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UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF INVESTIGATIONS

PUBLIC SCOPING MEETING

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Thursday, April 1, 2004

Athens State University Student Center Cafeteria 300 North Beaty Street Athens, AL

Time: 12:30 pm to 4:00 pm

APPEARANCES:

Nuclear Regulatory Commission PANEL:

CHIP CAMERON, Master of Ceremonies JOHN TAPPERT MIKE MASNIK CHUCK WILSON

MEETING

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(1:37 p.m.)

MR. CAMERON: Good afternoon, everyone.

My name is Chip Cameron. I'm the Special Counsel for Public Liaison, at the Nuclear Regulatory Commission, the NRC.

I want to welcome you to the NRC's public meeting this afternoon.

The subject of our meeting is the Environmental Review That the NRC is going to conduct on an application that we received from the Tennessee Valley Authority, TVA, To renew the operating license for Browns Ferry Units 1, 2, and 3.

It's my pleasure to serve as your facilitator this afternoon. And in that roll, I'm going to try to help all of you to have a productive today.

I just want to say a couple of words about meeting process before we get in to the substance of today's discussion. In terms of our format, we have a two-part format to today's meeting. Those two parts match our objectives for the meeting.

The first part of the meeting, we're going to have some brief NRC presentations to give you some background and some information on the NRC's license

renewal process, partially the environmental review part of that process.

What types of information do we look at; what is the schedule; how is that information used.

After the NRC staff presentations, we'll go on to you to see if you have any questions on that.

Second part of the meeting is to give us an opportunity to listen to you, to any advice, recommendations, concerns that you might have about license renewal. Specifically, the environmental review that the NRC is going to conduct on this license renewal application.

We are taking written comments on these issues. The NRC staff will be telling you more about that.

You may hear some information today from either the NRC staff or other people in the audience who talk that may prompt you to send in some written comments or give you some information on which to base your written comments.

The one thing that I do want to emphasize is that anything that you say today will carry the same weight as a written comment that's submitted.

Ground rules are real simple. If you have something to say when we go out for questions and answers, just signal me, and I'll bring you this cordless

microphone. Give us your name and affiliation, if appropriate, and we'll try to answer your questions.

And I would just ask that only one person speak at a time. I don't think that's going to be a problem today, but that will allow us to get a clean transcript.

We are transcribing this, this meeting. Mr. Stephen Anderson is doing that for us. That will be publicly available. It is our record of the meeting. So, one person at a time so that we can know on the transcript who's talking and more importantly, so that we can give our full attention to whoever has the floor, at the time.

I would ask you to try to be brief in your questions and comments; to make sure that we can hear from everybody, today.

Again, I don't think we're going to be pressed for time, but if you could just have brevity in your mind, when you're speaking, that would be very helpful.

Our focus is the environmental review on the license renewal application. We realize there are a lot, there may be a lot of concerns that go outside that. We always want to hear what people have to say about these issues, and their concerns, and to provide information, if we can, on those. But we are going to focus on license renewal.

When we get to the formal comment part of the

meeting, I usually ask people to try to keep it to five to seven minutes. That's the guideline for your presentation and I will try to follow that. If you have a prepared text, we can also put that, attach that to the transcript of the meeting.

I just want to introduce the NRC speakers who will be talking to you this afternoon, before we go on. First of all, you're going to hear from Mr. John Tappert, who is right here. John's going to provide a more formal welcome to you. John is the Chief of the Environmental Review Section in our office of Nuclear Reactor Regulation.

John and his staff, they are responsible for overseeing the preparation of any environmental review for a nuclear reactor licensing action. Whether it is a license renewal request or a request for an early site permit or anything like that.

John has been with the NRC for about 14 years now, I believe. And he served as a resident, one of our resident inspectors at the plants that the NRC regulates.

He has experience with the nuclear Navy, before coming to the NRC. He has a Bachelor's Degree.

MS. HARRIS: This is a classic case.

MR. CAMERON: This is it. This is Ann Harris.

John has a Bachelor's Degree in Aerospace and

Ocean Engineering from Virginia Tech. He has a Master's
Degree in Environmental Engineering from Johns Hopkins
University in Baltimore, Maryland.

After John is done, we're going to go to Mike Masnik. Dr. Michael Masnik, who is the Senior Project Manager on the Environmental Review of this license application.

Mike is going tell you about license renewal in general, The NRC process, and specifically, what we do in the Environmental Review and the types of information we're looking to provide for us, hopefully either today or through written comments.

Mike has been with us one month short of 30 years, at the NRC. He's been involved in a lot of activities over that time period, including decommissioning of nuclear power plants.

He has a Bachelors in Biology from Cornell
University. He has a Masters and PhD in Ichthyology,
which is something to do with fish, I think from Virginia
Tech.

As a matter of fact, he did his PhD dissertation on the fish, the fishes in the Clinch River. Which is a tributary of the Tennessee River, I guess.

But Mike will be giving you information on license renewal. Then we'll go out to you for any

1 questions that you might have on that.

I just would thank you for -- the NRC for all of you coming out to the meeting, today. This is one point on a long process.

Mike is going to tell you how to get in touch in him and other NRC staff, perhaps. But please avail yourself of the opportunity, if you have a concern or comment, to talk to Mike.

We have some of our expert consultants with us today, who are going to be helping us to prepare this Environmental Impact Statement. And they will be here, not just during the meeting but after the meeting, if you want to talk them more informally.

With that, John, I'll turn it over to you.

MR. TAPPERT: Thank you, Chip.

Good afternoon, everyone, and welcome.

My name is John Tappert.

On behalf of the Nuclear Regulatory Commission,

I'd like to thank you for coming out here today and

participating in this process. I hope that the

information that we will share with you today, will be

helpful. We look forward to receiving your comments, both

today and in the future.

I'd like to start off our presentations by briefly going over the purposes and agenda of today's

meeting.

Now first of all, I want to give you a brief overview of the entire license renewal process. Now this includes both a safety review, as well as an environmental review, which will be the principle focus of today's meeting. Then we'll give you some additional information about that environmental review. Which will assess the impacts associated with extending the operating licenses of the Browns Ferry Nuclear Units, 1, 2, and 3 for an additional 20 years.

Then I'll give you some additional information about our review schedule and how you can submit comments in the future.

Then finally, we'll get to the real heart of today's meeting, which is to receive any comments that you may have today.

Just by way of background, the Atomic Energy Act, gives the NRC the authority to issue operating licenses to commercial nuclear power plants for a period of 40 years. For the Browns Ferry Units, One, Two and Three, these operating licenses will expire in 2013, 14 and 16, respectively.

Our regulations also make provisions for extending those operating licenses for an additional 20 years, as part of a license renewal program. And TVA has

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requested license renewal for all three units.

Right now we're in the beginning stages of our review, in what we call scoping. Where we seek to identify those issues, which will require the greatest focus during our review. And these public meetings here today, are an important part of that scoping process.

We will then develop a preliminary assessment, and publish that. Then return again for another set of public meetings to receive comments on our draft review.

And kind of with that brief introduction, I'd like to ask Mike to carry on with the presentation.

MR. MASNIK: Thank you, John.

I would also like to welcome each of here today.

Once again, my name is Michael Masnik. I'm the Senior Environmental Project Manager for the Environmental Review of Tennessee Valley Authority, for TVA's application for the Browns Ferry Nuclear Plant license renewal.

On January 6th, 2004, the NRC staff received an application, from TVA, to renew the operating licenses for Browns Ferry 1, 2, and 3.

Our license renewal process has four components:
a safety review, a environmental review, plant
inspections, and a final safety review by NRC's
independent oversite body, the Advisory Committee for

Reactor Safeguards.

Essentially the NRC's efforts result in two parallel reviews: a safety review and a environmental review. This figure summarizes both the safety review, which is shown in the upper portion of the slide, and the Environmental Review which is shown in the lower portion.

The safety review entitles a detailed review of the licensee's application by headquarters and safety experts.

On site inspections by both our headquarters and regional staff and a final review by the independent over site organization within the NRC.

The safety review is focused on the review of the applicant's programs for identifing and managing what we call passive long-lived systems structures and components. These programs are the focus of the license renewal review because our existing regulations for operating nuclear power plants ensure, on an on-going basis, that active systems, structures, and components are inspected, maintained, and replaced as needed through out the operating life of the plant.

Also existing programs verify that programs such as the Emergency Planning and Security are acceptable.

The review of the application results in the NRC staff publishing a license renewal safety evaluation

report. That report, along with the results of the safety inspections, are forwarded to the Advisory Committee on Reactor Safeguards, or ACRS, the independent oversite board I spoke of earlier.

The ACRS reviews the safety evaluation report and inspection reports and makes a recommendation to the Commission on the licensee's application.

While this safety review and inspection are occurring, the NRC staff is also conducting an environmental review, which is shown in the lower portion of this figure, again, down here that is the focus of today's public meeting.

The NRC staff summarizes its findings on environmental issues first in a draft Environmental Impact Statement. Then after receiving public comment on the Final environmental impact statement.

During the preparation of the final Environmental Impact Statement there are several opportunities for public involvement. This public meeting this afternoon is one of them.

At the end of all this activity, the final safety Evaluation Report, the final Environmental Impact Statement, the results of the NRC staff's inspections, and the advisory committee's recommendations will be used by the Commission to make a final determination on the

acceptability of the license renewal application.

Opportunities for public involvement in this process are indicated by the splash marks on this diagram. The first opportunity for public involvement is the opportunity to file a petition, to request a hearing on the renewal application. That opportunity began in March and will close in early May. The process requires that a petition be submitted to the NRC to hold hearings on issues that would be litigated by a panel of administrative judges.

The next opportunity for public involvement is today's meeting, which is part of the environmental scoping process. In this scoping process we determine the issues that need to be addressed in our Environmental Review.

The next opportunity for public involvement will be when we request comments on our draft environmental impact statement. Additionally, oral and written statements can be provided during the Advisory Committee for Reactor Safeguard's meeting for this facility.

In addition to the opportunities throughout the process, members of the public, who have nuclear safety concerns, can raise those issues during meetings open to the public that the NRC will hold during our technical review of the application.

Meetings on particular issues are usually held in NRC's Washington headquarters. However, some technical meetings and meetings to summarize the results of the onsite inspections will be held near the plant site, and may be attended by members of the public.

I'd now like to provide a little more detail regarding our environmental review process, which is the subject of today's meeting.

The National Environmental Policy Act, or what we refer to NEPA, is the congressional mandate, enacted in 1969, which requires all federal agencies to use a systemic approach to considering environmental impacts, during certain decision making processes.

The law functions as a disclosure tool that seeks public involvement. It mandates a process in which information is gathered to enable federal agencies to make informed decisions.

Then, as part of the process, we document that information and make it all publicly available, and invite public participation to evaluate it.

The NEPA process for license renewal results in an Environmental Impact Statement, also called an EIS. which describes the results of the detailed review that we do.

In this case, we're preparing a Supplement to a

Generic Environmental Impact Statement, for license renewal. This Generic Environmental Impact Statement was published in 1996, and addresses a number of issues common to all nuclear plants, and identifies other issues that need to be reviewed on a site-specific basis for each plant applying for a license renewal.

Our review considers environmental impacts of alternatives to the proposed action as well. That also includes the no-action alternative, which would be to simply not approve the request. Also, the impacts of constructing and operating alternative power generating facilities are also considered.

Today, we're in the process of gathering information we need to prepare our supplemental EIS. In particular, at this stage, we're perform what we call scoping.

The NRC is having this meeting as part of our scoping process for the purpose of providing you and other governmental agencies with an opportunity to provide us with information that you believe that may have some bearing on the environmental evaluation.

Again, in particular, we're looking for information that may not have already been available or concerns that people might have that have not been addressed by TVA in their application.

This next slide describes the objective of our environmental review, as it is stated in our regulations. To paraphase, we're trying to determine whether or not renewing the Browns Ferry licenses for additional 20 years is acceptable from an environmental standpoint.

I should emphasize that if we conclude the license renewal is acceptable from an environmental prospective, all that means is that it would be environmentally acceptable for TVA to operate Browns Ferry for an additional 20 years.

The NRC doesn't determine whether they actually operate for those additional 20 years. The decision is made by TVA and others.

It is possible that the utility could determine that it is not economically feasible to continue operating, even though it is environmentally acceptable.

This environmental review may seem strikingly familiar to some of you. I'm sure some of you are asking: Didn't we already do this? And didn't we do it recently? The answer to that is both yes and no.

The Tennessee Valley Authority is a federal entity and is required to comply with the National Environmental Policy Act, just like the NRC.

In February of 2001 TVA began it's NEPA process by publishing a Notice of Intent to prepare an EIS, to

determine whether to pursue license renewal. This effort culminated in publication of TVA's EIS, entitled, "Final Supplemental Environmental Impact Statement for Operating License Renewal of the Browns Ferry Nuclear Plant in Athens, Alabama." And dated March of 2002.

So why then is the NRC preparing another EIS for a license renewal at the same plant? Well, there are number of reasons. The first, and probably the most important is a legal one. TVA is authorized by congress to construct and operate power plants. Therefore, its actions to generate electricity are just like any other private power producer.

Even though it is a federal agency, it can not issue itself a license to operate a nuclear power plant.

The NRC is a regulatory agency charged with insuring that nuclear material can be used, while protecting public health and safety, the environment and common defense, and security.

The NRC does not operate nuclear power plants; however, it does license them. As a regulatory agency, the NRC is required to conduct an independent assessment of potential impacts associated with renewing power reactor licenses.

The three units at Browns Ferry are much like the other 101 units regulated by the NCR elsewhere in the

United States.

In addition, since TVA's purpose and need for its action was different from the NRC's, some of the assessment that the NRC must consider for license renewal, such as the evaluation to mitigate severe accidents, was not part of TVA's environmental analysis.

Finally, the NRC staff environmental evaluation is expected to be contemporaneous with the commissions decision to either grant or reject TVA's license renewal application. TVA's Environmental Review is already several years old. So that the staff will consider whether there is new and significant information available that may effect its review.

In the end TVA's NEPA obligations are different than those of the NRC's. Nevertheless, the NRC and its predecessor The Atomic Energy Commission recognizes the unique standing of the TVA as another federal entity; and has permitted to TVA to submit its EIS in partial fulfillment of the requirements to submit an environmental report.

Let's go back to NRC's environmental review process. This next slide gives a little more detail on the environmental portion of the review process, including some of the dates for the milestones in the process.

TVA's application was received on January 6th of

this year.

On March 10th, of this year we issued a notice of our intent to preform scoping. Which is what we're doing now. It is our intent to develop a supplemental Environmental Impact Statement for the proposed action.

We're currently in the data gathering phase to determine the environmental impacts of renewing the license. After we collect the data that are available, we'll develop and draft Environmental Impact Statement, which we expect to issue for public comment in December of this year.

MR. HORN: Question.

MR. MASNIK: Yes, go ahead.

MR. HORN: Are you going to issue that in December?

MR. MASNIK: We're planning to issue the draft in December.

MR. CAMERON: Just so the transcript has clarification questions, let Mike finish up. Then we'll go --

MR. HORN: I'm sorry. I didn't mean to interrupt.

MR. CAMERON: Why don't we just get the answer to it right now. But let me get you on the record. Okay?

MR. HORN: They're issuing this in December?

MR. MASNIK: Our current schedule is for us to 1 2 issue a draft Environmental Impact Statement in December 3 of this year. MR. CAMERON: How long will the comment period be? 5 MR. MASNIK: The comment period is 75 days. 6 MR. CAMERON: All right. Thank you. 7 MR. MASNIK: We'll come back here in early next year, probably January or February. We'll have another 8 public meeting to talk about the results of our review. 9 And to provide an opportunity for the public to provide 10 11 comments that you may have on our draft Impact Statement. 12 After receiving and evaluating any comments, we will develop a final Environmental Impact Statement, which 13 14 we expect to issue in July of next year. 15 We're gathering information for our evaluation from a number of different sources. This is a list of 16 17 sources for our data review. This week we were at the site to review TVA's 18 19 procedures for managing environmental impacts and to observe first hand how the plant interacts with the 20 21 surrounding environment. We are also meeting with Federal, State and local 22 government officials and will consider all comments 23 received from the public during this comment period. 24

This slide shows the range of environmental

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topics our team is reviewing. The impacts considered include such things as air quality, water quality, and effects on plant and wildlife. It also looks at what we call socio-economics, or how the plant affects peoples lives economically in the surrounding communities.

We have assembled a team of NRC staff and experts for the national labs with backgrounds in these technical and scientifically disciplines. Many of them are with us today.

To summarize a few key dates, our schedule is to complete the scoping process by May 9th. Then the public comment period ends. After that, as indicated, we plan to issue a draft Environmental Impact Statement in December of this year, and to issue a final Impact Statement in July of next year.

If you'd like to receive a copy of the draft, and final Supplemental Environmental Impact Statement, please fill out a card and see Tomeka out at the desk.

This next slide provides contact information in case you have additional questions after you leave the meeting today.

I'm the designated point of contact with the NRC for the environmental portion of the license renewal review.

Although you're welcome to contact me with any

questions, if you have comments and wish to have them addressed in our review, they must be provided in writing or as Chip indicated, in this meeting. Where they are being transcribed and will be the equivalent of a written comment.

Arrangements have been made for the documents associated with the environmental review to be locally available to Athens Limestone Public Library, here in Athens and has been kind enough to make some shelf space available for documents related to the environmental review.

Also, documents are available through our on-line document management system, which is a available through our internet home page.

After this meeting, comments can be submitted by mail, in person, if you happen to be in Rockville,
Maryland, or by e-mail at the address that's shown here.
We have established a sperate e-mail address just for this activity. If you e-mail me some comments or questions prior to the 9th of May, we'll consider them.

That concludes our formal presentation on the environmental review process.

In closing, I'd like to thank each and every one of you for attending, and for your attention during this presentation. We look forward to any comments you have.

1 MR. CAMERON: Great thank you. Thank you Mike. 2 Thank you, John. Questions from anybody about this process that 3 4 we're undertaking now? 5 Yes, ma'am, if you could just tell us who you 6 are? DR. PRICE: My name is Dr. Lane Price. 7 I live about a mile downstream from Browns Ferry. 8 9 The question is to ask you to clarify a 10 persistent rumor that goes around on everybody -- the 11 people that live on the river. 12 Since I am a radiation oncologist, I understand 13 radiation. But many people feel that radio active waste 14 are being dumped into the river, and certainly fear 15 letting their children swim in the river, etc. 16 Now we all know that the river has a lot of old 17 DDT, and other stuff in it, which people seem just to nod 18 their heads at. 19 Could you specifically address the effluent from 20 Browns Ferry. What do you all actually put into the river, itself? 21 22 Thanks, Dr. Price. You also might MR. CAMERON: 23 want to clarify that the NRC isn't --24 MR. MASNIK: Yes, I was going to preface my 25 remarks in saying that we're the regulatory agency. We're the agency charged with assuring public health and safety through the use of this technology.

The way we do that is by regulation and by inspection. We do have regulations related to the discharge of radio-active material into the water. Those regulations are protective of public health and safety.

The plant has limits on the amount of radiation that they can dispose of by discharging it to the river. Those limits limit the amount of material at the pipe that's actually discharged into the river.

Additionally, the licensee is required to do far field monitoring studies around the plant to assure that nothing is leaking out from the facility into the water bodies. And that far field monitoring program involves a number of activities, including taking a water samples, and looking at various fish and shell fish, and whether or not there is actually radiation that's being released from the plant and being concentrated in fish and in shell fish or present in the water.

The results of those studies are summarized annually and submitted to the NRC. In fact, I believe they are due to the NRC the beginning of May of each year.

There's what we call an Off Site Dose Calculation

Manual, which is a document that the licensee uses to

determine the dose to a member of the public, associated

1 with the releases from the facility.

Those reports, those annual reports are available at our web site. Obviously, the May one, won't be for some period of time after that, but last year's is available. We review those reports. The state also gets those reports and they would review them.

But just to give you an idea, in 1999 -- and I just happened to pull that up because I had it -- it wouldn't vary very much from year to year. But the maximum dose that a member of the public would have received from the plant, from the liquid pathway, or from the water, is .037 rem. Which is roughly -- I'm sorry millirem, which is roughly a hundredth of what you would get from a chest ex-ray. So it's a very small amount of radiation.

I think I answered your question.

DR. PRICE: Yes.

MR. CAMERON: Dr. Price, do you have any follow up on that? I just want to -- it probably would be a good idea to just emphasize again that that .037 was millirem.

MR. MASNIK: Millirem, that's correct.

MR. CAMERON: Do you have anything else?

DR. PRICE: This is extremely helpful because I can readily speak now that, you know, they're getting less than 1/100 of a chest ex-ray. Which puts it in terms that

1 people, can understand.

Millirem are not people knowledge --not a lot of people know that.

But I have found the answer that I came to the meeting for. Was to get this particular bit of information to in turn spread it to the folks that live on the river.

Thank-you.

MR. CAMERON: Thank you, Dr. Price.

Other questions?

MS. HARRIS: Yes.

MR. CAMERON: Introduce yourself to us, please.

MS. HARRIS: My name is Ann Harris. I live in Tennessee, under TVA (inaudible) so this affects me also.

I want to know if the ACRS may -- that will come here to the site , will it be open to the public and will we be notified of it?

MR. MASNIK: To answer your question. First of all, the ACRS meeting will not be here at the site. It will in the Washington area. It is an announced meeting, so you would know about it.

MS. HARRIS: But do the regs require you to have an on-site meeting at some point before the ACRS? That is one of the problems that we have Watts Bar, because they didn't follow the regs, your own regs. I won't argue with

1 that, but I just wanted to know if that would be another 2 thing. MR. MASNIK: I don't believe our regulations 3 require that we have an ACRS meeting on site. 4 5 MS. HARRIS: It requires one in the vicinity of the plant, specifically is the wording. That's what 10 6 7 CFR says. MR. MASNIK: Can anyone else from the NRC help me 8 9 on that? 10 This may -- and Ann we need to get MR. CAMERON: 11 you on the record. Ann, we're going to come back to you 12 and the rest of your question. 13 Let's clarify this because we do have the usual 14 alphabet soup that the NRC and there is something called 15 licensing board panel that went through the hearings. 16 Usually tries to do it in the vicinity of the site. 17 The ACRS sometimes does come. I'm sure they're 18 required to. 19 Ann, Ann do you want to add anything from office 20 of general counsel? 21 MS. HODGDON: I'm finding my record; I don't 22 believe they are here. But it may be, it may be Ann 23 MR. CAMERON: 24 Harris that the regulation that you're referring may be 25 the ASLBP requirement. But, I certainly think that we

1 need to a some point provide clarification. Can you hear 2 the statements? Not coming through? 3 MR. ANDERSON: No, sir. MR. CAMERON: You know. for once I have it turned 4 5 on so that's not the problem. Give us a second and let us see if we can get this microphone back on. We'll try 6 that. 7 Dr. Price is with us also. She may be able to 8 9 help us if we need any help. We have our representative from the Office of 10 11 General Counsel checking the regulations to give an answer 12 to Ann Harris about whether the ACRS is required to be in 13 vicinity of the site. 14 And Ann, I know has another question. Is that 15 working? MS. HARRIS: My question is not why they have to 16 have one hearing, but if the ACRS holds the meeting here, 17 locally, will it be noticed for the public, as it should 18 19 be. 20 MR. CAMERON: The answer to that question, yes. 21 We'll give them notice. 22 MS. HARRIS: Because in the past it's not been, 23 that's why I'm asking. I want you on record as saying, 24 yeah, you'll let us know. Because that it's an important

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MR. CAMERON: We can go beyond record. It will be noticed and whether it's here or whether it's in Washington D.C. It will be noticed.

Mike, what's the best way for people to find out when the ACRS meeting will be scheduled?

MR. MASNIK: It's quite a way in the future. I can't even give you a prediction of when it might be. But certainly, Ann, we'll remember and we'll notify you and anyone else that chooses to be notified. Just let Tomeka know and we'll make sure that you know.

MR. CAMERON: That's great.

Dr. Price, did you want to say something at this point. Then we'll go back to you Ann and then we'll go over to this gentleman about the door.

DR. PRICE: Please tell us what ACRS is?

MR. MASNIK: The Advisory Committee on Reactor Safety. It's a -- safeguards, I'm sorry. It's a multiple member panel of people that are hired by the NRC to act as an independent review group.

MR. CAMERON: As Ann pointed out, the question was whether the public will be notified. I think we've answered that question.

I don't want to get too far into exactly what the regulations say but I do want give Ann Hodgdon an opportunity. If you've found anything enlightening in

there, can you just tell us what it says?

MS. HODGDON: Yes, I will merely read the regulation. It's found at 10 CFR 54.25. It's called Report of the Advisory Committee on Reactor Safeguards. It says: Each renewal application will be referred to the Advisory Committee on Reactor Safeguards for a review and report. Any report will be made part of the record of the application and made available to the public, except to the extent that security classification prevents disclosure.

MR. CAMERON: Okay. I don't think there's any mention of a meeting in that. There may be something else somewhere. We'll clarify that for you, but I think the important question is answered.

And Ann, we're going to come back and try to explain the millirem.

MR. WARD: My name is Stewart Ward. I want to know whether the millirem is per what or per person. What it meant when you gave that answer, when you said equal to a dose of ... Is that what a person can get by being in the water at the point of the -- at the pipes?

MR. MASNIK: The way the calculation is done is, it's a maximum dose that would be expected of individual that lived in the vicinity, that ate a certain amount of fish from the river, that recreated in the river. It's a

1 very conservative estimate. It's considered a maximum 2 dose that someone might get. 3 The actual calculation is through the use of a model and basically the model predicts what the dose would 4 5 be to the individual. 6 MR. WARD: So it doesn't --7 MR. MASNIK: Yeah and that's on an annual basis, 8 I'm sorry. 9 MR. CAMERON: And it doesn't mean that a person 10 would get. 11 MR. MASNIK: No. 12 MR. CAMERON: They might get it. Can we get you 13 on? I think we've got it. 14 MR. MASNIK: They're very conservative 15 assumptions of the amount of fish, for example, you would 16 eat. And how much time you would spend in the water, and 17 fishing on the --18 MR. HORN: When you say conservative, I assume 19 you mean --20 MR. CAMERON: Mr. Horn, I know this is a nusance, 21 It really is. But we do really need to get 22 everything on the record. So if you want to talk, which 23 is great, just let me give you the microphone. You want 24 to ask anything else while we have --

MR. HORN: I don't want to scare you with this.

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MR. MASNIK: We'll be around after the meeting.

If we want to talk one on one I can explain it a little

better. I'm sure Dr. Price could too.

MR. CAMERON: Ann, did you have another question for us?

MS. HARRIS: Whenever you're doing your EIS, will you address in that EIS that TVA is going to use a new type of fuel, downblending from nuclear weapons grade material? Will that come into the mix? And if so, will you address in the EIS how that mix will change as result of the new fuel?

MR. MASNIK: To answer that question is, we will not discuss in the document, that I'm aware of, the fact that the licensee is either contemplating or will use a different fuel mix. That activity is part of the safety review. That would be conducted at the time that licensee chooses or doesn't choose to use this fuel.

MR. CAMERON: Let me provide a clarification on that for you. Many questions that are raised in these question and answer part of the meetings really have an implied comment in them. This is scoping.

If there were any potential environmental effects or safety effects in terms of license renewal from the use of new fuel, if that is the comment that we're hearing, before we initially, in our scoping report, we will take a

look at it. Is that correct? 1 2 MR. MASNIK: That's right. MR. CAMERON: Do you have a follow up to that? 3 MS. HARRIS: In an EIS how can you -- that this 4 is not a secret that what TVA's doing here. To come to 5 Browns Ferry with this new theory on fuel, and I'm 6 7 wondering why it wouldn't be an issue for an EIS, since it's going to change the make-up of what you dump into the 8 9 river through waste water. MR. MASNIK: That may be true. If it is, it's 10 11 something that we're going to look at. 12 MS. HARRIS: And if you're not addressing it, why 13 not? I guess the answer is that we will 14 MR. MASNIK: 15 look at it. We'll have to. MR. CAMERON: John, do you want to add? 16 17 MR. TAPPERT: Yeah. I don't know if there's --18 basically if TVA comes in and they want to use a new type 19 of fuel, they'll submit a licensing action to us. 20 would trigger it's own environmental review. Now, whether that this is a license renewal, EIS 21 22 that we're doing, and what we've found in the past there have been other fuel issues which have been raised. 23 The critical question is, is there a nexus -- is there a clear 24 link between the new fuel and license renewal. 25

If there's not, then we won't be addressing it in 1 2 our EIS. If there is, then we would. And we have your comments, so we would definitely look at that. 3 MR. CAMERON: Great, I think that answers that. 4 Any other questions? Dr. Price? Stewart, 5 anything else? Anything. Just give us a couple of 6 minutes and then we're going to make sure that you didn't 7 have any questions. We're going to get to the comment 8 9 period next. 10 Any onother questions at this point? 11 (No response.) 12 Okay. Thank you all. Good questions. One comment that we heard. Right now we'll go to 13 the part of the meeting where we give you an opportunity 14 to make comments. 15 Do you have one more question, Ann? 16 17 MS HARRIS: Would you ask him to specify the 18 exact document on this report? MR. CAMERON: The question is, the annual report 19 20 on emissions, that the off site dose report. Mike, can you give that to -- unless you know right off the top of 21 22 your head. MR. MASNIK: I certainly don't know it right off 23

-- each plant has a different name, but we can make a

commitment to get that to you, if you want.

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MR. CAMERON: Great.

MR. MASNIK: Just make sure that you leave your name and address and we'll get a hold of it. We could also -- I think that would be the easiest thing.

MR. CAMERON: Okay, terrific.

Let's go to our opportunity to listen to you.

I'm going to give Chuck Wilson, who is the Project Manager for License Renewal for the Environmental Review for Browns Ferry, an opportunity to explain what the TVA's rationale is for this license renewal application. Then we're going to go to Mr. Horn and Ann, Dr. Price and others.

Go ahead, Chuck, please.

MR. WILSON: Let me get a couple of show and tell here. I'll try not to be long. Yeah, that's it right there.

Let me just tell you who I am. I'm Chuck Wilson.

I'm TVA's Project Manager for the Browns Ferry License

Renewal Environmental Reviews. Plural. Next line.

I guess you've already seen this. What TVA's trying to do is to renew the Browns Ferry Unit operating licenses, to continue operations for 20 years past the current expiration dates.

And there you can see -- I guess Mike Masnik already showed you those dates when the current operating

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licenses would expire. And here are the expiration dates for the renewed licenses. They're just 20 years later.

Next.

Mike Masnik also told you, but I'll reiterate a little bit, being a Federal agency, TVA has to comply with NEPA. The more sufficient a purposed project, the more extensive it's environmental review will be, including public involvement.

TVA completed a Supplemental Environmental

Impact Statement for Browns Ferry license renewal and Unit

One recovery in March of 2002. That's this thing right

here, I'll have it available after the meeting for anyone
who wants to look at it.

Next slide.

There are actually five public comment opportunities for that Browns Ferry Supplemental EIS, and this just lists them and when they were.

Next slide.

These are just some of the environmental subjects that were addressed in the Browns Ferry license renewal in the SEIS. Just showing you that, to give you an idea that it was as comprehensive as we could make it. Covering everything that was conceivably an issue.

The next one.

For the Browns Ferry license renewal, and EIS,

TVA concluded that there were no significant environmental impacts. And restarting Unit One, and continuing operation of all three units, allows power production without green house gases, which is consistent with TVA's clean air incentives. Plus it maximizes use of existing assets. It's an existing facility. And avoids the impacts of new site construction. Which now a days is very expensive and very complicated.

Also, as a commitment, TVA will confirm the expected levels of fish impingement and entrainment associated with increased intake flows after Unit One is recovered and restarted.

And the last line.

To support the NRC's NEPA review, TVA updated and repackaged that information that's in the SEIS in to an environmental report -- which is this thing, also a big document -- following NRC guidance.

The NRC is going to take that information and it will use it in compiling their own Supplemental Environmental Impact Statement. That's it.

Thank you.

MR. CAMERON: I think that's useful to hear the relationship between the TVA environmental statement and what the NRC is going to be preparing. So thank you very much.

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Let's go to Mr. Stewart Horn at this point.

MR. HORN: I have some written comments.

MR. CAMERON: Great. We'll put those on the transcript too. Thank you.

MR. HORN: My name is Stewart Horn. I live in New Hope, Alabama, outside of New Hope. I've lived there nearly 40 years. I'm retired electro-optical engineer. I submitted comments to TVA concerning this and I heard nothing back from them.

I addressed their board when they made the decision.

Excuse me, I'm going to read some of this.

"I have major concerns concerning the restart of the Browns Ferry Reactor that has been mothballed for so long. All of the reactors at Browns Ferry had an early history of many Reportable Occurrences and SCRAMS that may have prematurely aged the structures of the containment vessels of all three Browns Ferry Reactors. My reading ..." at that time, granted this was 20 years ago when I was involved in this stuff -- ... indicated that large number of automatic shutdowns that basically --, I'm sorry. I'm getting confused here.

"Large number of automatic shutdowns that occurred on these reactors may have weakened the structures due to repeated thermal shocking of the

Containment vessels. I raised these concerns to Tennessee
Valley Authority Board in the spring of 2001 when they
voted to reinstitute the third reactor. I detailed my
concerns and written comments I submitted at that time
which are attached as part of these comments. I would
have addressed comments to you directly, but I only
learned of these public comment meetings this morning as I
watched the morning news. Thus, I have not had time to
prepare much in the way of direct comments, but the
concerns are serious and need to be addressed by the NRC
prior to allowing TVA to proceed with the third reactor or
extending the life of the currently functioning reactors.

"I believe that the people of the Tennessee

"I believe that the people of the Tennessee

Valley may be in real danger from a major nuclear accident

if these concerns prove to be accurate.

I appreciate the process that allows the public to comment."

I'm going to read part of the comments that I've submitted to TVA.

"I'm writing in regards to the public announcement and request for public comment about the TVA proposed to extend the life, 40 to 60 years."

I'm going to skip pieces of this. It is contained in my written comments to save time.

"The following are two issues of concern that TVA

should address:

"A. The poor operating safety record of the Browns Ferry facility over the last 25 years, and what the consequences of that may be to reducing the useful life of the reactors.

*B. The potential for damaged structural integrity to one or all of the Browns Ferry reactor containment vessels as a result of the large number of automatic reactor shutdowns which may have occurred over the 25 (and eventually 40) year operating time.

"Back in the late '70 and early '80's I was involved in a local citizen's group, The Safe Energy Alliance of Alabama. That was attempting to influence TVA against continued expansion of TVA's nuclear power construction program. During this time, I did investigation and research about generation of electrical power using nuclear energy. Also, spent time studying the TVA Browns Ferry files available to the public.

"One thing that I learned from the Browns Ferry files was that during that time there were many occurrences of what are called 'Reportable Occurrences' at the plant. These 'Reportable Occurrences' are safety violations and/or other events that are required by regulation to be reported to the NRC. If I remember correctly, on thing that fell into this category was

1 called a SCRAM, which is the acronym for the reactors 2 being automatically shutdown by the safety monitoring 3 equipment at the plant. I don't know what the acronym stands for. Apparently there are many conditions that can 5 bring about a SCRAM. When a SCRAM occurs, the control 6 rods are automatically lowered between the fuel rods 7 causing the nuclear reaction to be safely stopped. safety equipment automatically shuts down the reactor. 8. 9 What I remember reading in the literature during that time 10 was that an automatic shutdown forces the reactor to cool 11 down very quickly compared to the rate at which it cools 12 down when a planned shut down occurs, using established 13 standard operating procedures for shutting down the 14 reactor.

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"This rapid cool-down of the hot reactor thermally shocks the reactor containment structure as a result of the short time period over which the temperature of the whole structure radically changes. These events cause stresses, strains, etc. to the reactor structure which reportedly prematurely 'ages' the reactor structure, reducing its strength and potentially reducing its safe operating life. The reactor containment structure is what contains the nuclear reaction . . . This is violated and function and 'meltdown' might occur.

"This wouldn't be such a significant issue if the

plant had a history or very few SCRAMS and a good operational safety record. I found some of the data that I had recorded in 1980 about 'Reportable Occurrences' at Browns Ferry during that time and I have included the data below."

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This covers a period from 8-11 to 11-30 in 1988. It's almost four months. There were 23 of these occurrences in Reactor One, 21 in Reactor Two, and 22 in Reactor Three.

"I don't know how many of these 'Reportable Occurrences' were SCRAMS, but what my vague memory recalls is that many of these were SCRAMS. The data shows that 66 reportable events occurred in less than four months, averaging about 16 per month or one every other day. This is not a good safety record for a nuclear operating facility. If any significant percentage of these events were SCRAMS, this would indicated that all reactors have experienced many SCRAMS over their 40 year life. the time the above statistics, TVA had a horrible track record with the NRC concerning safety violations and reportable occurrences. And they also had the horrible fire in the 1975 where they nearly lost the whole place. I don't know if their track record has improved over time, I've heard that publicly, but I don know that for a significant number of years, there were repeated

occurrences of safety violations, SCRAMS and Reportable
Occurrences. The other event of major significance was
the fire... "I'm skipping that part.

"TVA need to ..." -- I asked them to do a lot of things but at least to report on the -- they should investigate and report to the public about a detailed study of the SCRAMS, Reportable Occurrences and/or safety violations which have happened to each reactor individually including significance of these events relative to safe operating lifetime.

"TVA should be required to determine the structural soundness of the reactor containment vessels using a non-invasive technique, if such a technique exists."

That's basically -- I made a few comments that these facilities were designed for a certain lifetime.

Now you're talking about increasing that 50 percent. My understanding at the time that the TVA Board made the decision that they could buy a new reactor for less than they were paying to refurb this old Browns Ferry Reactor.

MR. CAMERON: Thank you.

MR. HORN: Thank you.

MR. CAMERON: Thank you very much, Mr. Horn.

Let me just say that all the comments that we hear tonight, and the ones that are submitted, are going

to be evaluated in terms of the scoping report that the NRC staff does.

There may some issues raised that may not be applicable to the Environmental Review of the license application, but they might be applicable to the safety review. And we'll certainly give that to the safety people side of the house.

I just want to introduce the Project Manager for the Safety Evaluation on the Browns Ferry license application, that's Mr. Jimi Yerokun. Who is right here. I just wanted to introduce people.

But if we hear comments that are relevant to the safety side, we'll make sure that the people on that side consider them.

Do you want to add something?

MR. HORN: My comments are based on old knowledge, basically. I'm also not a nuclear engineer or anything. So what I contend is, if we had a meltdown, there would be quite a significant environmental impact.

MR. CAMERON: Good, and I think that the -- not good but I think that -- watch what you say here. I think that your comments raise a concern. We appreciate the fact that you raised that concern.

The idea is that those be examined to see if there is any validity to prevent anything seriously from

happening. So thank you, thank you very much. 1 Dr. Price, do you want to say anything more to 2 3 us? DR. PRICE: No. 4 MR. CAMERON: Okay, thank you. 5 Ann Harris, do you want to come up and address 6 7 us? MS. HARRIS: Hi, how are you? Good to see you. 8 9 MR. CAMERON: Ann, you can use the -- if you want 10 to come up there and put your notes down. You can, go 11 ahead. 12 MS. HARRIS: Do you mind? 13 MR. CAMERON: No. MS. HARRIS: The first thing is, my name is Ann 14 Harris. I was a 15/16 year employee of TVA. 15 I'm now graciously retired and a great grandmother. 16 17 And Chip, first things first. It's not lost on me that today is all fools day! 18 Extending the license for another 20 years at any 19 20 nuclear power production facility in the US is simply a 21 way for the industry to delay the fact that decommissioning funds are not available for these plants. 22 And all here today know, TVA does not have the money to 23 decommission Unit One much less the entire plant. 24 If TVA had the money to decommission Unit One it 25

would already be a done deal. In Fifteen years to sit in "Administrative Hold." Too bad that no such action is permitted in NRC rules. But rules don't count here do they?

NRC, you know that this plant holds the record for the second worst accident in US nuclear history. You know that earlier this week a naval jet crashed almost on top of Watts Bar nuclear plant. You know that the hydro plant at Watts Bar burned a couple of years ago denying off-site power to the nuclear plant and stopping the flow of water to the cooling towers to the nuclear plant. You spent 24 years with TVA at Watts Bar and almost that much again at Sequoyah before TVA started these plants. And now this next year you will go back up there and Sequoyah replaced their steam generators and are still in the process of dealing with that problem. And we'll all prepare to shut down Watts Bar while we the ratepayer's pay for a steam generator replacement for a plant that has been operating less than nine years at full power.

Don't you wonder what the next surprises are in store for us?

Yes, I know that TVA says it has the best safety record in the industry. Who says so? INPO and McGraw Hill. INPO is a secret nuclear industry society that will not share the good nor the bad with the public, so we have

trust you boys to give us the party line each year they come for inspection visits. And McGraw Hill is a TVA contractor and will say whatever they are paid to say. So much for independence. So much for TVA's great safety records.

In 1986, when Browns Ferry Unit One was shut down, no one fought that NRC action. Now that you are supporting TVA in this endeavor of licensing extension, I must assume that you will provide them with the 20 years as requested. So much for public input, so much for regulatory oversight. You the NRC will not be able to hide when the next accident happens because as INPO stated in 1995, the next severe accident in the US will be human error again and will be of the same magnitude of Chernobyl. And you boys are supporting this plant to go forth and spread its venom on helpless communities, simply because you do not have the nerve to say no to TVA.

I know that you boys at this level do not have the authority to stop this extension or any of the others that you have extended but surely somewhere you will have to look at the long list of meetings and paper work that says nothing, does nothing and provides nothing. Nothing equals nothing.

While we are here today, look around the room, how many of these people were even in the industry when

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TMI had "unplanned event" 25 years ago. For the uneducated, "unplanned event" is nuke speak for accident.

The whole plan here is to provide TVA with an outlet for nuclear weapons materials made into fuel for this plant. Has anyone said out loud that the French will carry large amounts of American taxpayers money back home to France from TVA and the US government as they "work" on this process? Does anyone know about the millions of TVA dollars that TVA is spending up at Erwin, Tennessee at Nuclear Fuel Services so that TVA and the french group, Framatome can get cozy in bed together? Will the NRC analyze the effects of burning nuclear weapons materials at this plant. Has the NRC got out their pencils and wrote up some pie-in-the-sky answer for an untried, untested process TVA will be using in these units? And before the boys at TVA and the Frenchies get their boxers in was, the process has not been tested in the US. NRC you want us to trust this to TVA? What a hoax!

It will cost the ratepayer's enormous amounts of money for the Erwin, Tennessee connection and the French nuclear industry to collect money from TVA while the NRC plays the fiddle and the TVA money burns. DOE thinks that no one knows the scam they are playing. So much for NRC oversight. The only sight the NRC has is sometimes hindsight.

1 I know that this meeting is being to held to 2 check off the next box on your list of happenings for TVA to receive this extension. I don't believe for a minute that you will hinder or take this process seriously. 5 young men here today from the NRC headquarters are simply pawns in the process and are being given make do work. I'm glad that you have jobs.

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In 1995 TVA's public relations people publicly stated that if they wanted to burn this type fuel in TVA reactors then "an Environmental Impact Statement would have to be done."

Does this mean that you, NRC, and you, TVA, recognize that a full EIS must be produced prior to a license extension? If you so choose, I can cite where the statement was made, and who made it, and where it is to be found as a public record.

But, I digress. Who has the schedule for the letting of TVA ratepayer's money to go to France?

In other words, who is keeping the schedule for this dirty act to done and who is pushing to keep the schedule?

NRC and TVA, both of you know that there is not one evacuation plan at any nuclear facility in America that meets NRC standards and cannot be carried out for that accident that will only happen at 2:00 AM in the

morning while the children are home asleep.

Since you are having such a hard time at Indian

Point in upstate New York convincing the powers that be,

that the plan up there will work, how about convincing me,

the locals, community leaders, Moms and Dads that the plan

TVA has put on paper will truly work.

All of these issues must be dealt with in a formal EIS. Not an environmental assessment as you so gingerly use when the utility turns up the heat and NEI calls you and then the commission. NEI nor NRC Commissioners live down here, the French do not support our efforts in other arenas, TVA is now over 27 and half billion dollars in debt due to cooking the books. Why should I or other TVA ratepayer's trust you NRC to stand up to bullies such as these? NRC you have never said no to the industry, so I must admit that my statement is an act of futility and is simply playing into your hands to show someone somewhere that you have met the requirements of public input.

Don't ask me to participate again. You can't be trusted to perform your job and I am not trusting you to have the public's interest, best or otherwise.

Thank you for your attention and I hope you enjoyed your trip to the south. We will see you again when the process becomes public and a done deal and all is

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well.

By copy, I request that this statement be made a part of the official record.

MR. CAMERON: Thank you, Ann. Can we have that copy to put on the transcript? All right. We'll do that and thank you for those comments on what the Environmental Impact Statement should address.

All right. Are there others who want to address us at this point? Anybody else?

(No response.)

Okay. Well, I'm going to ask John to close the meeting, this afternoon meeting on course. We will be here tonight and are accepting written comments. John.

MR. TAPPERT: Thanks, Chip.

Thanks again everyone for coming out here today.

As Mike mentioned earlier, the public comment period does extend till May 9th. So if you'd like to amend your comments or add additional comments, please send those in.

And additionally, we will be staying after the meeting if you have any additional questions and want to talk to us individually.

Thanks again.

(Off the record at 2:50 a.m.)

PRIVACY ACT STATEMENT

Pursuant to 5 U.S.C. 552a(e)(3), enacted into law by Section 3 of the Privacy Act of 1974 (Public Law 93-579), the following statement is furnished to individuals who supply information to the U.S. Nuclear Regulatory Commission (NRC) on NRC Form 279. This information is maintained in a system of records designated as NRC-20 and described at 67 Federal Register 63788 (October 15, 2002), or the most recent Federal Register publication of the NRC's "Republication of Systems of Records Notices" that is available at the NRC's Public Document Room, 11555 Rockville Pike, Rockville, Maryland, or located in NRC's Agencywide Documents Access and Management System (ADAMS).

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- 5. SYSTEM MANAGER(S) AND ADDRESS: Chief, Payment Policy and Obligations Team, Division of Financial Services, Office of the Chief Financial Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Stewart Horn 498 Keel Hollow Rd. New Hope, AL. 35760 March 31, 2004

The Nuclear Regulatory Commission Washington, D. C.

People,

I have major concerns concerning the restart of the Browns Ferry Reactor that has been mothballed for so long. All of the reactors at Browns Ferry had an early history of many Reportable Occurrences and SCRAMS that may have prematurely aged the structures of the containment vessels of all three of Browns Ferry Reactors. My reading indicated that the large number of automatic shutdowns that occurred on these reactors may have weakened the structures do to repeated thermal shocking of the containment vessels. I raised these concerns to the Tennessee Valley Authority Board in the spring of 2001 when they voted to reinstitute the third reactor. I detailed my concerns in written comments I submitted at that time which are attached as part of these comments. I would have addressed the comments to you directly, but I only learned of these public comment meetings this morning as I watched the morning news. Thus, I have not had time to prepare much in the way of direct comments, but the concerns are serious and need to be addressed by the NRC prior to allowing the TVA to proceed with the third reactor or extending the life of the two currently functioning reactors.

I believe that the people of the Tennessee Valley may be in real danger from a major nuclear accident if these concerns prove to be accurate.

I appreciate the process that allows the public to comment. Thank you.

Respectfully,

Stewart Horn

Stewart Horn 498 Keel Hollow Rd. New Hope, AL 35760 Home 256-723-4960 Work 256-955-2114 March 22, 2001

Bruce L Yeager TVA 400 W. Summit Hill Knoxville, TN 37902

Dear Mr. Yaeger

I'm writing in regards to the public announcement and request for public comment about the TVA proposal to extend the operating life of the reactors at Browns Ferry Nuclear Power Plant from 40 years to 60 years. The following are two issues of concern that TVA should address:

- A. The poor operating safety record of the Browns Ferry facility over the last 25 years, and what the consequences of that may be to reducing the useful life of the reactors.
- B. The potential for damaged structural integrity to one or all of the Browns Ferry reactor containment vessels as a result of the large number of automatic reactor shutdowns which may have occurred over the 25 (and eventually 40) year operating time.

Back in the late 1970's and early 1980's, I was involved in a local citizen's group, The Safe Energy Alliance of Alabama, Huntsville Chapter, that was attempting to influence the TVA against the continued expansion of TVA's nuclear power construction program. During this time, I did investigation and research about generation of electrical power using nuclear energy. I also spent time studying the TVA Browns Ferry files available to the public.

One thing that I learned from the Browns Ferry files was that during that time there were many occurrences of what are called "Reportable Occurrences" at the plant. These "Reportable Occurrances" are safety violations and/or other events that are required by regulation to be reported to the Nuclear Regulatory Commission (NRC). If I remember correctly, one thing that fell into this category was called a SCRAM, which is the acronym for the reactors being automatically shutdown by the safety monitoring equipment at the plant. I don't know what the acronym stands for. Apparently there are many conditions which can bring about a SCRAM. When a SCRAM occurs, the control rods are automatically lowered between the fuel rods causing the nuclear reaction to be safely stopped. The safety equipment automatically shuts down the reactor. What I remember reading in the literature during that time was that an automatic shutdown forces the reactor to cool down very quickly compared to the rate at which it cools down when a planned shut down occurs using established standard operating procedures for shutting down the reactor.

This rapid cool-down of the hot reactor thermally shocks the reactor containment structure as a result of the short time period over which the temperature of the whole structure radically changes. These events cause stresses, strains, etc. to the reactor structure which reportedly prematurely "ages" the reactor structure, reducing its strength and potentially reducing its safe operating life. The reactor containment structure is what contains the nuclear reaction such that the reaction can be safely controlled. If this containment structure is violated and doesn't do its containment function, then "meltdown" will likely occur causing an untold disaster in our local community similar to what happened at the Chernobyl (spelling?) nuclear plant in Russia.

This wouldn't be such a significant issue if the plant had a history of very few SCRAMs and a good operational safety record. I found some of the data I had recorded in 1980 about "Reportable Occurrences" at Browns Ferry during that time and have included that data below.

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Reportable Occurrences at Browns Ferry 8/11/80 to 11/30/80 (About 4 Months)

Dates (1980)	Reactor BF-1	Reactor BF-2	Reactor BF-3
8/11 to 8/24	1	2	2
8/25 to 9/07	2	5	. 4
9/08 to 9/21 ·	. 4	1	3
9/22 to 10/05	5	1	3
10/06 to 10/19	4	5	· 2
10/20 to 11/02	1	1	0
11/03 to 11/16	5 ·	3	3
11/17 to 11/30	1	<u>3</u>	5
Totals	23	21	22

I don't know how many of these "Reportable Occurrances" were SCRAMS, but what my vague memory recalls is that many of these were SCRAMS. The data shows that 66 reportable events occurred in less than 4 months, averaging about 16 per month or one every other day. This is not a good safety record for a nuclear operating facility. If any significant percentage of these events were SCRAMS, this would indicate that all of the reactors will have experienced many SCRAMS over their 40 year life. During the time of the above statistics, TVA had a horrible track record with the NRC concerning safety violations and reportable occurrences. I don't know if their track record has improved over time, but I do know that for a significant number of years, there were repeated occurrences of safety violations, SCRAMS and Reportable Occurrences. The other event of major significance was the fire at Browns Ferry in 1975 during which there were periods of time when the operators had no control of the reactors and could not even determine what the conditions of operation were (including the critical water level in the reactors). During this fire, the facility came very close to entering into a meltdown situation.

TVA needs to do detailed investigations into the issue of the structural soundness of each Browns Ferry reactor containment vessel prior to considering extending the life of these units by 50%. Obviously the economic advantages to extending the reactors life are huge, but the magnitude of the disaster that would occur if a "Meltdown" happened is beyond measure or determination and if there is any significant risk of this then the reactor life should not be extended.

I would think that at least the following should be done by TVA prior to proceeding with reactor life extension

- 1. TVA should investigate (and report to the public about) a detailed study of the SCRAMs, Reportable Occurrences and/or other safety violations which have happened to each reactor individually including the significance of these events relative to the safe operating lifetime of the reactors.
- 2. TVA should be required to determine (by scientific measurement) the structural soundness of the reactor containment buildings using a non-invasive technique, if such a technique exists or can be developed. This issue is so important, and one in which a mistake would be so costly, that if a technique does not exist to make this determination by physical measurement, then TVA should initiate research to develop such a technique. This is bound to be an issue of great importance to countless other nuclear power generation facilities also.

I am requesting that TVA provide to me the safety record, etc. for each reactor as described in (1) above, and any available information on currently available techniques for examining reactor structural soundness discussed in (2) above.

Sincerely yours

Stewart Horn

NRC Public Meeting TVA's Browns Ferry Nuclear Plant Licensing Extension Request

April 1, 2004

First things first: It is not lost on me that today is All Fools Day!!

Extending the license for another 20 years at any nuclear power production facility in the US is simply a way for the industry to delay the fact that decommissioning funds are not available for these plants. And as all of us here today know, TVA does not have the money to decommission unit one much less the entire plant. If TVA had the money to decommission unit one it would be a done deal. Fifteen years to sit in "Administrative Hold." To bad that no such action is permitted in NRC rules. But rules don't count here do they?

NRC you know that this plant holds the record for the 2nd worst accident in US nuclear history. You know that earlier this week a naval jet crashed almost on top of Watts Bar nuclear plant. You know that the hydro plant at Watts Bar burned a couple of years ago denying offsite power to the nuclear plant and stopping the flow of water to the cooling towers to the nuclear plant. You spent 24 years with TVA at Watts Bar before TVA started that plant. And now this next year you will go back up there and we will all prepare to shut it down while we the ratepayers pay for a steam generator replacement for a plant that has been operating less than nine years at full power. Don't you wonder what the next surprises are in store for us?

Yes, I know that TVA says it has the best safety record in the industry. Who says so? INPO and McGraw Hill. INPO is a secret nuclear industry society that will not share the good nor the bad with the public, so we have to trust you boys to give us the party line each year they come for inspection visits. And McGraw Hill is a TVA contractor and will say whatever they are paid to say. So much for independence. So much for TVA's great safety records.

In 1986, when Browns Ferry unit one was shut down, no one fought that NRC action. Now that you are supporting TVA in this endeavor of licensing extension, I must assume that you will provide them with the 20 years as requested. So much for public input, so much for regulatory oversight. You the NRC will not be able to hide when the next accident happens because as INPO stated in 1995, the next severe accident in the US will be human error again and will be of the same magnitude of Chernobyl. And you boys are supporting this plant to go forth and spread its venom on helpless communities, simply because you do not have the nerve to say no to TVA.

I know that you boys at this level do not have the authority to stop this extension or any of the others that you have extended but surely somewhere you will have to look at the long list of meetings and paper work that says nothing, does nothing and provides nothing. Nothing equals nothing!

While we all are here today, look around the room, how many of these people were even in the industry when TMI had an "unplanned event" 25 years ago. For the uneducated, "unplanned event" is nuke speak for an accident.

The whole plan here is to provide TVA with an outlet for nuclear weapons materials made into fuel for this plant. Has anyone said out loud that the French will carry large amounts of American taxpayers money back home to France from TVA and the US government as they "work" on this process? Does anyone know about the millions of TVA dollars that TVA is spending up at Erwin, TN at Nuclear Fuel Services so that TVA and the french group, Framatome can get cosy in bed together? Will the NRC analyze the effects of burning nuclear weapons materials at this plant. Has the NRC got out their pencils and wrote up some pie-in-the-sky answer for an untried, untested process TVA will be using in these units? And before the boys at TVA and the frenchies get their boxers in a wad, the process has not been tested in the US. And NRC you want us to trust this to TVA? What a hoax!!

It will cost the ratepayers enormous amounts of money for the Erwin TN connection and the French nuclear industry to collect money from TVA while the NRC plays the fiddle and the TVA ratepayers money burns. DOE thinks that no one knows the scam they are playing. So much for NRC oversite. The only sight the NRC has is sometimes hindsight.

I know that this meeting is being held to check off the next box on your list of happenings for TVA to receive this extension. I don't believe for a minute that you will hinder or take this process seriously. You young boys here today from NRC headquarters are simply pawns in the process and are being given make do work. I am glad that you have jobs.

In 1995, TVA's public relations people publicly stated that if they wanted to burn this type fuel in TVA reactors then "an Environmental Impact Statement would have to be done." Does this mean that you, NRC and you, TVA recognize that a full EIS must be produced prior to a license extension? If you so choose I can site where the statement was made and who made it and where it is to be found as a public record.

But, I digress. Who has the schedule for the letting of TVA ratepayers money to go to France? In other words, who is keeping the schedule for this dirty act to be done and who is pushing to keep the schedule?

NRC and TVA, both of you know that there is not one evacuation plan at any nuclear facility in America that meets NRC standards and cannot be carried out for that accident that will only happen at 2:00 AM in the morning while the children are home asleep.

Since you are having such a hard time at Indian Point in upstate New York convincing the powers that be that the plan up there will work, how about convincing me, the locals, community leaders, Moms and Dads that the plan TVA has put on paper will truly work.

All of these issues must be dealt with in a formal EIS. Not an environmental assessment as you so gingerly use when the utility turns up the heat and NEI calls you and then the commission. NEI nor NRC Commissioners live down here, the French do not support our efforts in other arenas, TVA is now over 27 and a half BILLION dollars in debt due to cooking the books. Why should I or other TVA ratepayers trust you NRC to stand up to bullies such as these? NRC you have never said no to the industry, so I must admit that my statement is an act of futility and is simply playing into your hands to show someone somewhere that you have met the requirements of public input.

Don't ask me to participate again. You can't be trusted to perform your job and I am not trusting you to have the public's interest, best or otherwise.

Thank you for your attention and I hope you enjoyed your trip to the south. We will see you again when the process becomes public and a done deal and all is well.

By copy, I request that this statement be made a part of the official public record.

Ann Harris, We the People, Inc

341 Swing Loop, Rockwood, TN 37854

PH