As part of this scoping process if you're telling us that we're not looking far enough, our reach is not far enough, and we should expand the reach to include some other issues that's beneficial to us.

MS. KOTA: I simply need to ask you a yes or no question so I can understand your response.

Are Environmental Justice issues relating to fuel cycle going to be addressed in any future Environmental Justice issuance by the NRC? A yes or no question.

MR. CAMERON: We're going to go to our Office of General Counsel now, but I don't want to lose Jen's question.

Barry, do you have anything to say to that?

MR. ZALCMAN: No.

MR. CAMERON: Let's go to Stu Treby from our Office of General Counsel. Stu.

MR. TREBY: Yes. I would like to address your question if I can understand what your question is.

Environmental Justice has a disproportionate impact on certain minority groups. Will you identify what is the

- disproportionate impact that you are concerned about in the fuel cycle?
- MR. CAMERON: I think that we will try to get a clear answer in writing I think --
- 5 MS. KOTA: A yes or no --

6 MR. CAMERON: -- to this question.

And part of the problem with yes or no, Jen, is that the question has to be very precise, I think, and in terms of Environmental Justice at a specific plant that comes in for license renewal -- Barry, I think at least maybe we can clear up some of this -- Barry, you're saying that Environmental Justice considerations for a specific license renewal application for that plant, they are considered as a Category-2 issue?

MR. ZALCMAN: That's correct.

MR. CAMERON: Okay. At least we can say that for sure, and I think that we need to clarify the rest for you, and as Barry pointed out, if you're suggesting -- and I think that you might be, and you might want to clarify this in your comments --

MS. KOTA: I'll clarify it in the comments.

MR. CAMERON: Okay. Thank you.

Let's go to Rita.

MS. KILPATRICK: I have a question about liability.

When the public raises a concern before the NRC, and let's just

look at in dealing with generic environmental impact, and the NRC does not adequately set up protections that address those concerns that the public raised, who pays for the damage in terms of contaminated waterways that result and the host of environmental impacts that occur that can impact people's livelihood and their health? Who covers that liability?

MR. CAMERON: This is an issue that applies to plants generally, not just plants that are under license renewal, and Rita's question goes to liability for any nuclear accident that might harm -- not necessarily an accident.

John, do you understand the question?

MR. TAPPERT: I think the kind of impact you're talking about would be associated with an accident, and that is not necessarily a license renewal issue, but there is an insurance structure set up -- you've probably heard of the Price-Anderson Act -- all utilities are required to have a certain level of insurance, and above that -- This is to pay for any damages that may in fact occur, all utilities are required to have insurance. There's also a mutual insurance pool among the utilities. Maybe Barry has these dollar values. And above that the federal government has some role to make people whole.

MR. ZALCMAN: I was just going to add, Price-Anderson is one element of the Atomic Energy Act that was up for reconsideration in the past year or so.

But the pool that John is referring to actually deals with resources that are set aside as premiums, and retrospective premiums to the total of -- my last recollection was over \$8 billion per facility.

So the mechanism for dealing with potential adverse consequences and the restoration, or the ability to make individuals whole crosses the entire industry, so if you go more than \$8 billion across all the 104 plants with operating licenses it's a substantial sum.

So the mechanism is there. I know there's been some question as to whether or not that constitutes a -- in italics or quotes, a subsidy, I think has been thoroughly ventilated. But that's a Congressional issue, and just as the initial question dealing with license renewal we're obligated -- you know, Congress under the Act, the Atomic Energy Act, -- have established a process to deal with renewal of licenses, and they placed the burden upon the agency, just as they have issued as part of the Atomic Energy Act the Price-Anderson Act, and that is the mechanism in place.

Previously I indicated we're not going to change certain elements of rules. This is not the mechanism to change statutes either. But that mechanism does in fact exist.

MR. CAMERON: Rita, does that answer your question about the liability provisions for a nuclear incident?

MS. Kilpatrick: Okay. I'll address it in my

concerns.

MR. CAMERON: Okay. Let me put a couple questions up, and a related one before we go to Adele and Mary, and then we'll see where we are and maybe start some comments and come back to some questions.

But two questions here: Are there any plans or discussions to remove the SAMA analysis from the GEIS? Barry?

MR. ZALCMAN: I addressed that earlier in my presentation where the agency had responded to a petition by the Nuclear Energy Institute, and the Commission denied that petition.

At the same time, if you read the preamble to the rule for environmental protection for license renewal going back to the 1996 time frame, the Commission had an expectation that once the Individual Plant Examination and Individual Plant Examination for External Events was completed that the staff should take on an effort to see whether or not it could further resolve SAMA to be a Category-1 issue.

And given the evolution, the changes in plants, the IPE and the IPEEE program were intended to identify vulnerabilities, and the plants have addressed vulnerabilities, so that work probably is no longer current. And as a matter of fact, that's part of the issue that we're dealing with in the Catawba-McGuire situation where it represented early '90s work, and the plants don't look like those evaluations any more.

1 | They have further addressed risk.

So that we don't think can serve as the basis now for reexamining SAMA, and the SAMA process that we think we enjoy today is thorough, it is robust, and it's addressing the issue in a manner that the staff and, apparently, the Commission finds to be acceptable.

So this is not the process to address revisiting SAMA unless a member of the public, or the industry wants to provide additional information, a different rationale than they had provided previously. And, if that is the case, then it elevates to a level where it's within the scope of our review maybe we will revisit it.

MR. CAMERON: Okay. And the other question was whether there is any plan to change any Category-2 issues to Category-1 issues.

And then we'll go to Adele.

MR. ZALCMAN: SAMA was the one candidate where we had an IOU in the preamble, the rule. Right now we don't -- we as a staff haven't drawn any conclusion that there's another Category-2 out there that should be reconsidered to be a Categor-1 issue.

MR. CAMERON: And indeed the whole point of this scoping process is for people to give us their opinions if they think that it's warranted.

MR. ZALCMAN: Absolutely.

MR. CAMERON: Adele, could you just introduce yourself and tell us who you're with.

MS. KUSHNER: Adele Kushner with Action for a Clean Environment in Northeast Georgia.

What has occurred to me under what conditions would an application for a renewal ever be turned down, and has one ever been turned down?

MR. TAPPERT: When an application is submitted to the agency again we have the three components, we do an environmental review, and a safety review, and an on-site inspection.

If the findings of the safety evaluation conclude that the plant cannot be operated safely for an additional 20 years, that license will not be renewed. I mean it's a very thorough evaluation. We have scores of technical reviewers looking at it, on the environmental side we have a team of environmental experts going out in the field and visiting the facility, looking at all those issues.

At the end of that process the environmental group and the safety group make a recommendation and the agency makes a decision whether or not to renew that license.

To date, all those applications, all the decisions that have been made so far have been to grant that license.

That's not entirely surprising. These are very sophisticated operations, our regulations are very clear, the

1 | process is laid out.

For the utilities who have been adequately managing their facilities and have appropriate safety programs and environmental programs the expectation will be that most of those licenses will be renewed, but that decision will not be made until the end of this very extensive review.

MR. CAMERON: Okay. Thank you.

MR. ZALCMAN: Chip, before you go to the second part, let me add one item.

Let me make sure you understand. As John refers to, we're dealing with a sophisticated industry. If there was any possibility from a licensee's perspective that the plant would not be able to get a license renewal, my expectation is we would not see an application.

MS. Kilpatrick: Has that happened?

MR. CAMERON: I think in answer to the second part of your question about have we ever denied an application, I think John answered that as no, we haven't.

In terms of the question on do we know of any utilities who will not submit a license renewal application because they know they can't meet the regs --

MR. ZALCMAN: As a matter of fact, license renewal was still in its infancy, we were developing the regulatory framework. One of the private plants was the Yankee-Rowe facility. In the end they elected to decommission the

facility. So there's a situation where it became apparent that
the standard that the agency was going to hold them to would
not have resulted in a renewed license.

MS. Kilpatrick: You anticipated my next question about which ones have closed down, and why. Yankee-Rowe was closed down?

MR. TAPPERT: Yes.

MR. CAMERON: We're going to get some more here.

After Mike Masnik answers this question we'll take one more question and then we'll go to some comments.

MR. MASNIK: I'm Mike Masnik, Environmental Section.

There have been 23 reactors that have shut down, and in fact we have a CD out on the table there that talks about decommissioning of these facilities, and if you want we can also send you a copy of our Generic Environmental Impact Statement on Decommissioning which details all the plants that have shut down.

As Barry said, the utilities are relatively sophisticated, and if there is a chance that the plant will probably not be able to operate for an extended period of time they will shut it down.

MR. CAMERON: And, Mary, do you have one more question before we go to you for our first formal comment.

MS. OLSON: These are actually two questions. I think they're kind of straightforward, and I did send them in

1 | in advance, and I didn't get an answer.

What is the technical document used to evaluate the socioeconomic impacts of death that is usually used in SAMA analysis? This not a trick question. I just need to know the answer to that.

MR. ZALCMAN: I thought I did respond to your e-mail.

MS. OLSON: I did not get it. Sometimes they have problems.

MR. ZALCMAN: I'll check to see. I can't verify that it was received, but we did have a response to that.

To steer you in the right direction, two documents would be useful to you. Certainly the staff's environmental standard review plan -- that's NUREG-1555 -- has a specific section for license renewal in its Supplement 1, and if you will stop by the front desk before we leave tonight we'll make sure you get a copy of the CD.

The second document that would also be of benefit to you is the reg analysis handbook, and I don't have the exact number, but it's a NUREG-BR number, that provides -- that's NUREG-BR-0184.

MS. OLSON: The other thing I would like to hear a commentary on is the nuts and bolts of the relationship between the GEIS provision and GALL, and I understand you may have answered the e-mail, but I have two people who are waiting for this answer.

MR. ZALCMAN: Let me try and address that very quickly.

GALL, G-A-L-L, which is Generic Aging Lessons

Learned, that document has been prepared, it's a compilation of accepted practices to consider aging mechanisms and management programs to manage the effects of aging.

It is part of our safety activity, it is not part of the environmental review. It is to become a very useful tool, a generic tool so that applicants consider whether or not they have programs in place that would align with those acceptable practices.

So GALL will be to the safety side very much what the GEIS is to the environmental side.

MR. CAMERON: Let's go to some -- Peter, did you have a quick question?

MR. SIPP: Yes, thank you. Pete Sipp, I'm with GANE.

Barry, in your presentation you talked about the attributes of data. Can you describe the issues --

MR. ZALCMAN: The attributes dealing with the technical issues? Everything from the air, the water, the noise, the visual, the aesthetics, the hydrology, the surface water, the ground water, how much we take out of the water and how much we put into the environment -- not we, the license-holders -- the radiological sciences dealing with the health physics and exposure to workers, to the public, the ecological

sciences, everything from terrestrial and aquatic species,
effects on human health, the whole panoply, and we tried to put
that in that one slide that lays out all the technical issues.

But if you look at the GEIS and just look at the table of contents there's pretty good alignment on those issues covering these, you know, the physical, the social, the radiological, ecological sciences. They're all there.

MR. SIPP: Thank you.

MR. CAMERON: Thank you very much, Barry.

Let's take some formal comments, and we'll come back for some more questions in a little bit.

What I would like to do is ask Mary Olson to speak to us first, and then Rita Kilpatrick, and Joanne Steele.

MS. OLSON: I am Mary Olson, and I'm with the Southeast Office of Nuclear Information and Resource Service.

We are a National and International organization, and we have regional offices in Asheville, North Carolina.

I just wanted to give a little bit of instruction.

We have 59 sheets of posterboard that are just going to be moved from this pile to a pile over there, handing it across a human conveyor belt.

Now, each of these sheets has 36 little coffins on it, and each coffin reads John Doe, a Standard Man, or ten to twenty Baby Does.

Now, when you take 36 times -- I think it's 36 sheets

-- it comes out 1,236 which is the number that the Nuclear Regulatory Commission told us in 2001, July 30th, a Federal Register notice, if in fact 103 reactors operating on that day were operated for twenty years this is the number of cancer deaths associated with producing the fuel for those 103 reactors to operate for twenty years.

Now, the initial license is for forty years, so that would be 2,472, but we kind of thought you would get the idea from 39 sheets so we didn't have to bring more.

You have to double the number for forty years of operation, and then with the additional twenty years which is what we're talking about here, the additional 1,236 on top of 2,472 we come up with 3,708, 3,708 deaths from cancer associated with sixty years of operating 103 reactors.

Now, I'm kind of rubbing this in, but the reason I'm doing it is because these are fuel cycle only, these are fuel cycle only, and they have been evaluated as a generic impact.

And so my comment on this question of Environmental Justice tonight is to ask who are these people? Who are these people? Fuel cycle, fuel production, who are these people? And I want to bring to your attention that there's a new coalition of Navajos who are saying not us, not us any more. If you look at fuel cycle, you will look, and you will look, and you will look, and you will have a hard time finding white people, you will have a hard time finding rich people, and so I

am challenging the Nuclear Regulatory Commission to reconsider whether socioeconomic impact is the correct parameter for Environmental Justice, since these people are not rich and they are not white. They are dead. And if they're babies, there's a lot more of them than 1,236.

So that's my next comment, and always my next comment to the Nuclear Regulatory Commission, the standard man is not an adequate indicator for your impacts on the environment, we don't care about your regulations under NEPA, we care about your impacts, and your impacts on babies are many times greater than your impacts on standard men.

And I will tell you, and I will tell to go to those meetings where they are meeting with the Environmental Protection Agency, and if you go on behalf of your licensees and keep the EPA from having a standard for baby cancers, ooh, daddy-o, we're going to bust your a--. So don't do it. You need to come clean and have standards that reflect the population you are mandated under law to protect.

So who are these people? Who are they? You don't tell us, you don't look, you don't ask. We are looking, we are asking, we are standing with the Navajos and saying no more, no way.

A couple more quick comments because I want to respect your time.

They're still dying, see? It isn't even all done

because it's over time, right? They could still be dying from the first twenty years.

Now, there was an interesting thing that happened with Yankee-Rowe in the initial consideration of license renewal, and I think we really have to take this update opportunity on the GEIS of license renewal to reflect on the response, but you know it's like a dance, you know it's like you do something, we do something, you do something, the industry does something, we do something. It's a dance, and you know the public really got involved in Yankee-Rowe, and different things happened than anyone thought was going to happen.

So we then have to look at what NRC did. And quite frankly your rules are not anticipating the problems that are occurring.

In honor of Jess Riley who was one of our members who I represented in the license intervention for the Duke reactors I have to say that he was quite right in saying that the NRC's regulations do not anticipate what you don't anticipate.

And how can they? How can you anticipate what you can't anticipate? But what we can find out from this experiment called nuclear power that has been going on for about forty years is that, excuse my French, but s--- happens. Stuff that you didn't anticipate happens. Oconee after relicensing happens. Davis-Besse after inspecting other

1 reactors happens. South Texas happens.

And other things happen, like people who go and look at Indian Point's tubes in their steam generators and look at the wrong part, and they turn the darn thing back on, boom, it bursts right in the middle where they weren't looking.

Summer, ooh daddy-o, could have been a big one, looking in the right place with the wrong equipment.

And still the industry is ready and able to rise to the challenge of dealing with stuff that quite frankly is beyond its design basis in about 25 years.

All NRC is doing is giving out passes. You know, they can't meet the design basis, and so what happens, Amnesty International? No. Amnesty Irrational, where in three years 42 reactors reported over 500 cases of not meeting their own design criteria. And what happens? NRC does nothing.

Yankee-Rowe could not meet its own design criteria, it closed. What happened? The license renewal rules no longer require it, you simply assume that they do.

So this interaction between the public getting involved in Yankee-Rowe, the industry doing what it does to generate electricity, and collect money, and pay your bills results in what, a rule that simply assumes that everything is okay until and unless it fails.

And I know you're going to contest that, but quite frankly why were the cracks at Oconee discovered after renewal?

Why was Davis-Besse allowed to go for five years with corrosion?

I'm going to wrap it up, but I want to offer a couple of very concrete statements about things that are not in the rules. However, before I do those I want to say that our recommendation is that instead of using this process to extend licenses on the basis of the experience that I have cited here, and a whole lot I haven't, we believe that if the industry is following its mandate to protect public health and safety and to limit the liability of the industry and do the industry a favor you should shorten the operating licenses to 25 years and facilitate either phase-out or, you know, if they're trying to get new ones we'll see if that works.

So the only additional items that I can tell you that I think really are missing in your rule, whether it's for 25 years or 60 years, one is climate change considerations, and I'm not suggesting that these are the attributes that the industry is talking about when they say they are here to protect us from climate change, I'm suggesting that the severe weather and parameters of our climate that are changing impact reactor operations, and if you look at Catawba having to warn the Public Service Commission in South Carolina that they might have to go off line because of the drought lowering the water levels in the Catawba River, raising the temperatures in Lake Wylie, making it nearly impossible for them to cool their

reactors you will have a concrete example of why this should be included as both the generic and site-specific bases.

I have already mentioned that you need regulations at the generic level that reflect all of the population -- baby cancer rates, child cancer rates, and I'm going to get real explicit here, I had fibroid tumors ten years. Women bleed a lot, we are different than men. You have to look at women too.

There needs to be the standard woman, the standard child, the standard infant, and the standard fetus in addition to the standard man, and the standard elder, and then we'll quibble about whether they're correct.

Okay. And then finally Part 70. I don't know why the Nuclear Regulatory Commission decided to do a generic treatment of plutonium fuel, but you all did. You have rules for anybody who builds a plutonium fuel factory, so what about Table B-1? It only applies to LEU I need to remind you.

It's not that I'm endorsing plutonium fuel, but I am suggesting that uranium has no bearing on plutonium.

Thank you.

MR. CAMERON: Thank you, Mary, and thank you assistants.

Rita Kilpatrick.

MS. KILPATRICK: Good evening. My name is Rita
Kilpatrick, and I am the Georgia Policy Director for Southern
Alliance for Clean Energy. We have offices in Atlanta,

1 | Savannah, and Knoxville.

Our organization prior to a merge that I worked with was called Georgians for Clean Energy, and prior that Campaign for a Prosperous Georgia.

We gave extensive public comment in oral comment, and written comment form on the relicensing of Plant Hatch. We chose not to intervene quite frankly because the expedited process we viewed to be essentially a done deal for relicensing approval by the NRC, and not conducive to public input. So we just generally gave our detailed comments outside of intervention.

And quite frankly while we're daunted by the entire process of relicensing. Plant Hatch was the first reactor I believe in the nation of its type, a boiling water reactor, to seek and then receive license approval, or license renewal rather.

And Plant Hatch does have serious problems that it faces. It has a cracked core shroud, it has a problem with overflowing waste, the ISFSI which was set up, the independent spent fuel storage installation was a concern that we raised during relicensing process.

We were told that that along with a host of other major issues were really not part of the scope of the site-specific analysis that would be taken up to look at the relicensing of Plant Hatch, but rather those were generic

issues.

And so here we are today wondering what the scope of this really is. The kind of separation that occurs in putting issues in categories has been very challenging for us to even follow, and to know where is the opportunity when you're looking at a site-specific review and you're raising these profound questions of environmental impact, and safety impact, and a host of other impacts, including economic, when we're told that's really outside the scope we're wondering where are we supposed to provide that concern then, because each plant is being brought up in an individual basis for review and ultimate approval, and as has been said there really hasn't been one denied yet it just raises concerns for us as to what the real process is, and the public has -- we're not alone. There are other public commentors that raise concerns.

And honestly in looking at the results, the findings that the agency came out with we felt that our basic concerns were not addressed, and we were very dissatisfied by the analysis provided back to the public of this or that concern has been taken up by the agency and this is how the agency feels the problem fits in.

I can go through a host of items if this is what you all want to hear today, the water concerns, water impacts certainly that affect us at the Georgia plants, and this is true throughout the Southeast Region.

As we know, the nuclear energy industry has an enormous thirst for large quantities of water resources, and that's been very well documented. You can pretty easily compare fuel types across a host of environmental factors ranging from water quantity, water quality, going on to air quality, air quantity, land use, et cetera.

And when you look at these from not just the cleaner alternative fuels that are starting to come onto the market now, but also the traditional conventional fuels, the nuclear fuel ranks the worst, and it ranks the worst for good reason that it has the biggest impact on the environment.

And from a major accident standpoint I raised the question about liability earlier. There are questions of liability that link to accidents. Looking at the CRAC2 report that we hold up frequently that was issued through a subcommittee of the Oversight Investigations Committee on Interior and Insular Affairs, which by the way Dick Cheney was listed as a member of, there are a lot of very specific documentations of what the peak early fatalities are projected to be, the peak early injuries, peak cancer deaths, fatality figures, et cetera for individual plants throughout the country, and those numbers are very high.

But even if you don't look at this problem from an accident or a catastrophe point of view, we are hearing a lot of concerns about cumulative impacts that we don't feel the

agency is properly looking at. When decisions are made around relicensing the outcome in the Hatch relicensing was from the NRC saying specifically that Federal agencies other than NRC, and State regulatory agencies, and owners of plants will ultimately decide whether the plant will continue to operate.

At the State when we talk to them about this if they have the authority to move to get these plants closed on a reasonable time line they indicate that that's really the NRC's purview, that that's really outside their control.

So when you go through this relicensing and look at impacts and such and come out with findings if you can offer something for the States to actually work with, something concrete that lays out here's what options you have that's very clear to them, because they act like it's very confusing.

They may know full well that they have the ability to take care of these problems, but they kind of put their hands up and say we can't do too much here.

I can go on into various other issues relating to transportation and of course the more recent security concerns that have direct impacts on the environment and the potential to do quite a bit of damage, but I don't want to spend more time than I'm given here, so I'll just do that.

Or organization plans to submit writing.

MR. CAMERON: Is there anything that you would want us to attach to the transcript at this point?

- MS. KILPATRICK: I can offer you this CRAC2 report if
 you don't -- I'm sure you have that, but -
 MR. CAMERON: I don't think it would be readily
 - MS. KILPATRICK: Sure. [See attached]

available, so if you want to --

- MR. CAMERON: If you would like to go through in summary fashion the rest of your concerns.
- 8 MS. KOTA: You can have my time, Rita.
 - MR. CAMERON: I think if we have time later on I think we do need to clarify perhaps the statement that is made usually by the NRC that, well, even if we grant license renewal it's really up to the State and the utility about whether the plant can operate, because I think that the way we present that is probably a little bit misleading and leads to confusion of the type you alluded to, so we'll try to clear that up.

Do you want to summarize --?

- MS. KILPATRICK: Can you clear it up for us right now what is that statement? Who has the authority to deal with these problems?
- MR. CAMERON: Let's go to either Barry or John to tell us expressly what the NRC means when they make the statement.
- MR. TAPPERT: That's something that you will hear with every site-specific license review, and we make the statement that even if the NRC grants the license that does not

necessarily mean that plant will operate for sixty years. What it means is they have a license to operate for sixty years to operate that plant, and whether to operate that plant or not will not be made by the NRC, but by the utility and other decision-makers in the community.

It's like granting a driving license. If you have a driver's license, that doesn't necessarily mean you're going to drive, and if the utility decides it's no longer economical to operate that facility they may very well terminate that license earlier and not operate it. The State utility commissions have a lot of authority over what plants operate.

Barry, do you want to add anything on that?
MR. ZALCMAN: No.

MR. TAPPERT: Does that answer your question?

MS. KILPATRICK: Sure. I mean just for example the Public Service Commission in Georgia sort of takes the stance that it doesn't have a whole lot of control over the ISFSI handling, and that's really outside their purview. And if you all decide that's something that the reactor needs --

MR. TAPPERT: I can't actually speak to statistics of the licensees as a group. We can probably get back to you.

MS. KILPATRICK: Okay.

MR. CAMERON: And usually the public service commissions are dealing with questions of economics, and rate recovery, and issues like that. They're not addressing the

situation from a safety standpoint, which is within the NRC's exclusive purview.

The way we have said this at the meetings I think has caused some confusion.

MS. KILPATRICK: Yeah, it varies because I have worked at a commission office where they do have nuclear safety in their overview, or oversight responsibilities, so it varies by State as to whether the PSC has that. In Georgia it's housed with the environmental agency.

I guess our sense is if -- we're very concerned about the situation just related to the ISFSI issue at Hatch.

We've got the situation now where there's this longterm vision of developing Yucca Mountain storage. That's not
going to help in terms of offering any reduction on the ISFSI
front with Plant Hatch for years because it won't be in place
for so long into the future, so when we're looking at
relicensing issues and bringing the ISFSI questions up as to
how do you handle this we're setting up a parking lot outside
the reactor because the spent fuel capacity inside the reactor
has been maxed, it's getting ready to be maxed out, as was the
case when relicensing was going on we asked a basic question
what's going to happen? how are you factoring this in? and
we're told we're sorry, it just doesn't relate right here, it's
out of scope.

Then our question is where does that get addressed if

not through the relicensing process. And so we're very frustrated that we haven't had a mechanism to address those ISFSIs yet with the NRC.

Transportation is related. When these storage facilities are set up which we call DOMs, they are little dump sites that are not that little, they're highly dangerous sites, when you set these up you're looking at transportation at some point down the road which affects a lot of points in Georgia out beyond the reactor community. So that was another question I think was sort of pushed aside that's not an issue for relicensing to look at.

There are other specific concerns we had related to environmental analysis that we felt were important to be looked at. They relate to looking at drought impact. We have in Georgia the issue of drought, those concerns come up some seasons, and flooding comes up, so flooding impacts are an issue as well, looking at the dams upstream and where there could be flooding occurring and some breakage that can be devastating below, to the reactor area below.

So considering those -- discharge temperatures, I spoke a little earlier about the water, excessive water consumption, looking at the water that is permanently lost to the environment because these plants don't just run and then spit all the water back into the river.

Anyway, those are some of the concerns as I said

we're planning to submit some written comments on, so we'll take these up in a more comprehensive fashion then.

MR. CAMERON: Thank you very much, Rita.

Next we're going to go to Joanne, Joanne Steele.

MS. STEELE: I am Joanne Steele with Action for a Clean Environment in Northeast Georgia.

For the past year I have had a half-time staff position of researching the Oconee Nuclear Power Plant and issues around it, so it's been sort of a quick study, and there's a lot more that I need to know, but what I've found out is that we're definitely concerned.

And I share Rita's concerns about how everything has been compartmentalized within the Nuclear Regulatory Commission and other agencies, the Department of Energy, and Department of Defense, and all of these agencies that are related to the whole atomic energy/atomic weapons scenario which I feel like are so tightly connected. I don't really believe in the friendly atom, I think it's a charade to keep the atomic weapons going, because as has been stated in the past here the cost of, the true cost of nuclear energy makes no sense, and it's only 20 percent of the energy in our country, and yet we have these huge agencies and the different departments that are supposedly overseeing the whole process, and yet we get incomplete answers to our questions, or referred to some other I-don't-know-where to try to answer them.

So my concern with this environmental impact statement process is that it doesn't answer, or doesn't address all of the issues, all of the environmental issues of relicensing the nuclear power plants.

For one thing I've asked questions about the vessels themselves that are not replaced, that cannot be replaced, and in the refurbishing that goes on right now at Oconee they have three vessel heads, one of them has been replaced, Unit 3. They can replace all six of the steam generators, but they cannot replace the vessels that hold the reactor cores, or the fuel rods, and the vessels expand and contract, and expand and contract, and age, and they become brittle, and I haven't had any kind of satisfactory answers as to how the integrity of that whole vessel is tested. And so if anyone can help me with that I certainly would like to know how the integrity of the entire vessel itself top to bottom, inside and out is tested for the strength and flexibility and holding that powerful radioactive chain reaction that goes on in the fission process.

And also I share the concerns about the nuclear waste, and the response I get from Oconee is, well, we just store it on site, and have a capacity to store it until we are given permission, and then it's the Department of Energy responsibility, it's not the utility's responsibility any more to handle it, so then it goes to a different agency to handle it and they just pay money to handle that.

You know, the so-called Yucca Mountain repository is going to be the solution, but it doesn't have the capacity to handle the waste that we have all around the country from all the different sites right now, and to continue for another twenty years that is an environmental, that is a very serious environmental concern of what is going to happen with all of this waste, and it goes across the board from energy to weapons production, and it's all tied in with from having learned how to navigate atoms this past year and looking at all the things that you all deal with it deals with all of that stuff, everything from the little gauges and monitors that have -- you know, probably even these lights that glow in the dark, to the spent fuel, to the making of nuclear weapons and the waste products from that.

So what to do with the waste, how can that be a separate thing from the relicensing process, how the waste is being handled is just beyond me to understand, so I would suggest that you all make that a much more prominent part of the environmental impact study that's done. It's the really responsible handling of the nuclear waste from the whole process, from the mining of the uranium, and the water that's contaminated in that process, all the way to the disposing of the waste after the fuel rods are removed and stored.

I have grandchildren, and I come from a large family who has had a lot of problems with cancers, and birth defects,

and miscarriages, and things like that that haven't occurred in the past.

My parents, when I look when I looked at the radiation fallout from nuclear bomb testing they were in high-exposure zones, and they say that a lot of this, a lot of the problems identified as exposure to radiation can come up in the third generation, which is my children, and I'm seeing it in my sister's and brother's children who have died from different things that could be attributed, but how do you trace it back. Like Mary was saying, who are these deaths, and who are these people, and how can you have a flag on them to say this person was exposed and so their child has leukemia, or this person.

It just seems criminal to think that we have so many other alternatives for energy use and energy efficiency that we as a people, whether you work for the NRC, or you work for Duke Energy, or whether you work for some church, or whatever other people, it's time for us to look for a cleaner way to keep our lights on and our air conditioning, because we're killing our children and their children with this process.

And if you are about safety and regulating safety I plead you to reconsider the process that you go through for relicensing these plants.

MR. CAMERON: Thank you, Joanne.

Jen.

MS. KOTA: I have a special guest to come with my

1 | presentation, we'll have to wait for him.

Before I begin, I would like to ask the people here who are employees of the NRC some questions if you don't mind. I just kind of wondered, and if you say yes just raise your hand.

Who here working for the NRC has an engineering degree? All those with an engineering degree raise your hand.

No. No one has an engineering degree?

MR. CAMERON: Jen, the people would like to hear your comments rather than going through this quiz. I mean if you want to ask people questions on --

MS. KOTA: Well, I'm going to see who has a degree. So I would like to ask these questions real quick.

Who has an engineering degree? No one?

Okay. Who in the group has ten years? Twenty years?

One person with ten years. Anybody with the NRC for twenty years?

Thirty years? Yea. Over thirty years? Okay.

Now, the reason that I'm so pleased about engineering degrees, which I didn't see any of, or thirty years, is because there was a defensive attitude that brought these nuclear power reactors on line that seems to be missing, and I don't know, I guess you and Barry may have noticed that I have an attitude, but I want to tell you that my attitude comes from a very

important place, and I think it's something that you need to pay attention to as an organization.

I have never been to a meeting where NRC was present where they have forgotten to say that they were neutral about nuclear power. Never. You have always said that, always.

And I have never been to a meeting where you have said you are neutral, neither pro or con about nuclear power in which you haven't said pleased and positive things about nuclear power.

Now, I want you to walk the talk. I know you're representing that you have more important things to think about, but in these public meetings I don't want to hear Barry or John, or Roger, say things about nuclear energy has been good for you. I don't want to hear any of you say nuclear power is so economical. These are published in your statements, you need to strike them from anything you write because it's your role to appear to be nonpartisan to the public, and you are answerable to the public.

You need to get your industry-friendly jargon out of your minds before you come and see us, because you're not the industry, and we don't need to talk to you like the industry. We are stakeholders, so please take that into consideration.

Now, Blinky is up here for a very good reason, a couple of good reasons. When we look at the fusion sediment produced each year by a 1,000-megawatt nuclear power plant it

amounts to about 4 million curies, and since the half-life is about thirty years it becomes a very limited case over the year.

If we assume 99 percent containment, and that's a pretty high figure I think you will all agree, if we look at the hundred nuclear power reactors that we have operating, and an extent of 25 years, the amount of the curies released by those hundred power plants in 25 assuming 99 percent containment is equal to four Chernobyls.

If you assume a life for these nuclear power reactors beyond 50 years, that would be eight Chernobyls. 99 percent containment, guys. You're not getting there.

In any case, I would also submit Blinky is here because Blinky absorbs -- I think he lives in water -- a high amount of tritium by organic molecules inside his little body, much like a fetus inside of a woman would have high amounts, high amounts of tritium found in its little body.

Now, there are cells that are like the ovaries in a female, the nervous system of any female which are not regenerated quickly is along themselves. So this means that the tritium in those cells will be around practically for the lifetime of this individual. So we're talking long-term genetic defects, we are talking mental impairment.

How many of you listen to music from another generation which -- In any case, as far as the tritium in-

utero involves special dosimetric considerations. Also fetal cells require rapid -- from organic tissues, and certain things provide very little or no subsequent cell proliferation. That would be the central nervous system, that would be the ovaries and a woman's fetus.

These things are dangerous, you need to stop your jargon.

Moving right along, with the reactors we have 103 predeployed dirty bombs. Anyway, what can we do with all your impact statements regarding terrorism. This is a heavy issue, dudes.

The GEIS needs to be upended to allow it to be generic. Actually I don't like it.

You said in your important aspects that you were looking for things that had to do with -- let me look at my notes, I can't even read my notes --

Okay. I'll just read. Generic places important aspects out of reach of merely the stakeholders, and that's the sensibility that's an important aspect to any nuclear process' accessibility to the process by the stakeholders that are local to the plant. Unless the NRC wants to pay people the air fare, travel, to come to these meetings you need to stop this generic attitude of yours and go right down elbow to elbow with people and talk to them about their plants.

This is a farce. We don't, we're not paid for in all

cases by a specialist group, we are not paid for by NGOs. We are here because we are concerned, we're here because we're talking for the 14,000 members of the Georgia Sierra Club, and they have concerns.

We're here because a nationwide Sierra Club of half a million people have causes to give nuclear power because of some of the unsolved issues with nuclear power. You need to take it to the people, and not going to the individual sites about everything doesn't look too good, guys.

I was just confused about this thing that you're neutral. That is the big issue with me.

I think I've made enough statements, I'll submit some in writing, but before we go further can I hear a nodding of the heads about not working for the industry? Like we need to hear the word safe, like we need to hear the word economical because we just need a neutral stance.

Thank you.

MR. CAMERON: Thank you, Jen.

We will now go to Adele. Adele, you don't want to speak

MS. KUSHNER: No, I don't want to speak.

MR. CAMERON: We will go to Peter, and then Reverend Utley.

24 MR. SIPP: Thank you.

I want to talk about on Page 16 of the transporting

spent fuel, the pamphlet, and on Page 16 on the lower righthand part of it where it talks about for the purpose of this
study all of this material was assumed to be released from the
cask, although in reality a large part of the fungible fraction
would plate out or adhere to the surface within the cask.

And as Rita mentioned about criticality of the vessels, I think that should be put in the information the next time.

And also you did this quite a few times yourself, I know it's real common to save the environment, and where T-H-E has the way of separating the subject from, the topic from where we live, and I think it would be real good in your information also for the NRC to place, it would take the same amount of space in the sentence, take out "the" and put in "our" -- I can't find any examples in front of me right now -- but when you say our environment then it has to do with us personally because we can't live here without it. And that would be a help.

I think that the situation about Davis-Besse in Ohio is really unfortunate. I know that the Babcock & Wilcox company manufactured that reactor vessel, and a reactor in Texas where the bottom, a big part of it has got problems, and so to restore the public's confidence in the NRC when utilities with a B&W reactor vessel comes up for an extension, a license extension, tell them, yeah, you can have one, but you've got to

buy a new reactor vessel, period. It's just that simple. You
want us to really look, look at the NRC, they're looking out
for us. And that's what you tell them.

And I guess, Chip, I should maybe submit that in writing perhaps, this whole thing, or --?

MR. CAMERON: We have it, Peter. You don't need to present anything more unless you want to amplify on it, and add to it, and if you want to do that we would welcome it. But you don't need to if you don't want to.

MR. SIPP: Okay.

MR. CAMERON: What you've told us has been captured, and it will be on the transcript.

MR. SIPP: Okay. Well, thanks for that.

MR. CAMERON: The transcript will be available before the close of the comment period. If you want to look at what you said and decide whether to submit more, do that.

MR. SIPP: Well, thank you. In a nutshell that's what needs to happen, because we the public would like to know that the NRC is in fact really looking out for us because I know the NRC crowd at Davis-Besse were there in response to finding a football-sized hole in a six-inch-thick head with "Oh," and so that tells us that they didn't really know, or they did know and they tried to hide the fact, and they were letting the owner of the -- they were letting the people at Davis-Besse get away with it, and it's just real fuzzy there.

So we were really worried that it could be worse somewhere else, and we would love to know with confidence that that's not going to be the case any more.

And that's really it. Thank you very much.

MR. CAMERON: Thank you, Peter.

Reverend Utley.

MR. UTLEY: Gentlemen, I'm here just to tell you that you have an awesome responsibility, and I don't envy the seat that you're sitting in, but you're sitting there as a regulator and one who has to take this information back.

I think it is important that you look at a few things. Not only do I represent the Blue Ridge Environmental Defense League, but I also represent the High and Algin Park Improvement Committee.

I think that's important for me to tell you because it also represents not only poor blacks, but poor whites. And when I look at the implications of having a generic, and the term kind of bothers me because it tells me that I'm missing something. When it's generic you know I can go to the doctor and he says I can have the real thing, or you can get this generic, but it also tells me that something may not work as well as the original intent.

So I would like for if it's going to be generic let's put everything that's conceivable that will cause a problem for the patient to be addressed.

And in particular when we look at Plant Vogtle, it's in Burke County east of the Mississippi, the poorest county, evacuation routes all go through EJ [Environmental Justice] communities, a community even through now is one of the poorest, yet it's bounded by a big nuclear factory.

But this company has an opportunity to do generic stuff, we're looking to meet all the obligations to those farmers, we're going to meet all the obligations to the babies that haven't been born and hope to be born.

One thing about it, when we do things in a generic form we have to be sure that we cross all of the Ts and dot all of the Is, and I for one, if I could, I would afford the best of life, but I can't.

But whenever I have to take a generic anything I try to take one that's representative of the original. But all I'm saying is today I want to give you something to take back, and it is that all of you sitting here at some point in your life have liked to have had an extended family, which means that you want babies, you want a husband, or you want a wife, you want grandchildren, or you want generations to follow after you, but it also makes sure that those things happen.

I have to reflect it as I see it, and then I'm going to close because I won't have a sermon until Sunday, and that is that it always goes to the first born boy to carry on the legacy of the family. Am I right about it?

So if we intend to have our strong boys looking after our young ladies then we must provide for them, irregardless of where they come from, irregardless of socioeconomics, irregardless of black, white, poor, or whatever, during that impact statement be it a generic or the original, must address those things.

So I'm asking that if it's an EJ issue it should be not put on the back burner, or not left up to the plant, because I would write anything I wanted to if it was my plant, because my job other than as a minister I am counselor by profession, but I am also one who looks at children, and when I study kids we do a thing called an SST. That's where a child is having problems learning in school.

And I look where that child comes from. Most of them have been exposed to some form of radiation. Most of them I have been informed have been exposed to less health care.

Now I represent a community that has 240 known deaths that's been related to chemical exposure -- disproportionate I should say -- and that is not fair, because if they could they would have moved, but they couldn't move.

But it's up to us, the gentlemen here in particular, and where appropriate, ladies, you are too, to fight the battle for those who cannot fight, to speak for those who cannot speak, and to stand for those who cannot stand.

So I tell you now just let us put some faith in your

ability to do what you've been designed to do. All of us are brothers of one another, like it or not, and we have to take care of one another, and if I can take care of Charles Utley I can take care of you. Let us take care of one another.

It's good to have good power. Yes, I came from kerosene lights. That works too. So we'll have to also learn that we can't have everything, but the things that we can have let's have them in a clean, wholesome environment.

We're all God's children as Martin Luther King would say, black children and white children.

And I'm going to sit down, because you know when I visit the hospital, have you ever been able to determine when you went to the maternity ward whether it was a black baby, a Japanese baby, or a white baby that was crying. When you can answer that then you've answered yourself.

Thank you.

MR. CAMERON: Thank you, Reverend Utley.

I'm going to ask the NRC staff whether there's anything that they heard that they would like to clarify for people.

And I guess the second item on the agenda is while we have some more time are there any outstanding questions that Mary has? I mean that people have.

Let me ask Mary or John or others whether there's anything that they want to add at this point.

1 MR. TAPPERT: There was an awful lot of issues that 2 were raised, and we sure appreciate those comments, but rather 3 than try and respond to each of those issues right now we 4 certainly want the staff to speak to people one-on-one if you 5 have any additional questions. MR. CAMERON: I think that there were some issues 6 7 brought up that I'm thinking, one popping into my head that Joanne asked about the stability of the whole reactor unit. 8 9 There may be some offline things that we can do 10 there. P.T., do you want to --? 11 MR. KUO: I will speak to her after. 12 MR. CAMERON: Okay. Good. P.T., I forgot to add 13 that he is branch chief, and being the branch chief of the license renewal and environmental review program his 14 responsibility is not only the environmental aspect, but the 15 16 safety aspect of license renewal. 17 And, Mary, did you have something? 18 MS. OLSON: Yes. 19 MR. CAMERON: Okay. Here we go, two outstanding 20 questions.

MS. OLSON: My first question is from something that was said earlier this evening. I'm wondering where in the records of the world we can find out who has been asking for evaluation of Environmental Justice in NRC licensing, and whether that document is available.

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MR. ZALCMAN: Just to respond to that, there was a letter that was sent in to the Commission from the Nuclear Energy Institute. I don't have the exact date on that, but I think it was certainly within the first quarter of the year, this year [Actual date was December 20, 2002], and there is an effort to respond to that.

The Commission did in fact direct the staff to take a harder look at that issue, and my presumption is that it was part of a staff requirements memorandum which would also be made public.

MS. OLSON: I have one more question, but I want to make a brief comment at this point, and I'm sure we will follow this up in a more formal manner.

But we rarely, though we do express not only our appreciation but our pride in the Nuclear Regulatory

Commission, and certainly the decision about Environmental

Justice impacts of the Louisiana Energy System's proposal for

Homer, Louisiana is something that we take pride in as an organization having worked with the local affected community in helping them with their struggle, but we also have repeatedly taken pride in announcing the Nuclear Regulatory Commission's backing of the Atomic Safety Licensing Board decision on the Environmental Justice portions of that case.

So as I say, I think we will take the opportunity to make some of that more formal.

My other question from this evening is about Waste Confidence, and I admit that I haven't read the most recent thing, and I'm asking you now whether Waste Confidence was ever updated, or will be updated in relation to twenty additional years of reactor operations across the fleet, because the base case scenario that the Department of Energy used for the Yucca Mountain scenarios did not assume license renewal, and there is not currently a second repository program.

MR. ZALCMAN: A quick response.

In the last update of the Waste Confidence decision

-- and for those of you who want to look at it, it's in 10 CFR

51.23 -- the Commission found no dramatic change with the
information that was used in judging adequacy of the position
they held previously, and in fact they drew the conclusion that
waste could be managed safely for at least twenty years after
the end of current operating license, including license
renewal.

And that Waste Confidence decision is revisited on a periodic basis. The Commission does have a commitment to do that.

MR. CAMERON: Joanne.

MS. STEELE: I kind of got sidetracked. I tend to do that when I get talking.

But one of the things that I wanted to ask about, and again I just don't know which compartment different things go

in when we're talking about environmental impact -- I just thought that that would be B.U. -- I got the 2001 radiation monitoring report from the Oconee Plant, and I haven't seen the 2002, maybe it's out and available, but I haven't found it, I would love to have a copy of that.

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But it was a 93- or 97-page report from the different sites around the plant in a ten-mile radius and on with the vegetation, and air, and water, and sedimentation, and things like that that they test for isotopes, and I was having a hard time trying to figure out where the hot spots were, but I thought I had circled a few, and I sent them to Dave Close who is on the board of the Institute for Energy and Environmental Research, and he was saying that the way that the monitoring is done and compiled that it dilutes the findings, so that it was hard to really see exactly where some of the problems were, but that he did notice that there were high levels of tritium in some of the places, and high levels of cesium and sediment in some places from the Oconee plant, but ways of tracing that back to events and situations that caused that were hard to follow in the way that monitoring and records are kept, so I quess my question is how can it be traced back, and when the three-eyed fish reminded me of that question that I had had originally, and I do bring it up, but a more clear way of monitoring releases and the accumulation of some of the radioactive isotopes that get released from the plants during

operation, what was in place and what's available to us to see those things.

MR. CAMERON: I don't know if anybody wants to respond right now, but someone certainly can -- Mike, do you want to talk offline?

MR. MASNIK: I will talk to her.

MR. CAMERON: All right. Jen.

MS. KOTA: My father is an engineer, he's a rocket scientist. He and his slide rules put the first rocket on the moon. That is why I'm interested in who is an engineer in here, because I have an inherent faith in engineers, not that I necessarily think that the NRC is doing every single thing I would wish it to do. So that question was a matter of establishing faith.

And I appreciate anybody who held their hand up to bother to answer my questions.

I would like to try it one more time. Who in here is an engineer? Anybody? I thought you might be.

Anybody else an engineer in here?

Thank you very much.

MR. CAMERON: All right. And as I mentioned in the introduction for John Tappert and Barry, engineering, definitely an engineer, acts like an engineer -- No, I'm sorry.

25 [Laughter.]

MR. CAMERON: Rita, did you have a question?

MS. KILPATRICK: Yes.

MR. CAMERON: All right. We're going to go to Rita for a question, and I think we have a couple of offline so-to-speak conversations that are going to take place with P.T., Michael, and I'm sure there's other issues that you guys have heard that you want to talk to people about.

Rita.

MS. KILPATRICK: My question has to do with the assessment that occurs during relicensing, the relicensing process, assessment of the need for energy.

And we addressed this some in our comments knowing that for Plant Hatch for example the Georgia Public Service Commission goes through a long-range planning process that it approves with a Southern Company affiliate every three years, and we know that the big picture was not including a relicensed Hatch, and the energy needs were stepped out and addressed through alternative supplies for the future, and it occurred to us that the NRC is not really the agency that would necessarily have the expertise to even address that question.

The FERC deals with that, and the SEC in some ways deals with holding companies, but the NRC that's not your area of expertise, yet it's a category addressed and brought up as environmental issue because obviously the extension of the life of a plant has tremendous environmental impact, an adverse

impact over many years.

You mentioned during introduction topics such as merchant plants and issues that need to be resolved, and unbundling, and services, and deregulation, and you know these are really big issues, and how is this being tackled if there's not that base of expertise to address those questions as part of relicensing.

MR. ZALCMAN: Let me address it from two perspectives.

The first is you're absolutely right in terms of the role and responsibility of the agency. There are a limited number of times where the agency looks at need for power, and it's predominately in the environmental area.

But quite directly it is not in license renewal; the Commission already has determined the need for power is not part of the license renewal equation before the NRC. Need for power is the domain of States, the PUCs, the PSCs that pass judgment on need, and set rates, that's their responsibility.

The NRC looks at need for power at a stage when the environmental consequences, or environmental changes would be the greatest, for example at a construction permit phase for a new plant that would be contemplated under NRC's regulatory framework for Part 50, 10 CFR Part 50 there is a construction permit, and at that stage the NRC looks at need for power only insofar as there's a reasonable expectation that some public

good would result from this undertaking, and this undertaking results in disturbance of land, consumption of resources in terms of construction, and, ultimately, the operation of the facility.

Under that licensing framework, 10 CFR Part 50, there's a construction permit, and then there's an operating license. That operating license review does not consider need for power either. Once the environmental consequences have been borne already the Commission has determined there is no need to revisit the need for power, because if the need for power was not there as determined by the Sstates this plant would not be coming online.

For license renewal, the power is in use today, and it serves traditionally as a baseload facility. That power is used today. The expectation is, if you take a look at the Vice President's Commission on energy for the next generation, that more plants will need to be built to provide power for the United States.

If you remove existing facilities from the power base, even more plants will be built, so the presumption is today there is a need for power. That plant is online delivering power. If you remove it from license renewal, that power will need to be replaced, and that is why the view that we look at for alternative energy for license renewal is to replace a baseload capacity, and delivery of demand. You turn

on the plant, it runs for its cycle; it's a baseload plant, it's delivering it today, the expectation is that need is

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- 4 MR. CAMERON: And in terms of the expertise issue, 5 even --
 - MR. ZALCMAN: We don't look at it for license renewal. At the time when we were faced with construction permits we had the capability, and the expertise is only so far as to determine that some public good will come out of this exercise; it is not to do the full economic analysis.
 - MS. STEELE: If you don't look at it in license renewal, why is it on the application? There is a category on it, and we saw what the company said and -- Are you saying it's not an issue?
- MR. ZALCMAN: I'm saying need for power is not an issue for license renewal.
- 17 MS. STEELE: Then why do you ask for that information?
 - MR. ZALCMAN: I don't believe we ask for the information.
- MS. STEELE: Okay. Well, I'll submit that. It was
 in the company's application material I believe when we were
 looking through that and commenting on it, and if -- I guess
 the basic point would be it should be in there for that to be
 factored in, but to be factored in according to how the State

is planning for the future energy needs, and if there's planning done and replacement power that does not rely on any relicensed nuclear energy then why look at this in the first place?

MR. ZALCMAN: Let me make one quick response to that, and I think that touches upon the point that John Tappert was making previously, that the ultimate province for the decision of whether or not this plant will operate is the domain of the license-holder and traditionally State regulatory commissions. It is not the NRC.

We are making the safety judgment, we are making the environmental judgment that the impacts would not be so great, and in fact that the plant can operate safely during the renewal period, but that can ... is not ... must operate the plant; that is not our determination.

MR. CAMERON: And there is part of every environmental impact statement on license renewal where we look at alternative power sources, and that may be what you may be thinking about, and I know that Eva Hickey back here from Pacific Northwest National Lab has done a lot of those analyses, and maybe -- I don't know, Rita, if you have time maybe the two of you could talk after the meeting about that particular aspect of it.

I guess from a facilitator's point of view I would just like to thank all of you for your interest that you

1 definitely have shown, and also for your courtesy.

And I'm just going to ask whether Barry, P.T., John, anybody has anything to say to close the meeting out.

MR. ZALCMAN: Let me follow up on a point that Chip made with Peter that in fact everything that you've presented today builds the record. This transcript becomes part of the record as we move forward.

We hope that you take the opportunity to reflect upon what you've heard today, and have the time and interest to take some of the material that we've brought along with us to help put this in proper context.

But the scoping period ends on September 2nd, so you have the opportunity if you want to embellish your thoughts, or if you want to encourage others to respond to provide the background information that we need to be able to consider issues. We are focused on the technical issues associated with those 92 issues, or if there's a 93rd or a 94th, or, if there's some reason to remove one of the issues, let us understand the technical details and the bases for that, and that's really going to assist us in doing our job.

Thanks.

MR. TAPPERT: I would just like to thank everyone for coming out tonight. You are an important part of this process.

As Barry says, the scoping period will continue until September 2nd, and the means to contact the NRC was on the

slides earlier. So we certainly encourage you to send in any additional written comments that you may have.

We appreciate the commitment that you have taken, as

We appreciate the commitment that you have taken, and the investment of time not only to come out here tonight, but obviously you're heavily engaged in these issues and a lot of personal time has been put into becoming informed, and we appreciate that as well.

MR. CAMERON: I guess we're adjourned.

MR. TAPPERT: Oh. People with the name tags will be staying around after the meeting. If you have any questions we'll be happy to talk to you.

[At 9:40 p.m., Tuesday, July 8, 2003, the meeting was concluded.]