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NUCLEAR REGULATORY COMMISSION

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EIS North Anna Site

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING

+ + + + +

TUESDAY

AUGUST 15, 2006

+ + + + +

MINERAL, VIRGINIA

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The meeting convened at the Louisa County Middle School, 1009 Davis Highway, Mineral, Virginia, at 7:00 p.m., Chip Cameron, Facilitator, presiding.

SPEAKERS:

- CHIP CAMERON Facilitator
- JACK CUSHING
- MARYANN PARKHURST
- MIKE MURPHY
- DAVE MATTHEWS
- LANCE VAIL
- ANDY KUGLER
- GENE GREYCHEK

1 COMMENTATORS:

2 JIM ADAMS

3 LEE ANTHONY

4 GARY BREEDEN

5 KIRSTIN BREEDEN

6 BILL CAMPBELL

7 KEITH CHEATHAM

8 ROBERT CLARKE, JR.

9 ELINA DAY

10 REBECCA FERRIS

11 PAUL GENOA

12 GERALD GIACCAI

13 AVIV GOLDSMITH

14 PATRICK HANLEY

15 DELBERT HORN

16 ROBIN HORNE

17 SAMA BILBAO Y LEON

18 MELISSA KEMP

19 ALLAN LASSITOR

20 C. LEE LINTECUM

21 CHRIS LLOYD

22 RON MICKENS

23 BILL MURPHEY

24 JERRY ROSENTHAL

25

1 COMMENTATORS (CONTINUED) :

2 KEN REMMERS

3 HARRY RUTH

4 DENNIS SCHABLE

5 LISA STILES-SHELL

6 BEN SLONE

7 SYLENA SMITH

8 MICHAEL STUART

9 KELLY TAYLOR

10 PATRICIA WYCOFF

11 PATRICK WYCOFF

12 LOU ZELLER

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Adjourn

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

(7:00 p.m.)

1
2
3 MR. CAMERON: Good evening everyone. My
4 name is Chip Cameron and I'm the Special Counsel for
5 Public Liaison at the United States Nuclear Regulatory
6 Commission, which we are going to be referring to as
7 the NRC tonight. And I'd just like to welcome all of
8 you to the meeting. And thank all of you for coming
9 out tonight.

10 The topic tonight is a draft supplemental
11 environmental impact statement that the NRC has
12 prepared as part of our evaluation of an application
13 for an early site permit that we received from
14 Dominion to potentially site two new reactors at the
15 North Anna site.

16 And it is my pleasure to serve as your
17 facilitator for the meeting tonight. And in that
18 role, I'll try to help all of you to have a productive
19 meeting.

20 And I just want to cover three items of
21 meeting process before we get into the substance of
22 our discussions tonight. I'd like to talk about the
23 format for the meeting. Secondly, some simple ground
24 rules so that we can have a productive meeting. And
25 finally, I'd like to introduce the speakers who are

1 going to talk with you tonight.

2 In terms of format for the meeting, we're
3 going to start with some brief presentations from the
4 NRC and our expert consultants to give you some
5 background on what we look at in deciding whether we
6 can grant an application for a permit for an early
7 site permit. And also we want to talk to you about
8 the information, the conclusions, the analysis that is
9 in the draft supplemental environmental impact
10 statement.

11 After those presentations, we will have
12 time for some questions about process. We want to
13 make sure that you understand the NRC process. So we
14 will have some questions.

15 And then we are going to go to the primary
16 part of the meeting which is an opportunity for the
17 NRC to listen to all of you, your recommendations,
18 your advice, your concerns about the early site permit
19 and the draft supplemental environmental impact
20 statement.

21 We are going to take written comment on
22 these issue but we wanted to be here with you tonight.
23 And again thank you all for coming out. But we wanted
24 to be here with you in person. And any comment that
25 you offer tonight will have the same weight as the

1 written comments that we receive. And the NRC staff
2 will be telling you in a minute how to submit those
3 written comments.

4 When we do get to the comment part of the
5 meeting, I'm going to ask those of you who have signed
6 up to comment to come up to the podium and speak with
7 us.

8 I just want to say a couple words about
9 the focus of the meeting. This meeting is on the
10 draft supplemental environmental impact statement.
11 And we know that there may be broader concerns,
12 broader comments, and we are always willing to listen
13 to concerns. But we do want to try to focus on the
14 draft supplemental environmental statement.

15 Now there is also another meeting related
16 to the early site permit application. And that
17 meeting is going to be conducted by the Commonwealth
18 of Virginia and it is on consistency issues with the
19 Virginia Coastal Resources Management Program.

20 Now we do have Mike Murphy with us tonight
21 who is the Director of the Division of Environmental
22 Enhancement with the Virginia Department of
23 Environmental Quality. And, Mike, where are you out
24 there? Here's Mike. And I just wanted to introduce
25 you to him and give him a chance to talk about the

1 state's meeting tomorrow. And you need to speak
2 pretty loudly into this mike so that we can get it on
3 the transcript.

4 MR. MURPHY: Okay. It is usually not a
5 problem for me.

6 Good evening, everybody, and thank you
7 from the Commonwealth as well for coming out and being
8 heard.

9 Tomorrow night at six o'clock we will be
10 doing pretty much what you saw occur here this
11 evening. We will have representatives from the
12 Department of Environmental Quality. That is the
13 agency I'm with. Also Game and Inland Fisheries and
14 the Health Department will be here. And they are all
15 here tonight.

16 Our review that is running concurrently
17 with this one deals only with the coastal zone issues
18 that the Commonwealth has under the purview of our
19 Coastal Resources Management Program. If you are not
20 familiar with that program, we have a display here
21 tonight. It's down to the left -- right at the end of
22 the hall before you get into the cafeteria. There are
23 some fact sheets there.

24 Our public comment period is open right
25 now as well. And we will run until September 8th.

1 There is information out there about how to submit
2 comments.

3 At seven o'clock tomorrow, exactly like
4 tonight, we will open up a formal hearing of our own.
5 And you are welcome to come back. I understand there
6 are some folks that aren't here tonight that are
7 coming tomorrow. We will have a hearing that will
8 begin at seven. And we will take oral testimony at
9 that time.

10 And I will be here throughout the evening
11 if there are any other questions along with some of
12 our staff that are probably already over at the
13 display area.

14 Thank you, Chip.

15 MR. CAMERON: Great. Thank you, Mike.

16 And I just wanted to note that it can be
17 confusing about what is in the NRC bailiwick and what
18 is in the Coastal Zone Management bailiwick. But as
19 I understand the arrangement, if you want to have your
20 comments formally considered by the state, you either
21 need to go to the meeting tomorrow night and speak or
22 submit a written comment. And the state is willing to
23 take any written comments that you might have tonight
24 and accept that as a formal comment.

25 And there also is an email address that

1 you can get from the state if you want to email a
2 comment in. So I just wanted to be clear on that so
3 that misunderstand and think that if you give a
4 comment tonight, that it is automatically going to be
5 considered by the state.

6 And we will try, if there are questions on
7 the difference between the NRC process and the state
8 process, we will try to answer that during the
9 question period.

10 Ground rules, very simple. When we go out
11 for questions during our short question period, if you
12 could just introduce yourself to us. I'll bring you
13 this cordless mike. And then ask your question.

14 And I would ask that only one person speak
15 at a time so that we could give whoever is speaking
16 our full attention. And also so that we could get a
17 clean transcript.

18 We are taking a transcript of the meeting.
19 Our court reporter is back there in the corner. That
20 is Lindsey Barnes. And that transcript will be our
21 record -- our record meaning the NRC's and you, the
22 public, of the meeting tonight. And that will be
23 available to you.

24 I would ask you try to be concise. It is
25 hard, I know, on complicated and emotional issues but

1 try to be concise during both your questions and when
2 you come up to the microphone to give formal comments.

3 We want to make sure that we give
4 everybody an opportunity to speak tonight. And also
5 try to get out of here before the sun comes up
6 tomorrow because we have a lot of people who want to
7 talk. So try to brief.

8 And when we do get to the formal comment
9 part of the meeting, I'm going to ask you to try to
10 follow a three- to five-minute guideline. And I know
11 that some people are going to be shorter hopefully
12 than three minutes or five minutes.

13 Some people may go a little bit longer and
14 I'm going to try to allow that to happen for certain
15 folks. But at some point, we're just going to have to
16 ask you to sum up so that we can go on to the next
17 person.

18 Usually three to five minutes is enough
19 time to summarize your main points. And it
20 accomplishes two important objectives for us. One is
21 it alerts NRC to issues that we should start looking
22 at right away. And talking to you after the meeting,
23 if necessary, to try to understand your concern.

24 And secondly, it alerts everybody out
25 there in the audience to what issues people are

1 concerned about.

2 And I guess a last ground rule is your are
3 going to hear opinions that are going to differ from
4 yours tonight I'm sure. And let's just extend
5 courtesy to all those different opinions.

6 And again I would thank you for being
7 here. If you are signed up to speak, just be patient.
8 We will get to you eventually.

9 And let me introduce the main speakers and
10 then we have our Senior NRC Manager here tonight.
11 Dave Matthews is going to do a welcome for you.

12 We're going to first go to Mr. Jack
13 Cushing who is right here. And Jack is the Senior
14 Project Manager for the environmental review on the
15 North Anna early site permit application. And he's
16 going to give you an overview of the early site permit
17 process.

18 And Jack has been with the NRC for about
19 eight years. Before that, he had put in a substantial
20 amount of time as a reactor operator at the Maine
21 Yankee Nuclear Reactor. And he is a graduate of the
22 Massachusetts Maritime Academy. His degree is in
23 Marine Engineering.

24 And after Jack is done, we're going to go
25 right to the heart of the matter which is the results

1 of the environmental review, this supplement. Again,
2 it is draft. And we want your comments. It won't be
3 final until we get your comments.

4 But we have Maryann Parkhurst is right
5 here who is going to give us that summary. And
6 Maryann is the team leader for the group of experts
7 that the NRC has working to review the environmental
8 issues. And Maryann is a Senior Staff Scientist at
9 the Pacific Northwest Laboratory. And she has served
10 as a team leader on other environmental reviews on
11 reactor licensing issues.

12 She has two master's degrees, one in
13 ecology from Washington State University and one in
14 radiological sciences from the University of
15 Washington. Her bachelor's degree is in chemistry
16 from the University of New Mexico.

17 And with all that introductory material,
18 we're going to get started. But first I want to go to
19 Dave Matthews. And Dave is the Director of New
20 Reactor Licensing at the NRC. And he is with us
21 tonight.

22 And Dave?

23 MR. MATTHEWS: Thank you, Chip.

24 And I want to extend my thanks as well to
25 everybody for coming here tonight. And we really look

1 forward to hearing your comments.

2 I discouraged my staff from making any
3 prior announcement of my attendance because this close
4 to Charlottesville announcing that Dave Matthews was
5 going to be here would probably have overwhelmed our
6 capability for crowd control. So I try to travel
7 incognito.

8 All kidding aside, I would also like to
9 thank the Commonwealth of Virginia for the degree of
10 participation that they have offered us and degree of
11 cooperation during this whole review because it has
12 been -- although we have distinct responsibilities,
13 there are areas in which those responsibilities merge.

14 We are trying to make sure that that is
15 not a confusing issue for you, as Chip identified. I
16 think it has been very helpful that the state and we
17 were able to schedule these meetings and not only co-
18 locate it but coincident in time.

19 As a reminder, we were here in February of
20 2005 to receive your comments on the draft EIS. The
21 comments you provided us in response to that public
22 meeting, as part of that public meeting and
23 subsequently on the original draft EIS do not need to
24 be resubmitted. We are going to consider those
25 comments in the publication of the final EIS along

1 with the additional comments you offer on the
2 supplemental EIS. So there doesn't need to be any
3 duplication of effort on your part.

4 Obviously, as Chip pointed out, we would
5 be interested in the additional comments you may have
6 on this supplemental information.

7 We look forward to hearing your comments,
8 particularly with regard to the change in the cooling
9 system prompted by the decision by Dominion to alter
10 their proposed design. That also occasioned a change
11 in power level at the same time. And we have
12 evaluated those impacts in the draft EIS.

13 So those comments along with the prior
14 comments will be addressed in the EIS. To the degree
15 to which the EIS, the final EIS might be altered from
16 the draft in response to those comments will, of
17 course, depend upon the nature of their comments and
18 their relationship to the analysis that we have done.

19 But regardless, we have made it a habit
20 over the last some 10 or 12 years of doing these
21 evaluations in the license renewal arena and in the
22 new reactor arena of having a document published
23 wherein all of the comments are cataloged, recorded,
24 dutifully responded to by the staff irrespective of
25 whether they might change an ultimate finding by the

1 staff or occasion the staff to review the additional
2 analysis.

3 So I wanted to make that point, that your
4 comments are regarded and they are evaluated
5 individually.

6 So with that, I'll just turn it over to --
7 and get out of the way and turn it over to the
8 experts.

9 MR. CAMERON: Okay. Thank you. Thank you
10 very much, Dave.

11 We are going to go to Jack and he is going
12 to do his presentation. And then we will go right to
13 Maryann and do hers. And then we will go out to you
14 for questions.

15 This is Jack Cushing.

16 MR. CUSHING: Well, thank you, Chip.

17 Can everyone hear me? No? Now? Can you
18 hear me now? I feel like that commercial.

19 Could I have the next slide please, Laura?

20 This basically covers the agenda for
21 tonight's presentation. And, as Chip mentioned, he
22 wants everyone to be brief and that includes myself.

23 So, Laura, could I have the next slide
24 please? This slide, it's basically, you know, it
25 discusses the NRC's mission and our role in this

1 review. And the NRC's mission is threefold. We
2 protect the public health and safety, we promote the
3 common defense, and we protect the environment.

4 Now the mission includes nuclear power
5 plants. And to carry out this mission, we have a
6 staff of experienced professionals as well as two
7 resident inspectors, Mr. Jim Reece, if you could stand
8 up?

9 He is the resident inspector for the North
10 Anna site. And assisting him is Gerald Wilson. And
11 they inspect the activities at the site to ensure the
12 plant is operated safely and in accordance with our
13 regulation.

14 Next slide please. Okay, I'd also like,
15 before we go into any of the issues, explain what an
16 ESP is and what is allowed under an early site permit.

17 An early site permit is a site suitability
18 review. And in that we review to determine if the
19 site is suitable for a nuclear reactor or, in this
20 case, two proposed units, Units 3 and 4.

21 An early site permit does not give
22 Dominion permission to build or operate a nuclear
23 power plant. That would be a separate licensing
24 action and would necessitate another review similar to
25 this one with another safety evaluation report and an

1 environmental impact statement.

2 Dominion, however, can conduct site
3 preparation and limited construction activities under
4 an early site permit. These activities are limited to
5 non-nuclear activities. They include building roads,
6 clearing land, foundations so long as they do not have
7 a nuclear safety component.

8 Now to be able to that, we require a site
9 redress plan. And the site redress plan, the purpose
10 for that is in case the site preparation activities
11 are started but a nuclear power plant is never
12 completed, the site can be returned to an
13 environmentally stable condition.

14 And if I could have the next slide? While
15 the purpose of this meeting is to receive your
16 comments on the supplement to the draft environmental
17 impact statement, I'd like to touch briefly on the
18 safety review. Mr. George Wunder -- George? -- is the
19 back-up safety project manager. And he will be
20 available to answer any questions you might have on
21 the safety review.

22 The key aspects of the safety review are
23 evaluation of the site characteristics as they relate
24 to the safety of the plant and emergency planning.
25 Bruce Musico -- Bruce? -- he is our emergency planning

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1 reviewer. And he is also available to answer any
2 questions you may have on emergency planning.

3 The staff had, in its final safety
4 evaluation report, determined that the site meets the
5 siting criteria in the regulation. In addition, the
6 staff determined that there are not any significant
7 impediments to successful implementation of an
8 emergency plan.

9 The supplement to the final safety
10 evaluation report, which will evaluate the two
11 changes, the change in power level and the change to
12 the cooling system, is due to be issued shortly. And
13 will be made available on our website at www.nrc.gov
14 and at the Louisa County Public Library.

15 If you have any questions, on the safety
16 review, please contact George Wunder. Thank you.

17 And this slide has the contact information
18 for both George Wunder, who is the back-up PM and for
19 Nitin Patel, who is the primary PM.

20 Next slide. This slide shows the process
21 of the issuance of the draft -- from the draft EIS to
22 the Agency decision. We issued the draft
23 environmental impact statement for public comment on
24 December 10th, 2004. And we were here in February
25 2005 to receive your comments.

1 As Dave mentioned, we do have those
2 comments and we will consider them. And they will be
3 included in the final environmental impact statement.
4 So there is no need to resubmit those comments.

5 In October of 2005, Dominion notified the
6 NRC that in response to concerns raised by the
7 Commonwealth and local citizens, it was changing the
8 cooling system for Unit 3 from a once-through cooling
9 system to a combination wet and dry cooling system in
10 order to reduce the impacts to the lake. Unit 4's
11 cooling system was not changed. It remains a dry
12 cooling system.

13 In addition, Dominion increased the power
14 level of Units 3 and 4 from 4,300 megawatt thermals to
15 4,500 megawatt thermals, less than a five percent
16 increase in power.

17 The NRC decided that these changes were
18 substantial and in accordance with our regulations, we
19 evaluated the changes and issued a supplement to the
20 draft environmental impact statement in order to give
21 the public an opportunity to comment on these changes
22 which is the purpose of tonight's meeting.

23 Now the supplement is a draft, not because
24 it is incomplete but because we are at an intermediate
25 stage where we wish to receive your comments and

1 consider them before we issue our final EIS. And in
2 many cases, your comments result in changes to our
3 final environmental impact statement.

4 Next slide please. As you can see from
5 this slide, the staff sought input from a number of
6 different sources including the applications submitted
7 by Dominion. We discussed with federal, state, and
8 local agencies. We conducted a site audit. And we
9 solicited public comments about the draft and the
10 supplement to the draft.

11 Now we also discussed the project with
12 Federal and State Agencies which include the Virginia
13 Department of Environmental Quality and they have
14 provided excellent cooperation and input to us, Game
15 and Inland Fisheries as well. We have also discussed
16 it with the U.S. Fish and Wildlife Service.

17 And we conducted site audits and visited
18 the site and audited their records at their office as
19 well.

20 Now the change to the cooling system
21 primarily effects Lake Anna and the North Anna River
22 downstream of the dam. The thermal impacts from the
23 change were greatly reduced. The combination of the
24 wet and dry cooling system rather than giving up the
25 heat to the waste heat treatment facility now gives up

1 the heat to the atmosphere.

2 We also looked at the impacts of
3 increasing the power level by approximately five
4 percent and we evaluated those changes and we
5 discussed them in our supplement to our draft. We
6 provided copies outside on the table and if you
7 haven't already, you are welcome to pick up a copy.

8 Now if I could go on to the next slide,
9 Laura, this slide here discusses the expertise of the
10 NRC's staff and the technical experts from Pacific
11 Northwest National Laboratories that have assisted us
12 in the review. We looked at the full range of
13 environmental impacts. And we have discussed those in
14 our draft environmental impact statement.

15 And in the supplement, we are focused on
16 the changes to the cooling system and the change in
17 power level.

18 I'd like to turn this over to Maryann
19 Parkhurst so she can discuss the results of our review
20 but before I do, are there any questions on process
21 and how we got to where we are now?

22 MR. CUSHING: Okay. Right, if anybody
23 would like -- if not, we could go --

24 MR. CAMERON: I think we have a question
25 here.

1 MR. CUSHING: Sure.

2 MR. CAMERON: If you could just introduce
3 yourself, sir?

4 MR. WYCOFF: Hello, I'm Lee Wycoff. I
5 wanted to ask you a question about what the meanings
6 of those categorizations small, moderate, et cetera
7 that we have seen through the presentation and also in
8 published literature.

9 MR. CUSHING: Okay, actually we have a
10 slide on that. Maryann Parkhurst will be discussing
11 that in the very next slide. So I think we'll just go
12 with her next slide.

13 MR. CAMERON: If you still have questions
14 after Maryann --

15 MR. CUSHING: Yes, if you have a question
16 after --

17 MR. CAMERON: -- we will go back, go back
18 and ask you, okay?

19 Yes?

20 MS. DAY: Okay. My name is Elina Day.
21 I'm just wondering like you issued the supplemental
22 draft environmental impact statement on the 7th of
23 July. Isn't it unusual to have a public hearing so
24 quickly after the issuance of a supplemental draft
25 environmental impact statement? Shouldn't there be

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1 more of a period of time for the public? In addition,
2 it is August and a lot of people are on vacation.

3 MR. CAMERON: Okay, I think you got the
4 drift of the question.

5 MR. CUSHING: Right. And basically the
6 National Environmental Policy Act allows for a 45-day
7 comment period. And what we try to do is schedule
8 this with enough time for people to have some time to
9 read it. And then we will have our meeting.

10 And this meeting isn't the only
11 opportunity to provide comments. It is also to
12 provide information to help you formulate comments.
13 So we also want to have time after the meeting for
14 people to submit comments.

15 And what we -- no, there is not another
16 public hearing but we have also extended the comment
17 period by 15 days until September 12th to provide
18 people with more time.

19 MR. CAMERON: I think that also one of the
20 purposes, and Jack, correct me if I'm wrong on this,
21 but one of the purposes of coming out to do the public
22 meeting is to answer questions and talk to people who
23 might want to understand more about the draft
24 supplemental.

25 So it is as much an opportunity to hear

1 comments as to talk to people so that they can
2 understand what is in the draft so that if they want
3 to submit some more informed written comments -- and
4 that is why we like to get out early, too, I think.
5 Is that right?

6 MR. CUSHING: Exactly. To help people
7 understand our information, what we presented, so that
8 it will help them formulate any questions they may
9 have or comments.

10 MR. CAMERON: Okay, we have one question
11 up here. Yes?

12 MS. LLOYD: My name is Chris Lloyd. I'm
13 here from Louisa. My question is this is an
14 environmental study, correct? Do you take into
15 consideration your waste products while you are in
16 construction and through the next 20 or 30 years into
17 a landfill?

18 MR. CAMERON: And let me just ask you a
19 clarifier on that. When you talk about waste
20 products, you are not necessarily talking about
21 radioactive waste. You are talking about waste that
22 is generated during the construction process that
23 might have to go to the landfill?

24 MS. LLOYD: No, actually both because you
25 are going to have low-level radiation at every reset

1 -- like even when you clean your floors, you have low-
2 grade radiation going into our landfill.

3 MR. CUSHING: We do evaluate with the
4 waste cycle -- we evaluate the full aspect of the fuel
5 cycle from the actual mining of the fuel right through
6 to the final disposal of the fuel. So we do look at
7 a full range of not just the waste from the time it
8 reaches the plant but actually right from the mining
9 right through to the end point.

10 MR. CAMERON: And I would just ask for the
11 NRC staff to maybe talk to this lady after the meeting
12 to provide some more detail on when and how those
13 types of concerns are addressed in our process because
14 Jack is correct in terms of what he said. But there
15 may be some more details that will give you more
16 information on your question.

17 MR. CUSHING: I would be happy to go into
18 more detail with you after the meeting, too.

19 MR. CAMERON: All right. Any questions on
20 process before we go to Maryann?

21 (No response.)

22 MR. CAMERON: Okay, Maryann? And we won't
23 forget the small, moderate, large question that was
24 asked.

25 MS. PARKHURST: I do have a slide related

1 to the small, moderate, and large. It is actually
2 number three on my steps. So if you will hold out, we
3 will get to that here soon.

4 Am I coming across okay on the mike? Is
5 it doing okay?

6 MR. CAMERON: Why don't you keep going?
7 Maybe we need to --

8 MS. PARKHURST: Oh, maybe that will help.
9 It looks like it. And sounds like it to me, okay.

10 Dominion has not selected a specific plant
11 design for proposed Units 3 and 4 yet. Instead,
12 Dominion's staff submitted an application for an early
13 site permit with a plant parameter envelope as a
14 surrogate for an actual design.

15 This PPE is a set of parameters that
16 Dominion believes bounds the design characteristics.
17 In other words, the parameters themselves represent
18 the maximum values of composite characteristics and
19 are not specific to any design.

20 So why would Dominion use a PPE? Well, it
21 is because it allows them to defer the reactor design
22 decision until they make the decision on whether to
23 proceed with an application for a construction permit
24 or a combined construction and operating license
25 called the combined license or short for COL.

1 Dominion selected characteristics from five light-
2 water reactors and two gas-cooled reactors to develop
3 its PPE.

4 Next slide please. Using the PPE
5 parameters, the NRC assessment team evaluated the
6 construction and operational impacts for the proposed
7 North Anna ESP site. As part of the overall review,
8 we also evaluated Dominion's site redress plan, as
9 Jack was discussing.

10 With an approved early site permit and an
11 approved redress plan, Dominion would be allowed to
12 undertake limited construction activities. The
13 redress plan ensures that the site would be returned
14 to an environmentally stable and esthetically
15 acceptable condition in the event that Dominion does
16 not pursue or is not approved for a construction
17 permit or a combined license.

18 We also evaluated environmental impacts
19 for the alternative sites identified in the ESP
20 application. These included Dominion's Surry site and
21 the Department of Energy's sites at Savannah River in
22 South Carolina and the Portsmouth Gaseous Diffusion
23 Plant in Ohio.

24 We then compared the impacts of the North
25 Anna ESP site with the alternative sites. After

1 finding that no alternative site was obviously
2 superior to the North Anna ESP site, our preliminary
3 conclusion is that the ESP should be issued.

4 Now, the next slide we will talk a little
5 bit about how we came on to these conclusions, what
6 they are, and what the categories, impact categories
7 mean.

8 For each issue, an impact level is
9 assigned. These issue levels, the impact levels are
10 small, moderate, and large, and are consistent with
11 the Council on Environmental Quality's guidance for
12 NEPA analysis.

13 Small, for instance, is where an effect is
14 not detectable or is too small to destabilized or
15 noticeably alter any important attribute of the
16 resource.

17 Moderate is an effect that is sufficient
18 to alter noticeably but not destabilize important
19 attributes of the resource.

20 And a large effect is one that is clearly
21 noticeable and sufficient to destabilize important
22 attributes of the resource.

23 Next slide please. We reevaluated the
24 environmental impacts as a result of the change in the
25 proposed cooling system design and in the increased

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1 power level.

2 Some categories of issues were not
3 effected by the change in the cooling system and the
4 increased power level. In others, the staff
5 reevaluated the impacts and found no change to the
6 impact level.

7 The primary changes the team evaluated
8 included land use, in which there was no effect, no
9 change, air quality, in which cooling towers would
10 have evaporative plumes that would, at times, extend
11 about the cooling towers and be visible off site,
12 water quality and water use, in which changes proposed
13 by Dominion in regard to Unit 3 cooling system would
14 have the most significant impact on our EIS analysis.

15 And I'm going to discuss the water use and
16 water quality a few slides from here.

17 With regard to terrestrial resources, less
18 of the intake channel bank would need to be contoured
19 so there would be less disturbance on the land and
20 fewer terrestrial resources disturbed.

21 As far as aquatic resources, as previously
22 analyzed, the discharge from a once-through cooling
23 system was expected to raise the temperature of the
24 waste heat treatment facility and, to a lesser degree,
25 the lake itself.

1 Thermal impacts on aquatic ecology were
2 evaluated based on the once-through design,
3 particularly as it related to the stripe bass fishery
4 during times of drought. However with the closed
5 cycle cooling system now proposed, the effects to the
6 aquatic biota would be negligible.

7 There was no change in the threatened and
8 endangered species as the result of the change in
9 cooling system but we did address recent sightings of
10 bald eagles in the area. The nearest known nest is
11 outside the buffer zone for construction activities.

12 Included in the socioeconomic resources
13 are physical impacts, demographics, and community
14 characteristics. Dominion's original PPE assumed
15 enough construction and operational workers to cover
16 any additions required to construct the cooling
17 towers.

18 Therefore, the socioeconomic resources
19 related to the number of workers and families was
20 included. That information was included in their
21 draft EIS.

22 Items that did change and were reevaluated
23 were the visual esthetics of the Unit 3 cooling towers
24 and recreational use of Lake Anna with respect to
25 water level impacts.

1 There were no changes to the historic and
2 archeological resources in the environmental justice
3 categories.

4 Changes to the cooling system and the
5 increased power level led to reevaluation of public
6 health impacts from the waste heat treatment facility.
7 The thermal discharge from Unit 3 would add minimal
8 heat to the existing discharge and would be expected
9 to have little effect on human health.

10 We also reevaluated noise from the new
11 cooling towers and acute effects of the
12 electromagnetic fields related to the power level
13 increase.

14 Next slide please. Because of the
15 proposed power level increase, we reevaluated the
16 environmental effects with regard to accidents, the
17 uranium fuel cycle and waste management,
18 transportation, and eventual decommissioning.

19 In each of these categories, as a result
20 of the change in power level, there was no change to
21 the impact levels, which remained small.

22 Next slide. Now I want to return to the
23 issues of water and aquatic resources. Lake Anna is
24 an artificial reservoir created in 1971 by Virginia
25 Power as a source of cooling water for the North Anna

1 power station.

2 The lake is divided into two distinct
3 water bodies, the reservoir and the waste heat
4 treatment system, which is a series of three lagoons.
5 And I'm going to call it lagoons, cooling lagoons here
6 on out.

7 North Anna was initially licensed for four
8 nuclear units of which only two were built. Lake Anna
9 currently provides cooling water for Units 1 and 2
10 using a once-through cooling system. Dominion
11 proposes to use Lake Anna as the source of cooling
12 water for Unit 3. But rather than using the once-
13 through cooling, Dominion now proposes to use a closed
14 cycle combination wet and dry cooling system.

15 And as before, dry tower cooling is
16 proposed for Unit 4.

17 Now Virginia Power owns the land around
18 the lake up to the 255-foot high water mark. The land
19 adjacent to Lake Anna has become increasingly
20 residential. And Lake Anna has become a popular
21 recreation destination. The dam provides downstream
22 flood control.

23 The North Anna River below the dam is used
24 for municipal water supplies and provides an aquatic
25 environment that supports recreational fishing.

1 Any future conflicts for water by
2 downstream communities falls with the regulatory
3 authority of the Commonwealth of Virginia. Although
4 a combined wet and dry cooling system for Unit 3 would
5 eliminate additional thermal discharges to the cooling
6 lagoons and, therefore, would not measurably increase
7 lake temperature, evaporation in the cooling towers
8 would consume water.

9 Next slide please. Dominion proposes two
10 cooling system operating modes for Unit 3 to balance
11 energy production and consumptive water use. The
12 energy conservation mode would occur during periods of
13 relative water surplus. And wet cooling towers would
14 be employed to cool Unit 3 during these times. This
15 is called the energy conservation mode because of the
16 energy efficiency of wet towers compared with dry
17 tower cooling.

18 During times of lower water availability,
19 the dry towers would operate, assuming that suitable
20 atmospheric conditions exist at the site. And there
21 are some times when they would expect to use this like
22 when the water surface elevation dips below 250 feet
23 above mean sea level for seven or more consecutive
24 days. That is Dominion's proposal on this.

25 This mode is called the maximum water

1 conservation mode where water use is reduced but so is
2 energy efficiency.

3 We reevaluated the environmental impacts
4 as the result of the change in the proposed cooling
5 system for Unit 3 specifically for entrainment,
6 impingement, and thermal impacts on aquatic
7 ecosystems.

8 Entrainment is the passage of organisms
9 through the traveling screens into the cooling water
10 system. Entrained organisms are generally small and
11 include phytoplankton, zooplankton, fish eggs, and
12 larvae.

13 Impingement occurs when swimming organisms
14 are not strong enough to escape the cooling water
15 intake current and are caught or stuck on the screens.

16 Dominion's previous design proposed for
17 once-through cooling required or pumped a large volume
18 of water through the condenser where it picked up heat
19 and discharged it to the cooling lagoons.

20 The new combined wet and dry system would
21 pump significantly less water, like approximately 97
22 percent less, from the lake and discharge the majority
23 of the heat to the atmosphere, not the lake. This
24 reduction in water being pumped greatly reduces
25 entrainment and impingement.

1 Previously, the large flow of heated
2 discharged from the proposed once-through cooling
3 system was expected to raise the temperature of the
4 cooling lagoons and, to some degree, the lake itself.
5 With the change to a closed cycle, combination wet and
6 dry cooling system, the discharge volume and
7 temperature is much less and should raise the lake
8 temperature no more than a maximum of one-tenth of one
9 degree Fahrenheit.

10 We also evaluated the effects of lake
11 level using a conservative bounding analysis. We
12 determined that the change in lake level with the new
13 cooling system for Unit 3 and the existing Units 1 and
14 2 operating would cause the water level to be
15 decreased by less than three inches for about 70
16 percent of the time. It would be six inches less for
17 about 85 percent of the time. And it would be less
18 than 12 inches difference for 94 percent of the time.

19 The average estimated difference would be
20 less than three percent difference with the third unit
21 operating in addition to one and two. And the
22 estimated maximum difference would be less than two
23 feet, which would probably occur for a day or so.

24 Again, these numbers of using a very
25 conservative bounding analysis.

1 Next slide please. We re-analyzed the
2 radiological impacts to the public, to workers at the
3 North Anna facility, and to the biota at the proposed
4 increased power level from 4,300 to 4,500 megawatt
5 thermal per unit.

6 Although there was some small increase to
7 the maximally exposed individual as the result of the
8 power level increase, the impact level did not change
9 and the conclusions previously drawn still apply --
10 that the radiological impacts from construction and
11 operation would be small.

12 Next slide please. As part of our
13 analysis for water usage for cooling Unit 3, we
14 evaluated alternative plant cooling technologies.
15 These included once-through cooling as well as wet
16 cooling towers and dry cooling towers. The once
17 through system is more energy efficient but has a
18 higher incident of entrainment and impingement and
19 heat effects on the lake.

20 Wet cooling towers would reduce
21 temperatures discharged to the cooling lagoons but
22 compared with once-through cooling, would consume more
23 water and be less energy efficient.

24 As I mentioned before dry cooling towers
25 were proposed for Unit 4. Dry towers for Unit 3 would

1 largely eliminate the impacts on water consumption in
2 waste heat discharge. However, these benefits come at
3 a high price in energy efficiency.

4 We also evaluated the four identified
5 alternative sites and assigned impact levels to them
6 similar to the way we did this in our North Anna ESP
7 site. Again these are the Surry Power Station, the
8 Portsmouth Gaseous Diffusion Plant, and the Savannah
9 River site.

10 Next slide please. We then compared the
11 impacts of the alternative sites to the North Anna ESP
12 site. Our preliminary conclusion is that all sites
13 appear to have potential for a site in the nuclear
14 plant or plants. Although there were minor
15 differences among the sites, none of the differences
16 were sufficient to determine that any of the
17 alternative sites is obviously superior to the North
18 Anna ESP site.

19 Therefore, our preliminary conclusion from
20 the environment perspective is that the early site
21 permit be granted.

22 It is time for questions now.

23 MR. CAMERON: Thank you very much,
24 Maryann.

25 And before we go to any questions, just

1 one clarification and it is fairly important in NRC --
2 the NRC regulatory framework. This is a public
3 meeting tonight. And when we refer to hearings, it
4 has a special connotation for the NRC which is the
5 adjudicatory hearing before our Atomic and Safety
6 Licensing Board judges in connection with actions like
7 that. So I just wanted to make sure there wasn't any
8 confusion on that.

9 And I think this gentleman has a question
10 for you, Maryann. And please introduce yourself,
11 sir.

12 MR. MURPHY: My name is Bill Murphy. My
13 question is could you quantify the "high price in
14 energy efficiency" please?

15 MS. PARKHURST: High price in energy
16 efficiency?

17 MR. MURPHY: Yes, could you quantify that?

18 MS. PARKHURST: I can tell you that -- we
19 are talking about the difference in cooling systems?
20 We have some information in terms of the approximate
21 or a general understanding of what it takes the energy
22 efficiency -- the energy penalty for like a dry
23 cooling tower. And I believe that number eight and a
24 half to eleven percent.

25 MR. CAMERON: And that is in the --

1 MS. PARKHURST: That is in the --

2 MR. CAMERON: -- supplement?

3 MS. PARKHURST: It is in the document,
4 yes, sir.

5 MR. CAMERON: Okay, let me ask Mr. Wycoff,
6 did you get any clarification on your small, moderate,
7 large? Or do you have some additional questions?

8 MR. WYCOFF: Sure, I mean I'll take the
9 opportunity to follow up. You know thank you for
10 clarifying those. And the other thing I appreciated
11 you commenting on was the specific rise in temperature
12 to the cooling lagoons. I do live on the cooling
13 lagoon side and so that obviously is a big concern of
14 ours.

15 I wanted to understand a little bit more.
16 I know you said one-tenth of one degree. If that is
17 true, then I'm concerned for not -- I'm not as
18 concerned as I was. You know right now, the lake is
19 102 to 104 during this time of the year. And that is
20 obviously very, very hot.

21 If it were to raise another six degrees,
22 it probably becomes not usable for most recreational
23 purposes.

24 So I guess if you can confirm that with,
25 you know, a scientific method, that that is what you

1 came to and you are sure that if you were living there
2 you would be okay with it, then I'm okay with that.

3 The other thing I wanted to ask you is the
4 cooling towers that you have cooling the air
5 temperature. What is that going to do from a thermal
6 heat pollution to the atmosphere.

7 MS. PARKHURST: We do have information in
8 the supplement relating to fogging, icing, and some of
9 those concerns. We also discussed the visible aspect
10 of the plumes at certain times of the year. So that
11 information is discussed in this supplement. And will
12 be in the final environment impact statement.

13 MR. WYCOFF: Okay. And just so there is
14 no ambiguity, Mr. Wycoff's restatement of what you
15 said in terms of the raise in temperature, was
16 captured correctly then? Accurately?

17 MS. PARKHURST: That is my understand is
18 that is the case. Lance Vail, if he is wanting -- if
19 that was any -- if you want to clarify it further. If
20 that was sufficient --

21 MR. CAMERON: Yes, Lance Vail, one of our
22 experts on the team.

23 MS. PARKHURST: Hydrologist.

24 MR. VAIL: Yes, I'm actually the one that
25 was responsible for reviewing those water calculations

1 and that tenth of a degree. One of the things you
2 want to keep in mind is that the blowdown water, this
3 is the water that actually gets discharged, will end
4 up going to the waste heat treatment facility, is
5 limited under their plant parameter envelope at 100
6 degrees.

7 So when the current discharge is 104, this
8 small amount of water that would be added would
9 actually be cooling off effectively the water during
10 those particular times of the year. So they have
11 committed to that 100 degrees.

12 But the change that we had to consider was
13 the fact that because you are evaporating more water,
14 you have less water in the lake. And that lake has to
15 basically handle all of that heat load that is going
16 into there. And so we basically, you know, had a
17 calculation to basically say okay, how much does this
18 reduce the amount of water in the lake going to result
19 in a change in the temperature. And that is where the
20 tens of a degree goes and stuff.

21 Does that help?

22 MR. WYCOFF: Yes, it sounds like you did
23 everything, you know, production and then looked at
24 thermal impacts.

25 MR. CAMERON: Yes, we need to get all of

1 this on the record. And Mr. Wycoff, maybe you could
2 talk -- Lance, maybe you can talk after the meeting
3 and get more information.

4 Yes? And please introduce yourself?

5 MS. KEMP: Sure. My name is Melissa Kemp.
6 And I just want to follow up on his question back
7 there about the eight -- was it eight to 11 percent,
8 you were calling it an inefficiency that would be
9 added by doing the dry cooling tower instead of a
10 hybrid cooling tower, by efficiency or inefficiency,
11 you mean it is going to need eight to 11 percent more
12 electricity to run the dry system?

13 And my question was is that correct? And
14 also, what would be the cost? What kind of cost is
15 that to Dominion?

16 MR. CAMERON: Okay. Thank you.

17 MS. PARKHURST: I don't know to what
18 extent I can answer that part. We call it an inner
19 energy penalty. If you are looking at once-through
20 cooling, that is the cheapest situation. That's what
21 they have got on Units 1 and 2 right now.

22 If you do wet cooling towers, in this case
23 the combination of wet and dry cooling towers, there
24 is a fair amount of cost in energy to make the fans
25 work, you know, to drive that system.

1 MS. KEMP: My question, which is like, you
2 know, how much electricity are we talking about? And
3 can we place how much cost -- how much would it cost?
4 I mean it is making the water -- it is illuminating
5 the water impacts. How much this would cost Dominion
6 to make the third reactor completely dry like the
7 fourth one would be.

8 MR. CUSHING: If I could ask you --

9 MR. CAMERON: And, Jack, let's get you on
10 the record, okay?

11 MR. CUSHING: The energy penalty doesn't
12 just mean less electricity. It also means you need to
13 use more resources to produce that electricity. You
14 have to use more fuel so fuel cycling impacts
15 increase. And the increase is an eight-and-a-half to
16 11 percent penalty increase or a reduction in that
17 amount of electricity.

18 MS. KEMP: Over what a once-through
19 system?

20 MR. CUSHING: Over what a once-through
21 system.

22 MS. KEMP: But the proportion of the whole
23 --

24 PARTICIPANT: Could you speak to the
25 microphone please?

1 MR. CAMERON: We are not getting this on
2 the system. So could you just -- whatever you need,
3 if you want to ask a final question, why don't you do
4 that. And we will try to get an answer and then we
5 can talk offline.

6 MS. KEMP: Okay, I can mention it when I
7 talk for a couple of minutes.

8 MR. CAMERON: Okay. All right. All
9 right. Yes? Please introduce yourself.

10 MS. DAY: My name is Elina Day. And I
11 want to ask the hydrologist if he recently read about
12 the nuclear power plant in France and other European
13 countries. And they are returning water at a much
14 higher level than it is allowed. You know they are
15 facing a very, very hot summer. That means both the
16 temperature of the lake probably or the cooling water
17 that they use is already higher than they had probably
18 anticipated.

19 Now have you all looked at this? Because,
20 you know, we have had increasingly hot summers. And
21 we are, you know, probably in the throes of global
22 warming. I don't know if you people agree with that
23 or not but it is very apparent that water is just
24 hotter on its own than --

25 MR. CAMERON: Okay, Elina, let's -- I

1 don't want to -- I think we know the question. I
2 don't want to stop you but let's see if Lance has
3 anything to say about that.

4 Lance Vail?

5 MR. VAIL: Yes, I think the question was
6 this is the water that is going to be going into the
7 cooling could be coming in warmer as the result of
8 climatic conditions, right? And the essence of a wet
9 cooling system is the evaporation of water.

10 So the change in the temperature is
11 actually a relatively small fraction. Most -- I don't
12 want to burden you with the exact numbers but the
13 amount of energy that it takes to take water from a
14 liquid state to a vapor state is considerably more
15 than any change in temperature.

16 So basically it is this evaporation of
17 water where all that energy is going to be lost. And
18 so the intake temperature into the cooling tower has
19 relatively minor significance.

20 Now if it was a once-through system,
21 that's a much different story because basically they
22 have to operate at a certain, you know, delta, you
23 know, change in temperature between the inputs and the
24 outputs. So in a once-through case, that would be a
25 big problem. In a wet tower, that's not nearly as

1 significant.

2 Did that answer you?

3 MS. DAY: (Speaking from an unmiked
4 location.)

5 MR. CAMERON: Okay, Elina, we need to get
6 you on the record here. So why don't you say your
7 final thing --

8 MS. DAY: Well, I guess I just wanted to
9 make people realize that the first two reactors are
10 still once through. And, you know, they are going to
11 be using, in the case of higher temperatures
12 initially, they are going to be using more water
13 through evaporation.

14 Therefore, you add a third unit, you are
15 still going to increase the amount overall that is
16 lost to evaporation.

17 MR. CAMERON: Okay. Thank you, Elina.

18 Other questions on Maryann's presentation
19 before we go out to all of you to hear your comments?
20 We have one up here.

21 MS. FERRIS: My name is Rebecca Ferris.
22 I'm just a regular person. I don't really understand
23 half of what is being said here but it seems like
24 there is a lot of attention being paid to cooling.
25 And I know that in the process all this heat is

1 created.

2 What happens if everything, everything,
3 everything doesn't work the way it is supposed to and
4 those towers can't be cooled the way it seems very
5 important to everybody that they be cooled? Could you
6 tell me that in regular people's language?

7 (Laughter.)

8 MR. CAMERON: Do we have an expert down
9 there on regular people's language?

10 (Laughter.)

11 MR. CAMERON: I guess that is you, Andy.

12 MR. KUGLER: I am an engineer so I don't
13 know if I can speak like a regular person.

14 MR. CAMERON: Well, maybe not.

15 MR. KUGLER: But I'll take a crack at it.
16 A couple of things really in that comment.

17 The reason that there is so much focus on
18 the cooling water system is because this supplement is
19 to address the change in the cooling water system that
20 Dominion proposed. So that was a primary focus of our
21 work in this supplement.

22 Now the draft environmental impact
23 statement did speak about a number of other areas that
24 were not effected by that change. And so they are not
25 a focus of this supplement. And basically I think in

1 the supplement we talk about those things but we just
2 mention that these haven't changed.

3 The other thing I think you are raising is
4 well what happens if these cooling towers aren't
5 working. The plant does not rely on these cooling
6 towers to safely shut down.

7 There is an entirely separate system which
8 is safety related -- it is built to higher standards
9 -- that is specifically there to cool the plant down
10 in an emergency. And that system sits in standby
11 normally.

12 And what we are discussing here is the
13 normal cooling system that runs day to day to cool the
14 plant during periods of operation. So there are
15 really two separate systems. But there is a system
16 that is out there to cool the plant in an emergency.

17 MS. FERRIS: Maybe I didn't word my
18 question clearly enough. What happens if everything
19 --

20 MR. CAMERON: Okay, I guess the question
21 is what happens if things don't work. What would
22 happen? And I guess that -- and we're talking -- you
23 know we're going to confine this to the cooling
24 system, okay, because this is what this is about.

25 Andy, maybe if you could just briefly

1 without belaboring it because we can talk to Rebecca
2 afterwards, but what are the protections against
3 failure? And maybe Dave is going to come up and talk
4 about it.

5 (Laughter.)

6 MR. CAMERON: And this is our --

7 MR. MATTHEWS: I hope -- I hope you
8 understand. Maybe there is a misunderstanding. The
9 cooling towers are there to get rid of the waste heat
10 generated while they are generating electricity
11 because electricity generation does always result in
12 waste heat. If the cooling towers weren't to
13 operable, mainly if the cooling towers were to fail by
14 some reason of either seismology or a failure of any
15 active components and by the way they're very simple
16 activities, but if they were to fail, then the
17 reactors in effect would not be able to rid themselves
18 of that waste heat through that normal method and the
19 first thing that would happen is that the plant would
20 have to be shut down.

21 Then you would go into auxiliary cooling
22 and the emergency cooling systems that Andy was
23 describing. So the point is if the cooling system
24 doesn't operate, the plant cannot operate. So the
25 cooling system has to be operable in order for the

1 plant to operate. In the event that the cooling
2 system doesn't operate or the towers fail, the piping
3 fails or the pump that supply water to the cooling
4 towers fail, then the option for the operator, in this
5 case Dominion, is that they aren't going to be able to
6 generate electricity with that plant by virtue of the
7 fact that the cooling system has failed.

8 Now there is still waste heat or what they
9 call residual heat that has to be eliminated as the
10 reactors shut down. Unfortunately, nuclear reactors
11 are devices that when you shut them off they still
12 generate heat by virtue of what's called the sensitive
13 heat in the core. That's when the auxiliary cooling
14 systems and the emergency cooling systems go into
15 effect and those are systems that are in standby.

16 They use reserve cooling water that is
17 there and available to the plant and they will take a
18 number of hours and then a number of days to bring the
19 plant down to a stable level. But the cooling towers
20 are essential to the plant being able to operate and
21 generate electricity. So failure in cooling towers
22 means plant doesn't operate.

23 FACILITATOR CAMERON: Thank you. Thank
24 you very much, Dave, and we're going to take one more
25 question and then we're going to go for comments. Yes

1 sir.

2 MR. GIACCAI: My name is Gerry Giaccai.
3 I live on the cooling side. I thought her question
4 was and if it wasn't, my question is Dominion says
5 that and your studies say that the water going back
6 and into the cooling lagoon will go in at 100 degrees.
7 It won't affect --

8 PARTICIPANT: Maximum.

9 MR. GIACCAI: Maximum. Okay. What
10 happens if it goes in at 101 instead? It's measured
11 at that. What happens if it goes in at 110? Do they
12 just get to do it?

13 FACILITATOR CAMERON: Okay. The answer --
14 It's a related question. Jack, are you going to take
15 this?

16 MR. CUSHING: Yes.

17 FACILITATOR CAMERON: All right.

18 MR. CUSHING: Basically, the Commonwealth
19 of Virginia sets the regulatory limits on the water
20 discharges. In our evaluation, we evaluate what the
21 environmental impact would be for this design which
22 would discharge at 100 degrees. So for instance, if
23 they do come into that later licensing action, they
24 have to demonstrate to use that they would come in
25 with a system that would be 100 degrees or less.

1 FACILITATOR CAMERON: Okay, and there
2 might be further information after the meeting from
3 the state in terms of compliance issues which is I
4 think what you were concerned about. All right. I
5 think we're going to -- Okay. We'll go to Lou Zeller,
6 final question and then we're going to go onto public
7 comment. Lou.

8 MR. ZELLER: Quick question. Lou Zeller
9 from the Blue Ridge Environmental Defense League. How
10 many temperature sensors are placed around the lake by
11 Dominion and the State of Virginia?

12 FACILITATOR CAMERON: Does anybody know
13 the answer to that?

14 MR. REMMERS: Right here. Twelve.

15 FACILITATOR CAMERON: Okay. Do you want
16 to repeat that in the microphone?

17 MR. REMMERS: There are 12 sensors around
18 the lake that measure the temperatures that Dominion
19 collects.

20 PARTICIPANT: Can you identify yourself
21 please.

22 FACILITATOR CAMERON: Okay. Pardon me?

23 MR. REMMERS: Ken Remmers with Waterside
24 Property Owners Association.

25 FACILITATOR CAMERON: Okay. Thanks Ken.

1 All right. That was a pretty definitive answer.
2 Okay. Thank you very much, Maryann, and thank you,
3 Jack. And we're going to start off. Usually we find
4 that it's informative for the public to hear from the
5 company that submitted the application in terms of
6 what their vision, their rationale, is and I'm going
7 to ask Mr. Gene Greychek who is the Vice President for
8 Nuclear Support Services at Dominion Nuclear North
9 Anna to come up and talk to us a little bit. Gene.

10 MR. GREYCHEK: Good evening.

11 (Chorus of good evenings.)

12 MR. GREYCHEK: I notice it's about an hour
13 and I know it's going to be a long night I think. So
14 we're going to be brief. I just wanted first to thank
15 everybody for coming out and expressing their
16 interests in this, particularly those that took time
17 out from their busy schedules to come support the
18 project. I really appreciate that.

19 As you know, we submitted our application
20 for the early site permit back in 2003, September of
21 2003, and our goal at that time and our goal today
22 continues to be to maintain the nuclear option for
23 decisions that need to be made about power needs in
24 Virginia as we look toward the future years. If
25 anything's changed since 2003, we now believe that

1 those future needs are even more imminent and more
2 severe than what we expected three years ago. We
3 expect that the demand for electricity will increase
4 substantially in the next decade and we need to our
5 part to be ready for that.

6 As the NRC indicated to you, the early
7 site permit will not permit us to start building a
8 plant. In order to do that, we would have to come
9 back to the NRC for an application for a combined
10 operating license. We are working on such an
11 application and at the present time, we expect that we
12 should be ready to decide whether to submit that
13 application in the fourth quarter of 2007.

14 So the questions that we are facing as
15 Dominion looks at the picture and also the questions
16 that we're going to be discussing tonight are really
17 complex. No matter what kind of generation of what
18 kind of energy supply that you anticipate that we're
19 going to be using, there are impacts that need to be
20 weighed and evaluated.

21 If you think about what's been happening
22 in the energy picture just over the last two and a
23 half years since the application was submitted, just
24 think of what's been happening. There have been
25 dramatic changes in the price of natural gas and I

1 bring that up only because natural gas for the last
2 ten years or so has been basically the only form of
3 fuel used for generation at all in the United States
4 and you can imagine the economic impacts of a
5 dramatically changing natural gas price that we've
6 seen over the last couple of years.

7 Coupled with that, the realization that
8 natural gas production in the United States is
9 essentially flat or declining which means that if we
10 go into the future, we're going to be importing that
11 natural gas in the form of liquified natural gas and
12 the sources of liquified natural gas are the same
13 countries around the world that are currently the
14 source of our imported oil and we know what the
15 geopolitical consequences of that are.

16 Gasoline prices are above \$3.00 a gallon
17 many places. Just in the last week, we saw half of
18 the oil supply from Alaska shut down because of aging
19 infrastructure and as was already mentioned today and
20 I'm sure we'll hear more about it, there is continuing
21 discussion about impacts of energy use on the
22 atmosphere and particularly in terms of climatic
23 effects and we need to start thinking about what are
24 we going to do as a society and as a state to address
25 some of those issues.

1 We believe that nuclear energy is an
2 important part of the overall energy supply picture
3 because it assures a diverse energy supply and it's
4 something that can continue to be available to meet
5 future needs. And nuclear is not emitting, a non-
6 emitting source, from the perspective of carbon
7 dioxide and therefore, if we are concerned about
8 carbon dioxide, if as a society we choose to do
9 something about limiting carbon emissions to the
10 atmosphere, nuclear will be a vital part of that.

11 As was noted, the NRC had a previous
12 public meeting back in February and at that time, we
13 were proposing to cool the potential third nuclear
14 unit at North Anna with the lake. When we built the
15 lake back in the early 1970s, it was built, it was
16 sized, it was designed, to cool four units at the
17 station.

18 Following that meeting and after we had
19 many discussions with both the state and with many
20 residents around the area, we decided to go to the
21 hybrid cooling system that you've heard described
22 tonight and that you can read about in the
23 environmental impact statement. Again, I want to
24 reiterate, the reason we made that choice and that
25 choice will probably add about \$200 million to the

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1 price of the plant we make the decision to build it,
2 the reason we made that choice was to eliminate
3 thermal impact to the lake. There will be essentially
4 negligible thermal impact to either the waste heat
5 treatment facility or the lake as a result of the
6 third unit using this system. And in addition, it
7 would dramatically reduce the amount of water
8 consumption that is of particular interest during a
9 drought condition.

10 Promoting environmental stewardship is
11 something we're very proud of. We have a long
12 tradition of working very closely with the state
13 agencies and the local community groups. We will
14 continue to do that and particularly as this project
15 progresses as we start getting into the design
16 details, we will continue to work very closely with
17 both community groups and the state agencies. I
18 believe that our decision that we're discussing
19 tonight to change the cooling system, to eliminate the
20 thermal impacts on the lake, demonstrates our
21 commitment to environmental stewardship.

22 In closing, these are not simple issues.
23 Nothing in power production is simple. Nothing in
24 energy consumption or energy economy is simple. Any
25 project no matter what its size, not matter what its

1 type, will involve some change to the environment.
2 Our job is to balance that, to decide whether the
3 impacts are controllable, whether the impacts make
4 sense in relation to the benefits of the project.
5 We're confident that after we look at all of these the
6 EPS process can continue and that the nuclear option
7 can be maintained. Thank you.

8 FACILITATOR CAMERON: Thank you. And
9 we're going to go to Lee Lintecum, I'm sorry if I
10 didn't pronounce that correctly, and then to Robin
11 Horne. Go ahead. I thought we were going to have a
12 lawsuit on our hands there.

13 MR. LINTECUM: Unfortunately, you may sue
14 me. My name is Lee Lintecum. I'm the County
15 Administrator. I'll first say that we have a good
16 working relationship with Dominion Virginia Power. As
17 you may know, they're our largest employer and are by
18 far our largest taxpayer and being County
19 Administrator, I'm also involved in safety issues and
20 find them very cautious and very --

21 FACILITATOR CAMERON: I'm sorry to
22 interrupt you, but there are people who really want to
23 hear what you're saying and I guess the microphone is
24 not picking up that good. Let me slide this forward
25 a little bit and see if that helps.

1 MR. LINTECUM: It's said that County
2 Administrators are best seen and not heard. So maybe
3 that was --

4 (Laughter.)

5 MR. LINTECUM: But I just said that we do
6 have a good working relationship with Virginia
7 Dominion Power. Back in early June, a board member
8 brought up some concerns a citizen had regarding the
9 proposed impact that it might have on the surrounding
10 community and the board directed me to meet with
11 Dominion, make them aware of those concerns which I
12 did and then Dominion responded to those concerns and
13 the board asked me to enter this as part of the record
14 which I have a copy for you. Also in the motion that
15 directed me to do so, the Board of Supervisors voted
16 to say that they support Virginia Dominion Power in
17 their early site permit process.

18 FACILITATOR CAMERON: Thank you. Thank
19 you for being here and thank you for bringing that to
20 our attention. Wonderful. Thank you very much and
21 I'm going to give this to the project manager as an
22 official comment. All right. And Robin, Robin Horne.

23 MS. HORNE: Hi, I'm Robin Horne, Chairman
24 of the School Board. I'm here tonight representing
25 the Louisa County School Board. I feel it very

1 important to say the Louisa County School Board is not
2 here in support of or in opposition to the new
3 reactors. Our business is to educate students who
4 come to Louisa County Public Schools and this will
5 happen whether the reactors come or not.

6 Dominion Power has provided a very
7 expansive tax base to the County of Louisa over the
8 past 30 years. The school division receives
9 approximately 60 percent of the tax base from Louisa
10 County. With this money, Louisa County Public Schools
11 is a strong and growing school division.

12 We have programs starting with our four-
13 year-old preschool program in all of our elementary
14 schools. We have three elementary schools and working
15 on a new one. We hope to open in 02/08 in the Bells
16 Crossroads area. We provide students in our
17 elementary schools kindergarten through fifth grade
18 with a quality education.

19 Our middle school has grades six through
20 eight with a diverse population. We have classes that
21 provide for remedial help to advanced classes in all
22 the core subjects.

23 Our high school provides AP classes, dual
24 enrollment classes with four different colleges, the
25 Blue Ridge Virtual Governor's School. All levels of

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1 students are accommodated with our large expansive
2 course offerings. We have a vocational program that
3 exceeds state's compliance. We have our own director
4 of the CTE program, Ms. Outlaw, who provides us with
5 her experience and guidance.

6 We just recently received certification
7 for NATEF which is the National Auto Tech Education
8 Foundation. Mr. Vincent Cox from Dominion Power has
9 been very supportive of our schools and helped a great
10 deal with the safety issues in getting us certified.

11 Dominion Power has a program called "Power
12 Start." We have had students from our high school go
13 through this program successfully. The students
14 completed an internship as part of the program after
15 graduation. If they completed both the classroom
16 instruction and the internship successfully, they were
17 guaranteed a \$30,000 beginning salary job with
18 Dominion Power.

19 Our school division just recently
20 underwent a very extensive efficiency review. We were
21 commended for operating and administratively
22 maintaining a high level of school level customer
23 satisfaction. We're commended for providing a level
24 of administrative staffing that supports the academic
25 goals and objectives and we were commended for

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1 instituting a regular program of preventive
2 maintenance. This is very important since most of our
3 schools are 30 years old. We were commended for
4 having a transportation department that has a
5 structure that supports the highest level of
6 communication.

7 We have areas that also need improvement.
8 We must expand and upgraded current transportation
9 departments' facilities and a scholarship coordinator
10 of human resources position. We're not perfect,
11 however, we do a good job with the resources we're
12 given.

13 The school district must remain neutral in
14 political matters, however, we do have to consider the
15 contingencies of all outcomes and how they might
16 impact the school division financially and in terms of
17 student population. With the increase in taxes from
18 Dominion Power, we must understand this will raise our
19 composite index. When the index goes up, the funding
20 from the State of Virginia will go down and the state
21 will expect the localities to pick up the lost
22 funding. We could at best guess estimation lose
23 between \$6 to \$8 million.

24 We must understand that it will be the job
25 of our local government to pick up this portion of

1 lost revenue. There could be a lag time between the
2 lowering of the index and when we actually start
3 getting more tax dollars. Again the county and its
4 taxpayers must be willing to fund the school budget
5 should this happen.

6 The only agenda the Louisa County School
7 Board has is to educate the children of Louisa County.
8 We will continue to do this in a manner that is
9 fiscally responsible and in the best interest of our
10 children. Thank you.

11 FACILITATOR CAMERON: Thank you, Robin.
12 Thank you very much. Our next four speakers, we're
13 going to go Lisa Stiles-Shell next and then Sama
14 Bilbao y Leon and then to Harry Ruth and then to
15 Melissa Kemp. And this is Lisa Stiles-Shell.

16 MS. STILES-SHELL: It's much cooler than
17 it was in February of 2005. Just for my own
18 edification, could everybody raise their hand that
19 thinks that new nuclear is a good thing for Louisa,
20 for Virginia and for the nation? Great. Okay.

21 As you said, my name is Lisa Stiles-Shell
22 and while I'm temporarily living in Washington D.C.,
23 my permanent residence is in Glen Allen. I'm a
24 nuclear engineer by training with degrees from the
25 University of Missouri Columbia and the Massachusetts

1 Institute of Technology. I worked in the nuclear
2 industry for over ten years, mostly in used fuel
3 management.

4 Recently though, I've made a career
5 change. First, I realized that after a decade that I
6 just don't have the temperament to be an engineer
7 forever, probably because I like to talk too much.
8 I'll try to keep this short.

9 This realization came at about the same
10 time that the nuclear debate begin anew in Virginia.
11 I was shocked and amazed at the propaganda and
12 misinformation that was being perpetuated by anti-
13 nuclear groups. I was spurred into action and am now
14 working in public outreach and communication. I'm
15 also the President of the International Youth Nuclear
16 Congress and the past President of the North American
17 Young Generation of Nuclear (NA-YGN) and a member of
18 the local Virginia section of that organization.

19 Many of the local members that are here
20 tonight are residents of Louisa or other immediately
21 surrounding counties. NA-YGN was formed in 1999 as an
22 organization that unites young professionals that a
23 share of personal conviction that nuclear science and
24 technology make important and valuable contributions
25 to our society.

1 One of the group's primary missions is
2 public information. We believe that public discourse
3 often does not give fair play to the benefits of
4 nuclear technology or the truth about solutions to
5 safety and environmental concerns. As young nuclear
6 professionals, we are in a unique position to give
7 balance to the issues and share our first-hand
8 knowledge and expertise with our friends, neighbors,
9 elected officials and media representatives. As
10 nuclear technology relates to electricity generation,
11 we want to tell everyone the success story that is
12 nuclear power in our country. Nuclear energy is safe,
13 clean and reliable and is an important part of a
14 balanced energy mix.

15 Currently, nuclear provides about one-
16 fifth of our nation's electricity and about one-third
17 of Virginia's. In Virginia, the power output of the
18 North Anna plants represent about seven million metric
19 tons of carbon dioxide emissions avoided each year.
20 Furthermore, we support the ESP process as for the
21 means to guarantee an open and thorough evaluation of
22 future nuclear projects, while ensuring the timeliness
23 and predictability of the process.

24 Tonight's public meeting demonstrates the
25 benefits of the new process. That is that safety,

1 environmental and licensing issues are resolved before
2 large capital investments are made. Dominion's
3 original ESP application utilized a once-through
4 cooling system as we've just heard about for Unit 3
5 just like the existing units. When Virginia DEQ
6 nearby residents raised concerns about the impact on
7 lake temperature that a third unit would have, as a
8 result of this public process, Dominion modified its
9 proposed design to include a cooling tower for a third
10 unit to address the concerns, exactly what the process
11 was intended.

12 So as nuclear professionals and as
13 concerned local citizens, we concur with the NRC's
14 conclusion that environmental impacts would not
15 prevent issuing an early site permit for the North
16 Anna site. The environmental report of Dominion's ESP
17 application and the NRC's draft environmental impact
18 statement demonstrate in great detail what has become
19 patently obvious in an era of increasing concerns
20 about global warming, air pollution, environmental
21 protection, energy security and industrial safety.
22 That is in spite of the misinformed and skewed claims
23 of those small minority of career anti-nuclear
24 activists, nuclear power has perhaps the smallest
25 impact on the environment including water, land,

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1 habitat, species and air resources and life cycle
2 emissions analyses show that per kilowatt hour the
3 impact of nuclear energy is among the lowest of any
4 form of electricity generation including wind and
5 solar.

6 As an aside that we are not here to debate
7 the issue of spent nuclear fuel, I would like to add
8 that as an engineer who has years of experience
9 working and performing research in the management of
10 nuclear waste, I can say with confidence that the
11 problems of transportation and disposal are political,
12 not technical.

13 Unfortunately, though I continue to find
14 anti-nuclear groups misleading concerned citizens with
15 their propaganda and scare tactics. We saw it just
16 tonight. Ma'am, I'm not sure who told you that
17 sweeping the floors at a nuclear power plant releases
18 low level waste into the environment regularly, but
19 it's just not true.

20 PARTICIPANT: (Off microphone.)

21 MS. STILES-SHELL: Okay. Then I
22 misunderstood. I'm sorry. I thought you said that
23 sweeping floors puts low level waste into the
24 environment. If somebody thinks that, it's not true.

25 But some things that I have seen and read,

1 career anti-nuclear idealists continue to try to, Dr.
2 Mangano and his tooth fairy study, claiming the cancer
3 rates near nuclear plants, that cancer rates near
4 nuclear plants have risen, but these claims have been
5 debunked by the likes of the Center for Disease
6 Control, the National Institutes of Health, the *New*
7 *York Times*, the Health Departments of New York,
8 Connecticut and Illinois, just to name a few.

9 Closer to home, an anti-nuclear group
10 claimed that cancer rates had risen near North Anna.
11 But inspecting their work showed that they had
12 compiled their data rather strangely. While they took
13 the data from some counties far away from the plant,
14 they ignored the data from Spotsylvania County right
15 across the lake. Why did they do that? Because it
16 didn't support their claims.

17 Anti-nuclear websites claim that a cooling
18 tower for Unit 3 will evaporate more water than a
19 once-through system which will cause the lake level to
20 be permanently lowered. While that would be true for
21 older designs, the state-of-the-art cooling design
22 that Dominion has proposed for Unit 3 would evaporate
23 significantly less water. Plus when lake level is a
24 concern, a dry cooling tower will be used to maintain
25 lake level and downstream flow.

1 On this issue, I got into a discussion
2 with anti-nuclear activist outside in the hall
3 tonight. Now I admit that I don't recall the exact
4 evaporation rates of once-through systems, convenient
5 cooling towers and the hybrid design, though I didn't
6 appreciate the snide comment that you're a nuclear
7 engineer and you don't know.

8 Well, the truth is I care about the lake
9 level, the temperature and the downstream flow. If
10 all of those needs are met which they are by
11 Dominion's modified design, why would I care about the
12 evaporation rates. It's part of the water cycle. One
13 way or another, water evaporates, it forms clouds and
14 then it rains.

15 Anti-nuclear groups have made all sorts of
16 claims related to the fish of Lake Anna. It seems
17 they conveniently forget that Lake Anna was created
18 specifically to support nuclear power plants. Some of
19 the fish that they are so worried about are not
20 indigenous to this area and have been stocked in the
21 lake. Furthermore, the existence of the power plant
22 actually serves to sustain many fish populations. Try
23 reading an excellent summary of the Lake Anna
24 ecosystem written by expert anglers at the McCotter's
25 Lake Anna Guide Service website.

1 An anti-nuclear groups claim that renewals
2 like wind and solar can replace base low power. I'm
3 not against wind and solar. I think they're part of
4 an energy mix, but it simply isn't true that you can
5 take an intermittent source that operates at a maximum
6 of 35 percent capacity factor in this country and use
7 it to replace base load power that operates at 90
8 percent capacity factor.

9 Anti-nuclear activists conveniently ignore
10 that all energy technologies have their pros and cons.
11 Life cycle emissions for wind and solar are actually
12 higher than nuclear. Furthermore, they ignore that
13 solar produces about the same amount of toxic waste
14 per kilowatt hour produced as nuclear does. But this
15 is waste that never decays or becomes less dangerous.

16 I actually had a green politician in
17 Europe say I was lying when I said that there was
18 waste associated with solar. It's just a fact. I
19 still think we should develop renewables and do
20 everything we can to use them, but they are a part of
21 a balanced energy mix, not the entire solution, just
22 like nuclear.

23 These are just a few examples and I won't
24 get into the personal attacks, but I would like to
25 encourage the concerned citizens here tonight to be

1 sure to get all sides of the story. Don't assume the
2 anti-nuclear groups are the only ones with your and
3 the environment's best interest in mind. There are
4 plenty of us nuclear supporters out there that believe
5 that we as a society must be good stewards of the
6 environment and we should be good stewards of the
7 health and safety of our communities. I would not
8 work in this industry if it violated these principles
9 and I believe I speak for most, if not all, of the
10 nuclear professionals here tonight. Thank you.

11 FACILITATOR CAMERON: Okay. Thank you,
12 Lisa, and not to belabor this, but just in case it
13 didn't make it on the transcript, the question that
14 was asked before I didn't think was pejorative. It
15 was just a simple question about what happens to the
16 radioactive waste and the construction debris. How is
17 that considered in these various licensing processes?
18 I just wanted to point that out and this is Sama Leon.
19 I didn't get that right, did I?

20 MS. LEON: Good evening. Can you hear me
21 okay? Okay. I'll try. My name is Sama Bilbao Y Leon
22 and I am a member of the Virginia section of the
23 American Nuclear Society and the North American Young
24 Generation in Nuclear. In fact, I am one of the
25 founding members of the North American Young

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1 Generation in Nuclear.

2 The first thing that I wanted to do today
3 before I speak is I wanted to give to the NRC 1,190
4 signatures that the NA-YGN, the North American Young
5 Generation in Nuclear, has collected for the last
6 three or four weeks and this is from people all over
7 the area and actually from all over North American in
8 support of nuclear power and the new nuclear in
9 Virginia in particular. So I have it here and I'll
10 give it to you. [Available in Adams under Accession #
11 ML062350445]

12 Now let me start with my statement. As
13 Lisa, I am also a nuclear engineer and as that, I am
14 extremely proud of the very significant contribution
15 the nuclear science and technology makes every day to
16 improve our quality of life. This contribution is
17 most times very quiet, very unglamorous and made much
18 behind the scenes. Many people are very unaware of
19 it. In particular, I think that nuclear makes a very
20 big -- I'm sorry. It's an unsung hero that every day
21 generates more than 35 percent of the electricity that
22 we consume in Virginia and it does that cleanly,
23 safely, inexpensively and reliably.

24 I am also an active environmentalist. I
25 share with all of you the concerns about minimizing

1 human impact of the planet and preserving natural
2 resources for future generations and I actually have
3 interrupted my lifestyle to minimize those impacts
4 accordingly.

5 As I said, I'm a young professional in
6 nuclear and because of that, I know that nuclear power
7 is the most environmentally sound, large scale option
8 for new energy investment. Nuclear power minimizes
9 environmental impact by using a small amount of land
10 area and a small amount of fuel to produce a large
11 energy output. Furthermore, it accomplishes this
12 without emitting any negative gas emissions and
13 furthermore, the byproducts of nuclear power are the
14 most manageable of energy waste products because they
15 are totally contained, transportable and reuseable.

16 So those are the reasons that I can't
17 really understand how any serious environmentalists
18 after thoroughly reviewing all the facts can
19 realistically dismiss the measurable positive
20 contributions that nuclear power makes today and the
21 potential beneficial role of new nuclear power plants
22 to the sustainable development of humankind and of
23 course, Virginia. I insist that I'm talking about
24 reviewing unbiased facts, not mundane half-truths or
25 out-of-context misinterpretative data.

1 So as you all know, we live in a world
2 where the difference between the people that have and
3 the people that don't have anything is enormous and
4 hopefully, there's going to be a huge increase in the
5 amount of energy. So that gas, it's slowly but surely
6 being decreased. So we also live in a world where
7 energy resources are scarce and very unevenly
8 distributed and this is part of the cause that we are
9 now living in a world with war and terrorism. We also
10 live in a world with climate change, partly cold,
11 especially with human activities. Maybe we will have
12 an increased number in catastrophic weather events
13 that we have faced recently.

14 So given all these conditions that shape
15 the world in which we live, it is difficult not to
16 arrive to the realization that it will be impossible
17 to support sustainable development to obtain safety in
18 energy production and to reduce greenhouse gas
19 emissions without having nuclear power as an important
20 part of a balanced energy mix.

21 For example, in the U.S., the studies show
22 that it is not possible to maintain the existent
23 percentage of non-emitting energy sources that alone
24 increase this percentage without the contribution of
25 nuclear power. This means that just to maintain the

1 current level of environmental quality we will need to
2 build new nuclear power plants.

3 For that reason, I commend Dominion for
4 being proactive in planning for respective increases
5 in increasing power over the coming years while
6 considering sources that minimize the environmental
7 footprint as well as the economic burden to Dominion
8 customers. I also support the ESP process as the
9 means to warrant an open and thorough evaluation of
10 future nuclear projects, involving all the
11 stakeholders and ensuring the timeliness and
12 predictability of the process.

13 I really think that this process works and
14 this is why we are all here today. We all have the
15 opportunity to voice our concerns with Dominion's
16 plans and thorough discuss them. Dominion was very
17 proactive to revise the proposal to address the
18 concerns that were raised in this meeting and are
19 coming for additional meetings and this is also the
20 reason why we are here today again.

21 The NRC has issued a supplemental draft
22 environmental impact statement and here we are all of
23 us trying to provide the NRC feedback on what we think
24 of that environmental impact statement. Personally,
25 I think that their proposal would not have resulted in

1 any negative environmental or social economic impacts
2 in Lake Anna and the surrounding areas.

3 Therefore, I think that the new revised
4 plan which has an even smaller footprint on the area
5 does not result in any negative effects and for that
6 reason, I want to voice my support for granting to
7 Dominion Resources an early site permit to construct
8 new nuclear reactors at its North Anna site. Thank
9 you.

10 FACILITATOR CAMERON: Thank you very much,
11 Sama. Great. Thank you. Harry Ruth and then we're
12 going to go to Melissa.

13 MR. RUTH: The NRC, ladies and gentlemen,
14 my name is Harry Ruth. I reside at 230 Heather Drive,
15 Bumpus and I live at the lake. I represent the
16 Friends of Lake Anna Citizens Group representing 2,650
17 persons whose mission is to protect Lake Anna, both
18 the main reservoir and the cooling lagoons and its
19 surrounding landscape for the health, safety and
20 welfare of current residents, users and for future
21 generations.

22 We are not anti-nuclear nor do we have
23 not-in-my-backyard sentiments. Our goal is simply to
24 protect Lake Anna for 500,000 plus annual users and
25 ensure compliance with the law. We believe that the

1 U.S. should become self-reliant for energy sources and
2 not be dependent on foreign oil, but we do want to
3 promote the wise and safe use of nuclear energy and
4 not have the impact of the new nuclear reactors
5 destroy Lake Anna in the process.

6 If the project at the North Anna plant is
7 accomplished correctly and takes into account our
8 concerns, possibly the new reactors could become a
9 model for the continued growth of nuclear energy
10 throughout the country. We do support the addition of
11 the third and fourth nuclear reactors but want to
12 ensure that all environmental issues are taken care of
13 prior to the issuance of either an NRC early site
14 permit or a federal consistency certification. In the
15 interest of time, I'm going to forward my written
16 comments to the NRC and I'm going to identify the
17 highlights only of the presentation.

18 The first part deals with the NRC. The
19 public should be involved with the safety evaluation
20 report and be able to comment. That doesn't occur
21 right now. The NRC does their own thing.

22 And the NRC continues to accept many
23 changes to the ESP without automatically extending the
24 public comment period time with these changes and
25 issues. Recently, we've reviewed just thousands of

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1 pages and within the last few weeks, a revision seven
2 and eight were issued and the public comment period
3 has not been extended for that there. The current ESP
4 resembles a three ring circus without having the ring
5 master to direct all of the acts, but the timekeeper
6 is making sure that the public audience moves out of
7 the big top so the next scheduled performance can
8 begin.

9 We have concerns with fishery management.
10 The Department of Game and Inland Fisheries has found
11 that the fish will continue to be adversely affected
12 even if after the changes to the third reactor have
13 been made. As stated in the analysis of the draft EIS
14 which is this environmental impact statement, the
15 North Anna watershed is too small to allow large water
16 withdrawals. These would adversely affect the
17 beneficial uses of the North Anna river. The analysis
18 clearly indicates that the third unit would increase
19 the drought cycle and cause decreased water flows
20 during seven months of the year.

21 Recent Lake Anna Civic Association water
22 studies have indicated that the North Anna River three
23 miles before it enters the lake is 13 degrees cooler
24 than the central part of the lake above the Route 208
25 bridge. Many areas of the entire lake, both main

1 reservoir and cooling lagoons, have recently
2 experienced temperatures in the low to high 90s which
3 clearly exceeds the 89.6 degree Fahrenheit temperature
4 limitation in the Clean Water Act. Some residents
5 have reported temperatures as high as 106 degrees.
6 The entire Lake Anna is being heated as a result of
7 the current power plant. The NRC and VDEQ have fully
8 analyzed the impact of any further water temperature
9 increases resulting from the blow-down discharges of
10 the proposed Unit 3 cooling towers or any malfunction
11 of any of the proposed cooling towers or current
12 generating units.

13 The entire Lake Anna is unique and it's
14 primarily an impoundment where 99 percent of the water
15 is recirculated which in turn causes the lake to heat
16 up since only about one percent of the water is
17 released over the dam. Since the entire lake is 17
18 miles long and includes 13,000 acres of water and
19 water temperatures exceed 90 degrees throughout the
20 lake, it would seem that Dominion is routinely in
21 violation of the U.S. Clean Water Act and the
22 variances that they have. Any additional heat
23 transfer from the proposed third unit water cooling
24 tower blow-down discharge will only compound the
25 problem while the proposed Unit 4 dry cooling air

1 tower would have no additional heat transfer impacts
2 to the lake.

3 The U.S. Congress passed the Clean Water
4 Act to restore and maintain the chemical, physical and
5 biological integrity of the nation's waters. The
6 national goal of the Act is to achieve water quality
7 which provides for the protection and promulgation of
8 fish, shellfish and wildlife and also provides for the
9 recreation in and on the water.

10 One set of the North Anna River users
11 should not benefit at the expense of another set of
12 users. Whatever the final solution is, it should not
13 for decreasing the inadequate water supply in the
14 small water shed. The solution should not benefit one
15 set of users.

16 One alternative to discuss but not
17 proposed in the environmental impact statement is to
18 exclusively use dry air cooling for the third unit
19 which would then negate any further water withdrawals
20 from the small watershed. This appears to be a
21 feasible option since this is the same technology that
22 Dominion has proposed for Unit 4 and is used by many
23 overseas countries that did not have a local water
24 source.

25 We're concerned with water temperatures

1 and they should be limited to no more than 104 degrees
2 at the end of the discharge canal. A point of
3 compliance for all U.S. water permits should be
4 changed from dike 3 to the end of the discharge canal
5 to provide for Clean Water Act protections for all the
6 cooling lagoons users.

7 Human health problems due to increased
8 water temperatures and increased bacteria from
9 increased water temperatures are also a concern. The
10 impact to wildlife, fish and endangered species, the
11 bald eagles, as a result of increased water
12 temperatures, reduced water flowing, increased drought
13 cycles and possible loss of food supply.

14 Raising of the lake level to retain more
15 level for the third unit resulting in the destruction
16 of adjoining property and also for the retention for
17 downstream users. Lowering the lake level by
18 increased water use is thereby causing increased
19 drought cycles ranging from weeks to months.

20 We need to enforce the U.S. Clean Water
21 Act for recreating in and on the water on both the
22 main reservoir and the cooling lagoons. Currently,
23 it's only enforced only on the main reservoir. The
24 cooling lagoon users have no protections at all.

25 Height of dry and wet cooling towers and

1 facility buildings should not exceed the tree line to
2 protect the rural aesthetic atmosphere of the
3 community as Dominion indicated in their January
4 stakeholder meeting.

5 You have the impact of 5,000 to 7,000 new
6 workers, construction, periodic maintenance and
7 professional employees for five years on local roads
8 and schools. This will create the need for new
9 expanded roads before the project begins because of
10 the workers and three newly approved Louisa County
11 subdivisions in the proximity which is going to add
12 about 1800 new homes in that area.

13 New schools and other county
14 infrastructure, police, fire, rescue squads, etc.
15 will need to be planned and build prior to any new tax
16 dollars coming from Dominion. Louisa is now the 73rd
17 fastest growing county in the U.S. Who is going to
18 pay for all these new requirements? Is the Federal
19 Government going to give grants to Louisa County
20 similar to the \$8 to \$10 million grant that you gave
21 to Dominion for processing this early site permit?

22 We're concerned about emergency evaluation
23 on the small two lane roads, the spent nuclear fuel,
24 where it's stored, canisters intact protections, etc.
25 The impact of additional fog and icing from wet

1 cooling towers on local roadways. The noise concerns
2 emitted from the 180 to 230 foot buildings that will
3 travel long distances without having tree barriers to
4 protection the sound from giant fans.

5 We believe the North Anna project as
6 currently proposed is inconsistent with the Virginia
7 Coastal Zone Management Program. We support the
8 concept of the third and fourth reactors, but the
9 above environmental items must be resolved prior to
10 the issuance of any Federal consistency certification.
11 We request that a Federal consistency certification or
12 early site permit not be issued until the issues are
13 satisfactorily resolved.

14 We also request that all state agencies
15 stop using the designation "waste heat treatment
16 facility" to describe the cooling lagoons, so it is
17 not viewed and treated similar to a sewage treatment
18 facility. This designation affords no public
19 protection for the over 8,000 users of the cooling
20 lagoons.

21 Further, we request that the Virginia
22 Point of Compliance be changed from dike 3 to the end
23 of the discharge canal and the cooling lagoons start
24 to be treated by all state agencies as quasi public
25 works so the health, welfare and safety of those who

1 use the cooling lagoons is protected. The quasi
2 public water designation would recognize that Lake
3 Anna is unique of thermal cooling unlike other power
4 plants that discharge heated waters into oceans or
5 major free-flowing rivers. It would also permit the
6 state to treat the cooling lagoons as public waters
7 and afford them the same protection as other public
8 works unless there is a nuclear disaster. This would
9 also adhere to the recent Supreme Court decision SD
10 Warren v Maine Board of Environmental Protection to be
11 adhered to which did not permit the privatization of
12 public waters.

13 If there is a nuclear disaster at the
14 North Anna plant, this designation would recognize
15 that the cooling lagoons are adjacent to a nuclear
16 power plant. In the event of nuclear disaster, only
17 nuclear byproducts could be discharged into the
18 cooling lagoons and be quarantined.

19 We request that alternative analysis for
20 the third unit cooling method be accomplished to fully
21 consider dry air cooling for the third unit as used by
22 many overseas countries to eliminate the consumptive
23 water loss associated with using wet cooling towers.
24 We also request that the public be involved in
25 reviewing a draft safety report, read the ESP prior to

1 its final issuance and that's there's an automatic
2 extension of the public comment period whenever
3 revision of the EPS occurs.

4 The current public comment period should
5 be extended to permit the public to have adequate time
6 to review and comment on Revision 7 and Revision 8
7 which were just issued after the supplemental draft
8 environmental impact statement was issued in July just
9 a few weeks ago. Thank you very much for your time
10 and consideration of the Bell Binups (PH).

11 FACILITATOR CAMERON: Thank you, Harry,
12 for those specific comments and for abbreviating your
13 presentation and we'll look forward to your full
14 comments. We're going to go to Melissa Kemp and then
15 we'll go to Lou Zeller, Ben Slone, Robert Clarke Jr.
16 and Bill Casino and this is Melissa Kemp.

17 MS. KEMP: Hi, my name is Melissa Kemp and
18 I'm here on behalf of Public Citizen. I would like to
19 start off just by saying it was great to hear Harry
20 speak. We're not affiliated at all, but it's really
21 nice that we're back on the topic of why we all came
22 here which is this cooling system is it going to
23 protect the water resources for the lake and for the
24 people downstream.

25 So I'm here on behalf of Public Citizen.

1 Public Citizen has about approximately 3,000 members
2 in Virginia and have about 150,000 members nationwide.
3 As an organization, Public Citizen has been involved
4 in this project since Dominion has filed its ESP in
5 2003. I would like to begin my remarks by talking
6 about the water issues which are the focus of the
7 NRC's supplemental DEIS.

8 Basically, after reviewing the documents,
9 NRC, we feel has done an inadequate analysis of the
10 newly proposed hybrid cooling tower system,
11 particularly around the issue of water evaporation.
12 We will agree that this new system will address the
13 flow impacts to a great extent, will also take in less
14 water from the lake which is good in terms of what
15 they're talking about is taking in fish, but the water
16 evaporation impacts remain.

17 And NRC again has given the impression
18 that water evaporation will be significantly decreased
19 by the new cooling system. This, however, is
20 incorrect. Most of the year, the new reactor will
21 operate using actually what they call the energy
22 conservation mode which evaporates about 37.2 cubic
23 feet per second. Now the once-through system that
24 Dominion proposed before was actually 26.0 cubic feet
25 per second.

1 We understand that Dominion said that
2 we're concerned about drought, so we're also going to
3 have a maximum water conservation mode which according
4 to their numbers actually evaporates 25.7 cubic feet
5 per second which about equivalent to the once-through
6 system. But this means that most of the year the
7 actual evaporation rate is going to higher than it was
8 with once-through system and at the drought conditions
9 when you use the maximum water conservation mode, it
10 will be about equivalent. Now there is this whole
11 question about these are maximum, instantaneous water
12 evaporation rates, but when we tried to understand
13 that in the supplemental draft EIS we couldn't find a
14 clear explanation for why those rates were not
15 actually valid.

16 Moving on, we also have concerns about the
17 hot side of the lake. We don't think it should be
18 treated as private property or as a waste treatment
19 center. We think it should be fully regulated under
20 the law just like the rest of the lake is and should
21 be subject to the Clean Water Act.

22 In conclusion about the cooling tower, we
23 feel strongly that because Dominion obviously is
24 considering a dry cooling tower for the fourth unit,
25 the third unit should be dry cooling tower as well.

1 That's why I asked the question earlier how much more
2 would it cost. It seems like if it would eliminate
3 the thermal impacts and the evaporation impacts we
4 should do it. What's important here is protecting the
5 lake, for people to use their boats in the lake, to
6 fish in the lake, to swim in the lake if people do
7 that and to protect downstream people's ability to
8 kayak and canoe and also the fisheries.

9 Moving on, we have two other concerns that
10 have not been addressed, their waste and security, and
11 through the ESP process, waste and security are things
12 that are basically taken off the table. As you
13 probably are aware, each reactor at North Anna
14 produces about 20 metric tons of waste per year and
15 about over 56,000 metric tons already exist around the
16 country and we have no near-term solution. I know
17 that people commonly say there's that mountain in
18 Nevada. Aren't we going to take it there? I can tell
19 you by looking thorough at that the problem is it's
20 not a good mountain. I mean there might be a mountain
21 somewhere, but that mountain is not a good mountain.
22 So no time soon are we going to have a safe place to
23 secure this waste.

24 We also -- In this proceeding, NRC has not
25 talked about the waste because of the Waste Confidence

1 Rule which is something that says, "Look, we're
2 confident that we'll take care of the waste, so we
3 don't have to talk about it." But the waste is going
4 to be sitting around your lake and it's going to
5 continue to grow in terms of the amount that's sitting
6 around your lake and that's something that should be
7 talked about.

8 Someone before me has also mentioned the
9 security concerns. You know, it's a building to
10 reactors. We have a lot of concerns right now about
11 terrorists, about planes crashing into things and also
12 just about the safety generally and I think that's
13 something like as someone mentioned that there was no
14 public comment on the security issues and it's been
15 said that it's national security or it's something
16 that we can't talk about or aren't allowed to talk
17 about.

18 There was recently a court decision out in
19 the 9th Circuit in California that said, "Yes, the NRC
20 has to deal with security issues." Now it was talking
21 about that case which was about storing waste onsite.
22 But it seems like NRC should be talking about security
23 issue. We should be allowed to be talking about
24 security issues. It shouldn't be something that's
25 taken off the table.

1 And finally, the final thing is that we
2 don't feel that NRC has adequately considered the
3 alternatives to this whole process which they are
4 legally required to do and obviously earlier this
5 evening we've heard a lot about everybody loves solar
6 and everybody loves wind and they are a great part of
7 the mix, but they just can't cut it on their own. I'm
8 here to tell you that that's not true. That is just
9 something that's been said for a long time. We're not
10 anti-nuclear. We're for whatever is best, whatever is
11 safest, what is healthiest, whatever has the least
12 inherent risk and what that is renewable technologies.

13 According to National Renewable Energy
14 Laboratory data that was actually published in a study
15 by the Virginia Center for Coal and Energy Research in
16 2005 actually concluded from that data that renewable
17 energy, I mean solar, wind onshore and offshore,
18 geothermal heat pumps and possibly some advanced
19 hydropower could actually meet Virginia's electricity
20 needs in the coming two to three decades completely.

21 And, yes, some types of wind are
22 intermittent. Wind can be basal power, but solar is
23 always intermittent. It's a different paradigm. It's
24 a different way of combining resources over a larger
25 geographic areas, of different types of resources,

1 kind of matching different resources and periods of
2 intermittently together so that you can actually
3 provide the same type of basal that power you from a
4 centralized source.

5 The benefit is there's no radioactive
6 waste, there's no risk from a plant having a problem
7 or being intentionally sabotaged. I mean that's a big
8 thing. We're here because we're concerned about our
9 community and we're here because we're concerned in
10 some ways about global warming, but the choice is not
11 coal or nuclear. The choice is coal or nuclear or
12 renewable technologies and when you're choosing
13 between those, the decision that you could come to is
14 very different.

15 Just to give you an idea like wind power
16 in Virginia alone could generate about 104 million
17 megawatt hours per year which is about 92 percent of
18 present Virginia consumption which is about 113
19 megawatt hours. Solar PV, not thermal, but solar PV
20 could do a minimum of 46 million megawatt hours which
21 is about 41 percent of present use.

22 And geothermal heat pumps have another
23 significant role but more in reducing your electricity
24 use to begin with. They use them to reduce the
25 heating and cooling in your home. Heating is often

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1 from natural gas, but cooling is from electricity. So
2 you could reduce that use by 30 to 60 percent.

3 Again, that concludes my comments, but I'd
4 like to on the record advocate that Dominion should if
5 it's serious about wanting to protect this community's
6 water, about protecting the people on the lake so that
7 they can use their boats and they can fish and they
8 can really enjoy that environment and doing what's
9 best for Virginia, they really should get a dry
10 cooling tower if they want to even put this proposal
11 forward and they should really seriously look at
12 alternatives to actually building more reactors in the
13 first place. Thank you.

14 FACILITATOR CAMERON: Thank you, Melissa.
15 We're going to Lou Zeller and then we're going to go
16 to Ben Slone. Lou Zeller.

17 MR. ZELLER: Thank you, Chip. My name is
18 Lou Zeller and I'm on the staff of the Blue Ridge
19 Environmental Defense League and I have been on staff
20 with them since August of 1986. I want to talk about
21 money tonight.

22 All my comments will be on economic issues
23 just to be perfectly plain. And, for example,
24 despite the significant subsidies provided in the
25 Energy Policy Act of 2005, investments in new nuclear

1 plants remain very risky. The information that I will
2 be sharing with you comes from a synopsis of a series
3 of studies done by Peter Bradford and an associate.
4 Peter Bradford, the NRC folks may remember, is a
5 former commissioner of the Nuclear Regulatory
6 Commission and is also former chair of the New York
7 State Public Service Commission and also the Maine
8 Public Utilities Commission.

9 What we find is that, for example, the
10 U.S. Department of Energy has clearly and concisely
11 stated that new nuclear plants are not expected to be
12 economical. A 2003 study by the Massachusetts
13 Institute of Technology forecasted that the base case,
14 real levelized cost of electricity for new nuclear
15 reactors being estimated at 85 percent capacity would
16 be 6.7 cents per kilowatt hour over a projected 40
17 year operating life which is more expensive than
18 energy from pulverized coal or natural gas. This
19 study was done in 2003 at MIT.

20 Further, a 2005 assessment by Synapse
21 Energy Economics Incorporation showed that the
22 levelized costs of electricity from a new 2,180
23 megawatt nuclear power plant would be significantly
24 higher than obtaining the same amount of energy from
25 a combination of wind and gas-fired capacity and

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1 energy efficiency measures.

2 Wall street has expressed serious concerns
3 about the credit worthiness of companies that pursue
4 new nuclear power plants. In January 2006, Standard
5 & Poors Rating Services found that an electric utility
6 with nuclear exposure has weaker credit than one
7 without and can expect to pay more on the margin for
8 credit. Federal support of construction costs will do
9 little to change that reality according to Standard &
10 Poors. Therefore, were utility to embark on a new or
11 expanded nuclear endeavor, Standard & Poors would
12 likely revisit its rating on the utility. Standard &
13 Poors also expressed concern that "from a credit
14 perspective the 2005 Energy Policy Act provisions may
15 not be substantial enough to sustain credit quality
16 and make nuclear generation a practical strategy."

17 What other factors might the economics of
18 a proposed nuclear power resurgence? A success
19 attack, a terrorist attack, such as the one that was
20 thwarted this week could halt new construction even
21 after significant expenditures are made and sight
22 preparation.

23 For example, Robert Mueller, the FBI
24 Director, testified before the Senate Select Committee
25 in 2005 stating "Another area we consider vulnerable

1 and target rich is the energy sector particularly
2 nuclear power plants. al-Qaeda planner Sheikh
3 Mohammed had nuclear power plants as part of his
4 target set and we have no reason to believe that al-
5 Qaeda has reconsidered." That's according to the FBI
6 Director Mueller.

7 The Nuclear Regulatory Commission
8 shortcomings are also troublesome in that we may be
9 putting nuclear economic interests ahead of safety and
10 public confidence. It was 27 years ago that President
11 Carter's Commission found a mindset at the Nuclear
12 Regulatory Commission that was preoccupied with the
13 licensing of plants and not giving primarily
14 consideration to overall safety issues.

15 More recently, shortcomings of the U.S.
16 Nuclear Regulatory process were clearly implicated in
17 the 2001 near accident at the Davis Besse plant in
18 Ohio. The NRC Inspector General's report there found
19 a clear connection between cost considerations and the
20 NRC laxity in the fact that the licensee sought and
21 NRC staff and allowed Davis Besse to operate without
22 performing inspections was driven in large part by a
23 desire to lessen the financial impact that would
24 result from an early shutdown.

25 More troubling, a 2002 internal NRC survey

1 showed that almost half of all NRC employees thought
2 their careers would suffer if they raised safety
3 concerns and nearly one-third of those who had raised
4 safety concerns felt they had suffered harassment
5 and/or intimidation as a result.

6 Nuclear power will not reduce U.S.
7 dependence on energy supplies from abroad. In 2004,
8 over 80 percent of uranium for the U.S. nuclear plants
9 came from foreign countries. This is according to the
10 U.S. Department of Energy, Energy Information Agency.
11 There are 14 countries that sell uranium to the United
12 States.

13 The evolution of power supply markets
14 affects nuclear power. The MIT study I cited before
15 said that "nuclear power is the technology force-fed
16 into an unsophisticated power supply selection process
17 at a pace too fast for the nuclear industry to
18 assimilate the lessons of operating experience.
19 Moreover, the evolution occurs in ways that concealed
20 or understated the real costs and the real problems
21 assuring a series of unpleasant surprises and a
22 deepening public mistrust. A real nuclear revival
23 does not exist until private capital is available to
24 build plants which will require market prices that
25 assure competitive success on one hand and

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1 profitability on the other." This is the MIT study.
2 "However, even with their ability to compete on the
3 basis of operating costs clearly established, the most
4 recent sales of nuclear units have not been at a price
5 that would support the building of a new plant."

6 Finally, global warming. There are much
7 better solutions. Global warming is occurring. We
8 need to take action, but more nuclear plants are not
9 the answer. Further investment in nuclear power would
10 squander resources necessary to implement meaningful
11 climate change mitigation policies.

12 Moreover, nuclear power's role in
13 mitigating climate change and a reducing oil
14 dependence is constrained because it is limited to the
15 electric generation sector. Wind power and other
16 renewables along with energy efficiency and
17 conservation and co-generation are much more cost
18 effective and can be deployed much faster. This is
19 all from the report from Peter Bradford.

20 In conclusion, I would just like to insert
21 into the record a written document which is a report
22 done by us in October of last year which documents the
23 geologic faulting under proposed North Anna Units 3
24 and 4. [Adams # ML062350263] Thank you.

25 FACILITATOR CAMERON: Thank you very much

1 and give that to Jack and this is Ben.

2 MR. SLONE: Yes.

3 FACILITATOR CAMERON: All right.

4 MR. SLONE: Since I don't know what I'm
5 doing, I'll pull this out, so hopefully everybody can
6 hear me. My name is Ben Slone. I'm a resident of
7 Matense (PH) Virginia which about 19 miles southeast
8 of here and I spoke last February or February a year
9 ago at the meeting then and I've read NUREG 1811 and
10 let me say I'm a father of three. I'm a husband,
11 business owner. The business is probably about 20
12 miles away from the North Anna site and I'm in full
13 support of what I've read in the supplement.

14 To me, it seems a very logical - I'm very
15 pro nuclear as a result of everything I've read on it.
16 You know, it's one of the fascinating things where we
17 have a power source we can keep all our waste
18 together. As I spoke last February, I have mercury
19 poisoning and the reason I have mercury poisoning is
20 because I eat fish and I eat unfortunately a little
21 bit too much fish, but there is native mercury
22 entrapped in fish today and it's because of our power
23 generation techniques.

24 If we run out of space up at North Anna to
25 put fuel, I have 30 acres down at Goshen. You can

1 live down there. I don't have any problem with that.
2 I really don't.

3 (Applause.)

4 -- at the point it's moved out of the
5 reactor and I'm fine with it. But I applaud Virginia
6 Power in first of all escalating the power rating of
7 the reactor of the proposed Unit 3 and Unit 4. I
8 think that's a good move because I'm also a rate
9 payer. I'm not a shareholder or officer or in any way
10 involved with Dominion Virginia Power. But I am happy
11 to see more power being produced at a base load
12 facility at one location that's controlled, that's
13 secure, that's safe and that makes me proud.

14 I'm also proud of the fact that in reading
15 about the change to the once-through to mechanical and
16 dry cooling, the concern they have for the environment
17 and even though you mention it's going to cost \$200
18 million more, I'm willing to pay that as a taxpayer or
19 as a rate payer, excuse me, because I understand the
20 concerns, talking about the lake.

21 Talking about the lake, I'm really
22 confused about. You know, here we're dealing with a
23 lake as far as I understand is your property, Virginia
24 Power's property, and I'm also a big advocate of
25 property rights. I don't want somebody coming and all

1 of a sudden putting constraints on my property. But
2 at the same time, I understand your wanting to be fair
3 and treat the environment properly and I applaud you
4 for that. So I thank you very much. And to the NRC,
5 I thank you for the job you've done with the review,
6 with the EIS and I've included my comments in the
7 previous session back in February and I thank you for
8 the opportunity to speak.

9 (Applause.)

10 FACILITATOR CAMERON: Thank you, Ben.
11 Robert Clarke Jr.

12 MR. CLARKE: I'm here.

13 FACILITATOR CAMERON: There he is.

14 MR. CLARKE: Evening. My name is Robert
15 Clarke. I'm Chairman of the Industrial Development
16 Authority here in Louisa County and a retired banker.
17 I should have gotten the ground rules before I got
18 here because I was going to talk about economic
19 benefits and money just as we heard some of. So I'm
20 not going to waste a lot of your time tonight talking
21 about the benefits to Louisa County and the State of
22 Virginia and the nation that this project could
23 provide and the fact that the benefits that Dominion
24 Power has provided this county over the last 20 or 25
25 years. So that's all I have unless there are some

1 questions.

2 (Laughter and applause.)

3 FACILITATOR CAMERON: Thank you very much.
4 All right. I guess someone is at least following the
5 ground rules. Bill Casino.

6 MR. CASINO: Good evening everybody. I'm
7 Bill Casino. I live way down in Lynchburg. So I'm
8 not a local resident. I'm also a professional nuclear
9 engineer. I don't work for Dominion. I'm a member of
10 the American Nuclear Society and the North American
11 Young Generation in Nuclear.

12 I want to express my personal desire to
13 see this supplemental EIS get approved. I think it's
14 going well and it's a good idea. I want to spend the
15 bulk of my comments talking about public institutions
16 and our faith and/or questioning or lack of faith in
17 them and their charge for doing what's best for the
18 public interest.

19 As an engineer, I am obligated to obey
20 engineering ethical guidelines and through the
21 performance of my responsibilities and if I violate
22 those ethics or don't adhere to them to the best of my
23 ability, I'm held to high consequence for that.
24 There's a fundamental truth about doing engineering
25 analysis in that we can debate public policy, which

1 direction of this or that is right or wrong or good or
2 bad, but engineering analysis thankfully and probably
3 this is not why I'm in the public sector are fairly
4 black and white.

5 It's a fundamental thermodynamic exercise
6 to do a calculation to figure out how much heat a body
7 of water can take and how much it will raise the
8 temperature of the water and how much evaporation will
9 happen. So it concerns me when some of the watchdog
10 organizations come up with alternative values and
11 other numerical analysis which may at least indirectly
12 suggest that the NRC analysis is some way inaccurate
13 or not thorough.

14 I don't know any of the folks personally
15 in the Nuclear Regulatory Commission, but I know from
16 seeing who gets hired and what kinds of practices that
17 they engage in that they are a very high integrity
18 group of folks and I have a great deal of faith that
19 they're executing their jobs with very accurate and
20 very attention to detail. I'm not saying that I
21 question the qualifications of the other
22 organizations. As a matter of fact, I think it's
23 imperative that as a part of ensuring the public
24 trust, watchdog organizations are constantly looking
25 over the shoulder of industry and of governmental

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1 institutions to ensure that we execute our job
2 responsibilities and adhere to our code of ethics and
3 our public trust. I applaud you guys for being active
4 in making sure that we keep our act clean. I'll never
5 object to you doing that.

6 I do have issue. I do take issue with
7 when it seems as though there's some obvious
8 discrepancy between one group's analysis and another
9 group's analysis. I know from being a practicing
10 engineer that there's usually only one solution to a
11 mathematical equation and it's usually pretty easy --
12 Well, I don't want to say easy, but it's usually
13 pretty easy to come up with a consensus opinion on how
14 to approach a problem with what solution, with what
15 the solution value is.

16 So I would like to challenge those who
17 question the analysis, techniques and the results of
18 the Nuclear Regulatory Commission to make your
19 processes public so that people can stack them up
20 against what the Nuclear Regulatory Commission has
21 done to see if there are some differences in
22 assumptions that each groups have made or if there is
23 some other reason why there is a discrepancy in value.

24 But I understand also that most of the
25 folks around here, now you don't have the time or you

1 don't want to get bogged down in details like that.
2 You just want to know that you have faith and that you
3 can trust that the institutions that have been charged
4 with taking care of this matter for you are competent,
5 are ethical and are diligent in doing what you need
6 them to do for you.

7 I'd like to say that as a practicing
8 engineer, I have a great deal of faith that these
9 folks are doing their job right. Certainly, there is
10 going to be because we're all human beings there's
11 going to be slip ups and issues and circumstances that
12 happen. So we try and protect ourselves with checks
13 and balances and the watchdog organizations are a part
14 of that process and so is this public hearing.

15 As a matter of fact, I think this public
16 hearing is an example I would say of a success story
17 in that feedback was given, that of certain aspect of
18 this plant design was not optimally, people listened,
19 changes were made, actions were taken and hopefully at
20 least some of those concerns were addressed. That's
21 basically what I want to say.

22 It boils down to a question of do you
23 trust the institutions. Are they doing what's in your
24 best interest? Are they competent? Are they ethical?
25 If not, what can you do to change that? I believe

1 this public discourse is part of ensuring that the
2 system is working the way it's supposed to and if you
3 believe it's not, you at least have a way to redress
4 or make your concerns known. That's all I'd like to
5 say. Thanks.

6 FACILITATOR CAMERON: Thank you. We're
7 going to go to Pat Hanley and then to Patrick Wycoff
8 and Mike Stuart and we have Pat Hanley coming down
9 right now.

10 MR. HANLEY: My name is Patrick Hanley.
11 I'm Chairman of the Louisa County Chamber of Commerce.
12 I live on the lake and I will be brief. The Chamber
13 of Commerce supports the approval of the early site
14 permit for the North Anna Power Station. The addition
15 of one new nuclear unit is good. The addition is
16 better for the economy.

17 Dominion is a good citizen of our
18 community. They pay their taxes. They employ more
19 than 900 people with average wages significantly
20 average the average wage of the community as a whole.
21 They provide good, clean electric power and they help
22 reduce our dependence on oil.

23 Their proposal to expand the capacity of
24 the North Anna plant should be applauded. It makes
25 sense. It increases tax revenues at very little

1 expense to the community. It adds high paying jobs
2 for construction and ongoing operations. It is at the
3 leading edge of initiatives to reduce our dependence
4 on oil. It's good business and it's good for business
5 and we support it. Thank you.

6 (Applause.)

7 FACILITATOR CAMERON: Thank you. Lee, do
8 you want to say anything at this point?

9 MR. WYCOFF: I can get up there and read
10 some comments.

11 FACILITATOR CAMERON: Okay.

12 MR. WYCOFF: I wasn't planning on
13 speaking, but I can --

14 FACILITATOR CAMERON: I thought you signed
15 up.

16 MR. WYCOFF: No, I sent an email just to
17 make sure I'd registered --

18 FACILITATOR CAMERON: Okay.

19 MR. WYCOFF: I can share a couple
20 thoughts.

21 FACILITATOR CAMERON: Why don't go up
22 there, sir?

23 (Laughter.)

24 MR. WYCOFF: Hello everyone. Thanks for
25 taking a moment to listen to me. I'll try and keep it

1 real brief since everyone is. I live on the lake as
2 I mentioned earlier and actually on the cooling lagoon
3 side. I would very much support anything that moved
4 toward regulating that side and dropping the
5 temperatures on that side, but the warm water is good.
6 We all benefit and take on some risk by living that
7 close to a nuclear power plant.

8 Adding third and fourth reactors does
9 increase, and I realize the risk is low, the risk of
10 something catastrophic happening there. Any time you
11 have four independent operating things, your risk
12 increases twofold versus two independent operating
13 things. I realize that risk is minuscule and that the
14 issues that we've had worldwide have been slim to
15 none. So I think that's all I have for today.

16 FACILITATOR CAMERON: Thank you.

17 MR. WYCOFF: I'm undecided. I'm listening
18 in both sides and I'm gaining a lot of education
19 tonight. So that's good. Thanks.

20 FACILITATOR CAMERON: Okay. Thank you
21 very much, Lee, and I guess the truth is you don't
22 want to wing it. Right?

23 MS. WYCOFF: Actually --

24 FACILITATOR CAMERON: Maybe she does.

25 MS. WYCOFF: No. I just want to say that

1 -

2 FACILITATOR CAMERON: You have to get up.

3 MS. WYCOFF: No, I'm not walking up there.

4 (Laughter.)

5 MS. WYCOFF: I would just like to say this
6 is a real education. I love the way --

7 PARTICIPANT: Would you identify yourself
8 please?

9 MS. WYCOFF: I personally love sitting on
10 Lake Anna. I enjoy the water. I enjoy the warm water
11 and I support anything environmentally and I want to
12 continue to live there. I do support the process that
13 you're going through and in a profession I've focused,
14 my career is process management, so it's nice to see
15 it in action and that I can be a part of it.

16 PARTICIPANT: Identify yourself please.

17 PARTICIPANT: Would you state your name?

18 FACILITATOR CAMERON: This is Patricia
19 Wycoff.

20 MS. WYCOFF: Good boy.

21 FACILITATOR CAMERON: And for the record,
22 Patricia is Lee's wife.

23 (Laughter.)

24 PARTICIPANT: I just have one question.

25 FACILITATOR CAMERON: Can you hold it? We

1 really need to -- We'll get an answer for you, but we
2 really need to move through. Did you want to answer
3 a question about Patricia and Lee?

4 PARTICIPANT: No, a question of the room.
5 I want to know how many people in this room are from
6 Louisa County.

7 FACILITATOR CAMERON: I think that we've
8 had that asked before, but okay. Great. So let's go
9 to Michael Stuart.

10 MR. STUART: Hello. My name is Michael
11 Stuart. My family and I live and work in the
12 community. My wife is actually a school teacher, but
13 I'm not here talking on behalf of the schools or
14 behalf of anybody else except for North American Young
15 Generation in Nuclear and myself as a citizen that
16 lives within the ten mile APZ of North Anna. I'd like
17 to read to you War and Peace.

18 (Laughter.)

19 MR. STUART: That's just a joke. I'll
20 make this quick. I lived in the community for over 14
21 years and I built an energy efficient home that
22 employs passive solar heating. It also employs a
23 geothermal heat pump. So I'm very much in tune with
24 environmental concerns by my own practices.

25 And by my own observations as well as

1 published polls that I'm familiar with, the vast
2 majority of the people of the community are in favor
3 of expansion at North Anna. It's little wonder since
4 North Anna has provided employment for so many
5 thousands of people right here in this community. In
6 this community, North Anna has provide a tremendous
7 tax base for the local community and Dominion
8 employees have provided valuable voluntary services
9 including volunteering in this very school that I'm in
10 speaking right now.

11 It's fascinating to follow the opposition
12 to expansion at North Anna because at first the
13 opponents didn't want to increase water temperature
14 and as a result, Dominion took on tremendous extra
15 expense to address that. But now the focus has moved
16 to evaporation and even though the advanced cooling
17 tower design that Dominion is going with significantly
18 reduces the evaporative water loss that was initially
19 planned over the once-through cooling, that evidently
20 is not enough.

21 Now people are talking about they don't
22 want the noise even though the noise levels are well
23 below the country ordinance levels in residential
24 areas. The amount of noise we're talking about is
25 about the same as a refrigerator at that distance. So

1 if you find your refrigerator annoying, then you would
2 find the nuclear plants annoying.

3 Some have mentioned that the traffic on
4 Rt. 652 and others mentioned the increase in the kids
5 in schools, but what we're really talking about here
6 is not in my backyard. That's what it really boils
7 down to. Sure, everybody wants safe, clean and
8 affordable electricity and they certainly don't mind
9 the tax revenue and associative benefits, but many of
10 the people who opposed the expansion forget that Lake
11 Anna was a creek bed that was virtually devoid of life
12 before nuclear power. Dominion bought the land.

13 (Applause.)

14 Dominion bought the land and built the
15 lake specifically to support four nuclear units. They
16 forget that the flow rates in the North Anna River
17 varied from a barely trickled creek to a flooded river
18 before the dam started regulating the flow. Now the
19 downstream flows are regulated. They forget that the
20 recreational lake whose boat traffic is audible from
21 great distances would not even be there if it wasn't
22 for nuclear power nor would their lakefront property
23 and astronomical property values.

24 (Laughter.)

25 They forget that Rt. 652 was a dirt road

1 before nuclear power. When I came to the county in
2 1990, it was practically a dirt road with all the
3 potholes and stuff. They forget what the tax revenue
4 from North Anna has meant to the school systems of
5 Louisa. In fact, most of these people who are opposed
6 to the expansion at North Anna would not even live
7 here if it wasn't for nuclear power and the fact that
8 they brought that lake.

9 In order for Virginia to continue to be a
10 place for families to live and businesses to thrive,
11 we need reliable, safe, clean and affordable energy.
12 Nuclear has been providing much of this energy in
13 Virginia for the last 30 years and it's been doing it
14 safely and economically. As we move forward, we will
15 need all forms of non-polluting energy to cover our
16 current energy needs, not just the renewables, not
17 just nuclear, but all of them.

18 We also need to embrace conservation,
19 continue to develop our renewable energy supplies and
20 employ safe, clean nuclear energy as a continued part
21 of balanced energy mix. That's why I support the idea
22 of expanding the use of nuclear energy in Virginia
23 particularly at North Anna Power Station. Thank you.

24 (Applause.)

25 FACILITATOR CAMERON: Okay. Thank you,

1 Michael. Is George Cristus or John Besta here? Okay.
2 The next three speakers, Ron Mickens, Kirsten Breeden
3 and Bill Campbell and this is Ron. Great. Thank you.

4 MR. MICKENS: Good evening everyone. My
5 name is Ron Mickens. I'm a safety specialist with
6 Dominion at the North Anna Power Station. I've been
7 a safety specialist for the past three years. Prior
8 to that, I was an armed security officer at the North
9 Anna Power Station for almost 11 years and that's my
10 topic. This will be within three to five minutes.
11 Okay?

12 (Laughter.)

13 MR. MICKENS: So let's talk about security
14 just for a second. Is security important at the North
15 Anna and nuclear power stations? You bet it is. Let
16 me break this down just a little bit here. Let's talk
17 about the individual security officer and what he goes
18 through to be a security officer.

19 When he's hired, he or she is hired, they
20 go through nine weeks of intensive training just to be
21 on shift. After that, they're put with a mentor for
22 40 hours minimum. They receive 120 hours after that
23 of continuous training related only to security. All
24 of this doesn't include all the drills that are run at
25 North Anna. No, it doesn't.

1 Our hardware, our software, our detection
2 devices are state-of-the-art. For obviously reasons,
3 I can't go into a whole lot of detail about this. I
4 really can't, but I will say this about the security
5 force and the security department at the North Anna
6 Power Station. The security force is a formidable
7 force. Our security officers are motivated. They are
8 enthused. They are physically fit. They have to pass
9 a physical fitness test once a year. It is not an
10 easy test. No it's not.

11 As a landowner here in Louisa, I recently
12 purchased land, five acres I'm proud to say. Can't
13 afford to put a house on it just yet with a kid in
14 college, but we will soon.

15 (Laughter.)

16 MR. MICKENS: Looking at a map, an
17 overhead map, I live approximately five and a half
18 miles from the power station. And I wasn't going to
19 say this but I'm going to say it. My wife and my
20 daughters mean more to me than life itself and I feel
21 very comfortable moving five and a half miles from the
22 North Anna Power Station. Okay. Thank you.

23 (Applause.)

24 FACILITATOR CAMERON: Thank you very much,
25 Ron. And this is Kirsten.

1 MS. BREEDEN. Kirsten.

2 FACILITATOR CAMERON: Kirsten. I'm sorry.

3 MS. BREEDEN: My name is Kirsten Breedon
4 and I'm also an employee of Dominion Virginia Power as
5 well. I actually work in the Radiation Protection
6 Department for the last four years, but I'm not here
7 to talk about Dominion's policies. I'm here to talk
8 for me.

9 I've been employed for four years and
10 that's not a very long time, but my father has worked
11 for the company for 30 years. So I've grown up with
12 Dominion. Before North Anna, I knew several things
13 about the company. It was close to home, it paid
14 rather well and it gave us a lake to play in. I grew
15 up on the island at North Anna.

16 It was only when I came to work here that
17 I learned the more important aspects of the company,
18 one of those being their commitment to safety.
19 Dominion has set high standards for safety throughout
20 their fleet, personnel safety, industrial safety and
21 that which directly affects my department and what I
22 do radiological safety. High standards naturally mean
23 high expectations and I think that we at North Anna
24 meet and exceed those expectations when it comes to
25 our radiological safety.

1 When it comes to our occupational
2 exposure, our Unit 2 has the second lowest radiation
3 exposure in the nation for our type of reactor and
4 Unit 1 has the ninth lowest exposure. That's speaking
5 pretty good for us.

6 As for public dose, it's minimal. Natural
7 sources of radioactive, medical and dental x-rays for
8 example, account for 82 percent of just radiation
9 exposure to the average man, whereas nuclear power
10 only accounts 0.1 percent. Nuclear power is a safe
11 producer of electricity and Dominion is one of the
12 best to do it.

13 But our successes here at North Anna
14 aren't only important to me because I work here.
15 They're important to me because I live here as well.
16 My kids swim in the lake. I fish from the shores. We
17 play on the fields. North Anna's commitment to safety
18 directly affects me just as it does you and every
19 other member of the community. And if Dominion does
20 build Unit 3, I believe it will only strengthen our
21 pursuit of excellence and dedication to this
22 community. Thank you.

23 (Applause.)

24 FACILITATOR CAMERON: Thank you. And Bill
25 Campbell.

1 MR. CAMPBELL: How are you doing? My name
2 is Bill Campbell. I'm employed at Dominion Virginia
3 Power at North Anna. I've been there for six years as
4 an operator, nonlicensed operator. Before that for 18
5 years, I was a contract health physics technician and
6 had the opportunity to work at several nuclear plants
7 on the east coast.

8 First off, I would like to thank everybody
9 for coming here, for or against, however you want to
10 do. This is America at its finest. God I love this
11 country.

12 Now that being said, having worked at
13 Virginia Power, the reason I stopped on the road
14 contract work and came here was two reasons. (1) I
15 loved the North Anna area and (2) I love the people at
16 North Anna. Having worked all over the east coast,
17 these are some of the greatest people that really care
18 about what they do. They care about the environment.
19 They care about the lake and everything. They care
20 about how they do their job.

21 For the whole -- I first came here in
22 1984. For the whole time that I've been here, the
23 times I came here, they have always helped the
24 community and the environment. We have put fish
25 structures in. We've helped stock the lake. We've

1 done everything we could to make the lake a viable
2 resource for the community to use.

3 That being said, the cooling lagoon was
4 designed as a cooling lagoon and that's where I used
5 to live is on the hot side just like you people and I
6 love the hot water. It was great in July. Ninety-
7 eight degrees is little tough right away, but that was
8 all right. I just dove six feet under. But I have
9 now since moved to Louisa. I have three children that
10 go to the high school right across the driveway here
11 and I would never do anything to endanger them or my
12 family.

13 We have always been and always will be a
14 clean, safe, reliable, cheap energy provider and we
15 have expanded our nuclear portfolio and Wall Street
16 hasn't really hurt us that bad about that, you know,
17 and it is about money and it is about what's good for
18 the community, not just a group community.

19 Evaporation is a concern and we do have
20 viable wind power. That is a viable part. How much?
21 How much can we get from wind? What's the impact of
22 wind going to be on the bald eagle population when
23 they fly into a turbine which they've had a problem
24 with at the turbine farm in West Virginia of birds
25 flying into the turbines?

1 There are pros and cons for everything,
2 but it's what's good for the whole. We just set three
3 records in the last three weeks, two of them one day
4 apart about energy usage. Virginia Power is committed
5 to providing safe power for this country. We have
6 invested a huge amount of money in a new switchyard
7 and reliability on the grid. So when you go home and
8 flip on your light switch your lights on or when you
9 turn on your air conditioner up, your air conditioning
10 comes on.

11 Is there something we all can do to help
12 the environment? Yes there is. But I firmly believe
13 that nuclear power is going to lead the way in the
14 21st century until there is something viable, better
15 for the majority of the power we consume because we
16 consume a lot.

17 That being said, thank you very much and
18 have a great evening.

19 (Applause.)

20 MR. CAMERON: Our next four speakers,
21 we're going to go first to Rebecca Ferris, and then
22 we're going to go to Rick Parrish, Jerry Rosenthal,
23 and Kelly Taylor. And this is Rebecca Ferris.

24 MS. FERRIS: Thank you. I'm not up on a
25 lot of the technology and everything that's going on,

1 but I would like to react to everything I've seen and
2 heard tonight. A lot of people have left already, but
3 just for my edification, would people who work for
4 Dominion, or who have ever worked for Dominion, or who
5 in any way make their living associated with nuclear
6 energy raise your hands, please? You all got a dog in
7 the fight. Well, so do I. Many of you, maybe like I,
8 were raised in the 1950s and the 1960s. We were
9 taught that there were some -- that in the atom, we
10 would have the answer to all of society's needs for
11 clean, safe, cheap, and unlimited energy. What I
12 realized in the last couple of years - I'm a school
13 teacher and I've been studying this - what I realized
14 in the last couple of years is that there is no magic
15 in fissioning the atom. There is horrible death,
16 there is the potential for complete planetary
17 destruction, and there is heat. Apparently, that's
18 what we're talking about. Apparently, there is an
19 enormous amount of heat associated with the fissioning
20 of the atom; many, many times more heat than is needed
21 to boil water, because as I understand it, that's what
22 all this is about. That's what we're talking about.
23 We're talking about boiling water, boiling water that
24 turns into steam, that turns a turbine, that creates
25 electricity. Haven't improved much on that in the

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1 last 150 years, huh?

2 I am not anti-nuclear. I am pro life. We
3 are not against electricity. We are not against folks
4 making a living. We are not against counties having
5 a viable tax base. When did we all buy into this idea
6 that having enough energy to meet our needs meant that
7 we also had to become a terrorist threat, that we had
8 to face terrorist threats?

9 These nuclear reactors are cocked and
10 loaded nuclear bombs, essentially. When did we have
11 to become -- you know, all the mocking and everything
12 that I've seen tonight and the name calling and stuff,
13 I just don't know if it has a place. And like I said,
14 I'm just a regular person, but I understand some of
15 this. We don't need to have lethal poisoning for
16 millions of years just to boil water. We don't have
17 to have our children, and our futures dying of
18 leukemia and cancers just to boil water. This is not
19 an either/or proposition. We can do both. We can
20 have our electricity, and have a safe world.

21 Do you really believe that if we shut down
22 nuclear today, that all of us would end up living in
23 dark caves rubbing sticks together to make fire? Is
24 that what you're trying to tell us? I don't buy that.
25 This North American young generation nuclear - these

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1 people speak with pride of their careers, and of their
2 education, and I truly believe that they are Americas
3 brightest, and Americas best. And I really believe
4 that if they put their minds to it, they could figure
5 out a different way to boil water. Don't you think
6 they're smart enough to do that? I do. I believe
7 with all my heart that they're smart enough to come up
8 with a new way to boil water.

9 How do you explain the fact that we seem
10 to be more willing to protect our fragile psyches from
11 looking honestly at the horror that we are creating,
12 than doing everything that we can to protect our
13 babies? We have to stop hiding behind oh, we'll fix
14 it tomorrow. Let's let another generation pay for it,
15 or accidents never happen. I have never seen such a
16 rosy scenario painted for any event in life than what
17 I've seen tonight; impact is negligible, no problem
18 whatsoever in any way, shape, or form. You know, I
19 don't really understand that, because no matter how it
20 comes, no matter if it is through the destruction of
21 our DNA, no matter if it is through poisoned air and
22 water, no matter if it's through a terrorist bomb, the
23 end game of nuclear is death, and we can do better.
24 I truly believe that.

25 You can fill a thousand rooms with

1 Dominion, Virginia Power employees. You can throw
2 acronyms around all day long. You can draw a million
3 posters with flowers coming out of cooling towers, but
4 there aren't enough green and white balloons in the
5 universe to make it true that nuclear is safe, and
6 that nuclear is clean.

7 We live in an era of perverse cynicism.
8 We have companies that create sterile seeds. We have
9 governments that wage war in the name of peace, and we
10 have perfectly bright Americans who want to stand up
11 here and talk about nuclear as clean and green. All
12 this is about boiling water, and to do what we have
13 done with nuclear is like trying to cut butter with a
14 chain saw.

15 I noticed tonight, and I'll finish with
16 this, that my question about what happens when the
17 towers don't cool, and what happens when the safety
18 system that's in place that's supposed to take care of
19 what happens when the towers don't cool don't work?
20 What happens then? My question wasn't answered, and
21 I wonder if it's because the truth is that when those
22 systems fail, what we will face is a nuclear disaster
23 that each and every one of us will have to face.

24 MR. CAMERON: Thank you, Rebecca. I would
25 just repeat the one answer that was given; which was,

1 when the cooling systems are not working, the plant
2 has to shut down.

3 All right. Rick Parrish. Jerry
4 Rosenthal.

5 MR. ROSENTHAL: Hi, I'm Jerry Rosenthal.
6 I've been at this longer than probably anybody in the
7 room, and I just want to say I'm a 30-year Louisa
8 resident. I'm a fifth generation Virginian. I'm a
9 Dominion shareholder, and I spoke at the first Earth
10 Day, and my speech was for nuclear power. I was wrong
11 then.

12 I want to deal quickly with some general
13 stuff about the nukes, and then get on to our subject
14 because I don't want to take up a lot of time. Nukes,
15 if they're safe, get your own insurance, very simple.
16 If the nuclear plant is safe, get private insurance.
17 Right now, it's coming out of my pocket. If it's
18 safe, get it yourself. If it's cheap, don't take any
19 government subsidies, build it. I would urge Dominion
20 to go ahead and do it, just don't take my taxpayer
21 money. If it's good, build it. If it's clean, take
22 responsibility for your own waste. If I had an
23 outhouse, I got the privy, I know where my waste is
24 going. Let Dominion take it. When they give it to
25 the government, it's terrible. The federal government

1 has been an abject failure 100 percent of the time,
2 not quite, every DOE project dealing with waste has
3 created a mess. I don't want it to go to them.
4 Dominion, at least, is safe. It stays there. But for
5 those people who live around the lake, just think of
6 this. It's there for good. This is our legacy, and
7 people want to say not in your backyard. It's in my
8 backyard. I accept it, but everybody in this room
9 should accept it, too. It's our's, and we've got it.

10 Last, nuclear power is nuclear
11 proliferation. You want to talk about this - the
12 current plants in North Korea, Pakistan, and Iran are
13 all the products of clean, safe, reliable, wonderful
14 nuclear power. Does everybody like where it is?
15 We'll keep that.

16 Now on to our current NRC thing. I notice
17 the mission of the NRC - to protect the public health
18 and safety, to promote the common defense, and protect
19 the environment. For a long time I felt that the NRC
20 was doing this, but they've moved to be a rah-rah club
21 for the nuclear industry. And they've moved away from
22 our common goal, to protect us, our health and safety,
23 our defense.

24 Anybody with Defense would say you don't
25 build another one of these potential targets. You

1 protect the environment? You can't protect the
2 environment by creating the most lethal poison that's
3 going to be around for 100,000 years. The engineers
4 say we know the answers, the answers are clear, so
5 they went to the National Academy of Sciences, and
6 they say how long does nuclear waste last? And they
7 say it's dangerous for 100,000 years. That's the
8 scientific answer, that's a little math that you can
9 work out, but that doesn't work with the NRC, it
10 doesn't work with the agencies. They can't figure out
11 100,000 years, so they're going to Congress, and
12 they're going to get Congress to pass a law, and you
13 know that the politicians are brilliant scientists.
14 And what they're going to declare is it's not 100,000
15 years, it's 10,000 because they can deal with 10,000,
16 but they can't deal with 100,000. So we're going to
17 solve the problem by having Congress pass the law. I
18 hope it makes you all feel better. It doesn't make
19 sense.

20 Evaporation issues at the lake - we've got
21 this evaporation. One thing that comes to my mind
22 that we haven't talked about - the water is going up.
23 What else is going to be evaporated beside the water?
24 We know we have PCBs in the lake. Is this a potential
25 source, to put the PCBs out? How that other pollutant

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1 setter in the water, are they going to be spread out
2 into the atmosphere? We've got the lowered lake
3 levels in the lake downstream.

4 When we're doing these things, we need to
5 be thinking about the whole situation. The young
6 engineers and all the other pro nuclears have jumped
7 up here and said whew, this is a great idea. Well, if
8 you got their comments from last time, it was a great
9 idea last time when it was going to ruin the warm side
10 of a lake. They haven't found a nuclear plan they
11 don't like.

12 Whew, we've got a weird thing. And Louisa
13 County, the officials are falling all over themselves,
14 and all the guys oh, yeah, we love it, love it, love
15 it, tax revenues. We've gotten \$212 million from
16 Dominion, and how much has Louisa County saved?
17 Anybody know the answer? Zero. Two hundred and -- if
18 you won the lottery, I think you would have put aside
19 a hundred bucks. And how much have they planned to
20 save? Zero. So it's a windfall, but they're blowing
21 it. We need to do better. We need to do better.

22 The NRC scientists should be embarrassed.
23 They also approved this plan the first time. All of
24 this information was out about the water temperature
25 on the warm side of the lake. It was there, and they

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1 said (panting) yeah, yeah, yeah, they liked it, we
2 like it.

3 (Laughter.)

4 MR. ROSENTHAL: A big thank you has to go
5 out to the Friends of Lake Anna and Harry Ruth.
6 They've done an excellent job of bringing these issues
7 up, getting them discussed and doing it. Also, these
8 ESP is for two new units, and I read that people say
9 well, one might be okay, but the second, that doesn't
10 make -- that's out of the question. This is your last
11 chance. This is the deal. If they approve it, you
12 get two. You don't get one, you get two.

13 And, lastly, again I would like to thank
14 the people for coming out, the citizens and everybody,
15 for taking their time and paying attention to what
16 really matters here in Louisa County.

17 (Applause.)

18 MR. CAMERON: Thanks, Jerry. This is Kelly
19 Taylor. And then we're going to go to Delbert Horn
20 and Gina Gasadei, and Sylena Smith. Kelly Taylor.

21 MS. TAYLOR: That is a really tough act to
22 follow. That was great, Jerry.

23 My name is Kelly Taylor, and I work at the
24 power station. I am a resident of Louisa County.
25 Although, I'm wearing this lovely green tee shirt for

1 North American Young Generation Nuclear. For the
2 record, my remarks do not reflect North American Young
3 Generation Nuclear, they do not reflect Dominion, they
4 are my own.

5 I have learned a lot to sit here and
6 listen this evening. I really appreciate Harry Ruth's
7 remarks, in particular, because what I heard him say
8 is that they are all in favor of new nuclear, as long
9 as the cooling towers are invisible, make no noise,
10 cause no evaporation, and don't increase any of the
11 temperatures in the lake. Our engineers that I have
12 met at Dominion are very, very good, but I don't think
13 they're that good. So you have to compromise
14 somewhere; what are you in favor of? It was a real
15 shock to me to hear that Public Citizen is not anti-
16 nuclear. I think I'm sure that I misunderstood what
17 Melissa Kemp had to say about that.

18 As far as the waste issue goes, many of
19 you have seen the little plastic models that they have
20 of a uranium pellet that is made from the uranium
21 dioxide from which the fuel is composed. It's a
22 ceramic. It's a solid substance. That's what shape
23 it's in when it goes into the reactor, that's what
24 shape it's used to produce tremendous amounts of
25 power, and it's that same shape when it comes back out

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1 of the reactor, it's stored in spent fuel casks, and
2 left as a repository, unfortunately, waiting for the
3 government to fulfill its obligation to take use of
4 the used fuel, in the hope that one day it's not
5 waste, it's not spent fuel, it's not something we can
6 do nothing with. It's an energy repository, 95
7 percent of the energy that's in that fuel pellet is
8 still recyclable, and we can use it again.

9 And when you say that you want an instant
10 cure to make this stuff go away, you are hurting
11 future generations that can benefit from the energy
12 that's still stored in that pellet. You don't want
13 some place you can put it, and never touch it again.
14 You want to be able to bring it back and recycle it
15 for when it is one of the finer energy sources that
16 are available. Right now we don't recycle the fuel
17 because it's not cost-effective. There's enough
18 uranium available that it's cheaper to use the once-
19 through fuel production than it is to recycle what's
20 out there.

21 As far as the health issues, for those of
22 us who work at the power station, we are not doing it
23 out of ignorance. We are not doing it out of neglect,
24 and we're certainly not doing it out of a self-serving
25 interest to harm the rest of the community. We

1 understand the health effects of radiation. And if
2 you want to talk about the health effects on a
3 community population, then you need to be fair, what
4 kind of issues you're evaluating. You're not looking
5 fairly at, for example, the medical sources of
6 radiation, which we've already heard this evening are
7 tremendously higher for the impact on the population
8 than the impact from the radiation that comes from a
9 nuke station.

10 To be perfectly frank with you, you're not
11 looking at the radiation that comes from fossil fuels
12 and what's released from burning from those. It's
13 very easy to say I want you to find a better answer,
14 and I want to assure anybody that feels that way, that
15 research and development of power sources hasn't
16 discontinued. We haven't stopped, but nuclear is one
17 of the best answers we have available today,
18 particularly if you are concerned about the members of
19 your community that struggle to pay their electric
20 bill every month.

21 Now I have friends like this, and I feel
22 for them; although, yes, renewable resources are
23 great, and I'm a some time advocate of solar and wind
24 in the right applications. They are very expensive,
25 and when you start talking about low capacity factors,

1 and huge build-up of solar and wind energy resources,
2 you're also talking about having to store the power,
3 which makes it infinitely more expensive, and it costs
4 the people that are my neighbors, and my friends, and
5 the people that live in my community. Nuclear is an
6 inexpensive source of power.

7 Now Jerry takes issue with that, and he's
8 certainly entitled to do that. There are answers for
9 the insurance issues. Those of you who think you are
10 safe drivers, you are welcome to buy as much insurance
11 as you can possibly afford. You, as a driver, don't
12 have unlimited insurance while you drive your vehicle.
13 You have a cap on how much insurance you provide. The
14 nuclear industry isn't any different, except that the
15 federal government helps assist in negotiating what
16 that cap needs to be. The insurance companies don't
17 provide unlimited insurance for anybody for anything.
18 When you buy a policy, you buy X amount of liability,
19 and that's what you pay for. And the nuclear industry
20 is not any different from the coal industry, or the
21 chemical industry, or the drivers of their cars,
22 except that Congress gets involved in mandating how
23 that insurance is apportioned.

24 I have other comments, but you've listened
25 a lot and attentively this evening, and I thank you

1 all for being here.

2 (Applause.)

3 MR. CAMERON: Thanks, Kelly. Delbert, do
4 you want to put your maps up? All right.

5 MR. HORN: Good evening. My name is
6 Delbert Horn. I'm a Guchelin County resident, and a
7 Dominion employee. But as Kelly mentioned, views
8 tonight are my own. These are my own personal hot
9 buttons.

10 I worked inside the fence at North Anna
11 for five years, and can tell you after many, many
12 hours spent in the control room, that North Anna is
13 one of the safest, best run, and best protected
14 industrial facility anywhere in the country. I'd like
15 to talk tonight about a couple of studies.

16 In October 2004, Mr. Lou Zeller, on the
17 Blue Ridge Environmental website, cited a study by
18 Joseph Mangano, which claimed the death rate for
19 children almost doubled in the nine counties closest
20 to North Anna. The study examines causes of death in
21 a 30-mile radius from the plant. This first map shows
22 those nine counties and the 30-mile radius. Let me
23 show this to you for a second. The nine counties
24 closest to the plant in a 30-mile radius that the
25 study considered. Note that Caroline and Hanover

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1 Counties to the east and southeast were not included,
2 even though they're within 10 miles from the plant.
3 Green County to the west was included, although it's
4 completely outside the 30-mile radius. The black dot
5 to the west is the City of Charlottesville. It was
6 included, but it's also outside the 30-mile radius.
7 Richmond is the same distance as Charlottesville to
8 the southeast, but was excluded, as was Fredricksburg,
9 which is only 25 miles from the plant.

10 Five months later in March 2005, Mr.
11 Zeller, in written comments to the NRC, cited yet
12 another flawed health study. This one claimed women's
13 deaths from breast cancer increased 73 percent in the
14 ten counties closest to North Anna. If you thought
15 this new study added Caroline or Hanover Counties in
16 as the tenth county, you'd be wrong.

17 This next map shows the differences in
18 green. The second study dropped Madison and Culpeper
19 Counties to the northwest, but added Nelson,
20 Buckingham, Cumberland, and Palatan Counties to the
21 southwest. Nelson County is 50 miles from North Anna,
22 yet they still ignored Hanover and Caroline Counties
23 only 10 miles away. Strangest of all, and Lisa
24 mentioned this, they ignored Spotsylvania County in
25 the study, which is right across the lake from North

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1 Anna. Spotsylvania has more people than any of the
2 ten counties included in the study. Does hand-picking
3 counties and cities like this bias the results of the
4 study? You bet it does.

5 Ladies and gentlemen, this is what junk
6 science looks like. After the public meeting last
7 year, Mr. Zeller wrote the NRC saying I falsely
8 accused him of misusing public health data. I wish to
9 clarify. They aren't just misusing public health
10 data, as you can see, they're playing shell games with
11 women's and children's death statistics. It's a
12 shameful scare tactic.

13 This misinformation is still on the Blue
14 Ridge website today. I checked. Now Pace is a local
15 chapter of the Blue Ridge Environmental Defense
16 League, and they're also accountable for this fear-
17 mongering, as well. You see, it costs a lot of money
18 to commission junk science, and travel around the
19 country scaring people. This is why they solicit
20 donations on their website, but there's something that
21 they need far worse than money. They need a simple
22 lesson in Virginia geography. Please, send them a
23 Virginia state map, help them out by identifying the
24 ten counties that are actually closest to North Anna.
25 Don't get sucked in by their junk science, or their

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1 fear-mongering. Thank you very much.

2 (Applause.)

3 MR. CAMERON: Is Gina Casadei, here? How
4 about Sylena Smith? Sylena Smith, and then we'll go
5 to Elina Day.

6 MS. SMITH: I am Sylena Smith. I'm
7 actually a Master of Science in Engineering student at
8 the Ohio State University, majoring in nuclear
9 engineering. And I actually specialize in nuclear
10 waste management, and I just wanted -- I know that one
11 of the biggest complaints of the public with nuclear
12 power is the waste that creates, and I just wanted to
13 take a minute to put it in the scope, put it in scope
14 what this waste is for all of you. So I have in my
15 pocket an item about the same size as the nuclear
16 waste that would be generated if nuclear fuel produced
17 all of the electricity that I personally would use in
18 my life time. You're probably wondering why my pants
19 aren't bigger. It's because the item in my pocket is
20 pretty small. It's not a ton of coal, it's not even
21 a cubic foot of natural gas. All I have is my wallet.
22 All of the nuclear waste I would generate in my entire
23 life time is the size of my wallet after it's
24 vitrified.

25 You see, this is because the energy,

1 nuclear energy doesn't spew its waste into the air, or
2 spill it into the water. The residents of Lake Anna
3 never have to breathe it, they never have to see it,
4 they never have to smell it, you never have to taste
5 it. And that's because with nuclear energy, we always
6 know where the waste is. It's not the air, and it's
7 not in the water, it's not in the local wildlife. It
8 will never aggravate a child's asthma, or speed up
9 global warming, and it will never disrupt the flight
10 path of migrating birds.

11 Think of this when you consider what kind
12 of energy you want to be your legacy for our ever-
13 increasing demands for power. And yes, you can say
14 that we don't need this power now, but you will need
15 it. And we have passed peak oil production, you will
16 need it. When I decide what I want my legacy to be,
17 I don't want it to be a hot earth with droughts and
18 melting ice caps, hurricanes, disappearing glaciers.
19 I'd rather it be clean, efficient, environmentally
20 friendly nuclear power. That's all I wanted to say.

21 (Applause.)

22 MR. CAMERON: Thank you. We're going to
23 go to Elina Day, and then Ken Remmers, Bill Murphey,
24 and Gary Breeden. Elina.

25 MS. DAY: Hi, I'm with Peoples Alliance

1 for Clean Energy, and I just think we should draw
2 ourselves back to the issue at hand, which is the
3 supplemental draft environmental impact statement,
4 which has to do with Unit 3, wet/dry cooling tower.
5 Okay? I mean, let's just get back to that, just for
6 a second.

7 And I think this NRC process, here they
8 are reviewing Dominion's proposal, and yet, they can't
9 even answer a question as to how many temperature
10 sensors are out there on the lake. I mean, someone in
11 the audience had to answer that. These guys are paid
12 our taxpayer money. NRC is supposed to be looking
13 after our interests, not the interest of Dominion,
14 which sometimes I question, I think they're looking
15 after the interest of Dominion. I mean, they can't
16 even tell us how many temperature sensors are out
17 there on the lake. That's the issue at hand. I mean,
18 what is this third unit going to be doing to our lake?
19 We need to have some baseline as to what the two units
20 that are operating are doing to the lake. I mean,
21 it's really obvious.

22 And then the other thing I take issue with
23 is, this person from Dominion, I don't think he's here
24 any more. Oh, yes, you are. You tell us that we're
25 going to need a whole lot more electrical generating

1 capacity in the future. Hey, what's the basis for
2 this? And, also, is it Virginia that's going to need
3 it, or are you going to be exporting it elsewhere?
4 Well, then I say not in my backyard. I don't want to
5 see two more nukes here in my backyard, because you're
6 going to be using that electrical generating capacity
7 to sell to other states.

8 The other thing I think that we - like
9 since we're not going to be talking about this - well,
10 one more comment about the water. Okay. We have two
11 existing units. We do have a situation in which we
12 have higher water temperatures because our summers are
13 warmer. That means that there is already more
14 evaporation. Has the evaporation rate of warmer
15 water, because we have higher temperatures in the
16 summers, been studied? Have downstream flows been
17 evaluated? Has the effect of decreased downstream
18 flows, higher evaporation rates, previous to
19 constructing or even thinking of constructing a third
20 unit been evaluated in the course of the last few
21 years?

22 What's this doing to our flora, our fauna
23 in the downstream of the York River water shed, which
24 impacts our bay? I mean, I think these things are
25 something that the NRC just can't flippantly abandon.

1 I mean, this is everybody's water. What if hearings
2 were held not here in Louisa County, which benefits
3 very greatly economically from the two reactors that
4 are currently serving, or currently generating power
5 at North Anna? What if we held hearings downstream in
6 the four counties that are thinking about using water
7 in the York River water shed for increasing numbers in
8 their community? What if we held hearings in
9 Charlottesville, which is a very environmentally-
10 minded community that they, maybe Louisa thinks it's
11 okay in my backyard, but maybe Charlottesville doesn't
12 think that it is okay in Louisa's backyard. Maybe
13 they don't think it's okay in their backyard. How
14 about Fredricksburg, how about Richmond?

15 I mean, part of the NRC's mission is to
16 protect our interest. It's also to allow us to
17 educate ourselves by gaining information. I advocate
18 for more hearings around the state.

19 Oh, I guess I've gone on long enough.
20 I've just heard so many, so much garbage, like
21 decreased dependence on foreign oil by building more
22 nukes. Hello. Think about it. We only generate
23 what, 2 percent of our electricity by burning oil from
24 oil-fired plants. I mean, where's this one coming
25 from?

1 Anyway, let's just stick to the issue at
2 hand and our wet/dry cooling tower, and what that does
3 to our evaporation rate, and to downstream water
4 flows, and to flora and fauna in the York River water
5 shed, and onward into the bay.

6 MR. CAMERON: Thank you. Ken Remmers.
7 This is Ken Remmers, then Bill Murphey, and Gary
8 Breeden. I guess that wasn't Ken Remmers. He's
9 heading for the door. Here he is. Sorry.

10 MR. REMMERS: Good evening, everybody, and
11 I'd also like to thank you all for coming, the rest of
12 you who are still here. My name is Ken Remmers. Some
13 of you may recognize me as the Lake Anna Civic
14 Association's Water Quality Chairman. I'm not coming
15 here to talk in relationship to them this evening.
16 I'm also the Homeowner's Property Association for
17 Waterside's President, and I'm speaking for them this
18 evening.

19 It's a small community on the cold side,
20 the reservoir side down by the dam, and we have some
21 concerns about the new third and fourth reactor. My
22 concerns, and some inconsistencies which I see in some
23 of the documents. The first one is relative to pre-
24 lake water flows. It's identified in the SDEIS as
25 historical pre-dam minimum flows of 5 cubic feet per

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1 second, or less. And in a letter from the Department
2 of Fish and Gaming Inland Fisheries, they state in
3 their July 7th letter that the pre-lake dry conditions
4 is 12 cubic feet per second, so there's some
5 disconnects here that I think we should straighten out
6 in the documents.

7 Another issue is the sprayers in the
8 discharge canal. I've spoke about this several times
9 in the past, that in order to reduce some of the
10 temperature that is exited at the discharge canal, we
11 might consider using some sprayers in the discharge
12 canal just during the time periods when the temperate
13 really gets hot like it has been lately. Some of the
14 temperatures that I've measured in the discharge canal
15 exit have now exceeded 104.6 degrees, and that
16 sprayers could be turned on during those couple of hot
17 days or those hot weeks, and you could alleviate the
18 problem with minimal cost.

19 Water levels and temperature for the plant
20 operations - once again, there's some inconsistencies
21 in the documents. Unit 3 is stated to operate until
22 the water level drops down to 242 feet, that's 8 feet
23 below normal level. And it can take it at inlet
24 temperatures up to 100 degrees from the cold side, it
25 can run up to that point. Now the other part of the

1 document says 243.5 feet instead of the 242 for Unit
2 3, and 245.2 for the existing units. And it also
3 states that Unit 1 and 2 can operate up to 95 degrees
4 temperature.

5 Now these temperatures of 95 and 100
6 degrees far exceed the variances that have been
7 granted to Dominion in their VPDES discharge permit.
8 We need to put some controls on the temperatures to
9 delineate the exact values instead of just heat
10 transfer numbers. Another item is chemicals added to
11 the blow-down water. The blow-down water from Unit 3,
12 which is about 13 cubic feet per second at a maximum
13 temperature of 100 degrees. The chemicals that they
14 talk about adding, some of them are phosphates, and
15 this combined with the high temperatures can cause
16 algae blooms, which we're very careful on the rest of
17 the lake that we don't have phosphates, or try to
18 minimize the phosphates in the water, so that's
19 another concern.

20 The third unit cooling tower with air cool
21 towers - overseas they use this technique, these
22 towers, where they can't get a lot of water available
23 in that area, so why can't Dominion use a completely
24 air-cooled tower for Unit 3, as well as what they talk
25 about for Unit 4.

1 The duration of the flows is another
2 concern over the dam of 20 cubic feet per second.
3 Once again, the document states that 20 cubic feet per
4 second will increase from 6 percent of the time to 11
5 percent of the time, which is like 22 days out of the
6 year, going up to 40 days out of the year. But the
7 Dominion state in their presentation that the 20 cubic
8 feet per second discharge would only go from 5.2,
9 maybe to 7 percent. And the difference really isn't
10 explained in the document why they're different.

11 Relative to Unit 4, I don't think enough
12 attention has been given to Unit 4, and its dry
13 cooling. NRC needs to address this issue and
14 Dominion's answer that new technology in the next 10
15 to 15 years will solve the problems. It doesn't seem
16 to be acceptable. Since the ESP is good for 20 years,
17 why not include Unit 3 with this same technology, the
18 technology currently used overseas and where they
19 don't have a lot of local water source. I think
20 Dominion should explain this new technology, and state
21 why it would or would not work for Unit 3. And my
22 question is, is Dominion ready to go for a COL soon
23 after they get an early site permit, because I think
24 the public is due an answer on this question, and
25 Dominion should be forthwith and tell us what their

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1 plans are. Thank you very much.

2 (Applause.)

3 MR. CAMERON: Thank you, Ken. You really
4 did take us back to the document. Thank you. And are
5 you going to submit some --

6 MR. REMMERS: Yes.

7 MR. CAMERON: Okay. More detailed
8 comments. Bill Murphey. Bill.

9 MR. MURPHEY: Hi, my name is Bill Murphey.
10 I live right on the lake, about 5 miles from here.
11 I'm speaking - the remarks I'm making have been
12 approved by the Lake Anna Civic Association, which has
13 about 700 families around the lake, and for the
14 Windward Coves Property Owner's Association, which has
15 about 270 families.

16 Dominion's nuclear North Anna has been a
17 responsible, good neighbor over the years. The
18 Dominion staff has worked with LACA on a number of
19 issues to our mutual benefit. Dominion has met with
20 us a number of times with regard to the early site
21 permit. They provided briefings to us, and they've
22 answered a number of our inquiries.

23 Although as in any group of hundreds of
24 people, we have members with differing opinions, we as
25 a whole are strongly in favor of proceeding with the

1 third and fourth North Anna units. We have had no
2 fundamental unanswered concerns running to the nuclear
3 portions of the units, or to the accident safety of
4 the total plant.

5 We believe, however, that there are
6 several correctable adverse effects, and we request
7 that these adverse effects be corrected. We recognize
8 that the authority and responsibility to correct these
9 effects is distributed. It's distributed between the
10 NRC, Virginia Department of Environmental Quality,
11 other Virginia state agencies, and Dominion resources.
12 We asked the cooperation between all the agencies and
13 the parties to be to correct these effects.

14 The effects that we would like to talk
15 about are discharge water temperature, the lake level,
16 application of Virginia law, and the evacuation
17 problem. With temperature, we request that the water
18 temperature at the end of the discharge canal be
19 limited to 104 degrees Fahrenheit. The temperature is
20 a matter of safety for the people swimming in the
21 first lagoon. It's well documented in hot tub
22 literature that swimming in water temperatures above
23 104 degrees is life-threatening. We would not like to
24 see any accident related to the operation policy of
25 the power plant. We feel if there is an accident, NRC

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1 will be involved immediately.

2 Lake level - the third unit and the
3 existing units use lake water through evaporative
4 flows. We request that simple, obvious steps be taken
5 to improve the management of the available lake water
6 during times of low rainfall. We request that the
7 release over the dam be changed to limit it to 5 cubic
8 feet per second for lake levels below 250 feet. This
9 is a complicated issue. It'll require all the people
10 involved. This limitation will have a minimal effect
11 on downstream users, because there are other stream
12 flows into the North Anna River about a half a mile
13 below the Lake Anna Dam.

14 Application of Virginia law - this is
15 another complicated question. There are a number of
16 state regulations which relate to the health, safety,
17 and welfare of citizens living around and
18 recreationally using public water. These regulations,
19 many of them would not effect the operation of the
20 plant at all if applied to the cooling lagoons. We
21 request that the state agencies be legally required to
22 apply these health and safety regulations to the
23 cooling lagoons. I mention this point here to assure
24 that the NRC has no objection to this request.

25 Nomenclature - I notice that the NRC

1 speaker is already talking about cooling lagoons. We
2 support the use of the terminology cooling lagoons
3 instead of the waste heat treatment facility. The
4 reason is that when people hear the name "waste" in
5 the leading word of the WHTF, it immediately gives a
6 bad name and a misleading image of the clean and
7 recreational use of the cooling lagoons. These areas
8 are quite attractive to people, and they're being used
9 by a large number of people, and it's important to
10 describe them in a way that reflects their attractive
11 nature.

12 Evacuation - we request that Virginia DOT
13 upgrade the roads at the lake so that they are
14 adequate for evacuation of the current and expected
15 populations. We request that VDOT, Dominion, and the
16 public develop a traffic management plan relevant to
17 evacuation.

18 We believe that the noise issue is
19 currently covered by the Louisa County Noise
20 Ordinance, as measured at adjacent non-Dominion
21 properties. The Lake Anna Civic Association asks
22 these requests and recommendations be implemented.
23 Thank you.

24 MR. CAMERON: Thank you very much, Bill.
25 Thank you.

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(Applause.)

MR. CAMERON: Is Gary Breeden still here? Gary, and then we're going to go to Richard Ball. We have several other people, but I think we'll be finished within the next half hour or so.

MR. BREEDEN: Hi, my name is Gary Breeden. I work at the North Anna Control Room. I am also a Louisa County resident, and President of the Aspen Homeowner's Association. In May, we had our homeowner's association meeting, and we talked about the cooling tower change for the new units. And as our homeowner's association, I've been given approval to say that we fully support implementing and constructing the new power plants.

We are located on the first lagoon, so we're the ones that are going to be most directly affected by the temperatures that these cooling towers should alleviate for us. That's all I have to say.

(Off mic comments.)

MR. CAMERON: Okay. This can be off the record, as you're asking about that. Thank you. Richard Ball. And then we're going to go to Keith Cheatham. Richard.

MR. BALL: Yes. I'm Richard Ball. I'm the Energy Issues Chair of the Virginia Chapter of the

1 Sierra Club, and I will try to stick to the issues at
2 hand here, which is the supplemental DEIS, and the
3 adequacy of that DEIS. And, particularly, the issue
4 of the changes that have been made in the cooling
5 system.

6 I think the key issues are, we had
7 previously testified on a number of subjects, but we
8 particularly found previously that we felt the DEIS
9 was deficient in a number of respects. And one was we
10 didn't feel it had sufficient analysis of the impacts,
11 the downstream impacts of the water withdrawals. And
12 I appreciate that the changes that have been made in
13 the design of the cooling system for Unit 3 may have
14 been made for legitimate reasons to try to address a
15 lot of the concerns of the residents and others about
16 the lake temperature, and entrainment and the cooling.
17 I wouldn't want to criticize that. But, nonetheless,
18 the consequence is that we've gone to a system that
19 could potentially have even greater impacts downstream
20 in terms of releases.

21 Let me just give a couple of numbers. The
22 previous water consumptive use due to Unit 3 was
23 estimated at 11,700 gallons per minute. The new plan
24 with the combined wet and dry evaporative tower is two
25 modes of operation. In the normal so-called EC mode,

1 the water use increases to 22,298 gallons per minute.
2 That's approximately 90 percent greater than with the
3 once-through cooling. There's an additional mode
4 that's used when the water becomes - in drought
5 situations when the water becomes more scarce, called
6 the MWC mode. That uses 15,384 gallons per minute,
7 which is still 31 percent greater than the consumption
8 that would have occurred with the once-through
9 cooling, so we seem to have made a trade-off. We've
10 increased the total water use substantially in order
11 to be able to get the benefits of reducing the
12 immediate lake impact.

13 What I had said before, and this is, I
14 think, consistent with what the Virginia Department of
15 Environmental Quality has been saying - let me just
16 read a quote from March 2005 findings, which was, of
17 course, appropriate to the old system, the previous
18 proposal. "The DEQ's Division of Water Resources
19 commented previously in regard to its concerns for the
20 adequacy of Lake Anna as a source of cooling water for
21 a third nuclear reactor. These concerns remain." And
22 basically, they and we - and the Sierra Club both
23 raise the issue of whether Lake Anna has sufficient
24 water resources to support cooling, consumptive
25 cooling use for a third nuclear reactor. And I think

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1 these figures on water use testify to that.

2 Now the problem is that under either of
3 the regimes, the once-through cooling or this regime,
4 it's estimated that the percentage of time when the
5 flow has to be reduced from the normal minimum of 40
6 cubic feet per second down to 20 cubic feet per
7 second, that increases from about 6 percent to 11
8 percent with the addition of Unit 3. And that is
9 really kind of the nub of the problem.

10 To make a long story short, what our
11 concern is, that the DEIS or the SDEIS, the
12 supplemental, has not adequately evaluated, or
13 properly evaluated the ecological impact of that
14 change. And that is a principal concern. All the
15 other things, I won't try to talk about tonight. So
16 we're still concluding that the supplemental DEIS has
17 not -- is still deficient, and not adequately
18 analyzing that issue, as well as some other issues
19 that we've raised previous, and I won't go into
20 tonight.

21 One question is whether Lake Anna is a
22 suitable site, or at least whether you need other
23 alternatives to be discussed for cooling Unit 3,
24 including the extreme of going to dry cooling, which
25 is what you're already proposing for Unit 4. The

1 question is, if it's good enough for Unit 4, why isn't
2 it good enough for Unit 3? Now I think I'll close
3 with that.

4 MR. CAMERON: Okay. Thank you. Will you
5 submit some --

6 MR. BALL: I will. Thank you.

7 MR. CAMERON: -- comments to us, and it
8 would be interesting to see if there is dry cooling
9 for the other unit, whether that would alleviate the
10 problems that you identified. Thank you very much.
11 Keith.

12 MR. CHEATHAM: I'm not an engineer. Good
13 evening. My name is Keith Cheatham. I'm the Vice
14 President of Government Affairs for the Virginia
15 Chamber of Commerce. I'm speaking this evening to
16 register our strong support for Dominion's early site
17 permit application for the North Anna Power Station
18 site, and the NRC staff's preliminary recommendation
19 that the permit be issued. I will keep my comments
20 brief, but I would ask that my 200-page letter be
21 entered into the record. If anybody would like for me
22 to read that tonight at 10:30, I can do that. I'm
23 kidding.

24 The Virginia Chamber of Commerce is
25 Virginia's largest and most diverse business

1 organization. Its membership includes Fortune 500
2 firms that do business worldwide, to small family
3 firms that do business right here in Louisa County.
4 Nuclear energy is extremely important to the citizens
5 and businesses in the Commonwealth of Virginia.
6 Dominion's nuclear stations in Virginia have provided
7 and continue to provide a significant portion of
8 electricity used in this state.

9 The low-cost energy produced from these
10 generating facilities has enhanced the state's
11 economic climate, enabling Virginia to attract new
12 business growth. Existing companies have also
13 benefitted from a lower cost energy environment that
14 has allowed them to remain competitive and expand
15 operations in the Commonwealth.

16 Dominion is among the very top nuclear
17 operators in the country, and the North Anna Power
18 Station is one of the nation's most efficient nuclear
19 generation facility. The lack of affordable, reliable
20 energy in other parts of the United States has already
21 had a negative impact on the economies of those areas.
22 Because more base load electricity will be required in
23 the future, it is important that nuclear energy
24 remains an option to meet this growing demand.
25 Virginia businesses must have access to reliable, low-

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1 cost energy if they are to remain competitive in a
2 global marketplace.

3 The construction and operation of an
4 additional unit at North Anna would also result in
5 significant economies, economic benefits for the
6 region, and for the Commonwealth. Dominion estimates
7 that 400 permanent employees will be required to
8 operate the new facility. These are high-paying jobs,
9 as we've heard earlier, with annual salaries over
10 twice the average salary level in the region.

11 The Virginia Economic Development
12 Partnership, which is a state agency, estimates that
13 1,500 additional jobs would be created due to economic
14 activity associated with the plant. The permanent
15 workforce and the construction workforce estimated at
16 2,000, will provide significant opportunities for
17 local, regional, and state businesses to grow and
18 prosper.

19 Additionally, the direct and indirect tax
20 revenues generated by the project will provide over
21 \$70 million per year to local and state coffers, as
22 estimated by the Virginia Economic Development
23 Partnership. This will provide much needed funding
24 for schools and other critical infrastructures in the
25 region.

1 Dominion's nuclear facilities have an
2 excellent safety record. North Anna Power Station has
3 been recognized by the NRC, the Institute of Nuclear
4 Power Operators, Operations, and the World Association
5 of Nuclear Operators as a top-performing nuclear
6 station in the areas of safety and efficiency.

7 Dominion also is an excellent
8 environmental steward, and has demonstrated that it is
9 a good neighbor by agreeing to spend \$200 million on
10 a cooling tower system to cool a potential third
11 reactor at the North Anna site. Dominion made this
12 commitment to satisfy concerns expressed by state
13 regulatory agencies, and local citizens about the
14 potential thermal impacts on Lake Anna and the waste
15 treatment facility from using the lake for once-
16 through cooling.

17 NRC has performed a rigorous review of the
18 potential environmental impacts associated with
19 operation of additional reactors at the North Anna
20 site. The Virginia Chamber commends the agency staff
21 for its meticulous review of Dominion's early site
22 permit application, and supports its conclusions.
23 Thank you for your time and attention.

24 MR. CAMERON: Thank you very much, Keith.
25 Bill McGrath, Dennis Schable, Paul Genoa, and Mike

1 Beers. Bill McGrath here? How about Dennis, Dennis
2 Schable?

3 MR. SCHABLE: I did have some prepared
4 comments, but in the interest of brevity, I'll mail
5 them in. But I have a question, and if it's within
6 Roberts Rules to ask the Dominion representative - and
7 I don't work for Dominion, but I do own your stock -
8 my question is, if wet/dry cooling is better than
9 once-through cooling, and your fourth reactor is
10 planned for dry cooling, why don't we have dry cooling
11 for the third reactor? If you are a regulated
12 industry, and your charges are based on your cost to
13 some great extent, your costs are more, your rates are
14 greater, you still make money, everybody's happy, so
15 why don't we go with dry cooling for three and four?
16 That's my question.

17 MR. CAMERON: Okay. Thanks, Dennis. And
18 I'm just going to let them do that off-line with you.
19 And I'm sure other people have that same question.
20 But thank you very much. Paul Genoa, and then we'll
21 go to Mike Beers, if he's still here. This is Paul
22 Genoa.

23 MR. GENOA: Well, thank you for the
24 opportunity to be here. As a way of introduction, my
25 relevant academic training is in the area of the

1 environment. I received my Bachelor of Science degree
2 in Environmental Health from Colorado State University
3 from the College of Veterinary Medicine and Biomedical
4 Sciences. And in my professional career, I focused on
5 the environmental impacts of energy systems. That
6 professional career has spanned 25 years, with
7 experience working on both the technical, regulatory,
8 and policy issues associated with the environmental
9 impacts of delivering energy systems. Just
10 anecdotally, I've worked for three different public
11 utility companies, Consumers Energy in Michigan
12 working at the Big Rock Nuclear Plant; Arizona Public
13 Service, working for the Palo Verde Project; and
14 Florida Power Corporation, working for Crystal River
15 Nuclear Plant. And yes, my wife, Denise, and my son,
16 Matthew, and I lived within six miles of the Crystal
17 River Nuclear Plant for six years, and we're very
18 happy and comfortable living there. Crystal River is
19 a wonderful place.

20 But to the issue at hand, I am familiar
21 with the hybrid cooling system proposed by Dominion in
22 its modified early site permit, and it seems to me
23 that it's a responsive approach by Dominion that
24 mitigates the thermal impacts of the plants, when
25 those impacts are critical, and allows for the maximum

1 go with that.

2 I come from Physics Associates. I'm a
3 member of the Virginia Health Physics Society, and
4 academic background - physics, chemistry, nuclear
5 engineering, and medical physics. We have spent about
6 50 years now with our radiation, radiation safety, and
7 these various concerns, all of which tie-in with the
8 general subject here.

9 I would like to speak in favor of moving
10 nuclear energy forward as rapidly as we can. Various
11 speakers here this evening have referred to, for
12 example, the situation with respect to the OPEC
13 countries, the oil and gas situation, and things are
14 looking much worse across the pond that they have been
15 for a long time. We need energy independence, and
16 nuclear is the way to go. It is a clean form of
17 energy.

18 We have the capability, and we need to
19 remember, to remind ourselves that the first nuclear
20 reactor was American. And America produced the first
21 commercial nuclear energy, but now as one of the
22 earlier speakers mentioned, about 20 percent of our
23 energy is nuclear. If you go over to France, I
24 believe, Elina, you mentioned France there, and France
25 is producing about 75 to 80 percent of their energy

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1 from nuclear. We have dropped the ball. We have
2 gotten, if you'll pardon the pun, behind the power
3 curve on that one, so we need to really take a look at
4 where we're going with that.

5 One of the sticky subjects, which was
6 brought up tonight, was disposal of radioactive waste,
7 and two comments there. One speaker mentioned the
8 fact that radioactive waste serves as a source of
9 heat energy. We have to remember that, to wake up and
10 to use that source of energy. It can used as a pre-
11 heating device or whatever, and as far as burning the
12 stuff in Yucca Mountain or wherever, remind me where
13 did the uranium come from to begin with; from in the
14 earth, so we need to keep that fact in mind, as well.

15 One of the speakers was concerned that we
16 might be, in the State of Virginia, exporting
17 electricity at some time in the future. Well, you
18 know, one of the greatest concerns in the western part
19 of Virginia these days has been the fact that we have
20 a line coming in from West Virginia bringing
21 electricity into the state, not the converse.

22 Okay. We do need, in the nuclear
23 industry, the NRC and all of us involved, to push
24 forward the concept of the generic plans for reactor
25 plants, so that reactor plants can be built swiftly,

1 efficiently, consistent with good, safe practices.
2 That is coming forward, but needs to be pursued much
3 more rapidly.

4 Bottom line here is, once again, we're
5 looking at the opportunity to have a good, clean
6 source of power, a source of power which has no acid
7 rain associated with it, which has no - remember -
8 radioactive ash residue from it, and so forth. So
9 this is the way that we will go in the future, and I
10 would like to speak very favorably for the additional
11 of the two extra units here in North Anna, and indeed,
12 for the entire nuclear power industry overall. Thank
13 you so much for your time.

14 MR. CAMERON: Thank you.

15 (Applause.)

16 MR. CAMERON: Kevin Haggerty, Gerald
17 Giaccai, and Olin Compton. Is Kevin still here? How
18 about Gerald? Gerald, you switched seats.

19 MR. GIACCAI: Yes.

20 MR. CAMERON: I'm sorry. Now I've really
21 botched your last name, so maybe you could introduce
22 yourself to us.

23 MR. GIACCAI: Everybody knows, that's not
24 an issue.

25 MR. CAMERON: All right.

1 MR. GIACCAI: My name is Gerry Giaccai.
2 I'm a recent resident of Louisa County, permanent
3 resident on, as I mentioned earlier, living on the
4 water on the cooling lagoon side. And I guess my
5 concerns have been that people talk about the
6 improvement in the plan from the earlier plan, which
7 was flow-through cooling to the wet/dry tower cooling.
8 And from what I've heard tonight, what we're
9 sacrificing for that is water. It's going to cost us
10 more water, and I'm concerned about that. Okay?

11 And similar to what other people just
12 recently asked, I guess my question is, if that was an
13 improvement, wouldn't the dry cooling be an even
14 bigger improvement to eliminate even that problem?
15 And I guess I'd like to know why Dominion isn't
16 considering it, and why the Nuclear Regulatory
17 Commission isn't requiring it.

18 MR. CAMERON: Okay. Thank you very much.
19 Okay. Olin Compton. How about Allan Lassitor from
20 Spotsylvania County?

21 MR. LASSITOR: Thank you very much. My
22 name is Allan Lassitor. I do live in Spotsylvania
23 County at 1512 Sunset Harbor Boulevard. Yes, it's in
24 Mineral, Virginia, but I live in Spotsylvania. I'm in
25 one of those counties on that map right there. I'm on

1 the Board of Directors of our Property Owner's
2 Association for Sunset Harbor. I'm a member of the
3 Lake Anna Civic Association, I'm a member of Friends
4 of Lake Anna. I'd like to support everything that
5 they have put on the record tonight, all their
6 comments and concerns, and I ask you to address them.
7 And I have two questions, and one comment.

8 Question number one - the last three
9 speakers have addressed it - to-date, Dominion has
10 changed the design of Unit 4 from a wet tower to a dry
11 tower, and Unit 3 from once-through discharge into the
12 lagoons to the closed loop wet and dry combined
13 towers. Are there any other cooling designs been
14 contemplated? Is that it? And if not, if Number 4,
15 the dry tower's obvious conclusion to cooling number
16 4, why are we not using it in Number 3? So I think
17 I'm the fourth speaker in a row to question that.

18 My second question involves the
19 presentation by Marvin Smith at the Lake Anna Civic
20 Association meeting on July the 29th. Marvin stated
21 that, in response to questioning, that Dominion would
22 not undertake any site construction activities until
23 a full-blown decision had been made to go forward with
24 the whole project. And I'm curious if anybody from
25 Dominion can verify that statement.

1 I think I heard earlier this evening the
2 Chairman, or whoever the person was from Dominion, say
3 that they already started working on the permit, and
4 that it would probably be filed fourth quarter of
5 2007. So I guess I can assume that that means by that
6 point you'll probably have a decision on at least
7 applying to build the operation, 2007. Correct? Thank
8 you.

9 Last but not least, and I meant to bring
10 my copy with me, but on page 7.4 of the EIS
11 supplement, it is Chapter 7 of the Cumulative Impacts
12 of the entire operation, there are eight factors
13 there. Seven of them conclude that the impact is
14 small, and that mitigation is not warranted. But on
15 the issue of water use and water quality, it says,
16 "Water quality is unresolved."

17 Now after everything we've heard tonight,
18 and all the analysis that's been done, and all the
19 changes that are proposed, it's still hard for me to
20 understand why water quality is still unresolved.
21 Thank you.

22 MR. CAMERON: Thank you, Allan. In regard
23 to your question and comment, and Gerald Giaccai's
24 comment and question, we heard from Dennis, I guess,
25 in terms of alternatives to what's presented for

1 cooling systems for Units 3 and 4, is - I translate
2 what they're saying as a comment that that alternative
3 should be evaluated. And I don't know if we have or
4 not, but I'm just trying to put that concern into play
5 in terms of what our responsibilities are.

6 All right. Aviv Goldsmith, John Higgins,
7 and Steve Montgomery. And is it Aviv?

8 MR. GOLDSMITH: Yes. I don't know if I
9 can talk, and read, and hold this all at the same
10 time. My name is Aviv Goldsmith. I live and work in
11 Spotsylvania County, just outside of the emergency
12 alert radius for the North Anna Nuclear Reactor. It's
13 nuclear, not nuclear.

14 Mr. Cushing mentioned earlier that an ESP
15 involves the determination of whether a proposed site
16 is a suitable location for a nuclear plant.
17 Unfortunately, in my reading I don't see how the draft
18 EIS or the supplemental supports staff's
19 recommendation to approve the ESP. I believe that
20 there are probably at least nine reasons that support
21 my position that the EIS is not a complete document.

22 First, it doesn't provide sufficient
23 detail on the planning and consideration for potential
24 nuclear incidents, not just likely nuclear accidents.
25 Second, the document fails to adequately address the

1 potential for a terrorist act. Terrorism, by the way,
2 is not an accident. Acts of terrorism are numerous
3 and planned, and North Anna is a possible target. The
4 fuel and waste storage areas at North Anna are
5 especially vulnerable to a terrorist attack. How is
6 this in the public interest to worsen the situation?
7 It isn't.

8 There's been no real analysis of
9 transportation, whether for a construction workforce
10 of 5,000, or for the innumerable people that may need
11 to be evacuated in the event of a nuclear incident.
12 The supplement and the draft basically says that all
13 is well because many new roads are planned, and they
14 will be built before the plant is built. Well, if you
15 live in the area or read the newspaper, or even just
16 drive on 95, you know that transportation congestion
17 is one of the biggest problems in the region. There's
18 little to no funding for new roads and improvements.
19 How is Route 208 going to evacuate any meaningful
20 number of people? It can't. The other roads in the
21 area can't.

22 A more thorough EIS would tell us what the
23 data is from VDOT on the level of service rating for
24 the roads, what their carrying capacity is, and how
25 the project laid over that would support or worsen the

1 traffic situation. My guess is it would worsen the
2 traffic situation to a point that the roads cannot
3 support what's required. And we need more roads.
4 What's that going to cost? Who's going to pay for it?
5 A thorough socio-economic analysis would tell us what
6 those costs are, and what the trade-offs are.

7 There's no real plan for waste disposal.
8 I can't get a building permit to build a home unless
9 I have approved septic plan, but you propose to more
10 than double the amount of nuclear waste at Lake Anna,
11 and no one has a secure long-term plan. Mr. Cushing
12 said earlier tonight that an analysis was done to the
13 end-point of the fuel cycle. I'd like to know what
14 that is. Where is this waste going to go? Who's
15 going to pay for it? Who's going to protect it for
16 the tens of thousands of years?

17 It's unclear to me whether the supplement
18 is strictly about the cooling system change, or the
19 whole project. A more thorough draft document would
20 show what the changes are in each section, it's
21 possible to redline each word. The supplemental draft
22 is not clear in several sections, which I'll submit in
23 detailed writing later.

24 Sixth, the draft shows no real
25 consideration of renewable energy and demand-side

1 management. These are clearly alternatives, discussed
2 tonight from people on both sides of the table, and
3 this should be evaluated. The draft and supplemental
4 draft don't seem to me to be NEPA-compliant documents.
5 They should be re-done with more thorough analysis,
6 and circulated for review and comment. A more
7 thorough EIS would have multiple public hearings at
8 different times. I had to take off from work tonight
9 to be here. I can't take off from work tomorrow night
10 to come to that hearing. Different times, different
11 locations throughout the areas of impact would
12 facilitate public participation.

13 Lastly, the project offers no conclusive
14 evidence that there are benefits from this project for
15 the region. There's no clear cost benefit analysis,
16 so how do we know that this is good? I can only
17 assume it's bad, because I don't see the benefits
18 written down.

19 I appreciate the opportunity to comment
20 tonight, but what we're talking about here is a
21 federal action that has potentially serious regional
22 consequences that have not yet been properly analyzed
23 and documented. I hope that the NRC takes corrective
24 action sooner rather than later, and gives the public
25 additional information. Thank you.

1 MR. CAMERON: Thank you. John Higgins, or
2 Steve Montgomery. And then we're going to go to Julie
3 Curry, Jim Adams, and Jean moss Holland. This is
4 Steve, Steve Montgomery.

5 MR. MONTGOMERY: I just wanted to, first
6 of all, thank all you for coming to Louisa. I have
7 been here most of my life, and I just want to share a
8 couple of comments with you. I have been at North
9 Anna for 31 years, and I now work in the Training
10 Department. Before that, I taught school at Louisa
11 and coached football, and I actually graduated from
12 Louisa just a few years ago. But I wanted to share
13 one thing with you.

14 I had some comments that I had put
15 together about the purpose of this meeting tonight
16 with ESP, but when Rebecca was here and she said
17 something about being a regular person, I just wanted
18 to share something that happened this past Thursday,
19 that I thought you'd really appreciate. And I've
20 heard a lot of things about safety and security, and
21 so forth, but the man that stocks our vending machines
22 at North Anna, he came in - what I do is I teach a
23 little class, just basic information about security
24 and safety, and emergency planning, and radiation
25 protection, and a few other things, and it's really

1 just very basic information. And I really love what
2 I do, but the man that stocks our vending machines,
3 when he finished his little course this past Thursday,
4 he said, "Can I just talk to you for a minute out in
5 the hall?" And so I went out there with him, and he
6 said, "You know, I don't know who I'd tell this to",
7 but he said, "I've been here for a year now, and I was
8 scared to come here when I first started bringing
9 these Twinkies and everything else." And he said,
10 "You know, I just want to thank somebody and tell them
11 how much I appreciate the safety and everything, all
12 the checks that we go through." And he said he'd been
13 sharing a lot with the people in his community. And
14 being a local resident here all my life pretty much,
15 I get a lot of questions from the locals here, and it
16 really gives me a lot of pleasure to share that
17 information. Thank you.

18 MR. CAMERON: Thanks, Steve. Is Julie
19 here? How about Jim, Jim Adams? Oh, Jim.

20 MR. ADAMS: So, hi, and I'm Jim Adams.
21 And it's been just about 50 years since I became a
22 anti-nuclear activist, which is one of the hate words
23 that Lisa put out, but to me, she is a narrow-minded
24 fanatic, so I guess we balance on that. But I became
25 an anti-nuclear activist because when I looked at the

1 industry back in the late 50s, there were several
2 things that weren't working. One of the things at the
3 top of the list was that the power plants were not
4 user-friendly by the people who operated them, and
5 that was downright scary.

6 I want to acknowledge you all for having
7 created power plants that are user-friendly, that is
8 the most user-friendly part of the entire operation,
9 in fact. And you've done great on that. You have an
10 admirable safety record that I think is the envy of
11 all kinds of other industries out there.

12 Now I get that you're driven to do it, and
13 that the bosses in Congress are coming down on you
14 every time something goes wrong, and says correct it
15 quick. But all the same, your record is fantastic,
16 and I thank you for that.

17 Now where I have problems with it is that
18 both ends of the nuclear industry are sloppy and
19 messy. The mining part of it creates a kind of
20 pollution that's kind of deadly downstream, and is
21 kind of bad for the miners. But, you know, a few
22 lives lost. The coal industry has lost a bunch, and
23 the oil industry has lost a bunch, and so does
24 nuclear, but that's the price of progress. Right?

25 The other end of it is even messier and

1 sloppier, and it's still garbage disposal. I wish we
2 had a word that wasn't so euphemistic. You all use
3 "waste". I prefer "garbage", it's a little more
4 better defined. And yes, "garbage" can be a resource
5 in future generations, but garbage is such a
6 euphemistic term for something that is one of the most
7 poisonous substances on the face of the earth. It is
8 so poisonous, it is so nasty that it is the only power
9 industry that has 24/7 security. Can you imagine a
10 coal plant, or a solar plant, or even a wind plant
11 that has the kind of security that nuclear plants
12 have, and yet we put up with this.

13 You've done very well at keeping the
14 materials out of harm's way, because that's
15 significant, that you can deal with the world's worst
16 poison, most lethal poison out there, and keep us as
17 safe as we have been, barring a few minor accidents
18 here and there, and not counting the great testing
19 thing at Chernobyl. But it still doesn't answer what
20 we're going to do. The last time I'd said that if we
21 had put out, or completed the first nuclear power
22 plant in the year zero, and the first nuclear waste
23 had come out at that time, we would only have to guard
24 that waste for another 8,000 years. And that is using
25 the one that you want to have politically mandated,

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1 the 10,000 year limit, not the 100,000 year limit. If
2 we're going to guard it for 100,000 years, then we
3 only have to guard it for, what is it, 98,000 more
4 years?

5 So I understand, also, that you who have
6 dedicated your lives to this are really, really
7 attached to what you do, and you are very defensive
8 about what you do. I know that I'm defensive about
9 what I get involved in. And yet, this is still the
10 most lethal substance that's out there. I ask you to
11 look at the collaterals that go along with it. The
12 collaterals, of course, are the things that Gerry was
13 talking about, that I hope we're all happy with, the
14 power plants that Pakistan, and Korea, and others have
15 put out, that this is the material for nuclear bombs.
16 And we are worried about nuclear materials getting
17 out, coming out of Russia, and that terrorists will
18 have this, these materials. That's scary. That's
19 really scary. And this is some of the collateral
20 materials that come from the industry that you're
21 involved in.

22 Another thing we're dealing with to deal
23 with waste is spent nuclear material used in bullets,
24 large caliber rifle bullets that are scattered all
25 over other parts of the world, and so be thankful that

1 they're not scattered around our part of the world.
2 If they were, we would complain a lot more about what
3 we're doing, but we don't have to live with it. And
4 that, to me, is an object of shame, guilt, upset,
5 because we created that material, we put it out into
6 the world. And some bright engineer came along and
7 said hey, I can make bullets out of this, and it's
8 effective. We can take out tanks. Of course, we leave
9 spent nuclear material all over the place, and this is
10 a byproduct of your industry. You have created it.
11 We have to live with it.

12 So I ask you to consider these things, and
13 start developing a conscience for the world, a
14 conscience for humanity. This is something I find
15 missing in this entire argument that we're going
16 through, is a conscience issue. We do have clean
17 nuclear plants, and this is a plus. But the side
18 issues are still so sloppy, and I have a hard time
19 living with it, and I think it's worth junking the
20 entire industry, because of the side issues, the parts
21 that you have not dealt with. And I ask you to deal
22 with those parts, if you're going to continue in the
23 industry. Thank you.

24 MR. CAMERON: Thank you for those
25 comments, Jim. I appreciate your perspective, and it

1 is late in the night, and we have one more speaker.
2 Just a comment - I think both perspectives on nuclear
3 power that have been offered here tonight, I think
4 it's been pretty clear in some cases what people with
5 one perspective thought about the people with the
6 other perspective, and vice versa. But I don't think
7 it's good, in a public forum I think we should try to
8 avoid characterizing someone with the term that is
9 probably a pejorative term, and I just would say that
10 for the future times that we're going to be down here
11 with all of you. And I know there are strongly held
12 beliefs here, but I just wanted to offer that.

13 Jean Moss Holland. Okay. Well, Jim, I
14 think you were our last speaker. And I know you've
15 been here for a while. I'm going to ask Dave Matthews
16 to close the meeting for us. David.

17 MR. MATTHEWS: I'll do this very briefly.
18 I just want to thank everybody that has participated
19 actively and patiently this evening, those who have
20 left, and particularly those that are still here.
21 You've shown great perseverance. I just remind
22 everybody that we did extend the public comment period
23 in response to a question from the Commonwealth and
24 from a private citizen. The public comment period is
25 being extended by 15 days until September 12th of 2006

1 to allow additional opportunity for you to prepare
2 written comments, which we will address.

3 (Off mic comment.)

4 MR. MATTHEWS: Right. We focus our
5 attention with regard to public comments in the
6 directly affected areas, which are in the locales of
7 the intended permits and licenses. Thank you, again.

8 MR. CAMERON: And if that's a comment that
9 was made on the record, the staff will at least
10 consider it, but we heard this.

11 (Whereupon, the proceedings went off the
12 record at 11:01 p.m.)

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