

A.2 Public Meeting Transcript Excerpts and Comment Letters

LETTER A (Transcript)

Transcript of the Afternoon Public Meeting on July 10, 1999 in Clemson, South Carolina

[Introduction by Mr. Cameron]

[Presentation by Ms. Carpenter]

[Presentation by Mr. Grimes]

[Discussion]

Mr. Tims: My name is Chuck Tims and I'm a member of the Oconee County Council. I've got a couple questions. I know that some nuclear power plants may not seek renewal, and of course some are denied. Now, in the processes that we've had in the past, what is the process used to - once the application is refused or denied, or voluntarily denied, do you dis-establish these power plants and briefly, what is the process? Are you required to dis-establish them?

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Mr. Grimes: In the event that the license renewal application is denied, then the current forty year license will continue and regulations require that prior to the expiration of the forty year license the utility has to submit a de-commissioning plan and go through a formal process of de-commissioning in order to essentially dismantle the facility or to put it in what's called safe store, a condition which will ensure that even a non-operating facility is maintained in a safe state. In any event, any existing nuclear power plant has to go through a decommissioning process in order to make sure, regardless of whether it operates, it's maintained in a safe condition.

Mr. Tims: The other question regards to the composition of the Commission. How many members of the Commission are there and can you identify those members today?

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Mr. Grimes: Yes, I can. There are five commissioners that are appointed by the President. We just lost Chairman Shirley Jackson whose term ended on June 30th and she has now gone on to become the President of Rensselaer Polytechnic Institute. We have four remaining commissioners and a vacancy that the administration will propose a nomination for. The four commissioners that remain are Greta Dicus, who is the newly appointed chairman, Edward McGaffigan, Neils Diaz and Jeffrey Merrifield.

Mr. Tims: And they are appointed by the President?

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Mr. Grimes: Each of those are appointed by the President and each has a background of either law or they come from congressional staff. In Chairman Dicus's case, she was head of the Arkansas State Emergency Planning and --

Appendix A

A2,
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Mr. Tims: Do they have to be approved by the House or the Senate?

Mr. Grimes: Yes, they do. The President nominates them and then Congress affirms or denies the nomination.

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Mr. Tims: What are the terms of the appointees?

Mr. Grimes: I believe the terms are for five years.

Mr. Tims: Thank you.

Mr. Cameron: All right, thank you Mr. Tims. Are there other questions? We have one right over here.

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Ms. Thompson: My name is Margaret Thompson. I used to be a Federal government lawyer and now, in South Carolina, I teach law classes at both Clemson and sometimes U of South Carolina Law School. This is a quick academic question. You mentioned the availability of a public document repository but you didn't tell us where it is?

Mr. Cameron: A good point.

Mr. Grimes: It's in Walhalla. A public library at Walhalla.

Mr. Cameron: Okay, do you need any other information?

Ms. Thompson: Not at this time. I go to your website but not everybody could.

Mr. Grimes: I believe the website also has a listing of all the public document rooms. There's one in the vicinity of each major or each nuclear power plant or major nuclear facility.

Ms. Thompson: The website looks great, so far. I'm excited that you're updating it but I don't think everybody in the room has access to the web.

Mr. Grimes: That's why I mentioned the public document room. We also have a public document room in Washington that has all of the NRC's documents. We send the documents related to the major facilities to the local public document room.

Mr. Cameron: Okay, thank you. We have a comment or a question over here.

Mr. Williams: The Watershed Coalition, I'm the executive director, my name is Buzz Williams and, as you mentioned earlier, we had some questions and concerns earlier and we're becoming increasing and even more concerned as these proceedings move forward towards a decision. There's so many open-ended questions. Concerning the environmental impact

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statement draft report supplement to Oconee Nuclear Station - for example, regarding off-site radiological impact, spent fuel and high level waste disposal on Page 6 and 4, I think it is - reference to radioactive doses to individuals it says, and I quote: "However, while the Commission has reasonable confidence that these assumptions will prove correct, there's considerable uncertainty (and I want to underscore that word uncertainty), since the limits are yet to be developed, no repository application has been completed or reviewed and uncertainty (again that word crops up), is inherent in the models used to evaluate possible pathways to the human environment." "Concerning estimating cumulative doses to populations over thousands of years is more problematic." This is a quote, too. "Since estimates would involve very great uncertainties, (there it goes again), especially with respect to cumulative doses to populations." That's the end of that quote. Just a footnote, high level waste remains toxic for two hundred thousand years and there's currently about forty thousand tons stockpiled around the country at various nuclear plants on site. I assume everyone here has read the thousands of documents involved in this so you're probably familiar with this. We had to really dig this out. Regarding transportation of radiological waste, Page 6 and 7. Quote; "-- did not provide a site specific review of the environmental impacts and transportation of high level waste." Another point that I'd like to add to that is the Federal government, you the taxpayers, will bear the huge expense of storage of high level waste on-site in any future national repository which I would point out is very much in question at this time, whether or not Yucca Mountain will even be environmental safe to use as a repository. Concerning the safety evaluation report, which you mentioned earlier, it discusses critical issues concerning nuclear reactor operating systems. Again, it contains many open items and unresolved items. Some examples are:

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Questions remain about detecting thermal and neutron radiation embrittlement of the reactor vessel internal components and subsequent aging management programs. Also questions remain about ways to detect loss of fractured toughness, structure toughness. I think earlier that you had mentioned that the NRC had determined that all these things could be replaced and so the life expectancy of these plants might be indefinite. I would maintain that I don't think you're going to be replacing the actual reactor vessel so I would maintain to you that you've missed a very important part in making that decision when you don't analyze these potential embrittlement problems. Regarding the reactor building cooling units, questions remain about determining the heat removal capacity given degradation of the system due to aging. Meanwhile Oconee Nuclear Station has been cited by the Nuclear Regulatory Commission for problems, inadequacies in operating of the reactor coolant system. According to the research that I've done, under certain circumstances with cooling systems that inadequately function, some of these reactor vessels that might be embrittled could literally shatter like glass. I'm not saying that's the case with Oconee, it's a very well run plant. What I'm saying is that proceeding towards a decision, in the absence of handling or having the answers to these open ended questions, very clearly might prejudice any decision that might be made and therefore I think it's unfair to the public, it's unfair because of their right to know and it might possibly - frankly, almost certainly, it surely is illegal. Another, and final point, is that in the future as Duke and NRC address these open questions and decisions are made, the Public is invited but I would maintain that they do not have standing. Because of the morass of procedures that you

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Appendix A

have to go to have legal standing to do anything about it, surely you will listen, I have all confidence, but for the Public to have any legal recourse or way to intervene in our judicial system, I maintain that at that point they will be out of the loop. So, they're going to listen to you but you won't be able to do anything about it and I think you ought to be able to know that, you should know that. Those are my comments and I appreciate your time.

Mr. Cameron: Okay, thank you very much, Buzz. We sort of deviated from our script there because he has another meeting so he read the statement. Chris, did you have anything - there was a lot there, do you have anything to say before Buzz leaves?

Mr. Grimes: All I can say, at this point, is I understand the reason for his concerns, we do use that term unlikely because there are some areas where we've tried to abound things, with certain assumptions. Clearly, there's a national interest in what will happen with a high level waste repository and we're proceeding on the basis, and an expectation, that there will be a national resolution of that issue and if there isn't, in time, then we will have to act on that and do something different. Regarding the concerns related to the reactor vessel embrittlement, we did pay particular attention to that in the safety evaluation. There are open items that need to be resolved. We didn't say that the resolution of open items was going to be easy but I do want to point out that there are studies that have demonstrated how one can go about replacing a reactor vessel. At this point in time it's considered economically infeasible but it's not technically infeasible. In addition, our safety evaluation identifies those programs that we would rely upon to measure fracture toughness of the vessel and all other important parts of the reactor coolant system and the reactor coolant pressure boundary and we're going to continue to pursue those issues. If there are still residual concerns, those concerns can be presented to the Commission. Buzz is right, they may or may not listen to you, they're certainly going to hear you but they might not necessarily act on it but that, routinely, results in us being hauled into Court, and we get hauled into Court regularly, to defend our positions. That recourse is still available to you but I admit, it is a cumbersome and bureaucratic process.

Mr. Cameron: Okay, thank you very much. I guess we'll try to keep the coalition informed of what's going on with open issues.

Mr. Grimes: We did put the Chattooga River Watershed Coalition on our distribution for all renewal related documents and we'll continue to keep Buzz informed about meetings. If others of you are interested, we can make arrangements to keep you informed as well.

Mr. Cameron: Okay, thank you very much, Chris.

Mr. Williams: I'm glad you concur about the future public meetings where people can come where they may or may not listen. The fact that we may see you in Federal Court has something to do with our standing but again, I want to underscore, the Public will not be able to have standing because it's my concern that we're the only ones that have been acknowledged to have standing. I think it's important that they know we're basically carrying the ball. They

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can contact us and if they have concerns, if it gets that far, hopefully we'll be able to express the concerns and interest of the public through that procedure.

Mr. Grimes: I appreciate that and we do acknowledge that Chattooga was the only organization that petitioned to intervene and to represent Public interest for the Oconee License Renewal application. From my perspective, I would hope that we would be able to resolve any concerns that you have on an informal basis and we'll continue to try to do that, even though the Licensing Board and the Commission concluded that litigation of those issues was not warranted. We understand your concerns and we're going to continue to try to address them on an informal basis.

Mr. Cameron: Okay, thank you very much. Thanks Chris. Do we have other questions or comments for Chris, before we move on?
(No audible response.)

I just want to remind everybody who is up here at this particular microphone, you really need to get close and speak up. Next we're going to have Jim Wilson who's going to talk about the NEPA process, Jim?

[Presentation by Mr. Wilson]

Mr. Tims: Mr. Wilson, I just have a general question. Could you give your educational background and a brief synopsis of your - a history of your employment?

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Mr. Wilson: Okay. I was hired back in 1976 at the NRC as an environmental scientist. I have a Master's Degree in Zoology and I've done doctorate work, all but the dissertation, at Virginia Polytechnic Institute and State University. I've worked at the staff for twenty-three years now and I'm familiar with all stages of licensing, from initial licensing to license amendments and now I'm working on license renewal.

[Discussion]

[Presentation by Ms. Hickey]

[Discussion]

Ms. Thompson: Again, this is Margaret Thompson. I studied the generic statement that was mailed out to some of us on the mailing list and I have a question about the current status of the NPDES permit. I notice that at the time you published this in April the permit was under review and the review hadn't been completed yet so the status was interim or up in the air. What's the progress on that?

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Appendix A

Ms. Hickey: As of last week, when we checked, the permit was still in review so they are currently working under the previous permit.

Mr. Cameron: Okay, I believe there's a question back here. Yes, sir.

A14,
A.1.10

Mr. Cudworth: My name is Jon Cudworth, I'm with Tetrattech, we're an environmental consulting firm. Eva, earlier you talked about meeting with county and State and Federal regulatory agencies, could you give us an idea of the kinds of questions you asked them or the kinds of information that you conveyed to them?

Ms. Hickey: Are you interested in a specific area. We did it differently for - well let me have our socioeconomic person talk to what type of questions they asked.

Mr. Cameron: All right.

Mr. Scott: I'm Mike Scott with Pacific Northwest National Laboratories. I'm the socioeconomic on the project. We met with several of the - well, all three counties economic development departments and, in general, the kinds of questions - kinds of information we were seeking from them were issues like what's your transportation system like, what are the specific problems or conditions you're having with your public infrastructure, what are the locations and the make-up of any minority or low-income populations in the area, where are they located - what other kinds of questions did we ask. Oh, in particular for Oconee County, there's the question of the tax base provided by the plant and we talked, at some length, with them about the importance of that to the County finances and subsequently, of course, to their ability to attract new economic activity to the area, if that was their desire. That was the nature of the thing that we asked in that. I'll let some of the other staff, I guess, talk about some of the other agencies.

Mr. Cameron: Anybody else want to chime in on this one?

(No audible response.) I think - are we done answering this question?

Ms. Hickey: Are you happy with that answer?

Ms. Thompson: Yes.

Ms. Hickey: Okay.

Facilitator Cameron: Okay, and as I said, the staff over here and the PNL people will be here if you want to explore that in more detail. Yes, sir?

Mr. Wehmire: I'm David Wehmire. I am a local resident. I live about two miles away from the plant. A quick question. Your conclusion that you have on the Board at the present time, is that located anyplace except on Page 9.6 in the EIS?

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Ms. Hickey: I don't know the answer to that question. I believe it is but -

Mr. Cameron: The intent of the question, I guess, is there more of an elaboration on that so where can he find more information on this issue in the draft?

Ms. Hickey: The overall conclusion, you mean. I guess what is considered is that if you look at Chapter 4, that's where it talks about all of the issues in total and I don't know that we came to a conclusion in that chapter that's why it's all rolled up in Section 9. The summary is in Chapter 4.

[Discussion]

[Presentation by Mr. Palla]

[Discussion]

Mr. Wehmire: A quick question. Did you make any relative comparisons that would be understandable, more generally, to the general public such as comparing the risk from the Oconee plant to driving a mile on one of our local highways?

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Mr. Palla: No I didn't. It's probably a good idea. One could do that. I'm not quite sure how it would compare. What I can say is from - at a higher level the Commission has established safety goals for nuclear powerplants that essentially, if one is in compliance with the safety goals, the risk from the plant operation is a small fraction of the risk from all other risks that the population would get through other sources. That fraction is like a tenth of a percent. What one can say is - associated with those goals is a core damage frequency of one times ten to the minus four or one in ten thousand. The Oconee plant is below that goal. If one is below that goal you could be assured that your level of risk from the plant is a tenth of a percent of what would come from other sources.

Mr. Cameron: Does that answer your question?

Mr. Wehmire: Yes.

Mr. Cameron: Anybody else in the audience have a question about the severe accident part of the draft environmental impact statement?

Ms. Stancill: Nancy Stancill. Regarding the core damage, I wonder if you could follow-up on what Mr. Williams said about core embrittlement and what kind of a potential problem that might be with continuing to use the reactor?

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Mr. Cameron: Thanks Nancy.

Appendix A

Mr. Palla: From the point of view of modeling of an accident, if one would postulate an accident being the spontaneous rupture of the reactor vessel, there is a - it's called an initiating event frequency in PRA jargon but the probability assigned to the rupture of the vessel occurring spontaneously, this begins the accident. Those kind of sequences would generally progress to core damage. The number that is typically assigned, and I'm not certain what number was used in the Oconee PRA but it would be on the order of one times ten to the minus six or - it might be less. I've seen numbers that are several orders of magnitude lower than that. I'm not sure what was used here. I don't believe there was any adjustment made to the number to reflect an increased likelihood of a spontaneous rupture of the vessel but I don't believe that an adjustment would need to be necessary if the vessel is maintained, you know, controlled through other mechanisms. The aging management process should assure that the likelihood of that event would remain low.

Mr. Grimes: This is Chris Grimes. We treat the embrittlement of the reactor vessel and the loss of fracture toughness in the reactor vessel in the safety evaluation report. As Bob mentioned, that's an explicit part of the review that we did for the aging management programs. At present there's a design analysis for the Oconee vessels that demonstrate their capability to go out to forty-eight effective full power years, that's sixty real years. In addition, we have some open items related to cracking a vessel internals and we're looking at inspection programs to monitor for any evidence of cracking of the vessel internals that could cause a loss of core configuration. That's a very important part of the aging management programs that we're going to rely on in order to maintain the plant design basis that Bob relies on in his analysis.

Mr. Palla: Let me mention one other thing and that is should core damage occur in such an event, it does not mean that there would be a release to the population because containment integrity is very likely to be maintained through that event. The situation would be some degree of core damage but contained within the containment, which is a robust large dry containment structure for Oconee.

[Discussion]

[Presentation by Mr. Wilson]

[Discussion]

Ms. Plotnik: My name is Frances Plotnik. I have a question about the remaining fifteen years on the initial license period. The extension will be granted, of course, before this fifteen years is completed. If some unanticipated problem develops during this fifteen years, what happens?

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Mr. Grimes: The process that we employ in monitoring and overseeing the license for forty years is the same as it is for sixty years. If an issue comes up tomorrow or next month or next year, fifteen years from now or beyond that causes us to be concerned about public health and safety, we'll issue an order for the plant to shut down until that problem is rectified and that is

our usual practice. The significance of this licensing action is for the NRC to make clear to the Utility what the plant operating conditions, what plant operating conditions have to be maintained for a sixty year license. Otherwise, we would do the same thing in the remaining fifteen years that we would do beyond that point in terms of taking whatever action is necessary, that might come up during a licensed term.

Mr. Cameron: Okay, any other questions before we go to comments and before we go to Mr. Wehmire, I would like Bill McCollum from Duke has some comments to make on this and you can use this or -

Mr. McCollum: Thanks. My name is Bill McCollum. I work for Duke Energy Corporation. I'm Vice President in charge of the Oconee site. I just wanted to take a minute to say that I appreciate and thank the NRC members and their contractors for the thorough review thus far in the environmental portion of the licensing renewal application process. I think this has been a good solid, thorough review thus far and I appreciate the effort that's gone into that. I also would like to publicly thank the efforts of the Duke Power and Duke Energy employees, both those that have worked hard in this license renewal application process and in providing the information and response to a number of questions on the part of the staff, those folks for their efforts in this license renewal process as well as thanking the employees at the Oconee Nuclear site whose hard work and efforts, over the last twenty-six years, have built what I think is an admirable record of operation that stands well in terms of projecting our operation for the next thirty-something years at Oconee. The folks that work at Oconee and who live in this area are friends and neighbors of those of the rest of us who get to live in a great part of the country here and I think it's worth noting that nobody, not anybody is more concerned about the safety and reliability of operation and the maintenance of a high quality environment in this area than the folks that work at the Oconee station. I think that's shown by the efforts that those employees have undertaken over the years to maintain a high standard of good operation as well as the time and effort and energy that employees at Oconee have put in over those years to projects, maybe conducted on their own time, which have been recognized, in a number of ways, as having a beneficial impact on the environment. I won't go through trying to list numerous awards and recognition that Oconee employees have received for their efforts and projects that they've undertaken to protect and enhance the environment for the wildlife around the Oconee site area and around the general area but they are numerous. I want to thank those employees for their efforts. The last thing I wanted to say to our friends and neighbors in the Oconee area, I just want to thank - and all of us as employees at Oconee want to thank those folks in the area for the continued support that we've received over the last twenty-six years and the support that we're receiving in pursuing an extension of our license to continue to be your friends and neighbors here for many years to come. That support is extremely important to us and we appreciate the good and positive support that we've received throughout the years and that we continue to receive today from our friends and neighbors in Oconee and the surrounding area. Thank you.

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Mr. Cameron: Thank you Bill. Mr. Wehmire?

Appendix A

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Mr. Wehmire: My name is David Wehmire. I'm a local resident. I live about two miles from the plant, I mentioned this before but I wanted to make a general comment on the conclusions of the study. I hope, when they get through with this and come out with a final report, that they will put the conclusions near the front of the report and make them fairly clear. The important thing that I think the general public needs to understand is that the need for electricity in our country, both in this century and in the next century, is an absolute. We need the electricity in order to maintain our way of life. The report here is showing, rather clearly, that the generation of the electricity, through the use of nuclear power, is the safest and environmentally best way of handling the generation of electricity. The Oconee Station has made the environment their concern, we all live in an area that is one of the most beautiful areas of the entire eastern part of the United States and we want to maintain that and the continued operation of the nuclear power plant will not only assure that we do have the electricity but that the environment is maintained in the way that we have learned works very well. I just wanted everybody to understand that. Thank you.

Mr. Cameron: Thank you Mr. Wehmire. Doug Walters from the Nuclear Energy Institute. Doug, do you want to speak from there or do you want to come up front? It's entirely up to you.

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Mr. Walters: Thank you Chip. My name is Doug Walters, I'm with the Nuclear Energy Institute in Washington, D. C. Just for your information, NEI as we're known, has about two hundred and seventy-five members, U.S. and International, all involved in the energy business. We have every utility in the country that has a nuclear power plant as a member as well. We're here today to talk about the environmental impact statement for Oconee. As you heard, there was an extensive review done on the significant impacts for the plant and the conclusion was, I shouldn't have said significant, perhaps, but they reviewed the impacts for the plant and found that there were none of any significance. You also heard that the impacts that they looked at included things like its interactions with the water and the land around the plant, the socioeconomic factors, aquatic species, threatened and endangered species and many other issues. They also evaluated, as you heard, alternative sources of energy and I'll talk briefly to that in just one second. I want to emphasize the renewal of nuclear power plants is very important to the nation's energy mix. You may be aware that as a nation we're having difficulty now meeting the clean air standards. If we don't pursue renewal we're in more trouble, I think, in that regard. The Agency started preparing for renewal some time ago and in particular the environmental aspects of renewal. It's been a very open and public process. I think this rule making goes back probably to 1991. There were a number of regional workshops and the end result was the rule that was published in 1996. Certainly the NRC plays a vital role in license renewal but they're not the sole determiner of whether the plant will continue to operate. Their obligation is to evaluate the safety aspects and determine whether the plant may continue to operate. It's important to have, for the licensee, to have that option available. If the plant shuts down and the region decides, for example in this area, that they need emissions free generation it's too late. Again, that's why we need to be able to preserve the option of extending the license or operating for another twenty years. There's also a couple of other benefits for plant license renewal. One, it allows the U.S. to maintain an economic electric generating capacity, it

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doesn't produce greenhouse effects, gases or other pollutants. License renewal preserves jobs. There's a lot of people employed, not only at the Oconee Station but at the McGuire Station, Catawba Station and if you consider all the employees at the nuclear utilities around the country that's a lot of jobs. So, it preserves jobs. Third, at least in our assessment, renewal is a lot cheaper than building new capacity and that's extremely important as well. Let me just briefly mention that when we look at other sources of energy, and I'll emphasize emissions free generation, nuclear power represents about 64.5% of our nation's emission free generation. Hydro is second. It's about 35%, photovoltaic cells and windpower represent less than .1% and geothermal contributes a bit more, it's about .6%.

In closing BG&E and Oconee, as you know, are the first two utilities in the country to go through the renewal process. There are others that are lined up. Entergy will be filing an application at the end of this year for their Arkansas Nuclear One Plant. Southern Nuclear will file an application in the first quarter of 2000 for Plant Hatch. Florida Power and Light plans to file an application around the end of 2000. So with that, let me just say that nuclear energy provides an important benefit to the U.S. and the communities where these plants are located. Provides vast amounts of energy on demand to support continued economic growth and our high standard of living and it does all that without polluting air. Thank you very much.

Mr. Cameron: Thank you, Doug. Tom Harper, do you want to speak from there?

Mr. Harper: My name is Tom Harper, I'm a resident of Oconee County and I'm in the water treatment field as an operator, a shift operator, but I'm here just as a private individual. Right now you'll be licensing, relicensing the nuclear plant which is outstanding. Also, in Oconee County, two municipalities are considering, in the near future, and I don't know the time table for building new facilities. Seneca, I believe is committed to building a new one on Lake Keowee and I think that's great. I have a high level of confidence in Duke Power, extremely high in fact. However, Duke Power also has Lake Jocassee which is geographically above the nuclear plant and quite a distance from the nuclear plant as well. I guess what I would like to ask that is part of the licensing process that maybe Duke would make a strong commitment to making available a site on Lake Jocassee for a source of drinking water. I'm not technically sophisticated enough to know what possible contamination could happen to Keowee or whatever but I think that due to the fact that the relicensing is taking place now and these utilities are considering new plants that this would be a good time for Duke to make that commitment and I think they would need a little pressure and this might be a good way to go. One other thing. I'm not really - I guess the minutes are being taken of this meeting or whatever and I would hope to see that issue addressed in the minutes and the response. Thank you very much.

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Mr. Cameron: It definitely will show up on the transcript so you will see it there. I'm not sure that it's within the bailiwick of the Nuclear Regulatory Commission in terms of the environmental impact statement, in terms of response, but people are here from Duke Energy to consider

Appendix A

that. Chris, anybody up there have anything to add on this? I'm not asking you to I just want to make sure that if you do want to say something that you have the opportunity.

Mr. Grimes: NRC's obligations, under the National Environmental Policy Act, we typically don't have any kind of leverage with respect to what things are good things for the environment but I'm sure Mr. McCollum heard the opportunity that Duke has to reach out to the public. And, to the extent that we offer a forum for you to bring those kinds of things to Duke's attention will do what we can.

Mr. Cameron: Just one footnote that is that sometimes when you do the environmental impact statement there surfaces the need for some sort of mitigating action that might have to be taken by the licensee as a result of the NRC review. Any other comments out there before we adjourn? (No audible response.) Anybody else have anything to add? (No audible response.)

Mr. Cameron: Okay, well the staff is going to be here right after the meeting so if you have further questions for anybody, including the people from PNNL that did the study, please feel free to come up and thank you for being here today.

[Whereupon, the meeting was concluded.]

Transcript of the Evening Public Meeting on July 10, 1999 in Clemson, South Carolina

[Introduction by Mr. Cameron]
[Presentation by Ms. Carpenter]
[Presentation by Mr. Grimes]
[Discussion]

Ms. Haylor: My name is Nicole Haylor, I'm with the group that was referred to earlier, the Chattooga River Watershed Coalition.

I've read in some of the literature that the final inspection will occur as close as thirty days before the final decision on the license renewal. Is that correct?

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Mr. Grimes: That's correct. There's actually a set of three inspections that will be conducted. The first two inspections are the inspections of scoping and aging management programs that correspond to particular parts of the renewal application that we want the inspectors to verify in order to develop their inspection finding.

But then we have a third close out inspection, the last inspection is the opportunity for the Regional Administrator, who has to form a separate recommendation for the Commission to confirm any of the resolution of open items or any particular items that the Region believes would be of interest to the Commission making their decision.

Ms. Haylor: And if there were, some of the open items were say, possibly unresolved at this thirty day inspection period, how would this information be conveyed to the Public and how would that effect the schedule for the decision which, under my understanding, is on a very rigid time line.

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A.1.4

Mr. Grimes: We are working to a very specific schedule and we intend that all of the open and confirmatory items would have to be resolved before we would take a recommendation to the Commission. In the event that any of the open items are unresolved then the schedule would have be slipped. But, at this point, we're working on a schedule with anticipation that we would have complete responses from Duke by October so that we could complete a safety evaluation in November in order to time a final inspection before a Commission decision.

Ms. Haylor: I guess again, I'd like to ask, how would that information be conveyed to the Public, just thirty days before the final decision, if there were open items that were still unresolved?

A27,
A.1.4

Mr. Grimes: It would be conveyed - we would put the final inspection report, as well as the final safety evaluation and the final environmental impact statement would all be accessible to

Appendix A

the Public. I would intend on putting those on the Web as well as in the Public document room before the Commission gets the recommendation from the staff and then the Public would have the same thirty days to review those materials that the Commission would have, plus the opportunity to hear the explanation of how the issues have been addressed at the Commission meeting.

Ms. Haylor: Thank you.

Mr. Cameron: All right, this gentleman up here. Please state your name.

Mr. Sanders: My name is Don Sanders, I'm a resident of Oconee County and I belong to some of the conservation groups here in the area.

A28,
A.1.17 I was concerned about what the safety review, how it addresses the storage of the spent fuels and another point is, I've been reading and hearing about the MOX fuel, a mixture of uranium and plutonium. Is that a factor in the renewal of this license to be used here?

Mr. Grimes: No, sir, actually the MOX fuel is a concept that would be addressed by an amendment to the current license to permit the use of such fuel at any time. In fact, the issue concerning spent fuel storage and high level waste storage a national repository. All of the waste issues are issues that apply to the current license, the existing license and they're being addressed through specific rule makings and activities associated with spent fuel storage.

The Oconee facility has a spent fuel storage facility that has been licensed and is part of the current licensing basis. If they chose to expand that spent fuel storage capacity that would be through an amendment to the existing license or the extended license, whichever - at whatever time that might occur.

In addition, the Department of Energy is pursuing its plans to develop an application to submit to the NRC to license a high level waste repository and that issue is also being addressed as a separate effort that is associated with what is referred to as the high level waste confidence pact.

So DOE's obligation to develop a national repository is being developed separately from this.

Did I answer your questions?

A29,
A.1.17 **Mr. Sanders:** The only part I was not clear about was these items that you mentioned. Will these be open to the public?

Mr. Grimes: Yes. All of those activities, amendments to the existing license, the DOE effort to develop a high level waste repository, we put all those materials out there as information available on the NRC webpage that addresses spent fuel storage, high level waste storage and

the status of those activities and we hold meetings on the current license activities the same way we do for license renewal.

You just have to look at a different icon on the webpage to find some of those other matters.

Mr. Cameron: Yes, sir.

Mr. Mangrum: Dick Mangrum from WGOG, Walhalla. Did you say that the NRC will formally vote in August 2000 whether to renew the license?

A30,
A.1.4

Mr. Grimes: Yes, sir, that's the present schedule. The resolution of the open items by Duke is scheduled for October and I may have mis-spoke before because I've got two schedules in my head. The Staff's final safety evaluation and the final environmental impact statement are scheduled for February 2000 and our Commission decision by August.

As we approach those dates we would keep information about how we're progressing towards those milestones is also accessible on the web and in the Public document room.

The Commission meeting would be noticed at least thirty days in advance.

Mr. Cameron: Okay. Chris I think Nicole Haylor from *Chattooga is going to make a statement now that's mostly relevant to your topic. Nicole?

Ms. Haylor: Once again my name is Nicole Haylor. The Chattooga River Watershed Coalition is small, non-profit, conservation organization. Our office is based in Clayton, Georgia which is approximately thirty miles from the Oconee Nuclear Station. The entire Chattooga Watershed lies within the fifty mile evacuation zone from the Oconee Nuclear Station and as such would be greatly impacted if there were a major radiological accident there.

A31,
A.1.6

I personally am a resident of the State of South Carolina, I live in Oconee County, my residence is approximately twenty miles from the Oconee Nuclear Stations so you see I have various aspects, both personal and professional, as it were, in the safe operation and the relicensing decision of the Oconee Nuclear Station.

The Chattooga River Watershed Coalition as was noted before, has participated in the relicensing proceedings from the get go. We do have standing, as it were, in the proceedings although our concerns have not been recognized, have not been recognized for a Hearing by the Nuclear Regulatory Commission.

A32,
A.1.4

A33,
A.1.4 However, we do think that we have some important concerns and these concerns are being addressed somewhat through the relicensing process, however, a lot of these are simply unresolved at this point.

Appendix A

The whole relicensing technical issues are very involved and for the sake of streamlining some of our concerns or what I have to say now is it can be divided into basically three major categories.

A34,
A.1.15 No. 1 is the issue of the storage of high level waste. Everyone is probably aware that most of the high level waste for the Oconee Nuclear Station, or all of it as far as I know, is stored on site in spent fuel pools that are nearing capacity. Those who track what's going on in Congress are probably aware that the storage and management of high level waste is a very controversial issue that is currently - or has been the subject of on-going management strategies and what do we do with this very toxic waste that will remain toxic for approximately two hundred thousand years.

There are about forty thousand tons of this waste distributed around the United States at various nuclear power stations and there's basically nowhere to put it right now other than on-site in various storage mechanisms that sometimes work and sometimes don't work. I would say probably for the most part work at least for the time period that they've been used but for two hundred thousand years, it's simply an engineering problem that has not been solved yet.

It's relevant to note here also, and this is from the safety evaluation report, which is not necessarily the topic of conversation for this meeting, but it is very much a part of the relicensing process.

A35,
A.1.13 In the safety evaluation report the Nuclear Regulatory Commission offers the opinion or the judgement that regarding the actual spent fuel pool temperatures at Oconee Nuclear Station, the temperature limits do not guard against additional cracking of these spent fuel containment facility. This, of course, is an obvious concern to everyone, I would think, that lives within Oconee County and nearby. Obviously if there's leakage it gets into ground water and it's a very important concern.

A36,
A.1.15 Regarding the transportation of radiological waste, it's obvious that at some point this waste will need to be transferred away from the Oconee Nuclear Station possibly to the Yucca Mountain site if and when it's ever approved, which is also a very controversial subject right now.

Duke did not provide a site specific review of the environmental impacts from the transportation of high level waste. These words are the Nuclear Regulatory Commission's so there has been a void in the application regarding this subject.

Regarding the potential storage facility at Yucca Mountain, as I've said there seems to be - it's a very controversial subject. We don't know if this place will be approved and if it's appropriate it lies in a major earthquake zone and ground water - there have been studies by some individuals that show the ground water raises, periodically, through the mountain. It's against

A37,
A.1.15

the law in the State of Nevada to pollute ground water so these are some major stumbling blocks that still have to be resolved regarding the Yucca Mountain site.

Regarding if that site is used the environmental impact there, potential peak radiation, radioactive doses to individuals. Quoting the environmental impact statement, specific to the Ocone Nuclear Station, Nuclear Regulatory Commission Office:

A38,
A.1.15

While the Commission has reasonable confidence that these assumptions will prove correct about the potential radioactive doses being okay, there is considerable uncertainty since the limits are yet to be developed. No repository application has been completed or reviewed and uncertainty is inherent in the models used to evaluate possible pathways to the human environment.

Estimating cumulative doses to populations over thousands of years is more problematic. Such estimates would involve very great uncertainty, especially with respect to cumulative doses to the population.

Moving on to some of our concerns regarding the safety evaluation report, this will be the last formal public meeting where the public is invited, at several occasions, to hear a presentation from the Nuclear Regulatory Commission. These other meetings that were referred to are not exactly the same format so I'd like to introduce some concerns about the safety evaluation point at this meeting here.

The safety evaluation report does contain a fair number of open items. These items are unresolved at this point. While the relicensing decision moves forward, there are a number of very important open items that are unresolved and I'll just mention a few of them. I have all the page numbers if interested in checking my citations here.

Basically questions and uncertainty remain about detecting thermal and neutron irradiation embrittlement of the reactor vessel internal components and aging management programs for these components.

A39,
A.1.14

Also questions and uncertainty remain about ways to detect loss of fracture toughness. One of our primary concerns, of course, is the actual integrity of the reactor vessel given the fact that it is - will be over forty years old if the license renewal is approved.

A40,
A.1.14

The issue of embrittlement is a very important issue regarding the renewal process and is, to date, largely unresolved.

A41,
A.1.14

A42,
A.1.14 Regarding the reactor building cooling unit, questions remain about determining the heat removal capacity given the degradation of the systems due to aging.

Appendix A

A43, A.1.14 Regarding the reactor coolant system, "The NRC staff concludes that the applicant's time limited aging analysis of the reactor coolant system is not adequate to address the fatigue concerns for operation beyond the current design life of forty years."

A44, A.1.13 Meanwhile, it's common knowledge that the Oconee Nuclear Station has been cited by the Nuclear Regulatory Commission, on more than one occasion, for problems and inadequacies in the operation of the reactor cooling systems. Of course if the cooling system doesn't work then the reactor could potentially melt down. That's, of course, a very extreme scenario there are mechanisms in place to shut down the operation supposedly under controlled methods but, nevertheless, that's sort of the end result if the cooling systems fail.

Briefly, those are some of our concerns. We are tracking some of the other issues and we intend to keep tracking the unfolding of the open items as well as all the other aspects having to do with the license renewal process for the Oconee Nuclear Station.

Thank you very much.

Mr. Cameron: Thank you, Nicole. There's just a couple of things that I wanted to give Chris Grimes, perhaps, the opportunity to comment on.

One was Nicole's comments in terms of the SER quote on spent fuel. A second is, maybe just elaborate on the waste transportation aspect or have someone do that which Nicole referred to, which I think is being handled by the NRC rather than the licensee.

Just to give people an idea again about how some of the open items that Nicole mentioned are going to be resolved.

Mr. Grimes: Thank you Chip. I'll cover the safety evaluation items. Actually I'd like to thank you - I'm glad somebody reads these things. We go to a lot of trouble to write them.

Nicole properly characterized some of the open items that are reflected in the safety evaluation. There was a question about the appropriate temperature assumptions for determining the extent of cracking in the spent fuel pool. That specifically gets to managing aging effects for the pool liner. The safety evaluation does not elaborate but we are, we do know that -- monitoring systems to determine if cracking occurs. The safety evaluation is focusing on aging management programs that will try to prevent cracking so that we don't need to be concerned about any leakage from the pool but if leakage occurs it can be detected.

There are questions about embrittlement of reactor vessel internals. That's a matter that's being addressed. Pressurized water reactors at the present time but it's a specific area of interest that the staff addressed in the safety evaluation and we know that there are inspection activities that are being developed that can find cracking, should it occur, and correct it.

With respect to the reactor coolant system time limited aging analysis for fatigue, that is an issue that's related to calculational techniques. The staff did not think that the calculational techniques that Duke offered were sufficient. Duke is going to address the fatigue issue but there's also an industry-wide effort to address the fatigue calculational techniques, it's referred to as generic safety issue 190. We need to address that before we forward a recommendation to the Commission.

That's sort of a general reaction to some of the comments about the quotes from the SER which I don't need to know the page numbers, I pretty well know about where we said those things and those were fairly reasonable quotes of the safety evaluation and we need to have those issues resolved before we complete a renewal recommendation.

With respect to the high level waste issues, I'm going to let Cindy address those.

Ms. Carpenter: You're right, the disposition of high level waste is still an unresolved issue and correctly Oconee - Duke Energy did not address, in a site specific analysis, what to do with the transportation of high level waste. The reason for that is that the Agency has determined that the transportation of high level waste is really a generic issue that faces all of the nuclear power plants and therefore we're addressing that on a generic basis.

We're in the process right now of a rulemaking to look at the transportation of high level waste and at this moment in time the Public comment period has closed and we're in the process of reviewing the Public comments and resolving this.

[Discussion]

[Presentation by Mr. Wilson]

[Discussion]

Mr. Sanders: Don Sanders again. I guess the environmental impact statement is just not the place for the safety issue but that's not clear here, to me, and it may not be to others. You might want to say where the safety issue and some of these others - unable to hear.

A45,
A.1.14

Mr. Cameron: Did you guys hear that question?

Mr. Grimes: I heard the question and you're correct. The environmental impact statement doesn't address the safety issues. The safety issues are addressed, as I explained in the introduction, either through a formal public participation process which involves Hearings and a petition to intervene, or informally by attending meetings or calling us. If you have a particular question about the staff safety evaluation.

Appendix A

I'll give you my name and address and if you've got any safety questions you want answered I'll answer them.

Mr. Cameron: Chris, I think maybe you should just repeat and Jim might talk about it a little bit later on, but could you just talk about how the - there's the environmental impact statement process, which is the main focus tonight. There's the safety evaluation process - how do those all come together again, just so that people understand.

Mr. Grimes: Upon receipt of a license renewal application the safety review is the review that is conducted in accordance with Part 54 and that results in a safety evaluation report. As shown on this slide, the opportunities for public involvement are informally participating in meetings, specifically the ACRS review is a transcribed meeting where the ACRS solicits Public comment.

There are also the formal adjudicatory hearings and a little note at the bottom is the key here and that is if a hearing request is granted, the environmental review that Jim just described is conducted in accordance with Part 51. We had our scoping meeting, we've got a supplement to environmental impact statement, we're at this little box right here, right now, conducting a Public meeting to discuss the comments on the supplement as it relates to the environmental impacts that are described in Part 51 and Jim outlined those.

The other opportunity for Public involvement is when the pieces come together, the inspection activities, we hold Public meetings to discuss the inspection results. We hold meetings throughout the safety evaluation process where interested members of the public can comment.

Finally, all of these pieces come together when they're presented to the Nuclear Regulatory Commission for a decision and that is a Public meeting. All the documents that are provided to the commission for their consideration, except for the staff's recommendation which is withheld until the commission makes its finding. The safety evaluation, the supplement to the GEIS, the inspection reports - all of those things are in the Public domain at the time the commission meets.

[Discussion]

[Presentation by Ms. Hickey]

[Discussion]

Ms. Haylor: I have a question regarding the examination of alternative energy sources. Was it considered to analyze a combination of alternative energy sources such as the one, on the slide that you showed briefly, a combination of all those together or was the analysis just all with one?

A46,
A.1.16

Ms. Hickey: I cannot answer that right now. I believe they were all looked at independently. That's correct, we did not look at them mixed. So they were all looked at individually.

Ms. Haylor: My initial reaction would be that this would certainly prejudice the analysis because just basic common sense, as far as evolving technology, it seems to be going in a combination of various alternative energy sources would seem to be a more viable analysis than just saying we could generate all the energy that's produced by Oconee Nuclear Station from solar power.

So I think that the analysis is somewhat deficient there.

Mr. Wilson: I think in the first part of Eva's description of what's in the alternative section, she pointed out that we were looking at placing an alternative - something that would replace a large baseload unit and we didn't look at two or three different small sources added together, we looked at something that would replace Oconee's nuclear generating capacity, directly.

Ms. Haylor: Thanks, I think your answer was clear on that.

Ms. Hickey: Your comment is noted.

Ms. Haylor: Also, just as an aside or also I'd like to mention were energy reduction measures, conservation measures factored into that analysis at all?

A47,
A.1.16

Ms. Hickey: No, that wasn't one of the considerations here, it was just a direct replacement of Oconee Nuclear Plant.

Mr. Cameron: Could you hold on just a minute, Mike so I can get you on here.

Mr. Scott: I'm Mike Scott, partially responsible for that section of the report. Actually there are demand side measures that Duke, in its IRPs and its power planning have looked at in the past and are continuing to examine. That's on Page 8-27, if you want to look at that analysis.

Conservation, at least in part, was looked at as a possibility for replacement power.

Mr. Cameron: Okay, thank you. Those are the type of comments that the staff will be looking at as they develop the final environmental impact statement. In other words, looking at combinations of technologies and looking at conservation.

As Eva said, those are noted. Nicole, do you have any other comments on this part?

Ms. Haylor: I had another question on an unrelated subject but one that you mentioned in your presentation about the cumulative - potential cumulative health impacts over the span of the operation of the nuclear power plant.

Appendix A

A48,
A.1.9

My question is, do you know if the Centers for Disease Control has ever done a nation-wide, systematic study of the potential health impacts from - obvious health repercussion, increased cancer rates or whatever, leukemia in, say a fifty mile radius or a twenty mile radius of the nuclear power stations operating in the United States?

A49,
A.1.8

Ms. Hickey: I know there are many studies that have been conducted. I don't know if there's one specifically along that line, there may be, I'm just not aware of it.

I know that there are continuing studies on the impacts from radiological -

Mr. Cameron: Anybody from the NRC that wants to offer any information on that, Chris?

Mr. Grimes: The only thing I can add to that is when we had our Public meeting at Calvert Cliffs, Solomons, Maryland, the Maryland Public Health Officer reported that they had started a cancer register in Maryland which came as a bit of a surprise because we didn't know that anybody had developed a cancer register in the United States, let alone one right in my back yard.

At that time the question came up whether or not anyone was aware of a national register or any national studies and I didn't hear an answer to that so my suspicion is no, but we will contact the Centers for Disease Control and other health organizations and see if we can find out if there are any plans to develop any nationwide information concerning radiological impacts and cancer studies.

Mr. Cameron: Okay, thank you Chris.

Any more comments or questions. Margaret?

Ms. Thompson: Thanks, I'm Margaret Thompson. I used to practice law as a Federal government lawyer for the EPA up in New York, Region 2, hazardous waste issues mostly under a couple of different Federal - now I teach law classes on various subjects, sometimes at USC law school in Columbia and currently here at Clemson, Environmental Science, Law and Policy.

I wanted to raise two points, simply for the record. One of them I'll bring up first, water use and quality which I asked you about earlier and the subject passed by and I wanted to make sure the public attending only tonight realized that the information that should be there on your water discharge permit and its status is not in the report that the present NPDES permit, for both water discharge and land disposal permits are currently under review by --.

I've been planning to ask Mike Gandy, who is doing that review for -- what he could state in public, to date, this evening and he went back to Columbia before the evening meeting started

so he's not here. So my question becomes, when will the public get this water pollution permit status information if it's not in this report now and it isn't ready yet and we don't have another formal public meeting officially scheduled?

Ms. Hickey: We hope that it will be complete and in the final report but I'm not sure that - I'm assuming that will happen but since we don't have that yet I don't want to say.

But hopefully, the permit will be in place -

Ms. Thompson: So you're waiting on -- and you're dependent on their schedule.

A50,
A.1.8

Ms. Hickey: I don't know that we're dependent, that's dependent of the schedule but the hopes are that it will be in place by the time we do the final report.

Ms. Thompson: And what if it's not?

A50,
A.1.8

Ms. Hickey: I don't know. They're expecting the decision in August so we're assuming that it will be complete and the permit will be complete.

Ms. Thompson: So clean water questions are open?

A49,
A.1.8

Mr. Cameron: I would imagine that - the permit has a life of its own outside of the draft environmental impact statement process and the permit has to be issued and I think that's sort of the bottom line on that.

Mr. Grimes: I'm going to take a shot at it. We can't dictate to the state how they will implement their clean water provisions. It has a bearing and a relationship to this action and if the permit hasn't been resolved by the time that we present the final environmental impact statement to the Commission then we'll note that to the Commission, we'll note the status of it and the Commission will have to make its decision on that basis.

But I note that the threshold that the Nuclear Regulatory Commission will look at that issue - is predicated on whether or not the absence of the status is so compelling as to foreclose a decision on the license renewal.

It's a different standard than I imagine the state uses for issuance of the permit.

Ms. Thompson: Okay, thanks.

Mr. Cameron: I'm going to come back to you if you have another question but let's go to Mike for clarification on that.

Appendix A

Mr. Tuckman: This is Mike Tuckman from Duke Power. We have NPDEs permits, they are required to be renewed every four years and this is just the renewal process for that permit. It's not like we're operating without a permit.

Mr. Cameron: Okay, that's a helpful clarification.

Margaret, do you have another question on this segment?

Ms. Thompson: Yes, a short one. I think on refurbishment, Chapter 3 states that Duke has reported that it doesn't plan on refurbishment activities so you didn't need to review those issues. Yet, there's a statement with information suggesting that component replacement, as a technical term, is anticipated as an on-going activity throughout the extent of the life of the plant.

A51,
A.1.5

I'm a lawyer, could you distinguish for me between component replacement and refurbishment so as to indicate whether the Public would have information in decisions respecting component replacement if it - if the Public should get information about refurbishment and isn't going to, would we get information about component replacement?

Mr. Grimes: We have a language barrier and it relates to - I used the term refurbishment earlier as well in talking about maintenance activities.

For the purpose of the environmental impact review, refurbishment is described to - it's intended to describe something that constitutes a site construction activity or change in a facility that is so great that it might have an effect on the local environment. For example, putting up a new building or putting a shield around the whole plant and that's refurbishment with a capital "R", for the purposes of an environmental review.

When I use the term refurbishment in aging management, it's refurbishment with a small "r" and I've been looking for a different term, maybe it would be maintenance and rebuilding but it refers to repairs and replacements of individual components, pipe segments, repairing of concrete walls, that's a refurbishment activity but not one that's going to have a substantial impact on the environment. It's part of normal plant maintenance.

So, when we speak about refurbishment at the component level, that's something that occurs day in and day out and it's a part of the processes that we're reviewing for aging management.

[Discussion]

[Presentation by Mr. Palla]

[Discussion]

[Presentation by Mr. Wilson]

[Discussion]

Ms. Haylor: I have one question. If the Public comments that come in, if they are not acknowledged or deemed worthy by the Nuclear Regulatory Commission, what avenue of recourse is available to the Public?

A52,
A.1.4

Mr. Wilson: Let me see if I understand your question. Your comment will be a part of the environmental impact statement. It will be put in its entirety into Appendix A of the document and in that appendix, we'll indicate how we've addressed your comment. If we determine that it's appropriate, we'll change the document accordingly, so I guess you kind of have to wait until we issue the document in its final form to see if we appropriately addressed it.

I guess if you're unhappy with our treatment, you should let us know and I guess you could write a letter to the Commission and ask them to reconsider how your comment is being considered. It will be part of the document itself as well as our disposition of your comment.

Mr. Grimes: I'll add to that. The typical forms of appeal, if you're not satisfied with how the staff has executed its responsibilities are to formally complain to the Commission itself, you can tell your Congressman and then your Congressman calls me up and says, why didn't you do the job right or whatever.

There are a variety of different ways that members of the Public can appeal on how we execute our responsibility.

Ms. Haylor: In your opinion, would the appeal even have a chance of being heard by the Commission if you didn't already have standing?

A53,
A.1.4

Mr. Grimes: The Commission takes its responsibilities to the Public very seriously and standing doesn't really have anything to do with it since there's not a Hearing pending on particular issues in litigation. Certainly, in any circumstance you can try to take a particular complaint to the Courts but in the absence of some kind of exchange and appeal to the Commission or appeal to some legislative body, the NRC has not properly executed its responsibility, the Courts are probably not going to entertain the issue.

Mr. Cameron: I think we'll probably see if there are any more questions on that and we may be able to provide some more clarification to you after the meeting on that, Nicole.

Let's go to Greg Robison for a comment and Greg you can - feel free to come up here.

Appendix A

Mr. Robison: Good evening, I'm Greg Robison. I work for Duke Power. I'm the manager of the Oconee license renewal project and I just wanted to take just a moment to say thank you to several groups of individuals.

A54,
A.1.3

First I'd like to thank the NRC. I think their diligence and thoroughness in implementing the license renewal process is evident if you'll take a look at the supplemental environmental impact statement, you'll see the detail that they've really put into the work. They are to be commended for that work.

I'd also like to thank the Duke team, specifically I'd like to thank all the individuals at Duke who put all the hours and energy into producing our part of the license renewal application. There was a lot of interest and a lot of hard work, a lot of dedication. We were able to bring many, many work years of effort to that application and I'm glad that we had the strong team that we do have.

I'd also like to say thank you to the Oconee Staff extended, the strong environmental commitment that that staff has had in managing the environmental issues that's been there from day one, over twenty-six years now of operation. We bring that back to the table and I really appreciate that and I want to say thank you to them.

And importantly, tonight, I want to say thank you to the neighbors in the communities who are represented here with the Public. Thank you for your interest tonight but more importantly, thank you for your interest over the twenty-six years. We work hard, we want to be a neighbor and you can only be a neighbor if you're neighbors will accept you. We appreciate it, we plan to be here - license renewal is an effort that we want to undertake and as we look around us and it will continue to be important for us to be a part of the community.

We don't see our commitment changing. Renewal will give us an opportunity to continue to work hard, to stay focused and to run a safe and efficient power plant and for that we say thank you.

Mr. Cameron: Thank you very much, Greg. Mr. Castrill? Hi, did I get that right? Let me give you a mike so we can get you on the record for whatever you want to say.

Mr. Castrill: I don't have a comment I came just to listen as a citizen [inaudible].

Mr. Cameron: Well, thank you. Let's go to the representative of the Nuclear Energy Institute, Doug Walters.

Mr. Walters: Good evening. My name is Doug Walters. I'm with the Nuclear Energy Institute. The Nuclear Energy Institute is a Washington, D. C. based policy organization. We represent more than two hundred and seventy-five U. S. and International companies involved in nuclear

energy. All the utilities in the United States that have nuclear power plants are members of NEI.

Most, if not all of our activities involve nuclear energy which you heard earlier this evening represents about twenty percent of America's electricity.

Of course we're here today to discuss the draft environmental impact statement for Oconee for license renewal and, as you hear, after the extensive review that was done no significant environmental impacts were identified as a result of extending the license on the Oconee Plant.

This review included the potential impacts from obviously continued operation, the plant's interaction with the land, water and air socio-economic factors, aquatic species, threatened and endangered species and many other issues were considered.

The NRC also examined the environmental impacts of alternative energy sources and I think - a view in response to the question that was asked about that, I think the standard there is that nuclear has to be shown to be within a range of alternatives. So, it's not necessarily - I think you could consider a mix or combination but the test is whether the nuclear plant is within the range, in terms of environmental impacts of other alternative energy sources.

A55,
A.1.16

Of course license renewal is important for the future of America. We need it to meet our future energy needs. You may be aware that the nation, right now, has difficulty meeting the clean air standards or requirements and that's with the nuclear plants already operating.

A56,
A.1.1

We should commend, by the way, the NRC for the very open and thorough public process that they exercised in developing this generic environmental impact statement. It certainly helps to ensure that the important issues are not overlooked or left unexplored and, at the same time, it makes the process more efficient and effective.

A57,
A.1.4

The NRC actually started this process some time ago and, as you saw, they concluded that there were a number of issues that could be addressed for all nuclear power plants and they did that in the generic environmental impact statement.

The remaining issues, again, as you heard this evening have to be addressed in the context of individual renewal application and that's what the purpose of this meeting is.

The NRC certainly plays a vital role in license renewal but it isn't the NRC that will decide whether the plant - nuclear energy, I should say, or the particular plant is the right generating source for a given area. The NRC's role is to determine, solely based on safety whether the plant may continue to operate under a renewed license.

I'd just like to briefly talk a little bit about what license renewal really means. Without renewal these plants will have to shut down. Oconee would have to shut down at the end of its forty year operating license. If the Region - if this area decides that they need emissions free

Appendix A

generation that that plant provided then it would be too late if the plant shuts down. The time for making that decision will have passed.

A58,
A.1.1 With renewal, Oconee preserves the option to continue operating should that decision be made. That's a good option to have.

A59,
A.1.1 There are some other benefits of renewal and I'll just mention three.

One is - I touched on this earlier. It allows the U. S. to maintain a good energy mix. It allows us to maintain an economic generating capacity. Nuclear power does not generate green house gases or other pollutants such as sulphur dioxide, nitrogen oxide and particulates.

Second, renewal preserves jobs and there's a substantial tax revenue, as you heard, from the communities around these plants.

Third, renewal is much less cheaper than building a new capacity. Many people don't realize this but nuclear power is the largest source of emissions free generation. It's twenty percent of the overall generation of the country but it's about sixty-four and a half percent of the emissions free generation capacity in the United States. That compares to about thirty-five percent which we get from hydro which is the second highest source. Photovoltaic cells, windpower, they represent about .01 percent of emissions free capacity and geo-thermal is about .6.

Under the clean air act, States are increasingly - are under increasingly stringent controls on emissions, and again, as an emission free source nuclear power already helps limit the amount of greenhouse gases emitted through electricity generation.

So, in closing, I'd just say that nuclear power provides important benefits to the U. S. and the communities in which the plants are located. It provides vast amounts of electricity, on demand, to support continued economic growth and our high standard of living and it does all that without polluting the air.

Thank you very much.

Mr. Cameron: Okay, thank you very much Doug.

Let me sum up a little bit here.

The NRC staff was here to present the results of the draft environmental impact statement and to get your comments not only here tonight but written comments if you chose to submit them to the commission, based on the draft environmental impact statement and what you heard tonight.

The NRC staff is obligated to consider those comments and wants to consider those comments and not only to consider them but to explain how those comments were dispositioned in preparing the final environmental impact statement.

As Chris correctly pointed out, the concept of standing is no consideration, in terms of filing comments on the draft environmental impact statement or if you disagree with the staff's conclusions in the final environmental impact statement in writing a letter to the Commission saying that you disagree with something in the final environmental impact statement.

The Commission would then have those comments for its consideration when it makes the final decision on license renewal, when it has the results of the environmental study and also of the safety study.

As with any final environmental impact statement of any agency, if someone does not think that that's an adequate statement then the Agency's adequacy of that statement can always be challenged in Federal Court and, of course then standing does become important again because you're in an adjudicatory arena.

Any final comments before we adjourn tonight?

[No response.]

I'd just like to thank all of you for attending tonight and for your thoughtful comments.

Thank you very much.

Meeting is adjourned.

[Whereupon, the meeting was concluded.]

Appendix A

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