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License Renewal Draft Environmental
Impact Statement - Evening Session

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U.S. NUCLEAR REGULATORY COMMISSION

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NORTH ANNA POWER STATION, UNITS 1 AND 2

LICENSE RENEWAL

DRAFT ENVIRONMENTAL IMPACT STATEMENT

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PUBLIC MEETING

+ + + + +

TUESDAY,

JUNE 25, 2002

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LOUISA, VIRGINIA

+ + + + +

The meeting was held at 7:00 p.m. at the
Public Meeting Room, Louisa County Government
Building, 1 Woolfolk Avenue, Louisa, Virginia, Chip
Cameron, Facilitator, presiding.

PRESENT:

CHIP CAMERON, FACILITATOR

JOHN TAPPERT

OMID TABATABAI

ANDY KUGLER

EVA HICKEY

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ALSO PRESENT:

- BROOKS BESLEY
- MICHAEL SCHLEMMEN
- JACK DAVIS
- DR. DAVID MORGAN
- DR. JUD WHITE
- IONE DUSINBERRE
- MARIONE COBB
- ADRIANE DELLORCO
- GERALD ROOT
- DICK CLARK
- FITZGERALD BARNES

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

(7:00 p.m.)

1
2
3 FACILITATOR CAMERON: Good evening,
4 everyone. I want to welcome you to the meeting
5 tonight. My name is Chip Cameron, I'm the Special
6 Counsel for Public Liaison at the Nuclear Regulatory
7 Commission, and it is my pleasure to serve as your
8 facilitator for the meeting tonight.

9 And in that role I'm going to try to help
10 all of you have a productive meeting. And this
11 meeting concerns the draft environmental impact
12 statement that has been prepared, by the NRC, on the
13 license applications that have been submitted by
14 Dominion/Virginia Power to renew the operating
15 licenses for Units 1 and 2 at the North Anna Nuclear
16 Station.

17 And I just want to cover three things
18 about the meeting process before we get into the
19 substance of tonight's discussion.

20 The first thing I would like to talk about
21 are the objectives for tonight's meeting. We were
22 here last year to do a public meeting, it was called
23 a scoping meeting to try to give us some information
24 and help on what we should include in the
25 environmental impact statement that was going to be

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1 prepared on these license renewal applications.

2 We have prepared a draft environmental
3 impact statement, there are copies out there, if you
4 need one. And we are back here, tonight, to try to
5 clearly describe some of the findings, the important
6 findings in the draft environmental impact statement,
7 and also to give you information about this license
8 renewal process, generally.

9 A second objective, and a most important
10 one, is to listen to your comments, your concerns, on
11 these environmental and license renewal issues.

12 You will hear, tonight, from the NRC
13 staff, that we are also asking for written comments on
14 these issues. But we wanted to be here tonight with
15 you, in person, to talk with you about these issues,
16 both during the meeting tonight, and after the
17 meeting.

18 And I just want to emphasize that you may
19 hear things tonight that would prompt you to prepare
20 a written comment for us. But even if you don't, your
21 comments tonight will carry the same weight as any
22 written comments that the NRC receives.

23 In terms of the format for the meeting,
24 second thing I want to cover is format and ground
25 rules for the meeting. The format for the meeting is

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1 basically that we are going to have two segments to
2 the meeting.

3 The first segment of the meeting is going
4 to consist of some brief presentations by the NRC
5 staff to give you some background on what this license
6 renewal process is all about. And, specifically, what
7 are some of the findings that are in the draft
8 environmental impact statement.

9 After each of those presentations we are
10 going to go on to you for questions, to see if you
11 have any questions that we can answer about the
12 process.

13 When we are done with that, then we are
14 going to go into more of the listening mode, and give
15 anybody who wishes to an opportunity to make a more
16 formal statement for us. And a formal statement for
17 the record.

18 We are transcribing the meeting tonight,
19 and that transcript of the meeting will be available,
20 at a minimum, on the NRC website, and it will form our
21 record of the meeting.

22 And, ultimately, we want to use your
23 comments tonight, any written comments that we
24 receive, to assist us in finalizing the draft
25 environmental impact statement.

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1 And I want to emphasize that it is a draft
2 environmental impact statement. It is still a work
3 that is under development, until we consider the
4 comments that we hear tonight, and finalize it.

5 In terms of ground rules, they are pretty
6 simple. During the first phase of the meeting when we
7 are having the NRC presentations, if you have a
8 question just signal me and I will bring you this
9 talking stick.

10 Tell us what your question is, and we will
11 try to give you the best answer we can. And please
12 give us your name and affiliation, if appropriate, for
13 the record.

14 Second ground rule is only one person
15 speaking at a time so that we can get a clean
16 transcript of what that person is saying. But, more
17 importantly, so that we can give our full attention to
18 whomever has the floor at the moment.

19 A third ground rule is I want to make sure
20 that everybody who is here tonight, that wants an
21 opportunity to talk, that has a question, I want to
22 make sure that they get their time to do that.

23 So I would just ask you to try to be as
24 brief as possible in your questions, and in your
25 comments. And I know that that is difficult to do on

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1 complex and controversial issues.

2 But it will help us to make sure that
3 everybody gets a chance to talk. And for the formal
4 statement part of the meeting I'm going to be using a
5 ground rule of 5 minutes for presentations.

6 And it is a fuzzy boundary. If you go
7 over 5 minutes by a little bit, that will be fine.
8 But I would just like to try to keep us in that ball
9 park.

10 I'm going to introduce the -- go over the
11 agenda with you, so that you know what to expect, and
12 also introduce the NRC staff who are going to be
13 making presentations. And in about two minutes, after
14 I'm done, I'm going to ask John Tappert, who is right
15 over here, from the NRC, to welcome you.

16 And I'm asking him to do that because he
17 is the section leader, the supervisor of the
18 environmental review section within the NRC's Office
19 of Nuclear Reactor Regulation.

20 And John and his staff oversee the
21 development, the preparation of the environmental
22 reviews that are done for all license renewal
23 applications.

24 And as you may, or may not know, the NRC
25 has received several of these license renewal

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1 applications, similar to the Dominion/Virginia Power
2 application, from power plants all over the country.

3 John has been with the agency for
4 approximately 11 years. Before he became the section
5 chief he was a resident inspector of nuclear power
6 plants for the NRC, up in the NRC's Region 1.

7 He has a bachelor's degree in aerospace
8 and oceanographic engineering, and he has a master's
9 degree in environmental engineering.

10 After John is done we are going to go to
11 Omid Tabatabai, who is right here in the front row.
12 Omid is also in our Office of Nuclear Reactor
13 Regulation.

14 He is the project manager for the safety
15 review on the North Anna license renewal applications.
16 And he has been with us for about three years, and
17 before that he was with the Department of Energy in
18 the office of environmental safety and health.

19 And he also worked in programs related to
20 the Department of Energy defense programs. And Omid
21 has a bachelor's degree in mathematics, and a master's
22 degree, I believe, in nuclear engineering.

23 After Omid is done, he is going to talk
24 about license renewal, generally, we will go on to you
25 to see if you have any questions. After we are done

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1 with that, then we are going to go to, we are going to
2 get more specific.

3 We are going to go to a description of the
4 environmental review process for license renewal. And
5 Andy Kugler, who is right over here, is going to give
6 us a presentation on that.

7 And he is the project manager for the
8 environmental review, so he is sort of the counterpart
9 to Omid. Omid does safety review, Andy environmental
10 review. And Andy has been with the NRC for about 12
11 years. He has worked for a nuclear utility that
12 operated a nuclear power plant.

13 He has a bachelor's degree in mechanical
14 engineering, but also a master's degree. And, Andy,
15 I'm going to -- what was that master's degree?

16 MR. KUGLER: Technical management.

17 FACILITATOR CAMERON: Technical
18 management, okay, thank you.

19 After Andy is done we will go back out to
20 you to see if there are any questions. And then we
21 are going to get to the heart of the discussion
22 tonight.

23 And we are going to go to Eva Hickey, who
24 is right over here. And Eva is the project team
25 leader for the preparation of the environmental impact

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1 statement for the North Anna license renewal
2 application.

3 Eva is with Pacific Northwest National
4 Lab. And the NRC is, as you will be hearing more of,
5 is using a team of experts, expert scientists, to help
6 us to prepare this review.

7 Eva has a master's in health physics, and
8 she has had over 20 years of experience with nuclear
9 reactors, including emergency preparedness issues.

10 She is going to talk about what are some
11 of the important findings, environmental findings, in
12 the draft environmental impact statement. And, of
13 course, we anticipate that there will be a lot of
14 questions about that, and we are going to be going on
15 for questions on that, too.

16 Finally we have a short subject. Andy
17 Kugler, again, is going to talk about one specific
18 aspect of the draft environmental impact statement.
19 And that is something called severe accident
20 mitigation alternatives. Basically taking a look to
21 see what the potential is for any type of severe
22 accident, and what should be done to mitigate/prevent
23 those types of accidents. He will talk about that,
24 and we will have questions, possibly from you, on
25 that.

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1 And Andy is going to talk about what the
2 overall conclusion is in the draft environmental
3 impact statement.

4 So that is sort of the agenda. Then we
5 will go into hearing from you. A number of you have
6 signed up to speak, and we will get right into that
7 after we are sure that we have answered all of your
8 questions.

9 And I would just thank you all for being
10 here tonight to help us with the decision that we have
11 in front of us. And there is a sign-in sheet out
12 front for getting further information from us. So
13 please sign in.

14 There is also an evaluation form of the
15 meeting out there, that we use to try to help us to
16 improve, and how we do public meetings, notify people,
17 handle their questions, whatever. So if you are
18 inclined to fill one of those out, that would be very
19 helpful for us.

20 And I'm going to ask John to come up and
21 give us a welcome, now, and we will get started with
22 the meeting.

23 MR. TAPPERT: So welcome. As Chip said,
24 my name is John Tappert, I'm chief of the
25 environmental section in the Office of Nuclear Reactor

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1 Regulation. And, again I would like to welcome you
2 to this meeting, and thank you for participating in
3 our process.

4 As Chip said, there are several things we
5 would like to accomplish tonight, and I would like to
6 briefly reiterate the purposes of this meeting.

7 First we would like to give you a brief
8 overview of the entire license renewal program, this
9 includes both the safety review, as well as an
10 environmental review, which is the principal focus of
11 tonight's meeting.

12 Second we will give you the preliminary
13 results of our environmental review, which assesses
14 the environmental impacts associated with extending
15 the operating license at the North Anna nuclear power
16 plant, for an additional 20 years.

17 Then we will give you some additional
18 information about how you can submit written comments
19 on the draft environmental impact statement, and also
20 information on the schedule for the balance of our
21 review.

22 At the conclusion of the Staff's
23 presentation we will be happy to receive any questions
24 or comments that you may have on the draft
25 environmental impact statement.

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1 But first let me provide some context for
2 the license renewal program. The Atomic Energy Act
3 gives the NRC the authority to issue operating
4 licenses to commercial nuclear power plants for a
5 period of 40 years.

6 For North Anna units 1 and 2 these
7 operating licenses will expire in 2018, and 2020,
8 respectively. Our regulations also make provisions
9 for extending these operating licenses for an
10 additional 20 years as part of the license renewal
11 program.

12 Dominion has requested license renewal for
13 both of these North Anna units. As part of the NRC's
14 review of these license renewal applications, we
15 conducted an environmental scoping meeting here last
16 October.

17 At that meeting we provided information on
18 the license renewal process, and also sought your
19 input on issues to be included in the environmental
20 impact statement.

21 As we indicated at that scoping meeting,
22 we return here today to provide the preliminary
23 results of our environmental impact statement. And,
24 again, one of the principal purposes of this meeting
25 today is to receive your questions and comments on

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1 that draft.

2 And with that I would like to ask Omid to
3 give a brief overview of the safety review portion.

4 MR. TABATABAI: Thank you, John.

5 As Chip mentioned, my name is Omid
6 Tabatabai, and I'm the project manager for the safety
7 review of the North Anna license renewal application.

8 Although the purpose of this meeting is to
9 describe the findings of the NRC's staff on
10 environmental review of the application, I'll be here
11 to talk about overall license renewal process, and to
12 answer any questions you might have regarding safety
13 aspects of this license renewal application.

14 On this slide we have summarized the whole
15 license renewal process. And we have summarized what
16 license renewal process consists of.

17 For a license renewal review we review the
18 application for safety issues, for environmental
19 impact issues, and also we perform plant inspections.

20 And there is an independent organization,
21 within the Nuclear Regulatory Commission, it is called
22 the Advisory Committee on Reactor Safeguards, and they
23 do an independent review of the application, and the
24 Staff makes a presentation to them as far as the
25 findings or results of the reviews, and they make

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1 independent evaluation of the application.

2 The NRC performs its safety review
3 according to Part 54 of Title 10 of the Code of
4 Federal Regulations, and that is the governing rule
5 for license renewal review.

6 This rule requires that an application
7 address plant safety by demonstrating that the aging
8 effects will be adequately managed for the period of
9 extended operation, which is 20 years.

10 Each license renewal application extends
11 the operating license for that unit for an additional
12 20 years.

13 As the NRC project manager for safety
14 review, I'm responsible for coordinating the
15 evaluation of all these aging management programs,
16 plant inspections, and ACRS recommendations,
17 basically.

18 The NRC Staff performs its environmental
19 review according to Part 51 of Title 10 of Code of
20 Federal Regulations. Mr. Andy Kugler is the project
21 manager for the environmental review and he will
22 discuss that part of the license renewal process in
23 more detail.

24 So far the NRC Staff has conducted two
25 inspections at North Anna Units 1 and 2. One in

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1 October 2001, And another in February 2002. And we
2 have scheduled a third inspection for North Anna units
3 1 and 2, to be conducted in September of this year.

4 As I mentioned, before, ACRS performs an
5 independent review of the application, and they
6 directly report to the Commission, which consists of
7 five commissioners, including the chairman of the
8 Commission.

9 We have scheduled the ACRS subcommittee
10 meeting for July 9th, of this year. It is open to the
11 public, and you are welcome to participate.

12 This slide shows the license renewal
13 process in a flow chart format. In addition to that
14 there are opportunities for the members of the public
15 to participate in this process.

16 For example, this meeting we have tonight
17 is one opportunity for the members of the public to
18 provide us with their comments, if they have any
19 questions, or they want to provide information, this
20 is one opportunity.

21 As I mentioned, ACRS review, that is
22 another opportunity for the members of the public to
23 participate and provide comments to us.

24 And also if there is any hearing, if there
25 is any contention, any contest to the whole process,

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1 there is an opportunity for members of the public to
2 provide their comments to Atomic Safety and Licensing
3 Board. It is a panel of administrative judges that
4 conduct hearings.

5 At the conclusion of my presentation, I
6 would like to mention that all of the license renewal
7 application documentation, including the applications,
8 Staff's safety evaluation, reports, draft
9 environmental impact statements, and all related
10 correspondence, are available on NRC's website.

11 And if there is more information that you
12 need you may contact us, myself or Mr. Kugler, and we
13 will be happy to provide that information to you.

14 I would like to ask Chip if there is any
15 question?

16 FACILITATOR CAMERON: Yes, let's see if
17 people have some questions. And I guess before we do
18 that, Omid, just for the purpose, broadly, of
19 differentiating from the environmental review, can you
20 just tell us an example, or what does the safety
21 review focus on at the plant?

22 MR. TABATABAI: Well, basically the safety
23 aspects of the license renewal application focuses on
24 aging issues, because for those structures, systems,
25 and components in a nuclear power plant that we can

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1 replace their parts, that is covered.

2 I mean, if something goes wrong with
3 those, we can replace them, we can -- they are
4 constantly being maintained, and they are under
5 surveillance.

6 So we are not basically concerned about
7 those. But our concern is aging of passive systems,
8 or long-lived systems, structures, and components that
9 don't have moving parts, and aging affects them.

10 And we need to monitor those, we need to
11 have some aging management programs to manage the
12 effects of aging on those components.

13 FACILITATOR CAMERON: Thank you, Omid, we
14 apologize for whatever poltergeist is making that
15 sound.

16 Are there other questions about the
17 material that Omid presented, before we move on?

18 MR. TABATABAI: I think, Chip, that one of
19 the chairs has an out of order sign, maybe that is the
20 one that makes that noise.

21 FACILITATOR CAMERON: Ronaldo, you are on
22 that chair, and I don't understand why that would be
23 making the noise. Thanks, Omid.

24 Now we are going to go to Andy Kugler for
25 the environmental review process. Andy?

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1 MR. KUGLER: Thank you, Chip. Good
2 evening, thank you for coming out this evening to our
3 meeting.

4 My name is Andy Kugler, and I'm the
5 project manager for the environmental review for the
6 license renewal for the North Anna Power Station.

7 In that capacity, I'm leading a team of
8 experts from both the NRC and from our National Labs,
9 who are reviewing the environmental impacts of this
10 proposed action.

11 The National Environmental Policy Act
12 requires agencies to take a systematic approach to
13 evaluating environmental impacts of their actions. In
14 this regard we consider both the impacts of the
15 action, and also any mitigation that might be taken to
16 reduce those impacts.

17 In addition we look at alternatives to the
18 proposed action to determine whether the environmental
19 impacts of an alternative might be lower.

20 The National Environmental Policy Act is
21 basically a disclosure tool. The intent of this is to
22 involve the public in our review process, and to gain
23 input from the public.

24 For license renewal the NRC has determined
25 that we will prepare an environmental impact statement

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1 for all license renewal applications. Tonight we are
2 here to collect comments on the draft of that
3 environmental impact statement.

4 In terms of how we make our decision, the
5 basic question is, is license renewal for these units
6 acceptable from an environmental perspective; should
7 we keep the option of running these units open?

8 I want to emphasize that we don't actually
9 decide whether the licensee will run the unit for
10 another 20 years. What we are doing here is
11 evaluating whether or not it is acceptable. And if we
12 do issue a renewed license, there is no guarantee the
13 plants would run those 20 years.

14 That is going to be determined by the
15 owners of the plant, and state, and other Federal
16 regulators. So basically what we are doing is we are
17 determining whether it is okay.

18 This gives a little bit more detail on the
19 environmental review process. We were out here last
20 October for public meetings during the scoping phase,
21 when we were requesting input on what issues we should
22 consider in our review.

23 We issued the draft environmental impact
24 statement in April, and issued notice of its
25 availability in May, and that began a 75 day comment

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1 period on the draft.

2 This meeting is a part of that comment
3 period, it is an opportunity to provide comments,
4 verbally. There are also opportunities to provide
5 comments in writing, and I will talk a bit more about
6 those later this evening.

7 After the comment period ends we will
8 evaluate the comments we receive, we will revise the
9 draft as appropriate, and then we expect to issue the
10 final environmental impact statement around December
11 of this year.

12 We obtain the information that we use to
13 develop the environmental impact statement from a
14 number of sources. Of course we reviewed the
15 licensee's submittal; we also talked to local
16 agencies, state agencies, and other Federal agencies.

17 In addition, we came out to the site and
18 looked around the area, gathered information on the
19 environment, and talked to a number of folks out here.
20 We also collected the public comments during the
21 scoping phase.

22 And we also talked to social service
23 agencies while we were here. All that information was
24 used in the development of the draft.

25 We have experts from a number of different

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1 areas on our team. This slide gives you an idea of
2 some of the things we were looking at. We, of course,
3 looked at terrestrial and aquatic ecology, looked at
4 land use, water use, air.

5 We also look at some areas that you might
6 not really think about. We look at the socioeconomic
7 impacts of this action, and of the alternatives. We
8 also look at an issue called environmental justice.

9 And in that area we are looking to
10 determine whether this action could have adverse high
11 impacts on minority, or low income groups.

12 At this point I'm going to turn things
13 over to Eva Hickey. And what she is going to do is
14 explain the approach that we use in our review, and
15 the preliminary results that we documented in our
16 environmental impact statement.

17 FACILITATOR CAMERON: Andy, let's see if
18 there is any questions about the environmental review
19 process before we go to the substance of the finding.
20 Any questions on Andy's presentation?

21 (No response.)

22 FACILITATOR CAMERON: Okay. Let's go to
23 Eva for a description of the findings.

24 MS. HICKEY: Good evening, everyone. My
25 name is Eva Hickey, and I work with Pacific Northwest

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1 National Laboratory. And I'm the team lead for the
2 multi-disciplinary, multi-laboratory team, that has
3 been looking at the potential environmental impacts
4 for North Anna license renewal.

5 I have some of my team members here with
6 me tonight. And they, along with myself, will try to
7 answer any questions you have on our draft
8 supplemental environmental impact statement.

9 First let me talk about how we quantified
10 the impacts from the environmental issues that we
11 looked at. These impacts are consistent with the
12 Council on Environmental Quality. The first impact,
13 impact level, is small.

14 And that is defined as an effect that is
15 not detectable, or it is too small to destabilize, or
16 noticeably alter an important attribute of a resource.

17 Let me give you an example. The plant may
18 cause the loss of adult or juvenile fish in the intake
19 structure. That is where they pull water into the
20 plant for cooling. If the loss of fish is so small
21 that it cannot be detected in the lake, in this
22 instance, the impact would be considered small.

23 The next impact level is moderate. For
24 this the definition is, the effect is sufficient to
25 alter noticeably, but not destabilize important

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1 attributes of the resource.

2 So using our fish example, in this case,
3 if the losses at the intake cause the population to
4 decline, but then the population stabilizes, the
5 impact level would be considered moderate.

6 And, finally, the third is large. And
7 this effect is clearly noticeable and sufficient to
8 destabilize important attributes of the resource. So
9 in this case for our fish example, if the fish
10 population declined, and it did not recover, or
11 stabilize, the impact would be considered large.

12 Next let me take just a minute to explain
13 the analysis approach that we used for looking at the
14 environmental impacts. The Generic Environmental
15 Impact Statement for License Renewal, NUREG 1437,
16 identifies 92 environmental issues that are evaluated
17 for license renewal.

18 Sixty-nine of these issues are considered
19 generic, and these we call category 1, which means the
20 impacts are the same for all plants, or all reactors,
21 or for all reactors that have certain features, such
22 as plants that would have cooling towers.

23 For the other 23 issues referred to as
24 category 2, which we see here, these were not found to
25 be the same across all the plants. And so they

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1 require a site specific analysis.

2 Only certain issues addressed in the
3 Generic Environmental Impact Statement are applicable
4 to North Anna. And those are the issues that we
5 looked at during our review.

6 For the generic, or category 1 issues, we
7 looked to see if there was any information that was
8 considered new and significant. And if there was not
9 any, then we adopted the conclusions that are in the
10 Generic Environmental Impact Statement. For the site
11 specific, or category 2 issues, we did a thorough site
12 specific analysis.

13 To look for new and significant issues,
14 the site, during our meeting in our site visit in
15 October, we looked for new and significant issues. We
16 asked the public, during the public scoping period, if
17 they had any issues that they wanted us to look at,
18 and the licensee was also requested to discuss and
19 look for new and significant issues.

20 Now, I want to take just a few minutes to
21 cover some of the issues, and some of the findings
22 that we had from our analysis. In Chapter 2 of the
23 draft supplemental environmental impact statement, we
24 discussed the plant, and the environment around the
25 plant.

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1 And then in Chapter 4 we discussed the
2 environmental issues and what we found. Those issues
3 that we looked at are the cooling system, transmission
4 lines, radiological, socioeconomic, groundwater use
5 and quality, and threatened and endangered species.

6 I'm not going to go over all of these in
7 detail, I've tried to pick out just a few that I
8 thought would be of interest to the public. But if
9 there is any issues that I have not discussed, please
10 feel free to ask questions.

11 Also, if you do not have a copy of the
12 SEIS, we do have copies out in the hallway that you
13 are welcome to take a look at.

14 One of the issues that we look at, in
15 great detail, are the cooling system impacts. Here is
16 a drawing of the North Anna cooling system. Lake Anna
17 was actually created primarily to provide cooling
18 water for North Anna. And here you can see the main
19 body of the lake.

20 And then there are three dikes, and these
21 legs of the lake, or arms. This is the cooling ponds,
22 this is where the water is returned, and the water is
23 cooled before it is returned to Lake Anna. And this
24 is called the waste heat treatment facility.

25 In this diagram you can see where the

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1 cooling water is taken in from Lake Anna, goes up to
2 the canal, and then it goes to the plant, and then it
3 is returned, and goes through the waste heat treatment
4 facility, before being returned to Lake Anna.

5 There are trash racks and traveling
6 screens that are used to prevent debris and fish from
7 entering the cooling system. There are a number of
8 category 1 issues related to cooling systems, and we
9 looked to see if there were any new and significant
10 information related to these issues. However, we did
11 not discover any.

12 The issues that the team looked at, on a
13 site specific basis, include entrainment and
14 impingement of fish and shellfish, and heat shock.
15 And from our evaluation we determined that the
16 potential impacts were small, and additional
17 mitigation was not warranted.

18 One of the other issues I wanted to talk
19 about were radiological impacts. Now, radiological
20 impacts for license renewal are all considered
21 category 1, but I know a lot of times the public is
22 interested and concerned about this, so I thought I
23 would take just a minute to discuss it.

24 We looked at the effluent release and
25 monitoring programs during our site visits. We looked

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1 at how the gaseous and liquid effluents are treated
2 and released, and we also looked at how solid waste
3 are managed and transported.

4 We looked at how the Applicant determines
5 and demonstrates that they are in compliance with the
6 regulations for release of radiological effluents.
7 And we determined that the releases are well within
8 limits, and that the resulting off-site potential
9 doses are not expected to increase on a year to year
10 basis during the 20 year license renewal period.

11 We did not find any new and significant
12 information related to radiological impacts. And,
13 therefore, we have adopted the conclusions from the
14 Generic Environmental Impact Statement.

15 Finally I wanted to talk about the
16 threatened and endangered species. This is an area
17 that we spent quite a bit of time looking at. And, in
18 fact, there are no Federal or state listed threatened
19 and endangered species of aquatic or terrestrial
20 plants or animals known to be located on the North
21 Anna site, or under the North Anna transmission lines.

22 However, there are a number of species
23 that occur in habitats similar to those found at North
24 Anna, and I have shown some of these here on this
25 slide.

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1 There is a mussel that could potentially
2 live in the streams and rivers in counties near Lake
3 Anna. Eagles have been seen on North Anna site, and
4 near the transmission lines, and I think we've had
5 some debate about that today. But the eagles are not
6 known to nest on the site.

7 And, finally, there are a few plant
8 species that, although not actually found at North
9 Anna, live in the same habitat. We concluded that the
10 impacts of continued operation on threatened and
11 endangered species are small. The conclusion is
12 preliminary pending the completion of our consultation
13 with the Fish and Wildlife Service.

14 I think I've discussed the fact that we
15 have looked at potential and new information, so I
16 will just move on.

17 Now, a couple of other issues that we've
18 looked at, and these can be found in chapters 6 and 7
19 of the draft SEIS, are those impacts from the uranium
20 fuel cycle and solid waste management, and the impacts
21 from decommissioning.

22 These issues are all category 1, and we
23 did not find any new and significant information
24 identified and, therefore, we've adopted the
25 conclusions in the GEIS.

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1 Finally, one of the areas that we look at
2 is the alternatives; what would happen if North Anna's
3 license was not renewed. We looked at no-action,
4 which is simply that the power plant would cease to
5 operate at the time its license expires, or perhaps
6 before, and then be decommissioned.

7 We looked at new generation of power, from
8 either coal-fired, gas-fired, or even potentially a
9 new nuclear plant. We looked at the impacts from
10 purchased power, and alternative technologies, such as
11 wind, solar, and hydropower.

12 And then we looked at a combination of all
13 of these alternatives. We evaluated each alternative
14 using the same environmental issues that we looked at
15 for the license renewal term.

16 And our preliminary conclusions for
17 alternatives is that the alternatives, including no-
18 action, may have environmental effects, in at least
19 some impact categories, that reach moderate or large
20 significance.

21 So with that I would like to ask if
22 anybody has any questions on my brief review of our
23 supplemental environmental impact statement?

24 FACILITATOR CAMERON: Yes? Just give us
25 your name for the record, please.

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1 MS. COBB: Marione Cobb. I'm interested
2 in what you said about the large or moderate
3 significant of alternative possibilities. I was
4 wondering if you could elaborate on that?

5 MS. HICKEY: There are a number -- I don't
6 have my document in front of me, but there are some of
7 the alternatives that we looked at, and some of the
8 environmental issues that if we chose those
9 alternatives would actually have a moderate, or a
10 large impact.

11 Now, if you would like me to look and give
12 you some examples of that, I could do that, and maybe
13 talk to you after the meeting, would that be okay?

14 FACILITATOR CAMERON: Thanks Marione.
15 What were you suggesting, Andy?

16 MR. KUGLER: To use an example, we looked
17 at coal-fired generation. And some of the areas where
18 you might have moderate or large impacts would be in
19 the air, because of the emissions from that plant.

20 You also have to look at, you know, if you
21 want to go to a coal plant, you are going to have to
22 build it, which means you are going to have to disturb
23 more ground. You may have, depending on where you do
24 it, you may have to build transmission lines. You
25 have to bring in the coal by barge, train -- train,

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1 basically, would probably be the only option up here.

2 So those are the kinds of things that
3 would rise up above a small significance. And for
4 each of the alternatives we looked at them, and there
5 were various aspects of each one that might rise above
6 small.

7 So that is basically what we are saying.

8 MS. COBB: Thank you.

9 FACILITATOR CAMERON: Thank you, Andy, for
10 adding that. And let's go to this gentleman back
11 here. And if you could just tell us your name.

12 MR. ROOT: Gerald Root. I would simply
13 use the example of socioeconomic, if it were
14 decommissioned, i.e., the county gets 10 million plus
15 dollars in taxes out of the plant. It supports an
16 awful lot of workers, 900 and some, plus the
17 construction workers, when they come in to refuel.

18 It would have very large economic impact
19 upon the county and surrounding areas.

20 FACILITATOR CAMERON: Thank you, Mr. Root.
21 And that type of information is included for people to
22 look at in the draft EIS.

23 Are there other questions? We do have
24 experts on various disciplines, such as water quality,
25 with us here today, if there are any questions on

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1 that.

2 MS. DELLORCO: I'm Adriane Dellorco, and
3 I have two questions. One, did the environmental
4 impact statement look at the impact of the radioactive
5 waste? And, also, what were the findings on
6 environmental justice in this area?

7 FACILITATOR CAMERON: Thank you.

8 MS. HICKEY: With respect to radioactive
9 waste, we looked at the impact from the waste that is
10 stored on site, and shipped. But we did not look at
11 the impacts from the transport of the fuel, the spent
12 fuel.

13 FACILITATOR CAMERON: Thank you. Before
14 going to the environmental justice part, is it easy to
15 give an explanation of why we did not look at the
16 transport?

17 MS. HICKEY: Would somebody else like to
18 handle that?

19 MR. KUGLER: There are some aspects that
20 we don't include in the environmental impact
21 statement. The Commission has a waste confidence
22 rule. And basically what that is that the Commission
23 has determined that there will be some place for the
24 fuel to be put, some time after the plant shuts down.

25 And, therefore, within the environmental

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1 impact statement, what we consider is what are the
2 impacts of the storage on-site of the additional fuel,
3 and the impacts related to the longer life here on-
4 site.

5 But we don't, for instance, consider
6 environmental impacts related to the actual storage in
7 Yucca Mountain, that is treated separately. So there
8 are some aspects we look at, and some we don't.

9 If you read through the document,
10 hopefully it explains it clearly enough. I realize
11 this area sometimes is a little difficult.

12 FACILITATOR CAMERON: Thank you, Andy.
13 And, Eva, on environmental justice?

14 MS. HICKEY: Okay. We have a fairly
15 lengthy discussion of environmental justice in the
16 document, in chapter 4. But primarily our conclusion
17 was the Staff found no unusual resource dependencies,
18 or practices, such as subsistence agriculture,
19 hunting, or fishing, for which the population could be
20 disproportionately affected.

21 In addition the Staff did not identify any
22 location-dependent disproportionate impacts affecting
23 these minority and low income populations. So we
24 found that an additional 20 years of operating North
25 Anna would not disproportionately impact those people

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1 that we were looking at, with relation to
2 environmental justice.

3 FACILITATOR CAMERON: And by
4 disproportionate do you mean that everybody pretty
5 much is going to be impacted the same way?

6 MS. HICKEY: Yes.

7 FACILITATOR CAMERON: Other questions
8 before we go to severe accidents?

9 (No response.)

10 FACILITATOR CAMERON: Okay. Thank you
11 very much. And the Staff, our experts, will be here
12 after the meeting, in case you have more detailed
13 discussion that you want to have with them.

14 Andy is going to talk about severe
15 accident mitigation alternatives.

16 MR. KUGLER: Thank you, Chip. In looking
17 at postulated accidents, we actually look at two
18 different types of accidents. The first are called
19 design basis accidents.

20 And these are a broad range of events that
21 both the NRC staff, and the licensee, have evaluated
22 during initial licensing, to determine whether or not
23 the plant can withstand these events without undue
24 risk to the health and safety of the public.

25 Now, a number of these postulated

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1 accidents are never expected to occur at the plant,
2 but we use them to establish the design basis for the
3 plant, to determine what systems we should have in
4 order to mitigate or prevent these events from
5 happening.

6 The acceptance criteria for design basis
7 accidents can be found in Title 10 of the Code of
8 Federal Regulations, Part 50 and Part 100. And the
9 licensee is required to maintain these analyses
10 acceptable throughout the life of the plant, including
11 any license renewal term.

12 Severe accidents are the second type of
13 accident, and these are accidents that lead to
14 significant core damage. Now, the event may or may
15 not lead to significant releases off-site, but they
16 all lead to significant core damage.

17 In the Generic Environmental Impact
18 Statement that Eva described earlier, we determined
19 that the impacts of the accidents themselves are small
20 at all sites. And the reason for this is because the
21 probability of these events are extremely low, and
22 that drives the overall risk down.

23 However, we also determined that if a
24 licensee had not previously had an evaluation of
25 severe accident mitigation alternatives, in other

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1 words, things that could be done to mitigate these
2 accidents, then we should evaluate them at this stage.
3 And that is what we've done for North Anna.

4 In the licensee's environmental report, in
5 developing it, they used various sources and
6 identified 158 potential candidate improvements. They
7 then started reviewing those improvements to determine
8 whether or not they might be appropriate.

9 107 of these potential improvements were
10 eliminated either because they had already been
11 implemented at the plant, or the licensee determined
12 that they were not applicable to this design.

13 Of the remaining 51, 42 were eliminated
14 using a bounding analysis in which they, basically,
15 did a rough estimate of how much it would cost, and
16 balanced that against the most benefit you could
17 possibly get from any improvement in determining that
18 it was not cost beneficial.

19 For the remaining nine candidates that
20 broad analysis, that rough analysis, didn't give a
21 clear answer, so they did a much more detailed
22 analysis, making a more detailed evaluation of the
23 cost of the improvement, and also of how much benefit
24 you would actually receive from it.

25 Using that analysis, the licensee

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1 determined that none of the remaining nine candidates
2 were cost beneficial.

3 We reviewed the analysis that the licensee
4 performed, and we performed some independent analysis
5 of our own. We concluded that the methods used by the
6 licensee, and the way they implemented those methods,
7 were appropriate, and that none of the candidate
8 improvements were cost beneficial.

9 The result isn't really that surprising,
10 because licensees were asked, years ago, to evaluate
11 the impacts of severe accidents. And licensees have
12 already implemented a large number of improvements
13 related to those analyses.

14 So really they already caught the things
15 that are most likely to be cost beneficial. So it is
16 not too big a surprise if they don't find any today.

17 So the overall conclusion is that no
18 additional plant improvements are required at North
19 Anna Units 1 and 2 for the license renewal term for
20 severe accident mitigation alternatives.

21 Are there any questions on the postulated
22 accidents portion?

23 FACILITATOR CAMERON: Andy, just one
24 clarification, I think you might give us, is that
25 these mitigation strategies, when you talk about cost

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1 beneficial, these are all over and above the basic
2 minimum that we require to ensure that the plant is
3 safe to operate?

4 MR. KUGLER: Right.

5 FACILITATOR CAMERON: These would provide
6 additional safety?

7 MR. KUGLER: Right. The regulations have
8 a number of requirements, there are certain things all
9 licensees are required to have, or all plant designs
10 are required to have.

11 And this goes beyond that, in looking at
12 the severe accidents, and potential ways to mitigate
13 them. And as I indicated, a lot of things have
14 already been implemented.

15 FACILITATOR CAMERON: Okay, thank you.
16 Any questions on that aspect?

17 (No response.)

18 FACILITATOR CAMERON: I think Andy is
19 ready to move into the overall conclusion.

20 MR. KUGLER: Okay. So the results of our
21 review are these: We determined that the impacts of
22 license renewal, on the environment, are small in all
23 impact categories.

24 Now, this conclusion is preliminary, as
25 Eva mentioned, pending the conclusion of our

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1 consultation with the Fish and Wildlife Service. That
2 affects the threatened and endangered species
3 analysis.

4 We also concluded that the alternative
5 actions, including the no-action alternative, may have
6 environmental effects in at least some impact
7 categories that rise to moderate or large
8 significance.

9 Based on these results it is our
10 preliminary recommendation that license renewal for
11 North Anna Units 1 and 2 is acceptable from an
12 environmental perspective. In other words, we should
13 preserve the option of license renewal and continued
14 operation.

15 So where do we go from here? As I
16 indicated earlier, we issued the draft report in
17 April, the comment period on the draft runs until
18 August 1st of this year.

19 At the end of the comment period we will
20 collect all the comments and review them. We will
21 revise the draft, as appropriate, and then we will
22 issue the final environmental impact statement by
23 December of this year.

24 I'm the Agency's point of contact for the
25 environmental review, and here I've given you my phone

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1 number. If you have any questions related to the
2 environmental review, please give me a call, I would
3 be happy to help you out.

4 I've also provided some information, here,
5 on where you can get access to related documents.
6 We've put the documents related to the environmental
7 review in two libraries in this area.

8 One is at the Public Library in Mineral,
9 and the other one is in the Alderman Library, in the
10 University of Virginia, in Charlottesville. That is
11 the old local public document room, if you were
12 familiar with that.

13 In addition the documents are available on
14 our website at www.nrc.gov. And, in particular, the
15 draft environmental impact statement is available at
16 the address at the bottom of this page.

17 We've tried to provide a number of
18 different ways for you to give us comments. Obviously
19 this meeting is one way that you can do it. But in
20 addition to that you can write a letter to us at the
21 address given here.

22 You could come by and drop comments off in
23 person at our offices in Rockville. You can provide
24 comments by email at NorthAnnaEIS@nrc.gov. And if you
25 go into the webpage address I gave you on the previous

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1 page, for the environmental impact statement, there is
2 also an online comment form you can fill out directly
3 from there.

4 So we've tried to give you as many options
5 as possible for submitting comments. All the comments
6 we receive will be considered in preparing the final
7 environmental impact statement.

8 That concludes my remarks. I would like
9 to thank you all, again, for coming out this evening
10 and taking time out to listen to us.

11 Are there any questions on this latter
12 portion?

13 FACILITATOR CAMERON: Questions from
14 anybody? Steve, you look like you have a question,
15 sort of coming out there. Why don't you ask it?

16 MR. BOWLING: My name is Steven Bowling.
17 I was curious, this will renew the plant's capacity to
18 get a license for another 20 years.

19 When their current date comes up in what,
20 2018?

21 MR. KUGLER: In 18 or 20.

22 MR. BOWLING: Will they have to be
23 reinspected, will the plant be reinspected by you
24 guys?

25 MR. KUGLER: No, because the inspection

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1 programs are ongoing. We have residents on site, and
2 we have people come out to perform team inspections at
3 the sites. That is ongoing all the time, and that
4 will continue.

5 What we are doing right now, in the
6 environmental review, we look to the future and see
7 what impacts they may have. If issues come up in the
8 future then they will be dealt with at that time.

9 And in terms of the safety review, again,
10 there are inspections going on now to look at what
11 programs they are establishing, and those programs
12 will continue, through the license renewal term, to
13 manage the aging effects.

14 MR. BOWLING: Can you just tell me the
15 anticipated life span of a plant like this?

16 MR. KUGLER: Well, there is no actual
17 upper limit. The 40 year life is primarily
18 established in anti-trust considerations.

19 Of course, 40 years was set up as the
20 life, some of the systems were designed around that.
21 But what we are doing at this stage is for, what he
22 was referring to is active components, things that
23 are, you know, valves, pumps, things that are operated
24 periodically or continuously -- there are already
25 programs in place to make sure that they are repaired

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1 or replaced as needed. And what we are looking at,
2 now, in license renewal we are looking at those things
3 that might not be obvious if they were degrading,
4 passive equipment, some of the bigger things that just
5 sit there, how do you manage the aging of those.

6 And there are programs, basic rules for
7 the programs, that have been established. And what we
8 are doing now is going and looking at the licensee,
9 how are you going to manage that aging issue, what is
10 your plan, what is your program?

11 And, do you want to say some more about
12 that?

13 MR. TABATABAI: Yes, actually license
14 renewal does not have any limitation. They can apply
15 as many times as they want, for 20 years, as long as
16 they meet the regulations, and they comply with NRC's
17 regulations, there is no limitation on that.

18 FACILITATOR CAMERON: Does that answer
19 your question, Steven?

20 MR. BOWLING: Probably.

21 MR. KUGLER: I think eventually, I know
22 what you are thinking, eventually something is going
23 to wear out that you can't replace, and that is
24 probably true.

25 But, generally speaking, I think what we

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1 are seeing right now is 60 years is certainly within
2 the capacity of these plants, as long as they are well
3 managed.

4 MR. TABATABAI: The important thing is
5 that it is not economic, you know, as far as cost
6 benefit analysis goes, you don't want to spend more
7 money on something that does not pay off.

8 So at some point, that is the utility's
9 decision to stop operating the plant. But,
10 technically, there is no limitation on that.

11 FACILITATOR CAMERON: Okay, thank you.
12 Any other questions before we go to the second part of
13 the meeting, to hear from you?

14 (No response.)

15 FACILITATOR CAMERON: Okay. We are going
16 to go to more formal comments from you. And I'm going
17 to start with local officials for this segment. And
18 then we are going to hear from Dominion/Virginia
19 Power, a little bit more of their rationale for
20 license renewal, and a little bit more of what they
21 found in preparing the application.

22 What I would like to do is go to
23 Fitzgerald Barnes, from the Louisa County Board of
24 Supervisors, and then we will go to Dr. David Morgan,
25 from the same Board of Supervisors. Fitzgerald?

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1 MR. BARNES: Good evening. I'm Fitzgerald
2 Barnes, I represent the Patrick Henry District, in the
3 Louisa County Board of Supervisors. This is my second
4 term.

5 Without a doubt, when you talk about the
6 term that we all hear, on commercial, like a good
7 neighbor State Farm is there, you can use that with
8 Virginia Power.

9 Never had a case where we didn't look to
10 an answer they had where we didn't get it. Their
11 employees, without a doubt, the volunteer hours that
12 they put in this community, is not duplicated at all
13 by anybody.

14 We had a playground, a park that we tried
15 to get up and running, and their volunteer staff went
16 over there, and their employees went over there and
17 made it a reality where kids could go over there and
18 have an opportunity.

19 But that is just the tip of the iceberg,
20 some of the things that they do here. The library,
21 they contributed funds, and things of that nature, in
22 the community.

23 From an education standpoint, being a
24 rural county we would not enjoy the things that we
25 enjoy from an educational standpoint, without Virginia

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1 Power.

2 I'm very proud of our school system, of
3 the technology that we have here. Those things we get
4 from Virginia Power. But most of all is the openness
5 that Virginia Power has brought.

6 If something happens, as an elected
7 official, I get a phone call. I don't read it in the
8 paper first. Somebody from Virginia Power makes sure
9 that we know first-hand anything that we need to know.

10 And a lot of companies don't do that, a
11 lot of people can't say that. And I'm very, very
12 proud that we have them here as a neighbor.

13 From an economic standpoint a lot of
14 families enjoy a good quality of life because of the
15 employment opportunities here, from Virginia Power.
16 A lot of families would not have the opportunity to
17 make the amount of money they do if Virginia Power
18 were not here.

19 Sometimes I joke with people and I tell
20 people, I say, we wouldn't be on the map if it was not
21 for Virginia Power in this county. And in fact I was
22 in a meeting the other day and I just realized that we
23 are probably one of the few localities in the state
24 that offer, you go to the landfill free, and things of
25 that nature, don't pay fees, as of right now, and that

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1 is because of the tax dollars and things that we get
2 from Virginia Power.

3 So without a doubt, I'm in support of
4 Virginia Power. Like I said before, it is, without
5 effort they always come to our aid, and this is
6 something that they do.

7 But I'm in support of the application.
8 And if my two cents count, I would like for them to
9 count, and I'm in support of Virginia Power's
10 application.

11 FACILITATOR CAMERON: Thank you very much,
12 Supervisor Barnes. And now we are going to go to Dr.
13 Morgan, who is also on the Louisa County Board of
14 Supervisors.

15 DR. MORGAN: Good evening, I'm Dr. David
16 Morgan, I'm the Supervisor from the Green Springs
17 District here in Louisa County, I work as a radiation
18 oncologist. Basically, I use radiation to treat
19 cancer.

20 In my previous life in the Navy, where I
21 spent 15 years, I worked as a submarine medical
22 officer, so I had experience with radiation
23 protection, as well, and transferred that to oncology
24 in my private life, after I left the Navy.

25 Basically, I'm not going to reiterate what

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1 Mr. Barnes has talked about in terms of the economic
2 impacts of Virginia Power, I think those are obvious.
3 But I think that safety and security come first, in my
4 mind, and the economic impacts come second.

5 The group at North Anna is probably one of
6 the most professional organizations that I've had the
7 pleasure to work with. These folks really do put
8 safety and security above all else.

9 They have an operation that has multiple
10 security checks, safety checks, both radiologic and
11 security checks, based on other types of threats. And
12 I think that is important for the community to know.

13 These folks really have a good quality
14 management, and quality improvement system in place,
15 a lot of checks and balances. The organizations like
16 NRC, regulatory bodies kind of overlooking, and the
17 oversight committees that look over North Anna really
18 do a good job in making sure that the public in the
19 area is safe.

20 I think, you know, my personal bias is for
21 nuclear power. I think it has been a proven method of
22 power generation here in the United States. I'm
23 really not going to debate the benefits of it here
24 tonight.

25 Just to say that of the units in the

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1 United States, I think North Anna has one of the best
2 safety records out there. I think they've had an
3 exemplary performance as far as safety and security is
4 concerned, and I would wholeheartedly support their
5 application for their 20 year renewal on their
6 license. Thank you.

7 FACILITATOR CAMERON: Thank you, Dr.
8 Morgan. And next we are going to go to Brooks Besley
9 who is on the Town Council of the town of Mineral, and
10 also on the Planning Commission. And then we are
11 going to get to Mike Schlemmen from Louisa Emergency
12 Services. Mr. Besley?

13 MR. BESLEY: Thank you, Mr. Cameron.

14 I'm here on behalf of the Town of Mineral
15 Town Council. Thank you for this opportunity. The
16 Town and North Anna have enjoyed a very long, very
17 positive relationship. Thirty-four years ago the
18 announcement for this project was made at a meeting in
19 the town of Mineral.

20 Shortly thereafter Stone and Webster came,
21 set up a field office, lots of employment followed, a
22 lot of jobs. The retail merchants truly enjoyed the
23 impact.

24 But the dollar aspect is probably a type
25 of comment you all hear everywhere. The people at the

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1 power plant, the employees there, have set a
2 tremendous standard for us to follow, as far as
3 involvement in the community, their volunteerism.

4 They -- I recall the first place I was
5 aware of that was the elementary schools had science
6 fairs. They always had folks from the power plant to
7 act as judges in the appropriate areas, and they are
8 very positive, and very significant impact there,
9 brought the image up for our science fair
10 participation.

11 Basically lots of changes taking place in
12 the last 34 years, a very positive impact on our
13 community, our town. We've enjoyed the past 34, and
14 we hope there is another, at least 34. And at that
15 time I hope there is someone here, standing, that says
16 we have had 68, and we want 68 more. It has been very
17 positive. Thank you.

18 FACILITATOR CAMERON: Thank you, very
19 much, Councilman Besley.

20 Next let's hear from Mike Schlemmen, who
21 is with Louisa Emergency Services. Thanks, Mike.

22 MR. SCHLEMMEN: Good evening. You are
23 going to have to excuse me. I have been two places at
24 once tonight, I've got two meetings going on at the
25 same time.

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1 My position for the County is the
2 emergency services coordinator. And what that
3 position does is basically provide the locality's
4 response in case there is an emergency for North Anna,
5 or any type of emergency, where we have to declare,
6 where the County Board of Supervisors declares a local
7 emergency.

8 One thing my experience, and I have been
9 in the field, I'm a fire fighter, plain and simple.
10 I'm the guy that rides in, you saw those folks going
11 into New York, that is what I did for many years. So
12 you are looking at it from a fire fighter's point of
13 view.

14 I've been in the field for 25 years, I've
15 worked different areas, hazardous materials response
16 has been my last position, with the state, prior to
17 coming to Louisa County.

18 One thing I do have to say about Dominion
19 Generation, or Virginia Power, is that to them safety
20 is job one, it is a concern, they have a very great
21 concern for the community.

22 And I will explain this to you, because
23 when I first came here, and when I was notified that
24 I -- when I accepted the position here three years ago
25 as emergency services coordinator, the folks from

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1 Dominion Generation worked in the same building. They
2 had a representative that worked in the same building
3 with radiological hazmat response.

4 And when they found out that I was coming
5 up here we sat down, and met, and began to learn the
6 process. To me radiation was, God-awful thing. I
7 began to learn, through education, and the process of
8 what they were discussing, and in my own background,
9 that it is something not to be feared, we can deal
10 with it, and work with it.

11 And I feel very comfortable with them.
12 They have been a great help to my office. I've taken
13 an office here and we have been slowly growing. A lot
14 of things coming forth. And if it wasn't for the help
15 of Dominion Generation, I don't know where we would be
16 at.

17 I can pick up the phone and call their
18 emergency preparedness people and say, look, I need
19 some assistance, and I will get a phone call back, and
20 get some assistance, and whatever I need.

21 So I'm very grateful to those folks. Our
22 relationship has grown over the three years. One of
23 the things I do want to advise the citizens of Louisa
24 County, which we have, and you folks in the NRC, is
25 that we had our last drill in December of 2000.

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1 Boy, you talk about being nervous going
2 through that. It was a great deal, I think we had
3 some of the folks from the NRC here. We also had
4 FEMA. It was a graded exercise, and a lot of things
5 ride on that, how the localities respond to a
6 potential incident.

7 And if we did not do things right it could
8 affect the operation of the plant. So you can say I
9 was put on the hot seat. One of the things that we
10 did before that drill was work with Dominion
11 Generation, work with the Department of Emergency
12 Management in Richmond, held a lot of training,
13 brought our people up to speed. And our last drill,
14 it was the best that Louisa has ever done.

15 We received no new issues, no new ARCAs,
16 it was just one of those things that occurred, and how
17 well prepared. That plan, we are getting ready to go
18 through this drill July 16th. I will tell you that we
19 have been working constantly on that plan, updating,
20 upgrading it, because our concern is for the citizens
21 right there.

22 Safety is so much of a concern that what
23 we have done in the county, just for your information,
24 is as new developments go up around the lake, within
25 the 10 mile EPZ, we have kind of an informal agreement

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1 with the planning office, when a request for rezoning,
2 or putting in a development into the ten mile EPZ
3 comes across the planner's desk, and the Planning
4 Commission, it comes down to my office for a review,
5 we request siren easements.

6 I think this is one of the only localities
7 in the area, and actually in the state, that has
8 requested siren easements. So if you are going to put
9 a new subdivision up around that lake, we would like
10 to have a place that we can put a siren to eliminate
11 sending people in for alarming, that we can blow that
12 siren, and it frees our people up to do other things.

13 So these are some of the new initiatives
14 that we've done in working with Virginia Power. And
15 I do have to say it has been a very successful
16 operation.

17 As I said, I'm a fire fighter, dealt with
18 hazardous materials, and environmental impact. I know
19 this is an environmental impact statement. I think
20 dealing with hazardous materials, dealing with the
21 terrorism threat that we've been doing, and one thing
22 that we have been putting into our plan, is dealing
23 with the potential terrorism threat. It is out there.

24 I think the environmental impact of every
25 day hazardous materials that come through this

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1 community, I fear are much more greater, than I do the
2 nuclear power plant having a problem.

3 There is a lot of chemicals, and a lot of
4 things that come through, that can do just as much
5 harm, quicker, than radiation from the power plant.
6 So we are preparing ourselves for everything in all
7 categories.

8 We have major interstates and railroads
9 that go through here every day. And one thing I can
10 rely on is the expertise, and the assistance of
11 Virginia Power to assist us in those areas also.

12 So I just wanted to give you a little
13 perspective of emergency services. Thank you.

14 FACILITATOR CAMERON: Thank you, very
15 much, Mike.

16 It is always useful to hear from the
17 company in terms of the rationale for the license
18 renewal application, and some of the details behind
19 that. And we are going to have Jack Davis, who is the
20 director of nuclear safety and licensing, at the North
21 Anna Station, talk to us.

22 And then he is going to introduce Jud
23 White, who is over here, as the environmental manager
24 for Dominion. And then we are going to go to some
25 citizens in the community who have signed up to speak.

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1 Jack?

2 MR. DAVIS: Thanks, Chip. Good evening,
3 ladies and gentlemen. As Chip said, I'm Jack Davis,
4 and I'm the director of nuclear station safety and
5 licensing at North Anna Power Station.

6 I would like to take this opportunity to
7 thank the Nuclear Regulatory Commission for holding
8 this important meeting to receive public comment on
9 the NRC's supplemental environmental impact statement
10 that supports Dominion's application for license
11 renewal for North Anna Power Station.

12 We welcome the public comment process, and
13 we believe that Dominion, Louisa County, and other
14 nearby communities all have a stake in the future of
15 North Anna Power Station.

16 As an employee of Dominion I'm excited
17 about the license renewal for North Anna. A renewed
18 license would not only be important to Louisa County,
19 and Virginia, but also to me and 852 other North Anna
20 employees, whose livelihood depends upon providing
21 safe and reliable electricity to the customers of this
22 state.

23 That is not to mention the future
24 employees that will be required to continue the safe
25 operation of the plant well into this century.

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1 Currently North Anna provides about 17
2 percent of the electric power used in Virginia. A
3 renewed license would ensure that we could continue to
4 provide that safe, reliable power, to our customers.

5 Additionally, renewed licenses would
6 assure the local community that it will continue to
7 reap the benefit of having a large employer in the
8 area, and Louisa County would continue to receive the
9 tax revenue from the station's operation.

10 Just as an aside, North Anna Power Station
11 has provided 170 million dollars in tax revenue to
12 Louisa County since the station started building some
13 30 years ago.

14 I would like to digress for just a moment,
15 and tell you a little bit about myself, and how I came
16 to be associated with North Anna Power Station. I
17 began my professional life in the nuclear Navy, during
18 which time I had the pleasure of three tours as
19 commanding officer -- first of the USS Baton Rouge, a
20 nuclear powered attack submarine, then the Navy's
21 three reactor training facility, near Idaho Falls,
22 Idaho. And last, the USS L.Y. Spear, which is a
23 nuclear submarine repair ship.

24 I joined Dominion in the fall of 1997 as
25 the assistant superintendent of outage and planning.

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1 And in the summer of 1999 I entered the senior reactor
2 operator license class, and received my license from
3 the Nuclear Regulatory Commission in October of 2000.
4 In November of that same year I assumed my current
5 duties at the station.

6 North Anna Power Station has a long
7 history of safe, reliable, and efficient operation.
8 Since the 1990s North Anna has consistently ranked as
9 the most efficient producer of nuclear generated
10 electricity in the United States, on a three year cost
11 average.

12 The station has also achieved, and
13 continues to achieve, high marks in safety and
14 security performance from the Nuclear Regulatory
15 Commission, and from the Institute of Nuclear Power
16 Operations.

17 During the period 1993 through 1997, the
18 Nuclear Regulatory Commission, in its oversight
19 program, then known as the systematic assessment of
20 licensee performance report, graded North Anna as
21 having superior safety performance in all station
22 functional areas.

23 Under the NRC's new reactor oversight
24 process, the results of which are updated quarterly,
25 on a quarterly basis, on the Commission's website,

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1 North Anna continues to fully meet the NRC safety
2 cornerstone objectives.

3 Additionally, since 1991, the Institute of
4 Nuclear Power Operations has also consistently awarded
5 North Anna its highest marks for nuclear safety and
6 operational excellence.

7 As to environmental performance, our
8 commitment to environmental stewardship dates back to
9 the construction days of the power station in '60s and
10 '70s. North Anna Power Station was designed so that
11 the water that is used to cool the steam that
12 generates electricity, discharges into an innovative
13 3,400 acre system of lagoons that returns the water to
14 Lake Anna at nearly normal temperatures.

15 We also have a conservation effort that
16 focuses on protecting and enhancing fish populations
17 in the lake. Special structures of brush and
18 cinderblocks were constructed and sunk in the lake to
19 improve the fish habitat.

20 Our biologists regularly sample, or
21 monitor the health of the fish population. And that
22 data is compared with data that was taken prior to our
23 first day of operation.

24 These comparisons have consistently shown
25 that North Anna Power Station is not harming the

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1 lake's fish population.

2 In preparing North Anna's relicensing
3 application more than 50 individuals have spent,
4 literally, thousands of hours reviewing all
5 environmental aspects of continued plant operation.

6 The report concluded that continued
7 operation of North Anna Power Station beyond 40 years
8 will not negatively impact the environment surrounding
9 the plant.

10 In a moment Dr. Jud White, Dominion's
11 manager of environmental policy and compliance, will
12 share with you more about our environmental programs,
13 and review the findings of the NRC draft report.

14 Finally, I would like to thank you all on
15 behalf of Dominion for allowing us to do business in
16 Louisa County. We strive to be a good corporate
17 citizen, and have enjoyed the professional supportive
18 working relationship that we have with the county, and
19 the other local communities surrounding the station.

20 As many of you know, Dominion has a long-
21 standing tradition of investing in the communities it
22 serves through volunteer and philanthropic activities.
23 Many of our employees demonstrate their commitment to
24 the community by participating in programs such as
25 Adopt a Highway, Thanksgiving Baskets for the Needy,

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1 blood drives, supporting the area Boy Scouts, and many
2 other community activities.

3 Our volunteer programs and civic
4 participation are an essential element of Dominion's
5 corporate philosophy. We will continue our commitment
6 to our communities in the future.

7 Again, I appreciate the opportunity to
8 speak to you about North Anna Power Station's license
9 renewal. I would now like Jud White, if he would
10 provide you some more details on the environmental
11 aspects of our application. Jud?

12 DR. WHITE: Thank you, Jack. As Jack
13 said, my name is Jud White, I'm the environmental
14 manager at Dominion, with responsibilities for
15 environmental compliance activities at all of our
16 power stations in Virginia, as well as other states.
17 But it also includes the North Anna Power Station.

18 I have over 25 years experience in the
19 environmental field. My first ten years of my career
20 I spent at North Anna, with responsibilities for
21 studies, environmental studies in the lake, as well as
22 the downstream North Anna River.

23 I do have a master's degree in Biology,
24 and a PhD in environmental policy. I was directly
25 involved and helped in assisting the Dominion nuclear

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1 team, helping them prepare the license renewal
2 application to NRC. And, in particular, I helped
3 develop the environmental report to the NRC, and
4 coordinated with Federal and state environmental
5 agencies.

6 We commend the NRC in developing what is,
7 in my opinion, a high quality and professional draft
8 supplemental environmental impact statement. The
9 impact statement is a thorough, in my opinion, and
10 accurate scientific assessment of the potential
11 environmental impacts associated with the proposed
12 action.

13 We support and agree with the conclusions
14 of the NRC Staff that renewing the North Anna Power
15 Station operating license is a reasonable action that
16 will not result in any noticeable impact to the
17 environment.

18 Basically this means, as has been said
19 several times already, that the license renewal option
20 is preserved, or remains acceptable for the power
21 station to continue to provide safe and reliable, and
22 clean electricity to the Commonwealth of Virginia.

23 We prepared, over a several year period,
24 and submitted to the NRC an extensive environmental
25 report for license renewal that was part of the

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1 information used by NRC in developing their
2 supplemental environmental impact statement.

3 I say in part because it was just one area
4 where the NRC relied on information. They had other
5 sources including what was mentioned earlier, the
6 Generic Environmental Impact Statement, the extensive
7 consultation with Federal, state, and local
8 authorities, and environmental agencies, independent
9 review by the NRC Staff, National Laboratory
10 consultants, and the consideration of the public
11 during the scoping process, which was held last fall,
12 here.

13 Of particular note, relative to
14 information sources, Dominion proactively engaged in
15 discussions and meetings with key state, Federal, and
16 environmental agency staffs very early in the license
17 renewal process.

18 This helped ensure that all issues were
19 identified and appropriately addressed in the
20 environmental review submitted to NRC. Dominion also
21 proactively communicated with environmental and other
22 pertinent stakeholders about license renewal.

23 This helped considerably, in my opinion,
24 in the development of a thorough and accurate report.
25 The report speaks specifically, and it has been

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1 mentioned somewhat previously, about specific impacts
2 to fish, various aquatic resources, and is listed in
3 detail in the report.

4 The report goes back to studies that began
5 in the early '70s, even before the plant went
6 operational. The creation of Lake Anna, a key point
7 for this area, it created by damming up the North Anna
8 river, it created Lake Anna, which is a 9,600 acre
9 impoundment.

10 It basically ameliorated the effects on
11 the communities downstream from Contrary Creek, which
12 is a known source of acid mine drainage in the area.
13 And as a result of impounding the river, and creating
14 the lake, that impact was greatly reduced.

15 Also many of you who are fishermen
16 probably are well aware that Lake Anna continues to
17 rank high in the state as a trophy bass lake in
18 Virginia, which is a clear indication that the
19 underlying food chain, on which it depends, is healthy
20 and stable.

21 Based on the review of all of the
22 historical information, including the annual
23 monitoring, which does continue today, the NRC
24 concluded that potential impacts to aquatic operations
25 are small, and that additional mitigation is not

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1 warranted, and we do agree with that finding.

2 To work with the NRC in evaluating the
3 current applicability of the generic environmental
4 impact statement, that information in it, as it
5 pertained to generic issues, requiring no further
6 review, Dominion developed an internal procedure, and
7 protocol, to identify any new and significant
8 information related to those issues that NRC
9 identified as generic.

10 As a result of that process no new
11 information was identified, but we did go through the
12 process, as it was important to do. This activity is
13 considered very important, in my opinion, in all
14 license renewal projects for verification of the
15 findings in the generic environmental impact
16 statement.

17 We also agree with the NRC findings that
18 the potential impacts of license renewal for the
19 remaining environmental issues evaluated separately in
20 the impact statement are small, and of noteworthiness
21 is that a significant consideration is that there is
22 no new major construction or land disturbing activity
23 associated with this license renewal process.

24 As a result a lot of the impacts were
25 considered small. In essence current measures to

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1 mitigate environmental impacts associated with
2 operations were found to be adequate.

3 Dominion, and its entire staff, its entire
4 environmental staff, takes pride in its environmental
5 performance, and its positive relationships with
6 environmental agency staffs, environmental
7 organizations, the general public, and community
8 neighbors.

9 It goes without saying that developing
10 that relationship takes time to foster, as well as a
11 major commitment by upper management for openness and
12 candor, which I'm proud that we have.

13 Examples of these relationships that we
14 have with the various groups and organizations,
15 including the Department of Environmental Quality, the
16 Virginia Department of Game and Inland Fisheries, Lake
17 Anna Civic Association, as well as Lake Anna Advisory
18 Committee, and the River Association.

19 In this license renewal process we want to
20 ensure that we continue on this path, and not do
21 anything adversely impacting our future performance or
22 relationships with these groups.

23 Dominion believes that our obligation to
24 provide safe and reliable energy from nuclear power
25 extends well beyond this license renewal milestone.

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1 Federal, state, and local oversight will continue to
2 test and challenge, just as it does today, our
3 standard of environmental excellence, and the conduct
4 of our daily business.

5 We welcome all comments on the contents of
6 this supplemental environmental impact statement,
7 during the comment period, and we look forward to
8 working positively and constructively with NRC staff.
9 Thank you.

10 FACILITATOR CAMERON: Thank you, Jud.
11 Next we are going to go to Ione Dusinberre, and then
12 to Marione Cobb. And, Ione, would you mind coming up
13 to the microphone for us?

14 MS. DUSINBERRE: My name is Ione
15 Dusinberre, I live in Louisa County, the Mineral
16 district.

17 I particularly enjoyed hearing North
18 Anna's mention of aging. The 20 years I've been here,
19 so 20 years North Anna has been here. Pretend this is
20 a tin can stress, stress, stress, stress. North Anna
21 has undergone 20 years of stress.

22 What happens? Fatigue. I'm very fearful
23 that we will have another Chernobyl here. Everywhere
24 you go you hear, it couldn't happen here, it couldn't
25 happen to me. All kinds of accidents, it wouldn't be

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1 me, couldn't be me.

2 North Anna has been a fantastic provider
3 of safety. But what if we put the thousands of hours
4 that you put in, what if we put it into alternative
5 sources?

6 If we give a thought to something
7 different, wouldn't we have a beautiful future?

8 FACILITATOR CAMERON: Ione, thank you very
9 much. Marione, are you ready?

10 MS. COBB: Good evening, I'm Marione Cobb,
11 a semi-retired former social worker. I live,
12 currently, here in Louisa County. And like Ione, I
13 see the beauties of alternative energy compared with
14 a life threatening continuation of the nuclear energy
15 plant.

16 We've heard many people address this
17 evening the, let's see, I'm just glancing through my
18 notes, the 50 individuals, thousands of hours that
19 have gone into studying the safety issues, and
20 evaluating them, looking at the larger picture.

21 This is because there is a basic threat in
22 the operation of this plant, here in our county, and
23 anywhere, everywhere, in this country. If we had
24 given the supports, the financial incentives to
25 alternative energy that we've given to the nuclear

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1 industry, we would not be currently living with the
2 threats that, for instance, the nuclear waste disposal
3 brings, effectively to our doorstep if the North Anna
4 plant is going to be transporting toxic waste.

5 And, of course, that is now before the
6 Senate, there is the veto from the Governor of Nevada
7 has been overridden in the House, and the Senate is
8 now considering approving Yucca Mountain. And, of
9 course, there seems to be little alternative.

10 Where else do we want this toxic waste to
11 sit, as it is at North Anna, in the caskets, casks I
12 should say, but maybe caskets is more appropriate, and
13 be subject to the effects of weather, the effects of
14 time, it is a sitting time bomb, in my estimation.

15 Again, I'm glancing at my notes. Louisa
16 is -- gets -- has gotten ten million dollars in taxes.
17 Mr. Root, I believe, stated that it has raised us from
18 one of the poorest counties in Virginia, to our
19 current standard of living here.

20 We have good schools, we have good roads.
21 This is a terrible choice for our Board of
22 Supervisors, and other public servants, because they
23 see the benefits of this money, they see the benefits
24 of the philanthropy that the power plant employees
25 have given to the county, and to our children.

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1 Nevertheless, as a concerned citizen I
2 look at the larger picture, I believe, and see that
3 the threat continues to exist. I think , as I already
4 stated, that if we put the monies that we put into
5 nuclear energy into alternative energy, we would not
6 have to live with this threat.

7 The cost of nuclear power is borne by
8 taxpayers in general, as well as by rate payers. The
9 nuclear waste costs are insufficient to be covered by
10 funds set aside for disposal and decommissioning of
11 plants. More waste, another 20 years, or however many
12 years, means more taxes, perhaps hidden taxes.

13 It is hidden from us, nuclear energy has
14 in the past often called itself cheap, safe,
15 economical. There are taxes going to support the
16 plants, and to support the decommissioning, enormous
17 amounts of money. Nuclear energy is not economical.

18 I believe the facility was designed, it
19 was stated that some systems in the facility were
20 designed for the current licensing length. Mention
21 has been made of the aging process issue.

22 And the many attempts that have been, that
23 are being made to address it. There is also
24 repetition of a phrase, cost beneficial. So we are
25 not going to have a new plant, we are going to look at

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1 the cost beneficial aspects in replacing older items.

2 As a former resident of New York state
3 I'm sure, I remember and you, of course, undoubtedly
4 remember the crash of, was it a Boeing 747, on Long
5 Island? And they said, something must have aged,
6 something must -- we didn't count on that, that was
7 entirely unanticipated. It was not terrorists, it was
8 an aging piece of equipment.

9 We've seen, recently, at the Davis Besse
10 plant in Ohio, that aging parts can be a route to
11 catastrophic failure, without warning. Extension of
12 the license of this plant increases the danger to our
13 community.

14 And we are, of course, hearing about the
15 churches, the schools, the homes, that the nuclear
16 waste casks will pass by, if and when transported to
17 Yucca Mountain. A constant threat to my, and I
18 believe to your, well-being. Thank you.

19 FACILITATOR CAMERON: Thank you very much,
20 Marione. And next we are going to go to Adriane
21 Dellorco.

22 MS. DELLORCO: Hi, I'm Adriane Dellorco.
23 I'm an environmental studies student at Oberlin
24 College in Ohio. And listening through the discussion
25 of this environmental impact statement I see three

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1 things missing from this conversation.

2 One primary thing is that in all the
3 analysis of the environmental impact that the
4 shipping, and the toxic waste storage was never looked
5 at, and I think that is a major piece of this puzzle,
6 that we are basically shipping off our dangerous and
7 threatening waste off to somewhere else, so that
8 someone else can deal with it.

9 And we reap the benefits of having, you
10 know, greater taxes in our area. And so I would like
11 to think about what if we were the community where
12 this waste was being shipped?

13 And the second part of this that I see is
14 that the analysis said that other alternatives to
15 nuclear power show moderate to some -- some
16 alternatives show moderate to large impacts while the
17 nuclear power shows small impacts.

18 But does it also point out that other
19 impacts, do other alternatives do show probably even
20 smaller impacts to the environment, such as wind,
21 solar, and hydropower? That was also somewhat omitted
22 from this conversation.

23 Third, most people that are supporting the
24 nuclear power plant are touting the economic benefits
25 to this community. And, to me, that just exemplifies

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1 an environmental injustice, in which communities of
2 lower income have been historically placed as sites
3 for nuclear power plants to create a dependency upon
4 the nuclear power plants by providing it with money,
5 and community service.

6 And so I would just like to point out that
7 we are continuing this dependency that has already
8 begun, and I think it is an unhealthy one.

9 FACILITATOR CAMERON: Adriane, thank you
10 for those comments. We have two final speakers, or
11 two remaining speakers, I should say. One is Mr.
12 Gerald Root, who I would ask -- do you want to come
13 down -- why don't you come down? That is good. And
14 then we have Mr. Dick Clark, after Mr. Root.

15 MR. ROOT: I'm Gerald Root, I've been a
16 permanent resident on cooling ponds for ten years.
17 And during that ten year period we worked with a lot
18 of different situations on the lake, addressing the
19 problem that cropped up in the early 1990s, and
20 seeking solutions for how to resolve that, studying
21 the total watershed, working on a special area plan.

22 And in the course of that I went through
23 the original environmental impact statement that was
24 produced probably before the 1970s, at least before
25 the plant existed.

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1 And while there was a lot of good research
2 in there, there was a degree of speculation because
3 there were no facts. Let me give you one small
4 example.

5 There was concern on the cooling ponds
6 about the fish. And that slightly higher temperatures
7 would have very adverse effects on them. Well, after
8 30 years of operation we now have facts. And I hope
9 that they go into this environmental impact statement
10 in a factual way.

11 I appreciate what these three ladies have
12 said here. But it would be even stronger if it could
13 be backed up by hard facts. How many people have died
14 in the United States as a result of radiation from
15 nuclear production?

16 Now, I know what happened over in Russia,
17 but let's address it here in this country. Those
18 kinds of facts, I think, would help people reach a
19 more reasonable conclusion in terms of the course of
20 which is the right direction to go.

21 I personally would favor relicensing for
22 an additional 20 years. Thank you.

23 FACILITATOR CAMERON: Thank you very much,
24 Mr. Root. And now we are going to hear from Mr. Dick
25 Clark. Dick?

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1 MR. CLARK: It is good to see some
2 familiar faces here. Where are some of the others
3 from central Virginia, by the way, tonight here?
4 Well, I guess they should have come.

5 Well, my name is Dick Clark, and I'm a
6 resident here, just like Gerald. I'm also president
7 of the Oak Ridge Civic Association, real active in the
8 Lake Anna Civic Association, and particularly on the
9 Water Quality Committee, where we are evaluating and
10 assessing the water quality here in the lake and in
11 the tributaries.

12 Well, first of all, my background. I
13 think I have a little bit of experience in this, only
14 50 years in the nuclear field, frankly, as a nuclear
15 engineer. I recently retired from the NRC, but long
16 before that I was with the Atomic Energy Commission,
17 before that I was designing production reactors. I
18 was even one of the principal designers of a reactor
19 you probably don't even know about, a 10 megawatt
20 pressurized water reactor at Ft. Belvoir, which is
21 still standing, the fuel has been removed, but it is
22 still there.

23 I also worked on the design of the
24 Nautilus. Again, I have been the senior project
25 manager responsible for the issuing the construction

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1 permits for many of these plants, and the operating
2 licenses for some of the early reactors, after NEPA
3 came into effect.

4 Believe me, I prepared a good many final
5 and draft environmental statements, and multi-million
6 dollar statements, teams of 15, 20 terrestrial and
7 aquatic ecologists, and what not.

8 I have a wee bit of a background, I think,
9 in environmental science, and still working in that
10 field. As I say, I was the senior project manager.
11 I didn't actually license at North Anna. I did get
12 involved in the environmental assessment that we
13 issued for that.

14 I didn't bring a copy with me, but I have
15 it with me. I've also, some of the more recent
16 plants, as you know, like Limerick Unit 2, April 29th,
17 1989.

18 Now, you were talking about spent fuel,
19 and that sort of thing. I was also one of the
20 original environmental project managers assessing the
21 storage of spent fuel on site, and testified at many
22 hearings.

23 We started storing spent fuel, actually,
24 out at spent fuel pools on-site back in 1975. And
25 some of the real contested hearings we had were places

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1 like Vermont Yankee, and what not.

2 This spent fuel, after it has been stored
3 for five years underwater, you can take it off-site
4 and just store it in the air with just some shielding
5 around it. And that is what we did, for instance, the
6 Army had a plant at Ft. Greeley, Alaska.

7 And the spent fuel we just took out in the
8 yard and put concrete culverts around it for radiation
9 shielding. It is absolutely perfectly safe. These
10 shipping casks you are so worried about, they are
11 designed for fires, for dropping on hard concrete
12 surfaces, on a pin. Try and destroy them, I defy you
13 to try and destroy them.

14 Besides which that spent fuel, sure, it is
15 radioactive. But you can't do anything with it, you
16 can't get at it and what not. Really, actually, we
17 figured back in the mid '70s, it was really just as
18 safe to store the spent fuel at all the nuclear plants
19 forever, outside in the yard, but Congress decided
20 otherwise, decided to ship it out to Yucca Mountain,
21 but that is their decision.

22 And the bottom line is, I won't take you
23 up any more, Chip, but I strongly recommend it. I
24 mean, I reviewed this, the environmental statement, I
25 reviewed the procedure.

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1 One other thing, too, back 10 years ago,
2 back in 1992 we required all these plants, like North
3 Anna, to prepare an environmental, individual plant
4 examination. You are familiar with those, Andy, the
5 IPEs.

6 I was in charge of reviewing those. I was
7 shipped over to research to review those. And I
8 specifically reviewed the North Anna one, among
9 others. Believe me, the North Anna, you know their
10 operating record, one of the safest plants insofar as
11 operating, and management, and all that.

12 I will tell you one other thing. On these
13 "what if" statements, the IPEs, and all that, we were
14 evaluating everything that might possibly happen.
15 Sure, it was steam generator break, and that, small
16 break LOCA, you name it, a hurricane blowing a
17 telephone pole in at 150 miles an hour.

18 North Anna is one of the best designed,
19 safest plants in this country. And I will tell you
20 that, I know, because I've done the reviews on it. It
21 is really one of the safest and best designed plants
22 in this country.

23 And I have reviewed just about all of
24 them, under the IPEs. And I think I'm talking about
25 some personal knowledge of what the design of this

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1 plant is. And believe me it is safe to operate for
2 another 20 years, and I strongly urge the NRC to renew
3 the operating license for another 20 years.

4 Chip, thanks very much for letting me,
5 sorry to take up so much time on this. Good to see
6 you again.

7 FACILITATOR CAMERON: It is nice to see
8 you too, Dick, and thank you for those comments. It
9 is always nice to see a former colleague.

10 MR. CLARK: These lawyers are always the
11 nemesis --

12 (Laughter.)

13 FACILITATOR CAMERON: And there is going
14 to be, there is going to be another meeting after this
15 where Dick is going to tell us more about that.

16 But, seriously, thank you all for coming
17 out tonight and talking to us. Eva, do you have one
18 clarification for us?

19 MS. HICKEY: Yes, I'm sorry, I have to
20 apologize. On the question about high level waste
21 issues, I'm getting my projects confused. I've been
22 working on another Generic Environmental Impact
23 Statement.

24 In fact NUREG 1437 does evaluate the
25 disposal and the transportation of spent fuel. And

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1 those were found to be category 1 issues. So we did
2 look at those, and those are addressed in the uranium,
3 in the fuel cycle, in chapter 6.

4 So I apologize for that.

5 FACILITATOR CAMERON: You had better tell
6 us what NUREG 1437 is.

7 MS. HICKEY: That is the environmental
8 impact statement.

9 FACILITATOR CAMERON: That is the Generic
10 Environmental Impact Statement?

11 MS. HICKEY: For license renewal.

12 FACILITATOR CAMERON: That is the generic
13 statement that this site specific draft is a
14 supplement to that generic statement?

15 MS. HICKEY: Yes.

16 FACILITATOR CAMERON: Okay, good, I'm glad
17 we got that on the record.

18 MS. HICKEY: I apologize for that.

19 FACILITATOR CAMERON: Well, thank you,
20 thank you all. We are going to consider these, and
21 evaluate these comments in preparing the final EIS.

22 And, please, NRC staff, you've heard some
23 of the comments tonight, please -- and our expert
24 consultants from the labs, please take some time to
25 talk to some of the people, if they have time to stay,

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1 about some of these issues.

2 Thank you, all right, we are adjourned.

3 (Whereupon, at 8:50 p.m. the above-
4 entitled matter was concluded.)

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