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NUCLEAR REGULATORY COMMISSION

Title: North Anna: Review of the Early Site Permit

Public Meeting

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3	NORTH ANNA
4	ENVIRONMENTAL SCOPING FOR THE EARLY SITE PERMIT
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6	PUBLIC MEETING
7	* * * * *
8	MONDAY
9	DECEMBER 8, 2003
10	* * * * *
11	MINERAL, VIRGINIA
12	The meeting was held at 7:00 p.m. at the Louisa
13	County Middle School, 1009 Davis Highway, Mineral,
14	Virginia, Frances "Chip" Cameron, Moderator,
15	presiding.
16	PRESENT:
17	FRANCES "CHIP" CAMERON, Moderator
18	ANDREW KUGLER, Environmental Project Manager
19	JOHN TAPPERT, Chief, Environment Section
20	BOB WEISMAN, Office of General Counsel
21	JIM LYONS, Director, New Reactor Program
22	LANCE VAIL, Pacific Northwest Lab
23	MIKE SCOTT, Site Safety Project Manager
24	STEPHEN KLEMENTOWICZ, Radiation Safety Scientist

Paul Gunter, Nuclear Information and

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1	James Griffis
2	Sam Forrest
3	Donal Day
4	Steve Montgomery
5	Page Kemp
6	Bill Streit
7	Alex McGee
8	Amzic Sullivan
9	Jon Kessler
10	Ian Burke
11	Bob Bishop
12	Lou Zeller, Blue Ridge Environmental
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14	Brendan Hoffman, Public Citizen 151
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1 P-R-O-C-E-E-D-I-N-G-S 2 7:04 p.m. 3 MR. CAMERON: Good evening. My name is Chip Cameron. I'm the special counsel for public 4 5 liaison at the Nuclear Regulatory Commission, the 6 And I'd like to welcome all of you to the 7 NRC's public meeting tonight. The subject for tonight's meeting is 8 9 going to be the environmental review process on the 10 application that the NRC received from Dominion Energy for an early site permit for a potential new 11 12 reactor at the North Anna site. 13 And this meeting is formally being 14 called a scoping meeting, which means that the NRC 15 is here to hear comments, concerns, issues from all 16 of you on what we should look at as we prepare the 17 draft environmental impact statement. And it's my pleasure to serve as your 18 19 facilitator, your moderator for tonight's meeting. And my responsibility in that role is to help all of 20 you to have a productive meeting tonight. 21 I just wanted to say a couple of words 22

before we get into the beginning of the discussions.

about the format for the meeting and the agenda,

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In terms of the format for the meeting, the meeting is basically going to have two parts to it. The first part we're going to hear some brief NRC presentations on the early site permit review process and on specifically the environmental review part of that process. And then we're going to go out to you for any questions that you might have about that process.

And when we're done with that, we're going to give you an opportunity to give us some more formal comments tonight on any issues or concerns that you think the NRC should address as it prepares its draft environmental impact statement.

And the NRC is also asking for written comments on these scoping issues. And the staff, the NRC staff in their presentations will tell you when those comments are due. But I just want to emphasize that anything that we hear from you tonight, any comments that you make, that will have as much as weight as any written comments that come in. And the value of these meetings is not only for us to give you information in person and to meet you in person, but the information that you hear tonight either from the NRC or from others in the audience

1 may help you to prepare a written comment. 2 stimulate you to make a written comment to the NRC. 3 And in terms of ground rules, they're real simple. When we get to the question and answer 4 5 period if you want to want to ask a question or say 6 anything, just give me a signal and I'll bring you 7 this cordless microphone. Tell us what your name is, what your affiliation is if appropriate. 8 9 we'll hear your question. We'll try to give you a 10 clear answer to that. And we are taking a transcript of 11 12 tonight's meeting so that everybody can hear and 13 read what happened here tonight, and that will be the NRC's record of the meeting. 14 15 And Erin is our stenographer over here. 16 That transcript will be available to 17 anybody who wants a copy of it. I would ask all of you just one person 18 19 speaking at a time so that we can not only get a 20 clear transcript so that Erin will know whose 21 talking, but more importantly so that we can give 22 our full attention to whomever has the floor at the 23 time. 24 I would also ask you to try to be 25 concise in your comments. The reason for that is so that we can make sure that everybody who wants to speak tonight has an opportunity to do that. So by trying to be brief, it'll help us to meet that goal.

When we get up to the second part of the meeting where we hear more formal comments, I would ask you to follow a guideline of five minutes for your comments. And when we get to that part of the meeting, you can come up here, use this microphone or I can bring you the talking stick.

The agenda for tonight is we're going to have John Tappert from the NRC staff, whose right here. He's going to give us an overview of the early site permit process.

John is the Chief of the Environmental Section in our office of Nuclear Reactor Regulation. John's staff is responsible for overseeing the preparation of an environmental review for any application that needs one that comes into the NRC in the area of reactors. And, certainly for the early site permit application.

He's been with the NRC for, I think, approximately 11 years or so. He served as a resident inspector for the NRC at the FitzPatrick Nuclear Reactor. And as you may know, we use these resident inspectors as our eyes and ears actually

onsite at the reactors, living in a community making sure that NRC safety regulations are followed.

Before that he was in the Nuclear Navy.

He has a bachelor's degree from Virginia

Tech in aerospace and ocean engineering. And a

master's degree in environmental engineering from

Johns Hopkins University.

We'll go out to you for questions on the overall process, and then we'll go to Mr. Andy
Kugler from the NRC staff, also from the Office of
Nuclear Reactor Regulation, and in fact is one of
John's staff. And he's the Environmental Project
Manager for this early site permit application. And
that means he is responsible for the environmental
review, the preparation of the draft environmental
impact statement, and that's what he's going to tell
you about. We'll go out to you for questions then.

And then we'll go to the formal comment period. Okay.

And I just want to thank all of you for being here. We welcome any comments you have, any concerns you have about not only the early site permit process, but also the process that we use to arrange this meeting. Any suggestions would be welcome to us.

And this is the beginning of the process on early site permit application. And I would just like to stress continuity in the sense that you can get phone numbers from the NRC staff. They're going to be here to talk to you after the meeting. Also, some of our expert consultants are here. opportunity. If you have questions, you have concerns, call the NRC staff up. Maintain some communication with them because we want to make sure that we hear your concerns throughout the process and that we give you as much information as possible. And with that, I'm going to ask John Tappert to talk to us about the overview of the early site permit process. And then we'll go out to hear from you on questions. John? Okay. MR. TAPPERT: Thank you, Chip. Good evening, everyone. As Chip said, my name is John Tappert, and on behalf of the Nuclear Regulatory Commission I'd like to thank everyone for coming out tonight and participating in this process. I hope that you find that the information that we will share with you tonight will

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be helpful. And we look forward to receiving your comments, both tonight and in the future, as we develop an environmental impact statement covering Dominion's request for an early site permit at North Anna.

Now I'd like to start tonight by providing some context for the early site permit process itself.

About 15 years ago the NRC issued new regulations to provide an alternate process for licensing new power reactors. Now, this figure depicts the major portions of those regulations, and the regulations themselves can be found in Part 52 of Title 10 of the Code of Federal Regulations, or as we say 10 CFR Part 52.

Now in order to obtain approval to construct and operate a nuclear power plant under this new process, an applicant would have to apply for a combined license. The process allows for different situations. And a combined license application can reference a previously approved reactor design, a previously approved site permit or both, or in fact it could reference neither.

Obviously, the NRC review of a combined license which references the standard design and

early site permit will be streamlined as many of the issues would have been resolved in the earlier reviews.

At the present time the NRC has approved three standard designs and is currently reviewing a fourth. And we have indications that as many as six additional designs may be submitted to the agency for review.

As far as the early site permits,

Dominion's request for an early site permit is the

first of three that the NRC is currently reviewing.

The other two are for locations in Illinois and

Mississippi.

If the early site permit is approved, then Dominion could subsequently request a combined license that referenced the early site permit and one of the standard designs. And if so, the technical issues that were resolved as part of the standard design review and the siting issues that were resolved as part of the early site permit review would be considered resolved for the combined license application.

Now Andy Kugler will talk about some exceptions to the resolution of these issues later in our presentation.

Now if the NRC issues a combined 1 2 license, then the license holder would have NRC 3 approval to construct the plant. The NRC would monitor and inspect activities during the 4 construction of the facility and verify key 5 6 attributes before the plant would be allowed to 7 operate. 8 Next slide. Okay. 9 The key participants in the licensing 10 review include the NRC, the applicant and the 11 public. As we go further into the process 12 discussion, you will see how and when the public can 13 play its important role in the review. 14 Members of the public may able to shed light on issues unique to the region or to help the 15 16 NRC staff focus on the most important issues during 17 our environmental review. And I know that some folks, such as those involved in the Lake Anna Civic 18 19 Association have already spent a lot of time and effort in reviewing the proposed action. 20 21 Next. 22 If the NRC approves an early site

permit, that means that we have determined that a proposed site is suitable for the construction and operation of a nuclear power plant. It is not,

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however, an authorization to build such a plant.

Rather, it is an early step in a process that may someday lead to the construction and operation of a new plant. But as that first figure showed, much more will be required before the NRC would approve such an action. So to reiterate, the focus on the early site permit review is to assess the suitability of a proposed site.

Next.

The early site permit process affords an applicant the opportunity to resolve issues related to the siting of new nuclear plants at an early stage. And as I stated earlier, if an early site permit is issued by the NRC, then the applicant can reference the early site permit in his subsequent combined license application and the issues that have been resolved in their early site permit are then considered resolved for the NRC's review of that combined license.

Okay. Next.

So what this means is that if an early site permit is approved, then it gives the permit holder a piece of land with most of the siting issues resolved for up to 20 years. Having these issues resolved early reduces the uncertainty that

an applicant might face in pursuing a license for a new reactor. And when a company considers an investment as large as that required to site, construct and bring into operation a new power plant of any sort, actions that reduce uncertainty are important.

Next.

This figure outlines the major steps in the review process for an early site permit application. Significant times for public involvement are shown in the yellow stars. And as reflected here, the first opportunity for public involvement occurred even before we received the application. We came here last April to explain the early site permit process, holding a public meeting next door in the library.

The Dominion early site permit application was filed in September, and that initiated this current review.

Now, this figure has two major branches, because this review involves the implementation of requirements of two major statutes; the Atomic Energy Act and the National Environmental Policy Act.

The upper portion shows the review related to safety issues under the Atomic Energy Act. This part of the review involves an evaluation of site safety issues and emergency planning, along with NRC inspections related to site safety attributes.

evaluation report, the report will be reviewed by the Advisory Committee on Reactor Safeguards or ACRS. The ACRS is an independent body of experts in the nuclear arena that advises the Nuclear Regulatory Commission. The ACRS will hold public meetings during its review of the safety evaluation report, and a report from the ACRS will be provided to the Commission for its consideration prior to its final decision on the early site permit.

The safety evaluation report will also be one of the items considered in the formal adjudicatory hearing that will be part of this process.

The lower portion of the figure reflects the NRC environmental review implementing the requirements of the National Environmental Policy Act. Now early in the review process we carry out an activity that is called scoping when we have to

decide what issues require the greatest focus during our environmental review. And this public meeting tonight is part of that scoping process. Now Andy will discuss the environmental review in more detail a little later.

The public will also have an opportunity to comment on our draft environmental impact statement. And just as with the safety evaluation report, the final environmental impact statement will be the subject of a formal adjudicatory hearing which is part of this process. As you can see from the figure, the public can also participate in that hearing, but Andy will provide more on that later as well.

Okay. Next.

Now, while the focus of this meeting is the NRC's environmental review, for the sake of completeness we would like to provide you some more insight into the safety review as well.

The key aspects of the safety review are the evaluation of the site characteristics as they relate to the safety of the plant and emergency planning. The NRC will determine whether the site is suitable for the siting of a new nuclear plant independent of a specific design.

The NRC will also determine whether 1 2 there are any significant impediments to the 3 development of an emergency plan. The two primary regulations associated with a site safety review are 4 the regulations in Part 52, which I touched on 5 6 earlier, and in Part 100 which covers reactor site 7 criteria and its evaluation factors. The results of the NRC site safety 8 9 review and emergency planning review will be 10 documented in a draft and then a final safety evaluation report. 11 12 The NRC staff will conduct several site 13 visits to probe safety issues as part of this review 14 and will document these visits in trip reports which will be made publicly available. 15 16 The NRC has already conducted a quality 17 assurance inspection and will document the results of that as well. 18 Additional inspections may be scheduled 19 20 as necessary to resolve any outstanding issues. In order to enhance openness in the 21 22 regulatory review process and to engage 23 stakeholders, the staff held a public meeting last 24 April to discuss the early site permit process with

And the staff expects to hold

the public.

additional public meetings with the applicant on 1 2 safety issues. During these meetings, the public 3 can observe the discussions and will be afforded the opportunity to make remarks. However, it is the 4 hearing which will be discussed again later that 5 6 affords the principle opportunity for members of the 7 public whose interests are affected to raise concerns associated with the safety review. 8 9 Okay. Next. 10 And that completes the brief overview of the Part 52 process and the early site permit. 11 12 Andy's going to provide some detailed information on 13 the environmental review. But we can pause now if 14 there are any questions that me and my colleagues 15 can answer. 16 MR. CAMERON: Okay. Thanks, John. 17 there any questions on the overall process that would help your understanding of this before we get 18 into the specifics of the environmental review. 19 20 And please introduce yourself and affiliation. 21 22 MR. GUNTER: My name is Paul Gunter. 23 I'm with the Nuclear Information and Resource

Service in Washington.

1 I understand that we're currently within 2 a window of opportunity for petitioning the NRC to 3 And the environmental review is part of 4 that process. 5 Does the safety evaluation report become 6 available to the public in a time frame that allows 7 them to review it for the intervention or possible intervention? 8 9 MR. CAMERON: John, do you feel 10 comfortable with that or should we go to Bob. MR. TAPPERT: We might want to have a 11 12 lawyer answer it, yes. 13 Bob, it's a fairly simple MR. CAMERON: question, I think. This is Bob Weisman, Office of 14 15 General Counsel, NRC. 16 MR. WEISMAN: Yes. Mr. Gunter, the 17 notice of opportunity to intervene will close on January 2nd. And I don't know what the staff's 18 19 schedule is for issuing the safety evaluation 20 report, but typically these things take many months. So the safety evaluation report, even that, I would 21 expect will not be issued before the time expires. 22 23 MR. GUNTER: Can I follow up question? 24 I'll, I'll be right to MR. CAMERON: 25 you.

Bob, the basis for the intervention and 1 the contentions that have to be offered then in that 2 3 case because the safety evaluation will not be available until much later, are usually based on 4 The application? 5 what? 6 MR. WEISMAN: The contentions would have 7 to be based on the applicant's document that have the application and the environmental report that 8 9 the applicant has submitted together with its 10 application. And that will be the basis. And stand by, Bob. 11 MR. CAMERON: 12 go back to Paul for a follow up on this one. 13 Paul? MR. GUNTER: Well, again, this is Paul 14 15 Gunter with Nuclear Information Resource Service. 16 So from our perspective I think that as 17 a concerned pubic that it would only seem fair that a process that is an open process provide the 18 19 opportunity for the public to be fully aware of not 20 only the environmental report but the NRC safety evaluation report. I think this is all valuable 21 22 information for gaining insight into issues not only 23 of environmental quality, but of public health and

safety.

And it's a bit alarming to us that based on the inability of the staff to provide a timely response for the public to gain those necessary insights, that we're denied the opportunity from the get go.

MR. WEISMAN: May I address that?

MR. TAPPERT: And correct me if I
misstate this, Bob, but my understanding of the
process is we have a period right now where you can
submit the contentions based on the licensee
submittals and licensee's environmental report. You
can file contentions later on, late filed
contentions based on the staff's work but there's
additional criteria which have to be met before they
can be admitted. But if there's something that's
revealed later on, I believe those can be the

MR. WEISMAN: Well, and that's correct. What the staff has before it is the application which has all the technical information in it that the staff is going to be reviewing. If an additional piece of information comes out that you need, you would have needed for a good contention, that is one of the factors in the late filing criteria. That is, you have to have good cause for

subject of an accepted contention.

late filing. If you had a piece of information that 1 2 wasn't available earlier, then that would go to that 3 factor. Certainly the staff's safety evaluation 4 will have a lot of information in it. But the 5 6 staff's evaluation is based in what's in the application. And you've have the application --7 well, since November. 8 9 MR. CAMERON: And I -- just to make sure 10 that any questions that come up during this question and answer obviously can imply a comment, too. And 11 I think that, Paul, your suggestion may be that --12 13 go ahead. MR. GUNTER: And I want to be very 14 15 careful not to turn this into a dialogue. I 16 appreciate the opportunity. But it again is our 17 concern that first of all, the current opportunity for providing contentions that does close on what? 18 19 MR. TAPPERT: January 2nd. MR. GUNTER: Or is it December 31st? 20 21 January 2nd. MR. TAPPERT: 22 MR. GUNTER: January 2nd. The day after 23 New Year's Day. 24 Again, the bar is raised after January 2nd, as you mentioned, for this special 25

circumstances for late file contentions. And it's just our concern, and I think that the public should be concerned that only half the information is going to be readily available prior to the closing of the comment -- or of the opportunity to intervene. After that the bar is raised for the public. And those special considerations and criteria in fact will make it more difficult to enter contentions based on the staff's findings that may not have been as readily transparent in the licensee's application.

And I think that, again, I'll just state my own bias is that the bar has been raised very high for the public in order to, first of all, and most importantly as part of streamlining this process, to discourage the public from filing intervention.

MR. CAMERON: Okay. And on that last point though, Paul, I think that I would ask the NRC staff to point out that the process of asking for contentions and petitions to intervene after the license application has been submitted and accepted, there's no difference in the early site permit process, as I understand it from any other license application process. I mean, this is standard NRC practice? Is that correct, Bob?

1 MR. WEISMAN: Yes. These are the rules 2 in 10 CFR 2.714. I think that these rules were last 3 amended in this respect in 1989, I believe. is our longstanding practice to treat any kind of 4 5 application or intervention on any kind of 6 application in this way. 7 MR. CAMERON: And, Paul, that doesn't diminish your point. I just wanted people to 8 9 understand that this is not some sort of a special 10 process that has been developed for the early site permit process. 11 12 And I'd better announce this before this 13 poor person has a dead battery. One has their 14 lights on. A Buick license plate YCX-3969. So if anybody owns that, your lights are on. 15 I know it's 16 hard to tear yourself away from this discussion, but 17 you might want to check it. Yes, sir? 18 19 MR. REED: My name is Ernie Reed. I'm from Charlottesville, Virginia. 20 One of my concerns about the new NRC 21 22 regs is that in that environmental review that is 23 now going on, there's still a 20 year window, I 24 understand, until the actual licensing or

construction permits have to actually be manifest.

And that comments that are accepted now may be resolved prior to the actual reviewing of those specific details that can have so many direct implications with the environment. And certainly I question the process if that in fact is the case, and if it's not, what reservations do we have to be able to comment on those specifics and not have the more general comments at this time resolved and closed for environmental comment. MR. CAMERON: Good question, John. How do we deal with issues that might, you know, logically come up during that period? MR. TAPPERT: Yes. Yes. There is no specific design as part of this application. applicant has used an approach where they've looked at parameters and they've identified a number of parameters of the facility that they're going to perhaps construct some day. We're going to assess the impacts associated with those parameters. If when they actually come in and the plant that they're going to construct does not comport with those parameters,

well then those issues are not resolved and they can be addressed at that time.

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1 To the extent that they're within the 2 boundaries of that, then they probably will be 3 considered resolved because we've considered the 4 impacts. 5 Andy's going to touch a little bit more 6 on the details of the environmental review a little 7 bit later. So if you had some more questions, maybe we could handle it at that point. 8 9 MR. CAMERON: Ernie, does that suffice 10 for right now? And, you know, if you -- let's get you a mic. 11 12 MR. REED: Does the NRC make the 13 determination whether the environmental issues have been resolved? 14 15 MR. TAPPERT: If subsequently when a 16 combined license comes in and a party does not feel 17 that it meets the parameters that were originally submitted, that will be an opportunity for you to 18 19 participate. Now we may, depending on our 20 judgement, may differ on that. But certainly that 21 would be an opportunity for you to get involved in 22 the process. 23 The NRC, you're the agency MR. REED: 24 that decides if the issue has been resolved 25 sufficiently?

1 MR. TAPPERT: The agency and other 2 regulatory reviews. I mean, a lot of times these 3 things are not handled by the NRC staff themselves. We have licensing boards of judges and engineers 4 which make decisions for us. 5 6 MR. CAMERON: On an administrative level 7 I think the answer is yes, as opposed to litigation is always possible in the federal courts. 8 But yes. 9 Are there questions on the overall 10 process at this point before we get into the specifics of the environmental review? And, you 11 12 know, don't worry. If you have questions on other -13 - this part of the process, we'll come back and treat those. 14 15 Why don't we go to Andy Kugler right now 16 who will give you the specifics on the environmental 17 review, and then we'll come back out to you. Thank you, Chip. 18 MR. KUGLER: 19 My name is Andy Kugler, and I'm the Project Manager for the environmental review for the 20 21 early site permit application at North Anna. 22 Some of you may remember me. I've been 23 out here before. I was also the Project Manager 24 when we reviewed the license renewal application for

the existing units 1 and 2. And I was out here for

a couple of meetings earlier this year when we were 1 2 introducing people to the early site permit process 3 and, hopefully, getting them up to speed on what would be involved and what was coming. 4 5 This evening I'm going to talk a bit 6 more about the environmental review process. Hopefully, if some of you were at those earlier 7 meetings, I won't bore you too much. But I do want 8 9 to make sure everybody who is here has an idea of 10 what the process involves. The National Environmental Policy Act --11 12 Next slide, please. Thank you. I'm sorry. 13 The National Environmental Policy Act requires all federal agencies to use a systematic 14 approach to evaluating the environmental impacts of 15 16 certain actions that they may make. 17 disclosure tool that involves the public. It's a process by which we gather information from the 18 19 public, we develop a draft environmental impact 20 statement and then give the public an opportunity to review that draft and provide comments on it. 21 In accordance with the National 22 23 Environmental Policy Act, an environmental impact 24 statement is required for a proposed action that may

have a significant effect on the quality of the

human environment. And the NRC has determined that an early site permit is such an action.

Next slide.

This slide shows the environmental review process in a little more detail. And the first is the notice of intent. After we received the application in September, we reviewed it to make sure it had enough information for us to go forward with the review. And on November 24th we issued a notice of intent that we were planning to develop an environmental impact statement. This was issued in the Federal Register.

The notice of intent initiates the scoping process, which is a portion of any environmental review. And this will run until January 9, 2004.

During the scoping process we're trying to gather information on what issues should be considered during our review. And this public meeting this evening is part of that process. It's an opportunity for you to provide with us with that sort of input.

The review team that we've assembled will be on site this week getting more familiar with

the site and with the area around the site. 1 2 refer to this as a site audit or a site visit. 3 We may also afterwards issue formal requests for additional information to the 4 5 applicant. 6 And when we complete our review, we'll 7 issue a draft environmental impact statement and we will start a comment period on that draft 8 9 environmental impact statement. 10 Now, we're calling it a draft not because it's incomplete, but because we're at an 11 12 intermediate step in the process. We're looking for 13 comments on the draft. During the comment period on the draft 14 15 we will come back here again and hold another public 16 meeting and give you an opportunity, first, to hear 17 what results we found, what conclusions we've come to and then to give us comments on that draft. 18 19 After we gather all the comments, we may 20 make changes to the environmental impact statement, and then we'll issue it as a final environmental 21 22 That document would then become a impact statement. 23 part of the hearing process that John has already

mentioned. And it will become part of the final

1 decision by the Commission at the end of the 2 process. 3 Next slide, please. During our review we're going to be 4 gathering information from a number of different 5 6 Obviously, we review the application and we'll be talking to the applicant. We'll be talking 7 to federal, state and local agencies, social service 8 9 agencies. We'll be gathering comments from members 10 of the public. And, of course, we have our site audit as well that's going on this week. 11 12 We'll be looking at a number of issues 13 including the environmental impacts of the action 14 that's been proposed. We'll look at the impacts of potential alternatives to the proposed action. 15 16 we'll also look at the possibility of mitigation or 17 things that could be done to reduce the impacts of the proposed action. 18 19 Next slide, please. We assembled a team of experts in a 20 number of fields in order to perform our review. And 21 this gives you an idea of some of the different 22 23 areas that we look at. 24 The team is comprised of people both

from the NRC staff at our headquarters in Maryland,

and also we've brought in some experts from the

Pacific Northwest National Laboratory to supplement

our expertise in a number of areas.

Our team is made up of about 20 people covering the issues that we've presented in this slide.

Next slide, please.

The regulations provide that there are certain issues that need not be considered during the early site permit. In particular, it states that we don't need to consider the need for power or the cost for power at this time. In addition, the Commission has determined that we need not consider alternative energy sources during the early site permit review. Now deferral of these issues is acceptable because right now what we're looking at is a determination of whether this site would be suitable for the construction of a plant. We're not actually making a decision on construction itself.

If the applicant later chooses to request either a construction permit or a combined license to actually build a plant, then these issues that we're presenting here would be evaluated at that time. So they will be covered before any plant is built.

In the particular case of this review, 1 Dominion has chosen to defer evaluation of these 2 3 issues until a later time. Next slide, please. 4 These are some of the key dates in the 5 6 review schedule. As already has been mentioned, the opportunity for hearing -- or the notice of hearing 7 was issued and the opportunity to intervene runs 8 9 until the 2nd of January. If you wish to become 10 involved in this formal process, you need to submit an application or a leave to intervene within that 11 12 time period. 13 The scoping period runs until January 14 9th of 2004. And you can submit comments on the 15 scope of our environmental review up until that 16 date, and I'll provide you a bit more information on 17 how you can do that later. We expect to issue the draft 18 19 environmental impact statement in October of 2004, at which point we'll notice it and we'll have a 20 comment period, and we will come back for another 21 22 meeting. 23 We'll review the comments we receive, 24 and we expect to issue the final environmental

impact statement in June of 2005.

environmental impact statement has been prepared and 1 2 is final, and after the safety evaluation report is 3 final, we'll go into the hearing process that's been mentioned. 4 And then the Commission decision after 5 6 the hearing is expected around June, 2006. Next slide, please. 7 We've already talked quite a bit of how 8 9 you can be involved in the process, so I won't go 10 into too much detail on this slide. We mentioned the comment periods at both the scoping stage and on the 11 12 draft and the public meetings. We've also mentioned 13 the hearing. This is a formal hearing in front of an Atomic Safety and Licensing Board Panel. In the 14 15 hearing, we address issues both involving the 16 environmental review and the site safety review. 17 In addition, as John mentioned, the site safety review will involve periodic meetings between 18 19 the NRC and the licensee at which the public is 20 welcome. And toward the end of the process after 21 22 the safety evaluation report has been prepared, 23 there will also be meetings with the Advisory

Committee on Reactor Safeguards to review the safety

evaluation report. And that's a public meeting.

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Next slide, please.

Although we've already talked about it,

I want to come back again now after we've talked

about a number of different things, to talk about

scoping and what we're here for tonight. We're

looking for your input on what issues we should be

evaluating during our environmental review. In

particular, we would like to know about anything

that maybe be peculiar to this area or that you

consider to be significant for this particular

action.

On the flip side, if you think that there is something that we don't need to address in our environmental review, that's also a valid comment in the scoping phase. We're trying to make sure that in the end our environmental impact statement addresses all the important issues that we need to consider.

If you need more time to think about it after tonight, obviously you will have an opportunity shortly to speak to us, but if you need more time, you have until January 9th to submit comments. And we're hoping that the meeting tonight will help you in developing any comments you might have.

And one other thing I wanted to mention. When you came in and signed up and filled your registration cards, one of the options on the card was to check off you wanted things mailed to you, if you wanted to be on our mailing list. And if you checked that box and gave us your address, we'll automatically send you key documents involved in the environmental review. That will include copies of the draft environmental impact statement and the final environmental impact statement when they're issued.

And if you filled out that card but didn't check that box and want to reconsider, after we're done we should be able to add you to the list. So, if you need to be added, let us know afterwards or even after the meeting. After sometime later if you change your mind.

Next slide, please.

There are a number of ways other than the meeting tonight in which you can submit comments to us in writing. One method is to send a letter in to the address shown here on this slide. And this was discussed in the notice of intent that we issued back in November. If you prefer, you can also submit comments to an email address that we've set

1 up, and it's shown on this slide. So you can send 2 them directly electronically. 3 And, of course, you also have the option if you want to come and visit, you can come up to 4 Rockville and visit our offices and provide comments 5 6 in person. Next slide, please. 7 Finally, if you have any questions after 8 9 we're done here and everybody's left, there are a 10 couple of people you can contact. There is myself, and my phone number is given here. If you have 11 12 questions on the environmental review, I should be 13 able to help you with that. And Mike Scott is our Safety PM. He is 14 15 also here tonight, and his phone number is given as 16 well if you have questions related to the safety 17 review. And, of course, after the meeting is 18 over this evening, we'll all stick around and if you 19 20 have questions and would like to talk about any 21 issues, we can talk about that tonight. And as far as formal comments, they need 22 23 to either be in the transcript of tonight's meetings 24 or submitted to us in one of the forms I mentioned

earlier.

1	And that concludes my comments. Chip?
2	MR. CAMERON: Okay. And, Andy, I'm
3	sorry I didn't introduce you in terms of more of
4	your background before you got started. But Andy's
5	been with the agency for approximately is 20?
6	MR. KUGLER: No. Little less, 13.
7	MR. CAMERON: Thirteen. Okay. Thirteen
8	years. And he is the Environment Project Manager for
9	this early site permit and application.
10	He has a bachelor's degree from Cooper
11	Union in mechanical engineering and a master's
12	degree from Johns Hopkins in technical management.
13	Mike Scott, who was just introduced,
14	he's the Safety Project Manager.
1 4	le s'elle sares, rrejess hanager.
15	Before we go on to you for questions, I
15	Before we go on to you for questions, I
15 16	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right
15 16 17	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right here. And Jim is the Program Director of the and
15 16 17 18	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right here. And Jim is the Program Director of the and I'm not going to get this right the New Reactor
15 16 17 18	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right here. And Jim is the Program Director of the and I'm not going to get this right the New Reactor MR. LYONS: New, Research, and Test
15 16 17 18 19 20	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right here. And Jim is the Program Director of the and I'm not going to get this right the New Reactor MR. LYONS: New, Research, and Test Reactor Program.
15 16 17 18 19 20 21	Before we go on to you for questions, I just wanted to introduce Jim Lyons, who is right here. And Jim is the Program Director of the and I'm not going to get this right the New Reactor MR. LYONS: New, Research, and Test Reactor Program. MR. CAMERON: Program Office. But

1	early site permit application for North Anna. Is
2	that correct?
3	MR. LYONS: Yes.
4	MR. CAMERON: All right. And is Mike
5	Morgan with us tonight? Okay. Mike Morgan is the
6	senior resident inspector for the North Anna plant.
7	Questions on the environmental review on
8	scoping. Anything at all? Okay.
9	Let's go here and then we'll go up there
10	and then down to Dave.
11	Yes, sir.
12	MR. ZEIGLER: My name is Alexis Zeigler
13	from Charlottesville.
14	I notice among the slides early on there
15	was a phrase "petition to intervene versus
16	commenting on the scoping." Is that two different
17	things? Can you explain that to me?
18	MR. KUGLER: Sure. Yes, they are two
19	different things. As John indicated, there are
20	really two different processes running here. One is
21	under the Atomic Energy Act and the other is under
22	the National Environmental Policy Act.
23	What we're here tonight for is what's
24	called scoping under the National Environmental
25	Policy Act. As we develop our environmental impact

1 statement, we want to make sure we get everything 2 that should be within the scope of our review. 3 so the public comment period that runs to January 9 is to collect comments on the scope. 4 The other thing that's running in 5 6 parallel, which is under our regulations for hearings, is the notice of hearing that went out and 7 the opportunity to intervene. And that runs until 8 9 January 2nd. So they are two separate processes. 10 Now, the hearing covers both environmental and the site safety. Scoping is 11 12 involved purely in the environmental. 13 MR. CAMERON: And you don't -- Alexis, you do not have to participate in the hearing to 14 submit comments on the scoping. 15 16 MR. KUGLER: Correct. 17 MR. CAMERON: Does that take care of your questions or are they still -- All right. 18 19 Let's go back to this gentleman. 20 sir? 21 MR. DAY: My name is Donal Day. Ι′m from Charlottesville, Virginia. 22 I have two 23 questions, the second to follow the first after I've 24 gotten the answer to the first.

And that is, what I understand is that Virginia Power or Dominion Power has submitted a sort of an envelope that describes the potential impact of this new project. And, obviously, it's going to have significant water implications because of the, you know, the cooling from the pump and the large lake. And, of course, you have drought considerations.

And my first question is, is with regard with water. I mean, we just experienced, of course, a serious drought in Central Virginia followed by a year of abundant rainfall. But I wanted to know how you approached issues of drought; whether or not when you do that, you just sort of look at the historical record and then make extrapolations of what you can expect in terms of meeting the demands for water that this new project might have.

MR. KUGLER: I'm not sure I can go into that much detail, because I'm not the technical expert in that area. And I'm not sure if Lance Vail, who is here, would be able to address that, how we intend to review that portion. Because we're very early in the review yet, so we may not be able to tell you everything we're going to do.

But, Lance, would you be able to come 1 2 down and speak to his question. Lance would be 3 doing the primary work on hydrology and water use issues for our review. And he's from Pacific 4 Northwest Lab. 5 6 MR. VAIL: Yes. I'm Lance Vail. 7 And normally when we look at long time series analysis, and you're looking at extreme 8 9 events, we go back and then try to reconstruct the 10 time series consistent with those extreme events. So, you know, we'll be including the 11 12 extreme period and stuff that was in the past three 13 years in the analysis. But we're just starting -you know, we're just reviewing the application at 14 15 this stage. But it's clear that in this application 16 the water supply issues and stuff are very important 17 and they're getting a lot of attention. So in other words history, the 18 MR. DAY: 19 recent history as well as more distant history plays a major role in projecting forward? 20 21 MR. VAIL: Correct. So my follow-up is in 22 MR. DAY: Okay. 23 terms of nuclear waste storage. The recent history 24 there, of course, is that this nuclear waste that's

been coming out of the reactor has been stored on

1 the reactor site. And every year that Virginia 2 Power refuels, approximately every year, they bring 3 out 1500 metric tons of highly radioactive waste. Will the scope, environmental scoping of 4 5 this project include the continued storage of that 6 waste on site? Because, in fact, there is no 7 solution. You know, history shows us that. 8 Pollution in the recent past, nor can we anticipate 9 one in the near term. So, I guess my question is 10 will the continued storage of high level radioactive waste be included in the environmental impact 11 12 statement for this new facility? 13 MR. KUGLER: I'll answer that question, because that's really beyond Lance's area. 14 15 We will be considering it in our 16 evaluation. Now, there are some things you should 17 be aware of because they're kind of key to the 18 review. 19 One is our regulations in Part 51 of Title 10, 10 CFR Part 51 there is what is called the 20 waste confidence decision in which the Commission 21 has reviewed the history here and made the 22 23 determination of a couple of things. One, that high 24 level waste and spent fuel can be stored safely on 25 site for up to 30 years after the end of the

operating license of any given plant, and that would include new plants.

In addition, they've stated that there will be -- there's confidence that there will be a repository available for spent fuel within the first quarter of this century and that there will be sufficient capacity available by the time that 30 years beyond the operating life of a plant comes around for any spent fuel from any reactor. So that is going to be part of the basis of our review, because that's a determination the Commission has made. And they do review that periodically. The last time it was reviewed was in 1999. And we can give you references on that later. I don't know if I have them handy right here, but I could get you references on that.

MR. CAMERON: Okay. And Ernie, we'll be back to you. And, Dave, we'll go to you next. And this gentleman has a question.

Andy, just go back to Mr. Day's original question about water. I guess two questions is that the analysis that Lance was talking about, Mr. Day and the public will be able to see that analysis because that will be laid out in the draft

1 environmental impact statement for people to comment 2 on, is that right? 3 They'll have that MR. KUGLER: Correct. opportunity. 4 MR. CAMERON: And is there a review 5 6 document, standard review plan that we use to review the application that may provide some information on 7 these types of issues to the public? 8 9 MR. KUGLER: Yes, there are. For access 10 purposes, let me explain this first of all. Our website has a lot of information on it, and the 11 12 website which was given on one of the last slides 13 here is www.nrc.gov. And if you go in under new reactor licensing, you'll find a couple of things. 14 15 One is there is a review standard 16 specifically for the early site permits. 17 review standard RS-002. And that discusses details of how we're doing an early site permit reviews in 18 19 particular. There is also for the environmental 20 review an environmental standard review plan which 21 And these documents are both 22 is NUREG-1555. 23 available through the web and you can review them to 24 see -- they describe how we go about doing the

reviews and what our review standards are.

1 might give you some idea of how we're approaching 2 it. 3 Of course, the specifics on a given site, especially in the environmental area, will 4 5 vary quite a bit because the issues vary a lot from 6 one site to another. And as Lance mentioned, 7 clearly water issues here at North Anna are going to be very significant. 8 9 MR. CAMERON: Okay. Thank you. 10 Dave? My name is Dave Ritter. 11 MR. RITTER: 12 I'm with Public Citizen Critical Mass Energy and 13 Environment Program from Washington, D.C. On one of the slides that we saw that's 14 15 issues that need not be considered in an early site 16 permit and environmental review, need for power, 17 cost of power and alternative energy sources. I was wondering at what point in these 18 19 many processes, that obviously extend beyond the ESP, before actual plant construction since these 20 three issues, the evaluation of these three issues 21 is being deferred now, at what point in the process 22 23 before plant construction will these issues be 24 considered? And will the public have an opportunity 25 to comment on them and question NRC's methodologies

and conclusions? And more specifically, will these opportunities exist before a third party, not asking the NRC how did you come to these conclusions?

MR. KUGLER: Okay. And the answer is yes. Because in order to address these issues, if an applicant comes in after getting their early site permit and determines they actually want to build the plant, they would either request a construction permit which is not very likely -- that's the old process in Part 50 -- or a combined license under Part 52. But to go through either of those processes they would have had to address these issues. And we would review it at that time.

So before the plant could be started, construction could start, these issues would have to be addressed.

And as far as public involvement, we would be preparing another environmental impact statement at that stage, so the same sorts of involvement, public involvement would be available. In addition there would be, I believe, another hearing at that time. And so the same opportunity - right, the Atomic Safety Licensing Board Panel would be involved and that would be the third party.

1	MR. CAMERON: And I guess you could also
2	consider the Advisory Committee on Reactor
3	Safeguards
4	MR. KUGLER: That's true. They are
5	MR. CAMERON: As another third party.
6	They will be would that be within the scope of
7	their review
8	MR. KUGLER: I don't believe that is.
9	I'm not certain of that. I don't know if Mike or
10	Jim you could answer that; whether need for power or
11	cost for power is within the safety evaluation
12	report? I don't believe it is.
13	MR. CAMERON: Okay.
14	MR. SCOTT: The answer is no it's not.
15	MR. KUGLER: It's not. Okay. So they
16	would not be involved in that review, but the Atomic
17	Safety Licensing Board would be.
18	MR. CAMERON: All right. Thank you.
19	Let's go to Ernie, and then let's go to
20	this gentleman. Ernie?
21	MR. REED: Two quick questions, and I
22	hope they're simple.
23	MR. KUGLER: Okay.
24	MR. REED: One, in order to apply for an
25	early site permit, what requirements did Dominion

1 Virginia Electric Power have to put forth in order 2 to initiate this process, what they were required to 3 do? And secondly, what liability did they 4 have in the event of some significant environmental 5 6 catastrophe connected with this? 7 MR. KUGLER: Okay. In terms of the requirements for the application, those are in Part 8 9 I don't remember the specific subsection, 10 But if you look in Part 52, it's one of offhand. the basic subsections of the chapter or the portion 11 12 that relates to early site permits. It'll tell you 13 what basic things the application has to have in it 14 and lays out the process that we're going to go 15 through. 16 MR. REED: Is there any cost involved? 17 MR. KUGLER: Is there any cost involved 18 in --19 MR. REED: If I was going to --20 MR. CAMERON: Ernie, we have to get you 21 We have to get you on the transcript. a mic. 22 MR. KUGLER: Okay. 23 Are there any fees involved MR. REED: 24 if I wanted to apply for a early site permit, what 25 would I have to do?

1 MR. KUGLER: Yes, absolutely. Yes. The 2 fee is in the form of the hours that we spend, they 3 get charged for. And it's a very significant undertaking for the applicant. 4 First of all, it's going to cost them a 5 6 lot of money to prepare the application. have a sense of how much that was. And then all the 7 time that we spend on the review, the cost of that 8 9 is charged to the applicant. They have to pay for 10 So it's a big undertaking. I think we're going to 11 MR. CAMERON: 12 hear from --13 MR. KUGLER: But he had another piece to his question. 14 15 MR. CAMERON: Yes, but I just wanted to 16 point out that we are going to hear from the company 17 later on, and they perhaps can talk about some of 18 those cost items. 19 The liability issue? 20 MR. KUGLER: In terms of liability, I 21 think your question was if something -- if there was 22 environmental damage done? 23 Technically the early site permit by 24 itself doesn't give them permission to do anything. 25 So in that regard, there wouldn't be any

environmental impact associated with just issuing 1 2 the early site permit. 3 Now in this particular case they also included in their application what's called a site 4 5 redress plan. And if we were to approve that plan 6 and include it in an approved early site permit, it 7 does give them permission to perform some preconstruction activities, basically. Things like 8 9 clearing the land, digging holes, those sort of 10 things. But the premise of the site redress plan is this is how they would go about repairing that 11 12 damage if later they decided they weren't going to 13 complete construction. Okay. Well, quick follow-14 MR. CAMERON: 15 up, Ernie. 16 MR. REED: It's really the same 17 question. 18 MR. KUGLER: Yes. 19 MR. REED: If there was a significant 20 large scale early site permit disaster connected 21 with the operation of this once it was operating, 22 once it was up and approved and going. 23 MR. KUGLER: Okay. 24 MR. REED: What's the liability of the 25 company?

MR. KUGLER: I'm not that familiar with 1 2 all the financial -- I know that they're required to 3 carry insurance and it's quite large, but I'm not that familiar with the specifics of that. And I'm 4 not sure if there's somebody else here who is more 5 6 familiar with financial. 7 MR. CAMERON: We could do that simply. Bob, there is a liability arrangement on these. 8 9 And, Bob, if you could just quickly give us 10 information on that and if we need to get anymore detail, perhaps you can talk to Ernie later on. 11 12 MR. WEISMAN: Sure. I know a little bit 13 more than Andy about this one, but not that much 14 more. 15 There's the Price-Anderson Act which 16 provides for liability insurance for operators in 17 the power reactor. And the reactor licenses have to carry their own insurance under that Act, at least 18 19 some part of it. And the idea is that all the insurance gets pooled together and if there is an 20 accident at one site, all the reactor licensee's 21 insurance policies end up paying for that. 22 23 the idea. 24 Now, I can't give you the specifics of it, what the amounts are exactly what part -- how 25

1	much each licensee has to provide in insurance.
2	That I don't know.
3	MR. CAMERON: Okay.
4	MR. WEISMAN: But that's where you'll
5	find it. And there's also financial qualifications.
6	MR. CAMERON: Thank you. Thank you,
7	Bob.
8	There is a fact sheet that our Office of
9	Public Affairs prepared on this issue, okay. And I
10	am going to give this one to you, Ernie, but there's
11	copies there that explains it in more detail.
12	Let's go to this gentleman back here.
13	MR. KEETON: Dewey Keeton, Louisa
14	County.
15	We currently have problems with
16	contaminants in the fish in Lake Anna that we're
17	unsure where the contaminants are coming from. The
18	way I understand it, the checks and balances of the
19	NRC or the plant itself in the checking of these
20	fish have long since ceased. And Lake Anna Civic
21	Association now are monitoring the lake. Is this
22	going to be something that's going to happen again?
23	MR. KUGLER: I think what you might be

civic association, are you referring to the PCBs, is 1 2 that --3 It's a variety of MR. KEETON: contaminants, the way I understand. We're not sure 4 5 where they come from. 6 MR. KUGLER: Okay. 7 We have an idea, but if I'm MR. KEETON: not mistaken I've read the plant was regulating and 8 9 checking on the fish population. And they stopped 10 at some point in time and it's just concern of mine because what's bad for the fish is bad for me. 11 12 MR. KUGLER: Certainly. Okay. 13 think I understand the question. The monitoring you're referring to was 14 15 monitoring that was required post-construction for a 16 period of time. And the reason they stopped is that 17 they were only required to perform that monitoring for a certain period of time. 18 19 The licensee continuously monitors what they discharge, and that's a requirement both from 20 NRC and from the state. And the state is also I 21 22 believe, involved in monitoring in and around the 23 lake. 24 I'm not sure who else might be taking 25 fish samples anymore. But I believe the licensee

does not unless I'm mistaken. But what they 1 2 discharge is carefully monitored. 3 And so beyond that, I guess all I'm saying is as far as we know from the reports that we 4 received, the plant discharge is well within the 5 6 limits that they're required to maintain. 7 MR. CAMERON: But Dewey had a question about this, but it also sounds like a comment that's 8 9 a good scoping comment in terms of investigating 10 whatever the effects might be on the various fish populations. 11 12 MR. KEETON: I think since the lake is 13 for the benefit --And, Dewey, we again need 14 MR. CAMERON: 15 to get you on this transcript. So why don't you --16 MR. KEETON: Since the lake was created 17 for the nuclear plant, it seems to me that they should be checking on this fish population and 18 19 monitoring the water at all times. And certainly the grassroots and the associations that live around 20 the lake should be participating in conjunction with 21 -- you know, monitoring your discharge certainly is 22 23 -- but the whole lake is a concern. I think it's 24 essential that you do. 25 MR. KUGLER:

1 MR. CAMERON: We're going to try and get 2 you some more information, too, on monitoring, 3 environmental monitoring program. Klementowicz. 4 5 MR. KLEMENTOWICZ: Yes, I'm Steve 6 Klementowicz. I work for the NRC. I'm a radiation 7 safety scientist. And my specialty is radioactive effluents and the environmental monitoring programs 8 9 that are associated with nuclear power plants. 10 Excuse me, I'm just recovering from a cold. 11 12 As Andy had said, each licensee is 13 required to monitor and report every radionuclide 14 that they release into the environment from the air They're also required to have an 15 into the water. 16 environmental monitoring program. And this 17 requirement has not gone away, it will never go So they have to take water samples, sediment 18 away. 19 samples, vegetation samples, fish samples and analyze those for very low quantities of any 20 radioactivity. So this includes natural 21 radioactivity and anything that came from power 22 23 plants. 24 So I can state totally these programs 25 have not disappeared.

1	MR. KEETON: Is that chemical? Is that
2	just radioactivity?
3	MR. KLEMENTOWICZ: I'm speaking for the
4	radioactivity portion. I don't address the chemical
5	hazards. But as far as the radiological components,
6	every year every power reactor submits an
7	environmental monitoring report that lists what they
8	sampled: Milk, vegetation, fish, air and reports
9	any radioactivity that they've seen. And that's a
10	public document you can even review that.
11	Now, I understand chemical permits are
12	issued by the state, so the state should have a
13	record of all the chemicals that are released.
14	That's a state authority issue.
15	MR. KUGLER: But I think his point is
16	that he feels that there should be a monitoring of
17	the fish by the licensee or the applicant for a new
18	plant, so that
19	MR. KEETON: For all contaminants.
20	MR. KUGLER: For all contaminants, not
21	just radioactivity.
22	MR. CAMERON: Okay. Thank you, Dewey.
23	Thanks, Steve.
24	Let's go to Lou.

1 MR. ZELLER: Thank you, Chip. My name 2 is Lou Zeller. And I'm with the Blue Ridge 3 Environmental Defense League. I want to let people know here that we 4 5 plan on intervening before the January 2nd deadline 6 in that -- I understand that this intervention as you outlined here is an adjudicatory process. We 7 have three ongoing interventions. And every time we 8 9 do one we get a little better at it on nuclear 10 We're intervening on the side of public issues. health and public safety. 11 12 If anybody in the room here would like 13 to join our intervention, the holidays are coming, please come and see me before you leave here 14 15 tonight. We're interested in talking to you. 16 My question, Mr. Kugler, to you is I 17 heard on the radio tonight on the way here that there would be no record of the public hearing 18 19 I'm sure that must be incorrect. I think 20 they were talking about the pre-meeting. Could you clarify that in terms of what would be on the record 21 22 here tonight from what people have to say. 23 MR. KUGLER: Certainly. I'm not sure 24 what they meant by the statement on the radio. 25 you said, anything that was discussed before the

1	meeting in the open house isn't on the record. But
2	everything that goes on here in the meeting is being
3	recorded by the court reporter and will become part
4	of the record.
5	We use that as well to make sure we get
6	all the comments that we received tonight. So that
7	is all on the record.
8	MR. CAMERON: Okay. Thank you. Thank
9	you, Andy. Thank you, Lou.
10	We have this gentleman back here. Yes,
11	sir?
12	MR. BUCKLEY: Hello. My name is Brian
13	Buckley. I'm also from Louisa.
14	You commented on a waste confidence
15	decision that was made by the NRC. And guaranteed
16	that in the first quarter of this century a
17	repository will be made available. Is that right?
18	MR. KUGLER: Well, I wouldn't say the
19	word "guaranteed." But it said that the Commission
20	was confident there would be one by the end of the
21	first quarter of the century, yes.
22	MR. BUCKLEY: And it seems like Yucca
23	Mountain is a proposed site, or that's
24	MR. KUGLER: That's the current proposed
25	site, yes.

MR. BUCKLEY: My question is how much waste is Lake Anna putting out, how much more waste would Lake Anna with two additional reactors? people call this NIMBY, not in my backyard syndrome, and yet I think it a very natural instinct that people do not want someone else's waste in their state or in their locality. I cannot sleep well at night if I think that it's okay for me to burn and produce radioactive material and yet not take the risk of living with it. Instead, I ship it over to Nevada or ship it to somewhere in the Pacific, I don't know where, it will eventually be shipped. But should we not be focused more on using a type of energy that doesn't have such a poisonous effect on people, on life?

MR. KUGLER: Well, first of all, our job in our review, it's not our job to decide which type of power an individual company wants to use. Our job is if we receive an application for the use of nuclear power to review that and make sure that it could be done safely and that we evaluate the impacts to the environment and disclose those impacts and do things to mitigate the impacts or minimize them.

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1	But we will look at alternative energy
2	sources before a plant is built. But at this stage
3	in the review, what we're trying to determine is
4	whether this site would be suitable for building a
5	plant if the applicant decides to go forward. So at
6	this stage what we're looking for is just site
7	suitability. And there's been no decision by
8	anybody at this point as to whether one would
9	actually be built.
10	And you also asked at the beginning
11	about the amounts of waste, and I don't have those
12	numbers handy. I kind of doubt anybody here has them
13	real handy. But we could get those.
14	MR. CAMERON: Okay. We'll take that as
15	an action item, Brian. Thank you.
16	I think we have a lot of people who want
17	to comment to us tonight. And I don't think I see
18	anybody else who has a question right now. So, I
19	think what we'll do Paul?
20	MR. GUNTER: Just a real quick, a point
21	of clarification. This is Paul Gunter of Nuclear
22	Information and Resource Service.
23	And it has to do with the earlier
24	question with regard to this opportunity to
25	intervene and the subsequent public hearings.

The major difference is, is that only at the -- in the intervention process is the public allowed to cross-examine and have a process of discovery of the types of analysis, for example, with the lake levels and the droughts and how the agency arrived at those conclusions.

Any subsequent hearing on the draft environmental impact statement, which is going to come out after the intervention period is closed, you're not going to be able to question that.

You're not going to be able to at least question it to the degree that you would under -- before an Administrative Law panel through cross-examination and discovery.

I'm certainly really glad to hear that the Blue
Ridge Environmental Defense League is going to be
intervening here. Because it means that the public
is going to be provided with a higher level of due
process that you would not get if you just relied
simply on commenting to the Nuclear Regulatory
Commission. You could lose that ability to review
the safety evaluation report and the draft
environmental impact statements, which are all

coming out after the window for opportunity for 1 2 intervening closes. 3 MR. CAMERON: Okay. And just a couple of clarifications on what Paul said. Is that when 4 he said that losing the opportunity, I think he 5 6 meant losing the opportunity to examine that in the context of the adjudicatory hearing. 7 In other words, people will still be 8 9 able to comment on the draft environmental impact 10 statement even if they are not a part of the hearing. 11 12 And I guess the second thing is for 13 people who -- organizations that are admitted to the hearing, and Bob please correct me on this, that 14 15 they will be able to question in the adjudicatory 16 hearing the subsequent SER, environmental impact 17 statement, documents like that? Yes, if the party is 18 MR. WEISMAN: admitted into the proceeding, they'll be able to 19 conduct discovery. They'll be able to question the 20 witnesses before the Atomic Safety and Licensing 21 22 So they'll get to do that. 23 MR. CAMERON: Okay. And I don't want to 24 take away from Paul's main point, which is that the

ability to cross-examine the staff or applicant, all

1	the things that come with the adjudicatory
2	proceeding. Certainly you need to be a party to
3	that proceeding to avail yourself of those, and
4	that's I think the point that Paul was making.
5	Mr. Day, can we just do a quick one here
6	so we can get rolling on this? Thank you.
7	MR. DAY: Donal Day, again,
8	Charlottesville.
9	The one question that earlier
10	comments about if this application is granted, that
11	the company can then bank this license, this
12	environmental license for 20 years, something like
13	that?
14	MR. KUGLER: Well, they basically have
15	this permit for up to 20 years.
16	MR. DAY: Okay. My question is, is that
17	a contract? I mean, can that license then be
18	revoked for some reason in that intervening period?
19	I mean
20	MR. KUGLER: I'm not I guess I'd have
21	to look into the regulations. I'm not familiar with
22	that. Bob?
23	MR. WEISMAN: Yes, if I might address
24	that.
25	MR. KUGLER: Okay.

1 MR. WEISMAN: Yes. The Atomic Energy 2 Act has Section 186. And if, for instance, there 3 were false statements in the application, it could be revoked. The ESP could be revoked. 4 5 So the NRC has its full range of 6 enforcement actions that it could take with respect 7 to the ESP. 8 MR. CAMERON: Okay. Thank you. 9 We're going to go to formal comment. 10 And while Andy's sitting down, we're going to let Dave ask one more question. 11 12 MR. RITTER: Yes. Dave Ritter, Public 13 Citizen. Because of what we have, perhaps at 14 15 least some of us have discovered about the safety 16 evaluation report and the draft environmental impact 17 statement coming out or likely to come out after the window where one can put in a contention on this 18 19 early site permit, I would just propose that in the 20 interest -- in the public interest that the deadline 21 for submitting public contentions just be moved forward indefinitely until these documents are 22 23 available. 24 MR. CAMERON: And I think that was the 25 comment and that was the gist of what Paul Gunter

1 said originally. And we're noting that as a 2 comment. 3 Thank you, Andy. And we're going to go for a public 4 5 And I want to ask a representative of comment now. Dominion Energy to just give us a little bit on what 6 their rationale is behind the early site permit 7 application. And this is Mr. Gene Grecheck. He's 8 9 the Vice President for Nuclear Support Services. 10 Mr. Grecheck? Thank you, sir. 11 MR. GRECHECK: 12 Good evening, everybody. 13 As Chip said, my name is Gene Grecheck. I'm the Vice President for Nuclear Support Services 14 for Dominion. And it's my responsibility to lead 15 16 the team that put together this application over the 17 past 18 months or so and then carry it forward through this review. 18 19 We really do appreciate this opportunity to share with you why we're doing this, and also to 20 just let you know a little bit about how we see this 21 22 process going. 23 First, our goal in this is to maintain 24 the option for the construction of a possible 25 nuclear plant in the future. As I'm sure you've

heard, we have no plans at this time to build a plant, an additional unit at the North Anna site.

But what this allows us to do is work through the regulatory process, the entire ESP process that you've heard described today has never been tested.

It is a process that has been in place for about 15 years, but no one has ever gone through it before.

So in order to be able to make a determination about how long this would take, which is something that is very important to know if you're trying to plan for future energy needs, you need to understand how long the regulatory process will take. So what we're really looking at here is maintaining the option, going through the process to see if the site is suitable for additional nuclear units without actually making a commitment. And we have not made a decision as to whether we will indeed go forward with an order.

But our issue that we have is that as we look forward to over, say, the next ten years or so, we need to be planning today for where our energy is going to be coming from over the next several years.

If we get the early site permit approved, then what it would allow us to do is to have the site review done such that if we make a

decision that the need for additional electric power exists and that the best economic and social option for the company is to indeed build a nuclear unit at that point, then at least we would have a site that would be approved to do that at.

Obviously, we have a long experience with operating nuclear reactors. We've been doing that now for over 30 years. As you know, we have the two existing units at the North Anna site. We have two other units at Surry. We also operate two other units up in Connecticut. And this is something that we take pride in in terms of our ability to operate these units safely and economically.

But not only from a nuclear standpoint, but promoting environmental stewardship is also something that we take very seriously. There are many, many environmental rules and regulations that we are required to follow and we have a very strict corporate policy of strict compliance with those regulations. But over and above compliance, we pride ourselves on very good relationships with all of the governmental agencies that are involved in environmental regulations as to whether they're federal, state and local. We have a very positive

reputation that many of you may be familiar with, even around the North Anna site, for enhancements that we made for fish, for wildlife, for the water quality. And the responsibility that we have or the way we see it, is that not only do we have a responsibility for maintaining and enhancing the environment, but we also have a responsibility for local economic contributions through the provision of energy. And that is something that we take very seriously, and we will continue to do that.

Dominion is a growing company. We have operations in over 26 states in the United States now. So many of you remember the old VEPCO, which was a local company. But we're now pretty much a nationwide operation. And because of that, we have to take this long view, even though we have no immediate plans for building a plant. We have to be taking a long view about where is the energy supply going to come from to meet our customers' needs over the next 10, 20, 30 years.

If we look at what the energy projections are, the government has an agency called the Energy Information Administration. It's a department or a subsection of the Department of Energy. And according to the Energy Information

Administration the demand for electricity is projected to grow from about 754 gigawatts this year to over 1100 gigawatts over the next 20 years. Now, that's about a 50 percent increase or so.

And if you look at the additions to your existing electric generation, we're talking about something on the order of between 300 and 400 gigawatts of additional electric generation that needs to be added to the existing supply of electricity in the United States over this next 20 year period.

If you think about that, for example, if we talked about adding 400 gigawatts over the next 20 years, North Anna produces about 1.28 gigawatts, the two units at the station right now. So we're talking about something on the order of 300 times the existing North Anna site in terms of the nationwide need for electricity in the near future.

Now if you look over the last 10 or 15 years, the only generation that has been added in the United States has been natural gas. So if you think about what we're doing here, is we are banking our entire future on the supply of natural gas. And what that does, it certainly makes us very vulnerable to any disruption in fuel supply. We're

already talking about now importing natural gas from overseas, which would put us into the same situation that we've had with oil for the last 20 or 30 years. And natural gas up to now has been a domestic supply, but we're outstripping that supply and we're now saying in order to meet the natural gas demand, we're going to have to start importing natural gas from many of the same areas of the world that currently are problems in terms of imported oil.

So, that's the historic, well over the last ten years or so that every additional generation plant in the United States essentially has been fueled by natural gas. So we have an energy supply vulnerability that is growing. And we also have a price volatility problem. I'm sure all of you have been noticing that the variation in the price of natural gas over just, say, the last four or five years, the price has been swinging widely. That translates directly into the bills that we have to pay and it also translates directly in the inability of the economy in terms of anyone's going to build a business to decide what their costs of energy are going to be, because that price of gas is very volatile.

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So because of that, we think that the continuation of the option to build additional nuclear units is absolutely vital to be able to provide us at least an alternative to the continued reliance on the additional natural gas generation.

And on top of that, if you think about the air quality, just about anything that burns fuel, whether it's burning oil or coal, natural gas; anything that's burning anything is putting various contaminants into the atmosphere, including various types of oxides and carbon dioxide. And carbon dioxide is, of course, what's related to various theories to explain global warming.

So again, one of the reasons that we think that nuclear energy is an option to consider whether we'll do it in the future is that of all the various alternative energy forms that we're aware of, it is the only one that can produce energy on a scale large enough to make a difference in terms of what we actually put in the air by energy production. So it is the only large scale non-emitting generation technology that's available.

As many of you know, we at one time had planned to build two additional units at North Anna.

North Anna 3 and 4 actually had construction

permits. Those units were started back in the '70s and then in the early '80s they were both canceled.

And all of that equipment was removed from the site.

They were canceled at that time because as we looked at energy supply and costs projections at that point, they were just not economical to continue. But the point is, is that this site has been previously reviewed by the NRC and was approved by the NRC for the addition of two additional units.

Now what's changed since then? Why were those units canceled and now here we are again talking about let's see if these sites are acceptable?

What's changed is that the Part 52
licensing process that you heard described tonight
means that we can get through the regulatory process
before we start building the plant. Now what
happened in the past was that you went to the NRC,
you made an application, you got a construction
permit and then you would build the plant, which
means the company would spend several billion
dollars building the plant and then after the plant
was built, we would have to go back to the NRC and
restart the whole licensing process again to
determine whether it could be operated.

And I'll give you an example. would be as if you were building a house. And let's say that you picked out your lot and you decided to say okay I'm going to build this house. would go to the building inspector and you would get a building permit, and you'd build the house, put all your money into the house and then before you could move in, you'd have to go back and get the design of the house re-reviewed. And even after the house were already built, they could say, well, we don't think that this room ought to be over here, it ought to be there. And you'd have to rebuild it. Tear down the house that you've already built and build another one. That's basically what the old licensing process looked at.

Under the new process all of those questions are answered ahead of time. Now that's good for us, it's good for the pubic, it's good for the nation because we're not -- for us, obviously, we can make a decision that says that once we go through this licensing process, we have assurance that if we follow the terms of the license then we can indeed operate it.

It's certainly good for the public because you have the ability to do your commenting

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before larger amounts of money are spent on building the plant.

And it's certainly good for the country because we're not utilizing resources in an inefficient way.

So we think the process has a lot of good positive steps in it because it melds the opportunity for public involvement along with some certainty in the process.

We think that if this process works as it's supposed to, then there's an opportunity to shorten the overall licensing process, which again makes the decision as to when do you start a little bit more predictable. Because we're talking about energy needs, say, ten years from now. And under the old process we would have to start, essentially today, with a firm project because it was taking many, many years to license and build these plants. Under the new system, it should take less time which means we can bring that process a little bit closer to when we actually need the power.

I think as Chip mentioned, we're not the only company that's doing that. There are two other companies in the United States that have concurrent applications for Mississippi and in Illinois.

But again, I just want to repeat, that we are not asking at this time for permission to build a plant at this site. What we're trying to do is to make sure that the site is indeed suitable.

And there are many, many factors that would have to go into such a decision before we could be ready to decide whether or not we would go ahead with the project.

Now for over 25 years North Anna's been here. We've made great strides to be good neighbors. We pride ourselves in being able to get information to you. The Information Center, of course, at the site is always available for anyone that's interested in what's happening. And we certainly hope that through tonight's meeting and as we go through this licensing process if you have any questions, please don't hesitate to call us. We're always willing to answer anything, particularly even tonight after we break up, there are a number of members of Dominion staff here that would be happy to answer any of the questions that you have about what we're planning or what scale.

So again, Chip, thanks for the opportunity again.

1 MR. CAMERON: Thank you, Gene, for that 2 perspective. 3 And we're going to go to Mr. Bill Borduin now of the Lake Anna Civic Association, and 4 5 then we're going to hear from Jerry Rosenthal. 6 Bill? MR. BORDUIN: 7 Thank you, Chip. 8 Good evening. 9 As a result of the public hearing the 10 last time, we sort of formed an early site permit committee, of which I chair. And part of my 11 12 committee is Bill Murphey. Bill, would you stand? 13 And also Jerry Hoskins, would you stand also, please. Bill Martin also, who I don't think is here 14 15 this evening. 16 You will hear Bill Murphey just a little 17 bit later relative to some of the issues. As a committee representing a community 18 19 of interested neighbors, we appreciate the desire of Dominion and the NRC and all of us to maintain an 20 environment that's safe, that provides quality 21 standards and have a positive impact on air, water, 22 23 animal life, vegetation and natural resources. 24 We viewed the concerns and listened to a 25 number of constituents around the lake, and there

are seven issues which we have given to Dominion and 1 2 to the NRC, they are as follows: 3 Water issues. They consist of thermal changes, volume, flow and lake level. You'll be 4 hearing a little bit more from Bill Murphey on lake 5 6 level a little later. 7 Secondly, we wanted to know who makes decisions, what agencies make decisions and has 8 9 control over some of these issues. 10 Number three, security issues, issues that deal with terrorists that would lead to 11 12 radiation release. 13 Four, an evaluation plan relative to roads. 14 15 Five, natural environments such as fish 16 and plant life. 17 Six, spent fuel, dry cask storage. And seven, reactor design and 18 19 performance. 20 In the event you want to choose between reading a 1450 page application or John Grishem, I 21 22 probably wouldn't want to choose the 1450 page 23 application. But I want to tell you members of our 24 committee have spent time going through that 25 application.

1 And I also want to say that as a result 2 in doing that, we have prioritized and only studied 3 two issues; one being water issues which are comprised of those three components and also 4 evacuation. 5 6 And I have to tell that Dominion has 7 been extremely cooperative. We have received more information, more cooperation on anything that we've 8 9 asked for. And, you know, people fear what you 10 don't understand. But the more knowledge you gain, the easier it is for you to comprehend exactly what 11 12 some of these issues are all about. 13 The application was a good submittal. It has a tremendous amount of data. And many of these 14 15 discussions that we have had, we are willing to 16 provide anyone the information as what we've 17 learned. I think we can be a resource for you. We welcome any participation. 18 19 I think, obviously, there are pros and cons in all situations. I think we have a pretty 20 good handle on some of the circumstances that we 21 22 have researched to date. 23 And I thank you. You're welcome to give

us a call for help.

1 MR. CAMERON: And Bill, how do people 2 get in touch with you? 3 MR. BORDUIN: I don't know if I should give my phone number out. You can certainly contact 4 Lake Anna Civic Association. You can contact either 5 6 one of us. We will provide our email to either you 7 or any agency that you would choose. Certainly Dominion you could contact Dominion, they'll give 8 9 you our number. But I would say you can contact 10 Lake Anna Civic Association. We have a website and we'll be happy to follow up and give you any 11 12 information and share any information we have with 13 you to help you get a better handle on this. 14 MR. CAMERON: Good. Very helpful. 15 Thank you. 16 Let's go to Jerry. Jerry Rosenthal. 17 MR. ROSENTHAL: Thank you, Chip. My name is Jerry Rosenthal. I'm with the 18 19 Concerned Citizens of Louisa County We have been 20 actively monitoring what's been going on at North 21 Anna for over 25 years. 22 Again, I have pretty much knowledge at 23 my fingertips about what's going on at the plant. 24 And I want to give a big salute to the Lake Anna Civic Association for stepping up to the plate with 25

their environmental monitoring of the lake and for this committee that's looking into this. These people are doing a great job.

I've been looking at North Anna and what goes on there, like I said, for a long time. There are some real peripheral issues, not trying to deal with just the specific -- with the environmental impact statement or this early site process. We have to understand this in a bigger sense. And this gets to things like the confidence rules.

Does anybody really have confidence that they're going to move the nuclear waste? They are starting this discussion saying that's where they are. They have the confidence that this waste is going to be moved, and it hasn't. That puts a lot of the whole process in a different perspective.

Security is another big issue that we need to deal with.

And as we look at this from those of us who live here and who plan on living here, and want our children to live here, we have to look at our property values. Putting a new nuclear plant out there has no chance of doing anything but reducing property values around the lake.

1 So I think we want to look at a whole 2 variety of things. 3 I appreciate Chip and the NRC for coming and talking, and having this type of process for us 4 to do it. And we do need to be looking at legal 5 6 process and other stuff so that Dominion understands our concerns and not just Dominion, the NRC and the 7 8 government. And if anybody would, you know, like to 9 10 get in touch with me, I'm in the book or just catch up with me and I can pull a bunch of stuff together. 11 12 Thank you. 13 Thank you very MR. CAMERON: Okay. much, Jerry. 14 15 The next two speakers we have Mr. Terry 16 Jones from the First Baptist Church and then Dan 17 Holmes. 18 Terry? 19 MS. JONES: Terry --20 MR. CAMERON: Oh, Terry, how you doing? 21 MS. JONES: Good evening. I would just like to say that I'm very 22 23 honored to be here tonight, and I'm very concerned. 24 My name is Terry Jones, and a member of 25 First Baptist Church, but let alone I'm a member of

the county here. I applaud the Lake Anna community, 1 2 civic association, because you all are doing a 3 wonderful job. I'm standing here because of concerns as 4 5 far as public health. We've talked a lot about 6 safety factors, about the plant safety factors, 7 about the fish, but what's happening to the 8 community? 9 In my line of work in my job, I see a 10 lot of our fellow community citizens coming and they have been diagnosed with cancer. The cancer rate 11 12 for Louisa County has increased in the last 20 13 And my concern is what's happening? What's happening? I'm not saying that this is because of 14 Dominion Power, but there are issues that we need to 15 16 consider before we go any further. 17 It's not about -- so much about the water and the temperature of the water and what's 18 19 happening, but what happens to the people who play 20 in that water? What happens to the grandfathers who 21 take their children fishing? And they eat fish from 22 that lake. These are things that we need to 23 address. 24 And that's my concern. What happens to

those issues when public health needs to be

addressed? My question is what type of module or 1 2 type of plans do we have in preparation to notify 3 the public? I think we could do a better job of getting information out to the public about those 4 5 safety health issues. 6 I learned something new tonight. This 7 gentleman here who was sharing about the fish. My husband loves to fish, and until tonight I did not 8 9 know that there was a problem with the fish in the 10 So I think these type of sessions are very valuable. It's a lot of information that we can 11 12 gather as people. But I think that we need to look 13 at the issue of public health more so than the issue of is it just a safety factor for the environment. 14 15 We are the people and we need to know 16 what's happening before anything else is done. 17 MR. CAMERON: Okay. Thank you. 18 you very much, Terry. 19 We're going to go to Dan. Dan Holmes. Piedmont Environmental Council. 20 21 MR. HOLMES: Hi. My name is Dan Holmes. I'm with Piedmont Environmental Council. 22 23 appreciate the opportunity to speak here tonight. 24 Piedmont Environmental Council would 25 like to raise the following concerns and questions

in hopes that the Nuclear Regulatory Commission will address them in the environmental impact statement.

The first of which is, it's our understanding that the additional reactors would increase the water use of the facility dramatically. It's been estimated that the evaporative loss could be as high as 41 million gallons per day.

Thank you for whoever did that equation for me earlier tonight.

What impact would this have on the residents of the lake and their continued recreational use? Will this affect the flow rates downstream from the lake and the dam, and downstream users of the river? What impact would this have wildlife and fish species in and surrounding the lake, and on the North Anna River downstream?

Also, flows into the lake may not be sufficient to meet the demands of the expansion.

Within the early site permit it is noted that the makeup water may have to be taken from another source if all units were to continue operation during low flow periods. What is the estimated amount of additional water needed to meet the demand of the facility during these low flow periods? And what are the possible sources under consideration?

I actually heard tonight that even ground water would be considered. Since this additional source would be necessary for the operation of the facility, why is it suggested in the permit that this issue be addressed during the COL application and not in the EIS?

Consider the difficulties in bringing the additional water to the -- and the fact that this is an essential piece for operation, we urge NRC to consider addressing this issue now during the EIS process rather than later with the construction permitting processes.

Another point, on page 3-5-8 of the early site permit application under the heading "Water Use Impacts" there appears the sentence "The impacts of adding new unit four would depend on specific heat dissipation systems selected and would be evaluated in the COL application." Again, we urge NRC to request the data necessary from the applicant to determine the impacts If we are determining the feasibility of new reactors, it seems reasonable to know these impacts with the completion of an EIS.

My fourth point and last point, there's a reluctance for other states to allow transport of

nuclear materials through their jurisdiction. 1 2 this, will the EIS address the plan for disposal of 3 the additional nuclear waste generated by the new units, and I heard earlier tonight this kind of 4 eliminates this question, but how much additional 5 6 waste will be generated? We still don't really have an idea. And I'd really like to get a hold of that 7 8 figure. 9 It is our sincere hope that the NRC will 10 address these comments and questions in the environmental impact statement, and we plan on 11 12 submitting a list of our concerns by January 9th. 13 Thank you. 14 MR. CAMERON: Okay. Thank you very 15 much, Dan. And I know that we do have a takeaway 16 item from Brian's question about generation, the 17 amount of spent fuel, which was your question, too. And if there's any way that we can post that on the 18 19 website or whatever, we'll get that information out 20 there. Next three speakers. The first we can 21 Ernie Reed and then Alexis Zeigler and then 22 23 Abhaya Thiele.

Ernie?

MR. REED: My name is Ernie Reed. And I'm a high school teacher. I've studied and taught environmental science, biology and physics for about 20 years.

It was 43 years ago, as close as I can tell, that I received as a Christmas present from my parents a model of a General Electric nuclear power plant. I assembled it like I had done maybe 50 race cars, boats, planes and the like. And it wasn't clear to me then all the containment domes or cooling towers meant. But I remember my father saying something about the electricity that was going to be safe, cheap and abundant and too cheap to monitor.

Children don't forget promises unkept, whether they were just hopeful projections or outright lies doesn't really make a difference to a child. But it makes a big difference to me today. Because now we know that nuclear power is neither safe nor cheap. It's so dangerous that I'm not allowed to bring my high school physics class on a tour of the current Lake Anna facility for security reasons. There's just us and the facility, and if we aren't a threat, then that only leaves the facility itself.

1 Hopefully we're all aware of past nuclear accidents. In the winter of 1957 a tank 2 3 holding radioactive waste exploded and 10,000 people were evacuated in a rural Russian countryside. 4 5 the names of 30 towns and villages disappeared from 6 Soviet maps. 7 And I shouldn't have to remind you of history lessons from Liverpool, England, Browns 8 9 Ferry, Alabama, Three Mile Island, Pennsylvania or 10 Chernobyl. 11 Man has never created a more long lived 12 or dangerous substance than the radioactive 13 substances that are byproducts of the nuclear reaction process. By comparison, the anthrax, 14 15 mustard gas and biological weapons that were last 16 manufactured in Iraq around 1991 had a shelf life of 17 just a few months. Both fuel waste and decommissioned 18 19 equipment all pose long term health threats of many lifetimes to humans and other species and animals. 20 Strontium 90 remains radioactive for 600 21 years and concentrates in the food chain. 22 23 other isotopes its odorless, tasteless and 24 invisible. It acts like calcium in the body's

organisms where it enters the bones and animals and

lactating breasts of mammals. It's a carcinogen causing leukemia, bone and breast cancer.

Cesium 137, another byproduct, also remains radioactive for 600 years. It also concentrates in the food chain, but it stores in the muscles where it induces malignant muscle cancers called sarcomas.

Plutonium is so carcinogenic that one pound of the stuff evenly distributed can cause cancer in every person on earth. Plutonium has a radioactive life of half a million years. It enters the body through the lung, migrates to the bone and liver, crosses the placenta into the embryo, mothers with child. Causes bone cancer, leukemia, liver cancer, testicular cancer, birth deformities and genetic mutations in humans and other animals that are passed from generation to generation.

I take this very personally. My wife died from a combination of thyroid and breast cancer initiated and compounded by exposure to radioactive radium.

But I don't feel that it's my job to

tell you the hazards of the reactors and this place.

I would say that it's the job of the power company

to do that.

I would ask that somebody someday do the analysis of the amount of ambient heat that energy production in the United States adds to the environment. Virtually all of the energy released in the nuclear reactions is released in the form of heat, which ends up in the environment. A small amount of that that's converted to electricity, a great amount of that is also converted into heat. Heat as in terms of heating, cooking or AC. All of that ends up in the environment.

Perhaps the analysis of this plant or all of the electrical generating plants in the country might significantly be adding to the melting of the Arctic ice caps and other problems.

If you neglect to inform the entire populace of the full range of risks, costs and dangers involved, then someone's not doing their job. And in this case, who pays you to do your job? Well, we pay for the power. The power that none of us could afford if we add the full costs of the fuel cycle, monetary environmental costs from mining to decommissioning were it not for the hundreds of millions of dollars in government subsidies, tax breaks and insurance liability waivers. Take these away, and the nuclear energy costs many times the

cost of coal generation and costs more than twice the price of any solar or wind renewable energy.

But it certainly doesn't pay for the cost of the Medicare.

It's no coincidence that this new round of NRC hearings corresponds to the comprehensive energy legislation now stalled in the Senate that contains billions of dollars of loan guarantees, direct subsidies and tax breaks for the nuclear industry. What does this teach my students? If you're quick and slick, you'll get your piece of the pie while it's still hot.

Well, if the future of energy isn't safe or cheap, it may in fact be plentiful. Rebecca Smith, a staff reporter for the Wall Street Journal told us on November 11th, 2003 that "The U.S. electric power industry lured by the promise of deregulated markets has added far more generating plants than will be needed for years, a building boom that has thrust industry into its biggest financial bust since the early 1980s and," and I still quote, "in the continental United States nearly 200,000 megawatts of new generating capacity, the equivalent of 400 big nuclear power plants, has

been added since 1999 boosting the total by 24 1 2 percent at a time when demand has flattened out." 3 She goes on to say that -- one more quote "No region has a greater surplus of electrical 4 5 capacity than the southeast." And one more quote. 6 "Since 1999 more than 51,000 megawatts of capacity have been built in a nine state region that extends 7 from Louisiana to Virginia excluding Florida, 8 9 boosting energy capacity by a third." 10 Nuclear power's primary asset is the rich and powerful constituency with its roots deep 11 12 in the current U.S. Government Administration. 13 While the Administration that you look to for a free handout pushes less conservation, you're trying to 14 sell us more energy that we don't need. 15 16 Conservation is undoubtedly the most effective 17 method of ensuring energy security. Conservation efforts defuse energy producers of energy by 18 19 reducing the need for generating capacity while stimulating the technologies, the research, the 20 manufacturing and the job creation of more efficient 21 22 technology's progress. Less for you means more for 23 us. 24 It's a fact that with existing 25 technologies we could continue our current standard

of living with less than half the energy generating 1 2 capacity now in this country. 3 To Dominion Virginia Power I would say, even though I'm one of your customers, we'd all be 4 5 better off without you. 6 MR. CAMERON: Alexis? 7 MR. ZEIGLER: Good evening. My name is Alexis Zeigler. 8 9 I don't have a long prepared speech. I'm 10 not an expert on nuclear power, nuclear energy. anybody whose paid any attention at all to what's 11 12 going on in our world today knows that nuclear 13 energy is the most expensive power that you can generate. And it seems a little bit like a charade 14 15 that we're going through and that the real issues 16 were eliminated right at the beginning. We can't 17 talk about -- or the environmental impact statement is not going to talk about alternative sources or 18 19 about demand. Demand being a key issue because 20 Dominion Energy and Power has one of the weakest 21 demand side management programs of any company in 22 the country, demand side management being 23 conservation. 24 And in strictly economic terms, demand

side management in this region would probably cost a

few cents per kilowatt-hour. Nuclear power is going to cost three, four, five, ten times that. You couldn't build nuclear power if you didn't have a government subsidy. You couldn't do it. challenge Dominion Power to try to do it without a government subsidy. You won't be able to do it. So that brings us to the question of why do we want to do this? Well, the fellow from Dominion says this is the only large scale technology that can meet future demand. It's a very telling statement. Because you have to have an incredible -- to make that statement. All over the world people are generating power either by creating megawatts, meaning you use less or wind, which is the fastest growing of the alternative energies. If you take the train from the Washington, D.C. to Chicago and you'll see the big wind mills popping up in Pennsylvania. That's real. That's something that people are doing. It works. That's a large scale power that could meet future demand.

But what's telling about the statement is only large scale technology that can meet future demand, it's the only large scale technology that they would have control over; that's the difference.

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1	That's the reason they want to do this. And I think
2	that's the reason we should oppose it.
3	Thank you.
4	MR. CAMERON: Okay. Thank you. Thank
5	you.
6	Abhaya?
7	MS. THIELE: I'm one of those shorter
8	people. I don't know if this microphone is going to
9	work or not.
10	MR. CAMERON: No, we can fix that. I
11	think.
12	MS. THIELE: Is that good enough.
13	MR. CAMERON: But she's on tiptoes. All
14	right.
15	MS. THIELE: Thank you. Much better.
16	Thank you very much.
17	My name is Abhaya Thiele. I'm a
18	resident of Buckingham County. I'm not affiliated
19	with any group, per se. I am a public citizen here
20	concerned about the environment.
21	I have to say I am very disappointed in
22	this meeting. I frankly think this is a sham. Most
23	people in this audience have white name tags with
24	the letters NRC on them.

I was going to do a count off of Louisa residents right now to just see. Louisa resident that don't have any affiliation with Dominion or the plant? There one, there's two, there's two -- there's a good number. Well, that's good. I'm happy to see that we have citizens coming out.

I guess what I want to speak to is my personal experience. I only found out about this meeting this weekend. There has to be something wrong with a public participation process when a very interested citizen only finds out a few days before a meeting about it. So I would like to encourage the NRC to contact the public newspapers, contact the local activists, contact the schools. We have three students here from the Living Education Center, and I really applaud you for taking the time to come out and show your interest and learn about this process.

I wish there were more people of all ages that showed your interest. Full steam ahead. That's just great.

So, you know, if this is a public process, there should be more people here. There have been very valid comments offered tonight, but there aren't very many people here. And I think

it's really the responsibility of the NRC to do a much better job of getting it out to the community in a layperson friendly format, not just a little box in the bottom of the paper or a press release sent to the newspaper that gets buried.

I've done some media work and it really takes a lot of perseverance to make individual contacts to get the media out. So that's one point.

There is another point I'd like to raise, is that there has been no new nuclear reactor built since the one that was started in 1973 and that was completed in 1996? Now, I wonder why that is? Could it be that it's not economically feasible? Yes, that is why. It's a very, as Alexis Zeigler spoke to, it's a very expensive way to get energy. And, as a matter of fact, it is being heavily subsidized by our government. And as a taxpayer, I don't want to have my tax money put to that use.

My understanding is in this particular process, this siting process, the government is picking up the tab for half of the costs, which is a real large amount of money. And I would think that it would be the applicant who should bear the full cost of the process.

1 I for one as a taxpayer would like to 2 see my money go to the support of energy that's 3 renewable and safe. I hate to say this, but with the amount 4 5 of terrorism in the world, we do not need more 6 invitations to terrorists, and that's what nuclear 7 power plants are. They cannot be safe enough, despite the claims by the nuclear industry. 8 9 So those are a few of my thoughts 10 tonight. I would like to come back to the next 11 meeting and I would like to see twice as many people 12 here. 13 So thank you very much for letting me 14 have the opportunity to share these few thoughts 15 with you tonight. 16 MR. CAMERON: Thank you. And thank you 17 for those suggestions on public notification, too. We are going to go to some people from 18 the local community who have signed up to talk to 19 tonight. 20 First of all, we're going to go to Bill 21 22 And then Marione Cobb. You've been with Murphey. 23 us before? Okay. Thank you, Marione. 24 Bill?

MR. MURPHEY: I'm Bill Murphey. I'm a resident of Louisa County. I do own a computer, so I'm able to access websites. And for the lady who didn't know about the meeting, I think it's been on the NRC website for six months or so. But we'll let that go.

My other comment is no nuclear power plants? Well, that's in the United States. However, world wide there are about 453 power plants operating. There are 30 under construction. About five come on line every year. So the United States might not be doing anything, but the rest of the world is.

Anyway, that's an aside. My only comment is really very tiny compared to all the rest of them that have been made tonight on the future of the world and the need for power, and all that sort of thing. No, one related to the environmental impacts of units 3 and 4 here at Lake Anna. And the reason is, is that I understood that to be the topic of the meeting.

Part of environment that is less recognized that without Dominion Power or Virginia

Power in the past there would be no lake here. That the fact is the lake is here and since it's here, it

has attracted a lot of people around the lake. So consequentially part of the environment of the plant is the people around the lake. And so what I wanted to address was the lake level concerns for units 3 and 4.

Luckily for the past couple of years we've had a lot of experience on the public response to what happens to the lake level. And Dominion has been very forthcoming in supplying the actual data in their application as to what is expected with regards to lake level. In particular, unit 3 -- and somebody mentioned this -- had evaporative loss. And specifically it's about 10,000 gallons per minute, which comes to about 23 cubic feet per second. Well, what's the context? The context is that the agreement between Dominion and the State of Virginia requires that 40 cubic feet per second be put over the dam whenever the lake level is above 248 feet above mean sea level. And if it goes below 248 feet, then they can cut the lake release to 20 cubic feet per second.

So one observation is that one should examine the agreement between Dominion Power and the State of Virginia on the matter of water released over the dam. Now, that's not an NRC concern, but I

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noticed that there are Dominion representatives here, so I'll get my dig in that way.

Now, somebody asked what the specific response would be to a third unit. Well, in the application they put in a graph. And this graph, which is page 3-5-18 of 1400 pages. Anyway, this graph shows what the lake level has been since 1978 every month. And it shows what it has been with the two units in operation. But it also shows what it would be with a third unit in operation; in other words, how much further the lake would go down.

Well, until this last drought it didn't even begin to come close to any sort of a technical concern. But in talking to people, nothing much happens -- well 250 is where they try to maintain the level. But 249, nobody says much. 248 you get some comments. When you get down to 247 then people start getting concerned, they start putting articles in the newspaper and that sort of thing. So the one question that had to be asked was what's the public reaction to the change in the lake level as a function of height below 250? And the answer is people start to get concerned when it goes down three feet.

Well, during this drought it went down 1 And if there's a third unit in 2 five feet. 3 operation, it would go down to about 7 feet below. Let's just put that fact on the side for a minute. 4 What can one do about that? 5 6 recommendation has been to make up this evaporative loss from other water sources. Well, 10,000 gallons 7 per minute is going to be kind of tough to get out 8 9 of ground water or deep wells. And so the second 10 recommendation is that Dominion start looking now into other sources of water, that is most of the 11 12 time no additional water makeup would be needed. 13 But there would be times where it would be very good for public relations to be able to make up the 14 15 evaporative loss, mainly during times of drought. 16 So that's for the third unit. 17 Now for the fourth unit, we're talking about evaporative loss of around 23,900 gallons per 18 19 minute, or about 54 cubic feet per second. It's all 20 opinion, but there is no way that this can be taken 21 from the input to Lake Anna without having the lake level drop, you know, beyond what is considered by 22 23 useful use for the people around the lake. 24 And so toward the fourth unit, we would

like to recommend very strongly that Dominion looked

1	into getting additional water from another source,
2	it could be from another river, it could be from the
3	cities, they're processing more, that sort of thing.
4	But to have an external source of water to make up
5	for the loss for the fourth unit.
6	Thank you.
7	MR. CAMERON: Thank you.
8	MR. MURPHEY: (Off microphone).
9	MR. CAMERON: All right. Now you think
10	you got some pretty specific stuff out there, and
11	we're now going to temperature.
12	MR. MURPHEY: Very fast.
13	MR. CAMERON: All right. How long is
14	this going to take you to address temperature?
15	MR. MURPHEY: A few minutes.
16	MR. CAMERON: All right.
17	MR. MURPHEY: The temperature changes
18	are addressed in great detail in the application
19	itself. And the temperature concerns are real, but
20	I believe there are reasonable solutions to them.
21	MR. CAMERON: Thank you. Thank you, Mr.
22	Murphey.
23	We're next going to go to Marione Cobb.
24	And did I pronounce her name
25	MS. COBB: You did. Thank you.

1 MR. CAMERON: Thank you. And then is it 2 Brianne? Brian. Okay. Brianne. It looks more 3 like Brianne. Okay. Go ahead, Marione. 4 I also found out about this 5 MS. COBB: 6 meeting belatedly this afternoon. I do not go on the 7 NRC website routinely. I'd like never to have to go on the NRC website. In fact, I would like there not 8 9 to be a nuclear plant here in the Louisa now or any 10 time in the future. I am concerned about the toxicity of the 11 12 waste that's generated. And Ernie Reed gave us 13 information that unfortunately I need to be reminded of every little while to even believe that we are 14 doing this to ourselves. 15 16 I would like this waste not to be stored 17 here, and I would like this waste not to be stored anywhere. I think this is a danger for ourselves, 18 19 for our children and our great, great, great, great, 20 great, great, great grandchildren. 21 As you all know, as he mentioned, Plutonium has a one half million years life. 22 23 I am concerned about the subsidies for 24 the plant, this plant and the plants all over the

And I don't know about these subsidies for

country.

1 plants around the world that probably don't even 2 have what Dominion and other U.S. plants might have 3 in the way of "safequards." But I would like the subsidies to go to safer forms of energy that would 4 5 not be a threat to me and my children and my 6 children's children. 7 Thank you. 8 MR. CAMERON: Thank you. I was doing 9 well, but -- and then we're going to go to Olivia 10 Ryan and Paul Gunter. So I just moved here three 11 MS. BOYLAN: 12 months ago. And I live less than 20 miles from 13 North Anna, and actually it was something that I was 14 concerned about before moving here. I was aware of 15 it, and I very much thought about not moving here 16 because of it. 17 And I just think that public health and the environmental events cannot be separated, and 18 19 that's something that I hear people separating all 20 the time. And, obviously, they are one in the same. 21 And that the site is obviously not environmentally 22 safe if we cannot take care of the plant's waste. 23 It's not -- nuclear energy is obviously 24 not suitable because we have no way of reintegrating

this waste back into our environment in any

1 foreseeable future. Clean up your own mess before 2 you make a new one. 3 Thank you. Thank you Brianne. 4 MR. CAMERON: Okay. Olivia? 5 6 MS. RYAN: Olivia Ryan. I'm a resident of Louisa County and Lake Anna. And I have listened 7 to all the concerns. And I realize we don't have 8 9 all the answers, but here we are in a room that's 10 heated, lighted and we do need power sources. have to find the answers and the way. None of us 11 12 like power outages. 13 I spoke to a gentleman today and he said, I might quote him, he said he was born in a 14 15 house without electricity and he lived without 16 electricity. But he didn't like outages either and 17 he did not want to die without electricity. So, I -- I ask you to keep asking the 18 19 questions and let us all work together to find the 20 right answers. Because we have a need and if it's 21 nuclear power, maybe there's something better that 22 our bright students will think of. You are the key. 23 So we look to you, but we at the moment have to rely 24 and work toward the future with the knowledge that

we have and that which you will supply us later.

1 Thank you. 2 Thank you very much, MR. CAMERON: 3 Olivia. Next we're going to go Mr. Paul Gunter. 4 5 MR. GUNTER: Thank you. My name is Paul 6 I'm with Nuclear Information and Resource Service in Washington, D.C., the director of the 7 reactor watchdog project there. 8 And I'd like to, first of all, just 9 10 point out that we are at the beginning of a process 11 on a very crucial process. The representative from 12 Dominion, I just caught the last part of your 13 presentation, but you did liken the Code of Federal 14 Regulation that covers the early site permit process 15 as to a home building permit. I'd really add in 16 this situation it's like getting a permit without a 17 plan for a septic system. And that's something that's not reasonable to build a home, and it's 18 19 certainly not reasonable to build a nuclear power station. 20 And the fact that this process does 21 22 provide for the expansion of a site which in fact is 23 probably both the agency and the industry emphasize 24 that this does not authorize construction, but in

fact it is a partial construction permit.

25

And this

is a language that was originally in the early site permit process that was removed by members of the Nuclear Energy Institute in a effort for further streamlining and obfuscating this whole process from a public point of view. And it only continues to raise all along that the due process is being cut short by this same process.

I think what we'd like to offer, particularly first to the North Anna Civic Lake Association is that recently there were two studies that just came out in early summer of this year. One was prepared by the New York State Department of Environmental Protection looking at the Hudson River and it was a detailed study that looked at both the thermal pollution and the entrainment and impingement of fish on and through the Indian Point units 2 and 3 nuclear power station as well as a couple of much smaller fossil fuel facilities. But the State of New York through its DEP is engaging the utilities there with regard to the significant damage to the marine life in the Hudson River, both in terms of the tremendous thermal discharge that's outgoing daily into that water resource, as well as the impingement of fish and the impact on fish sucked in the intake. So we'll get you a copy of

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that study. I think that that would be important for you to review.

Another study we'd like to provide you with is from the State of California, the Central Coastal Water Region, that's the equivalent to the DEP for the coastal water regions of California where they looked at the impingement and entrainment of fish in Diablo Cove, which is the receiving water for Diablo Canyon's 1 and 2 nuclear power stations. That study was just focused on two nuclear power facilities.

We're talking about over 2% billion gallons of water a day. That's roughly a square mile down to the depth of 14 feet every day being run through that facility. Whatever is in there is, if not impinged and crushed by that force of water, is pasteurized as it goes through the facility.

So clearly one of the areas that the Lake Anna Civic Association should be looking at is the impact of not only fish but spawn of fish and how that impacts the future populations of fish in the Lake Anna area. And this is what the State of California is actually -- is now relooking at a cease and desist order for the -- the cooling systems for the Diablo Canyon 1 and 2 units. And

this is, of course, an ongoing battle that's been several years now within the State of California and Pacific Gas and Electric. But clearly what we're seeing is a definite adverse impact from thermal pollution to this particular water body and the fish stocks as well as other marine life and the nutrients in that water body.

So we'll provide you with that.

We've also committed tonight to provide you with an ongoing and increasing list of lake closures and restrictions to public right of way to lakes around nuclear power stations because of security reasons.

Tonight as we're talking about expanding the site of North Anna, we're talking about expanding the possible pre-deployed weapons of mass destruction if used against us. And clearly the level of sophistication of attack that was delivered on this country, not only at the World Trade Center but in the Pentagon demonstrates that we should be concerned about building and expanding potential pre-deployed weapons of mass destruction.

These are only a few areas of concern and expansion of nuclear power will compound a whole series of concerns and risks.

1	I would just like to close with another
2	concern. And that is, not only with the issue of
3	expanding the site, but the process by which we're
4	now being thrust into. And I spoke to you earlier
5	about our concerns about how just how abbreviated
6	the public opportunity is for this particular
7	intervention. More of concern is the fact that we
8	believe and can document that the agency that will
9	provide the approval, the Nuclear Regulatory
10	Commission, has already expressed a bias. And the
11	bias is, we believe, dangerously close to those
12	issues of promotional activity which resulted in the
13	disbandment of its previous agency, the Atomic
14	Energy Commission, because it could not abide by the
15	provision of regulating on behalf of the environment
16	and the public health and safety, but had to enter
17	into the promotional arena. And we believe that the
18	Nuclear Regulatory Commission is involved close in
19	that same process now. And clearly a process which
20	eliminates some of the most germane issues such as
21	nuclear waste and the fact that as Jerry spoke to
22	earlier, that everything hinges on the agency's
23	confidence that the nuclear waste problem will be
24	solved when they're only looking at one site. And
25	that site in Yucca Mountain, Nevada, we already know

-	to be seismically active, to be ringed by a whole
2	series of very early volcanos within miles of where
3	we would put a minimum of 77,000 metric tons of
Ŀ	irradiated fuel and everybody knows that water,
;	surface water has already been found at the
,	repository level. So we know that the site is
,	compromised. We know that in fact the State of
3	Nevada has called this process a political mugging
,	by its own state attorney general. And that is the
)	process with which this agency has confidence,
-	enough confidence that they're not going to allow
2	the issue of more nuclear waste being stored on the
3	shores of Lake Anna to be raised in the early site
Ŀ	permit process and the environmental review.
5	That is a travesty to our democratic
5	process. And it is a revelation of the promotional
,	attitude that is growing within this agency to
3	promote an industry that is all but dead. Thank you.
)	MR. CAMERON: Thank you.
)	Is it Dr. James Guff?
-	DR. GRIFFIS: Griffis.
2	MR. CAMERON: Griffis. Dr. Griffis.
3	And then we're going to go to Mr. Sam Forrest.
Ŀ	Dr. Griffis?

DR. GRIFFIS: Jim Griffis, retired 1 2 Presbyterian pastor living on the shores of Lake 3 Anna. I choose Lake Anna because of the 4 benefits it has. I've lived here for ten years. 5 Ι 6 have as a hobby kind of done some work, covered for 7 one paper or two papers many public hearings. And I see some of the same opposition at all those public 8 9 hearings speaking tonight. And I came basically to 10 say something positive. I'm glad for Dominion Power's 11 12 application. I'm glad they're thinking about the 13 future, even though they may say to them we can't 14 build here. 15 I'm glad that they are thinking further 16 of others to provide electricity so that all of us 17 go home and watch TV tonight. I'm glad that the safety of this plant 18 should be reimbursed by letting possibly another 19 plant be. Remember one, two or three in the -- in 20 21 safety. These things to be aware and you're talking 22 about potential growth. 23 I'm also glad for the school building 24 and the thousands of taxes that Virginia Power pays

1 to Louisa County so we citizens didn't have to build 2 it alone. 3 I'm glad for the influence it has made in the past 25 years in Louisa County. I'd like to 4 see it continue. 5 6 MR. CAMERON: Thank you, Dr. Griffis. 7 We're next going to Sam Forrest and then 8 to Mr. Day. 9 Mr. Forrest? 10 MR. FORREST: Good evening. I'm Sam Forrest from Louisa. I live over at Greensprings, 11 12 and I too was lucky to get here tonight. I heard it 13 on the radio in the evening. So I called several people, and nobody had heard of it. I even called 14 the Sheriff's Department. And he didn't know about 15 16 But I'm sure he's going to rise and get up to 17 speed when the terrorists come, whatever. It's all been said here tonight much 18 19 better than I can, but I'll just affirm my 20 sentiments. I'm opposed to nuclear energy anywhere on earth. It's a bad idea. It's like having a 21 terrorist for a neighbor and you don't know when 22 23 it's going to strike, and everybody knows all the

reasons.

And I want to say, not rudely, but I don't want to be punished by your lack of imagination. I need the power company to do better and protect me.

Thank you.

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MR. CAMERON: And thank you, Mr. Forest.

And we're going to go to Mr. Day and
then to Steve Montgomery.

Thank you very much. MR. DAY. I, too, only learned of this meeting rather late. think maybe perhaps all parties involved could have done, perhaps, a little bit better job of informing of this opportunity. Perhaps Virginia Power could have included in my bill right next to the amount owed and pointed out to me that this opportunity existed. But nonetheless, I want to thank the NRC for this opportunity and I'm impressed by their organization and their hospitality and the openness by which this meeting has so far taken place. I'm at a bit of a loss of how to respond, because I understand that this meeting is about the early site permit and it seems to me with so many things taken off the table to be considered, it seems to have bifurcated the process.

I didn't mention my name is Donal Day. 1 I'm from Charlottesville. In fact, I'm not here as 2 3 an anti-technologist. In fact, I'm a nuclear physicist at the University of Virginia and I study 4 nuclear processes through electron scattering at the 5 6 National Laboratories that in fact are funded by the 7 Department of Energy. So it's not out of fear of nuclear things that I'm here. 8 9 I think what is important, I mean the 10 fact of the matter is that this process is somewhat bifurcated, we know that the North Anna facility was 11 12 built for four nuclear power plants. And in fact 13 only two built. In fact, we've learned a lot, our sensitivity to things environmental has been 14 increased. And, in fact, the world has changed 15 16 since that time. 17 But I think it's very important for the public to decide if we want to allow our state and 18 19 our national energy policies to be driven by the interests of the large power companies and their 20 21 allies, and whether or not we will pursue a more 22 enlightened policy. 23 Nuclear power cannot stand on its own.

It is a heavily subsidized energy source and there

is no other energy source that is so heavily subsidized.

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There's no solution to the nuclear waste People have asked this question tonight problem. about how much nuclear waste is extracted out of the reactors. I looked up in a textbook before I came here, but after every refueling, and that depends on how long -- how often that is depends on the efficiency of the plant. Virginia Power has gone 450 days between refuelings. But at every refueling, approximately 1500 metric tons of highly radioactive waste is removed from the reactor. There's no solution to this radioactive waste problem that at present is being stored on the site waiting for a solution that, frankly, will never appear because of the confluence of technical and political problems.

9/11 changed everything, and at the same time it changed nothing. The officials at Dominion Power have not yet realized that on their power station exists one of the most attractive -- for a terrorist organization. I do not know what the flight time is between the Louisa Airport, but I can imagine that a direct hit on the spent fuel nuclear

storage would have a catastrophic environmental impact.

Nuclear power continues to face a lot of unforeseen problems that will keep coming up as they age and the technical issues come into light. Such as the corrosion of the nuclear vessel heads. There was a very serious case as Davis-Besse. And as I understand it, the reactor vessel heads at North Anna are scheduled to be replaced.

What other problems might we face just around the horizon?

To be frank, nuclear power actually is just a ridiculously stupid and expensive method for doing what is nothing more than boiling water.

There are alternatives to boiling water, ones that don't involve nuclear waste that lasts for hundreds of thousands of years. And to follow up the comments of the last speaker, I think Virginia deserves better than returning to a technology that lacks the public trust, that lacks the economic vigor to stand alone and that burdens future generations with an unwanted legacy.

Dominion Power owes Virginians a better place. And I might note that in the words and comments of a Dominion Power official here tonight,

he never mentioned the one technology, the one 1 2 opportunity to provide our future needs, and that is 3 conservation. 4 Thank you very much. 5 Okay. Thank you, Mr. Day. MR. CAMERON: 6 Do we have Mr. Montgomery? Oh, hi, 7 Steve. 8 MR. MONTGOMERY: My name is Steve 9 Montgomery. And after hearing where so many of you 10 come from to this meeting, I just want to welcome you to Louisa County. I'm kind of an unusual 11 12 person, because I graduated next door here in the 13 mid-'60s and then went on to college. And I couldn't wait to get of Louisa. And then after 14 15 teaching school in the big city one year, I said, 16 man, I am ready to get back to Louisa. 17 So I came back here and taught physical education and coached football and track. And then 18 at about 1974 I saw this little advertisement about 19 20 the nuclear plant that was being built. And I just 21 said, gosh, you know, this sounds like an 22 opportunity. And I was nervous, but I said just let 23 me check into this. 24 And so I went down and, you know, I 25 thought it really sounded like a great chance to

enhance myself and take a new challenge. And that 1 2 was 29 years ago. And I've been at Dominion North 3 Anna ever since. Both of my boys have worked there. My 4 wife, who taught school for 30 years with 29 years 5 of those being in Louisa County, retired two years 6 7 ago and she now works there part-time in the 8 processing center. My grandson, I took pride taking him 9 10 down and letting him swim in the lake. We fished after we go out and fish. 11 12 And I guess in general, I just want to 13 let you know that I'm really proud that I work there. And from living in Louisa all my life, I've 14 15 seen unbelievable changes in this country. 16 My dad had the only grocery store in 17 this area. And, you know, it was just to see what's changed. Not just because of North Anna, but just 18 19 because of the people that have come here, like for And I don't call them the lake 20 the lake folks. 21 folks, we're all Louisa residents. And it's just --22 I'm just really proud to be a resident here. 23 And as far as the early site permit, I 24 feel very comfortable with this. I mean, I'm

planning to live here. I'm going to retire in three

years, which I probably shouldn't be saying right 1 2 now, but anyway my wife and I live here, and we plan 3 to live here. I hope to be able to work part-time at North Anna when I do retire. 4 And when I bring people into the plant 5 6 as far as, you know, when they come there to work 7 for part-time work or whatever, after I talk to them they have a whole different view of nuclear power 8 9 after they've worked there. And the safety record 10 and just what we're doing to protect the Because this is our county, and I'm 11 environment. 12 proud of it. And I hope we can continue to protect 13 it. And I hope sometime with this being a 14 15 night meeting, that you'll come to Louisa again in 16 the daytime and just see what we have here and what 17 we have to offer. 18 Thanks. 19 MR. CAMERON: Okay. Thank you very 20 much. 21 We're going to go next to Brian Buckley 22 and then Page Kemp. 23 Brian? 24 MR. BUCKLEY: No, thanks. 25 MR. CAMERON: All right. No, Brian.

All right. Page Kemp?

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MR. KEMP: My name is Page Kemp and I do live in Louisa County. And just like Steve, lived here all my life.

I started in North Anna about the same time that Steve did. I just want you to know I support this process tonight, that you could come out and talk about this early site permit and your comment. I appreciate those. But I tell you as a member of the staff at North Anna Power Station, I personally and I know all the employees at North Anna are committed to nuclear safety at that site. We want to make sure we operate it safely. We want to make sure the employees are safe. We want people in the public to be safe. But we're also focused on environmental safety . And I believe if you look at the operating record at North Anna, what we have done, we have helped the air quality and the environmental quality around the North Anna Power Station.

I know we all are committed to that and we will continue to be committed to environmental safety at North Anna. And I do support the early site permit process. And I hope it's approved by the Nuclear Regulatory Commission.

1 Thank you. 2 Thank you, Page. MR. CAMERON: 3 Is there a Bill Streit? MR. STREIT: 4 Yes. 5 MR. CAMERON: Bill? And then we're 6 going to go to --7 MR. STREIT: Good evening. My name is Bill Streit. I'm a resident of Louisa County also. 8 9 And I wasn't sure if I was going to say anything 10 I put my name on the card because I wanted tonight. to see what the process was like. And I do 11 12 appreciate the process that people are able to come 13 and speak, and that's why I want to add my voice to others who have spoken in opposition to this 14 15 project. 16 I grew up in Pennsylvania not far from 17 Three Mile Island. Of course, not far enough. I presently belong to a movement called the Catholic 18 19 Worker, and it has a long history of opposing war 20 and nuclear weapons. So my opposition to nuclear 21 weapons is not only the nightmare at the opposing 22 their use, but their very existence because of the 23 pollution and the poisoning of the planet. 24 whether it's wastes from nuclear weapons or waste

from a commercial reactor, it's poison.

1 It seems to me it doesn't make any sense 2 when we don't have, as was said so well by so many 3 others here, we don't have any solution to this problem why create more of the problem? 4 5 My ten year old son and my six year old 6 daughter -- well, my two daughters would kind of see 7 this as just a very common sense thing. You know, if we don't know what we're doing with all the waste 8 9 that's piling up already, you know, why create more. 10 It's like the toilet that doesn't work, you know. 11 So I would really like to be a part of a 12 meeting in the future that talks seriously about 13 dismantling the power stations at Lake Anna and that seriously considers alternative ways of energy and 14 15 conservation. 16 Presently we live in a way that we burn 17 wood, we trying to find many ways of not using as much power as the planet seems to be crazy in using. 18 19 So, yes, I appreciate the electricity but at what 20 cost? So I really believe that in people 21 power, that people's voices can join together. 22 23 I'd just for the record like to put my name down as 24 an unequivocal no.

1 MR. CAMERON: All right. Thank you, Bill. 2 3 Alex? MS. McGEE: Hi. My name is Alex McGee. 4 And I've lived in Albermarle County for three years. 5 6 And I lived in Louisa County for six years before 7 that. 8 And in the business I ran here many 9 customers were Dominion Power employees, so I am 10 definitely aware of the economic value of the plant being here. 11 12 I previously lived in Utah with my 13 parents where they have seen the tragedy of "down-14 winders". This is the term used for cities 15 subjected to radioactive waste in testing in the 16 And these people were assured by the 17 Government hat they were safe. And these people are now suffering from deformities and their children 18 19 are suffering from deformities. 20 My parents' home state, Utah, is a popular destination for the nuclear waste that no 21 22 Impoverished Navajos are one knows what to do with. 23 resorting to selling their land for nuclear waste 24 storage.

1 As a consumer of Dominion Power, I would 2 like my consumer dollars to go to wind and hydro 3 power, not nuclear power. I believe these are safer for employees and all citizens. And as a taxpayer, 4 I would like to ask of the NRC to use your 5 6 government influence to reallocate government 7 subsidies away from nuclear power and towards hydro 8 and wind power. 9 I understand that the process tonight 10 instructs you not to consider alternative energy options at this time. But I ask you to deny this 11 12 application simply on the basis of the unknown 13 dangers of nuclear energy. Then Dominion Power will have to examine alternative energy now. 14 15 Thank you. 16 MR. CAMERON: Okay. Thank you, Alex. 17 We're going to go to Mr. Amzic -- I think -- no. Amzic Sullivan and then Jon Kessler. 18 19 MS. SULLIVAN: There are Mr. Amzics, I'm 20 just not one of them. My name is Amzic Sullivan. 21 live in Green County. And I'd like to begin by saying that the 22 23 Louisa County line is a fiction created by humans. 24 And the fish and the water and the air don't 25 recognize county lines. And so even though it may

1 be Louisa's backyard, it's also my backyard all the 2 way to Green County. 3 I don't have a Ph.D in biology or engineering or nuclear physics, or any other kind of 4 5 science. But I do, however, have a Ph.D in "oops". 6 All of my life I've been living 7 downstream, and I've moved around quite a lot. the age of two I was irradiated around the neck 8 9 Not to save my life, but because the very 10 earnest doctors that my parents trusted my care to had a new treatment for my condition. It was an old 11 12 condition, it was going to go away all by itself, 13 but they had this new nuclear medicine thing that they wanted to use. And so 27 years later I was 14 15 diagnosed with thyroid cancer. 16 The doctors cut my throat and took out 17 my thyroid, and now I take a pill everyday to regulate my hormones. Oops the doctor said to me at 18 19 that time. So sorry, we didn't know. During my childhood in Virginia I played 20 in clouds of DDT every night during the summer that 21 22 were used to kill mosquitoes 23 For millennia human beings slapped 24 mosquitoes to kill them.

When I went to college I lived in a very 1 rural and beautiful part of New England where the 2 3 lakes died from agricultural run-off, and I drank the water that was infused with that run-off. 4 For 30 years I lived downstream from the 5 6 Connecticut Nuclear Power plant that Old Dominion 7 And 27 years after I was in college I was diagnosed with breast cancer. I had both my breasts 8 9 cut off to save my life so that I could raise my two 10 young daughters. And I was pumped full of chemotherapy in hopes that the breast cancer would 11 12 be eliminated. The cost at that time, which was ten 13 years ago, was approximately \$500,000 for my treatment. I don't know who lives down downstream 14 from the chemotherapy that I peed into the toilet, 15 16 but somebody does. Oops, so sorry. We didn't know 17 about that. It's ten years later and this past June 18 19 I was diagnostic with metastatic breast cancer. 20 Oops, so sorry. We didn't know. I stand before you as one of millions of 21 22 ordinary women who are like the canaries who were 23 taken into the coal mines in an earlier 24 technological age; so that by their death they would warn the miners that their environment was corrupted and fatal.

I have now two daughters, Virginia residents, and a granddaughter 18 months old and therefore have a huge emotional investment in there being no more oops, so sorry. We didn't know. We do know. And you scientists who are very earnest and dedicated people, just as my oncologists are, and just as my doctor when I was two years old was, you know, too. But we get disconnected from what we know.

We do know, as has been said very eloquently by the scientists who have spoken already, that radiation is exceedingly dangerous and toxic. We do know that Murphy's Law says that what can go wrong, will go wrong. Think Chernobyl, Three Mile Island and so forth. And by the way, didn't we just invade Iraq, supposed nuclear capacities far less serious than the one that exists in Louisa County.

We do know that the half life of spent nuclear material is far longer than our ability to contain it. And we do know that monied interests are more interested in technology which can enrich them further than in finding safe sources of energy which

are less lucrative and would protect someone like me or my daughter or your sister.

Think Exxon Valdez. Think Enron. Think Karen Silkwood. Erin Brochovich. A Civil Action.

I am truly struck by the concern of the regulations for the "risk" to the "applicants" in this process. Because it gives it a kind of human quality to use those words. And I would just remember that risk in this context is financial and applicant is a corporation, a non-human, nonliving entity. And I ask that those of you on the nuclear regulation committee whose salaries my tax dollars pay, that higher consideration be given to the risk, to the life and health and my daughter, the water, the air and the animals than to the financial risk of 21st century of robber barons who are so disconnected from reality that they cannot see the risk not just to me, but to their own families.

I'm glad for those people who live near
Lake Anna who have not gone through the medical
situations that I have. And I hope that that
continues to be so. But there is no way based on
the research I've done that I can believe that I am
simply an unusual or unlucky person in this
environment.

To the scientists and engineers who work 1 2 for the NRC, I believe that you're dedicated to 3 ensuring safety in nuclear energy. I truly believe I spoke with some of you earlier. I don't 4 doubt your integrity or your intelligence. 5 6 it is obvious to those of us who live downstream and 7 have been doing so for our entire lives, and experiencing the consequences of thousands of 8 9 scientists over the past 100 years, we know that the 10 only safe decision, the only decision that carries no risk is the decision not to use nuclear decision. 11 12 We know that. We don't need more research. 13 I'm willing to put on an extra sweater. I'm willing to drive less. I'm willing to use solar 14 15 I'm willing to sweat more in the summer. I'm power. 16 willing to slap mosquitoes if it means that my 17 daughter and your sister don't have to go through what I've been through. 18 19 And I ask that you please connect to me. 20 Please connect to the risk to my granddaughter and yours above that of non-living corporate structures. 21 22 Thank you. 23 MR. CAMERON: Mr. Kessler and Mr. Burke 24 and Mr. Robert Bishop.

1 MR. KESSLER: I'll try to make this 2 pretty brief. 3 I'm a Charlottesville resident. I lived in Louisa for ten years and I've lived in 4 5 Charlottesville for six years. I'm a homeowner 6 there and also a business owner of a food business. So it's within 30 miles of the nuclear plant. 7 I'd like to thank the NRC people for 8 9 coming and organizing this event. And I'd also like 10 to thank the workers at the plant for keeping the plant as safe as possible. 11 12 I wanted to comment on a couple of 13 process issues regarding -- a couple have been mentioned earlier. The safety review process, I 14 think that there is a timing issue there that has 15 16 been addressed, and I'd like to see that date for 17 comment extended. And I also think there's a larger 18 19 problem with the waste issue. If someone has made 20 some decision at some point that waste is not being 21 considered as part of the environmental impact, it 22 seems like a major problem. There's been waste in 23 the plant for the whole existence, and there's no 24 reason to think -- I mean, there's always going to

be waste there, even if it's transported out of the

county. Even if it is transported, it'll still be generated there, so the waste issue has to be addressed.

One other environmental issue I wanted to mention was as far as drought and water issues, we recently had a pretty severe drought, but I don't think that would be the worst case scenario for the time we're looking at in the next, probably, 30 years or more that the plant is in operation. Our climate is changing. There is evidence to suggest that it's not necessarily a slow and steady change, but rather it could be more like a switch that switched on and off. It could change much more dramatically.

And so I would encourage when the water issues are examined, that more severe droughts are considered, certainly than the one a couple of years ago, recently. Even worse than any on record, I would suggest being considered.

And finally, to the Dominion Power people. There's an institute called the Rocky Mountain Institute that works with power companies to help them see how they can most profitably, you know, invest their money. And they can certainly help even with subsidies that might be available for

1 nuclear power. I believe that with the money that 2 the power company -- and I'm not a Dominion customer 3 -- would have to invest in the power plant, they could help them make a more profitable investment. 4 So that's the Rocky Mountain Institute and they do 5 6 have a website. 7 Thank you very much. 8 MR. CAMERON: Thank you, Jon. 9 Mr. Robert Bishop. And then we're going 10 to go to our last three speakers for the evening, starting to Mr. Lou Zeller after that. 11 Oh, I'm sorry. Did we get Ian Burke? 12 13 Okay. Go ahead, Ian. Was that you. I'm sorry. 14 skipped you. 15 MR. BURKE: No problem. Okay. 16 So there is a very cheap answer to the 17 energy problem, which is to use much, much less of There were about -- I don't know -- 20 percent 18 it. 19 of us in the world who live like we Americans do, 20 yet we use 80 percent of its resources. So I'm sure 21 we could use much, much less. And if you're worried 22 about terrorist attacks against the nuclear plants, 23 then maybe you should tell your government to stop

funding to terrorist organizations.

The NRC claims that it can produce this electricity with minimal effects on the environment, but all it can do is postpone the effects by further regulations and burying its waste underground for future generations to deal with. These things that we're burying underground are leaking into our underground aquifers and poisoning the environment. All it's going to do is leave it for, like I said, other people to deal to deal with later instead of us.

It's already been pointed out most of the effects of the isotopes that are produced in nuclear waste. One of them plutonium, which one pound of it is enough to give everybody in the world And in the year 2000 it was estimated that cancer. nuclear power had generated 1,139 tons of plutonium. In building the nuclear power plants we must remember that the costs go way beyond that of economic decisions that govern the decisions that things such as the power company entities make. it causes high environmental devastation one way or another -- if there is a nuclear meltdown. this nuclear reactor? I don't think so. Killing tens of thousands of people and not to mention years of genetic mutation in all walks of life.

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1 We don't need nuclear power, we need 2 conservation. We need to respect current 3 generations and future ones. Using the earth's resources for our material needs cannot do any of 4 Please don't build this nuclear reactor and 5 this. 6 respect ourselves and our children, and their children. 7 8 Thank you. 9 MR. CAMERON: Thank you very much. 10 And now we go to Mr. Bob Bishop and then Lou Zeller. 11 12 MR. BISHOP: Good evening. 13 Given the hour of the night, I'm going to quickly summarize my prepared comments. But I 14 15 did want to take the opportunity to give you my 16 perspective. I've been involved in nuclear matters 17 for six months shy of 40 years now. 18 I know that's 19 hard to imagine, a young fellow such as I. started out being asked to operate nuclear 20 submarines. Became involved in the design and 21 construction of nuclear power plants, the licensing 22 23 Worked in state government helping devise of them.

a state energy policy which those of us who are old

enough to remember, always called the first energy crises back in 1973/1974.

Then became a lawyer. Got involved in working with the construction, design and licensing of nuclear power plants. And most recently, I'm now with an organization called the Nuclear Energy Institute involved in addressing generic, regulatory, legal, technical, communication, political issues associated with nuclear energy and all of its uses.

As probably the first spokesperson tonight, the gentleman from the Lake Anna Civic Association observed, it is certainly not illogical or unreasonable to be concerned about those things that you do not understand. I come to you tonight with the experience of having been involved in virtually every facet of this technology for a great period of time, and perhaps one of the few people you'll have the opportunity to talk with who relied on it, not only purposely but willingly, living within 120 feet of an operating nuclear reactor for the better part of six years. That was not just my job, that was what I did, that was how I chose to serve my country. It gave me a healthy respect to the technology. It also enabled me to have the

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perspective that, unfortunately, many of you do not of understanding what it is, how it can be used, how it can be misused. But it gives me the opportunity to observe that I do respect it, but I do not fear it. But let me just give you a couple of quick comments from my perspective.

I've been also involved in this process, as it turns out, working on licensing nuclear power plants and working with a variety of entities, as you might imagine, in a variety of different context in trying to use what we have to make the best decisions we can. And that includes a licensing process that will result in a decision that is better informed, that is reached in a more timely fashion.

In my view, it is most important for there to be an answer that this is a suitable facility or not as soon as possible. The process that the NRC embarked on, and I happened to be involved from 1987 on, was to try to analyze and develop a process that would be more efficient and more effective in terms of resources of people, in terms of technology, in terms of enabling decision makers to come to their best possible decision.

That's resulted in a series of

evolutions of the licensing process. It's resulted

3 in federal law which has created and changed some

4 aspects of it that the NRC was evaluating. And it is

5 the process that has now been undertaken in this

first context by Dominion, by two other companies as

7 you have heard in Mississippi and in Illinois.

I think it interesting that today marks the 50th anniversary of a speech by President Eisenhower now called the "Atoms for Peace" speech. He declares, and our Congress has supported that in the 50 years since, that it is our national policy to promote the peaceful use of nuclear energy consistent with the common defense and security, consistent with the protection of the public health and safety.

I can't speak for the NRC. I can assure you from my perspective that is what I do, that is what I am interested in. It is, obviously, up to each of you to make your own decisions. But I think a number of you have observed that the people before you and those of you here present have wrong perspectives, but I think there's no question that everyone here is trying to reflect on what they believe, what they understand, what they know and

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help the NRC come to the best possible decision it can.

Again, just emphasize a couple of points. This is not to construct this plant. The reason this process has been segmented the way it has is so timely decisions can be made in an orderly sequence. And the first thing to do is find out if this site is suitable. Dominion and other companies are looking, as they must, to carry out their responsibilities to their customers for new sources of energy. If they are granted an early site permit for this station, that means that they could use this facility, this site to build a nuclear power plant. They could also use it for other facilities, potentially. But their job is not an easy one.

I've been involved, again, in a variety of contexts and I do know that they take their job seriously to try to do the best they can to satisfy the needs and the legal responsibilities that they have.

We can certainly -- I think because of the hour of the night, I would not emphasize anymore than observe that those of you who understand nuclear energy, who have been following it from whatever your perspective, you understand that

there's no technology that isn't without risk.

There are many that have benefits and there's always a question of public policy to evaluate the risk and the benefit to try to come to the most informed decision possible.

are not well known, and are certainly not emphasized. I just did a quick analysis and, for example, nuclear energy in Virginia caused there to be roughly 7 million -- it's a big number -- metric tons less of carbon. That's pretty easy to visualize that that's a huge amount. Not to be emitted into the environment in 2002 because of the operation of their nuclear facilities.

When you talk about environment, you need to understand that there are a variety of different aspects to the environment like other sources of other energies that have different impacts on the environment.

You should know that nuclear energy does not emit greenhouse gases. That is of grave concern to many who study and worry about environmental future.

Nitric oxide, sulfur dioxide, hopefully you know of them and certainly there are a number of people who have some experience in that context.

This is a process to provide more opportunity for public participation. This is one example. If you had an opportunity to be here at the first of the presentation, you will see that this system involves the public a great deal more, a great deal earlier before the decisions are made that become more and more difficult to change.

Dominion were to actually decide to build a facility, all of the issues that have been raised -- I shouldn't say all. Many of the issues that have been raised, like need for power, like other alternatives, will be dealt with at that time. But, again, this is supposed to be a logical thoughtful segmented process so that the issue here is this site suitable for possible future development. It is not a guarantee that there will be a nuclear power plant here. That is a decision that will be made in the future as Dominion goes about its responsibilities.

I think it is important, this is the first of these meetings under this new system that I've been able to participate. I think those of you

who have been throughout can better understand the 1 2 value of the regulator getting a perspective that 3 each of you individually bring. That is not to say that anyone of us are going to be able to control 4 the decision, but I think it's important for each of 5 6 us to have this kind of opportunity to register our 7 views. I think that this process and Dominion's 8 9 exercise of it, its leadership in going forward in 10 this area is a very important and positive step for evaluating in a consciousness way how their 11 12 responsibilities for future energy supply can be 13 achieved. 14 And I thank you. 15 MR. CAMERON: Thank you, Bob. 16 We're going to Mr. Lou Zeller now. And 17 then we're going to Brendan Hoffman and David. 18 Lou? 19 MR. ZELLER: My name is Lou Zeller. I'm on the staff of the Blue Ridge Environmental Defense 20 21 League. Blue Ridge is about to celebrate its 20th 22 anniversary next March. I've been on the staff with 23 Blue Ridge since 1986. 24 After hearing the last speaker, I'm 25 forced to conjecture if the Nuclear Energy Institute

is lobbying the President to adhere to the 1 2 provisions of the -- protocol under the United 3 Nations framework to reduce greenhouse gases. Let's take a look at what North Anna has 4 released into the environment, if not carbon 5 6 dioxide. I've brought several documents here. was in somewhat of a hurry. But I want to include 7 these documents by reference into the hearing record 8 9 tonight. 10 This is a scoping hearing for the Nuclear Regulatory Commission under which we are 11 12 asked to submit information which the Nuclear 13 Regulatory Commission should consider in the development of this environmental impact statement. 14 15 That's why I have prepared these documents. 16 This is from the Nuclear Regulatory Commission, NUREG/CR-2907, radioactive materials 17 released from nuclear power plants. This was an 18 19 annual report from 1988. I've selected 1988, about 20 15 years ago, because of the cancer latency period. 21 After 20 years you have -- and I believe you are beginning -- maybe beginning to reap the whirlwind. 22 23 In this report, this NUREG report, there 24 was a risk in here for the North Anna plant 40

miles northwest of Richmond, unit 1 and unit 2.

There are airborne effluents and radionuclides released which number 26 including some of the cesium and other elements that were mentioned by previous speakers. Liquid effluents, nuclear -- or radionuclides released number 32 in this report.

And just scanning the highlights here. The volume of total liquid tritium released in that year was 1,940 liters.

The volume of liquid -- waste total prior to dilution released, again in 1988, was 338 million liters. And that's not accounting for the dilution, which is four orders of magnitude greater than that.

I have another document here. This is the Department of Energy award contract, contract number DEAC0299CH1088 which is granted to Duke/
Cogema/Stone & Webster on March 22, 1999. This is a plutonium fuel program by which nuclear weapons dismantled warheads which are laying around in various sites around the United States would be fabricated into fuel to be used in reactors. This is a very bad program. We have expended -- Blue Ridge has expended a great deal of energy opposing this program. And the reason I bring it to you tonight is because in here it mentions North Anna.

1	Under the mission reactors to perform
2	irradiation services for plutonium fuel from these
3	warheads turned into nuclear power fuel rods, the
4	contractor expressed the warning that Duke Power
5	Company and the Virginia Electric Power Company
6	shall, subject to regulatory approval, provide
7	irradiation services, etcetera, etcetera. They
8	mention in here the reactors that operate by Duke
9	Energy in North and South Carolina and North Anna
10	unit 1 and North Anna unit 2. It also goes in
11	the contract which is still in force by the way. I
12	know that North Anna has been supposedly withdrawn,
13	but it's still in the contract which I'm holding in
14	my hands. It says further should a mission reactor,
15	that's a reactor burning plutonium fuel, need to be
16	replaced for the reasons stated above, the
17	contractor is to propose a replacement mission
18	reactor to the contracting officer and the proposal
19	shall include the following: an explanation of why
20	the replacement is necessary, a schedule,
21	modification regarding safety and enforcement
22	records, etcetera, etcetera.
23	I'd be glad to provide more information
24	about this in written comments.

Okay. There's just two more here, and I'll be very quick, Chip. And I appreciate the time here tonight. I appreciate the people, the Nuclear Regulatory Commission coming here tonight and providing us an opportunity.

This is -- this was generated by

Institute for Energy and Environmental Research in

April of 1996. This is a relatively recent document.

In here it says "the revelations of the past two decades such as systematic environmental mismanagement, fabricated data, coverups and human experiments without informed consent have eroded any faith in that priesthood that the public may have had." That is the nuclear priesthood. "In the meantime, reliance on nuclear power has grown and the already large quantities of weapons-useable plutonium in the world are rising rapidly." quotes Johanson here. "It will not be possible to provide energy needed to bring a decent standard of living to the world's poor with a sustained economic well being of the industrialized countries in environmentally acceptable ways if the present energy course continues. The path of sustainable society requires more efficient use and a shift to a variety of renewable energy resources."

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The Union of Concerned Scientists in here saying with regards to the new reactor designs which are on the drawing board, perhaps for North Anna if Dominion goes forward with this project, the Union of Concerns Scientists says regarding advanced reactors, as a general proposition "there is nothing inherently safe about nuclear reactors regardless of the attention to design, construction, operation and management of nuclear reactors. There's always something that could be done or not done to render the reactor dangerous."

Finally, in the preliminary statements tonight there was a reference to the National Environmental Policy Act and what must be considered in this document. Well, according to my understanding of the law that under the National Environmental Policy Act the no action alternative must also be considered. The no action alternative if power needs are rising, forces us to consider other forms of power generation. Not only fossil fuel but the other forms which are renewable.

And according to -- affordable energy plan for the southern United States published by REPP, which is the Renewable Energy Policy Project in Washington, D.C., "progressive energy programs

will reduce the annual growth due to demand to electricity from 1.8 percent to seven tenths of a percent. As a result, 236 million megawatts of new demand which is the equivalent of the output of 112 new power plants 300 megawatts each in size can be avoided." Under the -- part of the saving from efficiency programs will be used to increase the use of renewable generation. Under the plan renewable sources will grow to provide ten percent of the electricity generated in the region by the year 2020. It addresses nuclear power in here, and I don't want to go -- nuclear power has been a controversial and an expensive source of power since the 1960s. It has received 95 percent of the total federal subsidies for [nuclear, wind and solar?] since 1947. When adjusted for total power production, nuclear power has been 18 times more expensive than power in terms of subsidy received over the first 25 years of either technology's development. I will have written comments before the end of the comment period here.

power is a public health catastrophe hidden in plain

According to our estimation, nuclear

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I encourage people of Louisa County to join 1 sight. 2 in our planned intervention in addition to the 3 ongoing process which is kicked off here tonight, the environmental impact statement. The deadline 4 5 for that, as has been said, in January 2nd. And I 6 have a list here as it's growing already. 7 Thank you. 8 MR. CAMERON: Okay. Thank you, Lou. And 9 thank you for coming up all the way from North 10 Carolina. We're going to go to Brendan Hoffman and 11 12 then our last speaker, David Ritter. 13 Brendan? MR. HOFFMAN: Good evening. Thanks for 14 15 sticking around. My name is Brendan Hoffman. I'm 16 with Public Citizen in Washington, D.C. 17 I just wanted to start out with a question, actually, first. I'm not sure if it'll 18 19 get answered tonight, so it may just be a rhetorical question. But my question is why the North Anna 20 site was chosen in the first place? 21 As we heard, it's very expensive to file 22 23 the early site permit application even with the 24 massive government subsidies. So I'm sure that 25 Dominion thought very carefully about what site they were going to choose. This is the only one currently that they've applied for. So, I'm not sure whether we'll find out why North Anna specifically as opposed to all the other potential sites around the country that could have been chosen, why North Anna was picked.

Second, I wanted to draw your attention to a study that was just released on Friday. study by Greenpeace France. The study is, obviously, in French, but there is an English language summary available. I know we've beaten this point over the head so far tonight that this is not going to be part of the early site permit application process, but I think it's worth pointing out anyway that the study found that dollar for dollar the investment dollars put towards a nuclear power plant, an equal number of dollars could create five times as many jobs and 2.3 times as much electricity as a nuclear power plant would. think that's worth thinking about just in terms of whether or not nuclear power is really the best option.

As I understood the argument from the gentleman representing Dominion, it seemed that at current usage rates it seems we're going to need

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1 more power and we don't want to rely exclusively on 2 natural gas and import that, therefore we're going 3 to need to build nuclear power plants. And this just seems like another option -- dollar seems like a far 4 5 better value. Obviously, though, conservation is the 6 best and cheapest way to go with preserving that 7 power. And finally, I just wanted to reiterate 8 9 I believe that the period for intervention needs to 10 be extended. As I understand it, it seems that all the information that has been released that will be 11 12 used for the safety evaluation report, all that 13 information is out yet it seems that the NRC is 14 going to be taking months and months to review that data and release their report, whereas the public is 15 16 given one month to formulate their interpretations. 17 And that one month period includes two major federal 18 holidays. 19 So, in the interest of time, that's it. 20 Thanks. 21 MR. CAMERON: Thank you. 22 And Dave Ritter. 23 Okay. Thanks, everyone, MR. RITTER: 24 for sticking in there. I'll try to be really quick

so everyone can make a rush for the bathroom.

Let's see. Someone earlier said that maybe there's something better, one of the earlier commenters. Maybe there's a better option than nuclear.

Well, first of all, I'm sorry. I didn't introduce myself properly. David Ritter, Public Citizen from Washington, D.C. We're a nonprofit public interest group representing approximately 150,000 U.S. citizens and we don't take any corporate or government money.

Nuclear is a waste of resources. It's a waste of financial, natural and intellectual resources. And as far as the comments that people can put in here tonight, what people really care about are making public comments that matter, that potentially can make some kind of difference. having participated in a lot of these processes for nuclear plants and nuclear waste, I can say that there's guite a substantive difference between submitting public comments within the public comment period where they're simply tallied up and put in different columns of how many people said approximately this and how many people said approximately this versus having the actual quasilegal process that includes contention and

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adjudication. That's where the comments can really make a difference. And that's what people really care about, so that therein is the reason behind our request to indefinitely extend the period for submitting contentions based on the lack of a SER and the draft environmental impact statement at this point in time.

Others spoke of how expensive nuclear is. Public Citizen, we did a report on that within the last couple of years that discusses how states that rely more on nuclear power ratepayers tend to pay more for their electricity. And you can find that on our website at www.citizen.org.

There was a commenter who made the building and home analogy. I think Paul Gunter already spoke about this, but I'd also like to throw in that my -- I don't live in a house, I live in an apartment. But my apartment doesn't release radiation on a regular basis. It doesn't require an evacuation plan, only if there is a fire, of course. But for other people. There's no iodine pills if you live nearby my apartment.

Dominion as far as whether they're really developing a plan for a new plant there, I think it's almost certain that they are, otherwise

they would not be investing the substantial quantities of money in order to go through this early site permit process.

And, of course, someone brought up earlier the clean air energy mythology was brought back for us. This, not only is it problematic to make that assertion when you consider all of the greenhouse emissions and the use of fossil fuels involved in the entire fuel stream for nuclear energy, because you have to remember that the nuclear fuel, the uranium what goes into the heart of the reactor itself, it doesn't just magically appears there. It actually comes from somewhere. And then when it is done for the purposes of boiling the water, the nuclear fuel is removed and then it has to go somewhere. And all of these processes from mining, processing the uranium to taking it to Yucca Mountain, if indeed that is going to be the alleged solution, all of these things are going to take massive quantities of fossil fuels and will in their own way contribute to greenhouse gases, global warming, whatever, carbon dioxide emissions we want to talk about there.

And then the concept of -- oh, the one thing I wanted to say is regardless of the -- above

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and beyond the greenhouse gas emissions, the global warming contribution that nuclear may or may not make to one degree or another, we're presented with a false choice here of whether we want -- do we want global warming or do we want nuclear waste and the water to be drained from our local lake?

So, you know, it's do you want to be electrocuted or do you want to be hanged? It's your choice. So I think that's a false choice to present to the public, and it's also questionable just on the scientific basis if you really look at the entire fuel cycle.

Paul already also spoke about the streamlining of the processes. I'd just like to kind of add onto that in saying that over time and especially within, you know, like the last 10 or 15 years the NRC appears to be really moving in the direction from regulating the nuclear industry to promoting it. And we're seeing that over and over in rapid succession with early site permits, combined licenses, the ITAAC program, inspections tests, analysis and acceptance criteria. The deregulation of radioactive waste, which includes allowing radioactive waste to be recycled into a wide variety of products. And the lack of oversight

at Davis-Bessie where at nuclear plants you basically had a situation where it's like you watch yourselves and we trust you that you're going to be looking at things carefully. And same with ITAAC. You do the inspection and then we'll rubber stamp the paper and move on from there.

Mr. Day's remarks that nuclear can't stand on its own. Very true. And I'd like to just again we need -- can't forget about Price-Anderson. While there are many I think show stoppers, as they were called in a recent business produced report on the future nuclear renaissance for nuclear energy, that the one that just should never be forgotten is the Price-Anderson subsidy. If the nuclear industry really had to provide, really had to pay market rates and really had to go out and get its own insurance, it didn't have any taxpayer or government subsidy, then that would be the end of the nuclear industry. One very crucial Achilles heel for the industry, and it should not be forgotten by consumers and ratepayers, especially those who live within the evacuation zone.

Contradictions in what the NRC says and what they do. Just one regarding something that

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came up tonight, and that's what sparked this for me.

I heard something about permitted releases. The plants are actually allowed, as long as its diluted to the proper amount, to put radioactive releases into air, water and the surrounding environment. And this occurs at the same time that the Nuclear Regulatory Commission formally agrees with the linear-no-threshold -- response model which says that any increase in radioactive dose, no matter how small, results in an incremental increase in risk. And at the same time, the Nuclear Regulatory Commission tells us that its primary mission is to protect the public health and safety in matters regarding radiation exposure.

There's been no interest on the part of the nuclear industry, of course that's not to be expected, but the Nuclear Regulatory Commission essentially is not even going to take a serious look at what we call the precautionary principle which, among other things, it involves placing the onus on the waste generator, the polluter or the creator of the energy to prove that that energy is safe for us. But instead, as we heard from the one woman who was here with the various health problems, the onus is

placed on us to prove that our various health problems were actually caused by the nuclear waste or the nuclear plants, or whatever other contaminants are being imposed upon us, not necessarily with our consent. The onus should not be on the affected individual to prove the health detriment.

And as far employees of the plants and their commitment to safety and the public health and safety, I don't doubt especially that an employee would come here and would have that level of concern that they would have a great deal of concern about What does concern me regarding employees at America's nuclear power plants is a recent NRC Inspector General report -- well, it was actually talked about a survey that an independent firm did at the nuclear power plants in the United States. And there was a significant percent of employees at the plants, I believe in was somewhere in the neighborhood of 47 percent, who said that at various points they did not feel that they could bring up -they did not feel comfortable bringing up safety concerns. And some of the things they said on the survey definitely would lead one to question what kind of a safety culture there is within many of the

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1 plants or in various aspects of nuclear power 2 generation. 3 And one last, my last remark, is This is not -- I'm not representing 4 personal. 5 Public Citizen saying this. But regarding the "Atoms 6 for Peace," we heard that today I guess is the 50th anniversary celebration for that, or what have you. 7 But I think we can pretty much dispose of that 8 9 concept that nuclear plants are really into atoms 10 for peace when currently we have Watts Bar and Sequoyah producing tritium with full approval from 11 12 all the agencies including the Nuclear Regulatory 13 Commission and the Department of Energy that produces tritium for nuclear weapons. 14 15 plants are simultaneously operating as commercial 16 power providers and also providing tritium for 17 nuclear weapons. So it's a two in one obvious overlap between nuclear power and nuclear weapons. 18 19 Thanks. 20 MR. CAMERON: We thank you. Thank you, 21 Dave. I'm going to turn it over to John 22 23 Tappert to close the meeting out for us. But I just 24 want to say from a facilitator's perspective, just

thank you all for your courtesy tonight and your

attentiveness and your patience. So thank you very 1 2 much. 3 John, would you like to close, please? 4 MR. TAPPERT: Thanks, Chip. 5 I'd just like to echo Chip's thoughts 6 and thank everyone for coming out tonight. 7 a significant commitment to get informed on these issues and come out to a public meeting. We 8 appreciate your participation and the comment period 9 10 -- the scoping period is available for another So if you'd like to amend any of your 11 12 comments tonight, please just send us an email or a 13 letter. 14 Thank you. MR. CAMERON: Good night. Thank you. 15 16 (Whereupon, at 10:32 p.m. the public 17 meeting was adjourned.) 18 19 20 21 22 23