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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING

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ENVIRONMENTAL SCOPING PROCESS FOR

UPDATE TO THE GENERAL ENVIRONMENTAL IMPACT STATEMENT

(GEIS) FOR LICENSE RENEWAL OF NUCLEAR POWER PLANTS,

NUREG-1437

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THURSDAY

JULY 17 2003

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BOSTON, MASSACHUSETTS

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The Public Meeting commenced at 7:00 p.m., at the Executive Conference Center at Bayside, 200 Mount Vernon Street, Boston, Massachusetts, Francis "Chip" Cameron, Facilitator, presiding.

PRESENT:

FRANCIS (CHIP) CAMERON

FRANK GILLESPIE

JOHN TAPPERT

BARRY ZALCMAN

DAVID AGNEW

PRESENT:

MARY LAMPERT

TIM JUDSON

PAT SKIBBEE

VERA COHEN

ROBERTO PENA

ANDRE MARTECHINI

SANDRA GAVUTIS

DIANE TURCO

DEBBIE GRINNELL

OLIVER HALL

BARBARA PYE

KATE ADAMS

JAMES MILKEY

DEB KATZ

JED THORP

A-G-E-N-D-A

I.	Welcome and Purpose of Meeting	4
II.	Overview of Environmental Rose in License Renewal Program by J. Tappert	9
III.	Overview of GEIS Update Project by B. Zalcman	16
IV.	Public Comment	49
V.	Closing remarks	118
VI.	Adjournment	119

P-R-O-C-E-E-D-I-N-G-S

(7:00 p.m.)

FACILITATOR CAMERON: Good evening everyone. My name is Chip Cameron, and I am the Special Counsel for Public Liaison at the Nuclear Regulatory Commission, and I want to welcome all of you to tonight's meeting.

And the subject that we are going to be dealing with tonight is the update of what is called the Generic Environmental Impact Statement for applications for the renewal of licenses, operating licenses, for nuclear power plants.

And it is my pleasure to serve as your facilitator tonight, and in that role I will try to help all of you to have a productive meeting. And I just wanted to cover 2 or 3 items about meeting process for you before we get started with the presentations and the discussions.

The objectives for tonight's meeting are that we, the NRC, clearly explain the license renewal process, and also the update process for the generic environmental impact statement, and answer all of your questions to the best of our ability tonight.

The second objective, and the most important one, is that we hear from you, and listen to you on what concerns and comments that you may have about license renewal and the update of the generic

environmental impact statement.

Now, our format for the meeting matches those two objectives. In other words, we are going to start with some NRC presentations to give you some information, some context, on license renewal.

Then we are going to go out to you to answer any questions that you might have. The second part of the meeting is to ask you, any of you who wanted to make a more formal comment for us, to come up and give us those formal comments.

And I wanted to emphasize the information sharing part of the meeting. Anything that you tell us tonight we are going to consider and evaluate as a formal comment on this process.

But we are also asking for written comments, and the NRC staff will tell you the process for how you do that. But anything that you say tonight is going to be -- will have the same weight as any written comments that we get.

But you may hear things tonight either from the NRC staff or perhaps from your colleagues, and other people in the audience, that will give you information in terms of formulating written comments, or actually stimulate you to submit some written comments.

So I really want to make sure that we do give you the information that you need to comment on

this process. And if we need to go back into the question and answer mode after we have some formal comments, then we will certainly do that. That may be a productive thing to do tonight.

The ground rules for the meeting are real simple. If you have a question that you want to ask when we get to the question and answer period, just signal me and I will bring you this cordless mike, and then please tell us your name and your affiliation, if appropriate, and then we will go to the NRC staff to answer that question.

I would ask you -- we have a lot of people, and we all thank you for taking the time to come down to be with us tonight to help us with this process.

I would just ask you to be concise if you can. That is difficult sometimes on these subjects, but I just want to make sure that everybody gets an opportunity to talk.

And when we do get to the formal comment part of the meeting, I ask people to try to limit their formal comments to 5 to 7 minutes, and with the number of people that we have tonight, I think that will extend us well to the 10 o’clock time period, or perhaps beyond.

So I would just ask you to try to be concise, and if you do have any prepared comments

tonight, we can get that attached to the transcript for you. We also have an evaluation form for the meeting that is on the table out there.

It helps us to figure out how we can do meetings better, and all sorts of issues that are connected to that. So if you are so inclined, please fill one out, and leave it with us, or drop it in the mail. It is metered already and so we will get that.

We will be here after the meeting is over for any informal discussions with you that you would like as long as you want to stay, except that I am thinking one caveat tonight is that they have to come up and set this room up for tomorrow. So we will have to probably be out of here by 10:00.

But I think we may have some flexibility. How can they throw us all out, right, but it is going to be approximately 10:00. And what I want to do now is I want to just tell you what is on the agenda, and introduce you to the NRC staff who is going to be speaking with you tonight.

First of all, we are going to start with a short piece on the license renewal process generally, and tell you what the status of that is, and we have Mr. John Tappert right here from the NRC staff.

John is the chief of the section on environmental review that is within the license

renewal and environmental review program in the NRC's Office of Nuclear Reactor Regulation.

Now, John and his staff are responsible for the preparation of any environmental reviews, be it on an application from a company to renew a license for a plant, or a license amendment, and if something is happening at an existing reactor, his staff does that.

And he has been with the NRC for approximately 13 years, and he was a resident inspector for the NRC, and these are the NRC people who actually are on-site at the plant all the time to make sure that our regulations are being complied with.

He was with the nuclear Navy before that, and he has a Bachelor's in Atmospheric and Oceanographic Engineering from Virginia Tech, and a Masters in Environmental Engineering from Johns Hopkins University.

After John is done, we are going to go right to the heart of the information that we want to give you tonight, and that is on the generic environmental impact statement update process.

And to do that for us, we have the project manager for that process, Mr. Barry Zalcman, who is right here. And Barry is also in the environmental review section. He has been involved for a long time

in the planning for the environmental reviews on license renewal applications, and he is responsible for this process.

He has also been involved in project management and supervision of emergency planning issues at the NRC, and also something called the early site permit program.

He has been in the private sector with Dames and Moore Engineering, and was a Congressional Fellow with Senator Harry Reid of Nevada. And in terms of educational background, Barry has a Bachelors degree in atmospheric science from Rutgers and has done graduate studies in geophysical fluid dynamics.

And I just want to introduce one other person to you, and that is our senior NRC manager who is with us tonight, Mr. Frank Gillespie, who is right here, and Frank is the deputy director of the regulatory improvement program, and license renewal, both the safety evaluation for license renewal, and environmental review, are both under Frank's domain as deputy director there.

And with that let's get started with John Tappert, and we will hear both John and Barry, and just bear with us. It will be hopefully not painfully long, and then we will go out to you for questions. John.

MR. TAPPERT: Hopefully not painfully

long. Thank you, Chip. My name is John Tappert, and I also would like to welcome you to this meeting here tonight. This the fourth of four meetings that we are having across the country on this topic, and thanks for attending.

I would like to start by telling you why we are having this meeting here tonight; to introduce the license renewal process and the role of the environmental review in that process, and finally to explain what we hope to accomplish tonight. The next slide, please.

Well, we are here at this meeting tonight 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 for license renewal or GEIS.

Now, this generic environmental impact statement, or GEIS, and the NRC rule that was 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 the NRC when conducting the environmental review. Now, this environmental review is an important part of the license renewal program, and along with the safety evaluation and on-site inspections, forms the basis of

the staff recommendation to renew or not to renew the operating license of a nuclear power plant.

Nuclear power plants may be licensed by the NRC for a period of up to 40 years. Now, while there is no engineering limitations associated with this period, the United States Congress and the Atomic Energy Act of 1954 envisioned that this 40 year period struck the right balance between the nation's long term energy planning needs and financial consideration.

Congress also envisioned that these licenses could be renewed, and it is so stated in the Act. But it provided no additional guidance, and the implementation details were left up to the Commission.

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

Also over this time the nuclear technology has matured, and the focus on reactor safety and environmental protection has been strengthened, and the industry has expressed interest in renewing virtually all of the nuclear power plant licenses in the country.

Now, 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 give you the status of the license renewal program in a later slide. This slide depicts the entire license renewal process. Now as nuclear power plants progress through their 40 year licenses the NRC initiated the license renewal program, and established a 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.

Now, these safety activities are focused on aging management programs of passive long-lived systems, structures, and components, and require a reassessment of those time limited analyses that assumed 40 years of use.

These activities involve the NRC staff development of a safety evaluation report, conducting inspection activities, and the independent evaluation by the Commission’s Advisory Committee on Reactor Safeguards.

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

Now, 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 that have provisions for key programs, such as emergency planning and security.

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

Now, the Commission determined that the action to determine whether or not to renew a nuclear power plant's license should allow for a high level of public participation during the environmental review, and also indicated that a site specific environmental impact statement will be developed for each and every license renewal.

Now, 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.

Now, the NRC has established implementing regulations for license renewal, and Title 10 of the Code of Federal Regulations, or 10 CFR Part 54, and we also have regulations for the environmental review in 10 CFR Part 51. Next slide.

Now 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 the current operating licenses.

And the specific activities associated with refurbishment that may be necessary for continued operation during the renewal period. The results of this comprehensive review were issued in 1996 as NUREG 1437, or the Generic Environmental Impact Statement for License Renewal for Nuclear Power Plants.

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

The findings of the GEIS that was issued in 1996 were codified in NRC regulations at 10 CFR Part 51. Now, in issuing these regulations the Commission indicated its intent to revisit the GEIS and its implementing regulations on a 10 year cycle to determine whether the technical bases or conclusions need to be updated.

Now as this program has been implemented, changes have occurred and the staff has captured these changes as they were identified in each of the site specific environmental impact statements that were developed for each license renewal application.

Therefore, the GEIS represents a snapshot

in time and now it is time to determine whether the changes that have occurred should be included in an update to the GEIS.

Now to date the NRC has received 14 applications for the renewal of 30 power reactor licenses, and has issued renewed licenses for 16 power reactors, and all indications are that multiple renewal applications will continue to be filed every year for the next decade, and virtually an entire fleet of nuclear power plants will seek renewal of their licenses.

So we are here today to listen to your views and look forward to your participation in helping the NRC 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.

But you have an important role in identifying generic and environmental issues that we should consider for all nuclear power plants. Now, in our notice for this meeting -- and extra copies are available at the registration desk -- we have identified resources to assist you in understanding how the license renewal process works, and the results of that process to date.

Now as we consider changes to update the

GEIS, we will continue to evaluate new applications under the existing regulatory framework. However, insights gained from this GEIS update process may very well be used during the review of the current applications.

And with that I would like to ask Barry to provide some additional details on the GEIS and the GEIS update. Barry.

MR. ZALCMAN: Thank you, John. Good evening. Again, welcome. For those of you who participated in the process to develop the generic environmental impact statement, and I will constantly refer to that as the GEIS, back in the late 1980s and early 1990s time frame, and let me welcome you back to this process again.

For those of you who recently became aware of license renewal, or have a particular interest that you want to share with us, welcome to the process as well.

If it becomes apparent from this process that the NRC will in fact need to go forward with an update to the generic environmental impact statement, then you will have additional opportunities to participate with us after we develop a draft, a draft generic environmental impact statement addendum.

And with that will go hand-in-hand a proposed rulemaking. After the opportunity to comment

on the draft of the GEIS and the proposed rule, the NRC would plan to issue a final generic environmental impact statement update, and a final rule that would be a companion, or attendant to the findings in that change.

As John indicated, license renewal has a number of components, and we are here tonight to focus on the environmental portion, and particularly the technical basis document, or that GEIS, the 1996 GEIS, and in fact an addendum was issued in 1999.

Now, as I walk through my slides, I would like to provide you with the perspective of the NEPA process, and how the NRC relates it to license renewal.

I plan to provide some detail on how the GEIS fits into the NRC's framework, briefly discuss how the hundred or so environmental issues associated with license renewal work together, and were evaluated already for all plants.

They were categorized so that the unique issues associated with an application for a particular plant become the focus of our review. So with that, let me start at a very high level.

The National Environmental Policy Act is the landmark piece of environmental legislation, and it expresses the principle that the Federal Government should consider and disclose to decision makers and

the public alike the effects of certain actions on the human environment.

The Nuclear Regulatory Commission determined that the licensing action and in this case, the Federal action, associated with an applicant's request to renew an operating license for a nuclear power reactor, warrants the development of an environmental impact statement.

And that provides the highest level of public participation in an NRC licensing action. The Commission also determined that the environmental review for license renewal may have common attributes for some, but not necessarily all, environmental issues.

As John indicated the Commission directed the staff in the late 1980s to undertake the development of a generic environmental impact statement, or GEIS, to establish an effective licensing process as part of license renewal.

Those environmental issues that could be resolved generically were analyzed in detail, and were resolved in the GEIS. Those issues that were unique because of a site specific attribute of the issue, or particular site setting, or unique plant interface with the environment, or variability from site to site, were deferred.

And these are required to be resolved at

the time that a specific applicant seeks to renew its license. Therefore by rule, the NRC staff prepares a site specific supplement to the GEIS in association with each and every license renewal application.

Each applicant is required to submit a detailed environmental report as part of its request to renew an operating license, and the staff is required to develop a detailed environmental impact statement that falls out of the interactions of the NRC with governmental, and of State and Federal agencies; a review of the information provided by the applicant in its application; environmental audits that we conduct and interviews that we conduct; and an analysis that we perform, as well as public participation.

The NRC relies in part on the findings of the GEIS, and the staff assesses whether or not new and significant information may be available that would bring into question any of the conclusions of generic issues already in the GEIS and the rule.

This is a dynamic process and the NRC even established a requirement that applicants for license renewal identify any new and significant information that they are aware of.

NEPA requires a systematic evaluation to perform the analyses to evaluate the environmental

impacts associated with license renewal actions, and mitigative measures are those measures that can reduce the impacts are also considered.

Therefore, NEPA and the NRC environmental statements that are produced are disclosure mechanisms. The EISs are used to inform decision makers and the public alike. EISs are subject to public scrutiny and public participation. Next slide.

Now, the range of technical issues originally involved in a thorough analysis as we develop the GEIS and again in the review of every license renewal application, is comprehensive.

For this GEIS and each and every site specific review, the NRC establishes a team of experts, its own staff, including experts participating with us at national laboratories. For this GEIS update the team consists of NRC staff experts and contractors, and, in this case, from the Pacific Northwest National Laboratory.

In total, there is more than 250 years of experience amassed for this effort, with backgrounds in environmental and siting issues. And this slide gives you an idea of the issues involved and the technical areas that the NRC and its team of experts have strengths in, and the issues that we evaluate. Next slide.

Now, let me briefly address how we arrived

at the generic environmental impact statement. NUREG-1437, or the GEIS, or the Generic Environmental Impact Statement, specifically applies to license renewal. And I say that because there are other generic environmental evaluations that may have been completed, and also inform license renewal decisions.

Since some of the evaluations already represent the Commission's position, by rule they serve a useful purpose in license renewal as well. And a number of these issues are enumerated in the NRC's environmental protection regulations at 10 CFR Part 51.

As we consider license renewal, the environmental equilibrium that has been established after some period of operation is well understood. And the situation clearly differs from new reactor licensing, where lands may be disturbed, where new demands may be placed on resources, and where new discharges may need to be permitted.

Such issues would have to be evaluated individually and collectively without the benefit of real and local experience. And as we stated earlier the Commission envisioned that there would be issues that would be common to all plants based upon real supporting information, no matter what type of reactor or what type of cooling system was used at the plant.

The NRC staff and its contractors obtained

a wealth of information leading up to the 1996 GEIS, and we refer to that as thousands of years, thousands of reactor-years of operating experience across the entire spectrum of technical issues as the basis of the initial hard look required by NEPA at the environmental impacts.

That effort, just as with this and every other environmental impact statement, is preceded by a scoping process. That's why we are here today. We are in that scoping process.

Ultimately, it will be followed with a draft and final environmental impact statement. The NRC established a significance test to assess the magnitude of impacts and considered whether mitigation of those impacts were warranted.

From that process the NRC organized environmental issues, and categorized them into those that would be generically dispositioned or Category-1 issues, based upon the thorough analysis already in the GEIS.

And those that could not be resolved generically and as a result require a site specific resolution. For example, one of the myriad of environmental issues associated with electric power production is the generation of ozone and nitrous oxides by the transmission line distribution system.

After analysis in the GEIS the NRC found

that the amount of ozone and NOX, or nitrous oxide, that was generated was insignificant, and it did not contribute measurably to the ambient ozone and NOX levels. Consequently, the issue was generically resolved in the GEIS and codified in the rule.

And, to date, we are not aware of any significant new information on that issue that would call into question the conclusion. As an example of an issue that could not possibly be resolved generically is the impact of major refurbishment activities on issues that deal with threatened or endangered species. Consequently, this issue must be thoroughly analyzed by the applicant as part of its submittal, and included in detail in its environmental report, and then the NRC independently evaluates the issue as part of its environmental impact statement.

So even though a Category-1 issue may have been addressed within the GEIS, the staff looks for new and significant information on Category-1 issues during each and every environmental review to determine whether or not it draws a cloud on the conclusion in the GEIS when it is applied to a particular site.

The scoping process when we first developed NUREG-1437 involved public stakeholders, as well as governmental officials, representing State and Federal Agencies, and our notice for this first review

of the GEIS invited them all to participate in this effort again.

The findings and conclusions of the GEIS were codified in the NRC's environmental protection regulations at 10 CFR Part 51, which established the requirements for applicants, as well as the NRC staff.

In all, at this time, there are 92 environmental issues related to license renewal, and 69 of these are considered resolved generically, and the remaining 23 issues must be considered site specifically.

A thorough analysis of GEIS issues are brought forward in the site specific supplement to the GEIS, and the balance of the applicable site specific issues are analyzed in detail in the site specific supplement, and there is a detailed accounting of each of the 92 issues in the NRC supplements.

Now some of the goals for what we are attempting to accomplish in this effort. The license renewal program is a large part of the NRC's licensing framework for power reactors, and has become a very large part of its workload. The NRC anticipates that the program will grow to about one application submitted every two months into the foreseeable future. As John indicated almost one-third of the nuclear power plants already applied to have their licenses renewed.

And 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 this update project the NRC staff has initiated the scoping process early to invite public participation so that the scale of the effort can be identified and accommodated to meet the Commission's goal of 2006.

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

The scoping process also helps the NRC staff identify and eliminate from a detailed study those issues that are peripheral or that are not significant, and which have been covered by other environmental reviews.

As I mentioned earlier there were other

analyses and environmental reviews, and not just those by the NRC, that may inform the NRC's license renewal process. As an example, one that you may be familiar with in recent years, the NRC recently updated the generic and environmental impact statement for decommissioning, or NUREG-0586. The NRC conducts environmental reviews associated with extended power uprates and publishes those for public comment. Programmatic EISs and other EISs are produced by the Department of Energy and other regulatory agencies.

The scoping process also invites other governmental agencies to assess whether or not they should be considered cooperating agencies under the regulatory structure afforded by the President's Council on Environmental Quality.

It also invites them to identify whether or not they have a particular expertise on an issue that may be invaluable to the NRC, or have consultation roles under other statutes that may have a bearing on generic rather than site specific issues.

The purpose and need for this update is to review the findings and conclusions made by the NRC in the 1996, and again in the 1999, time frame 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 is significant. Science and the

natural environment march on and our understanding of issues, and methods, and assumptions may need to be revisited. Experience gained in using the regulatory framework may identify situations where we use less than optimal approaches to address issues and to state conclusions. And changes in statutes, changes in regulations, and policies and practices, and even the structure of the power market may have a cascading impact on the NRC licensing framework.

Now, this slide is going to take a little more time. To date, the NRC has received 14 applications for license renewal for power reactors at 17 sites, and the NRC has issued 11 final environmental impact statements, and has acted on eight of these EISs already, renewing the licenses of 16 power reactors.

And 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 rules. Some of them are more familiar with it than others, and that is understandable. We have some utility organizations that are already on their second and third applications. Others are still contemplating whether and when to pursue license renewal. The staff continues to compile its own lessons learned, and from that list has identified groupings of candidate

drivers that may prompt a consideration for change.

As a framework, the staff compiled this list of seven criteria to help guide whether environmental topics identified by the staff or this scoping process, namely by you, is appropriate for this update project.

We are also looking for your feedback on this list of 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 is absolutely fundamental that we begin the process with the GEIS and its Addendum 1 as the starting point or our frame of common reference.

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

And on a related point that can serve as an illustrative example, the industry previously petitioned the Commission to amend the rules and to eliminate from one particular license renewal and 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 and made a recommendation to the Commission, and the Commission denied the request of the petitioner.

That is the mechanism that is to be considered for changes to the underlying rule structure. The focus here is the 92 issues that were addressed in the GEIS, which in turn were codified in the rule.

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

And as you consider these criteria, we believe that it would be useful to provide you with some examples so you can reflect on them in preparing either your comments tonight or in written form before the end of the comment period.

So if you bear with me, I am going to step through each one of these quickly.

Identify New and Significant [Information], which is a hard one. The staff identified isolated incidents of new information that had not been previously considered. For example, extremophiles. Extremophiles are those

microbiological organisms that enjoy living in high radiation and high temperature environments. It was raised to us under a specific application. And so we evaluated it, and determined that while it is new information, it is not significant, because those extremophiles would not be able to survive in the harsh environment of Chesapeake Bay, which is where they would get out into the public domain. So while they may exist, and we have no reason to believe that they do, they would not work themselves into the human environment.

Changes in staff practice have resulted from evolutions that have occurred since the issuance of the GEIS and its Addendum 1.

As an example, actions related to the investigation of Yucca Mountain to serve as a national repository, and the expression of interest by the industry and Congress in the deployment of new nuclear power plants.

Consequently, our environmental impact statements now recognize the Presidential declaration on Yucca Mountain, and a new alternative to license renewal involving new nuclear power plants.

The second criterion, Statutory or Regulatory Changes. The NRC is currently tracking EPA’s initiative on cooling water intake structures

for existing facilities. Now as this issue matures, it may have a bearing on the conclusions and the generic environmental impact statement.

As some of you may be aware, as a result of prior precedence, namely the Yellow Creek decision, the NRC is obliged to adopt the Environmental Protection Agency's technical conclusions regarding the Clean Water Act.

Should this issue be resolved before the NRC issues its addendum and companion rule, then it will be considered. If not, then after it is resolved, it will be reflected in the subsequent supplemental environmental impact statements, and be ripe for the next update of the GEIS.

Industry Structural Changes. Obviously, the deregulation of the power market and unbundling of services (generators of power 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 are interested to hear about the environmental topics that may be affected and the rationale for a change in the rule or the GEIS. Now, keep in mind that some utilities do own both the plant and the transmission lines system, while others do

not.

So a single conclusion in the GEIS may not apply to all of these utilities. That helps beg the question 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 systems.

The fourth criterion is Incorrect Characterization. Now the GEIS states that license renewal is a major Federal action significantly affecting the quality of the human environment.

The reality is that the Commission was not swayed by arguments for or against the point. Rather, it elected to require the staff to develop an environmental impact statement for each and every license renewal action, to ensure that the public had the highest level of participation on the action.

And this decision was taken in concert with the recommendations of the President's Council on Environmental Quality, the Environmental Protection Agency, State officials, as well as comments from the public.

Omitted Issues. In recent reviews the staff has considered the impacts associated with

dredging activities that may occur periodically and for a period of extended operation. Whether it is to be treated generically, because the analysis to support the permitting requirements of the Army Corps of Engineers associated with dredging, or site specifically, it should be addressed in the GEIS either way as an issue.

We are almost there.

Confusion. SAMAs are evaluated as a site specific issue unless previously evaluated under another licensing action, and some of the latter portion of the operating license proceedings did in fact evaluate severe accident and mitigation design alternatives as part of that review, and they meet the criteria of meeting SAMA. But not every plant has evaluated SAMA.

Associated with SAMAs is the environmental impact of severe accidents, which has already been determined to be small for all plants. The analysis for that conclusion is in the GEIS in Chapter 5, as well as in its appendices. In reality, the impact from severe accidents is another issue separate from SAMAs. Consequently, the staff will consider whether it is warranted to call this out and eliminate confusion.

And the last criterion that we are considering, and again we are seeking your comments on the criterion to determine whether or not they are fully comprehensive, is Realignment to Improve Clarity.

Currently, there are 92 issues addressed in the GEIS. Apart from SAMA and severe accidents that I just discussed, some of these issues are solely related to the license renewal period. Some of them are solely related to refurbishment activities, and 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 apply only to the renewal period because no major refurbishment is contemplated. Now one potential solution is to realign the issues so that any one issue is either for refurbishment or for the renewal period, but not both. The consequence of this will be an increase in the number of issues solely for accounting purposes and expected improvement in clarity.

Now hopefully this provides you with a sense of the staff experiences during the license renewal reviews that we have had to date. Our list continues to grow as more environmental issues or more environmental reviews are conducted, and we would like

to hear now what is on your list.

We would appreciate your input on the criteria that we are considering to drive a change, and the treatment of specific issues with detailed rationale and technical bases to support any recommendation for change. Next slide.

And as was mentioned earlier, we are currently in an intermediate step in the scoping process, and the process ends on September 2nd, and I thought it was useful to come into the communities around the country to explain this in a little more detail before the scoping period ended to give you an opportunity to reflect upon it.

All comments that you make from this transcribed meeting and the three other public meetings that we have held already will be considered.

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

After the end of the scoping period the NRC staff will issue a summary report, and that report will detail those comments on environmental issues that will go forward as part of the update project.

Now, we fully expect that we will receive issues that are not related to the environmental issues associated with the GEIS update, and some of

the comments will be forwarded to other program areas for their consideration and response.

And we expect to issue the scoping summary report in early 2004, depending upon the breadth and the depth of the comments received, and from this input we will be in a better position to refine the balance of the schedule for the draft and the final EISs and the companion proposed and final rule changes.

The opportunity to comment on the draft update will be the same opportunity as on the proposed rule. They do in fact go hand-in-hand. Now we fully expect to be able to meet the Commission's goal for the 10-year update with the addendum being published in 2006.

As I wind down with this background discussion, let me reiterate that I am the key point of contact, and with us tonight is also Stacey Fox, who is support for this project.

I have included Stacey's name as an alternative point of contact, and she may often be in a better position to respond to you more directly. Stacey is sitting in the back of the room.

We will be working together to manage the team of experts that we have aligned for this project. Now the scoping summary report that I mentioned will be available to the public on the NRC's web page and

through our document control system, the ADAMS system, and through our public document room in the Washington, D.C. area.

This slide also points out where you can review the associated documents. In addition, we will mail a hard copy to each and every one of you if you signed up and registered on the way in, and if you haven't, well, on the way out.

And the last slide is that, beyond presenting oral comments at today's meeting, there are three ways to provide written comments on or before September 2nd, and they are in writing to the Chief of the Rules and Directives Branch. And if you want to come and visit us in the Washington, D.C. area, we are located in Rockville, Maryland; or by e-mail and some of you have already provided us with some of your comments at LRGEISUpdate@NRC.gov.

All comments will be collected and considered, and let me remind you that you have an important role in this process. We certainly look forward to your participation.

We may or may not agree with all of your views on issues but we will consider them seriously as we go forward, and with that I think that both John and I are prepared to take any questions that you may have on the process and the project.

FACILITATOR CAMERON: Okay. Great. Thank

you, Barry. Are there questions on -- you heard a lot of material and is there any clarifications that we can provide to anybody, and just give us your name and affiliation?

MR. AGNEW: I am David Agnew, with Cape Code Downwinders. My question is regarding the GEIS update milestones. Are there public meetings scheduled in that process?

MR. ZALCMAN: As I indicated at the time the agency prepares its draft environmental impact statement, which is its reflection upon what is within scope and all the technical analyses that are used to support its work. It will prepare a document and we intend to come back into the community. We have four meetings around the country, and we will probably be back in this same area, if not the same building, if not the same room, to share with you our findings, and to share with you our technical bases for the decisions that we are proposing to be made, and that would be during a public comment period.

Again, like this is scoping for 90 days and we are here at some intermediate point within that process, and we will be back in the community to share our views, and that will be another mechanism.

Or if it is not in the Boston area, there certainly will be sufficient notice so that you can stay aware of what the activities are. This is one

location in NRC's Region 1, which covers many States.

So others are having to deal with us more electronically than face to face, but certainly we will come back.

FACILITATOR CAMERON: Okay. Thank you, Barry. David, did that answer your question?

MR. AGNEW: Yes. I guess that means there is a total of two public opportunities for public comment in this entire process for 28 years of nuclear pollution. Thank you.

FACILITATOR CAMERON: Is that correct? And, Barry, I think that this is going to be easier, and I hate to put you back up there, but could you speak from that microphone and just project so that we can get it on to the transcript?

MR. ZALCMAN: I am speaking -- if this microphone goes into the transcript however it sounds.

FACILITATOR CAMERON: That's right. We have one microphone.

MR. ZALCMAN: Let me make sure that you understand that the GEIS update project is to address those issues that are common to all plants. The specific application that is applied by any one license holder for license renewal has a similar process as this, but that meeting that we would have for scoping and the second round of meetings that we would have on the draft would be much closer to the

plant.

This is a generic activity, and so we have a meeting in each of our regions, but the site specific application gives you a whole separate forum to address the actual concerns for a specific applicant.

FACILITATOR CAMERON: Okay. Thanks, Barry. And I have another idea for you, which is I think to come right out there, okay? And to be closer to the audience, and that mike might pick you up.

DR. LAMPERT: Yes, Mary Lampert, Pilgrim Security Watch. I am a bit confused. Generic issues is as I understand more or less setting the rules of the game so that when it gets to site specific, we then will be limited by the generic rules on what we can bring forward as important. That is one point that I want clarified.

And the second point is this. That there are 32 States that have one or more reactors with one or more units. You then are saying that you will continue to get input from one location, a three hour meeting, in four of those States?

That means 28 States are going without the opportunity for comment, and also many States are quite large, and as a result people from the reactor or near the reactor site communities do not have an opportunity or the motivation to take part.

Obviously you were aware of the fact that you had one member of the public at your meeting in California. So therefore it would seem reasonable for your second round of public input to in fact get public input by going to more than four States, three hours each.

FACILITATOR CAMERON: Okay. You have two questions.

MR. ZALCMAN: Let me address them in reverse order. The first point that we make is that it is not just the four public meetings that we have. In fact, let me make sure that you understand that the public meetings are not required.

The four public meetings that we hold we think are meaningful in that it gives us an opportunity to reach out to an informed public that has an interest in what we are doing. But it is not just the four meetings that we have, but it is actually the entire scoping period, which is 90 days.

Individuals that have an interest and that want to participate in this process have an extended period of time where they can communicate with us. We have worked very hard in our notice to identify the pointers to all the relevant information to assist them in understanding this process.

We have provided if you see what we have attempted to do tonight with our open house, is to

provide you with additional information so that those of you that could come to join us in our four meetings, one held in each region, have additional information to go back and deliberate the issue.

It is the scoping process for 90 days that matters. This is one mechanism to communicate with the public, but there are other mechanisms as well. Now, when we try to reach out to an informed public around an individual facility, we think we go to extraordinary lengths. It is not just the Federal Register notice.

I don’t read it every day, and I can’t imagine that any of you would either, but we go to the lengths of sending out press releases and public service announcements, and buy ads in newspapers, sending letters and making attempts at reaching out to key individuals that have already expressed an interest on a variety of nuclear issues. And have their own pool of resources where they can reach out to other individuals. So we think that we have gone to extraordinary lengths. We do have four public meetings, and that is a considerable investment of resources already to do that, and when we have a meeting like this with a large turnout, it is refreshing to see an active community that wants to be engaged.

It is disappointing frankly when we go

through the same effort, and yes, only one person shows up. But we did go to lengths, and we tried to respond to that community as well.

The last time we did a generic environmental impact statement update, and we were in NRC's Region 4, and we did it in San Francisco, and was criticized for going to San Francisco, and they wanted us further down in Southern California.

And we went there and we got criticized as well. So we do go to extraordinary lengths to try and reach out to the public in environmental space. We give you an extended period of opportunity to comment and provide insight.

The question is how much further can we go, and frankly we are prepared to take whatever recommendations you have, and if there is more that we can do, and more that we should do, and it makes sense from our perspective, we are not closing the door on that.

But this is a scoping period and it is good until September 2nd, and it is a good opportunity to interact with us. Now, let me try and get back to the first question.

The first question dealt with the generic issues and the rulemaking structure that was established. It is fundamentally important to understand that if you had the opportunity to review

the generic environmental impact statement, how much detailed technical evaluation went into any one of those issues that served as a basis for the agency to judge what the significance of the impacts were.

We did the hard work and we did the hard look, and we did the technical analysis, and developed that GEIS in the 1996 time frame, and we circulated it for public comment.

We had a scoping process, and we had comment on the draft, and then we went final. And that informed the rule. Those 69 issues that are Category-1, or generic issues, we drew a conclusion on and the conclusion is now part of our rule.

That is the impact. But we still have the question of whether or not there is new and significant information that exists out there today that we must reconsider to judge whether or not it clouds the conclusion of the rule.

So those 69 issues are very much on the table, and they are in fact included in each and every one of our supplements. For the burden on the applicant, which is among the remaining issues that are site specific, they have to document in detail, and again by rule, their technical analysis, judging the impacts of those remaining issues on a site specific basis.

The agency does an independent evaluation

of that work, and we perform our own analysis, and we go out and we audit the work of the applicant as well.

All the issues then come forward in the site specific supplement to the GEIS. All the issues. Now, if your concern is involvement in a hearing process, you have an opportunity upon the submittal of the application if there is an issue that you have some concerns about, that is a mechanism for you to address any of the issues in the environmental report.

That is what you can challenge, but an applicant need not address the generic issues. We had a second opportunity to challenge the technical issues, and all of them when the staff completes its environmental impact statement.

So the issues are not precluded from further evaluation and further challenge. Does that help you? I responded to both questions.

FACILITATOR CAMERON: We are going to go to Tim Judson, okay? Tim.

MR. JUDSON: My name is Tim Judson, and I am with the Citizens Awareness Network, and this is a short point. I am just curious. When you say that the NRC goes to extraordinary measures to involve the public, I am just wondering what standard you are using to make that statement.

MR. ZALCMAN: The question is how do we judge whether or not we are going to extraordinary

lengths. I have had quite a number of interactions in the environmental community with sister agencies about the process that they go through for demonstrating that they comply with the National Environmental Policy Act.

When we sit with the purveyors of NEPA, and principally the Environmental Protection Agency, and explain to them the kinds of interactions that we go through, many times it sets them back, because we do more in some respects than they do.

This public meeting is not required. A public meeting on the draft environmental impact statement is not required. Other agencies issue a Federal Register notice seeking public input and that is the extent of it, and it complies with the rules, and it complies with the requirements.

We go and meet with the public in their community, depending on the type of action that it is. The efforts that we go out to reach out to the community include facilitated meetings, notices in newspapers, sometimes bilingual when it is appropriate. If I can use the interactions with Native American tribes. We send correspondence to tribes several States away because they may have an aboriginal tie to the land. I am not aware of any other agency that does something like that. And so we take our work very seriously, and when we reach out

into the environmental space, we think that there is a standard of excellence in participation, and certainly compared to the rest of the Federal family.

So if that is an adequate judgment of the standard, I think that this is a program of which I think the agency is very proud.

FACILITATOR CAMERON: Okay. Thanks, Barry. Did someone have another question? Did you have a question? Please tell us your name.

MS. SKIBBEE: Pat Skibbee, Citizens Within A 10 Mile Radius. Are we in the portion of this meeting that is called public comment, or are we still in the question and answer period for the 10 minutes that Mr. Zalcman was going to explain the process? Which period of the meeting are we in?

FACILITATOR CAMERON: We are answering your questions now.

MS. SKIBBEE: Okay. So in other words, we will go on answering questions and we won't get to the public comment period until people stop asking questions; is that correct?

FACILITATOR CAMERON: We will be getting to the public comment period at 8:30 so that we can get everybody on, but we did want to have an opportunity for people to get their questions answered.

MS. SKIBBEE: I just wanted to clarify

that. Thank you.

FACILITATOR CAMERON: All right. I think that was another process question.

MS. SKIBBEE: I think it was, too.

FACILITATOR CAMERON: Any other questions? Okay. There is one here, and please tell us your name?

MS. COHEN: I am Vera Cohen, and I am both with the Toxic Actions Center, and with the Women's Community Cancer Project. I am also wondering about you having said -- and I think you do mean it, but you say that you ensure that the public has the highest level of participation.

And perhaps other agencies aren't as good. However, nuclear matters are perhaps more serious, and when you give the public 90 days and you are going to be going through this process until 2006, it seems to me that maybe the public could have a year also, and I would like you to consider that.

FACILITATOR CAMERON: Okay. Thank you. And anything that is a comment during the question period, we obviously will consider that as a comment. So, thank you.

If there aren't any more questions now, let's go to the public comment and if we need to go back into the question and answer mode, we can do that. Thank you, Barry.

You can come up here and use this microphone, or you can speak from wherever you are. I just wanted to make sure that I introduced Mr. Pena from Congressman Markey's staff, who is here, before we get started with this. Do you want to say anything, Roberto?

MR. PENA: I would actually. I actually would like to address one of your concerns as far as being alerted by the NRC. I think that the Congressional offices -- and I represent Congressman Edward Markey, and if we were notified by the NRC of a hearing, we would be happy to submit a secondary press release to the local newspapers.

I think that it is a good way for our local communities to become more involved in the process I feel, but I think that is something that we might be able to talk about afterwards, and if any of you have any specific questions for me, we can speak afterwards.

FACILITATOR CAMERON: Great. Thank you. Thank you very much, and it was a great idea, too. We are going to go first to Andre Martechini, who is a Selectman in the Town of Duxbury. Andre, do you want to come up or do you want to stay there?

MR. MARTECHINI: Stay here. My name is Andre Martechini, and I am a Selectman in the Town of Duxbury near the Pilgrim Power Plant. I am really

here -- first of all, I would like to thank the NRC for hosting this meeting.

Even if it is not required, I think it is a great opportunity to get some input from the public, and so I do appreciate that very much. I am here really speaking on behalf of the Town of Duxbury. We passed a resolution recently at a town meeting requesting that -- and in particular this one was requesting the Pilgrim Power Plant to utilize dry cask storage for its spent nuclear fuel.

And I would like to address the issue of spent fuel, and one of our concerns, and I think in listening to the presentation on the generic impact statement, the GEIS, when you look at something -- and I think that many of the issues that you are going to I'm sure hear about tonight is that if everything is working perfectly, there is no environmental impact.

Or you might conclude as you do here in Table B-1 on spent fuel, that the impact will be small, and the reason is because nothing has a problem. The problem always comes up when you have a problem, and then the environmental impact is huge.

And I think that this is where -- and I am sure that you are going to hear it, because I have just been chatting with people, that there is this discrepancy that if it is not a problem, because everything -- the mechanical systems, and the people

are all trained well and everything is working as you anticipated, or as you hope it will, and certainly I hope it will, you just don't know what will happen when it does happen and if something goes wrong.

So we would like to -- certainly I would like to encourage some method of ensuring that prior to a licensing for those plants that are currently -- and I am sure that there are many of them out there, and I know that Pilgrim is one of them, but that are utilizing very high density storage, which potentially should a mechanical problem or a personnel problem, or a terrorist act, god forbid, happen, the conclusion of that could be catastrophic to a wide area.

So one of the things that I would like to suggest is if we can strongly look at the dry cask storage as a passive way to hold our spent fuel without relying on mechanical means.

And secondly is the idea of monitoring. The Town of Duxbury, which is 5 miles away from the plant, doesn't have radiation monitors, at least that I am aware of, and I am a Selectman, and if I don't know where they are, then I am sure that we don't have them probably, I think that we should be requiring as part of a plant relicensing certainly, and I think we should require it anyway, but it certainly is the relicensing, but that we install monitors, and a lot of them around, that could be doing two things.

One, monitoring the long term health, because a lot of the projections and calculations that you make in a GEIS are based on theoretical calculations, risk probabilities and things.

What I would be much more comfortable in, and I am sure that the public would be, is if you can say, yes, we have made a calculation that says that the chance and probability of developing cancer is X based on some theoretical analysis.

But then to actually monitor it over a period of time, and much more extensively than we are doing today. And the second benefit of course is during any kind of a nuclear event that you would be able to in real time monitor much -- and have it wired to FEMA's headquarters, to the NRC headquarters.

And with today's technology, we can do that. Maybe 30 years ago, you couldn't do that, but today we certainly can do that. So I think to really investigate a lot more the ability to monitor I think would be very much appreciated. Okay. Thank you.

FACILITATOR CAMERON: Thank you, Andre. Pat, are you ready to talk to us and do you want to speak from there?

MS. SKIBBEE: Thanks. I have a number of -- these are brief and to the point. Let's see. And a couple of process things first of all. The fallacy of the categorization of the size of the impacts --

you know how you have got small, moderate, large? And there is a footnote on this on the last page of the Schedule B-1, Number 3.

It is stated in this footnote that when the large categorization is used, the probability of that accident or situation is figured into the categorization process.

Therefore, I think that process is flawed and some impacts categorized as small or moderate ought to be categorized, or might be categorized as large if the probability factor were excluded.

Apparently, and as far as I can figure out, the probability factor is not used for small or moderate categorization. And if it is not used for small or moderate, it should not be used for large either.

And this goes back to something that the Selectman said, that it seems like that in the GEIS that the thought is really for the probability of an accident or something going wrong, as opposed to the consequence, and I think you really need to figure on both of those things.

And some other things. Some of it sounds confusing, but I think it has been answered by now. But this is a process question, too. This goes to the goal of avoiding confusion.

That the scope of the GEIS needs to either

expand or be qualified to include impacts from contemplated continued operation of the plant. In other words, if there is a relicensure procedure, and I think the maximum relicensure procedure or time rather is 20 years, if the plant is relicensed for, say, 10 years after its 40 year license time, the impacts considered in the GEIS need to take into account the contemplated impacts for the extra licensure time, and not just the contemplated impacts during refurbishment time.

And you could do that by using each of the 92 issues and having a section for refurbishment period, and a section for additional contemplated licensure time. I hope that I am saying that clearly if I am trying to help avoid confusion.

One other specific thing that I will talk about, which is a change in -- well, since 1996, and really sine 1999, too, when the last GEIS and its addendum were issued, is the increase in the amount of spent fuel stored on site.

This is a very specific change, because I think that everyone in the NRC I would hope contemplated many years ago that by the time that we got to 2003 that there was going to be a permanent place for the highly radioactive spent fuel.

And as we all know, there is not. So a really serious change that has happened since 1996 and

1999 is the increase in the amount of spent fuel stored on site, and there is no new way to deal with these amounts.

We talked about HOSS, Hardened On-Site Storage, and this is obviously an intermittent solution. So in the GEIS, when you are considering relicensure, we are already in a situation with licensure, and never mind relicensure, where there is no place to put this stuff.

And this has got to be in my opinion a potentially large impact. So I think that this is a serious, serious, change in human environment from ’96 to ’99 and probably the most important thing that needs to be considered. Thank you.

FACILITATOR CAMERON: Okay. Thank you very much. Let’s go to Diane Turco and then to Sandra Gavutis. Diane.

MS. TURCO: I’m fine.

FACILITATOR CAMERON: Okay. Let me know if you want to later on. Sandra.

MS. GAVUTIS: I don’t know if this is relevant to this, but it certainly is something that affects my environment and those of us living within the 10 mile radius of any nuclear plant, and it might be able to be included under your accident analysis.

One of the big, big concerns in all of our communities are evacuation plans, and emergency

preparedness, especially since 9/11. Everything has really, really changed.

The government has now said that we can give KI, potassium iodide, to a 20 mile radius. There are people who are very, very concerned that we couldn't even evacuate in a 10 mile radius. What are you planning to do about the shadow phenomenon of evacuation?

It really is a serious issue. These plans around plants have never ever been tested. There are exercises where the NRC and utility management get together at their EOCs, and their evacuation centers, and they have a paper plan.

But if you talk to parents around nuclear facilities and you say to them, well, your children in the school are going to be bused to some reception center and you may be bused to another reception center, why can't we test these plans?

It has been a problem that the NRC has just swept under the rug for years. I know that. I was a Selectwoman when the Seabrook Nuclear Power Plant's were written. I worked on those plans and I know that they cannot possibly work. The infrastructure is not there to evacuate people.

On the 4th of July, we had 100,000 people on Hampton Beach at the fireworks. Your own FEMA, Ed Thomas, years ago said that the evacuation plans could

not work in Massachusetts.

Governor Dukakis refused to submit those plans and I really think that it is an environmental issue. You may disagree with me, but I would like to have you certainly take a look at it. Thank you.

FACILITATOR CAMERON: Okay. Thank you, Sandra. Diane, are you ready? All right. And then we will go to David Agnew and Debbie Grinnell.

MS. TURCO: I am Diane Turco from Harwich, and this spring our town passed a public advisory question, asking that we be put in the emergency planning zone. We are 30 miles as the crow flies from Pilgrim.

And your job is to ensure public safety and that the public is protected, and I don’t even know why the plant was licensed in the first place because the public safety is not protected.

FACILITATOR CAMERON: Okay. Thank you, Diane. David.

MR. AGNEW: Hi, David Agnew from Cape Cod Downwinders. As I said before, I live on Cape Cod. I would like to preface my comments by saying a couple of things.

This is a very emotional issue for me and if I offend anyone, my comments are directed to the Nuclear Regulatory Commission and not to any individuals present.

And my other prefacing comment is that I wanted to thank the Nuclear Regulatory Commission for reversing its position of 20 years, and no longer opposing the stockpiling of potassium iodide. Welcome to planet Earth, and now I know that you really do care about human safety.

This process is a sham. The Nuclear Regulatory Commission regulates corporations which damage and destroy life in order to make a profit, in this case by generating electricity.

The question is how many cancers and birth defects and how much genetic damage is acceptable, and to whom is it acceptable. According to the NRC's own estimates the proposed GEIS will allow the killing of over 1,000 people over 20 years if everything goes perfectly.

Theoretically, public input is valued, but this process allows just 12 hours of input from the entire U.S. populous on the issue of what is an acceptable amount of radiation poisoning for our nation for another 20 years or maybe more. Guys, it is not clear to me whether at the end of 20 years are we going to be still stuck with it for the next generation.

In April of 1985, testimony before Congress, the Nuclear Regulatory Commission's Palladino said, quote, there is a 45 percent chance of

another severe core melt accident at a U.S. reactor by the year 2005.

Does this mean that such a failure is highly likely in the near future, or are we to believe that as the nation's commercial reactors continue to corrode, crack, and become embrittled, that they become safer?

Or perhaps the NRC believes that the economic pressures to cut operating budgets increase safety. Since we have seen by the recent near failure of a reactor vessel head that the NRC is unwilling to enforce its own regulations, does the GEIS presuppose the regular and continuing failure to regulate by this agency. It should.

It is clear that little was learned from 3-Mile Island, and safety equipment to avoid the hydrogen explosion portion of that disaster have been non-functional at Davis-Besse for over 25 years.

The ineptitude of this agency in regulating is mind-boggling. I wonder what the odds of a severe core melt at a U.S. commercial nuclear reactor are before the year 2040.

The secret 1982 Sandia Labs CRAC II study found that the consequences of a severe accident at a nuclear power station would be devastating, unacceptable to anyone not blinded by greed or power.

Regarding the size of populations

surrounding our nuclear stations, the value of property and the risk of injury from ionizing radiation, that document is extremely outdated. Is the GEIS based on a newer study of accident consequences? Is that document secret?

The GEIS should be based on a new public, independent study of accident consequences, funded by those who profit from placing the public at risk. With a total failure of national defense that occurred on September 11th, 2001, we saw that our adversaries are capable of sophisticated planning and great ruthlessness in their effort to cause harm to this nation.

Since then our government has provoked many more to consider harming us, and done little to protect the most vulnerable targets. Until it can be proven that the nation’s reactors, and control rooms, and spent fuel storage could prevent or withstand a similar or more powerful terrorist attack, like a Learjet filled with C4, the purpose and need for the generic environmental impact statement update is not clear.

If our consideration of license renewals is a waste of resources, then the renewal process should be terminated. However, should this agency continue relicensing, proceeding with criminal recklessness with no guarantee against a successful

attack, then the GEIS update should address the impact of a catastrophically successful terrorist attack.

What are the agency's assumptions regarding risk of health effects from ionizing radiation? If they are not consistent with those of Dr. John Gofman, they are probably wrong. He has the only track record for being right on this subject.

And thus the impact part of the GEIS would be faulty. The GEIS should assess risk, which is an impact, using assumptions of biological harm from ionizing radiation that are at least as cautious as Dr. Gofman's.

Continuing radiation doses to the public at current levels is unacceptable. Millirem by millirem this agency facilitates cumulatively raising the background radiation levels worldwide. Genetic damage to the entire biosphere, save humans, is stridently ignored, without even estimating the repercussions.

This is not only unwise, it is insane. We have nuclear power because the public was mislead by statements of electricity "too cheap to meter," and assurances by the likes of Dixie Lee Ray that nuclear waste was so small and harmless that she would eat her share.

We now know that we were being lied to. A vast amount of RAD waste has accumulated and

unfortunately the head of the AEC never ate her plutonium. Because the public was once fooled into believing that nuclear energy was safe and cheap does not make it acceptable to perpetuate the lie.

Until the once-through reactor cooling systems are reengineered to meet existing environmental protection requirements nukes dependent upon them should be closed.

Once through cooling with its destruction of fish, shell fish, birds, sea turtles, and marine mammals due to impingement and temperature shock, is unnecessary and unacceptable. The thermal pollution of a billion gallons of water per reactor per day is evidence of the insufficiency of this outdated technology, and the full effect of this primitive practice is not understood.

To suggest the continuation of this violation of environmental protection laws for an additional 20 years is absurd. At a minimum, the addition of cooling towers, which would reduce thermal pollution and attendant environmental destruction to 1/25th of its present rate should be required.

The assumptions about emergency planning that held sway when present reactors designed their emergency preparedness plans, they presumed sufficiency of a 10 mile zone, and no awareness of shadow evacuation, blissful ignorance of the power of

coordinated, multi-pronged terrorism, to name a few, those assumptions are now antiquated and all licensees should be required to develop new, independently approved, emergency preparedness plans, which plan for today's conditions, and those anticipated at the end of their relicensed period.

In [10 CFR Part 51] Table B-1, the Commission states the following regarding, quote, low level waste storage and disposal. This is quoting from Table B-1. "The low public doses being achieved at reactors ensure that the radiological impacts to the environment will remain small during the term of a renewed license."

The impacts of long term disposal of low level waste from any individual plant at license sites are small. In addition, the Commission concludes that there is reasonable assurance that sufficient low level waste disposal capacity will be made available when needed. Where is the evidence for reasonable assurance that sufficient low level waste disposal capacity will be made available?

This is an example of the ignorance of this agency. The American public does not want to be dosed with radiation. Since there no safe doses of ionizing radiation, referring to radiological impacts as small is akin to saying that a restaurant regularly serves only a little botulism.

The doses may be small to you, but for the parents of a child with birth defects, they are not. Shouldn't this agency at least pretend to respect the citizens that it is mandated to protect?

FACILITATOR CAMERON: Thank you, David. Would you like us to attach a copy of that for the transcript?

MR. AGNEW: Yes.

FACILITATOR CAMERON: We are going to go to Debbie Grinnell, and then we are going to go to Mary Lampert next. Debbie.

MS. GRINNELL: My name is Debbie Grinnell and I am currently a research advocate for the C-10 Research and Education Foundation based in Newburyport. I am a founding member of C-10, and served as the field director for the C-10 real time radiological monitoring program.

The following will be incorporated in a more detailed written comment to be submitted to the NRC. My comments this evening question the NRC's assertion that the existing license renewal process which assumes that all plants are operating in compliance with their design.

This is the basis from which you are operating when we go to small, moderate, and large. This is a huge assumption because the NRC has not addressed or reformed the following regulatory

processes before permitting the industry an issuance of a license renewal, and you have got to really look at these safety process issues and I am going to list them.

And this is part of my proposed realignment to improve clarity on your mission. The NRC must reassess and improve its problem identification and resolution programs. If the NRC had enforceable standards for problem identification and resolution programs at all facilities, then the number of plants that have been shut down for a year or more would not have occurred.

There have been 26 plants that have been shut down since 1984 for over a year for extensive repairs. This data is clear evidence that leaving problem identification and resolution problems up to the industry to develop without an NRC standard allows flawed programs to be in place.

The NRC needs to establish a conservative and high standard for problem identification and resolution programs, and develop a reliable inspection process to verify that the industry executes them.

Two, the NRC is reliant on the industry's risk assessment. The NRC has not established standards for probabilistic risk analysis or the PRAs, and must do so. The NRC has also not developed requirements for updating the industry's PRAs, or a

process for establishing their accuracy.

The quality of the industry's PRAs is currently unknown to the NRC. If a plant manifests serious safety problems, it is at that point that the NRC knows that the PRAs were flawed. This renders the process seriously flawed, while really useless in heading off a potentially serious safety problem.

Also, industry assessments are used to legitimize delayed attention to fixing problems, or to side step costly shutdowns to fix safety problems, For example, the Davis-Besse's owner provided the NRC a risk assessment to assure that they could continue to operate safely when the NRC knew that the probability of a safety issue was highly likely, but compromised.

Poor judgment was used because the process is flawed, as the PRAs submitted to the NRC were flawed. There is no standard. The NRC does not enforce its own technical specifications, which are a minimum compliment of safety equipment needed for safe operation and how long the operators of a reactor can operate when one or more pieces of safety equipment are unavailable.

There are numerous waivers issued by the NRC allowing plants to continue to operate outside of their own minimum standards for technical specifications because of industry assurances that

they are capable of operating safely even when the NRC's knowledge is apparent that there is compelling evidence to the contrary.

If technical specifications were not defined as a minimum standard, but rather as a optimum standard, then some leeway given to the industry might be comprehensible or acceptable.

The NRC does not have an effective aging management program as degradation caused by aging is revealed through failures, rather than through condition monitoring activities. This is a reflection of poor design and bad process.

It points to the shortfall of requiring less than adequate inspection technology and personnel. Furthermore, it points to the lack of diverse and multiple inspection techniques, and a pressing need for more periodic random inspections of less vulnerable areas.

A good example of this happened at Seabrook. The NRC Information Notice 2002-21, which is Supplement 1, Axial Outside Diameter Cracking Affecting Thermal Treated Alloy 600 Steam Generator Tubing, is a good example of a finding at the Seabrook plant which was both termed unexpected and unusual, and illustrates the pressing need for the NRC to require the industry to utilize probes and personnel which are qualified for the protection of the

degradation of steam generator tubes throughout the industry.

What has happened is that as an agency you have by polite suggestion thrown to the industry the caveat of we need to know if you are in compliance, because we honestly don't know if you are.

So this has now been thrown to the industry as if to say if you are not compliant, we would like to know about it, and we would like to know what you are doing about it. Your mission is to make sure that under the Federal Code that you are assuring public safety by enforcing the regulations.

You are not enforcing the regulations. The culture now seems to be voluntary. The industry apparently is being asked by your agency to come into compliance politely, and that seems to be the culture.

We expect more of you and we are paying your salary, and Congress has mandated you with the task that you are not fulfilling. The renewed license process has not included in its evaluation a plant's operating experience.

The waivers or exceptions given to a plant, or the need to bring an aging plant up to the current safety modification standards required of new and younger plants, is not a requirement.

This process that you have undertaken is based on the assumption that every one of these plants

is operating under its design.

We know that by the exceptions, the waivers, the event reports, that they are not. It's obvious that they are not. So you are starting from a point to establish a risk and an impact from small, medium, and large that you cannot do based on the assumption that you are starting with. Thank you.

FACILITATOR CAMERON: Thank you, Debbie. Mary, we are going to go to you next, and then we will go to Oliver Hall and Barbara Pye. Mary Lampert.

DR. LAMPERT: There are many significant issues that do in fact require updates under the category of postulated accidents, and it is very clear that the issue of security is something that has to be evaluated. This is not September 10th.

It can't be passed on to another agency, another department, and it clearly is something if you look to follow through with what Debbie was talking about, at consequences.

We can't be continuously making false assumptions on projecting probabilities of something happening. We have to recognize the fact that if the spent fuel pool, for example, is drained of water in 25 years of research at the NRC, it has demonstrated that there would be a pool fire and a release of radioactivity three times the size of Massachusetts, making Chernobyl look like a picnic.

That is the consequence and therefore all measures have to go into it as a result. And the next category that needs issues looked at has been touched on is waste management.

Your conclusion was that the issue of on-site spent fuel storage was small. Well, that is patently ridiculous. You again are making foolish assumptions.

We know that Yucca Mountain is not going to be available at 2015 probably, and there are questions, and there are legal issues involved, issues involving transportation.

And I think that Nevada is going to continue to have a Governor and two Senators. So therefore it is not a sure thing. However, even if it were to open, there is no requirement that the licensees send their waste to, and empty all their waste, and empty what they have accumulated for 40 years out there right away.

Even if it were a requirement, they would be unable to do it. As was pointed out by one of the Congressman from Nevada in a Congressional hearing that Yucca Mountain will be filled to capacity in 2032.

Then we are going to be in the exact same boat we are in right now, having generated 20 more years worth. So therefore for relicensing to even be

discussed without a requirement of low density pool storage and secured camouflaged dry casks is unconscionable.

And that does not mean putting dry casks as you are now up like bowling pins waiting for a strike. They cannot be just 6 feet apart. They have to be separated further so that if you hit one, you don't hit them all.

We also in talking about waste management, it was pointed out that in low level waste storage, impacts to the environment will remain small during the term of the license, and there is not going to be impact in apparently the waste community.

Now, where did this radioactive waste ferry come from I ask? No new low level radioactive waste site has been developed. The ones that are existing, like Barnwell, South Carolina, are environmental disasters, unlined pits, and they are gathering evidence of health impacts from what is there now.

So to assume that there will be no further impacts is ludicrous. And what guarantee do we have that the sites that now exist will continue to accept our waste? We do not know that by and well we continue to take Massachusetts' waste.

So then what? Are the host communities to these reactor sites going to be low level waste dump

sites, too? We know that they are unsuited to be dump sites because of their proximity to water and population.

So that has to be reconsidered. The assumptions again are baloney. And this is so bizarre. Decommissioning. Waste management small. Decommissioning at the end of a 20 year license renewal period would generate no more waste than the end of the current license. Now, where did that come from?

Again, where is the radioactive waste fairy? This is a fiction. It is clear that 20 more years of generation is going to be producing more waste. Under postulated accidents, quite clearly age degradation of components has to be considered.

To begin with their original license and their tech specs are not being adhered to now, and so therefore they have to be adhered to. As far as I understand both the NRC and the industry have stated unequivocally that they do not have the technology to identify cracks, and that a crack can develop to the point where the component can break in one cycle.

And we know that these power plants have aged more rapidly than expected. We know that there are problems with tubes, and we know that there are problems with embrittlement. We know that there are problems with cracking. Cracking of shrouds, and

cracking of this, and cracking of that.

Type-304 stainless steel, which is used throughout the BWRs, for example, are problematic. So you put old horses out to pasture if they are not holding up for the 40 years, and how are they supposed to hold up for another 20?

How can you deal with this generically when our nuclear power plants are not made out of the same cookie cutters, and as the GAO identified there is a long list of counterfeit and substandard parts that is now in use throughout the industry.

So how can you say that this part is going to have a certain expected longevity or what have you when you don’t even know whether it is the original part that it is supposed to be, and there has been no requirement to follow through to replace counterfeit and substandard parts.

Human health. A huge issue. The impact or the assessment in Table B-1 was radiation exposure. Radiation exposure to the public small and radiation doses will continue at the current levels associated with normal operations. Somehow that is supposed to be good news.

It is clear that from the current levels the footprints of radiation linked disease are found around our reactor communities. There was a case control study that dealt with leukemia, for example,

around Pilgrim, showing a four-fold increase the closer you lived to work.

There have been statistical studies of higher than expected thyroid cancers, and there have been studies of higher than expected Downs Syndrome in the Deerfield River Valley, and it goes on, and on, and on. So clearly then the current levels are too high.

And we know the effects of radiation are cumulative, and there is certainly far more research since Chernobyl showing the effects of radiation on human health; that they are cumulative, and that they carcinogenic with other toxic compounds. So therefore -- I mean, just picture a glass.

In our community the cup has run over for many people. It had too much radiation, and they are dead. Others, perhaps, the cup has only been filled this far, but given 20 more years worth at the same level, then that cup will run over.

So it is very clear that in relicensing that there has to be a reassessment in lowering the dose, and stocking the baloney of ALARA. You have to have a standard like a standard from a chemical release, for example, and other toxins.

You don’t see on the highway that we suggest that you go 65 miles an hour. You have a standard, and it would make sense to do the same, for

example, with the release of a chemical is to the standard of one cancer incidence per million.

Now, if we are to meet the same standard, which is only reasonable, then that would be reducing to 0.025 millirem per year. A standard, not a goal. Not a suggestion, but a standard, and as the Selectman from Duxbury pointed out, if you have radiation, and if you are considering a power plant to relicense, and they are in biologically compromised communities already, you have to have adequate monitoring.

Technologically, the monitoring that is on, for example, the Pilgrim Nuclear Power Plant is antiquated. You need to have upgraded monitoring to measure alpha, beta, and gamma on a continuous basis from all egress routes on-site, and that similar type of monitoring off-site located according to wind direction and topography, and to have instantaneous readouts to the Department of Public Health in the State, the Department of Emergency Management, and to the local communities.

To assure that these standards are met and if they are exceeded that a requirement that they cease operations, because they have already maxed out the population. That makes sense. And it makes sense again as Debbie, the previous talker was discussing. You can’t play games as you are doing with risk assessments.

That what has to be considered, and whether it is standard now is irrelevant, is the impact of a radiation dose on the people who are most at risk, and who in fact live by this reactor that you are going to allow to go for another 20 years.

That is not a hypothetical reference man who is 30 years old, and who weighs 170 pounds and is healthy, but rather who lives there and is most at risk, pregnant women, small children, the elderly, the sick.

We do not have homogenized requirements to live near a nuclear plant. So therefore if you are going to be discussing health impact, it is critical that it is done in an honest way to in fact protect the people who are there.

As David, the fellow from the Cape discussed, you mentioned that 20 more years of operation will bring about 1,200 cancer deaths. I think if we all picked up the paper tomorrow and we saw that 1,200 American soldiers who were killed yesterday, we would think that it was serious.

Why isn’t this serious? That is a good question. Plus, it is an insulting underestimation, because all it considers is cancer deaths, and not the other impacts which should be considered; reproductive disorders, cell damage, compromised immune systems, et cetera.

Also, it assumes accidents, and it does not take into account accidents and non-routine releases, such as that occurred in my neighborhood nuclear plant in 1982. Somehow that does not count.

Also, as we move right along, in your environmental assessments, it seems that you take into account the effect on the nuclear plant on the environment, but I have not seen a reversal, and the effect of projected environmental climate changes on the nuclear plant.

And I think that this is an issue that should be looked at, because we pick up the paper and excepting our President, George Bush, who apparently doesn’t read, it seems that it is pretty evident that we are seeing an increase, a rise, in ocean water levels, and more severe coastal storms, erosion, and there are all of these issues and projections that clearly should be assessed in looking at license renewals, particularly on a category of nuclear plants that are on the ocean and would expect to be subjected to this.

Now we are on the ocean, and the impact on aquatic ecology, and what was brought up was very important of the once-through. I thought that was a requirement that the least damaging technology to the environment is what is supposed to be used.

Quite clearly, once through cooling is the

most damaging technology that can be used. As was described a billion gallons of water a day being sucked in -- I mean, we all heard what is that sucking sound. Why, it is the Pilgrim Nuclear Power Plant cleaning out the bay, or any other equivalent.

The point being that in pulling in all that water you have the tiny larvae and fish, and eggs, being pulled in. You have the larvae being pulled in and the larger animals being damaged or pulled in, and then the super heated water going back out and having its negative effect on the plant life there, the fish there.

And then when you shut the plant down, those who can survive in a hotter water temperature now are nailed because the water gets cold again. There is another technology, being cooling towers, or dry cooling, and I would think that this should be a requirement of any relicensing.

I have many more things to say, but I have taken too much time. Thank you for the opportunity.

FACILITATOR CAMERON: Thank you very much. Oliver.

MR. HALL: My name is Oliver Hall, and I am testifying on behalf of MASSPIRG, the Massachusetts Public Interest Research Group. MASSPIRG is a non-profit, non-partisan organization with over 50,000

members throughout the Commonwealth.

I appreciate the opportunity to testify and MASSPIRG and the National Association of State PIRGs will follow our oral comments with written testimony. In general, it is clear that the generic environmental impact statements needs major improvements in order to adequately protect the public health and safety.

Further, many site specific issues must be addressed for each nuclear plant renewal application. In addition, the new GEIS should apply to licensees who submit applications prior to 2006. Specifically, there is a long list of problems with the current GEIS that render it inadequate, and it must be fixed with the updated GEIS. First, the increased threat of terrorist attacks must be taken into account.

Licensees must demonstrate that they have the means to resist an attack on the reactor building, and support structures, and spent fuel. Second, relicensing will result in increased spent fuel storage on-site, and it has not been demonstrated that on-site storage as currently executed is safe.

Third, the classification system for radioactive wastes fails to serve the public interest because the classification is based on how waste is generated, and not on how toxic or how long-lived it is.

Therefore, dangerous and very long lived radionuclides are in so-called low level radioactive wastes. Wastes need to be reclassified according to longevity and toxicity.

Fourth, 20 more years of operations would clearly produce more wastes of all classes. It is unreasonable to allow continued generation of wastes until a final solution is developed and current waste is transported to it. In the interim safer on-site storage must be required.

Fifth, our nuclear fleet is old and tired. As in any other industry the nuclear industry is experiencing problems with wear and tear of components and systems. The industry is now plagued with age-related deterioration of mechanisms unique to nuclear power operations.

Chronic exposure to extreme radiation, heat, pressure, fatigue, and corrosive chemistry are combining to cause a long list of mechanical problems.

As nuclear reactors get older and are relicensed the chance of failure of this equipment only increases. Aging management programs are intended to monitor the condition of the equipment and structures and implement repairs or replacements when necessary to prevent failures.

The long list of aging related failures since 2000, occurring about once every 60 days,

indicates beyond a reasonable doubt that the aging management programs are inadequate because they are not preventing equipment failures.

The NRC must ascertain the effectiveness of aging management programs, and not just merely the scope of these programs before granting license extensions.

Sixth, the NRC cannot continue with the generic approach to age-related degradation issues for reactor licensing extension. Our nation's reactors are not made from the same cookie cutter. In addition, many reactor components have been identified by the GAO as counterfeit and substandard.

Therefore, industry experience is not applicable. All that generic approach accomplishes is to effectively eliminate site specific public participation and intervention in the relicensing proceedings on aging issues.

In turn, this approach eliminates independent experts and public review of the potential impact of age related degradation issues from the license extension process.

It removes the affected public's discovery process and their ability to scrutinize and cross-examine industry and regulatory assumptions pertaining to aging safety components and public safety within the context of an adjudicatory proceeding.

Seventh, nuclear reactors release radioactivity to the air and water as part of their normal day to day operation. There is no safe dose of radiation. Its effects are cumulative. Many studies have demonstrated that low constant levels of radiation exposure can cause cancer and genetic mutations.

Continuing at current levels associated with normal operations is no comfort. Do we really need more radiation to add to our existing biological burden? The allowable rate of release has been too large, and must be decreased.

Eighth, the NRC currently grossly underestimates the risk of the public's exposure to radiation released by licensees through a number of statistical and methodological errors. Therefore, calculations have to be readjusted to determine real impact.

Lower allowable limits must be established, and monitoring put in place, and an alternative assessment performed.

Ninth, former FEMA Director, James Lee Witt, was asked by the New York Governor to evaluate emergency planning for Indian Point, and concluded that, quote, the current radiological response system and capabilities are not adequate to protect the people from an unacceptable dose of radiation in the

event of a release.

His conclusions should be applied to other facilities and evaluated in the GEIS. For example, the radiological emergency plan covers the 10 mile radius around each reactor. However, radioactive collusion from a release can be dispersed much further.

Additionally, population and traffic congestion is far different today and will be different over the next 30 years than when reactors were originally licensed. With respect to the terrorist threat and the Federal Government's disclosure that nuclear power plants are known targets, we need to reevaluate emergency planning at the local, State, and Federal levels.

This is just a partial list of the problems that need to be addressed before relicensing of nuclear plants can move forward. We look forward to submitting written testimony and to the NRC's responses to these comments. Thank you.

FACILITATOR CAMERON: Thank you, Oliver. Barbara, do you want to talk? All right.

MS. PYE: Barbara Pye. Most of what I was going to say has already been covered, but I am just curious as to -- we are going through this process of reevaluating this whole process, and why are you renewing licenses?

I mean, you know that there is a problem, along with everything else that we are talking about, and that we might want to consider stopping your renewal process until you have made a determination as to what should be done. It just does not seem like the right thing to do.

As well as something that has dramatically changed, which we have all said is September 11th, and the power plants and the security that is provided by the power plants needs to be improved. I mean, you have security guards that are walking out on strike because they feel like they are overworked.

And this is something that is a serious problem if they can't protect the plant, and then we are all in danger, and that is something that is universal to all plants.

FACILITATOR CAMERON: Thank you, Barbara. The next two speakers, Kate Parker Adams and James Milkey. Kate, do you want to come up here.

MS. ADAMS: My name is Kate Adams, and I am affiliated with the Citizens Awareness Network, and I am a doctoral student in public health and I live in Medford.

I first would like to just in passing acknowledge an interest in some issues, many of which have been or still will be raised by others at this meeting.

As a public health professional, I can speak at length about the questionable ethics of non-consensual exposure of the general public to radionuclides based on whole body radiation standards derived from Hiroshima, or as an environmental health person, I could talk about how what we really need is a total assessment of the environmental issues of the nuclear fuel cycle from start to finish.

Or even point out that there has been a serious lack of assessment of alternatives to nuclear power generation in this country as a whole. And I could go on at great length about the questionable nature of decision making that drives scientific inquiry and control scientific inquiry, instead of decision making which is supported by scientific inquiry of a wide and ranging nature.

But my main concern here today as a member of the Citizens Awareness Network is the security and the immediate need to do something about the irradiated fuel stored on site at nuclear facilities.

As we all know, September 11th brought wide-scale threats to our infrastructure and full into our vision, and not that they weren’t there before obviously, including those to these nuclear facilities.

Most nuclear facilities store large quantities of irradiated fuel and will continue to

store it for many years to come. Recently removed fuel is too hot to be moved to long term storage even if a suitable repository has space available, and this fuel must remain on site.

Fuel storage problems will thus not magically disappear when waste hits the roads and rails and tries to make its way to Yucca Mountain. Mitigative measures required by the GEIS must be specified to address this challenge.

Currently, Vermont Yankee and Pilgrim both store irradiated fuel in highly vulnerable configurations and irradiated fuel pools are present in 65 reactor sites throughout the United States. Without going into great detail, a terrorist attack using conventional weaponry could easily penetrate the external walls of most irradiated fuel storage systems and drain their cooling water.

As these facilities typically concentrate all or nearly all of the waste from a single reactor in an single area, the water cooling loss could result in ignition of the irradiated fuel and the resulting fire could distribute more than a thousand times the radiation released during the Hiroshima bombing.

A report commissioned by CAN calculated that such an attack on Vermont Yankee could render 24,000 square miles uninhabitable. As radiation doesn’t know any borders, this would conceivably

include parts of Quebec and Ontario, rendering this an international hazard.

To say that this is a small environmental impact is crazy. Through its design basis policies the NRC has taken the stance that protecting the fuel supplies is not the responsibility of the reactor operators or a condition for licensure.

This flies in the face of common sense. For example, if I applied for a permit to store several tons of fireworks in my garage -- hey, it is empty right now -- and I live in an urban area, I am quite sure that my city zoning board would have something to say about it.

In fact, I think they would be sufficiently concerned and responsible as to deny a permit from being issued based on what are obvious safety reasons.

I strongly doubt that they would stand there and say that protecting my family and my neighbors from a clearly preventable catastrophic disaster fueled by an unreasonable stockpile of a dangerous material was none of their affair.

But this is what the NRC has been trying to tell us about irradiated fuel. The terrorist attack risk can only be reduced or shall we say mitigated by reducing the density of nuclear fuel in storage areas, or in other words spreading it out a

bit, breaking the waste into multiple storage areas so you have a bowling pin here, and a bowling pin here, and not the strike that Ms. Lampert was mentioning.

And then armoring the resulted distributed containment. Hardened on-site storage systems would ideally consist of a dry storage canister of waste reinforced by concrete and steel, and protected by concrete, steel, and mounds of gravel, separated in space to prevent serial damage, and designed and tested to withstand reasonably foreseeable artillery and air attacks, and car bombs.

The NRC has a responsibility to protect the American people from this clearly preventable terrorist threat by requiring the implementation of hardened on-site storage systems for irradiated fuel as a condition of any and all licensing of nuclear power generation facilities, be it licensing or relicensing. Thank you.

FACILITATOR CAMERON: Thank you very much. We are going to go to James Milkey, and then we will go to Deb Katz.

MR. MILKEY: My name is Jim Milkey, and I am the environmental protection chief for Attorney General Tom Reilly. I want to apologize first for being slightly late. I had a nice tour of Beacon Hill, and Mount Vernon Street in Boston, and for those

of you who are from out of town, we are in Dorchester.

I have some comments prepared, but it is very late, and so I am just going to do a summary of the three main points. First of all, as we all know, 9/11 changed the world, and it is imperative to assess the impacts of that in the relicensing process.

Simply put, the NRC needs to reopen the GEIS process to fully evaluate the risks of a potential terrorist attack. And, point two, is that in that context the NRC needs to fully evaluate the potential benefits of alternative means of storing so-called spent fuel rods, including hardened dry cask storage as so many other speakers have eloquently mentioned.

The third and final point is a process point, and that is mainly that we recognize that at the margins there are certainly some specific details that may be too sensitive not to be kept confidential, but we want to stress that otherwise the question of the potential risks that are posed by an attack on a nuclear plant should be fully debated in an open and democratic process as NEPA requires. Thank you very much.

FACILITATOR CAMERON: Thank you, Jim, and next will be Deb, and then after Deb, we will go to Fred Katz, and Tim Judson. Deb.

MS. KATZ: I want to start with a sense of

this process. You know, this was one of the hardest places for me to get to than I have ever gone to an NRC hearing at, and I want to commend you for making it the most difficult public participation process to engage in yet.

Now, we might do the next one in Canada, which would allow us an even greater struggle, and a sense of real determination to participate. So I wish we could make them a little easier to access for many people.

But this is in line with the schizophrenic sense of being here tonight that I am having, because there are a number of concerns. People have really raised them, and I am not going to go into them in detail.

But everyone here is talking about safety, security, post-9/11 issues, and the NRC has said that post-9/11 attacks will not be addressed in relicensing.

So what are we doing here? I mean, what is this process that is taking place and in which it is clear -- and for every place you go and in every meeting you have, at every site you go to -- people are raising safety and security vulnerability of irradiated fuel pools, vulnerability of dry cask storage, and the NRC says it is taking it off the table already. That is what the Commissioners have

decided.

So what is this process about? I mean, this is unconscionable. It is unconscionable. It is unethical. That us poor people come here and say please do something for us and you have taken it off the table already.

And in fact at a Commissioner's meeting, you made clear -- Commissioner McGaffigan made clear that he wanted the sense of the vulnerability of irradiated fuel pools to be attacked. That was the position that he took on it, without having an analysis done.

So we are here in fact attempting to get a fair and reasonable process in which the NRC has already stacked the deck about what they are going to do.

This is unacceptable and if the NRC can't in fact introduce a fair and equitable process and scientific one, then Congress has to, and the people have to, and the States have to, because if the NRC isn't go to protect us, then somebody better, because our communities are already suffering from epidemics of disease.

And to now add terrorism to it just takes it over the top. It is just over the top. I'm sorry. Maybe I am suffering from nuclear hysteria at this point, and I just need some better drugs. But I don't

think so.

I think what I need is a solution or at least some deterrent to the incredible vulnerability that I live in, and that my community lives in, people in the Northeast live in if there is a catastrophic attack.

And what is mentioned in this generic issue that the Mark-1's are the most flawed reactors in terms of a vulnerable attack on the reactor, and of course we have the Pilgrim reactor, and we have Millstone, and we have Vermont Yankee. They have fuel pools dangling.

I shouldn't say dangling, but they are supported 6 or 7 stories up in the air, and in effect an attack on one of them would give the best bang for the buck in certain ways, because what you would have is the whole thing crumbling to the ground, and our expert has estimated that an attack on Vermont Yankee, just a medium-sized reactor, would in fact contaminate 25,000 square miles, making that area uninhabitable for decades.

Now, I think that this is a generic impact issue personally, but I may be biased because I lived there. I want to raise a couple of other issues with this, because the issue of evacuation that was raised, we do not have realistic evacuation plans.

If we are talking about a fast breaking

attack, and then the ability to actually move people out of an area has to be addressed realistically, and if you are going to relicense, then there has to be proof that the plan is going to work. Otherwise, they can't get relicensing.

It is really insane to allow that farce to go on any longer. What there also is in terms of the issues of age related degradation and also these power uprates that are going on, because in fact Vermont Yankee has gone for a 20 percent power uprate, and Pilgrim went for 1 or 2 percent.

But Vermont Yankee is up there with the guys at this point now that GE has made it easier to operate larger amounts, and one of the issues in terms of the uprates and our concern is that in terms of an accident or an attack on a reactor, what the Union of Concerned Scientists has estimated is that 34 percent more contamination would be released into the environment, even though the uprate is only 20 percent, the amount of contamination released in an accident or in an attack would be 34 percent higher. That is an unacceptable increase in terms of vulnerability.

There is no solution to the waste problem as we all know, and in fact to start a second generation through the relicensing of reactors when we have not solved the waste from the first generation,

except to think of dumping it on Native American land seems ludicrous.

I want to end with the health consequences, because they are real and immediate. I mean, when Pixie was talking about the Downs Syndrome in and around where I live, we have a 10-fold increase in Downs Syndrome.

We have statistical significance in non-Hodgkins Lymphoma, and statistical significance in multiple myeloma and breast cancer, and that may not mean much to people outside of my community, except if you live in another reactor community, or you live in a waste community where everyone has the same statistics.

And so when you talk about small impacts, these may be small to you, but the suffering and loss of our children is unacceptable to us, and is not a small impact, and it is an insult to us that it is talked about that way. Thank you.

FACILITATOR CAMERON: Okay. Thanks, Deb. You raised the issue about the Commission taking off the table, and we will hear from Fred and Tim first, but I just want to ask the staff perhaps to talk to that point, because it is an extremely important point. But let’s go to Fred Johnson, and then we will go to Tim Judson. Fred.

MR. JOHNSON: No, I am not going to speak.

FACILITATOR CAMERON: Okay. So let's go to Tim then. Go ahead, Tim.

MR. JUDSON: Well, my name is Tim Judson, and I am with the Central New York Chapter of CAN, and I live in Syracuse, New York, and god bless everybody from Massachusetts and the tri-State area for getting here.

I am wondering why I came in a lot of ways. But I think to kind of give a sense of this whole issue, and these issues that people are raising, I guess the real reason that I am here is that I live next to 2 of the 3 oldest reactors still operating in the country.

And with the GEIS that is before us, within the next 2 years those two reactors are going to be relicensed for 20 more years of operation, and by the time that that happens, they will be older than any other reactor that has operated, any other commercial power reactor that has operated in this country.

And it is beyond any of the conception of what that means under the NRC's and the industry's experience at this point. And at the same time that this is going on, I live next to three boiling water reactors.

Well, there are three reactors with these fuel pools six stories up in the air, and there is

already 1,350 tons of spent fuel sitting on that site. And what I have become aware of actually since doing a little research is that for every pound of reactor fuel that is produced there is 4,000 pounds of uranium tailings that are produced in the mining process.

And so that when you conceive of there being 20 more years of operation, and especially in multiple reactor sites, you not only have a monstrous waste problem, and a growing terrorist target, but you have also got a tremendous environmental justice problem, with literally 2 tons of radioactive waste produced through the operation of that reactor before the fuel even goes into it.

I mean, this is absolutely abominable. I know that it is not accounted for in the GEIS, or as an environmental justice issue, or as a consequence of the continued operation of the reactor.

There is literally a mountain of radioactive waste associated with every single one of these power plants, but you don’t see it on site. It exists elsewhere, and it is atrocious.

But I think what I am most struck by being in this room tonight is this sense of being at this diminishing point in our relationship with the NRC. That there is this profound attachment between the regulators of nuclear power and what they are considering, and moving forward with this bureaucratic

process that you have been put on by the mandate of the Commission that is completely out of step with where the public is, in terms of where in fact the issue of nuclear power is in this country.

And that this is going to come to a screeching halt sometime soon either by catastrophe or by mandate of Congress, and I am really wondering what the point is to moving forward with relation to this GEIS at this point given the state that we are in.

FACILITATOR CAMERON: Thank you, Tim. We have some more time, and I think that was the last speaker, okay? But we do have some more time and I wanted to see if the NRC staff wanted to say something about the security issue that Debbie raised, and go back to you to see if there are any other questions.

MR. TAPPERT: Yes. I am John Tappert, and first of all, I would like to thank everyone for their comments and thoughts, and you certainly have brought a lot of passion and concern on these issues.

But I think we need to remind ourselves that the generic environmental impact statement for license renewal is just one piece of the regulatory framework that the NRC uses to regulate these facilities.

And there is a lot of important issues that the NRC is addressing that it is not addressing through this document. A number of the speakers have

raised the fact that the world has changed since 9/11, and the NRC could not agree more.

I mean, the thought of the impacts of terrorism --

(Comments off microphone.)

MR. TAPPERT: (Responding to comment) That is not true. The consequences are potentially very large, and the NRC has done a lot of things to improve the security posture of these facilities around the country. And they are not waiting for plants to come in for license renewal.

Actions have been taken at each and every one of these 103 nuclear power plants to increase their security posture. (Comments off microphone) Just a minute and we will take your question. But, immediately in the aftermath, a number of orders were issued to these plants to enter compensatory measures to increase stand-off distances from vehicle bombs, and increased the number of security guards, a number of things were done.

Earlier this year the Commission issued another round of orders, changing the -- what we call -- the design basis threat, which is the characteristics of a terrorist adversary that the plants have to defend against.

And the Commission has continued to study this issue, and will continue to impose additional

requirements as they become necessary. So the point being is that this is a very important issue, and the agency acknowledges is a very important issue, and is taking action, but you are not going to necessarily see it -- well, in fact you won't see it in this generic environmental impact statement.

(Comments off microphone.)

FACILITATOR CAMERON: Deb, let me just -- we want to get you on the transcript so that people can hear what you said. You may not or people may not agree with how the Commission is handling individual issues that John was talking about, but this is just a process point, okay?

I am not trying to convince you of anything, but the issues, or a lot of serious issues that we heard about tonight, they are being addressed through other processes in the Commission, and not through the GEIS on license renewal.

And obviously the GEIS on license renewal, you may believe that some of the same underlying philosophy and problems are still in operation there.

But I just want people to understand that this is not like the big mother of all regulatory processes here for everything that -- for all the problems that people are concerned about. And I seriously mean it just as a process point. Deb.

MS. KATZ: The NRC made it clear in the

design basis threat -- regulations have been put through basically that they will not make licensees meet post-9/11 attacks. I mean, that is right in there, and that in fact the military has to deal with that. It is right in the document.

So although the NRC's job is to increase not just public health and safety, but it is also to make us have confidence in the agency that they are doing their job. You are at an all time low, and you need to know that, because we don't have any confidence at this point, and that you say that the GEIS is separate.

Well, we have experienced it as just schizophrenic, and if the process isn't stopped to actually deal with reality, then all you have is just a bunch of paperwork that someone can make look good in the end, and we are still stuck with the terrorism.

And we are still stuck with the vulnerability, and all you have done is push a bunch of papers and said it is okay. And it is not okay with us, and they have increased security, and I am really glad for that. I am glad for everything that they do,but it is nowhere near enough, and I have no confidence in the Commission given the clearly political and bias stance that they are starting with

FACILITATOR CAMERON: Okay. Thanks, Deb. Let's go to Mary.

DR. LAMPERT: I would just expand on that. I actually have no confidence. As mentioned, a Commissioner in the NRC in a March transcript directing [RES] ~~NRR~~ Director Thadani to in a day that you can essentially deep-six the study on spent fuel pool dangers and hazards put out in the Princeton Journal in January.

It has given us a lot of trouble, and you can read it, and I think it begins on page 44, number 1. So confidence in the Commissioners? Give me a break. Confidence in security. Now, let's think.

They are not required to or are able to resist or defend for an air attack. So we have this nonsense of the Commissioners trying to come up with new analysis of how rigid the reactor building is.

Well, who cares. You don't have to hit the reactor building. There are softer targets that are necessarily for that fuel pool to keep going, and the reactor, such as the control room, the switch yard, and I could give you some other clues. I used to be a housewife. That is a joke isn't it?

And so then you say, well, we will rely on the security at Logan Airport, major airports. That is ridiculous because we have all these secondary airports. You don't need a jet. You just need a small plane that is fuel laden and you have done the job.

And so if you don't do what Congressman Markey and Senator Clinton, for example, are asking for, Avenger missiles on site, like we had at the Olympics, the summer Olympics and the winter Olympics, and they are hanging out around the White House at various times, if you can't come up with 65 for the 65 operating sites, then you are not taking it seriously.

I was out in my 36 foot sailboat right past Pilgrim Nuclear Power Plant every weekend this summer that it has not rained. So they have buoys at 500 yards, and that didn't impress me. The kids used them as a slalom course.

You know, if you don't do what they have done in Baltimore Harbor and similar areas and put chains between the buoys that go to the floor, and have 24 hour surveillance, you have not got anything.

No trespassing signs. Well, that is not going to impress a terrorist. For the land, our previous Governor sent for the National Guard to stand outside of the main gate. This is 1,600 wooden acres.

To the south, it rises up to private property that is wooded and that looks right down on the reactor. Now, the security personnel are protesting Wednesday, Thursday, and Friday, because they are working seven day shifts for 12 hours.

Now, who are you going to bet on? Who is going to win, a terrorist or a sleepy guard, who like

at Indian Point said they can't even get up with a gun in their hands because he is so out of shape.

And that is Wackenhut at Indian Point, and Wackenhut here. The same company. So what do we have. Paper.

FACILITATOR CAMERON: Okay. Thanks, Mary. Debbie, before we go to you, is there anything else the NRC wants to say at this point, and then we have a couple of more questions or statements.

MR. TAPPERT: I am sure that we can on with this topic all night, but again it is not going to be addressed in the generic environmental impact statement. It is being addressed by the agency, and these are the most hardened civilian facilities in the country.

AUDIENCE: That is bullshit. Don't go there.

(Comments on microphone.)

MR. TAPPERT: Okay. And your elected representatives are certainly advocates for you in this regard as well. But finally if I could, regarding the security, actions are continuing to be done where they have established a whole new office in the agency that is focused on those issues. We are not those people.

We cannot respond in any greater depth than what we have already done, but there are people

who are working on that every single day, and that is all that I can tell you.

FACILITATOR CAMERON: Thanks, John. Debbie, did you want to say something?

MS. KATZ: The issues around 9/11, and we are all in this together, and certainly we all need to be unified in understanding that we are all at risk, and not shove reality into a place that is very insulting for the public.

I think that there are so many cultural issues within your agency that are so disturbing as a bureaucracy, that as bureaucrats who have worked for this agency for a long time, if you are not aware of them yourself, then you are unable to see the forests for the trees.

And I think as professionals that you need to look at your agency and the culture with which you are operating. And to voice these concerns in your departments, and within the agency.

We have a steam generator action plan that is the biggest joke that I have ever seen in my life, and it is a huge unrolling problem that is so serious in dimension that it got away from you, and everybody is sitting on it and canning it right now because you really don’t know what to do with it.

And there are a lot of good people in your agency, and there are a lot of good technical people

in your agency who have done their work, and it has not been acknowledged within your agency.

And I don’t know quite where this culture falls apart, but there are good people at the NRC and you guys may be part of it, but the culture is falling apart and we know it.

It is too big for you to handle because things were swept under the rug and not addressed and not dealt with by this agency. And the gig is up. It is very soon.

FACILITATOR CAMERON: Okay. Thanks, Debbie. Pat, did you have anything that you wanted to say?

MS. SKIBBEE: Thank you. This has been more or less talked about, the long term storage of highly radioactive waste, and just this evening I picked up a bunch of NRC literature dealing with radioactive waste production, storage, and disposal.

And I was noting in here that the candidate site, Yucca Mountain, according to this NRC document, the specs for the containment vessels at Yucca Mountain or wherever the site ends up being at, have to maintain their integrity for between 300 and a thousand years.

But the half-life of plutonium 239 is 24,000 years. So we are talking about what to do with the waste long term, I think this is an unsolvable

problem.

And I think that the only thing we can respond -- well, it is too late for responsible action actually, but the only thing that can be done at this point is to stop generating power in this totally irresponsible manner.

You can equate it on a small scale to this little town where I used to live, where it turned out that it was discovered that the whole downtown, comprising about a thousand people, were flushing their toilets, and you know what? That stuff didn't have anywhere to go. It just went into the river.

And they finally figured that out, and obviously that problem pales compared to this. But 24,000 years for a half-life. Integrity of the vessel, 300 to a thousand years.

These are NRC standards, and how can we live with this? We can't live with this. But a question. On the relicensing procedures, how long before the end of a current license for a plant can that plant obtain relicensure?

FACILITATOR CAMERON: That is a good question, and John.

MR. TAPPERT: The regulations allow licensees to submit for licensure renewal 20 years prior to the expiration of their current license. So they can apply 20 years prior, and then after the

safety review and the environmental review, and the on-site inspections, the agency makes a decision to grant that relicensing or not.

So however long that period takes, but our schedule right now is typically two years for review. Did I not answer your question?

(Comments off microphone.)

MS. SKIBBEE: Well, say for example that you have got an operating plant that has an existing license for 40 years and that license is going to expire in 2025. So you are saying that in 2005 that plant can apply for relicensure and in around 2007, that plant could be granted additional years that will begin in 2025; is that correct?

MR. TAPPERT: Yes.

MS. SKIBBEE: So essentially you are granting a relicensure to a plant that has 18 years to go on its existing license, and so you are making a decision based on the supposed conditions at that plant, 18 years hence? Okay. Here is a process that needs a change.

FACILITATOR CAMERON: Okay. We are going to go to David, and then we are going to hear from someone who we have not heard from, and then to David, and then I think we will close out. And tell us your name, sir.

MR. THORP: My name is Jed Thorp, and I am

with Clean Water Action in Boston. I actually just moved to Massachusetts, believe it or not, about four days ago. So I am not an expert on nuclear power in Massachusetts.

However, ironically I just moved from Oak Harbor, Ohio, which the NRC folks know is the site of the Davis-Besse plant which many of you have affectionately referred to tonight.

We found out there last year that there was a football sized hole in the reactor where boric acid I think had eaten through that. So if you want to talk about a place where confidence in the NRC is low, that would be Oak Harbor, Ohio.

Just as a general comment, I want to say that I am kind of sad that this whole conversation seems to be predicated upon the assumption that there will be a proliferation in the number of nuclear power plants in the U.S.

And I almost feel like no matter what we say tonight, that process is going to continue and go forward. And that to me is a little sad because I think as some people pointed out here tonight, there is a mass movement in this country of people who are posing the question of whether nuclear power should go further at all.

And also I know that we are kind of limited here in the scope of what we are supposed to

be doing tonight, and I know that some of these concerns about security issues and what not are maybe outside the scope of what you guys are charged with here tonight, but it is obviously a concern, and what I want to know is where is the opportunity for public participation in that part of the process.

And let me know about it so that I can get on that mailing list because it is obvious that there needs to be some public input on that side of things. And that is a serious comment. If you can let us know how we can be a part of that. Thank you.

FACILITATOR CAMERON: Okay. Thank you.

(Comments off the microphone.)

FACILITATOR CAMERON: And that is an interesting question, okay? Because there are all these separate actions that are going on at the Commission that you can try to participate in or try to influence in various ways, and I am thinking about some overall way to get tuned in.

And I can only think of just as a starter going through or going to the NRC website to see where you can register comments. We are having a meeting in Washington next Tuesday with David Lochbaum and some other people to talk about perhaps making it easier for people to find in one place where all of the things that we have out for comment are.

So that you don’t have to search through

these and you can see that there is a proposed rule on this, or there is a proposed licensing action on that. So maybe that will be just a real tiny step towards what you are talking about.

You have not said anything and I think you do want to say something.

MS. ARDITTI: Yes, my name is Rita Arditti, and I am one of the founders of the Women's Community Cancer Project, which is a grass roots organization dealing particularly with the issues of women and cancer. I am astounded by what I have heard in this session. I am really shocked.

Our organization is committed to the precautionary principle, and the precautionary principle and what you guys are doing are just completely opposite.

The precautionary principle is about prevention, and is about if there is suspicion of harm, you stop doing what you are doing, and you look at the bigger picture, and just a suspicion of harm should be enough to prevent a release in your plants.

We are going to take from this session and what we learned today to the Women's Cancer Movement, and you are going to hear about it.

FACILITATOR CAMERON: Thank you. David, let's go to you for a final comment, and then I want to ask if Frank Gillespie, our senior official here,

wants to say something, and then ask John to close it out again. David. This is David Agnew.

MR. AGNEW: Well, I have a couple of comments. One is that the meeting as it was advertised was to go to 10:00 p.m. and we have got 15 minutes and so I don't know why I should be the last person to speak. However, I want to make one comment which has not been mentioned tonight, and that is that there is a clear and obvious, and disgusting conflict of interest regarding the way that the NRC is set up, which is that you guys are all paid for by the industry.

If you refuse a license and you refuse a utility operator a license, that is less money for the NRC. So that is totally bogus. And the other thing that I just want to say is that I am heartened by the fact that the public unanimously who has turned out to speak tonight has a voice that they pretty much have zero confidence in the NRC.

And if I am wrong about that, I would like to have someone correct me, and if no one corrects me, I would like the record to reflect that the public at this meeting has no confidence in the Nuclear Regulatory Commission.

DR. LAMPERT: In looking around tonight, you see where the confidence is. I think that everyone should make note that the industry found no

need to make comment, because as we know the industry and the NRC behind closed doors are writing the rules.

So there has been no need for the industry to come and comment about how they may want things changed or relaxed, and I think that is just an interesting observation.

Also, is there any requirement for an alternative assessment, because I think that it is very clear -- we know that there are cheaper ways to generate electricity if you remove all the subsidies. We know that there are safer ways to generate electricity.

I don’t think that many people are worried about a terrorist attacking a wind farm. No other type of generation produces wastes that is poisonous for thousands of years. So if you do an honest alternatives assessment, I don’t even see why we are doing this.

FACILITATOR CAMERON: Okay. I would like the staff to answer two questions, and then we will close up for tonight with Frank Gillespie and John Tappert, if he so desires.

But first of all, I think we have to clear up the misimpression that there is a direct pipeline between industry money and the NRC budget. And who would like to take that one first? Frank.

And second of all, Pixie’s question about

looking at alternative sources of power, I don't know who you want to have address what is looked at in the site specific environmental impact statements in terms of other sources of power, because that is looked at.

Let's go to Frank, first of all, on the fee issue, and then either -- well, John will answer the second one.

MR. GILLESPIE: I am actually kind of sorry that only Congressman Markey's representative is here, and the representative from the Attorney General had to go. He popped out. There were a whole lot of things said here tonight, and I think one of the things that we came here with was to give you an opportunity to say those things and say those things on the record.

And that is one of the reasons that we do keep a transcript, and the transcript is really pretty readily available. We have tried to simplify our webpage and even though a number of the topics like security were not necessarily on the subject, I think we do appreciate that -- and I know when this team comes out, getting that feedback for the Commission.

And I would emphasize -- and now I will get to the fees, because the Commission is actually an organization of the Congress, and not an organization of the Administration. And that was done by design when the Atomic Energy Commission was split up so that

we would not be reporting to the same part of the government that was in charge of kind of endorsing the industry or promulgating energy policy.

And it is interesting the way that you said it. You said that going to the Congress, and the Congress taking action is a threat. I don't view it as a threat. Actually the Commission is one of the few bodies of government that is actually here to serve the Congress.

So it is interesting that you think we would take that as a threat rather than we think that is part of the citizenry in participative government that exists.

And now to get to the budget. In fact, our budget is allocated by Congress, but Congress then also mandated that whatever they give us has to be recovered from fees. So the Congress is totally in control of our budget.

It makes no difference how much money we get. The checks coming from the utilities go into the general Treasury of the United States. They do not come from the NRC, and the NRC never sees it. We send a bill out and the Department of the Treasury gets the check.

We are at any given time now, something like 96 to 98 percent fee recoverable. We charge in the range of $3 million a year per reactor, and $156

an hour for our time to the reactors.

But our total appropriations strictly come from the Congress. So in fact I think as part of the democratic process, and the way that our agency was actually set up, participating through Congress, who are our bosses, is a very appropriate vehicle, and as public servants, we have to welcome it.

So I am glad at least that Mr. Markey's representative is still here, and quite honestly the Commission is by design also a political body, yes, but it is also a political body that services another political body, which is intended to be the representatives of the people and they serve the Congress.

We do not report to the President, and we do not report to the people making policy. The President appoints the Commissioners and the Senate confirms them.

And there is no more than three from any one political party. And they serve 5 year terms. So that they overlap Presidential appointments. To tell you the truth, I am not sure how we would create a reasonably more representative agency than we are. You may not like our views, but we also have to listen to all parties.

(Comments off microphone.)

MR. GILLESPIE: Anyhow, fees do not come

to us. Yes, our appropriations come from Congress, and yes, we do recover 96 to 98 percent of our budget from fees. That's true, but the money does not come to us.

It does not matter whether we do it or not. Now, there was one other -- the other question was alternative power. John, do you want to answer that one?

MR. TAPPERT: The question is do we look at alternatives to nuclear power? The National Environmental Policy Act, which tells us how to do these environmental impact statements, the heart of that Act is the analysis of alternatives.

So if the proposed action is to renew the license for a nuclear power plant, we do in fact on a site specific basis look at alternatives to that for equivalent generation capacity, and that can be through solar, or coal, or natural gas, or wind, or conservation.

So we do in fact look at all of those things, and we have copies of our past EISs which we have issued, and so if you would like to see how we have addressed those in the past, those are in the back.

FACILITATOR CAMERON: Okay. Thank you, John. I think I am going to ask Frank if he wants to say anything more in terms of closing for the NRC or

do you think you have sort of expressed that?

MR. GILLESPIE: I would like to invite you to log on, and we have tried to make it easy to log on to the website. Flood us with mail and we welcome it. But we do try to account for it all.

You may not think we are trying to be open, but one of the things that NEPA requires is a disclosure rule. So we do have the obligation to get all the facts on the table.

And with that, I would like to say that this is not the only 90 days. There is some down time when the team is working, and then there is probably like another 90 days or so on the proposed rule and the draft rule.

So someone made a comment earlier that you guys get a year and we only get 90 days. This is the first 90 days and then there is probably going to be about 8 to 10 months of work, a document issued, and another 90 days in there to get comments on the document, the proposed rule and the NUREG that gets issued.

It spans almost a year or a year-and-a-half in time frame. So we are in fact trying to be fair. It is not that if we don’t hear from you by September 2nd, we don’t want to hear from you. It goes on for a long time.

FACILITATOR CAMERON: Okay.

(Comments off the microphone.)

FACILITATOR CAMERON: All right. Mary.

DR. LAMPERT: Going off of her point, that if a power plant has 10 more years to go, but they jump the gun and get approval, and so then they can get their 20 years added on when they are finished with the current license; and then your comment that we are really a politically responsive agency, and different Presidents and different political parties appoint Commissioners, which of course dictate the process, then everybody is clearly jumping the gun because of our pro nuclear President Bush.

And so your attempted assurances that different political parties and different Presidents, and different this, and different that, bring about a greater fairness and representation.

FACILITATOR CAMERON: Okay. I think we probably have to close down now. We will be hear to talk to anybody that wants to talk. And thanks for that observation, Pixie. I just would thank all of you for your courtesy tonight, and thank you very much. And, John, do you want to saying anything?

MR. TAPPERT: And I just want to echo Chip’s thoughts. We do appreciate you coming out here, and giving up your evening to share your views with us, and we have captured it all in the transcript, but this is not your last opportunity to

comment.

The comment period is open until the beginning of September, and we have entertained extensions in the past if you feel that you need more time, and we will attempt to accommodate any comments until we develop the draft.

So again thanks for coming, and we will be remaining after the meeting if anyone would like to discuss anything further. Good night.

(Whereupon, at 9:55 p.m., the meeting was concluded.)