	Ι.
1	United States of America
2	Nuclear Regulatory Commission
3	+ + + +
4	Atomic Safety and Licensing Board Initial
5	Prehearing Conference
6	Bellefonte Nuclear Power Plant Units 3 and 4
7	+ + + +
8	Wednesday,
9	July 30, 2008
10	+ + + +
11	Scottsboro, Alabama
12	+ + + +
13	The hearing commenced at the Scottsboro Goosepond Civic
14	Center, Scottsboro, Alabama, at 9:00am.
15	BEFORE:
16	G. Paul Bollwerk, III, Board Chairman
17	Dr. Anthony J. Baratta, Administrative Judge
18	Dr. William W. Sager, Administrative Judge
19	
20	
21	
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1	APPEARANCES:
2	On Behalf of the Petitioners:
3	Louis Zeller
4	Blue Ridge Environmental Defense League (BREDL)
5	Bellefonte Efficiency and Sustainability Team (BEST)
6	Sara Barczak
7	Southern Alliance for Clean Energy
8	
9	On Behalf of the Applicant:
10	Tennessee Valley Authority
11	Steven P. Frantz, Esq.
12	Stephen J. Burdick, Esq.
13	Morgan, Lewis & Bockius LLP
14	
15	On Behalf of the Nuclear Regulatory Commission:
16	Ann P. Hodgdon, Esq.
17	Patrick A. Moulding, Esq.
18	
19	
20	
21	
22	

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

6 proceeding under Part 52 of Title 10 of the Code of Federal

Regulations, also referred to as the CFR.

This prehearing conference has been convened as a result of the responses of several groups, including the Blue Ridge Environmental Defense League and its Bellefonte Efficiency and Sustainability Team Chapter, also referred to as BEST, and the Southern Alliance for Clean Energy to a notice of opportunity for hearing published in Federal Register on February 2008.

Following an April 7, 2008 Commission order extending the time for filing hearing petitions by a joint submission dated June 6, 2008, these petitioners requested an adjudicatory hearing on the October 30, 2007 application on the Tennessee Valley Authority, or TVA, for a COL by which TVA seeks to obtain authorization to construct and operate two new AP1000 advanced passive pressurized water reactors on the existing site of its never completed two unit

1 Bellefonte Nuclear facility located some 6 miles Northeast

2 of Scottsboro, Alabama, the City where we are conducting

3 today's prehearing conference.

In a June 12, 2008 memorandum, the secretary of the Nuclear Regulatory Commission, acting on behalf of the Commission, referred joint petitioners hearing request to the Atomic Safety Licensing Board Panel for the appointment of a licensing board.

On June 18th, 2008, the Licensing Board Panel's Chief Administrative Judge issued a notice designating this three-member licensing board to conduct the proceeding.

By way of background regarding the NRC licensing processes as it applies to Combined Operating License applications, under Part 52 of the Agency's regulations, if issued, a COL provides authorization from the NRC both to construct and with conditions operate a nuclear power plant at a specific site in accordance with agency regulations.

This can be contrasted with the process used for the licensing of the 100 plus commercial nuclear power plants currently operating in the United States, which under Part 50 of the Agency's regulations, will require to apply for and obtain separate construction and operating

authorizations.

As was the case under the previous two-step licensing regime, however, prior to the Agency issuing a Combined Operating License, the NRC staff, which is one of the participants before us today, has the important responsibility of completing safety and environmental reviews of a Combined Operating License application in accordance, with among others, the Atomic Energy Act, NRC regulations and the National Environmental Policy Act or NEPA.

At the same time, the Atomic Energy Act and agency regulations provide an opportunity for interested stakeholders, including individual members of the public, public interest groups and other organizations and governmental entities, including state and local governmental bodies and Native American tribes, to seek a hearing regarding a COL application in which they can litigate health and safety, environmental or common defense and security concerns regarding the COL application.

And with respect to the conduct of this adjudicatory process, independent administrative judges appointed by the Commission as members of the Atomic Safety and Licensing

- 1 Board Panel are designated to serve on a three member
- 2 licensing board such as this one to preside over any
- 3 proceedings regarding the contested matters raised in the
- 4 hearing petition.
- 5 The Panel's administrative judges do not work for or
- 6 with the NRC staff relative to the staff's license
- 7 application review. Rather, we are charged with deciding
- 8 whether the issues proffered by those requesting a hearing,
- 9 such as the joint petitioners, are admissible, and for those
- 10 issues that we find to be litigable making a determination
- 11 regarding their substantive validity in terms of the grant
- 12 | conditioning or denial of the requesting Combined Operating
- 13 License.
- Our decisions on hearing matters generally are subject
- 15 to review, first by the Commission as the Agency's Supreme
- 16 | Court and then by federal courts, including, in appropriate
- 17 | circumstances, the United States Supreme Court.
- 18 Relative to the specific matters before us today in
- 19 this initial prehearing conference, of the three groups that
- 20 jointly submitted the June 8th hearing petition challenging
- 21 | the TVA Combined Operating License application for
- 22 Bellefonte Units 3 and 4, there has only been a contest as

1 to whether BEST has standing or the requisite legal interest

2 in this proceeding to be admitted to -- as a party, excuse

 $3 \quad \text{me}.$

Today we will hear participant oral arguments on that

matter as well as whether joint petitioners' hearing request

submitted via the agency's electronic web-based e-filing

system was timely.

Then on balance -- during the balance of today's prehearing conference, the petitionments will have the opportunity to make oral presentations on the separate question of whether the proposed issue statements or contentions posited by the joint petitioners as contesting the validity of certain aspects of the Applicant's license application, or NEPA-related environmental report are legally sufficient to be admitted as litigable issues in this proceeding.

Before we begin hearing the participants' presentations on these matters, I'd like to introduce the Board Members.

To my right is Associate Chief Administrative Judge
Technical Anthony Baratta. Dr. Baratta is a nuclear
engineer and a full-time member of the Atomic Safety and
Licensing Board Panel.

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1
         To my left is Dr. William Sager. Judge Sager, a
2
    geoscientist, is a part-time member of the Panel.
3
         My name is Paul Bollwerk. I'm an attorney and the
    Chairman of this licensing board.
4
5
         At this point I'd like to have counsel or the
    representatives for the various participants identify
6
7
    themselves for the record.
8
         Why don't we start with the joint petitioners, then
9
    move to the Applicant and finally to the NRC staff. If you
    would, sir.
10
11
               >>MR. ZELLER: Good morning, Chairman Bollwerk,
12
    Dr. Baratta and Dr. Sager. Welcome to Alabama.
13
         My name is Louis A. Zeller and I'm the legal
14
    representative here for joint petitioners and specifically
15
    the Blue Ridge Environmental Defense League.
16
         Next to me is Sara Barczak who's representing one of
17
    the joint petitioners, Southern Alliance for Clean Energy.
18
    Thank you, sir.
19
              >>CHAIRMAN BOLLWERK: All right. Applicants,
20
    please.
21
              >>MR. FRANTZ: My name is Steve Frantz.
22
    attorney with the firm of Morgan, Lewis and Bockius in
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1
    Washington. We are co-counsel for TVA.
                                              To my right is my
2
    associate Stephen Burdick and to my left is Ed Vigluicci who
3
    is counsel for TVA.
              >>CHAIRMAN BOLLWERK: Thank you. And the NRC
4
5
    staff.
6
              >>MS. HODGDON: I am Ann Hodgdon for the NRC
7
    staff.
8
         To my left is Patrick Moulding, my associate, also for
9
    the NRC staff. And to my -- no, that's to my left. Did I
10
    say that right? To my right is Joseph Gilman, who is a
11
    paralegal who works for OGC.
12
              >>CHAIRMAN BOLLWERK: All right. Thank you very
13
    much.
14
         I would note as we stated in our June 21st, 2008
15
    issuance regarding scheduling and procedures for this
16
    prehearing conference that presentations to the Board during
17
    this prehearing conference will be limited to the
18
    participant counsel or representatives who have just
19
    identified themselves.
20
         As my previous comments indicated, during today's
21
    conference we will only be entertaining presidents --
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presentations, excuse me, from these participants regarding

1 the standing period petition time limits and contention
2 admission issues that I outlined previously.

At some point in the future, however, if contentions are admitted in accordance with Section 2.315(a) of Title 10 of the Code of Federal Regulations the Board will issue a hearing notice that, among other things, may indicate that members of the public will be afforded an opportunity to provide as appropriate oral limited appearance statements setting forth their views concerning the proposed Combined Operating License application for the two Bellefonte plants.

In that issuance or subsequent notice, the Board will outline the times, places and conditions of participation relative to any opportunity for oral limited appearance statements.

In the interim, as the Board noted in its July 9th,

2008 issuance in this case, any member of the public can

submit a written limited appearance statement providing his

or her views regarding the issues in this proceeding.

Those written statements can be sent at any time by regular mail to the Office of the Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. The ZIP code 20555-001. They should be sent to the attention of the

- 1 rulemakings and adjudication staff or they can be sent by
- 2 | e-mail to hearing docket (that's all one word)
- 3 | hearingdocket@NRC.gov. That's by e-mail.
- A copy of the statement also should be provided to me
- 5 as the Chairman of this Atomic Safety and Licensing Board by
- 6 sending it by regular mail to my attention at the Atomic
- 7 | Safety and Licensing Board Panel, Mail Stop T-3F23, U.S.
- 8 Nuclear Regulatory Commission, Washington, D.C. 20555-001 or
- 9 by e-mail to Paul Bollwerk, last name B-O-L-L-W-E-R-K, it's
- 10 Paul.Bollwerk@nrc.gov.
- 11 And again, this written submission information is
- 12 provided in the Board's July 9th issuance if you need the
- dates or the -- excuse me, the addresses or the e-mail
- 14 addresses again.
- With these limited appearance statements -- with these
- 16 | limited written appearance statements are an opportunity for
- 17 | those who do not seek party status in this proceeding to
- 18 provide their views regarding the substantive issues before
- 19 the Board.
- 20 However, the Board will also be interested in hearing
- 21 from anyone who might be watching this proceeding via web
- 22 casting about their experience with accessing and viewing

the webcast.

As we noted in our July 21st memorandum and order, this
prehearing session is being made available over the Internet
as part of a pilot program to assess whether permitting
public viewing of licensing board adjudicatory hearings via
the Internet is a cost effective tool for increasing public
access to our proceedings.

To the extent anyone viewing this proceeding via the Internet has comments regarding the technical aspects of this webcast or its efficacy as a tool for providing broader public access to the adjudicatory hearing process, those comments can be directed by e-mail to the following address. This is a little bit long, so I will say it a couple of times.

Its webstreammaster (that's all one word) websstreammaster.resource@NRC.gov.

Again, web stream master -- all one word -- dot resource at NRC dot GOV. We'll also have that up as we take breaks on our slide from time to time.

I would note that although today's proceeding is available via the Web for live viewing only, a verbatim transcript of this conference will be available for viewing

- 1 and download within seven days on the NRC website in the
- 2 | reactors materials and other hearings portion of the
- 3 Agency's electronic hearing docket, which can be found under
- 4 | the Electronic Reading Room tab on the Agency's home page,
- 5 | which is www.NRC.gov.
- 6 Finally, as an informational matter, I would note that
- 7 under the current provisions of the Atomic Energy Act,
- 8 regardless of the admissibility of any of the joint
- 9 Petitioner's contentions, the Agency must conduct a separate
- 10 | mandatory hearing concerning the TVA Combined Operating
- 11 License application for Bellefonte.
- 12 That hearing, to which only TVA and the NRC staff will
- 13 be parties, would deal with matters other than those
- 14 admitted for litigation before this Board and would provide
- 15 the basis for required health and safety, environmental and
- 16 common defense and security findings associated with the
- 17 application and the NRC staff's safety and NEPA reviews of
- 18 the application.
- 19 Under current agency policy the mandatory hearing for
- 20 | the Bellefonte Units 3 and 4 COL application will be
- 21 | conducted by the Commission itself.
- Returning then to the matters before the Board today,

- 1 with respect to the order of presentation by the
- 2 participants in this prehearing conference, in our July 21st
- 3 order, we outlined the schedule that affords an opportunity
- 4 for the participants to address the various contested
- 5 matters now before the Board.
- 6 We would intend to follow that schedule as closely as
- 7 possible in terms of the issues and allocated times for
- 8 arguments.
- 9 In that regard, we requested before starting on an
- 10 issue for which the joint petitioners have been afforded an
- opportunity for initial argument and rebuttal, their
- 12 representative should indicate how much of the joint
- 13 Petitioner's total time allocation for that issue he or she
- 14 | wishes to reserve for rebuttal.
- Toward the end of the allocated argument time, the
- 16 Board will be providing the participant counsel and
- 17 | representative with notice of the need to finish his or her
- 18 presentation.
- 19 Also, as we noted in our July 21st issuance, in making
- 20 | their arguments the petitioners -- I'm sorry; the
- 21 participants should be aware or bear in mind that we have
- read their pleadings and as such they should focus their

- 1 presentations on the critical points and controversy as
- 2 | those have emerged as a result of the various participant
- 3 | filings over the last eight weeks.
- 4 Finally, at some juncture we'd like to have a brief
- 5 discussion regarding some of the administrative details
- 6 involved in this proceeding.
- 7 And relative to administrative matters I would note
- 8 | that this is my cell phone, which I have turned off. I'm
- 9 sticking it in my pocket and I won't turn it on again until
- 10 we have a recess.
- I would request that anyone else do the same thing with
- 12 his or her cell phones or at least put it on vibrate. But
- 13 | if you put your phone on vibrate and it goes off while we're
- 14 in session, we would ask that if you wish to answer it, you
- 15 leave the room before making -- before having your
- 16 conversation.
- We would appreciate that everyone abide by this
- 18 protocol at any time this prehearing conference is in
- 19 session. Basic message, please turn your cell phones off or
- 20 | put them on vibrate. No cell phone conversations in this
- 21 room while we're in session. We'd appreciate that. Thank
- 22 you.

- Unless the participants have anything at this point 1 2 they need to bring to the Board's attention, let's begin 3 with the joint Petitioner's presentation regarding the issues of the standing of BEST and the timeliness of their 4 5 hearing petition. >>MR. ZELLER: Judge Bollwerk, if I might? 6 I have 7 a request to make with regards to limited appearance 8 statements, if I might? 9 >>CHAIRMAN BOLLWERK: Yes, sir. 10 >>MR. ZELLER: Several members of the public have 11 approached me asking to make limited appearance statements 12 if possible today. Several have brought written statements 13 according to your instructions, but some others are also 14 interested in making an oral statement if time permits. So, 15 I would put in that request on their behalf. 16 >>CHAIRMAN BOLLWERK: We can take that under 17 advisement. I suspect, given what we've said, that will not 18 occur, but we're more than willing to take their written 19 appearance statements and put them in the record. 20 I'll talk with the Board Members at the next recess.
- 21 If they do have something in writing and if they need to, 22 we'd be glad to provide it. If they need some paper and

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    pencils that they want to write something down, we'll put it
    into the record and put it in the hearing docket when we get
2
3
    back to the Rockville area.
         Again, I'll talk with the Board Members, but again,
4
5
    this presentation as we set it forth is to listen to the
    parties on the admission of contentions and the questions of
6
7
    BEST standing as well as the timeliness of the petitions.
8
    But I appreciate you bringing it to my attention and we'll
9
    talk about it at the next recess.
10
         All right. Would you like to talk then about the
11
    standing of BEST in this proceeding as well as the
12
    timeliness of the hearing petition?
13
              >>MR. ZELLER: Yes.
14
              >>CHAIRMAN BOLLWERK: How much time are you saving
15
    for rebuttal?
16
              >>MR. ZELLER: With regards to timeliness, I would
17
    like to reserve half the time, please.
18
              >>CHAIRMAN BOLLWERK: All right. So, five minutes
19
    for your first presentation and five minutes for rebuttal.
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              >>MR. ZELLER: About timeliness and standing?
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22 >>MR. ZELLER: Okay. Yes, sir. Blue Ridge

>>CHAIRMAN BOLLWERK:

1 Environmental Defense League as you've read in our brief and

2 on our petition is a unitary organization. The Bellefonte

3 Efficiency and Sustainability Team is part and parcel of our

4 organization.

As we have explained, similar to, you might say, a franchise agreement. Basically they show the same legal incorporation and the same financial and structure. So, Bellefonte Efficiency and Sustainability Team as our local actor in this case has the most interest of anyone within our organization. And I understand why there would be a question perhaps with regards to why that would be in addition to Blue Ridge Environmental Defense League.

Firstly, we prefer it this way. Second, we don't see any problems with it in terms of the proceedings. And third, as I mentioned, they are the people who are in the Tennessee, Alabama and Georgia area, with the most directly affected interest here.

Many of their members have submitted declarations for standing as part of the procedure. The standing questions are also outlined in our submissions, which I think are fairly clear. I don't know if there are any outstanding questions other than would have been raised so far.

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19
         So, with all due respect, we would submit that
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2
    alongside of Blue Ridge Environmental Defense League and the
3
    Southern Alliance for Clean Energy that the Bellefonte
4
    Efficiency and Sustainability Team have a standing by the
5
    same -- all the same standards.
6
               >>CHAIRMAN BOLLWERK: The members of the
7
    organization used a sort of a form affidavit, which is
8
    nothing wrong with that. It's certainly probably a good
9
    idea and very efficient in terms of getting the information
10
    to everyone.
11
         That affidavit only mentions the League. It doesn't
12
    say anything about BEST. It doesn't say that BEST has their
13
    authority to represent them. None of the affidavits you
14
    provided us mention BEST at all.
15
              >>MR. ZELLER: That's quite correct.
16
              >>CHAIRMAN BOLLWERK: That's an issue that has
17
    been raised.
18
              >>MR. ZELLER: That's quite correct. And the fact
19
    that Blue Ridge Environmental Defense League is unitary I
20
    think is reflected in those declarations. We could have put
21
    the name of Bellefonte Efficiency and Sustainability Team,
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or BEST, throughout and perhaps we would do that in the

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1
    future for clarity sake.
2
              >>CHAIRMAN BOLLWERK: Any other questions from the
3
    Board Members?
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              >>JUDGE BARATTA: You made a statement that BREDL
5
    and BEST are the same legal entity. I'm not sure I quoted
6
    you exactly.
7
         Could you just explain that? Specifically, BREDL has
8
    an Article of Incorporation, I assume, somewhere.
9
              >>MR. ZELLER: Correct.
10
              >>JUDGE BARATTA: Does BEST have a separate
    Article of Incorporation anywhere?
11
12
              >>MR. ZELLER: No.
13
              >>JUDGE BARATTA: Okay. So, there's no -- nothing
14
    legally identifying them as a separate organization?
15
              >>MR. ZELLER: The only thing would be within Blue
16
    Ridge Environmental Defense League's records is the
17
    Chapter's acceptance by the Board of Directors of Blue Ridge
18
    Environmental Defense League as a bonafied chapter.
19
              >>CHAIRMAN BOLLWERK: Thank you, Mr. Sager. All
20
    right then. If you'd like to move to the issue of the
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    timeliness of your petition.
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              >>MR. ZELLER: Thank you. Yes. Regarding
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- timeliness, we have -- there has been much back and forth 1 2 about this, and the first thing I would like to say is that 3 we certainly do appreciate the staff of the Office of Adjudications and Rulemaking in their diligence with regards 4 5 to this. We know it was a difficult process. I think what it boils down to was the size of our 6 7 submission on the order of 50 megabytes with the associated 8 petitions -- petitions declarations, I should say, with over 9 40 scanned declarations. It turned out to be quite a large 10 document in addition to the 109 pages of the petition 11 itself. 12 Simply stated, when we hit the button to submit that by 13 the Electronic Information Exchange, it seems like we were 14 wading through molasses. And it ultimately did go through, 15 but actually it took on the order of a week of back and 16
 - forth to get the documents concatenated and attached in a method which conforms with the Electronic Information System's capacity.
 - >>CHAIRMAN BOLLWERK: How do you connect to the internet, your organization? Is it cable modem? Is it DSL?

21 >>MR. ZELLER: We have a broadband connection 22 through our local internet service provider. It's high

17

18

19

1 speed, 400 megabyte, whatever. 2 >>CHAIRMAN BOLLWERK: In your pleadings you've 3 indicated that you hit the button before midnight. 4 >>MR. ZELLER: Correct. 5 >>CHAIRMAN BOLLWERK: The rule basically says that 6 the pleading has to be finished -- submitted -- you have you 7 to perform the last act to get the pleading submitted in its 8 entirety before the time deadline, which is 11:59 p.m. 9 >>MR. ZELLER: Precisely. 10 >>CHAIRMAN BOLLWERK: That's what you're 11 essentially saying that you did? It just didn't arrive on 12 time? 13 >>MR. ZELLER: Our last act was hitting that 14 button and after that, like I said, there was mostly -- that 15 was our last act. Again, as I've said in our written 16 submission it was tantamount to the postmark date handing 17 off in the old days when we would submit these things at the 18 local post office. 19 Once the postmaster would stamp that date, if it took a 20 day, a week or if it got lost somewhere, basically that date 21 stood to be the determination of timeliness. So, it's an 22 analogous situation here.

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               >>CHAIRMAN BOLLWERK:
                                     All right.
                                                 Any questions
2
    from any of the Board Members? Anything further you want to
3
    add on that?
4
               >>MR. ZELLER: That's all I have today.
5
              >>CHAIRMAN BOLLWERK: All right. Let's turn then
    to the Applicant, if we could.
6
7
              >>MR. FRANTZ: Mr. Burdick will be making our
8
    presentation for us.
9
              >>MR. BURDICK: Good morning, Your Honors.
                                                           I'll
10
    be addressing the first two issues of the standing of BEST
11
    and then the timeliness of the petition to intervene.
12
         The BEST organization has not demonstrated standing in
13
    this proceeding and therefore they should not be able to
14
    participate as an independent party.
15
         In their reply, the petitioners -- and also today --
16
    their primary argument is that BEST and BREDL are the same
17
    organization. We believe this argument actually supports
18
    TVA's position.
19
         If the two organizations are the same, then there's no
20
    reason for them to participate as separate parties in this
21
    proceeding with the rights of separate parties in this
22
    proceeding.
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That's all I have on the standing. 1 If there are any 2 questions. 3 >>CHAIRMAN BOLLWERK: Given Judge Baratta's 4 information that he gleaned from the petitioners, basically 5 they're a chapter. Why can't we just consider them part of 6 the League? 7 >>MR. BURDICK: We have no problem if they 8 participate as part of BREDL. Our concern is that if they 9 participate as separate parties in this proceeding with the 10 rights of separate parties, at this point they seem to be 11 acting in a unified method, but in the future there could be 12 disparities. 13 If they are separate parties in this proceeding, they 14 could potentially move in separate directions in the future. 15 For example, if BREDL were to determine if there was a 16 contention admitted -- if BREDL were determined not to move 17 forward in this proceeding, then BEST with the rights of a 18 separate party could potentially continue on. And since 19 they haven't demonstrated standing, we think that would not 20 be correct at this proceeding. 21

There could be other issues with discovery rights, 22 filing separate pleadings, and anything associated with them

1 acting as an individual party, we feel would not be 2 appropriate since they have not demonstrated standing. 3 >>CHAIRMAN BOLLWERK: Any questions from the Board 4 Members? All right. Nothing. 5 Turning to the second issue of >>MR. BURDICK: 6 timeliness, the joint petitioners have not filed a timely 7 petition in this proceeding. The Electronic Information 8 Exchange notices make it clear that the documents did not 9 arrive until June 7th, after the filing deadline. 10 Petitioners in their pleadings on this issue and today, 11 they argued that they performed a last act, and they find 12 support for that in section 2.302 Paragraph B of the 13 regulations. However, this argument must fail. 14 Petitioners have not provided any proof that they 15 actually did commit -- perform this last act prior to the 16 filing deadline, and they provided no explanation for any 17 delay in that filing. 18 Additionally, the same regulation, Section 2.302, both 19 in Paragraphs D and E, clearly states that the entire filing 20 must be performed in order for it to be considered timely.

The petitioners filed their joint petition in two parts and the second part clearly did not arrive and was not

21

- transmitted prior to filing the deadline; therefore, the 1 2 entire pleading was not timely and should be rejected on 3 those grounds. 4 Additionally, the joint Petitioner has discussed some 5 technical difficulties, but they never explained the technical difficulties that actually occurred when they 6 7 tried to file the initial -- the original joint petition. 8 Instead, their discussion of these large documents that 9 had to be broken down into separate parts before they could 10 be successfully filed, deal with issues that occurred many 11 days after the initial filing and have no relevance to the 12 timeliness of their initial pleading. 13 Instead, those issues address the formatting of the 14 pleading and their correction of that over the weeks 15 following the initial submission. 16 >>CHAIRMAN BOLLWERK: Would the Applicant able to 17 read the pleading the next morning in the petition -- in the 18 accompanying declarations? 19 >>MR. BURDICK: That is correct. We were able to 20 obtain them.
 - >>CHAIRMAN BOLLWERK: I take it there wasn't anybody sitting there at 12 midnight waiting for it to come

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    in?
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              >>MR. BURDICK: Actually, I was there waiting for
3
    that. But we were able to obtain it after it arrived
4
    through the Electronic Information Exchange system.
5
              >>CHAIRMAN BOLLWERK: So, the two e-mails that
6
    came in, when you saw them the next morning, had what you
7
    needed, just that the time they were marked with is time
8
    past the deadline?
9
              >>MR. BURDICK: That's correct.
10
              >>JUDGE BARATTA: Given that statement, what harm
11
    occurred as a result of -- let's say it was late?
12
              >>MR. BURDICK: The regulations are clear in the
13
    notice of hearing.
14
              >>JUDGE BARATTA: I didn't ask that. I said what
15
    harm occurred?
16
              >>MR. BURDICK: As the Applicant has argued and
17
    the staff agrees with, there are no admissible contentions
18
    in the petition. If the Board agrees with that, then there
19
    is absolutely no harm and the issue of timeliness is moot.
20
         But if the contention is admitted in this proceeding,
21
    then the harm would be that the difference between that and
22
    the petition being admitted and/or rejected and the
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1 | associating proceeding with them.

you're correct, that it was late?

>>JUDGE BARATTA: That harm would exist even if it
were on time. What harm is added because, assuming that

>>MR. BURDICK: We were able to obtain the petition. Another concern is this is one of a series of examples of the Petitioner's failure to comply with the procedural requirements and the Board's order in this proceeding. We think that this should not go unchecked.

For example, we've seen -- the Board issued a few orders requesting a notice of appearance from the petitioners; have not seen that. Apparently, the petition was not filed in proper format. Petitioners did not appear to comply with the Board's order regarding their supplemental petition.

And also, we feel the application was submitted in October 2007, was publicly available in November 2007. So, the petitioners had approximately eight months to prepare this petition, including a 60-day extension. And for them to try to file it literally at the last minute, we believe past the filing deadline, we feel it should not be allowed in this proceeding.

>>JUDGE BARATTA: 1 Again, you never answered my 2 question, but let's move on. 3 >>CHAIRMAN BOLLWERK: Let me just make one other 4 question with you. In the Federal Register Notice for the 5 final rule it dealt with the question of e-filing. Volume 72 of the Federal Register Page 49, 143. This would have 6 7 been August 28th, 2007. 8 It makes the point that "making completeness of filing 9 dependent upon receipt of the transmission would subject 10 participants to the vagaries of electronic transmission, 11 which may include such problems as the filer's Internet 12 connection being slower on the day of the filing, the 13 filer's Internet service disconnection -- I'm sorry; the 14 filer's Internet service disconnecting during transmission 15 or the filer's connection to the e-filing system failing to 16 connect because of the allotted time for the connection to 17 file." 18 Basically, problems with the transmission, which was 19 why the Last Act Standard was put in place. 20 Don't we really have that situation here in some way? 21 >>MR. BURDICK: We really have not seen any proof 22 that they actually filed before the deadline, but regardless

- 1 of whether they clicked the submit button with the first
- 2 part of the petition, the second part could not have been
- 3 | filed until the first part arrived through their computer
- 4 system.
- 5 And so, the second part would not have been submitted
- 6 prior to the deadline.
- 7 So, we notice -- we noticed that it was late filed, and
- 8 therefore we raised this issue in our answer.
- 9 >>CHAIRMAN BOLLWERK: So, basically you're saying
- 10 in its entirety, the last act was not performed before the
- 11 entirety of the petition, including the declarations, before
- 12 | the midnight deadline?
- 13 >>MR. BURDICK: That's correct. And Section 2.302
- 14 | both D and E consider the filing complete when the entire
- 15 | filing has been submitted. And in fact, Paragraph E
- 16 | specifically states notwithstanding Paragraph D, which
- 17 Petitioner is relying on. But that is the case.
- 18 >>CHAIRMAN BOLLWERK: All right. Anything else
- 19 from the Board?
- 20 Let's turn then to the staff. One of the things I'd
- 21 like to hear about is the point you made in your footnote
- 22 about the difference between the language in the notice of

```
1
    hearing versus the rule itself.
2
              >>MS. HODGDON: Could I ask a question? Exactly
3
    which point?
4
              >>CHAIRMAN BOLLWERK: In the pleading that you
5
    filed on this you had made the point that the original
    notice of hearing mentioned that it should be filed by
6
7
    midnight Eastern Standard Time and when this actually came
8
    in it was Daylight Time.
9
              >>MS. HODGDON: Well, actually, yes, we did make
10
    that point and I don't entirely understand the question
11
    regarding it.
12
         However, what we said was that it's Eastern Time, which
13
    is what the rule says.
14
               >>CHAIRMAN BOLLWERK: That's true, but isn't the
15
    notice more specific? Doesn't specific govern the general?
16
              >>MS. HODGDON:
                              I'm not clear at this moment
17
    because I wasn't planning to address that. So, on what the
18
    notice said standard time, and it was actually daylight
19
    time, and that had not been changed when we went to daylight
20
    time.
21
         So, I don't believe that the Commission meant to give
22
    the petitioners an extra hour, having already given them an
```

1 extra 59 days.

I think that it was meant to be Eastern Time, which when this petition filed was Eastern Daylight Time not Eastern Standard Time, and therefore we probably should have corrected that, but I don't -- I think that's harmless error.

It's clear that we were on Eastern Time on June -whatever day in June this petition may have been filed. So,
June 6th, 7th.

>>JUDGE BARATTA: I'm not a lawyer, so I don't understand a lot of this in terms of notice and such, but I thought there is this concept that one has to have a proper notice, and if -- and as a result that that notice would supersede anything else or it would be defective, in which case we wouldn't have a time period which should be specified.

You use terms like, well, I think that the Commission wanted this or that. The fact of the matter is notice of Eastern Standard Time, which means that it would be the same as 12 midnight here; in other words a one hour time difference. So, anything filed up until 1:00 a.m. Eastern Daylight Time would meet that criteria. Is that not true?

- 1 The petition was not filed here. >>MS. HODGDON: 2 It was filed in North Carolina, which was also on Eastern 3 Time. >>JUDGE BARATTA: Well, it doesn't matter. 4 5 Eastern Standard Time would mean 1:00 a.m. Eastern Daylight Time if you accept the notice as a proper notice. 6 7 >>MS. HODGDON: The time that's relevant to these 8 petitions is Eastern Time, no matter where they're filed.
- >>JUDGE BARATTA: That's not what the notice said,
 though. If that's the case, then the notice is not proper.

 I mean, isn't this concept -- there's a legal concept in the
 notice; is there not?
- >>MS. HODGDON: There's a legal concept of notice.

 >>JUDGE BARATTA: Could you explain that legal

 concept in short order?

16

17

18

19

20

- >>CHAIRMAN BOLLWERK: And let me give you a specific example. If the general provision in the rule says that motions are to be responded to in ten days. If this Board issues an order that says it should be responded in seven days, our order being more specific than the general rule would govern.
- 22 Here is the specific notice that says it has to be

```
1
    filed by this time. Wouldn't that govern over the more
    general rule, which simply says Eastern Time? I guess
2
3
    that's the point.
4
              >>MS. HODGDON:
                              I'm still not sure which notice
5
    we're talking about. The correction was not made over
    the -- in the second notice, which corrected the first
6
7
    notice by adding things that were not in the first notice.
8
         In the second notice, the -- that notice was put out by
9
    the Commission and not by the staff and they did not make
10
    that correction.
11
         I would also argue that petitioners had no notion of
12
    any of this and they believe that they needed to file by
13
    11:59 Eastern Time. That would have been Eastern Daylight
14
    Time at the time it was filed and not Eastern Standard Time.
15
         So, the staff had no control over that notice.
16
    filed by the Commission.
17
              >>JUDGE BARATTA:
                                So?
18
              >>MS. HODGDON: Excuse me?
19
              >>JUDGE BARATTA: So?
20
              >>MS. HODGDON: So, my argument is that the staff
21
    may have corrected it yet once again with yet another notice
22
    and did not. That's my point. It was filed by the
```

- 1 Commission and was not filed by the staff.
- 2 The Federal Notice -- the Federal Register Notice is
- 3 | the Commission's notice, not the staff's notice. And I
- 4 | don't know to what extent the Board is bound by the
- 5 | Commission's notices. I would leave that to Board.
- 6 >>CHAIRMAN BOLLWERK: We're bound by the Agency's
- 7 actions. So, that's why. I guess we'll have to sort that.
- 8 I do appreciate, however, you bringing that to our
- 9 attention. I think it was a point that needed to be
- 10 mentioned and you did put that in your brief and we
- 11 appreciate it.
- 12 >>MS. HODGDON: We did the best that we could do
- 13 with that under the circumstances.
- 14 Also, we made the points that have just been made by
- 15 | the Applicant about the non-timeliness of it citing 2.302
- 16 and to 2.306.
- 17 But to answer the question asked by Judge Baratta about
- 18 the harm that was done, there's no need to show harm here
- 19 because 2.309 sees the non-timely filings will not be
- 20 | entertained absent a determination by the Commission on the
- 21 good cause factors. So, one does not need to show harm
- 22 here.

```
I would like to have you look at something that I have
1
2
    here which I'm going to address. It does not need to be
3
    admitted, but I think it really solves the whole problem or
    maybe it just adds -- would you distribute them to
4
5
    everybody?
              >>CHAIRMAN BOLLWERK: They need to be distributed
6
7
    to the parties involved.
8
              >>MS. HODGDON: I'm not entering them. I'm just
9
    giving them to you so you can follow me because what this is
10
    is the transaction data and the meta data and the e-mail
11
    filing, if you read all those pages. And it will show that
12
    Mr. -- if you look at the first bracket there where it say
13
    Friday, June 6, 23:58:22, access Louis A. Zeller,
14
    administrator and so forth and the rest of that entry.
15
         And then skip down a bracket and go to the third one,
16
    1, 2, 3 -- that is the point I should say at which
17
    Mr. Zeller accessed the system. In other words, he entered
18
    his private key and he was on the system then, and when --
19
    it acknowledged his presence he was on the system.
20
         He did that at 23:58:22. Then you skip down one.
21
    is the earliest date that he could have hit -- the earliest
22
    time, I should say, that he could have hit the submit
```

- 1 button: Friday, June 6th, 23:59:35; 35 seconds late, and 2 that would not seem to be a lot, but the rule says it's a 3 non-timely filing. 4 >>CHAIRMAN BOLLWERK: That's the point at which 5 something was received for this log file, but he could have hit -- if the transmission were delayed or interrupted, he 6 7 could have hit it 30 seconds earlier, right? 8 >>MS. HODGDON: No, I think not. I think that's 9 the first time that he could have because that's a 10 transaction and that transaction was submit. His first 11 transaction was let me on the system. The one right ahead 12 of that is Stephen Burdick trying to get this thing, and he 13 signs onto the system, but he doesn't file anything. 14 So, what happened there --15 >>CHAIRMAN BOLLWERK: One problem I'm having with 16 this document is I'm getting it right now. This would have 17 been great if you would have filed it with your response, 18 but I'm not sure --19 >>MS. HODGDON: I didn't have it. I'm sorry. I wasn't allowed to answer anything in the reply. I was
- 20 21 merely -- the staff was told to answer with regard to timeliness. So, I used what -- everything that the 22

```
1
    Applicant had said of regarding it's not meeting 2.302(d)
2
    and not having been submitted in one piece. And everything
3
    in 2.306, about it having to be filed by 11:59, et cetera.
4
              >>CHAIRMAN BOLLWERK: Where was this information
5
    generated from? Where did you get it?
              >>MS. HODGDON: Tom Ryan gave it to me.
6
7
              >>CHAIRMAN BOLLWERK: And Tom Ryan is an NRC
8
    contractor that deals with e-filing?
9
              >>MS. HODGDON: He is an NRC contractor regarding
10
    this and I believe he was one of the persons who designed
11
    the system. Beyond that, he is one of the persons who put
12
    in that -- there's an e-mail from Tom Ryan in the reply of
13
    petitioners, and I will point to it if anybody has a copy of
14
    that.
15
         No, it's not in the reply. It's in the timeliness
    submission. I misspoke.
16
         It says -- if you'll bear with me a moment, I have to
17
18
    find it.
19
              >>CHAIRMAN BOLLWERK: You're way past your time.
20
    So, you need to kind of --
21
              >>MS. HODGDON: I'm aware of that. I want to
22
    address the BEST matter. As you know, we agree with what's
```

- 1 been said regarding BEST not having standing.
- 2 On Page 5 of Mr. Zeller's filing on timeliness, which
- 3 is dated July the 18th, there's an e-mail from Tom Ryan, and
- 4 it says, "Two EIE submissions came in early Saturday, the
- 5 7th of June, directed to the Bellefonte hearing. Both are
- 6 incorrectly marked as non-publicly available", et cetera.
- 7 I don't want to read the rest of that because I've used
- 8 | up my time, and I want to make one more point. And that is
- 9 | if you look at this piece that was distributed, you will
- 10 look at the meta data, which is in Greenwich Mean Time, so
- 11 | it's four hours off, but all you have to do is subtract the
- 12 four hours.
- 13 Then you go to the last one. All these things match
- 14 up; these two filings. The first, yes, the -- I have them
- 15 marked on a copy that I have, but I don't think you'll have
- 16 any trouble finding them.
- 17 They are on the second page of the meta data. These
- 18 pages are not paginated. About three-quarters of the way
- down it says 2008, 6:07, 3:59, that's Greenwich Mean Time.
- 20 A gap and then further down 6:07, 4:07 post.
- 21 And then finally you get the e-mail logs. All these
- 22 | times match up with the times that I've just given.

```
40
1
         E-mail logs is on the last page. 6/7/2008, 12:07,
2
    that's when the submission was concluded, and 12:07:41, the
3
    sending e-mail, okay.
4
         12:07:41 seconds; that's when the e-mail was sent, et
5
    cetera. This is the recording of the e-mail.
              >>JUDGE BARATTA: All right. Let me stop you
6
7
    there. I have a very specific question. You say you got
8
    this information from Tom Ryan. Did this come off of the
9
    NRC web server?
10
              >>MS. HODGDON: It came off and it's public
11
    information.
12
              >>JUDGE BARATTA: I didn't ask that. I said did
13
    it come off the NRC web server?
14
              >>MS. HODGDON: Yes, it did.
15
              >>JUDGE BARATTA: Okay. So, you did not access
16
    SkyBest.com, which is their ISP?
17
              >>MS. HODGDON: No, I did not.
18
              >>JUDGE BARATTA: So, how do you know that between
19
    SkyBest's portal and this there was non-delay?
20
              >>MS. HODGDON: There was no delay.
21
              >>JUDGE BARATTA: How many times have you sent an
```

e-mail message and it shows up three hours later?

```
1
               >>CHAIRMAN BOLLWERK: One of the things that you
2
    will recognize is that with the internet, stuff happens.
3
    Stuff happens.
4
              >>JUDGE BARATTA: I can't -- without actually
5
    seeing the -- when he connected to his server, all right, he
    doesn't connect directly to the NRC server. He goes into
6
7
    his ISP's server.
8
              >>MS. HODGDON: Yes.
9
              >>JUDGE BARATTA: And then that ISP server goes to
10
    some other node on the Internet, which may in turn go to
11
    another node which eventually connects into here. Right?
12
         Well, without seeing where those messages were
13
    received, as we go through that daisy chain, this is
14
    meaningless. Is it not?
15
         Can you tell me at what time SkyBest's server received
16
    this e-mail?
17
              >>MS. HODGDON: SkyBest's server --
18
              >>JUDGE BARATTA: That's their server.
19
              >>MS. HODGDON: It received it exactly the same
20
    time that everybody else received it.
21
              >>JUDGE BARATTA: Are you certain of that?
22
              >>MS. HODGDON: Yes, I'm absolutely certain
```

```
1
    because I received it.
2
              >>JUDGE BARATTA: You would be willing to bring
3
    testimony in a court to say that?
4
              >>MS. HODGDON: Well, I'm not a witness. If I
5
    were, I would --
              >>JUDGE BARATTA: Well, you're acting like one.
6
7
              >>MS. HODGDON: -- I would we willing to say that
8
    SkyBest was served at the same time I was because that is
9
    way the server works. It services everybody at the same
10
    time.
11
              >>JUDGE BARATTA:
                                That's fine. I don't want to
12
    argue with you, but that is not the way the Internet works.
13
              >>CHAIRMAN BOLLWERK: Anything further?
14
              >>MS. HODGDON:: I want to make one further point
15
    and that is this system will be upgraded in September, as
16
    some of you might know and it will time stamp the time of
17
    submission, the time that the button is hit, as well as it
18
    does now, the time that the submission is finished. And
    that will make it much, much more -- make it dispositive, I
19
20
    should think. That's certainly the intention.
21
         Here the -- there could be -- I don't see how there can
22
    actually be any argument. In fact, these things are all
```

```
1
    matched up, you can easily see. And it's instantaneous is
2
    what it is.
3
              >>CHAIRMAN BOLLWERK: But that's -- I don't mean
4
    to interrupt. That's Dr. Baratta's point. It's
5
    instantaneous if everything connects up, but sometimes
    things don't connect up and that's his point, I think.
6
7
              >>JUDGE BARATTA: Yeah, that's my whole point.
8
    Unless you actually go back to the server that his message
9
    is going to first and get the comparable information, you
10
    cannot -- you could assume, but it may not be a valid
11
    assumption that that time and the time that you record are
12
    the same. There could be delays for any number of reasons.
13
              >>MS. HODGDON:
                               That is true and several other
14
    things are also true regarding that.
15
         In one proceeding, I think Indian Point, even though in
16
    Indian Point there was an argument about whether meta data
17
    is admissible, but the meta data from the Petitioner's
18
    server was in fact requested.
19
         Here, of course, Mr. Zeller's computer may not have the
20
    right time. The EIE is set to Greenwich Mean Time.
21
    very common to have a computer that's not on the same --
22
              >>JUDGE BARATTA:
                                 I'm not talking about his
```

```
1
    computer. I'm talking about his ISP's computer, which I
2
    don't know, but I would assume it is also set to either GMT
3
    or Central Standard Time.
4
              >>MS. HODGDON: It's set to Eastern Time, whatever
5
    that might be.
6
              >>JUDGE BARATTA: I'm talking about his server.
7
              >>MS. HODGDON: His server is set -- he's in North
8
    Carolina, which is--
9
              >>JUDGE BARATTA: Well, we don't know where his
10
    ISP server is.
11
              >>CHAIRMAN BOLLWERK: Anything further on this
12
    from the staff at this point?
13
              >>MS. HODGDON: The staff has nothing further.
14
              >>CHAIRMAN BOLLWERK: Okay. Thank you. I
15
    appreciate you giving us your views.
16
         All right, Mr. Zeller.
17
              >>MR. ZELLER: Yes, thank you. I think that one
18
    technical point - somebody that knows more about this than I
19
    has told me that the time stamp itself is a relative
20
    sequence, and we're getting into an area here which I'm a
21
    little uncertain about, but it has to do with actual machine
22
    clock versus the actual time, Greenwich Mean Time and
```

1 whatever. 2 With regards to what the document which we have just 3 been handed, I think this shows that we, in fact, are timely. It begins on Friday, June 6th, 23:58, which would 4 5 be timely. I have a question. This first page begins with Regulatory Commission, 6 7 which I assume is Nuclear Regulatory Commission. There may 8 be an earlier page in here that may not --9 >>CHAIRMAN BOLLWERK: I think there's a lot of 10 earlier pages. I think this is just a running log of what 11 comes into the server. 12 >>MR. ZELLER: Right. And then finally, the last 13 page talks about the subject, EIE document available. 14 is the time that the notice was sent out from the 15 Commission's EIE. This shows that we were timely. 16 >>CHAIRMAN BOLLWERK: What about the Applicant's 17 point that the petition appears to have been submitted in 18 two pieces, one before midnight and one after midnight. 19 Anything you want to say about that?

>>MR. ZELLER: The large document it took -taking a long time. It wouldn't go through quickly and, so,
I don't know. I don't have any explanation for that. We

20

21

```
1
    did submit a further -- those were declarations.
2
    they were so large, and it just -- happen to have trouble
3
    with it.
4
         This should have taken a matter of seconds to go. When
    I have used the Electronic Information Exchange before, it's
5
6
    a matter of seconds between sending the document and getting
7
    a reply notice through the e-mail or an indication from the
8
    EIE itself that your document has been submitted even before
9
    you get the e-mail notice that goes out.
10
         This was a very large document with many scanned
11
    declarations. So, we did submit that in two separate parts.
12
    The second part was, in fact, additional declarations of
13
    standing. Some of the declarations of standing were
14
    attached to the first part, but that's the way we did it.
15
              >>JUDGE BARATTA: Let me just -- just to make sure
16
    I read those records right. Is SkyBest your ISP?
17
              >>MR. ZELLER: That's correct.
18
              >>JUDGE BARATTA:
                                Thank you. Where are they
19
    located? Do you know?
20
              >>MR. ZELLER: In Jefferson, North Carolina.
21
              >>JUDGE BARATTA:
                                Thank you.
22
              >>CHAIRMAN BOLLWERK: Let me just clarify one
```

1 It sounded like your intent was to submit two 2 separate parts, the petition and the declarations. You hit 3 the button and nothing happened for some time, and then you just -- you went back in, took the -- went back into the 4 5 site, got the declaration, loaded them and then hit the 6 button again? 7 >>MR. ZELLER: Correct. 8 >>CHAIRMAN BOLLWERK: But there wasn't a period of 9 time between because you didn't receive a response from the 10 first one? You weren't sure what was happening? 11 >>MR. ZELLER: Correct. Exactly. 12 >>CHAIRMAN BOLLWERK: Okay. All right. Anything 13 further? Anyone? Okay. 14 Thank you very much for your comments and your 15 observations on those issues. 16 Let's go ahead then and move on to what has been 17 labeled and we had some relabeling of contentions, but we'll 18 give both designations so it's clear to everyone. 19 FSAR(b), which was formerly Contention 3, this -- the title of this contention was plant site -- excuse me; "Plant 20

site geology is not suitable for nuclear reactors. Geologic

issues are not adequately addressed".

21

- How much of your time of your ten minutes would you 1 2 like to save for rebuttal? 3 >>MR. ZELLER: If I might, I have just a brief 4 note to make before we begin to address that specific issue, 5 if I might? Many of the contentions that we have raised have to do 6 7 with the rules of the Commission. We understand the 8 distinction there between the adjudicatory process and 9 rulemaking. So, two brief notes regarding the waste 10 confidence rule. 11 We plan to submit a petition for rulemaking in that 12 matter under 10.CFR 2.802 and according to the NRC Chairman 13 Klein that a rulemaking will be underway within a short 14 period of time. 15 Note number two is regarding Table S3, which is 16 referenced in our in our petition, we are working on 17 rulemaking there and we will submission -- petition, I 18 should say, rulemaking petitions, which we will submit as 19 soon as possible. 20 >>CHAIRMAN BOLLWERK: Just so I understand, you
- 21 are planning on submitting a petition dealing with waste
 22 confidence or you're awaiting the NRC taking some action on

```
1
    waste confidence?
2
              >>MR. ZELLER: Well --
3
              >>CHAIRMAN BOLLWERK: Because you're right, there
4
    has been - at least the Trade Press has indicated - that the
5
    NRC may well be initiating a waste confidence rulemaking at
    some point in the near future.
6
7
              >>MR. ZELLER: We're still weighing our options
8
    there. It may be a moving train. So, in which case our
9
    participation -- we anticipate participating in that.
10
              >>CHAIRMAN BOLLWERK: As opposed to filing a
11
    separate petition?
12
              >>MR. ZELLER: Yes, we're still considering that
13
    one as well.
14
              >>CHAIRMAN BOLLWERK: All right.
15
              >>MR. ZELLER: I didn't mean to muddy it up.
16
              >>CHAIRMAN BOLLWERK: I'm sure I did, but I just
17
    want to make clear between the two of us what we were
18
    talking about.
19
              >>MR. ZELLER: And then with regards to S3 we are
20
    all working on that, too.
21
              >>CHAIRMAN BOLLWERK: Alright, with respect then
22
    to this particular contention, how do you want to allocate
```

```
1
    your time?
2
              >>MR. ZELLER: We'd like to reserve half the time
3
    for -- in rebuttal.
              >>CHAIRMAN BOLLWERK: Is that what you're going to
4
5
    do in all the contentions? I can stop asking you that
    question? Basically 50/50?
6
7
              >>MR. ZELLER: Yes.
8
              >>CHAIRMAN BOLLWERK: Okay. Thank you.
9
              >>MR. ZELLER: With regards to our Contention 3.
10
              >>CHAIRMAN BOLLWERK: Can I stop you one second?
11
    Could you move the mic a little closer to you? I should
12
    mention with the mics, as you found out, you need to move
13
    the mic in front of you. These are fairly directional. So,
14
    if the person in the middle with the microphone is not
15
    speaking, then you need to move the mic around. That would
16
    help us out a lot.
17
              >>MR. ZELLER: Yes, sir. I might add that I had a
18
    little difficulty hearing Ms. Hodgdon, too. So, I think --
19
              >>CHAIRMAN BOLLWERK: If anybody is having any
20
    problems hearing, raise your hand or let us know and we'll
21
    have mics moved around or whatever. We want everybody to
22
    hear what is being said. Certainly, we want the court
```

reporter to hear what is being said.

>>MR. ZELLER: Some of that may be my fault. You may have noticed I'm wearing hearing aids in both ears.

With regard to this contention in which they said plant site geology is not suitable for nuclear reactors and geologic issues are not adequately addressed. Of course, this is regarding the geologic and the seismic criteria found in 10 CFR 100.23 which details these requirements.

The regulation unequivocally states that the responsibilities for the license Applicant for a combined operating license that each Applicant shall evaluate all citing factors and potential causes of failure, such as physical properties or materials underlying the site, ground disruption, and the effects of vibratory ground motion that may affect the design and operation of the power plant.

The site criteria include these earthquake ground motions, surface tectonic, non-tectonic defamation, seismically induced floods and wave soil and rock stability.

In addition to that Regulatory Guide 1.208 states that "any new information related to seismic sources that impacts the hazard calculations must be evaluated and incorporated into the seismic hazard analysis."

1 With regards to the -- that's the end of Regulatory

2 | Guide 1.208.

With regards to the Combined Operating License

application, we submit that the Applicant has not updated

the eastern Tennessee seismic zone source models from the

Electric Power Research Institute. And that the

characterization of the potential for large earthquakes and

new information was not included.

So, the bottom line is that the application is still incomplete. And some of this, of course, was outlined in our supplemental motion of April 2, 2008, the Burgman letter and the Design Control Document which affects seismological hydrological analysis.

So, the application, we believe, is still incomplete with regards to this. And so, based on both the federal regulations under 100.23 the required analysis or the guidance from Regulatory Guide 1.208, and the fact that the application is still incomplete, that we would like to have this contention admitted.

Finally, we are here in receipt of a request for additional information dated July the 11th, from the Nuclear Regulatory Commission to Tennessee Valley Authority.

```
One of these requests for information regards this very
1
2
    subject regarding the statements described in the Board's
3
    joints, betting plains and description of the model, that is
4
    the equivalent of porous media versus karst, which we made
5
    note of in our contention that we're talking about here.
6
         So, there are outstanding questions here with regards
7
    to the stability of the site. Therefore, we believe this
8
    contention should be admitted for further discussion.
9
              >>CHAIRMAN BOLLWERK: Judge Sager, you're our
10
    geoscientist. I can see the wheels are spinning.
11
               >>JUDGE SAGER: Well, I'm just trying to get a
12
    handle on -- for the seismic, is it -- do you know -- are
13
    going to make the argument that there is new information
14
    that -- let's see. I'm trying to put this in the right way
15
    here.
16
         Do you have an expert opinion that says that the new
17
    information shows that the information that was relied on
18
    the COL is inadequate?
19
               >>MR. ZELLER: Yes, sir.
20
               >>JUDGE SAGER: And likewise for the karst, I
21
    realize that your contention states that there is karst in
22
    the area, but the COL -- the environmental report also
```

```
1
    mentions it as well.
2
         So, do you have information that shows that there is or
3
    says that there is karst on the site?
4
              >>MR. ZELLER: That's correct. As we have
5
    submitted in our petition, with some detail, there are -- we
6
    have identified potential areas, problem areas, if not
7
    underneath the actual cooling towers, at least very close
8
    by, and which indicate that the area is unstable. Yes, sir.
9
              >>CHAIRMAN BOLLWERK: Judge Baratta, anything?
10
              >>JUDGE BARATTA: Are you referring to the map
11
    that appeared in your submittal with the little X's on it?
12
              >>MR. ZELLER: Yes, Judge Baratta. That's
13
    precisely that.
              >>JUDGE BARATTA: You say "nearby". It says, as I
14
15
    recall, there's a statement the about within two miles of
16
    the site? Is that what you mean by nearby?
17
         If I look at your document, under Dr. Moss, these
18
    features are plainly within -- I'm sorry; one or two miles
19
    of the proposed Bellefonte reactor. I just want to clarify
20
    what you mean by "nearby".
21
              >>MR. ZELLER: I'm looking through here.
22
    believe that the --
```

```
1
                                 This is Page 25; I guess it is
               >>JUDGE BARATTA:
2
    of your --
3
              >>MR. ZELLER: The reference within the text talks
4
    about plainly within one to two miles. And I apologize
5
    there's no scale on this map, but -- so, I can't say exactly
    how far they are. And I don't recall.
6
7
         I believe, though, it's much, much closer than one to
8
    two miles. Perhaps I could find out exactly how far it is.
9
              >>JUDGE BARATTA:
                                 The proposed plant site was not
10
    on here, so I had trouble figuring out where that was.
11
    Maybe I'll ask the Applicant if they can provide that
12
    information.
13
               >>CHAIRMAN BOLLWERK: Anything further from the
    Board for the joint petitioners? No?
14
15
         All right, we move then to the Applicant.
16
              >>MR. FRANTZ: The petitioners have
17
    mischaracterized both Reg Guide 1.208 and our application.
18
         First of all, with respect to Reg Guide 1.208 it does
19
    not require an update of the EPRI SOG model every time
20
    there's new information. Instead, it says that if the new
21
    information is consistent with the EPRI SOG model there's no
22
    requirement to update the model.
```

So, they again -- there's no absolute requirement as
the petitioners seem to be implying.

Second of all, they have mischaracterized our application. We in fact have analyzed the new data. We've analyzed both new earthquake data and we've looked at new seismic studies and those are discussed in our SR.

We referenced those sections in our answer and they fully account for the new earthquake data and for the new seismic studies referenced by the -- or implied by the petitioners.

As a result of this mischaracterization there is simply no basis for the contention. The petitioners also have provided no expert opinion or other sources to support their allegation that there's a factual need to update the model.

In response to Dr. Sager's question, Mr. Zeller said he has expert opinion, but there is nothing in the application -- nothing in the petition itself to support that.

There's no references to any affidavits, no references to other source material. He has nothing at all in the contention in the reply that would provide any expert opinion on this matter.

The most he does in his petition is reference vague

concerns by the NRC staff with no references. We do note

that there was an RAI on this issue, but RAI's by themselves

are not an appropriate basis for the contention. He needs

something more than just the fact the staff has asked

questions.

The staff's RAI does not say that there's a need to update the EPRI SOG model. Instead, the RAI simply asks for more information from the Applicant on whether there should be an update.

In fact, in May of this year, we provided through NEI a fairly extensive report from EPRI, which in fact goes through a very detailed sensitivity study and shows that the results of the new studies, the results of the new earthquake data are not significantly different than the results of the EPRI model.

And in fact, they are within the same era bands of EPRI model, and that therefore there's no need to update the EPRI SOG model.

We adopted that as part of our response to the RAI on May 30th. It's all part of the record. The petitioners have not attempted to address any of that information in

- 1 their petition to intervene, and they have an obligation to
- 2 do so -- ironclad obligation to do so, to look at all
- 3 information on the record -- on the docket.
- 4 They have referenced a sinkhole near the site. In
- 5 | fact, our application discusses the fact that there's a
- 6 sinkhole on a property nearby the site. So, that's not a
- 7 material difference of opinion or a difference of fact. We
- 8 acknowledge that.
- 9 Further, the FSAR shows that there are no sinkholes
- 10 underneath the site of the proposed Units 3 and 4. There
- 11 | are no integral caves beneath the site of Units 3 and 4.
- 12 And petitioners have provided nothing to dispute that
- 13 information in the FSAR.
- 14 So, in conclusion, we believe that the interveners have
- 15 provided absolutely no expert support and they have not
- 16 raised a general issue of material fact. Instead, they have
- 17 | simply mischaracterized both the regulatory guidance and our
- 18 FSAR.
- 19 >>CHAIRMAN BOLLWERK: Thank you, sir. Any
- 20 questions? Go ahead.
- 21 >>JUDGE BARATTA: You said the FSAR shows that
- 22 | there are no -- and I kind of looked through that section.

```
59
    I assume you're referring to roughly Section 2.5.4 or
1
    thereabouts, under site characteristics? That's the one
2
3
    that deals with the sinkholes, geologic history, et cetera.
4
              >>MR. FRANTZ: That's correct.
5
              >>JUDGE BARATTA: I didn't quite see where it
6
    showed that because it really didn't describe what
7
    techniques -- I may have missed that in looking at those.
8
    was looking to see what techniques were used to evaluate
9
    what features there were.
10
              >>MR. FRANTZ: I don't have a full catalog of all
11
    the features, tests that we did, but I know, for example, we
12
    used borings underneath the footprint of the power block,
13
    and those borings showed very small cavities. But again, no
14
    major caves or enterable caves.
15
              >>JUDGE BARATTA: I saw that section.
16
              >>MR. FRANTZ: We also did refractory studies or
17
    surveys underneath the footprint. Again, I don't think we
18
    found any large cavities as a result of that.
         And I believe we did other tests, too. Again, I don't
19
20
    have the full listing with me right now.
21
              >>JUDGE BARATTA: Just out of curiosity are you
```

able to show where the plant is on that figure?

```
1
              >>MR. FRANTZ: There is a list of -- or a --
2
              >>JUDGE BARATTA:
                                I was --
3
              >>MR. FRANTZ: I think there's something called
4
    Bellefonte on that one figure. So, it appears to lead to
5
    the right of those X's. The site itself is located between
    the Tennessee River, which is on the right, extreme right
6
7
    lower hand corner, and the Town Creek, which is in the
8
    middle.
9
              >>JUDGE BARATTA: Oh, I see that. Okay. It's in
10
    that stretch of land there where it looks like there's a
11
    road of some sort going in there.
12
              >>CHAIRMAN BOLLWERK: This is on what page of the
13
    petition?
14
              >>JUDGE BARATTA: I'm sorry. This is on page -- I
15
    believe, it's 25. Yes, 25 of the petition and it's the
16
    figure that's referred to as the above map on that page,
17
    just for the record.
18
              >>MR. FRANTZ: Based upon this map that they
19
    provided, the sinkholes they point out are probably a mile
20
    or two, I would guess, from the site itself for Unit 3 and
21
    4.
22
              >>JUDGE BARATTA:
                                Thank you.
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1
               >>CHAIRMAN BOLLWERK: Anything further from the
2
    Board?
3
         All right. At this point, let's turn it to the staff,
4
    then.
5
                              The staff would note that
              >>MS. HODGDON:
    Mr. Zeller's reference to Reg Guide --
6
7
              >>CHAIRMAN BOLLWERK: Can I have you move the
8
    microphone closer to you? I think we're having trouble both
9
    over here and in the audience. So, get it as close as you
10
    can.
11
              >>MS. HODGDON: Am I okay? I'll start over.
12
         His reference to Reg Guide 1.208 is -- that's
13
    mentioned. In fact, most of this -- a good partner of this
14
    contention comes verbatim from a staff letter to the
15
    licensee dated January 18th, 2008, and that is the
16
    acceptance letter which had two attachments to it.
17
         One about -- which are about schedule. The first one
18
    is about hydrology, and the second one is about seismic.
19
         This first paragraph was actually the last paragraph of
20
    the staff's scheduled concern, as expressed in that letter.
21
    And so, I believe there was an RAI that repeated quite a lot
22
    of this, and I would say with regard to that the same
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- 1 | argument -- similar argument to that made by the licensee --
- 2 | the Applicant, is that the RAI's cannot -- RAI's on this
- document also is like an RAI in that it was a predecessor of
- 4 an RAI.
- 5 The Petitioner's for intervention cannot write
- 6 contentions, admissible contentions based on staff concerns
- 7 | -- based solely on staff concerns, which this is here.
- 8 If you're looking at the petition to intervene from
- 9 where it says seismicity on Page 25, over to Page 27, where
- 10 | it goes into the eastern Tennessee seismic zone, all of
- 11 those things are from the staff's letter, and therefore it
- does not show -- and it's because it's actually about
- 13 schedule.
- 14 It's not really an -- and everything that the -- the
- 15 description as given by the Applicant's counsel just now is
- 16 true. That was a letter concerning the staff's concern
- 17 about schedule.
- 18 As regards whether or not it needs to be updated, new
- 19 information and so forth, the Reg Guide says you need to
- 20 | look at your PSHA. It's a probabilistic seismic
- 21 hazardous -- assessment. You need to look at your PSHA to
- 22 | see whether or not it's current and you might have to update

- 1 it, but that's based on -- it doesn't say for sure that it needs to be updated. 2 3 I won't go into anymore about that, except to say that there was an RAI on that. It was much earlier than the June 4 5 17th, and it has been answered in part. 6 >>CHAIRMAN BOLLWERK: Anything further? 7 >>MS. HODGDON: I have nothing further. 8 >>CHAIRMAN BOLLWERK: All right. Anything from 9 the Board Member? Judge Baratta? Judge Sager? 10 Let me turn back, then, to the joint petitioners and 11 see what response they have or reply they have to the points 12 made by staff and the Applicant. 13 >>MR. ZELLER: Thank you, Judge Bollwerk. 14 With regards to experts, Dr. Thomas Moss was director 15 of the Alabama Cave Survey from 1994 to 2003. He helped to 16 develop much of this contention. 17 The information upon which we rely comes from many 18 sources, of course. One of those was the U.S. Geological 19 Survey. TVA's application reports no natural --20 >>CHAIRMAN BOLLWERK: Can you pull that microphone
- 22 Mr. Zeller: How's that?

a little more forward?

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1 | Chairman Bollwerk: That's better.
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- 2 >>MR. ZELLER: The Applicant's application reports
- 3 no natural sinkholes, but admits induced sinkholes. This
- 4 was pointed out by Dr. Moss.
- 5 And then, of course, in our petition it details
- 6 activities, cumulative activities in the area, including the
- 7 | construction of the site, both previous and projected.
- 8 So, all this goes to potential instability within the
- 9 site.
- With regards to Regulatory Guide 1.208, the word "must"
- 11 is in there with regard to considering new information. As
- 12 | I pointed out already with regards to the basis, the Design
- 13 | Control Document affects seismological and hydrological
- 14 analysis.
- 15 The design control document, as we pointed out before
- 16 and will continue to point out, is still under -- the DC,
- 17 | the Design Control Document Revision 16 is still
- 18 work-in-process.
- 19 So, it would to me seem appropriate to admit this
- 20 | contention partly because the Design Control Document is a
- 21 moving target. It is not settled yet.
- 22 This information that petitioners -- joint petitioners

- 1 | are submitting I believe will help to resolve and bring to
- 2 | the Commission's attention important issues. For example,
- 3 the information provided by Dr. Moss and also the U.S.
- 4 Geological Survey and others.
- 5 And finally, the Electric Power Research Institute
- 6 document, of course, is dated 1986. It's over 20 years old.
- 7 Surely, there is much more current and recent information
- 8 given 20 years development of technology.
- 9 The geology may not change, but the technology and the
- 10 ability to determine what is underground has far advanced
- 11 | since the last two decades of the 20th Century.
- 12 >>CHAIRMAN BOLLWERK: Anything from the Board
- 13 Members? Go ahead, Dr. Sager.
- 14 >>JUDGE SAGER: I have a quick question. This is
- 15 my ignorance showing, but this contention seems to -- there
- 16 | are two attacks in here: one seismology and one the karst
- 17 | instability, but they seem to have very different paths in
- 18 terms of remedies.
- 19 Something's wrong with this mic? Okay.
- 20 (Technical difficulties)
- 21 >>CHAIRMAN BOLLWERK: We will go ahead.
- 22 Everybody, hold that thought. We're going to take a ten

- 1 minute recess. We were actually going to take one after we
- 2 | finished this argument in any event. So, we'll just take it
- 3 a little early. We'll come back and let Judge Sager ask his
- 4 question. Because I think it's important that everybody is
- 5 obviously able to hear what we're doing.
- 6 So, we'll take a ten minute recess. We'll come back at
- 7 10:30. Thank you very much.
- 8 (Whereupon, a recess was taken.)
- 9 >>CHAIRMAN BOLLWERK: We've taken a short break to
- deal with a minor technical difficulty with the sound. We
- 11 | would ask again that the judges -- we will try as well as
- 12 | the parties to make sure you're speaking directly into the
- microphone so we don't have any problems with everyone
- 14 hearing, especially the court reporter.
- 15 And obviously, again, if anyone in the audience is
- 16 having trouble hearing, just raise your hand and we'll try
- 17 to make an adjustment.
- 18 Let me also address another matter. There was a
- 19 question raised about limited appearances for today. We've
- 20 talked that over and I think right now we're actually
- 21 running a little behind the time we wanted to be.
- I think, again, that's something we had planned on

- doing at a future point in terms of oral limited appearance
- 2 statements, but I would indicate that, again, as we did that
- 3 | if someone has something in writing they want to give us now
- 4 or send to us they should certainly do that. I gave the
- 5 information at the beginning.
- 6 If you want to drop something off today, this table
- 7 over here, we have our law clerk, Erica LaPlante and also
- 8 | Sherverne Cloyd who is our administrative person with us
- 9 today. Either one of them is there. You can certainly give
- 10 | it to them and they take it and will have it put on the
- 11 record. And the judges, I assure you, will read each one as
- we receive them at some point in the near future.
- So, again, we will take limited written appearance
- 14 | statements today, but we won't be having any oral
- 15 statements.
- 16 All right. We were having a discussion about -- Judge
- 17 | Sager had a question about geology. Let's move from there.
- 18 >>JUDGE SAGER: Okay, let me try that again. My
- 19 question was essentially directed towards what is being
- 20 | sought. There are two parts to this convention: one about
- 21 seismology and one about the instability because of karst
- 22 features.

```
So, on the one hand it seems like the remedy sought is
1
2
    an update of what's called a probabilistic seismic hazard
3
    model as to ground accelerations.
4
         On the other hand, it seems as if the remedy is --
    well, is there a remedy? It sounds as if you're saying the
5
    site is just unsuitable because of the karst feature.
6
7
    that a fair characterization?
8
              >>MR. ZELLER: Yes, that is. Two things.
                                                          The
9
    ability to detect any changes and as I pointed out,
10
    cumulative activity and, of course, droughts impact on the
11
    stability of these soils.
12
         We have the same rocks under there, but we don't have
13
    the same hydrology that we had 20 years ago.
14
              >>CHAIRMAN BOLLWERK: Any follow-up?
15
              >>JUDGE Sager: So, is there -- for the karst --
16
    is there a remedy? Is there any way that the Applicant can
17
    -- is it just providing more information, better data, or is
18
    that going to be suitable?
19
               >>MR. ZELLER: The most serious implication would
20
    be modifications in the underpinnings of the facility;
21
    additional concrete, stronger rebar. That's hard to
22
    determine at this point, but it could absolutely affect the
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1
    construction of the facility.
2
              >>JUDGE Sager: Okay. Thank you.
3
              >>MR. FRANTZ: Judge Bollwerk, may I add one
4
    sentence just so the record is complete?
5
              >>CHAIRMAN BOLLWERK: You can certainly add a
    sentence, but I will always turn to Mr. Zeller. He gets the
6
7
    last word.
8
              >>MR. FRANTZ: That's fine. I just refer the
9
    Board to FSAR Section 2.5.4.1.4, which discusses the
10
    potential for human activities to impact the site beneath
11
    the power block, including some sites. I just wanted to
12
    make sure that that was on the record.
13
              >>JUDGE BARATTA: I'm sorry, could you repeat
14
    that?
15
              >>MR. FRANTZ: The section number?
16
              >>JUDGE BARATTA: Yes.
17
              >>MR. FRANTZ: It's 2.5.4.1.4, discusses human
18
    activities and its impact on the karst.
19
              >>JUDGE BARATTA: Thank you.
20
              >>CHAIRMAN BOLLWERK: Mr. Zeller, anything you
21
    want to add?
22
              >>MR. ZELLER: Nothing to add, Your Honor.
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1 >>CHAIRMAN BOLLWERK: Anything from the Board 2 members on this point? All right. 3 Then we'll move to the next contention, which is 4 labeled Miscellaneous D. It was formerly Contention 5. 5 contention was entitled "The Assumption and Assertion that 6 Uranium Fuel as a Reliable Source of Energy is not supported 7 in the Combined Operating License Application submitted by 8 TVA, the Applicant, to the U.S. Nuclear Regulatory 9 Commission". 10 Mr. Zeller, your initial 5 minutes. 11 >>MR. ZELLER: Thank you, Your Honor. 12 contention we did point to federal regulations under 10 CFR 13 50.33, Paragraph F requiring an assessment of related fuel 14 cycle costs. 15 And our petition lines out - not only in Contention 5, 16 but in some of the other contentions, which we'll get to 17 later on - some of the uncertainties with regards to fuel 18 cycle costs, which impact the bottom line, the provision of 19 power and many other factors; the availability of the fuel 20 itself and some of those uncertainties. 21 So, if this is to be an enterprise involving the

22 expenditure of tens of billions of dollars, it only makes

- 1 sense, of course, to determine that there is a reliable
- 2 | source of fuel for it, and that the fuel is available at a
- 3 price which would not be prohibitive in terms of the costs
- 4 of providing power to the ratepayers of the Tennessee Valley
- 5 Authority.
- 6 Contention 5 has, I will admit, perhaps information
- 7 | which I think is accurate, but it may not be the most
- 8 | concisely drawn contention within our list of 19. But taken
- 9 together with some of the other contentions, which we will
- 10 get to toward the end, for example, 18 talks about the
- 11 uranium fuel cycle, our Contention 18, I should say.
- 12 Considered together, I believe this contention should
- 13 be admitted.
- 14 >>CHAIRMAN BOLLWERK: Any questions from the Board
- 15 | at this point? You look like you're thinking, Judge
- 16 Baratta.
- Okay. We'll move on at this point and you can come
- 18 back to the point. Let's hear from the Applicant then.
- 19 >>MR. FRANTZ: This contention argues that the
- 20 application does not consider or discuss the reliability of
- 21 the uranium supply.
- 22 Again, the petitioners have simply mischaracterized our

1 application. They have either ignored or overlooked

2 environmental report Section 10.2.2.4, which has a fairly

3 complete discussion of the supplied uranium.

That section includes many of the factors that the petitioners have listed in their contention, such as the fact that current production does not meet current -- I'm sorry; current production does not meet current demands, and the difference is being made up through a diversion of secondary sources, such as uranium supplies from weapons materials.

The application also discusses the fact that there's been very little exploration for uranium over the last 20 years because we've had these additional secondary supplies.

Our application goes on and discusses the fact that there have been numerous studies which discuss the supply of uranium and show that it's adequate for existing and future plants.

For example, the environmental report discusses a DOE study that shows that at \$30.00 per pound, there's enough uranium supply to supply the current reactors and the planned reactors for the next 10 years.

Additionally, we cite a rule, Nuclear Association Study

- 1 | that says that the current stock market prices, the supply
- 2 | is sufficient for the next 70 years at the current rates of
- 3 consumption.
- 4 The petitioners don't dispute any of that. In fact,
- 5 | the web pages that they cite are fully consistent with the
- 6 information we provide in our environmental report.
- 7 And as a result, we don't believe that there is a
- 8 material dispute of fact here. The application in fact does
- 9 describe the supplies including the cost of those supplies,
- and the petitioners simply have mischaracterized our
- 11 application.
- Now, we do point out that their reply does have a new
- 13 citation to a new web page. We believe that that should not
- 14 be considered by the Board and that reference should be
- 15 struck.
- 16 That new reference was not in any way at all mentioned
- 17 | in the initial contention in their petition to intervene and
- 18 | it's not appropriate at this point for them to introduce new
- 19 information in their reply.
- I don't know whether the Board wants a separate
- 21 discussion on our motion to strike at this point or the
- 22 | countervailing motion to admit the reply. I'd be happy to

- do that or wait to a later point in this presentation.
- 2 >>CHAIRMAN BOLLWERK: At this point, if you want
- 3 to say something about it, particularly with respect to the
- 4 motion to accept a reply, this would be as good a time as
- 5 any.
- 6 >>MR. FRANTZ: We submitted our motion to strike
- 7 on July 10. Responses were due on July 21. The NRC staff
- 8 | filed a timely response in support of our motion. The
- 9 petitioners never filed a response. Currently, our motion
- 10 to strike is unopposed.
- 11 Last Friday, on July 25th they did submit their motion
- 12 to admit the full reply. This really has the appearance of
- 13 | a response to our motion, and if it's treated as a response,
- 14 | it's untimely by four days.
- Even if it's treated as a separate motion,
- 16 independently of our motion to strike, it's still untimely.
- 17 The rules require that any motion be submitted within ten
- days of the occurrence of the event that gives rise to the
- 19 motion, which in this case again was our motion to strike,
- 20 and therefore they're four days late with their motion if
- 21 | it's treated as a motion rather than a response.
- 22 Finally, they admit that their motion to admit their

- 1 reply is late -- I'm sorry. They admit in their motion that
- 2 | the reply contains new information. They attempt to say
- 3 that that's excusable and not serious; however, we do
- 4 | believe it is serious.

14

15

16

17

18

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21

22

- It obviously deprives the other parties, such as

 ourselves and the NRC staff, an opportunity to address this

 new information. Therefore, we believe the Board should

 either not consider the new information in the reply or

should strike it from the record. Thank you.

- >>MS. HODGDON: With regard to the contention, the staff would rest on what it said in its answer.
 - With regard to the motion to strike, as Mr. Frantz said, the staff did support the motion and agrees that the motion to admit all portions of Petitioner's reply, which arrived on the 25th, is inexcusably late, because they should have responded to the motion and the same -- it should be given the same treatment as the response to the motion.
 - It should -- motions of something in the nature of a motion should not relate to something that happened more

- 1 than ten days before. That's my point.
- 2 This motion was four days late and it is -- it doesn't
- 3 have much going for it. The petitioners say that they
- 4 apologize because some of their affidavits from expert
- 5 | witnesses were filed late.
- 6 Well, even though they were filed with the reply, such
- 7 affidavits cannot be filed with the reply. They should be
- 8 | filed in the first place, which they were not.
- 9 And they still have yet to address lateness in any of
- 10 | their filings; their lateness with regard to this and so
- 11 forth.
- 12 Then the last and finally I think the Applicant
- 13 addressed most of these things is last and finally they
- 14 | rely on a prehearing conference rule, which is not
- 15 applicable here.
- And the whole last part of the motion addresses the
- 17 | prehearing conference rule that's not applicable here, which
- 18 is 10 CFR 2.329, which regards the prehearing conference in
- 19 anticipation of the hearing rather than the initial
- 20 prehearing conference, which we don't have that rule
- 21 anymore. It's not in Part 2.
- 22 So, that's all the staff wants to say about that as

- 1 | with regards -- I did neglect to say that we supported the
- 2 staff with application to this contention. We might address
- 3 this further when we get to specific expert witnesses that
- 4 | are offered now instead of with the initial filing.
- 5 >>JUDGE BOLLWERK: All right. Let me ask you,
- 6 maybe direct the question to both, if either of you want to
- 7 | answer it, and then we'll move back to Mr. Zeller.
- 8 Is this contention really one that says that there's
- 9 not enough production as opposed to enough availability, if
- 10 I'm using the terms properly?
- In other words, the uranium is out there, its just not
- 12 being produced because the market isn't there at this point
- 13 | in terms of the market price? Maybe it is or it could be at
- 14 some point?
- >>MR. FRANTZ: I guess I interpret the contention
- 16 as initially submitted as a contention of admission.
- 17 They're claiming that our application does not discuss
- 18 uranium supply. And as I pointed out, that's probably
- 19 incorrect. Environmental report Section 10.2.2.4 does
- 20 discuss it.
- 21 To the extent you look at the merits of what they're
- 22 | claiming, they do seem to change their argument somewhat in

- their reply. The reply seems to indicate that they believe 1 2 there won't be enough supply of uranium at a low cost, or at 3 some point the cost of uranium supply will be prohibitive. 4 And again, if you look at both the studies that we cite 5 in our environmental report and the studies they cite, there's sufficient supply for Bellefonte and they don't 6 7 provide any information to dispute that. 8 >>JUDGE BOLLWERK: All right. anything the staff 9 wants to say on that point? 10 This contention was >>MS. HODGDON: Yes. 11 submitted in the North Anna proceeding and apparently in 12 response to the staff's and the Applicant's comments on the 13 contention, these petitioners added the thought about 14 50.33(f), which does not seem to be related to the 15 contention, at least not in any important way. 16 So, it's hard to connect those two things up. We did 17 address both those things in our filings. So, I needn't add 18 to that here. It was just a comment on the fact that the 19 two are really not closely related things. 20
 - And also, they addressed use of MOX, which we addressed also before, and I won't repeat that, Your Honor.
- 22 >>CHAIRMAN BOLLWERK: All right. Anything from

- 1 the Board members, then? Let's turn to Mr. Zeller then.
- 2 All right, Mr. Zeller.
- 3 >>MR. ZELLER: Thank you. Uranium production is
- 4 | the basis for this contention. As we pointed out, only 60%
- 5 of consumption is currently supplied by annual production.
- 6 This fact was raised in this contention.
- 7 I pointed to -- I made reference a minute ago to
- 8 | Contention 18. I was incorrect. It was actually 16 in our
- 9 petition, which talks about the environmental reports
- 10 | inadequate cost estimates and cost comparisons.
- 11 So, taken together, 5 and 16, TVA underestimated
- 12 capital costs, fuel costs as well as operation and
- maintenance cost and 16 goes into some detail about that.
- 14 I think it provides some of the information which makes
- 15 | this a viable -- not only a viable contention, but an issue
- 16 that should be explored before we move forward with granting
- 17 | a construction and operation license for this Bellefonte
- 18 facility.
- 19 >>JUDGE BARATTA: What I had a problem with and I
- 20 | was trying to figure out how to phrase it before, is that it
- 21 | seems like the Applicant in this Section 10.2.4 doesn't say
- 22 that there is a limited supply, but current demand and such

- 1 is adequate for 70 years, which goes out beyond what might
- 2 be reasonably projected life for this plant of 40 years,
- 3 getting built within the next 10 or 20 years, something like
- 4 that.
- 5 They cite the same study that you do, which says it's a
- 6 production problem and not an availability problem, and they
- 7 seem to allude to that in here, too.
- 8 So, I'm having trouble understanding -- it seems like
- 9 you're both saying the same thing, maybe using different
- words, and therefore is there really an issue?
- It looks like they've acknowledged, yeah, there needs
- 12 to be more exploration, but there hasn't been any for 20
- 13 years. That's what that study says, and -- but everybody at
- 14 | the time says, we really think there's more out there, but
- we've got enough even without that for the next 50, 60, 70
- 16 years.
- So, I'm kind of lost as to what to do with this one, I
- 18 guess, is what I'm saying. Any help?
- 19 >>MR. ZELLER: You may have hit the nail on the
- 20 head. It may be is the glass half empty, is the glass half
- 21 | full kind of argument? Projections of this nature, of
- 22 | course, are subject to change and subject to interpretation.

- And two people can look at the same data and see two
 different things. This -- taking for example what I said
 with Dr. Makhijani's expert opinion about these matters in
- 4 addition to what is actually in Contention 5.

- I can provide some basis for a problem -- the

 discussion of a problem, which we seek to resolve through

 this adjudicatory problem solving process to get to the

 bottom of that matter.
 - Obviously, we need further expert opinion on this, and in order to elucidate some of these question that you raised in your question to me and which we brought up in actually two of our contentions.
 - I can't answer everything today about uranium fuel supply for the next -- for the duration of operation of the facility, which is four decades, and it's not even constructed yet.
 - >>JUDGE BARATTA: The problem is, though, that we have to deal with issues related to what the Applicant says, and it sounded to me like you said -- and I just reread what he said, or they said, and it sounds like you're both saying the same thing.
- 22 So, I'm struggling. Is the application deficient?

- 1 Because that's really what we have to address, okay. Not
- 2 try to solve the larger global problem. It's sounds like
- 3 they're saying, "Yeah, there's some uncertainty." You're
- 4 saying, "Yeah, there's some uncertainty." You're both
- 5 saying the same thing, so--
- 6 >>CHAIRMAN BOLLWERK: They're sort of in violent
- 7 agreement.
- 9 | commercial says. Sorry. I'm kind of at a loss as to what
- we would wind up adjudicating here. That's what I'm really
- 11 searching for, if you understand what I mean.
- 12 >>MR. ZELLER: Yes. TVA has to show that uranium
- is a cost-effective or a fuel supply. Based on these data,
- 14 | if we cannot determine that that is the case then further
- 15 explanation is certainly needed.
- If there are uncertainties, again, before we move
- 17 | forward, either the Commission moves forward with the actual
- 18 | construction and operation license, there needs to be a
- 19 better delineation by the Applicant.
- 20 So, I would say in answer to your question, no, there
- 21 is not sufficient information provided by the Applicant to
- 22 determine that there is enough uranium supply at a cost --

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    at reasonable cost.
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              >>JUDGE BARATTA: So, yours is not a contention of
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    omission, but rather one that you feel that in Section
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    10.2.2.4, which is the one that the Applicant referenced,
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    that the discussion is inadequate? Is that what you're
6
    saying?
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              >>MR. ZELLER: Correct. Yes, sir.
8
              >>JUDGE BARATTA: Because it fails to take into
9
    account the uncertainties and the projections?
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              >>MR. ZELLER: That's exactly what I'm saying,
11
    yes, sir.
12
              >>JUDGE BARATTA:
                                Thank you.
13
              >>CHAIRMAN BOLLWERK: Anything further on this
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    contention? All right, then.
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         Let's go ahead then and move to Contention NEPA-A,
16
    which was formerly Contention 7 and the title of this
17
    contention was "Excessive Water Use Contrary to TVA's
    Purpose". Mr. Zeller?
18
19
              >>MR. ZELLER: Yes, Your Honor. The Commission's
20
    guidance on water availability, of course, forms the basis
21
    for this contention. The guidance states that we are
22
    required by law demonstration of a request for certification
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- of the rights to withdraw or consume water, and an
- 2 | indication that the request is consistent with appropriate
- 3 state and regional programs and policies to be provided as a
- 4 part of the application for a construction permit or an
- 5 operating license. This comes from Regulatory Guide 4.7.
- 6 >>CHAIRMAN BOLLWERK: Could you move your
- 7 microphone a little closer? I don't want you to swallow it,
- 8 but we do want everybody to hear. Sorry.
- 9 >>MR. ZELLER: Yes, I'm sorry. Regulatory Guide
- 10 4.7, which is General Site Suitability Criteria for Nuclear
- 11 Power.
- Bellefonte, if constructed, would dwarf by an order of
- 13 magnitude all of the waters in the Guntersville Water Shed
- 14 | save one that is the Widows Creek Fossil Fuel Plant, which
- 15 is also operated by TVA.
- 16 The Applicant projects water use for the year 2030 in
- 17 | the Tennessee River Watershed on its Page 2.3-109. The
- 18 table lists the increased percentage, the largest increase,
- 19 | 56% as a result of increased public water supply withdrawal.
- 20 However, the current water withdrawal for public supply
- 21 is just 5% of all basin-wide water use.
- 22 The dedication of water supply to Bellefonte 3 and 4 if

- 1 | constructed, we believe would be contrary to the principal
- 2 purposes for which the Tennessee Valley Authority was
- 3 created. That is, dams and river control.
- 4 I know this probably sounds like apostasy or flies in
- 5 the face of experience over the last several decades,
- 6 whereby TVA appears to have converted into an electric power
- 7 | supplier over a flood control entity, but nevertheless,
- 8 | within its own founding documents flood control and
- 9 agricultural and industrial development in that order, in
- 10 this derivative applicability are its founding purposes.
- 11 Some of our people who have provided declarations for
- 12 standing are concerned about this because they live in this
- 13 area and there are farmers in this area who rely on the
- water for their own use, which go back, as I said, to the
- 15 agricultural usages for which TVA is responsible.
- 16 Is the Nuclear Regulatory Commission responsible for
- 17 | enforcing TVA rules and regulations? That I cannot tell
- 18 you. That is up for this Board to decide, but we do know
- 19 that TVA was unable to provide verification and validation
- 20 of records for the computer programs and the supporting
- 21 | input data sets with regards to quality assurance.
- 22 >>CHAIRMAN BOLLWERK: Any Board questions at this

- 1 point. All right. Then we'll turn to the Applicant.
- 3 use by Bellefonte will be excessive. As a basis, they
- 4 | basically point to information that's contained in Chapter 2
- 5 of our environmental report.
- 6 They don't really dispute any information that we have
- 7 | in Chapter 2. Instead, based upon these undisputed facts
- 8 | they argue that water use will be excessive.
- 9 However, they provide absolutely no expert opinion or
- 10 other reference material or source material to support their
- 11 argument.
- 12 Therefore, the contention is inadmissible under
- 13 2.309(f)(15) of the regulations.
- 14 Additionally, I might note that the impacts of water
- 15 use are discussed in our environmental report in Section
- 16 | 5.2. The petitioners do not point to that section at all.
- 17 They don't discuss it at all. And that's a separate defect
- 18 in the contention.
- 19 That section goes on to note that the plant will use
- 20 | 0.28% of the monthly average river flow near Bellefonte.
- 21 Based upon that very small percent the environmental report
- 22 goes on and shows that the impacts will be small and that

- 1 those impacts don't warrant mitigation.
- 2 Again, petitioners don't cite to any of that
- 3 information, don't dispute any of that information, in
- 4 Section 5.2 of the environmental report.
- 5 So, this is again inconsistent with 2.309(f)(16) of the
- 6 regulations.
- Now, I might add that they also seem to be making a
- 8 | claim that the water use will be inconsistent with the TVA
- 9 Act. Obviously, the NRC has no authority or jurisdiction to
- 10 enforce the TVA Act and it's outside the jurisdiction of the
- 11 Agency.
- But even if you were to consider the act, it's very
- 13 clear on its face that the Act does authorize TVA to
- 14 generate electricity. I'd refer the Board to 16 USC Section
- 15 831(d)(1) of the Act.
- Additionally, obviously the NRC already has issued
- 17 operating licenses for a number of nuclear power plants for
- 18 TVA including Watts Barr, Sequoia and Browns Ferry.
- 19 Additionally, there are court cases which uphold the
- 20 | right of TVA to construct and operate nuclear power plants.
- 21 All of this indicates that the Petitioner's legal arguments
- 22 | are clearly defective and don't warrant admission of this

1 contention.

2 >>CHAIRMAN BOLLWERK: All right, sir. Anything

from the Board? All right. Then we'll turn to the staff.

4 Thank you.

>>MR. MOULDING: Thank you, Your Honor. As has already been mentioned, Contention NEPA-A argues that excessive water use would be contrary to TVA's purpose.

As the Applicant has already mentioned the petitioners did not explain how any of their statements concerning water use contradict the discussion in the application of water use.

For example, in Chapters 2 or 5 of the environmental report and the petitioners thus did not show a genuine dispute of the application on that issue.

The petitioners also provided no references or factual support for their statements concerning reduced rainfall or lake water levels, nor did the petitioners explain how -- what they referenced about partial shutdowns of Browns Ferry plant relate to any concerns about TVA water use at the proposed Bellefonte facility.

Finally, the petitioners did not explain why the NRC would have any jurisdiction over TVA's general compliance

- with the TVA Act, independent of the NRC's review of this 1 2 application, and in any event did not explain how the 3 application for a COL would be inconsistent with the TVA Act 4 for the reasons that the Applicant just mentioned. 5 Finally, as petitioners did not present any new information on this contention, they replied that the staff 6 7 has no further comment on this contention at this time. 8 >>CHAIRMAN BOLLWERK: All right. Anything from 9 the Board Members? All right. Let's go back to Mr. Zeller 10 then. 11 >>MR. ZELLER: Thank you, Your Honor. A couple of 12 things. 13 I did make reference to the NRC's weekly information 14 report of February 22 of this year when I was quoting it 15 saying that TVA was unable to provide verification for 16 supporting input data for its analysis, and the review 17 mentioned in that report assumed that inspection would find 18 no major problems. 19
 - And so, I think that the weekly information report of February 22 was referencing not only a technical issue, but also a procedural issue, which has delayed the proceedings in some way.

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Additional information has been requested in RAI and this is from July the 11th, to provide -- the Commission is 3 asking for TVA to provide consistent and complete data on

water use diversion and water return.

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It points to some of the same issues that we have raised in this contention, and I know that the RAI process is an ongoing iteration for a back and forth, but it does, I think, point to the fact that there are some outstanding questions here, which we have also raised in our contention.

So, in terms of expert opinion, in answer to the earlier question from, I believe from Mr. Frantz, that no expert opinion, we are here relying on the Commission's own communications and other documents cited within our contention and our reading of them.

>>CHAIRMAN BOLLWERK: All right. Again, with RAI's obviously the staff sends out a number and as the Commission has made clear, simply the fact that they send them out is not enough. There has to be something further that frankly, I guess a Petitioner would need to take that RAI and put in some evidence of their own that suggests this RAI raises the question and by the way, our expert or our -we have some other basis for doing it.

1 At least that's one way to look at what the Commission

2 has indicated.

>>MR. ZELLER: Right, and when I saw this and discussed it with my colleagues, it did seem -- it raised an issue which comes up again and again.

Our contentions were raised, of course, in the beginning of June and then -- and are available to anyone who wants to read them, but the RAI's in some case strike some of our people as if someone has been reading the petition and that the Nuclear Regulatory Commission's staff people are trying to put Band-Aids on some of the questions or answering in attempting to try to answer some of the same issues that we raised in our initial petition, which does seem a little bit like double-teaming.

We expect to be in opposition to the Applicant and we respect that. The Commission's staff does seem to be an adjunct to the Applicant in many matters and this is one particular example that comes up again and again in our view that instead of being an intermediary or perhaps sometimes coming down on the side of the Petitioner as well as on the side of the Applicant that the Commission staff does not present an independent view.

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In this case, I believe they are working to answer some
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2
    of the very same questions that we raised on June the 6th of
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    2008.
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               >>CHAIRMAN BOLLWERK: Well I guess, how does the
5
    fact they asked the same questions indicate they're not
    independent? I guess I'm not making the connection. Maybe
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7
    you could help me.
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               >>MR. ZELLER: Well, because the answering of the
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    questions through this RAI process may be done, but it's
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    outside of -- we don't have a role in that.
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         Interveners, petitioners do not have a role in such to
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    provide expert opinion and what not.
13
         It's a way to cure a problem with outside -- outside of
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    the process, which the Atomic Safety Licensing Board has
15
    oversight.
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              >>CHAIRMAN BOLLWERK: All right, sir. Anything
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    the Board Members have on this point? All right.
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         Let's move then to Contention NEPA-B, which was
    formerly Contention 8, "Impacts on Aquatic Resources,
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20
    Including Fish, Invertebrates and General Aquatic Community
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    Structure of the Project Area, the Guntersville Reservoir
22
    and the Tennessee River Basin".
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               >>MR. ZELLER: Yes, Judge.
                                           Sara Barczak will be
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    speaking for us on this.
3
               >>CHAIRMAN BOLLWERK: Let's make sure we have the
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          We want to make sure we hear what you have to say, so
5
    our court reporter can get it.
6
              >>MS. BARCZAK: Okay. Can you hear me?
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              >>CHAIRMAN BOLLWERK: I think so. Very good.
8
              >>MS. BARCZAK:
                               Thank you. Good morning and thank
9
    you for providing this opportunity. As Lou Zeller said, my
10
    name is Sara Barczak and I'm with Southern Alliance for
11
    Clean Energy, a non-profit in the region that promotes
12
    responsible energy choices to solve global warming problems
13
    and ensure clean, safe and healthy communities throughout
14
    the southeast.
15
         In regards -- I would like to start out this discussion
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    by stating that I am prepared to communicate the elements of
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    our impacts on aquatic resources contention, referred to as
18
    NEPA-B or as Contention 8 previously.
19
         But our technical expert, Dr. Sean Young, who conducted
20
    the research of TVA's COL application for our June 6th
21
    petition had wrote the affidavit attached in our July 8th
22
    reply filing and provided responses for our July 8th reply
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1 testimony is out of the country and was unable to testify
2 here today.

Given the short notice of the hearing there was no way

his schedule could be altered. And I'd like to say my

potential inability to answer any technical questions here

today should not undermine the detailed work Dr. Young has

put into this case over the last months highlighting the

serious impacts the proposed Bellefonte proposal could have

And given that this is my first time before the Board in this capacity, I ask for your patience for time I may need to consult with Lou Zeller as I answer your questions.

>>CHAIRMAN BOLLWERK: All right.

on the Tennessee River and surrounding environment.

>>MS. BARCZAK: Thank you. We believe that

Dr. Young's arguments should be admitted as a contention or

contentions and this is addressing the motion to strike by

TVA.

It should be admitted because he is a qualified expert in the field of fishery science. As his CV describes, Dr. Young has extensive academic experience with a Master's and a Ph.D. in fishery science from Clemson University of South Carolina and teaching experience at both Purdue University

and Clemson.

He also has extensive research experience with 30

publications on many aspects of fishery science. Dr. Young

has conducted detailed work not only in this case, but in

previous ASLBP proceedings that have led to accepted

contentions relating to water impacts, such as plant

Vogtle's early site permit.

Dr. Young -- this should also be admitted because Dr. Young was involved in this case from the very beginning of this process. We had a completed affidavit from Dr. Young ready in April of 2008 for our initial filing before we received an extension to June, but we believe that the proper time to include his affidavit was during the reply process.

Hence, why we submitted it with our July 8th reply testimony to the NRC staff and TVA reply of seven -- of July 1st.

As Dr. Young has an address change since the April June work was done, we updated his address and CV accordingly and changed the date on the affidavit, and that was all that was changed since April.

As one can see in our June 6th, 2008 filing, the text

- 1 is a summary and in many places nearly identical to what is
- 2 in Dr. Sean Young's affidavit of July 8th, 2008. Dr. Young
- 3 wrote the reply testimony for Contention 8.
- 4 That is because he was our expert all along. The
- 5 arguments to reject his affidavit and this contention, or
- 6 these sub-contentions as they've been outlined, are
- 7 predominantly based on procedural grounds and do not in any
- 8 | way diminish the significance of Dr. Young's arguments about
- 9 the substantial negative impacts that he believes the
- 10 proposed Bellefonte project could have on the health of the
- 11 Tennessee River.
- 12 And we apologize if including his affidavit in the
- original petition was necessary and implore the Board to
- 14 | allow Dr. Young's testimony, affidavit, CV and reply summary
- 15 to be considered.
- 16 Further, in terms of the merits of the contentions
- 17 | themselves, the responses by both TVA and NRC do not include
- 18 any additional data or discovery to refute our contentions.
- 19 We understood the contents. We did not misconstrue any
- 20 | statements, and much of the NRC and TVA is based on
- 21 semantics to mask the fact that the contentions hold merit.
- 22 The issue at hand remains that Guntersville Reservoir

- 1 and the whole Tennessee River Basin are in very poor
- 2 | ecological health and future Bellefonte operations will
- 3 cause further decline.
- 4 The issue is of major concern as the Tennessee River as
- 5 | we stated in our reply and original brief is the most
- 6 | biologically diverse fresh water ecosystem in the United
- 7 States.
- 8 In response to Subparts 1 and 6, and this is in
- 9 response to NRC staff. And since TVA Applicant response was
- 10 very similar, we're responding to them together.
- 11 We did not mistaken -- we were not mistaken in the
- mention of new intake and discharge. The term "new"
- 13 referred to a future increase amount of water intake and
- 14 thermal discharge, and essentially -- what was difficult
- 15 about this whole process is that there were statements made
- 16 in the ER that did not have reference to any study
- 17 | supporting the statements made.
- We gave an example of one found in ER Section 5.3.2.2,
- 19 that talked about the plume size and how that would
- 20 | interfere with the migration of breeding areas of fish in
- 21 | the reservoir, but there was no study saying, you know, "Why
- 22 | is that the case?" And we felt that we could not take such

1 statements as fact when no scientific study supports such 2 statements.

In regard to Subpart 2, the statements made in the ER correctly address the river continuum, but fail to discuss specific impacts on upstream and downstream resources that will be affected by a BLN operation.

And we argue that instead of rejecting the contention, elaboration investigation is warranted. And in the request for additional information from July 11th, No. 2.3.1-1 asks for clarification of significant impact the three reservoirs can have on BLN, the Bellefonte Facility and vice versa what impact would the Bellefonte facility could have on those three reservoirs.

That language was used in Dr. Young's affidavit specifically. He raised the significant impact statement that was brought up, and then when you read that RAI it's almost a verbatim question of what he had in his affidavit.

In regards to Subpart 3, there was an argument that the NRC was saying that there's a 32% decline in fish species, not a 44% decline, and the basic matter is there were -- the different ways to calculate that based on different sentences in different sections of the ER.

And regardless of whether it's 44% or a 32% decline, these rates of decline in the fish species are very alarming. And there was another RAI and I know that you had said earlier that's a separate process, but I think it's important to raise that RAI Number Table 2.4-7, asked to explain the decline and mentions that fish were not ID'd in the recent samples taken and list fish that Dr. Young cited as being in the area, but that weren't sampled for.

And, in terms of Subpart 4 and 5, this was bringing up some of the fact that NRC and TVA were wanting to dismiss some of our contentions because they were rejected during the Vogtle early site permit proceeding, but the fact of the matter is that several of those similar contentions were accepted in the Vogtle early site proceeding that Dr. Young worked on.

So, it was sort of a statement that wasn't completely accurate, and it was somewhat misleading.

Then there was also a request -- this is falling under that same section where there was questioning about the sampling of -- at different river miles and of the ichthyo plankton that was available and went into detail on that.

And I don't want to bore everyone with that here, but

- 1 again there was an RAI request. This was No. 5.3.1.2-1 and
- 2 | 5.3.1.2-2 that asked about the sampling of ichthyo plankton,
- 3 why weren't recent samplings done. If they weren't needed,
- 4 prove why, and then talked about all this entrainment.
- 5 It's almost verbatim from what Dr. Young's information
- 6 was. And basically we're saying that how can these impacts
- 7 | not be properly assessed -- or how can they be properly
- 8 assessed when we don't even know what is present to be
- 9 affected?
- 10 And that through all this back and forth arguments it's
- 11 | showing that the petitioners are again correct that no
- 12 recent data from Bellefonte has been collected to assess
- 13 these impacts, specifically monitoring at Guntersville
- Reservoir as stated as going on and around BLN, but not at
- 15 Bellefonte.
- And again, I could reference more RAI's, but I know
- 17 | we've done that probably too much already. But his
- 18 arguments are very solid with extensive research. And I
- 19 apologize that I was not as familiar with this process to
- 20 know that we need his affidavit in the June 6th petition
- 21 because it was ready to go, and we held onto it because at
- 22 the last hour you granted an extension of 60 days, which we

- 1 appreciated, and then all we did was change the date on it
- 2 and his address because he had moved and I'm very sorry that
- 3 he's not here today because I think he would have very much
- 4 enjoyed this discussion. Thank you.
- 5 >>JUDGE BARATTA: So, you're contention basically
- 6 is that they don't have current data, which is all inclusive
- 7 of the species of fish found in the adjoining -- whatever
- 8 | waterways and bodies of water would be affected? Is that
- 9 basically what you're saying?
- 10 >>MS. BARCZAK: That is one main item. I mean, I
- 11 know the whole contention got divided up in the NRC's staff
- 12 | reply into these subsections, but one of the overarching
- 13 | items is, yes, what you said, that current studies of full
- 14 sampling of the various fish species and ichthyo plankton,
- 15 et cetera, at the site has not been conducted.
- 16 And that there has clearly been shown a decline
- 17 | significant, whether it's 32% or 44% in the reservoir that
- 18 has not been explained and that we strongly believe, and
- 19 Dr. Young -- his affidavit said that a Bellefonte
- 20 application -- expansion in his mind will further
- 21 deteriorate this area.
- 22 >>JUDGE BARATTA: Just wanted to get

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    clarification. I should make sure I understood what you
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    were saying. That's fine. Thank you.
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              >>CHAIRMAN BOLLWERK: You mentioned this is a --
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    this shouldn't be a procedural matter, but to some degree it
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    is and as a lawyer I have to just ask you one question.
         It sounds like with Dr. Young in his affidavit, it was
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    all prepared, it was ready to go, and was a strategic
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    decision made not to submit it as part of the petition?
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         Is that -- Am I understanding that's what you're
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    saying?
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              >>MS. BARCZAK: Can I have a moment to discuss
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    with Mr. Zeller?
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              >>CHAIRMAN BOLLWERK: I'm sorry?
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              >>MS. BARCZAK: Could I have a moment to discuss
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    with Mr. Zeller?
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              >>CHAIRMAN BOLLWERK: Sure.
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              >>MS. BARCZAK: As the process went forward, we
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    just felt that -- essentially what I did in the original
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    petition from June is I had his affidavit and was tasked
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    with summarizing it into sort of key points of what his
21
    affidavit had.
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And we felt that we would be submitting that affidavit

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103
    at the appropriate time, and that appropriate time was,
1
2
    our opinion, and I certainly don't want to step on the
3
    procedural issue, because it's obviously very, very
4
    important.
5
         But we felt then that with the replies we received from
    TVA and the NRC that that was the time to provide that
6
7
    information in the July 8th reply that we filed.
8
         I actually feel that -- you know, there was a
9
    statement, I think by both TVA and the NRC staff that the
10
    literature that was cited in our June 6th petition didn't
11
    have the full literature citation page at the end of it, and
12
    I agree with that, because -- and that was an oversight on
13
    my part.
14
         I should have included that because we had it.
15
    know saying that this is the first time I'm involved is not
16
    a good excuse per se in ignoring procedural issues, but I do
17
    apologize for the literature citation being overlooked in
18
    that original petition.
19
               >>CHAIRMAN BOLLWERK: All right. Thank you.
20
    Let's turn then to the Applicant.
21
              >>MR. FRANTZ:
                              I guess we're somewhat surprised --
```

>>CHAIRMAN BOLLWERK: Any other Board questions?

104 1 I'm sorry. I apologize. 2 >>JUDGE SAGER: I had a couple of quick questions. Let's see, did -- The staff called this Subpart 6, the 3 4 environmental report does not adequately address the 5 cumulative impacts of the new intake structure on aquatic 6 resources. 7 Then it seems to be that you're making a dispute of the 8 fact that the ER relies on performance standards for cooling 9 water intakes. 10 Is there something about this environment that makes it 11 that generic standards would not be suitable? 12 >>MS. BARCZAK: I'm sorry. I'm going to have to 13 ask you to repeat the question. 14 >>JUDGE SAGER: I'm not sure I can. 15 >>CHAIRMAN BOLLWERK: I know that I could, but 16 I'll leave that up to you. 17 >>JUDGE SAGER: The contention says that in the 18 ER, the ER relied on basically generic performance standards 19 for the cooling water intakes and your contention says that 20 that's inadequate.

21 Is there a particular reason for that being inadequate 22 that has to do with this site or is it just they are in

general inadequate?

>>MS. BARCZAK: Again, from my potential inability
to answer any technical questions here today should not
undermine Dr. Young's work, but as I understand it, that it
is not that it's insufficient, the latter part of your
statement, but rather that it is incorrect to assume that
there's a static or standard sampling regime throughout the
entire reservoir.

And so, therefore, more detail needed to be provided on the features in question.

>>JUDGE SAGER: Okay. Another question was -- and I'm a little unclear about - this is back up to Subpart 2 saying something to the effect that the operation of the plant downstream affects the upstream -- affects the impoundments upstream. Have I got that correct? They don't have a spigot that drains those reservoirs. How -- What's the effect?

>>MS. BARCZAK: Well, I mean that is one of the points that we have, is that -- and Dr. Young actually spent quite a bit of time looking into. Because the Tennessee River has so many impoundments and so many -- it's a very controlled river and, you know, TVA has to monitor that.

```
That the ER fails to look at how the Bellefonte
1
2
    operation will affect the upstream river continuum and the
3
    lower river continuum, and in fact, again not to get into
4
    RAI's, but I didn't mention this one before is 2.3.1-1, asks
5
    to describe the significant impact on Nicajack, Guntersville
    and Wheeler Reservoirs; the impact that can have on BLN and
6
7
    vice versa.
8
         And then goes into specific questions on elaborate --
9
     the Applicant needs to elaborate on what is significant.
10
          Some of the items that came up in our research and
11
    talking with Dr. Young were you could -- I think one of the
12
    things that is sort of logical is that Browns Ferry, being a
13
    down user, could be impacted because it's sort of at the end
14
    of the line.
15
         But then with that there are obviously organisms living
16
     throughout that whole continuum that also are going to be
17
    impacted if we have droughts that need to be mitigated
18
    downstream.
19
          There's really no analysis of this, sort of you know,
20
     the back and forth nature of this water body that we have.
21
          That's it.
22
               >>JUDGE SAGER:
                               Okay.
                                      Thank you.
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1
               >>CHAIRMAN BOLLWERK:
                                     Judge Baratta, anything?
2
              >>JUDGE BARATTA:
                                No.
3
              >>CHAIRMAN BOLLWERK: All right. Let me turn then
4
    to the Applicant.
5
                              Thank you.
               >>MR. FRANTZ:
                                          The Petitioner has
6
    appeared to have engaged in a deliberate tactic to withhold
7
    information from the Board and the parties.
8
         They made a choice not to submit their affidavit from
9
    Dr. Young as part of their petition to intervene; instead
10
    they withhold it to the reply.
11
         That is not only inconsistent with previous NRC and
12
    Commission precedence, which say that they're not allowed to
13
    produce new information in the reply, but it's also
14
    fundamentally unfair to the NRC staff and to TVA who have no
15
    chance to respond to the reply.
16
         And therefore the Board, as we mentioned in our motion
17
    to strike, should either not consider that affidavit or
18
    should strike the affidavit from the record.
19
         I'd like to briefly address two issues raised by
20
    Dr. Sager. First of all, on the EPA standards, we do
21
    mention that as one of the basis for determination that the
22
    impacts are small, but we don't rely upon the EPA standards
```

1 alone.

We also refer to another plant on the Guntersville

Reservoir, the Widow's Creek plant, which also has a

somewhat similar intake, and we have demonstrated at the

Widow Creek plant that the impacts of the intake are small.

And therefore we also rely upon that as a basis for our over all determination that the Bellefonte impacts will be small.

With respect to the issue of the upstream and downstream impoundments, again, I believe the petitioners have simply mischaracterized our application.

They point to Section 2.3 of the environmental report, which discusses some of these impoundments and then say we don't evaluate the impacts.

Well, the impacts are evaluated in a different section; Section 5.2, which we just discussed on Contention 7. And we've showed there that the withdrawal rates are 0.28% of the volume of the Tennessee River, the flow of the Tennessee River on an average basis.

And because that withdrawal and consumption is so small, there simply is no significant impact.

The heart of the Petitioner's contention seems to be

- 1 | the argument that we need to have a site specific study of
- 2 | the aquatic biota at Bellefonte. Again, I believe that
- 3 their contention is mischaracterizing what we have in the
- 4 application.
- 5 First of all, the plant is located on the Guntersville
- 6 Reservoir. The reservoir is around 76 miles long. Our
- 7 | plant is located approximately halfway, a little bit more
- 8 than halfway up the reservoir.
- 9 For the construction permit and operating license for
- 10 Bellefonte's Unit 1 and 2 we did perform sampling of the
- 11 aquatic biota at the intake and discharge locations. We're
- 12 using those same structures, by the way, for 3 and 4.
- So, we do have that data. It's from the 1970, 1980
- 14 | time frame, but it's from those precise locations.
- 15 Additionally, we did further sampling at the intake
- 16 location in 2007 for mussels, and then in addition to all
- 17 that, we had performed regular sampling at locations
- 18 upstream and downstream of the plant on the Guntersville
- 19 Reservoir and we show that there's no unique habitat for
- 20 aquatic biota at Bellefonte, and therefore those other
- 21 sampling stations upstream and downstream should be
- 22 represented at the Local C at the Bellefonte itself.

- 1 All together we believe that provides an adequate
 2 baseline for characterizing the aquatic biota.
- In this regard, we do note that the petitioners

 provided a very similar contention in Vogtle where they

 advocated that there was a need for a site-specific survey

 of aquatic biota.
- The Board in that case rejected the contention. First of all, it found that NEPA does not require necessarily a site-specific baseline study. Instead, there may be other ways of providing an adequate baseline.

- Additionally, they found in that case that the interveners had not provided any expert opinion or support for their argument that there was a need for a site-specific study.
- Once again, if you look at the petition to intervene, there's nothing in that that would provide any expert support for the argument that we need a site-specific study here beyond what we already have.
- Very quickly, too, they have made other

 mischaracterizations of our environmental report. For

 example, contrary to their allegations, the report does

 discuss issues, such as impacts on ichthyo plankton,

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111
1
    migrating fish and mussels. Their allegations to the
2
    contrary just are incorrect.
3
         So, in summary we believe that their contention, one,
4
    is not adequately supported by the petition to intervene
5
    with any expert support.
         And two, that they have simply mischaracterized what's
6
7
    in our application and that we have an adequate baseline for
8
    aquatic biota.
9
              >>CHAIRMAN BOLLWERK: All right. Any questions
10
    from the Board Members?
11
               >>JUDGE BARATTA: You acknowledge then that your
12
    data that you use for the site specific data is from 1970
13
    and 1980 timeframe?
14
              >>MR. FRANTZ: For fish species and then for
15
    mussels we also have a 2007 study.
16
              >>JUDGE BARATTA: And where and -- that was taken?
17
              >>MR. FRANTZ: At the intake and discharge
18
    locations for the fish and for, I believe, the intake
19
    location for the mussels.
20
              >>JUDGE BARATTA: And there are or are not other
21
    species which were included in the original study which were
```

not included in the 2007 study?

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1
                             That's correct.
               >>MR. FRANTZ:
                                               I don't believe
2
    there was any sampling for fish in the 2007 study.
3
              >>JUDGE BARATTA: Okay. Your answer questioned
4
    the source of their statement; is that correct?
5
               >>MR. FRANTZ: We questioned, one, that they don't
6
    have any expert opinion in the petition to intervene itself.
    And two, that they had mischaracterized what we have in the
7
8
    application.
9
              >>JUDGE BARATTA:
                                I think it said "unsupported
10
    statements", not -- I agree with you also it did say that
11
    they don't have expert opinion, but I believe your exact
12
    terminology in several places was unsupported statements; is
13
    that correct?
14
               >>MR. FRANTZ:
                             That's correct.
15
              >>JUDGE BARATTA:
                                In a -- again, not being a
16
    lawyer, I don't know what's proper, but it would seem that
17
    if you questioned -- made a statement as unsupported and
18
    they then provided the document that provided the support,
19
    isn't that an answer or a reply to your question?
20
               >>MR. FRANTZ: In fact, they put that in the
21
    reply, but as we point out in our motion to strike, that's
22
    not appropriate. They should have provided that support.
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1
              >>JUDGE BARATTA: But you opened the door when you
2
    made that statement, did you not?
3
              >>MR. FRANTZ: No. I don't believe we did open
4
    the door to have them produce new affidavits, new reference
5
    material and other source material.
         We were simply responding to what they had in the
6
7
    petition to intervene. They're not allowed at this point to
8
    introduce new material like this in the reply.
9
         Their obligation is to address our arguments narrowly,
10
    not to provide new information.
11
              >>JUDGE BARATTA: Well, in saying where the source
12
    was, aren't they addressing it narrowly?
13
              >>MR. FRANTZ: If you go back and look at the
14
    precedence and there are a number of cases that we cite in
15
    our motion to strike, where the petitioners could do
16
    basically the same thing. They provided new reference
17
    material, new affidavits.
18
              >>JUDGE BARATTA: Wait, wait. You're saying
19
    new reference material as opposed to the source of the
20
    existing material that was in their original petition.
21
         I'm trying to make a distinction here. It may be
22
    appropriate that certain sections of the reply be strucken
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-- stricken, excuse me -- but at the same point, we heard a
1
2
    minute ago that the statements that are in the affidavit are
3
    identical.
4
         Now, maybe not all of them are identical, but at least
5
    a number of them, which you called into question by your
6
    answer - actually your, yes, your answer.
7
         So, what I'm trying to make, is there more to this than
8
    your simple approach that everything should be taken out as
9
    opposed to, okay, you questioned the source, here's the
10
    source.
11
               >>MR. FRANTZ: One, the affidavit goes into more
12
    detail than what the petition to intervene does.
13
              >>JUDGE BARATTA: Well, then don't we have to get
14
    specific as to what in that affidavit is new material?
15
              >>MR. FRANTZ: No.
                                   I think they were under the
16
    obligation affirmatively in the petition to intervene to
17
    supply the affidavit, even if it did nothing more than
18
    simply repeat what did they have in the petition to
19
    intervene itself.
20
               >>JUDGE BARATTA: Doesn't 2.309 say "facts or
```

expert opinion"? The fact that you did not do a complete

survey in 2007, that is a fact, is it not?

21

22

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1
               >>MR. FRANTZ: That's a fact.
                                             And if that's the
2
    case, then there's no dispute of the material fact.
3
    Board knows what we did.
4
         We had the studies at the site for Unit 1 and 2 in the
5
     '70s and '80s. We had the 2007 study for mussels. We have
    the current ongoing studies up and downstream of the site,
6
7
    and the collection of all that provides an adequate
8
    baseline.
9
              >>JUDGE BARATTA: Well, in your opinion it does.
10
              >>MR. FRANTZ: In our opinion. If you strike that
11
    last sentence of mine, everything else is uncontested, it's
12
    a statement of fact, and there's no dispute.
13
              >>JUDGE BARATTA: Well, unfortunately, I think
14
    that's the issue, is it not?
15
              >>MR. FRANTZ: They had nothing in their petition
16
    to intervene that would justify an attack upon our
17
    conclusion. It was only in the reply with the affidavit
18
    from Sean Young that they even come close to that. And we
19
    just don't believe that's an appropriate tactic for this
20
    proceeding.
21
              >>CHAIRMAN BOLLWERK: All right. Judge Sager, you
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had some questions.

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1
                               That's right. I was going to ask
               >>JUDGE SAGER:
2
    -- let's see. So, we've established that the study of the
3
    fish species was 25 or 30 years old, 1970's and 1980s, and
4
    I've heard two different percentages. I think applicants --
5
    the Petitioner said 44%. You guys came back with 33%, if I
    remember, decline in fish species.
6
7
         Doesn't that in itself say that that earlier study is
8
    inadequate?
9
              >>MR. FRANTZ: It doesn't say it's inadequate when
10
    you look at the cumulative set of information. Again, we're
11
    not relying solely upon those studies from the '70s and
12
    '80s. We also have the current ongoing studies and they've
13
    been going for, I guess, ten years or more upstream and
14
    downstream of the reservoir.
15
         We show that those upstream and downstream locations
16
    should yield similar results to sampling right at Bellefonte
17
    itself.
18
         And based largely upon this more current data that we
19
    have upstream and downstream that we find that we have an
20
    adequate baseline.
21
              >>JUDGE SAGER:
                               I'm done.
22
              >>JUDGE BARATTA: Doesn't a 50% difference in the
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1
    number 33 versus 44 -- I guess maybe it's not 50%, maybe
2
    it's a 33% difference -- say something is not right?
3
              >>MR. FRANTZ: Dr. Baratta, I don't really care
4
    what number you want to use. We have the actual numbers of
5
    fish that were -- species that were identified in the
    sampling periods. So, you can do your own math, whatever it
6
7
    may be.
8
         The point is here that the first set of data came from
9
    a lengthy period of decades using a particular sampling
10
    methods. The more recent sampling period was a four-year
11
    period using different sampling methods, and you have to
12
    draw the conclusions based upon differences with some degree
13
    of care.
14
              >>JUDGE BARATTA: Well, that's why we have
15
    hearings for, to determine those.
16
              >>MR. FRANTZ: No. The fact of the matter is,
17
    there's no dispute as to what each of these samplings found.
18
    And we aren't disputing what was found in the earlier study.
19
    They aren't disputing it either. We aren't disputing what
20
    was found in the most recent study.
21
         The only dispute, and I wouldn't even characterize it
22
    as a dispute is what the numbers translate into in terms of
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118
1
    percent. And frankly, we don't care what the percents are,
2
    what we care about are the actual numbers. And those actual
3
    numbers, the underlying numbers are in the application and
4
    they don't dispute those numbers.
5
         In fact, they rely upon those numbers to draw their
6
    conclusion on the percentages. That's how they determine
7
    their percent by using our numbers.
8
              >>JUDGE BARATTA: I don't know. I'm a fisherman
9
    in Maryland. They sure do care about how many -- what the
10
    percent decline in striped bass are in Chesapeake Bay. That
11
    seems to be an important number.
12
         What you're saying -- I don't quite understand what
13
    you're saying because if there are two different statistical
14
    approaches, one leading to one number and one leading to
15
    another number, there's clearly a dispute over which
16
    number -- which is the correct methodology to be employed.
17
              >>MR. FRANTZ: We don't actually have a percent in
18
    our application. What we have are the raw data. And the
19
    petitioners don't dispute our raw data.
```

20 >>CHAIRMAN BOLLWERK: Anything further? 21 right, let's turn to staff then. Thank you.

22

>>MS. HODGDON: The staff has a several, couple of

- 1 points to make. One, there was new information introduced
- 2 today that was not in the nature of a reply to what was said
- 3 by the Applicant and the staff, and naturally that should be
- 4 disregarded.
- 5 Also, with regard to this, I'm afraid this may be the
- 6 staff's fault in a way. They got into a dispute about
- 7 | mathematics and what percentage and so forth. But the one
- 8 | sampling period was from 1945 to -- I wrote it down -- 1994,
- 9 a period of about 50 years.
- 10 Another was from 2002 to 2006, and we don't know the
- 11 | conditions exactly of either, but the important point to
- 12 make here is the staff did not say "decline", although the
- 13 staff is quoted as saying there was a decline.
- We said that there was a percentage difference of 32%,
- 15 | not 44% as represented by petitioners.
- There's not enough information to tell whether it's
- decline or not. In fact, the table itself, which I
- 18 | believe -- I have it here someplace to it look up, is 2.4.7.
- 19 That table shows those figures as compared with one another.
- 20 Also, they said "fish" and they should have said
- 21 | "species". I think we all know that.
- 22 So, the thing is that some of the species were

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1
    identified in one sampling period and then they disappeared
2
    in the next and they came back in the third. There are
3
    three periods that are represented there.
         One can learn a great deal just by looking at those
4
5
    three pages of table -- those three pages of table, but you
    still can't tell anything about decline because there's just
6
7
    not enough information to tell that. That's not what it's
8
    about.
9
         And then as the -- and therefore, as I said before, we
10
    said "percentage difference", we did not say "decline". We
11
    were just talking about the math and not about how many
12
    species were there at one time or another.
13
              >>CHAIRMAN BOLLWERK: All right. Mr. Baratta,
14
    anything?
15
              >>JUDGE BARATTA: No.
16
              >>CHAIRMAN BOLLWERK: Mr. Sager?
17
              >>JUDGE SAGER:
                              No.
18
              >>CHAIRMAN BOLLWERK: Thank you very much. Let's
19
    go back to the joint petitioners then.
20
              >>MS. BARCZAK:
                              Thank you. I'd like to just
21
    quickly address the fact that we did not strategically
22
    withhold this information as TVA said at the beginning of
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their statement.

Our petition was written based on Dr. Young's

affidavit, and it was mentioned by the Panel that 2.309,

plain reading statement says, "provide a concise statement

of the alleged facts or expert opinions which support the

requestors or petitioners position on the issue and on which

the Petitioner intends to rely at the hearing."

And that -- we had the affidavit and I wish that I had known to just say let's include it, but I was under the knowledge that we could provide the summary, the information, and go forward with that.

Again, it doesn't take away from the argument that is raised, and I just want to make sure that you realized that we did not strategically withhold that and try to keep information from the NRC staff or TVA in any way, shape or form.

We were relying on expert opinion, and as I said earlier, when you read that contention in our petition much of that language is verbatim from his affidavit; just put in a summarized, more readable format.

Replying back to some of the comments made. The 1970 to 1980s time frame for the fish sampling is very old. And

- 1 yes, there were some newer studies done, and again the
- 2 | 5.3.1.2-1 RAI asked for current characterizations of ichthyo
- 3 | plankton and/or a basis why the data from the '70s and '80s
- 4 is still valid.
- 5 Fundamentally, we did not provide any new data or
- 6 arguments in the reply. The arguments in our original
- 7 petition are the same arguments that we had in our reply,
- 8 but part of the reply is we had to respond to the criticism
- 9 from TVA and NRC.
- 10 And Dr. Young wrote that reply statement for Section
- 11 8 -- excuse me -- Contention 8 with that in mind and was
- 12 very strong in saying that we did not misunderstand.
- 13 Predominantly that's him, that he did not misunderstand
- 14 the statements and he correctly understood the importance of
- 15 those statements, and he read all the sections and
- referenced them and questioned -- when you read our reply,
- 17 | why certain sections were talking about the health in one
- 18 | section, but it seemed to make sense to have it in a
- 19 different section and that the application itself was
- 20 | confusing.
- 21 In terms of the recent fish studies, as mentioned from
- 22 | 2002 to 2006, they did not ID -- identify a number of fish

- 1 species. And again, that's a new RAI request on Table 2.4-7
- 2 | and it's something that Dr. Young raised, which is, you
- 3 know, there are old studies and then even with the new
- 4 studies there are fish species that have been overlooked or
- 5 | not sampled or are missing.
- 6 Again, I'd like to actually agree with the TVA staff
- 7 | that we aren't arguing about the 44% or the 32% decline.
- 8 That the difference in those number, and we specifically
- 9 even say how we calculated that decline.
- We used a sentence that said the TVA collected 82
- different species of fish from Guntersville Reservoir
- 12 between 1949 and 1994 and "in conjunction with surveys
- 13 | conducted between 2002 and 2006 identified 46 species in
- 14 Guntersville Reservoir to arrive at 44% decline."
- Whereas, the NRC used, "more recent surveys, 1985 to
- 16 | 1994, which produced 68 fish species "to arrive at a 32%
- 17 decline. The NRC staff is correct. They did not do that
- 18 | calculation and say "decline." We did.
- 19 We did the calculation and our point is it doesn't
- 20 | matter whether it's 44 or 32. Both statements are in the
- 21 ER, but it's quite a decline and it's very alarming,
- 22 especially to a fishery science expert.

- And he said this is an example of the use of semantics 1 2 to mask the importance of this information in exhibiting the 3 poor state of aquatic health which contradicts TVA's 4 assessment. 5 And again, this information was stated in the ER and 6 was used correctly by the petitioners because it determined 7 that that's enormous importance to the current state of 8 aquatic health and the exhibition of TVA's biased 9 assessments by internal staff, not peer review. 10 And that this further supports the petitioners 11 assertion that expansion of nuclear facilities or other 12 water withdrawals will accelerate decline of aquatic 13 resources and to a greater extent than proposed in the ER. 14 I would leave it at that and offer that we would be 15 supportive of case management to allow TVA to respond to 16 Dr. Young if that's where this needs to go. 17 But we did not include new information and we didn't 18 bring up new arguments. And again, I apologize Dr. Young 19 couldn't be here because I think it would have been an 20 excellent discussion.
- 21 >>CHAIRMAN BOLLWERK: All right. Any questions 22 from the Board Members?

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1
               >>JUDGE BARATTA:
                                 No.
2
              >>JUDGE SAGER: No.
3
              >>CHAIRMAN BOLLWERK: All right. Let me just say
4
    one thing. And again, I appreciate your candor in telling
5
    us basically what happened. I think that speaks well of
    your participation in the process, and we understand.
6
7
         I think what I heard is if you had this to do over
8
    again you might not do it the same way, and that's -- again,
9
    I appreciate your candor in telling us that. To what degree
10
    that has an impact on this at this point, I can't say, but
11
    we will talk about that. Again, I appreciate you being
12
    candid with us.
13
                              Thank you.
              >>MS. BARCZAK:
14
              >>CHAIRMAN BOLLWERK: All right. At this point,
15
    we're at -- we have series of contentions; about four of
16
    them that we sort of joined together dealing with
17
    alternatives and need for power and sort of, at least we
18
    thought, had relationship to one another.
19
         It's also about a little before noontime. So, it's
20
    probably a good point, I think, to take a break.
21
         Because of the situation in the area here, we have --
22
    because of where we're at, we are going to have to go a
```

- 1 little ways off-site to get to someplace to eat. So, I
- 2 | think the Board's plan would be to go ahead and take about
- 3 an hour and a half for a break. So, at this point why don't
- 4 | we plan on coming back at 1:30.
- 5 Let me say, though, two things before we do take that
- 6 break.
- 7 One, is that again, if have you a limited appearance
- 8 statement that you wanted to have us -- a written limited
- 9 appearance statement that you wanted us to consider, to take
- 10 back to Rockville and put into our docket as opposed to
- 11 mailing it to us or sending us an e-mail, either the folks
- 12 over here at this table will be glad to accept it. Please
- 13 give it to them. We'll see it gets into the docket.
- 14 The second thing is we may have some folks that decide
- 15 | not to join us after lunch on our web stream. If that's the
- 16 case and you have comments about the web stream or technical
- 17 | aspects of it; how any problems you had accessing it or what
- 18 | the quality of it was, let me give you the e-mail one more
- 19 time.
- 20 | It's webstreammaster (all one word) dot resource at NRC
- 21 dot gov. And again, when we take a break we'll be putting
- 22 | up a slide that will have that e-mail address on it as well.

1	And we do really appreciate any comments negative or
2	positive in terms of the folks that are watching this on the
3	web stream and their impression on what we're doing and
4	whether they feel it's useful or not useful in terms of the
5	hearing process.
6	Anything further from the judges at this point?
7	All right. At this point, then, we'll stand adjourned
8	until 1:30 Central Time. We'll come back then and talk
9	about some of the NEPA alternative contentions that have
10	been have put before us. Thank you.
11	(Luncheon recess taken.)
12	
13	AFTERNOON SESSION
14	>>CHAIRMAN BOLLWERK: Everybody take their seats.
15	We're ready to get started.
16	All right, we're back in session. I do need everyone
17	to have a seat in the back, please. If you're having a
18	conversation, you need to stop and sit down. Thank you.
19	All right. Again, my reminder. This is a cell phone.
20	It's off. It goes in your pocket or wherever. If you're
21	going to have it on vibrate, please take any cell phone
22	conversations outside the room. We'd appreciate it, so we

- can conduct our business without the interruption of any
- 2 | cell phone conversations.
- 3 To start this afternoon, we're going to hear about a
- 4 group of contentions which the Board put together because
- 5 | they seemed to have some common themes, and let me give the
- 6 designations for each one.
- 7 And, Mr. Zeller, while I'm doing that, maybe I'll give
- 8 you something just to think about. If you could, give us a
- 9 brief description of how these are each the same or
- different to the degree that you can do that, a little
- 11 synopsis, and maybe draw some distinctions between them, so
- 12 | that will it be clear to us. That was one of the things we
- wanted to do with these.
- 14 The contentions are NEPA C, which was formerly
- 15 | Contention 9: "Alternatives to the Proposed Action
- 16 lacking".
- NEPA D, formerly Contention 10, which was TVA's "Power
- 18 and Energy Requirements Forecast Fails to Evaluate
- 19 Alternatives".
- NEPA E which was formerly Contention 11: TVA's COLA,
- 21 C-O-L-A. It's a Combined Operating License Application:
- 22 | "Power Demand Forecast Fails to Justify Need for New Nuclear

```
1
    Reactors".
2
         And then NEPA N, formerly Contention 16, "Environmental
3
    Reports and Inadequate Cost Estimates and Cost Comparisons".
4
         Just a procedural question. You sort of dropped -- you
5
    jumped from like E to N. Was there a reason that there was
6
    a big gap between -- in the numbering?
7
         I think there was a substantial gap between like -- it
8
    was an E or F was the last one and all of sudden it jumped
9
    to N or M.
10
         I was just wondering if there was a reason you did
11
    that?
12
              >>MR. ZELLER: I can't explain that, Your Honor.
13
              >>CHAIRMAN BOLLWERK: Okay, that's fine.
14
         So those are the four contentions. For these, you have
15
    30 minutes total time allocated to you. How would you like
16
    to divide it up between that? The presentation.
17
              >>MR. ZELLER: As before, about half.
18
              >>CHAIRMAN BOLLWERK: Fifteen/fifteen?
19
              >>MR. ZELLER: Yes.
20
              >>CHAIRMAN BOLLWERK: Okay, thank you. You have
21
    the floor, sir, and if again, everyone would remember to
22
    speak in the microphone, so the court reporter can hear you,
```

- 1 as well as the folks maybe watching us on the webcast.
- 2 Thank you.
- 3 >>MR. ZELLER: Thank you. This group of
- 4 contentions are plainly related because they have to do with
- 5 the need for the power plant and the justification for it by
- 6 the Tennessee Valley Authority and the requirements to
- 7 justify it under the National Environmental Policy Act.
- 8 Hence, some of the names reflect requirements in the
- 9 Act; alternatives to the proposed action are lacking. For
- 10 example, just one of the highlights from that contention,
- 11 TVA says what can be and actually achieved by enhanced
- 12 efforts remains to be determined. This comes from the
- 13 | combined operating license application 9.2.1.3, on demand
- 14 | side management.
- 15 And our contentions is that TVA does not even attempt
- 16 to project a reasonable demand side management forecast,
- 17 | which would plainly be an alternative to providing more
- 18 power.
- 19 The next Contention, number 10, deals with some of the
- 20 | same issues, and in fact is drawn by -- we rely on the same
- 21 expert for this, drawn by Dr. Ross McClooney, who has a
- 22 background in this area and contribute some of this

- 1 | language; for example, TVA's power and energy requirements
- 2 | forecast fails to evaluate the alternatives, Contention No.
- 3 | 10. And pulling from the Environmental Report submitted by
- 4 TVA which stood out in their report, says that the first
- 5 option, that is, no action alternative.
- 6 The first option doing nothing to satisfy demand
- 7 | for power is not reasonable to Dr. McClooney and to myself
- 8 and to members of our organization.
- 9 This was a stunning statement from the Combined
- 10 Operating License Application on Part III of the ER, Page
- 11 9.1-1, because it was both flippant and also seemed to
- 12 | negate the need within the National Environmental Policy Act
- 13 | really to evaluate alternatives, including in this case the
- 14 no action alternative. So, those two are plainly related.
- 15 The contention -- our Contention number 11, and I don't
- 16 have the other designation there but --
- 17 >>CHAIRMAN BOLLWERK: It's NEPA E.
- 18 >>MR. ZELLER: TVA's COLA power demand forecast
- 19 fails to justify need for new nuclear reactors.
- 20 This is largely developed by Louise Gorenflo, a member
- 21 of the Bellefonte Efficiency Sustainability Team.
- 22 Ms. Gorenflo is very familiar with the Tennessee Valley

- 1 Authority. She lives in Tennessee and has spent, in fact,
- 2 | perhaps -- well, I hesitate to guess how many years, but I
- 3 have known Louise for some years back when we were working
- 4 together on a nuclear waste dump site issue in East
- 5 Tennessee.
- 6 And, so, her research here talks about the failure of
- 7 TVA to include scenarios for -- actually, economic
- 8 | conditions, growth rate, recessionary economic conditions,
- 9 economic impacts, and inflationary impacts, and that with
- 10 the bottom line being TVA's wholesale price is no longer
- 11 competitive.
- 12 TVA, we will admit, is kind of a strange duck. It's a
- 13 government agency. It's independent in that way, and does
- 14 not, according to its own charter and its own history, is
- 15 | not really in competition with other utilities such as --
- 16 the Southern Company, for example, or Duke Energy, or
- 17 Dominion or Virginia Power, or many others that are publicly
- 18 owned and are corporations.
- 19 So, TVA -- I'm sorry -- Ms. Gorenflo points to the fact
- 20 | that the primary benefit of a new nuclear plant is large
- 21 quantity of base load power it can provide.
- 22 Consequently, analysis of need should focus primarily

1 on energy rather than peak demand requirements.

This is emphasized by the NRC in its Standard Review

Plan. I attribute it to Ms. Gorenflo. I may have flubbed

that up little bit.

But what my point here is that TVA addressing its decreasing system load factor by increasing its base load capacity rather than reducing its peak demand.

The point here being that by addressing one issue, which is base load, or peak demand, with a new power source which is uniquely designed for a base load power that it can provide, that would be the nuclear plant.

I hope that's clear. If it's not, please stop me.

The final contention in this series that we're talking about in this section is environmental reports, inadequate cost estimates and cost comparisons, we have Dr. Arjun Makhijani here as our expert, who states that the TVA estimated -- underestimated capital costs, fuel costs and operation and maintenance costs, and of course within our contention, it details some of those things.

You have read that, so I won't repeat any of that.

These are genuine disputes that we have with what TVA has presented in their Combined Operating License

- 134 application with regards to the need or the failure to 1 2 demonstrate need and also the cost analysis, which unfortunately, in the application there is a lot of blank 3 4 pages for some reason. 5 And I'm sure that the blank pages are there because 6 of -- at a request by TVA, but we are puzzled why 7 information from a company which is not actually in 8 competition with other power producers. 9 Some of the ones I just mentioned have operations all 10 over the country, but TVA is not. It is an entity unto 11 itself. It is not in competition. So, it's failure to 12 provide cost data, service area information, just doesn't --13 just flies in the face of reality. >>CHAIRMAN BOLLWERK: Anything further? 14 15 >>MR. ZELLER: Thank you. That's all for now. 16 >>CHAIRMAN BOLLWERK: Any questions from the 17 Board Members at this point? 18 >>JUDGE BARATTA: Yes. I wanted to get
- 20 You have a range of growth that you said was 21 not considered -- I think this is on Page 49 of your

clarification on at least one point.

19

22 petition, where you say that: "However, TVA does not include

- 1 standard rates for following economic growth, growth in the
- 2 range of 0.1% to 2.7%."
- And, I was wondering why is that a significant range?
- 4 I mean, one could in principle name any range you like and
- 5 say they didn't do it.
- 6 But I don't understand why that range was considered.
- 7 You do acknowledge that they did look at long-term
- 8 | forecasts, reflect a range of economic growth standards
- 9 varying from 3.6 down to 2.7 growth in GRP.
- 10 Why did you specifically call out -- this is in
- 11 | Contention 11, I guess -- why did you specifically call out
- 12 | that range?
- >>MR. ZELLER: The growth in ranges from 0.1% to
- 14 2.7%?
- >>MR. ZELLER: Just a minute, please. The lower
- 17 growth range has to do with an economic recession. And
- 18 TVA's long-term forecast reflects a range of economic growth
- 19 between 3.6% down to 2.7%.
- 20 So, what we are talking about here is basically an
- 21 economy in recession, and how that has an impact on,
- 22 | negative or positive, on the need for power.

```
Okay, and presumably, their
1
               >>JUDGE BARATTA:
2
    long-term forecast -- and maybe I should ask this of the
3
    Applicant. And if you can't answer it, I will ask it of the
4
    Applicant -- refers to growth over many years, not one, two
5
    or three, but more like 10, 20, 30 or more years.
         I was curious as to how you would justify a 0.1% growth
6
7
    rate for more than a couple of years.
8
         If you look historically at data from, say, the 1970's,
9
    where in fact electric demand actually declined from -- I
10
    think it was '76 to '78, if I recall correctly, but that was
11
    unsustained. It didn't go back to the 8% that it was
12
    experiencing in the early '70s. It went back to essentially
13
    a couple percents as such.
         So, why should we -- in evaluating these alternatives,
14
15
    you have this reasonableness test. In other words, what's
16
    reasonable to look at? It just kind of struck me that
17
    that's not exactly reasonable for long-term growth, I guess.
18
         I'm looking for a way, what's the basis for it that you
19
    consider it to be reasonable?
20
               >>MR. ZELLER: Well, I take your point, and -- but
    TVA throughout has picked a high range of the growth rate
21
22
    here, 2.7 to 3.6%, which is, in our view, unjustified.
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You're correct in saying that in fact back in the '70s,
1
2
    things were relatively flat, in fact, during which electric
3
    growth did not expand.
         In fact, during that period, if I remember correctly,
4
5
    and I'm doing this from memory, that electricity growth
    nationwide or energy use was relatively flat --
6
7
              >>JUDGE BARATTA: It was actually negative for a
8
    period of time, though.
9
              >>MR. ZELLER: -- for a sustained period, which
10
    was for some people bad news, for the rest of us it was good
11
    news because we were doing as much, or more, with the same
12
    amount of power.
13
         Not that we want to revisit the stagflation of the
14
    1970's, but a flatter growth rate or a lower growth rate
15
    than the high end of this range, we think should be included
16
    in these analysis.
17
              >>JUDGE BARATTA: Going to Contention 9, I guess
18
    it is, you have a statement on Page 47. I believe it's
19
    intended to be a quote, which begins -- it's under Demand
20
    Side Management. It says "TVA states" and there's about a
21
    paragraph that you quote.
```

22 Is that a quote from Section 9.2.13 of the application?

1 Is that what you're referring to? 2 I assume that's the ER actually in the application. Is 3 that where that comes from? 4 >>MR. ZELLER: Yes. I'm looking at it right here, Judge. Yes, it's a long quote. 5 6 >>JUDGE BARATTA: That is from the TVA application 7 itself? 8 >>MR. ZELLER: I believe that it is. This was 9 provided by Dr. McClooney. That's correct. 10 >>CHAIRMAN BOLLWERK: Anything, Judge Sager? 11 >>JUDGE SAGER: Yes. My question is, you refer to 12 Dr. Makhijani in a couple of these, and I'm looking at his 13 affidavit from June 6th, and his affidavit really just gives his qualifications. So, I'm missing something here. 14 15 Where is what he says that you're using? You're using 16 some information from him about -- I suppose he's saying 17 that we've underestimated the costs -- I'm sorry, TVA has 18 underestimated the cost of construction and operation, but I 19 don't see that in the affidavit. 20 >>MR. ZELLER: Oh, it's not in the affidavit. It 21 is within the text of the Contention, environmental reports, 22 inadequate cost estimates, and cost comparisons.

```
1
               >>CHAIRMAN BOLLWERK: And I take it you've
2
    attributed that to Dr. Makhijani in the Petition?
3
              >>MR. ZELLER: Yes, that's exactly right.
4
         If that's not clear, I apologize, but that's in fact
5
    the contribution from Dr. Makhijani himself.
              >>CHAIRMAN BOLLWERK: All right. Any other
6
7
    questions from the Board at this point?
8
         All right. Then let's move along. Let's move on to
9
    the Applicant then, please.
10
              >>MR. FRANTZ: Thank you. I think it's important,
11
    first of all, to set the legal standards applicable to need
12
    for power analysis.
13
         As the Board held in Niagra Mohawk, which we cite in
    our answer, future forecasts of power demands are subject to
14
15
    substantial uncertainty. In the Applicant's projections,
16
    that need for power should be accepted if they are
17
    reasonable.
18
         I think you alluded to that Dr. Baratta. Similarly in
19
    the Potabo case, which we cite in our answer, the Appeal
20
    Board held that an Applicant's forecasts are not suspect
21
    merely because they are considerably high, which addresses a
22
    point raised by Mr. Zeller.
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In that regard, the Appeal Board said if demand should outstrip supply or capacity the consequences could be serious.

In light of these standards, TVA's forecast should be judged on whether they are reasonable or not. The mere fact that it's possible to postulate different assumptions or postulate different issues or factors that should be considered is not sufficient basis for this contention.

The Petitioners must provide some basis for believing that our analysis or need for power is unreasonable, and they have not done that.

Essentially, if you look at the contention, it is nothing more than a laundry list of the statements that we should consider this factor or consider that factor.

Dr. Baratta pointed out one of those, but the -- that have essentially have no basis, at least no expert support, no references, no other source material. But the contention is just rife with these kinds of statements. And you pointed out only one of many.

Petitioners have to provide some expert opinion or some source material to support their allegation that we need to consider these factors or issues.

1 Furthermore, they need to provide some basis for

2 believing that if we do consider these issues, it's going to

3 make a material difference in the outcome of our need for

4 power analysis, and they simply have not done that here.

They must provide some basis for believing that our analysis is unreasonable and that they have something to show that our analysis is wrong.

They need to provide, for example, their own analysis of need for power. They need to cite some other reference that evaluates the need for power, that shows that our analysis is unreasonably high, and they simply have not done that.

If we turn to some of the specific issues raised by the Petitioners here, they, first of all, require us to speculate. They say we should postulate various future events, such as high inflation, recessions, loss of customers, changes in legislation, but they provide absolutely no basis for believing that any of these future events will occur.

The contention also raises issues that they believe we should consider, and yet they've made no attempt to demonstrate that even if we were to consider those issues,

- 1 that there be any material change in the results of our
 2 evaluation.
- For example, they argue that we should consider issues

 such as the high cost of oil, possible carbon tariffs that

 might be enacted by Congress, distribution of income and

 income inequalities throughout the TVA service area and

 aging population.

But even if you assume we considered all of those factors, there's nothing to indicate that they would in fact change the results of our need for power analysis.

In fact, it's equally plausible to postulate that they would actually show that our analysis is reasonable and perhaps low.

Therefore, because these allegations don't raise any material issue, they are not acceptable under 2.390(f)14.

Petitioners point out in their petition itself that our -- they say that our analysis of forecasts were not achieved in 2007, in the first quarter of 2008. They say our actual power sales were less than our forecasts.

First of all, Petitioners provide absolutely no reference to support that allegation. But even you assume it's true, I'm not sure it has any impact.

They appear to be relying in part upon the TVA's own
annual report in 2007, which does in fact say that our power
sales were less in 2007 than they were in 2006. But we also
explain in that same report that that was due to an
accounting change, and we changed our accounting practices,
and there is simply no basis for saying that the actual
percentages were less than we forecasted.

In any case, again, if you simply assume they are correct, it doesn't provide an adequate basis for a contention.

The Appeal Board held in Duke Power, again that we cite in our answer, that a short-term blip in forecast and needs and actual demand does not justify a holding that the long-term forecasts are unreasonable.

Dr. Baratta, again you pointed this out, that the simple fact we have a recession, or could have a recession, put it that way, over a period of a year or two, does not indicate or invalidate long-term forecasts that's over a period of ten years or more.

In fact, in our case, we're looking at a projection of need for power in the 2016 to 2020 time frame, which again is 8 to 12 years, and they have not made any attempt to

- demonstrate that we could have a recession lasting for that
- 2 length of period of time.

- Additionally, Petitioners have simply mischaracterized our application. Mr. Zeller alleges that both, in his oral presentation today and in his petition, that our need for power analysis is based upon peak load forecasts rather than energy or base load forecasts. That is simply incorrect.
 - If you look at Page 8.4-2 of our application, we clearly state that our analysis of the need for new base load plants is based upon energy needs and not peak load needs.
 - They also allege that we haven't considered various factors, such as recent increases in electricity prices, the effect of price on demand, weather conditions, and the use of heat pumps.
 - And, again, I think if you look at our answer, we clearly show that in fact the application considers all of those factors and Petitioners once again are simply mischaracterizing our application.
 - I might also add that they do try to introduce new material in their reply. They have, for example, on Contention 11, a new attachment on one of the other

1 contentions. They have new information from Ross McClooney.

Again, as we've discussed previously in our motion to strike that information should have been included in the original petition. It was not, and therefore it should not

be considered as part of the contention.

With respect to their contention on the demand side management, which is NEPA Contention C, they contend that we have not forecast any load reduction from the demand side management. Again, I think that just simply mischaracterizes our application.

Our application shows in Section 8.2.2 of the Environmental Report that we have already achieved demand side management in the last ten years of approximately 500 megawatts reduction in demand. So, we do take that into account.

Turning to their contention in NEPA N, on the cost comparison issues, their allegations here are simply not material to our environmental report, although we do provide information on costs of alternatives.

In the Environmental Report, we do not base the results of our analysis on a cost comparison. Instead, for example, we reject the alternatives of wind and solar because they

1 cannot supply base load power.

We also look at combinations of wind and solar and
fossil fuel plants, which can supply base load power, but we
rejected those on the grounds that they are not
environmentally preferable to the Bellefonte plant.

Therefore, even if Petitioners are entirely correct on the cost issue, it simply is not material to our analysis.

It won't affect the results or the outcome of our analysis of the alternatives of wind, solar and other combinations.

Therefore, the contention simply is not admissible under 2.309(f)14.

Finally, turning to their contention on the no action alternative, which is Contention NEPA D, this contention is largely unintelligible to us. It appears to be saying that the no action alternative that we discussed in Section 9.1 of the Environmental Report is defective because it does not discuss, allegedly does not discuss, the negative impacts of Bellefonte.

Again, this contention simply is a mischaracterization of the Environmental Report. The Section 9.1 of the Environmental Report clearly states that if the No Action Alternative is selected and Bellefonte is not built and

operated, the negative environmental impact of Bellefonte

2 | would not occur.

Then, obviously, we have a full discussion of those environmental impacts in Chapter 4 on construction impacts and Chapter 5 on operational impacts.

So, our Environmental Report does have a full catalog of the environmental impacts of Bellefonte. We have not neglected to provide negative information.

They also appear in this contention to criticize our alternatives, our evaluation of alternative generating sources, such as wind and solar, but in this contention itself, there are essentially no facts, no allegations that would support any contention that our consideration was improper.

There's nothing more than a very conclusionary statement that we haven't done a proper job of evaluating alternatives, without saying how our analysis is defective.

We have a full analysis of alternatives in Chapter 9.2 of the Environmental Report and they've not criticized any aspect of that in this Contention NEPA D, and therefore we believe this contention should be rejected also for lack of an adequate basis.

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1
         Thank you.
2
              >>CHAIRMAN BOLLWERK: All right. Any Board
3
    questions at this point?
4
              >>JUDGE BARATTA: You made reference to specific
5
    page -- a citation relative to the fact that you used base
    load capacity to evaluate. What page reference was that?
6
7
              >>MR. FRANTZ: 8.4-2.
8
              >>JUDGE BARATTA: 8.4-2, okay. I guess the thing
9
    that kind of made me wonder was this -- making projections
10
    is more than science, let's face it. You're right, you have
11
    to look at what is a reasonable way to do things, and I was
12
    curious. I kind of got the impression that you looked at a
13
    medium growth, high growth, but not a low growth.
14
              >>MR. FRANTZ: I think we looked at all three
15
    patterns of growth. I think we actually looked at five
16
    different scenarios of growth, including a medium low and a
17
    medium high for the economy.
18
         Then I think we looked for -- in terms of demand for
19
    power, we looked at three scenarios: High, medium and low.
20
              >>JUDGE BARATTA: What was the low one based on,
21
    then?
22
              >>MR. FRANTZ: Let me pull that out.
```

```
1
               >>JUDGE BARATTA:
                                 Because 2.6 or so seemed like it
2
    would be closer to a medium than a low?
3
              >>MR. FRANTZ: Are you asking for the growth in
4
    the economy, or the growth in demand?
5
              >>JUDGE BARATTA: I would say that was reference
    to growth in the economy, I believe.
6
7
              >>MR. FRANTZ: For the annual growth rate in the
8
    regional product, we have a high -- actually, it varies from
9
    period. We have periods from 2007 to 2012, 2012 to 2017,
10
    and 2017 to '22.
11
         For the high, we have ranges of around 4.1% to 4.3%.
12
    For the medium, we have 3.1% to 3.2%. For the low, 1% to
13
    1.5%.
14
              >>JUDGE BARATTA: I just wanted a clarification on
15
    that because I was confused by what was going on there.
16
         And then there does seem to be, and this could very
17
    well be very well justified, although I'm not sure it's
18
    explained well, those statements that I cited earlier that
19
    are in the ER at Page 9.2-6, where it says that these -- you
20
    have -- I'm going to say caveats or some forecast demands.
21
         These enhanced efforts are expected to produce some of
22
    the demand of the forecast, et cetera. In other words,
```

1 you're waffling; not unjustifiably. 2 How did you take those into account? How did you take 3 that uncertainty on what demand side management can do? >>MR. FRANTZ: At the time the environmental 4 5 report was prepared - this was last fall - TVA had not yet identified what enhancements it would be making on the 6 7 demand side management program. 8 Therefore, we had no basis for calculating any 9 reduction at that point because it would have been pure 10 speculation without identifying what enhancements we were 11 planning to use. 12 So, until we have a good definition of enhancements, it 13 really wouldn't be appropriate to try to forecast what the 14 effectiveness of those enhancements might be. 15 >>JUDGE BARATTA: Well, I agree with you from a 16 forecasting standpoint, but from an ER standpoint, that 17 might be considered to be a hole in the ER. 18 >>CHAIRMAN BOLLWERK: You may need to move your microphone up a little bit. 19 20 >>MR. FRANTZ: There are other cases which have 21 held we don't need to consider reports that may be issued in

the future, and such future forecasts that haven't been

developed yet.

The Vogtle decision, for example, on the early

supplement says that there is no reason, no basis for an

adequate contention to argue that the Applicant in that case

did not consider a regional demand forecast that was to be

produced in a year or two.

It simply is not reasonable to speculate what may occur in the future.

NEPA is entirely devoted to a rule of reason, and there's numerous case law that says we aren't required to speculate as to these kinds of events.

>>CHAIRMAN BOLLWERK: Well, if I can interject, in the Vogtle case, if I remember correctly, had to do with the fact there was a public utility commission involved and I don't know of any public utility commissions that's involved with TVA.

>>MR. FRANTZ: That's correct. However, the situation is somewhat analogous in that we at that point in time when we developed the Environmental Report, we didn't have a plan.

We didn't know exactly what we were going to be doing in terms of demand side management enhancements, and

```
therefore it would be entirely speculative for us to try to
1
2
    forecast the effect of that.
3
              >>CHAIRMAN BOLLWERK: Are you saying you don't
4
    need to do it or you haven't done it?
5
               >>MR. FRANTZ: After the report came out, the
    environmental report came out and was filed with NRC, of
6
7
    course TVA has continued to work on this plan, and in May it
8
    did release a plan that showed, I believe, a reduction in
9
    peak capacity -- or peak demands of around 1,400 megawatts.
10
         Again, this was after we submitted our Environmental
11
    Report.
12
         But the important point here is, I and think we
13
    discussed this in the Environmental Report, these kinds of
14
    demand side management programs typically impact most
15
    significantly the demand for peak power, and they have
16
    relatively little impact on the overall energy demands based
17
    on power. There is some, but it's small compared to the
    impact on the peak load.
18
19
               >>JUDGE BARATTA: I mean you do say in the same
20
    area that could have some effect on the demand for base
21
    load?
22
              >>MR. FRANTZ:
```

153 1 >>JUDGE BARATTA: Which would be taken into 2 account for future planning. But this whole demand for 3 power is speculative. I can't -- and really what we get 4 into is how -- the approach that you use, is that 5 reasonable? 6 >>MR. FRANTZ: Yes. 7 >>JUDGE BARATTA: What I'm a little troubled with 8 is that this is something of a hole that exists in the ER at 9 the present time. 10 >>MR. FRANTZ: I guess it's not a hole. 11 Situations do change over time, and this is one case where 12 the situation has changed somewhat over time. 13 We still don't even have, as far as I know, a forecast of the effect on the need for base load of power. All the 14 15 studies I've seen indicate they were released in May, impact 16 upon the peak load and not the base load. 17 >>CHAIRMAN BOLLWERK: I believe there have been 18 other cases or arguments made that demand management doesn't 19 have to be taken into account. 20 For instance, there's a merchant power company which 21 really has no control over demand at all. But you're not

taking that approach here, I take it? You're not taking

```
1
    that position?
2
              >>MR. FRANTZ: I think we need to distinguish two
3
    different issues: One is could we produce additional
4
    reductions form implementing even further demand side
5
    management activities. This would be basically the
    alternatives analysis that would be in Chapter 9.2?
6
7
         Then, there is the other issue of using the existing
8
    plans, using the existing demand side management program
9
    that's in effect. What is the demand for power? And that's
10
    discussed in Chapter 8.
11
         I think the cases you're referring to are the cases
12
    that pertain to alternatives, all but even more demand side
13
    management in Chapter 9.2 rather than the need for power
14
    analysis in Chapter 8, based upon existing programs.
15
              >>JUDGE BARATTA: I didn't quite -- you say that
16
    there's more in another chapter?
17
               >>MR. FRANTZ: Yes. In Chapter 9.2, we do discuss
18
    the alternatives of using demand side management.
19
               >>JUDGE BARATTA: Right. That's what we're
20
    looking at here.
21
              >>MR. FRANTZ: In fact, I believe we say there
22
    that demand side management cannot produce the power, the
```

base load power that we're projecting from Bellefonte, as an 1 2 alternative. 3 >>JUDGE BARATTA: A moment ago you said that you 4 looked at, amongst alternatives, solar, wind and fossil 5 together, and you discarded that because of the negative environmental impact. 6 7 I think one of the issues that was raised by the 8 Intervener dealt with solar, wind and biogas. Did you 9 consider that? 10 >>MR. FRANTZ: We did not, and I guess I have two 11 points on that. 12 First of all, they raised the biogas issue for the 13 first time in their reply. It's not in their petition, and 14 therefore we move to strike that reference to the biogas. 15 I think you're going to find that the environmental 16 impacts of biogas are not horribly different than from, say, 17 the impacts of natural gas. 18 And, therefore, I think the analysis that we have on 19 environmental impacts on combinations of wind, solar and

21 had actually gone through and evaluated biogas. 22 >>CHAIRMAN BOLLWERK: All right. Anything further

fossil fuels is roughly similar to what we would have if we

```
1
    at this point?
2
              >>JUDGE BARATTA: No.
                                      Thank you.
3
              >>CHAIRMAN BOLLWERK: Judge Sager? Thank you,
4
    sir. Let's move to the staff then.
5
              >>MR. MOULDING: Thank you, Your Honor.
6
         The Staff has relatively little to add to what has
7
    already been said here, but I would like to briefly go
8
    through each of the contentions in this section to briefly
9
    reiterate a couple of points.
10
              >>CHAIRMAN BOLLWERK: I think we're having some
11
    hearing problems. You may need to first check it to make
12
    sure it's on and maybe move it a little closer.
13
         We're going to check over here and make sure our volume
14
    control is okay.
15
              >>MR. MOULDING: Can you hear me?
16
              >>CHAIRMAN BOLLWERK: Definitely. Much better.
         Again, we don't want you to swallow it, but make sure
17
18
    you get close enough to it.
19
              >>MR. MOULDING: Understood. Thank you.
20
         The Staff has relatively little to add to what has
21
    already been said here, but I would like to briefly go
22
    through each of the contentions and reiterate a couple of
```

points.

First of all, for Contention NEPA C, formerly Contention 9, the contention alleges that alternatives to the proposed action are lacking. As the Staff mentioned in its Answer, the petition did not dispute the recommendations or the alternatives discussed in the application and ignored several sections of the Environmental Report that did relate to the issues specified in this contention, wind and solar generation, as well as demand side management, as has been mentioned.

There is a discussion of wind generation in Section 9.2.2.1, solar generation in 9.2.2.2, and of demand side management in Section 9.2.1.3.

As the Petitioners' reply presented no new information on Contention NEPA C, the Staff has no further comments on that contention at this time.

With respect to Contention NEPA D, formerly Contention 10, this contention alleges that TVA's power and energy requirements forecast fail to evaluate alternatives.

As has previously been mentioned, the petition misunderstood -- or misunderstands the No Action Alternative and ignored other portions of the Environmental Report that

did in fact discuss the No Action Alternative and the energy

2 | alternatives that this contention identified.

The petition did not identify any dispute with the one paragraph from the Environmental Report that it did cite and as mentioned did not include the remainder of the environmental reports discussion of the no action alternative.

Petitioner's reply on this contention made a number of new arguments and presented some new factual material. This material included new factual sources concerning wind and solar energy generation, which we perceive as being for the sole purpose of curing the absence of factual support in the initial contention, an absence which the staff noted in its answer.

The Petitioners characterize this new material as rebuttal, but do not explain why it could not have been presented in the initial petition, and as has been discussed already in the context of other contentions, because Petitioner made no attempt to demonstrate that they have met the standards for late file contentions, the Board should not consider the new material in making its determination on the admissibility of this contention.

1 However, in any event, the new material in the reply

2 fails to explain in what way the additional information

3 specifically contradicts the analysis of wind and solar

4 generation that is in the application.

Applicant's need for power analysis.

With respect to Contention NEPA E, formerly Contention

11, this contention raises a number of challenges to the

However, as the Staff explained in its Answer, the

Petitioner provided almost no factual support for its

assertions in the contention, and more specifically did not

explain how its assertions contradicted the analysis in the
application.

As mentioned in the Staff's answer, the contention also in numerous places cited language from NRC guidance documents but without any specific additional discussion of why such an analysis was required and much less how the application in fact failed to address those issues.

The Petitioners' reply concedes that statements in SRP, Standard Review Plan Guidance, are not regulations, but argues that the concerns are important within the Staff, the NRC review process, and the staff agrees with that assertion.

The SRP provides one approach that the Staff considers acceptable for meeting the relative regulations.

However, simply quoting guidance in the contention without some explanation of how the application is therefore inadequate does not satisfy the standards for admissibility of a contention and does not demonstrate a genuine dispute with the application on that issue.

The petitioners' reply also argues that the NRC must provide some regulatory oversight of TVA or appoint another agency to conduct an independent review.

However, as explained in the Staff's response to

Contention NEPA F, formerly Contention 12, as we will be

discussing later this afternoon, generalized policy

arguments about TVA's organization and the appropriate level

of state or federal regulation of TVA are not issues that

are subject to resolution in this proceeding.

However, like other applicants, TVA must include certain information in its application, including the need for power and discussion. And as part of its NEPA responsibilities, the Staff does review TVA's need for power analysis to determine if it's reasonable and meets high quality standards, as is mentioned in the Environmental

Standard Review Plan.

But Petitioners' arguments for broader NRC control over TVA's internal decision-making or rate-making activities are beyond the scope of this proceeding.

The Petitioners' reply also presents new factual material in connection with the contention. This material includes an additional citation to challenge the economic growth rates used by TVA, and a list of energy efficiency programs that are used by -- allegedly used by other utilities and states.

However, Petitioner's characterized this new material again as rebuttal and does not explain why it could not be presented in the initial contention; and, again, as mentioned before because they had made no attempt to demonstrate that this material meets the late filed contention standards, the Board should not consider it in making its determination on the admissibility of this contention.

However, in any event, the Petitioners did not explain how the new cited growth rates or energy efficiency programs are relevant or are comparable to TVA's forecast, much less how they specifically contradict any portion of TVA's

analysis.

Finally, with respect to Contention NEPA N, formerly Contention 16, the contention here argued that the cost estimates in the application for nuclear generation were a misleading basis for comparison with the cost of -- with comparison for alternative energy sources.

However, as the Staff noted in its answer, the contention ultimately does not explain how its challenges to the Application's cost estimates create a dispute with the Environmental Reports' conclusions on the viability of alternatives.

The Applicant's analysis and conclusions with respect to wind and solar generation alternatives in the Environmental Report clearly did not depend solely on cost estimates but on the asserted need for base load capacity from the new proposed Bellefonte facility.

Consequently, the contentions challenges to the cost estimates in the Environmental Report do not demonstrate a genuine dispute with ER's conclusions with respect to the evaluation of alternatives.

As correctly noted in the Petitioners' reply, the

Petitioners presented the declaration of Arjun Makhijani as

support for both the factual content and expert opinion of this contention.

However, as noted in the Staff's Answer, for several of the assertions in the contention neither the contention nor the supporting declaration identify the sources of documents on which the Petitioners' expert opinion is based or would rely as required by 2.309(f)(1)(iv).

These include assertions regarding the costs likely to be imposed in the future for carbon dioxide admissions, about the significance or magnitude of various financial risk factors or the basis for comparing cost at a Florida Power & Light project in Florida to the cost of the Bellefonte facility.

However, as previously mentioned, the contention ultimately does not explain how its challenges to the Application's cost estimates contradict the ER's, the Environmental Report's conclusions with respect to those alternatives as alternatives to new base load capacity.

In Petitioners reply, the Petitioners' reply raises new arguments that challenge TVA selection of nuclear for the purposes of base load power. They argue for consideration of hybrid power plants, and advocate efficiency measures to

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1
    reduce electricity demand and peak load.
2
         However, the Petitioners do not show why these
3
    arguments could not have been raised in the Petition and,
4
    similar to what we have mentioned for previous contentions,
5
    the Board should not consider those new arguments in making
    its determination on the admissibility of former Contention
6
7
    16.
8
         In any event, the reply still does not identify any
9
    dispute with the analysis that is in the application,
10
    including with respect to the Environmental Report's
11
    discussion of energy efficiency measures.
12
         The Staff has no other comments on these contentions at
13
    this time.
14
              >>CHAIRMAN BOLLWERK: All right. Questions from
15
    the Board?
16
         Dr. Baratta? Absolutely.
17
              >>JUDGE BARATTA: Can I ask my Florida Power &
18
    Light question now?
19
              >>CHAIRMAN BOLLWERK: I suppose.
20
              >>JUDGE BARATTA: All right. You said that the
21
    FP&L costs aren't relevant to the Environmental Report
```

analysis that needs to be done. Is that what I heard you

say?

>>MR. MOULDING: No. We actually characterized it
as -- our statement was that the contention did not explain
what the relevance -- why those costs would be comparable to
the Florida Power & Light.

>>JUDGE BARATTA: Well, it seems like a factor of two difference in cost estimates would be kind of obviously relevant and I was curious as to what your take was on that.

>>MR. MOULDING: As I believe the Applicant has mentioned, there may be some differences in the cost for being in a different area of the country, the infrastructure that may already exist with respect to the Bellefonte facility. The Applicant has pointed to some of those as reasons why the cost might not be comparable.

Our statement was simply that the contention did not explain, other than simply citing these estimates as being for two nuclear projects using the same design, why those created material disputes with the cost estimates presented by the Application.

>>JUDGE BARATTA: That's an awful lot to be eaten up in regional differences, having built ships in different parts of the country. A factor of two, we probably never

- 1 | would have gone to that area, but it seems rather strange
- 2 and it would seem as though that would have a direct impact
- 3 on one does the alternatives comparison, and therefore it
- 4 does seem relevant.
- 5 >>MR. MOULDING: The Staff's view was that it was
- 6 | the burden of the contention to explain what the relevance
- 7 of that comparison would be, to explain why it disputes
- 8 those cost estimates.
- 9 However, as the staff also emphasized, ultimately the
- discussion of the cost estimates for nuclear generation do
- 11 | not create a dispute with the conclusions that the
- 12 | Environmental Report reached with respect to some of the
- other alternatives, such as wind and solar power, on which
- 14 cost was not -- apparently was not the determining factor in
- dismissing those as viable alternatives to new base load
- 16 generation.
- 17 >>CHAIRMAN BOLLWERK: Does the Applicant want to
- 18 say anything about that?
- 19 >>MR. FRANTZ: Just to emphasize the point that
- 20 was raised by Mr. Moulding, we do plan for Units 3 and 4 to
- 21 take advantage of the existing transmission lines. For
- 22 Units 1 and 2, the existing intake and discharge structures,

```
1
    the existing cooling towers.
2
         So, that obviously has an impact on the differences
3
    between the FPL estimates and our own estimates.
4
         Additionally, I believe the FPL itself, it says, it
5
    took our estimates for Bellefonte and used that as a
    starting point for its own analysis. Therefore, it
6
7
    obviously did not see anything that was deficient in our
8
    analysis if it was using it as a basis for its own analysis.
9
              >>JUDGE BARATTA: Except they doubled it.
10
              >>MR. FRANTZ: They doubled it. And, frankly, I
11
    have not gone through and tried to identify every reason why
12
    ___
13
              >>JUDGE BARATTA: Nor have I. I'm really asking
14
    this question out of ignorance. I'm trying to figure out
15
    why the difference.
16
              >>CHAIRMAN BOLLWERK: Did you all just get a great
17
    deal?
18
              >>JUDGE BARATTA: Did you get a fire sale or
19
    something?
20
               >>MR. FRANTZ: We've not tried to break down the
21
    FPL estimate in detail, identify every reason why it's
22
    different from the TVA estimate.
```

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1
               >>JUDGE BARATTA:
                                I mean even allowing -- what's
2
    the cooling tower cost now? A hundred, two hundred million?
3
    Something in that range? Maybe comparable for new intake
4
    structures?
5
         I mean, I can come up with -- those factors you named
    might be worth a billion or even two, but we're talking 12,
6
7
    and I just --
8
              >>MR. FRANTZ: I might also add that these cost
9
    estimates really vary tremendously on whether you're talking
10
    about overnight capital costs or costs that would include
11
    the cost of money over a four-year, five-year period. And
12
    again we have not looked at the FPL estimate to see why it
13
    may be different from the estimate we used for TVA.
14
              >>CHAIRMAN BOLLWERK: Anything further on that
15
    question? Or anything else for the Staff?
16
              >>JUDGE BARATTA: No.
17
              >>CHAIRMAN BOLLWERK: Mr. Sager?
18
         I just have -- what is the Staff's general on demand
19
    side management and the need to address it in an
20
    environmental impact statement?
              >>MR. MOULDING: It's a matter that's discussed in
21
22
    the Environmental Standard Review Plan as something that the
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1
    staff may look at.
2
              >>JUDGE BARATTA: Could you speak up?
3
              >>MR. MOULDING: I'm sorry, sir.
4
         Demand side management is a matter that is identified
5
6
              >>CHAIRMAN BOLLWERK: Try it one more time.
7
              >>MR. MOULDING: The Staff does consider demand
8
    side management to be one of the issues that is discussed in
9
    the Standard Review Plan, as something that may be relevant
10
    to the need for power analysis.
11
         However, as the Applicant has explained, there's a
12
    discussion of demand side management in the Environmental
13
    Report that the Petitioners do not clearly dispute, and the
14
    ER also identifies -- ruled it out as a viable alternative
15
    to base load capacity.
16
         So, that discussion is in the Environmental Report and
17
    it was not clear that the contention clearly disputed any
18
    aspect of that analysis in the application.
19
               >>CHAIRMAN BOLLWERK: All right. Anything further
20
    for the Staff? Thank you very much.
21
         We'll turn back the joint petitioners at this point.
22
              >>MR. ZELLER: Thank you, Your Honor.
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170
1
               >>CHAIRMAN BOLLWERK: You may want to move your
2
    mic up as well.
3
                              Indeed. TVA's arguments and I
               >>MR. ZELLER:
4
    believe Staff's arguments revolve around claims that
5
    comparative costs of nuclear and alternative energy supplies
    are not material to the outcome of this proceeding because
6
7
    nuclear power is somehow better than wind or solar power for
8
    the provision of base load energy.
9
         But our contention centers on the fact that TVA has not
10
    demonstrated that electricity or the need for power
11
    translates into base load power requirements rather than
12
    peak load sources for which there are -- peak load demands,
13
    I should say.
14
         Our information shows that a combination of renewable
15
    energy, wind and solar, can provide power with the same
16
    level of reliability, particularly when you look forward
17
    over the period of time that we're looking at.
18
         Last year in the United States, something on the order
19
    of 5,200 megawatts of new power was provided. That would be
20
    tantamount to four AP1000s. With nothing like the time
```

22 These are -- efficiency measures also can reduce

frame for development of those resources.

- 1 electricity demand and peak load much better, with far less
- 2 pollution overall.
- 3 Some of the internal contradictions which have been
- 4 | referred to -- if I can find them here. I believe you
- 5 alluded to that earlier.
- For example, regarding the costs; the difference
- 7 between Chapter 10 of the environmental report and Chapter 9
- 8 of the environmental report, which we included in our June 6
- 9 petition.
- 10 Some of these questions are reflected also in the June
- 11 | 11th request for additional information regarding the cost
- of construction estimates.
- 13 I'm looking at RAI No. 10.4.2-1, which asks the
- 14 Applicant to update the cost of construction estimates,
- 15 provide references to support the revised cost estimates,
- 16 | confirm the costs, rework of existing structures.
- 17 The allusion to Florida Power & Light don't hold up
- 18 | because -- we believe do not hold up because Florida Power &
- 19 Light is an existing site and operating station, which could
- 20 | not be much more different from the Bellefonte site. \$4.6
- 21 | billion was spent here with no power produced as of yet.
- 22 Demand side management can change NG production

forecasts.

So, for all these reasons, and the others outlined both in our original petition and in our reply, we believe this contention is admissible because it's supported by a concise statement of expert opinions and facts, and are — the bar here for us is that a contention must make a minimal showing of material facts that are in dispute, and demonstrated inquiry and depth is appropriate with the internal contradictions and what we feel is the omitted information or discounting out of hand of cleaner and in our view preferable sources of power to meet both peak demand base load power that our petition, our contention meets those requirements.

>>CHAIRMAN BOLLWERK: All right. Let me see if there's any Board questions. Judge Baratta?

>>JUDGE BARATTA: I wanted to make a comment on some of the issues you've raised in terms of, well, if a major consumer industry were to collapse or something like that, I mean I'm a little troubled.

As the Applicant has pointed out, those are discreet events, and, yes, it probably would have a very dramatic impact on growth rate and things like that, but it would be

- 1 over, first off, a short period of time. Second off, It's
- 2 | all very speculative.
- 3 You could have one go away, but then if land prices go
- 4 down and such, somebody else may come in.
- I mean to be reasonable, you can't -- individual
- 6 isolated events like that are, I think, maybe unreasonable
- 7 to take into account as opposed to coming up with a
- 8 reasonable strategy to define a low, medium and high growth
- 9 rate on which to base your forecast.
- 10 That's why I asked you about that 0.1%. What was the
- 11 basis for that? Is there a dispute between what they had,
- which is on the order of 1% versus what you're saying, and,
- 13 | yeah, those events you named could occur but one could
- 14 equally conjure other events which would have the opposite
- 15 effect. You can't play this game forever, you know what I
- mean.
- So, I was wondering, do you have anything to add to
- 18 that that would answer my concern there about whether or not
- 19 | what you're proposing is really a reasonable way to approach
- 20 that type analysis?
- 21 >>MR. ZELLER: Yes. I appreciate that question.
- 22 And, forecasts, I agree, are subject to assumptions, but I

- 1 think the only thing I could add at this point, in addition
- 2 to what I've already said, is that nuclear generating units
- 3 do seem to suffer from a unique vulnerability, and that is
- 4 | we are seeing now power plants being developed outside the
- 5 United States as well as inside the United States.
- 6 Many older units, whether in Europe or elsewhere around
- 7 | the world, are reaching the end of their normal lifespan of
- 8 | 40 years time. The vulnerability of that, I've identified,
- 9 could change the economics of all of these assumptions, and
- 10 in a matter of hours. And we've already seen one of those
- 11 | shocks go through the system, the economic system, as well
- 12 as the electrical system. In 1979, with the Three Mile
- 13 Island accident there and years later at Chernobyl.
- Now, this is not off the subject of your question.
- 15 This is right on the point. The economics of nuclear power
- 16 | could be altered if an accident happens 100 miles away or
- 17 | 10,000 miles away.
- 18 These types of changes, these types of catastrophes you
- do not see with other forms of alternative energy, the ones
- 20 | which we're talking about here, which are solar and wind
- 21 energy. Even a coal plant, which I'm not advocating.
- 22 There's nothing in history which would show the kind of

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1
    catastrophic meltdown impacts of a fossil fuel plant.
2
         So, the economics of nuclear power are subject to
3
    unique vulnerabilities. So, thereof, the analysis does need
4
    to take into account a broad range, and that's why to narrow
5
    the range of assumptions to a part of this spectrum we feel
    is unjustified.
6
7
              >>JUDGE BARATTA: When did you first raise the
8
    issue of wind, solar and biogas?
9
         We've heard it said that it was in your reply.
                                                          Is
10
    that -- I don't recall, to be honest with you, when you did.
11
    So, I'm asking that out of ignorance or failing memory.
12
              >>MR. ZELLER: Just a moment.
13
              >>JUDGE BARATTA: If you want, we can come back to
14
    that.
15
              >>MR. ZELLER: Of course.
16
              >>JUDGE BARATTA: Going back to this statement
17
    relative to the demand side management, is your concern
18
    about the analysis that was done one of adequacy or --
    concern over adequacy or concern that it was not addressed?
19
20
         In other words, that it was omitted?
21
              >>MR. ZELLER: There are words about demand side
22
    management which have been mentioned. We feel that the
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176
    analyses were inadequate and discounted out of hand, or
1
2
    mixing apples and oranges by addressing base load or peak
3
    demand with -- inappropriately.
4
              >>JUDGE BARATTA: Okay, do you have an answer to
5
    that other one?
6
              >>MR. ZELLER: Yes. The answer regarding Page 48,
7
    at the bottom of our original petition, for energy supply,
8
    negative --
9
              >>JUDGE BARATTA: Bottom of Page 48.
10
              >>MR. ZELLER: -- negative alternatives include
11
    efficiencies, demand side management which will allow TVA to
12
    abandon nuclear option at Bellefonte. Positive alternatives
13
    to nuclear power include solar, wind, et cetera.
14
              >>CHAIRMAN BOLLWERK: Judge Sager, any questions?
15
              >>JUDGE SAGER: No, thanks.
16
              >>CHAIRMAN BOLLWERK: I just have one, maybe a
17
    clarification to the record.
18
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I know you had mentioned, I guess particularly with respect to Contention NEPA N, which is now -- or used to be Contention 16, that there is cost information that was not available to you. Or you felt there were blank pages that perhaps contained that sort of information?

19

20

21

1 >>MR. ZELLER: Yes.

>>CHAIRMAN BOLLWERK: My assumption is you're talking about some kind of proprietary information that was not provided, and you suggested you had a problem with that.

I just want to make sure for the record, however, the Board did issue an order that said that if you wanted access to proprietary information you could talk with the Staff and the Applicant and seek a protective order to get it.

>>MR. ZELLER: I acknowledge that, Your Honor. We
did -- the proprietary information or security -- as
differentiated from the SUNSI rule? Isn't that what we're
talking about?

>>CHAIRMAN BOLLWERK: Well, SUNSI and proprietary tend to fall in the same category in terms of the requirements. Security information like safeguards or classified is in a different category. The safeguards and classified obviously at a much higher standard, where you need to get access to the information.

>>MR. ZELLER: Right. Well, yes, I understand, and we do have a fundamental problem with -- we understand the need for safeguards information for security concerns, national security and otherwise. SUNSI we feel is a kind of

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a grab bag and is -- and this is not unique to this
1
2
    application.
3
         We feel it is an arrogation of power by the -- by, I
    guess the Commission to keep information away from the
4
5
    public without justification.
         I could go into some detail about that. We have
6
7
    outlined this in some of our writings elsewhere, but
8
    basically we feel that to subject Petitioners or members of
9
    the public to fingerprinting and credit checks and what-not
10
    in order to get information --
11
               >>CHAIRMAN BOLLWERK: Although I don't think
12
    that's required to get access to proprietary information.
13
    believe all you need is a protective order and signing an
14
    affidavit of nondisclosure.
15
         I'll have the Staff correct me if I'm wrong, but I
16
    think you're referring to the types of information
17
    safeguards and security, or am I incorrect in that regard?
18
              >>MR. MOULDING: You're correct, Your Honor.
19
    There's no background check or credit check required for
20
    access to proprietary informational. That's a requirement,
21
    however, for safeguards information.
```

>>CHAIRMAN BOLLWERK: Which would be generally

- information dealing with the security plant or nuclear power 1 2 plant or that sort of information. 3 I think you may be under a misapprehension here. I 4 don't want you to continue to operate under that, but 5 proprietary information, at least in all the cases I've done over the years, if you talk with the Staff and the 6 7 Applicant, you can reach agreement on a protective order and 8 then get to simply sign an affidavit of nondisclosure, you 9 can have access to that information. 10 Obviously, you cannot disclose it without authority 11 from the Board. 12 One of the things that has been done in the past is you 13 can come to the Board and say we think this should or should 14 not be made proprietary. 15 But it doesn't require a credit check. It doesn't 16 require fingerprints. All it requires is your willingness 17 to abide by the order that's put in place.
- 18 >>MR. ZELLER: Thank you. I appreciate that. I 19 should -- I wasn't prepared to talk about this today, but it

seemed like the --

20

>>CHAIRMAN BOLLWERK: You may have a philosophical 21 22 objection to SUNSI and --

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1
                              I do.
               >>MR. ZELLER:
2
              >>CHAIRMAN BOLLWERK: -- proprietary too, and I
3
    understand that. I'm just saying it's not --
4
               >>MR. ZELLER:
                              I do, too.
5
              >>CHAIRMAN BOLLWERK: -- something you cannot get
6
    access to and cannot try to object to as part of these legal
7
    proceedings. I just wanted to may that clear.
8
              >>MR. ZELLER: Thank you. I appreciate that. And
9
    we did look at acquiring SUNSI information, specifically,
10
    and the constraints that you have mentioned, which apply to
11
    SUNSI, we feel are unjustified, and unjustifiable, and
12
    particularly in this case with TVA, which is not in
13
    competition with any other utility, so far as we can tell.
14
         So, if we should be more straightforward and explicit
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    in our objections to it in this matter, then perhaps we
16
    should have done that, but you are correct, we do have a
17
    philosophical problem with keeping this information apart
18
    from the freely available information, which is in the rest
19
    of the Combined Operating License Application.
20
              >>CHAIRMAN BOLLWERK: All right.
                                                 Thank you.
21
    Anything further?
22
         All right, it's a quarter till. Why don't we go ahead
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and take a break at this point. We've been at it a little 1 2 over an hour. 3 We'll take a break up until -- why don't we say, let's 4 see, 2:55, approximately. 2:55. 5 I would mention again if we have some folks that have been part of our webcast and are leaving, there is an e-mail 6 7 address, webstreammaster, one word, dot resource@nrc.gov. 8 If you have any comments, we appreciate hearing from you. 9 Then we'll take a 10-minute break until five minutes to 10 3 o'clock, and then we'll reconvene. Thank you. 11 (Whereupon, a recess was taken.) 12 >>CHAIRMAN BOLLWERK: All right, let's go back on 13 the record. We're back from a brief break, and we're going to begin 14 15 now with Contention NEPA F, which was formerly Contention 16 12: "The NRC Failed to Justify the Need for New Units." 17 And I'll turn to Mr. Zeller and let's hear what you have to 18 say, sir. 19 >>MR. ZELLER: Thank you, Your Honor. In this 20 contention, the Petitioners are asking the Nuclear 21 Regulatory Commission to review Tennessee Valley Authority's

22 claims that the proposed Bellefonte units are needed. This is based on our look-back over the last several decades when Tennessee Valley Authority protected large increases in demand, which did not materialize, and resulting in the cancellation of many of the units at that time, projected to be on the order of 17 new units.

So, I guess this is maybe a wish and a prayer that

So, I guess this is maybe a wish and a prayer that somebody will take a look at what TVA has done, and our analysis here is mostly the broad brush strokes and just guessing, by gosh, showing that TVA has made some big mistakes in the past.

Court II are justified.

And so we're kind of appealing to the Commission or to this Board to either have the Nuclear Regulatory

Commission's staff take a harder look at this, or if needs be, an outside agency. I don't know, for example, since TVA is a federal body, could the General Accounting Office of Congress look at these claims to justify these new units?

I'm aware of the example of a proposal by TVA which undermines their own claims that a new unit at Bellefonte

Their energy efficiency plan, which is supposed to be met by 2012, calls for a 1,400 megawatt reduction in power demand in their service area, met by energy efficiencies and

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demand side management; reasonable approach to reducing the
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2
    impacts on the environment, saving their own ratepayers
3
    money.
4
         1,400 megawatts, as you well know, is tantamount to
5
    just one of these AP1000 reactors, and that's by 2012.
         So, basically that's the contention in a nutshell.
6
7
               >>CHAIRMAN BOLLWERK: All right. Any questions
8
    from the Board at this point?
9
         All right, let's turn then to the Applicant.
10
                               Thank you, Your Honor.
              >>MR. BURDOCK:
11
    petitioners have not provided an admissible contention here.
12
    In the title to their contention, they claim that the NRC
13
    failed to justify need for the new units.
14
         If the petitioners are claiming that the NRC already
15
    should have done something, then it provides no legal basis.
16
    From the Petitioner's description today, it sounds like
17
    they're disputing the future reviews by the NRC staff.
18
         In the Petitioner's Contention, they conclude that it
19
    clearly becomes a responsibility of the NRC to review the
20
    adequacy of TVA's claims that the proposed Bellefonte units
21
    are needed.
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TVA submitted its application to the NRC in October

- 1 2007. Chapter 8 of the Environmental Report includes a need
- 2 for power analysis. TVA submitted that to the NRC for the
- 3 NRC's review.
- 4 So, in essence, the Petitioners are claiming that the
- 5 NRC staff is required to do something that they are already
- 6 required to do by the regulations and this cannot support an
- 7 admissible contention.
- 8 Additionally, if the petitioners are challenging the
- 9 future analyses of the NRC staff, this, too, must fail.
- 10 | Section 2.309(f)(2) of the NRC regulations makes it
- 11 clear that at this stage of the proceeding, Petitioners must
- 12 | challenge the documents that have already been prepared,
- 13 | such as the Environmental Report and Petitioners challenge
- 14 no part of the environmental report in this Contention.
- 15 Additionally, this Contention discusses a lot of facts
- about TVA and their decision-making process. It appears to
- 17 | claim that the NRC should provide oversight to those
- decision-making processes related to TVA's rates and their
- 19 decisions to apply for a COL.
- 20 But they provide absolutely no statutory or regulatory
- 21 authority for that. Therefore, that challenge is outside
- 22 the scope of this proceeding.

1 Nothing further.

2 >>CHAIRMAN BOLLWERK: All right. Any Board

3 questions for TVA?

All right. We'll turn to the staff and I guess one of things I think we'd like to get a sense of from the staff is what is your relationship with TVA on the regulatory side given they are a federal entity that might be different from what you do relative -- or how you interact relative to other utilities or other applicants for nuclear power plants, to the degree you can help us out with that?

>>MR. MOULDING: I can try. Like any other

Applicant, TVA is required to submit an environmental report
that includes the need for power analysis. Like, as we do
with other applicants, the staff reviews that need for power
analysis to ensure that it is reasonable and that it meets
high quality standards as discussed in the Environmental
Standard Review Plan.

Previous Commission cases do indicate that the NRC and TVA both have NEPA related responsibilities and it is pursuant to our NEPA responsibilities that the NRC staff conducts the review of the need for power and presents that in the NRC staff's Environmental Impact Statement.

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1
               >>CHAIRMAN BOLLWERK:
                                     Given there's no public
2
    utility commission involved, how does that change the
3
    staff's relationship with TVA or the sorts of reviews they
    might otherwise look to the PUC to do?
4
5
              >>MR. MOULDING: As I mentioned, the Environmental
    Standard Review Plan has certain criteria that the NRC staff
6
7
    looks for in determining whether any Applicant's need for
8
    power analysis is reasonable.
9
         Those criteria are spelled out in Chapter 8 of the
10
    Environmental Standard Review Plan, and those are the same
11
    criteria that the staff would be looking for in TVA's
    environmental report.
12
13
         But in any event, as the Applicant has correctly
14
    pointed out here, most of what the Petitioner is asking for
15
    here concerns more general oversight of TVA's
16
    decision-making process, the extent that the stakeholder
17
    involvement and TVA's decision-making and those issues are
18
    outside the scope of this proceeding and are not really
19
    related to the more narrow question of how the NRC reviews
20
    the need for power analysis.
21
              >>CHAIRMAN BOLLWERK: I think you haven't
22
    specifically answered my question, though, in terms of --
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- 1 for instance, the staff will defer to a public utility
- 2 commission's findings about need for power.
- And I take it what you're saying, and maybe I'm not
 listening carefully enough, that you're basically saying you
 would stand instead of the public utility commission in that
- 6 regard?

- >>MR. MOULDING: The staff's guidance in the
 Environmental Standard Review Plan suggest that the staff
 can rely on the need for power analysis provided by an
 Applicant or by a public utility or other regulatory entity
 if it meets the criteria for being reasonable and meeting
 high quality standards.
 - The staff's guidance is directed at that analysis of an Applicant's environmental report. And in that sense, it is the same -- same review that the NRC staff performs of TVA's or would of other applicants, if it meets those criteria for being reasonable and of high quality standards.
 - >>CHAIRMAN BOLLWERK: If I understand what you're saying, the only difference is, for instance, an Applicant, in a regulated state can look to their public utility commission, perhaps, to supply the NRC with some information that might be used for making a need for power

1 determination.

Whereas, here, the TVA does not have that opportunity because essentially, they are not regulated by a public utility commission; they have to supply the information themselves?

>>MR. MOULDING: That is correct, but that doesn't mean that the staff does not perform the same review of whether it meets the criteria for being reasonable and the criteria being systematic, comprehensive, et cetera.

>>CHAIRMAN BOLLWERK: You would just be looking to the public utility commission's analysis or the way that they did the process rather than somebody looking at the Applicant's information?

>>MR. MOULDING: That is correct, but the staff cannot simply rely on information in an Applicant's environmental report, whether or not it comes from a third party regulatory review, unless it meets the standards that the staff looks for in its guidance.

>>CHAIRMAN BOLLWERK: All right.

>>JUDGE BARATTA: Just for further clarification, when a PUC does their -- Public Utility Commission, does their review, it's more akin to the due diligence review.

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In this case where there is no PUC, are you going to do
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2
    that type of review, because that's quite an undertaking?
3
         What are your criteria for determining reasonableness,
4
    I guess is what I'm saying?
5
               >>MR. MOULDING: Those criteria are the ones that
6
    are identified in the Environmental Standard Review Plan,
7
    which include things like the analysis being systematic and
8
    comprehensive.
9
         I'm not sure if that's similar to what you're referring
10
    to in terms of due diligence. I'm not sure --
11
               >>JUDGE BARATTA: Well, my understanding is when a
12
    PUC -- they actually go in and look at the very detailed
13
    level numbers and such, at historical data, population data.
14
    It's a much more comprehensive review then frankly I would
15
    expect you to undertake.
16
         I'm just trying to get an understanding of what you
17
    think you will be doing in this case, this particular
18
    application.
19
               >>MR. MOULDING: In the Environmental Standard
    Review Plan, the guidance indicates that -- perhaps the way
20
21
    you were discussing our first look in conducting the review
22
    of the need for power analysis is to determine whether the
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1 analysis is systematic, comprehensive, et cetera.

The staff's guidance continues that if those criteria

are not -- do not appear to be met, then the staff has more

detailed criteria that we would then look at and we would

request more detailed information about some aspects of that

analysis.

So, the Environmental Standard Review Plan kind of discusses both those levels of scrutiny of a need for power analysis. But the first step is trying to determine if the need for power analysis can be relied on because it is reasonable and meets the high quality standards.

>>JUDGE BARATTA: And you get in as part of that, into the reasonableness of their assumptions? Or are you just looking at whether or not you have a systematic approach to determining the need for power?

>>MR. MOULDING: I believe it's more the latter, but I would have to consult the language of the Environmental Standard Review Plan to be confident about that.

>>CHAIRMAN BOLLWERK: With respect to TVA, will you be doing the latter or the former? I guess we're back to that.

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Is it systematic, what you're looking for with respect
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2
    to TVA or are you actually taking the next step since there
3
    is no public utility commission there?
4
              >>MR. MOULDING: As the Applicant mentions, at
5
    this time, the staff is currently reviewing the need for
    power analysis. So, as part of that analysis, we would
6
7
    determine what level of information we would be looking for
8
    under the NRC staff guidance. But that is what the staff is
9
    currently reviewing.
10
              >>JUDGE BARATTA: I guess this is a unique beast
11
    in a way because you're dealing with a situation where most
12
    utilities are regulated or a merchant, which means
13
    unregulated, and the need for power is meaningless in that
14
    case, because that's strictly a business case and not a PUC
15
    type of case, which this is more akin to.
16
          I'm just curious as to how -- does the Standard Review
17
    Plan really cover this case? That's the bottom line.
18
              >>MR. MOULDING: As I mentioned, the Standard
19
    Review Plan talks about situations when the staff may rely
20
    on Applicant's need for power analysis or on a third
21
    party's -- a public utility commission's review submitted by
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an Applicant after having consulted that utility commission.

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So, the guidance is intended to address both of those
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2
    circumstances. I guess I would also just emphasize that in
3
    this case, the contention doesn't make specific claims about
4
    what should or should not -- part of that analysis they're
5
    making more general assertions about what proper oversight
    of TVA, NRC should or should not have. And our position is
6
7
    that those issues are outside the scope of this proceeding.
8
               >>CHAIRMAN BOLLWERK: Right, although you did make
9
    reference in your prior argument on the NEPA contentions
10
    that we put together to this sort of idea, to some degree,
11
    which is one of the reasons also we were interested in this
12
    issue.
13
         All right. Anybody from the Board have any other
14
    questions for the staff?
15
         Let me turn then back to Mr. Zeller. Anything further
16
    to say on this contention?
17
               >>MR. ZELLER: Thank you, Your Honor.
18
         The responses that I've just heard, both from the
19
    Applicant and from the staff I believe indicate that the NRC
20
    may or may not have -- the staff, I should say, may or may
21
    not have expertise akin to the public staff of a public
22
    utilities commission or a public services commission.
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I pointed to this request for additional information

which asks TVA to provide or update its IRP, its Integrated

Resource Plan, in which it reviews a forecast for power.

So, I believe that the Commission's staff does seem to be seeking some of this information. So, I don't know if we're at the point yet where we would accept that they have done the due diligence or they have done the -- provided the checks and balances that an independent review would provide.

I mentioned the GAO; that was just kind of a shot in the dark. Some agency, if it's not within the Nuclear Regulatory Commission's staff that has the expertise that a public staff of a utility's commission would have, to check things out and to do an independent analysis, which, as we said in our contention, is lacking in this case.

So, we're kind of -- we're looking for an answer here ourselves and I don't know what the solution is, but I know that what I'm seeing is not it.

>>CHAIRMAN BOLLWERK: Let me ask this question.

Putting aside the GAO for a second, Mr. Moulding indicated their staff is undergoing its review now on this aspect of the application and they haven't finished it yet.

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Do you think what you're asking for here may be a
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2
    little premature? Do you need to see what they actually do?
3
              >>MR. ZELLER: Maybe so, and if this contention
4
    was admitted, then we would certainly have the benefit of
5
    that analysis in order to talk more about it.
6
              >>CHAIRMAN BOLLWERK: Although normally, at least
7
    looking at the rules at this stage, what we're looking for
8
    are contentions that relate to the Applicant's application
9
    in the Environmental Plan, not to what the staff's review is
10
    doing on the NEPA side.
11
               >>MR. ZELLER: There's the rub.
12
              >>CHAIRMAN BOLLWERK: All right. Any other
13
    questions from the Board or Mr. Zeller?
14
              >>MR. ZELLER:
                              I'm done.
15
              >>CHAIRMAN BOLLWERK: You're done? All right.
16
         Let's then move to Contention Miscellaneous F, which
17
    was formerly Contention 13, the so-called low-level -- the
18
    title is "So-Called Low-Level Radioactive Waste".
19
         I guess you mentioned before, Mr. Zeller, your concern
20
    about I guess the Commission's waste confidence ruling,
21
    which has to do with high-level waste. And as I read this,
22
    I got the impression what you're looking for is waste
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1 | confidence relating to low-level waste?

This Contention No. 13 or Miscellaneous F, this

so-called low-level radioactive waste -- pardon the term

there, because that means that much of what is categorized

as low-level waste, as you well know, is not -- does not

mean low danger. It includes some of the same radionuclides

that's included in high-level nuclear waste.

And then when you get in the upper range there, Class B, C or even greater than class C radioactive waste, you're talking about some very dangerous -- some very hazardous radionuclides.

This Contention, as outlined in our original petition of June 6th, states it -- I think plainly that there is no place for this waste to go and therefore that TVA at Bellefonte would have to find some other way to deal with some of these wastes.

I agree it's an intractable problem, but there are -or there have been in the past, legislative or institutional
remedies for such, and at this point in time and perhaps for
a considerable period into the future, such options are
foreclosed.

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So how, in our view, how -- we aren't aware of no
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2
    exemptions granted by the Commission from the relevant
3
    regulations under -- for low-level radioactive waste
4
    disposition over a long period of time.
5
         Low-level waste are handled on-site for a limited
6
    period of time, but I think if the past is any guide, the
7
    Low-level Waste Policy Act was passed decades ago and the
8
    compact system that it was supposed to put in place almost
9
    came together. It fell apart before it became functional.
10
         So, we're in a situation now -- we're kind of in a
11
    limbo with low-level radioactive waste on a national scale.
12
         So, it's left to the utilities, now, TVA and others to
13
    figure out how to deal with low-level waste. That's why we
    come to the regulations under 10 CFR 61, because that seems
14
15
    to be the one place where long-term management or
16
    disposition of low-level radioactive waste is discussed.
17
              >>CHAIRMAN BOLLWERK: All right. Anything from
18
    either of the Board Members at this point?
19
         No?
              All right. Let's turn then to the Applicant.
20
               >>MR. FRANTZ:
                             The heart of the Contention is that
21
    we must obtain a license under Part 61 to dispose of
22
    low-level waste. This contention is both legally and
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- 1 | factually incorrect.
- 2 First of all, Part 61 applies to disposal of waste, not
- 3 to temporary on-site storage. As we clearly state in
- 4 | Section 3.5.3 of our Environmental Report, we don't plan to
- 5 dispose of waste on-site.
- 6 Instead, we plan to store it temporarily and then ship
- 7 it offsite for disposal. And therefore clearly, Part 61 is
- 8 | not applicable to our plans.
- 9 Furthermore, I might add that as a legal matter, Part
- 10 61 only applies to waste received from others for disposal.
- 11 So, therefore, even if we were planning to dispose of waste
- on-site, which we're not, but even if we were, Part 61 would
- 13 | not be applicable in this case.
- 14 Furthermore, I think the Contention is based upon a
- 15 | faulty premise that there will never be an available
- 16 disposal site for Class B and Class C wastes.
- 17 However, we don't plan to begin operation at Bellefonte
- 18 until the 2017/2018 timeframe. That gives us about ten
- 19 years hopefully to develop a disposal site that would take
- 20 | waste from the State of Alabama and perhaps from other
- 21 states.
- 22 Additionally, Bellefonte is designed to store two

- 1 | years' worth of Class A, B, and C waste. Most of that is
- 2 Class A waste, and therefore if we were only going to be
- 3 using it for Class B and C storage, we'd have more than two
- 4 years worth of capacity.
- 5 And then, finally, there are provisions that are in the
- 6 NRC guidance documents for expanding storage capacity. So,
- 7 for example, if we get into the 2020 time frame or later,
- 8 and we find out that we need more storage capacity, the
- 9 guidance documents provide for us to construct more
- 10 capacity.
- 11 For example, the generic letter 81-38 and Regulatory
- 12 | Issue Summary 20 -- I'm sorry; 2008-12 both provide guidance
- 13 for expanding storage capacity on-site. And again if we
- 14 need to, we would use those provisions.
- 15 Finally, I might add in this regard that their
- 16 | suggestion that we obtain a Part 61 license and dispose of
- 17 | waste on-site is contrary to the NRC's policy.
- 18 For example, in generic letter 81-38, the NRC has said
- 19 that licensees should not dispose of waste on-site because
- 20 | that would discourage states from developing their own
- 21 disposal facilities.
- 22 What Mr. Zeller is suggesting would be contrary to the

- 1 NRC's policy in this area. Petitioner's reply takes a
- 2 | somewhat different tact. They argue there that we would
- 3 | consider the environmental impacts of on-site disposal, but
- 4 that represents a direct challenge to Table S3 and 10 CFR
- 5 51.51.
- 6 In fact, in Footnote 13 of their reply, Petitioners
- 7 | acknowledge that fact because they have not sought a waiver
- 8 from the regulation, this issue is not cognizable by the
- 9 Board.
- 10 They do state that they plan to submit a petition for
- 11 | rulemaking to amend Table S3. In other words, they have not
- 12 | submitted that petition yet. In any case, it would not
- 13 provide a basis for a contention in this proceeding.
- 14 The NRC is allowed to resolve issues generically rather
- 15 than through individual licensing proceedings and
- 16 petitioners have simply mis-cited the case of Massachusetts
- 17 | versus NRC. That does not provide authorization for the NRC
- 18 to admit contentions on a standby basis or to allow a
- 19 placeholder basis.
- 20 Instead, it simply says that a petition for rulemaking
- 21 may request inspection of the relevant portions of the
- 22 | licensing proceeding if it's a party to that proceeding. It

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1
    provides no basis for a contention in that proceeding.
2
         Finally, I might add that they claim in their petition
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    to intervene our description of the Process Control Program,
    commonly known as a PCP, is perfunctory.
4
5
         However, they seem to overlook the fact that our FSAR
    incorporates by reference NEI-0701 which provides a fairly
6
7
    lengthy description of the PCP. Therefore, we think again
8
    they have mischaracterized our application in this area.
9
         That concludes my discussion. Thank you.
10
              >>CHAIRMAN BOLLWERK: All right, questions from
11
    the Board? Judge Baratta?
12
              >>JUDGE BARATTA: I guess what would be wrong with
13
    you just saying what you just said in your environmental
14
    report? In other words, I acknowledge that Barnwell is not
15
    available and you do have options available, which you just
16
    outlined.
17
              >>MR. FRANTZ: First of all, when we submitted our
18
    environmental report last fall, at that point Barnwell was
19
    available.
20
               >>JUDGE BARATTA: Yeah, but they already said they
21
    were going to close in June.
22
              >>MR. FRANTZ: I understand your point, and
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- 1 obviously there could have been an enhancement in this area,
- 2 but we don't see any fundamental problem with the
- 3 | Environmental Report.
- 4 There really isn't any material issue or dispute of
- 5 | fact here and won't alter any of the outcomes of our
- 6 analysis in the environmental report if you were to include
- 7 this kind of information.
- 8 >>JUDGE BARATTA: I don't know about that. Just
- 9 for the audience benefit, what does Table S3 specifically
- 10 | say relevant to low-level waste?
- 11 >>MR. FRANTZ: It assumes that it will be disposed
- 12 of off-site in shallow burial.
- 14 >>CHAIRMAN BOLLWERK: Judge Sager, anything?
- 15 >>JUDGE SAGER: Just to help me with my education
- 16 here, the contention says there's almost no mention in the
- 17 ER about this subject, but you reference the sections. What
- 18 | section would I look this up in? Your description of the
- 19 handling the waste.
- 20 >>MR. FRANTZ: The handling of the waste with
- 21 respect to the PCP is in FSAR Section 11.4.6. I believe
- 22 | there are also various discussions of how we intend to store

waste and dispose of it off-site in Environmental Report 1 2 Section 3.5.3. 3 >>JUDGE SAGER: Thank you. >>CHAIRMAN BOLLWERK: When I first spoke with 4 5 Mr. Zeller, it referred to this as sort of the low-level 6 waste analog to a high-level waste confidence provisions, 7 the Commission's policy or undertaking a rulemaking. Why is 8 that not an apt analogy here? 9 I suppose that one of the questions is what confidence 10 does the Commission have with this problem with low-level 11 waste generally is going to be solved, going on in this past 12 20 years, as is the case in the high-level proceedings. 13 >>MR. FRANTZ: The waste confidence rulemaking 14 proceeding was looking at the safety of the storage spent 15 fuel on-site after termination of operation of the plant, 16 and in this case there really isn't any dispute that we can 17 safely store material on-site. 18 We do have provisions right now for two years worth of 19 storage and the staff is reviewing those -- or has reviewed 20 those. They are part actually of the DCD for the AP1000. 21 And if we need to develop additional storage 22 facilities, the Agency staff has guidance documents that

- 1 provide criteria for safe storage. So, there really isn't
- 2 any question at this point we can safely store the low-level
- 3 waste on-site.
- 4 >>CHAIRMAN BOLLWERK: But again, with high-level
- 5 | waste, that question is for how long? Isn't that a question
- 6 here?
- 7 If this never -- if the states don't deal with this
- 8 problem in the near term, how long is this going to go on?
- 9 Isn't that what the Commission is looking at in some degree
- 10 of the high-level waste cases?
- 11 >>MR. FRANTZ: You have to postulate that this
- would go on for 50 years; 10 years to go through the
- 13 licensing process and the construction process and 40 years
- over a license lifetime, and you could actually renew it for
- 15 another 20 years. To postulate, we won't have any disposal
- 16 | facilities available for that lengthy period of time I don't
- 17 believe is reasonable.
- >>CHAIRMAN BOLLWERK: Hasn't this been going on
- 19 for nearly 20 years already? There were alternatives up to
- 20 | this point, but those alternatives -- the window is
- 21 narrowing.
- 22 And would also point out with maybe another analogy

- 1 | with the -- there were problems originally with the uranium
- 2 enrichment that had to be solved with basically Congress
- 3 coming and passing a statute that then became basis in the
- 4 LES case for a finding there about confidence relative to
- 5 waste.
- 6 >>MR. FRANTZ: Again, I think our position is we
- 7 | can safely store this. The NRC has found with the DCD they
- 8 have safe storage provision already in the DCD.
- 9 >>CHAIRMAN BOLLWERK: All right, anything from the
- 10 members of the Board at this point for the Applicant? All
- 11 | right. Thank you very much. Let's start with the staff.
- 12 >>MR. MOULDING: The staff has relatively little
- 13 to add with respect to the contention Miscellaneous F. As
- 14 | already mentioned, the Bellefonte application does not
- 15 propose on-site disposal of radioactive waste and
- 16 accordingly there is no Commission requirement to license
- 17 | this site under 10 CFR Part 61.
- 18 As already mentioned, Table S3 of 10 CFR 5151 already
- 19 makes a conclusion with respect to the amount of low-level
- 20 | waste identified, not resulting in significant effluent to
- 21 | the environment.
- 22 And as the Petitioner seems to recognize in their

- 205 reply, they acknowledge that this is essentially a 1 2 prohibition on challenging the regulation and they indicate 3 their intent to file a rulemaking petition. 4 But for the reasons already explained in the staff's 5 answer with respect to two other contentions, their intention to file a rulemaking petition does not make for an 6 7 admission contention here. 8 Finally, the petitioners attempted in their reply to 9 cure the lack of factual support or expert opinion for their 10 contention by providing a new expert declaration. 11 previously mentioned, a reply brief is not permitted to cure 12 that deficiency in the original contention. 13
 - As noted, the reply also raises some new claims and arguments, including with respect to environmental justice and economic consequences. But because the petitioners made no attempt to demonstrate that they met those standards for late-filed contentions with respect to those arguments, the Board should not consider those in ruling on the admissibility of the contention.

The staff has nothing further at this time.

14

15

16

17

18

19

20

21 >>CHAIRMAN BOLLWERK: All right. Judge Baratta, 22 anything for the staff? Just one question. Wasn't the

- 1 closure of Barnwell sort of a material change here? It was
- 2 obviously something significant. Something's changed here.
- 3 Something's not the same as it was before in a fairly
- 4 | significant way?
- 5 >>MR. MOULDING: Well, for the reasons that have
- 6 been already mentioned here, the rule already deals with --
- 7 deals with the circumstances of the availability of
- 8 disposal, and for the reasons that the Applicant mentioned,
- 9 the timeliness of that ultimate disposal issue is not
- something that needs to be determined at this time, or the
- 11 | contention has pointed to no requirement to resolve that at
- 12 this time.
- >>CHAIRMAN BOLLWERK: Anything further from the
- 14 Board? You're looking pensive.
- 15 >>JUDGE BARATTA: Well, the last statement that
- 16 leads to no requirement to resolve that at this time, I
- 17 | quess I'd like to understand that a little further.
- 18 At some point, it's going to have to be resolved. When
- 19 does it become right?
- 20 >>MR. MOULDING: As the Applicant previously
- 21 discussed, if there proves to be a storage issue down the
- 22 line, the staff has guidance for addressing that issue at

1 that time. 2 But the contention pointed to no -- the contention is 3 focused on the need for a Part 61 licensing requirement for disposal -- actual disposal of low-level radioactive waste 4 5 on-site, and Part 61 is simply not applicable to that. >>JUDGE BARATTA: Well, I'm not referring to Part 6 7 I'm more referring to the issue that Judge Bollwerk 8 referred to here, which is the closure and what to do about 9 the waste that might accumulate. 10 When does that -- dealing with that relative to their 11 license or proposed license? I shouldn't say when does it 12 become right. 13 >>MR. MOULDING: As the Applicant mentioned, the 14 Commission has issued some generic guidance about dealing 15 with the issue of low-level waste storage and has indicated 16 that those measures can be considered in the future at an 17 appropriate time. 18 >>JUDGE BARATTA: Seems to be evading question 19 about when the appropriate time is. We'll let that go by.

>>CHAIRMAN BOLLWERK: All right. Anything

22 >>JUDGE SAGER: No.

further? Judge Sager?

20

```
1
               >>CHAIRMAN BOLLWERK: All right.
                                                 Let's turn back
2
    to the Joint Petitioners then.
3
              >>MR. ZELLER: Thank you, Your Honor.
4
    original petition does address Section 11.4.5, and we
5
    characterize that as a perfunctory discussion, which is
6
    regarding the process control program, which I'm assuming
7
    you all read, so I won't bother with that.
8
         But it does end up saying that its purpose is to
9
    provide necessary controls, et cetera, et cetera, et cetera,
10
    for a burial at a low-level waste disposal site that is
11
    licensed in accordance with 10 CFR 61.
12
         So, I guess it kind of -- it begs the question because
13
    there is no explanation offered as to how the Applicant will
14
    meet this plan.
15
         For example, where is the analysis for greater than two
16
    years' storage on site, at the Bellefonte site? Somebody
17
    can point that out to me, but I don't see it in here.
18
         I think at the bottom line our recommendation would be
19
    to request this contention be admitted and held in abeyance
20
    until some of these issues can be resolved.
21
              >>CHAIRMAN BOLLWERK: Any Board questions for
22
    joint petitioners? Judge Baratta?
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1
                                 We have this Table S3, and I
               >>JUDGE BARATTA:
2
     think you're well aware that one of the things that a
3
    contention cannot do is challenge regulation.
4
         And Table S3 is in essence a regulation which says that
5
    the issue of low-level waste disposal is a generic issue and
    the Commission's opinion is that there is place to store it
6
7
    and dispose of it.
8
         So, what would you have us do? Because we have on the
9
    one hand, the requirement that we cannot admit a contention,
10
    the challengers regulation.
11
         We have, on the other hand, Table S3, but until we also
12
    have the issue that Barnwell is now closed.
13
                              I understand and I appreciate that.
               >>MR. ZELLER:
14
         According to my understanding, the Nuclear Regulatory
15
    Commission may channel into a generic rulemaking the
16
    Petitioners' concerns about information and that it can --
17
    it should or it must provide at least one path by which the
18
    challenging party may establish a connection between the
    rulemaking and the licensing proceeding.
19
20
         The purpose of which is to assure the result of the
21
    rulemaking proceeding will be applied to the individual
22
    licensing case.
```

- So, this is the Commonwealth of Massachusetts, First 1 2 Circuit 2008. 3 So, this information we think would come under that,
- 4 and so there has to be some path here which allows the issue 5 to be not only dealt with generically, but it's raised in this context. 6
- 7 And that's what I believe the case law or the -- not 8 the case law -- well, I guess it is case law, that comes to us from the First Circuit would indicate that there needs to 9 10 be some kind of path provided here.
- 11 If it's not held in abeyance, then perhaps some other 12 management decision by the judges. I would leave that to 13 you. I have no idea about that.
- 14 >>CHAIRMAN BOLLWERK: All right. I don't have 15 anything further. Judge Sager?
- 16 >>JUDGE SAGER: No.
- 17 >>CHAIRMAN BOLLWERK: All right. Thank you very 18 much for your comments on that contention.
- 19 We're now at what I would, I guess, refer to as sort of 20 the residuum, which would be the balance of the contentions 21 that you all had posited.
- 22 We've given you a general time to argue any, all or

```
1
    none of those depending on how you want to proceed.
2
         I guess my question, Mr. Zeller, is do you have
3
    something you want to say about every one or do you want to
    deal with only specific ones? How is your --?
4
5
              >>MR. ZELLER: Thank you. I wondered why that
    kind of did seem like a grab bag.
6
7
              >>CHAIRMAN BOLLWERK: I think the Board's feeling
8
    is we understood what you were saying. It wasn't
9
    necessarily -- we wanted to give you an opportunity if you
10
    wanted to emphasize something to us about any of them in
11
    particular. That's why we sort of put them all together.
12
         We can proceed through them one at a time or I can sort
13
    of set them all out and we can go through them in any order
14
    you'd like. Sort of a question of how you'd like to proceed
15
    within the time frame that we have.
16
              >>MR. ZELLER: Which is 20 minutes, 10 and 10.
17
         Can I have a moment to confer with my colleague,
18
    please?
19
              >>CHAIRMAN BOLLWERK: Sure. Absolutely.
20
              >>MR. ZELLER: Okay. Thank you, Your Honor. I
21
    would just like to briefly touch on a few points, not on
22
    every single one of these contentions because I think we
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1
    leave some of it to stand.
2
              >>CHAIRMAN BOLLWERK: Would it be helpful if I
    sort of went down and you can just tell me if there's
3
4
    anything you want to say about that one and if there is you
5
    can say. If there's not, we'll move on to the next one.
6
              >>MR. ZELLER: Of course.
7
              >>CHAIRMAN BOLLWERK: Will that work for you?
8
    first one is what was called Miscellaneous A, formerly it
9
    was a portion of Contention 1, whether Bellefonte will
10
    improve the general welfare and increase the standard of
11
    living or strengthen free competition in private enterprise.
12
              >>MR. ZELLER: What I would say here is what has
13
    the Nuclear Regulatory Commission done to eliminate the
14
    problem identified in its August 2001 review on human error?
15
              >>CHAIRMAN BOLLWERK: Your essential concern there
16
    is about questions of human error?
17
              >>MR. ZELLER:
                              Yes.
18
              >>CHAIRMAN BOLLWERK: All right. Anything further
19
    on that one?
20
               >>MR. ZELLER: No, I think the rest of it stands
21
    on some of the technical issues as stated. We'll just leave
22
    it where they are.
```

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1
               >>CHAIRMAN BOLLWERK: All right.
                                                 You may have
2
    already gone into this, but let me just go through.
3
    was also FSAR-A, which was formerly also a portion of
    Contention 1, hardware failures.
4
5
               >>MR. ZELLER: Right.
6
              >>CHAIRMAN BOLLWERK: You're standing pat on that
7
    one, at least at this point?
8
               >>MR. ZELLER: We'll stand by our petition.
9
              >>CHAIRMAN BOLLWERK: All right. There was TS-A,
10
    which was formerly a portion of Contention 1, human factors.
11
    I think that's what you just referred to.
12
              >>MR. ZELLER: That's the one I mentioned.
13
              >>CHAIRMAN BOLLWERK: There was A/FI-A formerly a
14
    portion of Contention 1, threats to NRC independent review.
15
    I think that one sounds like you've already submitted what
16
    you want to say about that one?
17
              >>MR. ZELLER: I don't know what more I can say.
18
    It might be a little bit unusual to bring up issues such as
19
    that, but we feel that they are important.
20
         We would just ask the judges to please consider that
21
    and look at it with a fresh eye, even if they have never
22
    been considered before because we do have some major
```

- 1 questions about the appearances of this procedure and
- 2 | legislation which is mentioned in here, which is plainly
- 3 outside of your control, but which has an impact on how
- 4 | nuclear licensing is done over the next -- over the
- 5 | short-term and over the long-term.
- 6 Things have changed which -- outside the control of the
- 7 Commission, which we believe undermines the body's
- 8 independence or its appearance of independence.
- 9 In many -- in many publicly appointed bodies and
- 10 others, the appearances and the proprieties of integrity
- 11 | within that institution, within that regulatory body, is as
- 12 important as the letter of the law.
- 13 A half a billion dollars of penalties have to be
- 14 | considered in this decision at some point, and we feel that
- 15 | those -- that that is perhaps -- I don't know, I don't think
- 16 | "unsavory" is inappropriate here, and this does not impugn
- 17 anyone within the Atomic Safety Licensing Board because, as
- 18 | I stated, there's no -- the actions of the Energy Bill of
- 19 2005 in Congress were totally outside the control of anybody
- 20 directly affected by it, but nevertheless, it's like
- 21 gravity. It's there.
- 22 So, I leave it at that.

```
1
               >>CHAIRMAN BOLLWERK: I'm going to move through
2
    these as we talk. If one of you all has a question, just
3
    let me know and I'll stop.
         Miscellaneous A1, formally a portion of Contention 1,
4
5
    procedural shell games.
              >>MR. ZELLER: We believe that speaks for itself.
6
7
              >>CHAIRMAN BOLLWERK: Miscellaneous B, which was
8
    formerly Contention 2, the NRC fails to execute
9
    constitutional due process and equal protection.
10
              >>MR. ZELLER: This one relates to exposures to
11
    individuals and how many people we will expect to die every
12
    year during the operation of this plant.
13
         And the difference between how the regulatory limits
14
    for radionuclides -- the difference between how the health
15
    impacts of radionuclides are set as compared with other
16
    carcinogens and other deadly substances at the federal
17
    level.
18
         Why is it different within the Nuclear Regulatory
19
    Commission for radionuclides than it is from dioxin and
20
    other harmful substances?
21
         This seems to be a much different level, which seems to
22
    be acceptable; one in a million versus one in 10,000.
```

- don't have the number off the top of my head, 5 in 10,000,
- 2 | 100 millirems of exposure.
- 3 So that, I guess, is the crux of it, and how that can
- 4 be dealt with by the Nuclear Regulatory Commission
- 5 | without -- I don't know, but it's a concern of ours. That's
- 6 | why we've raised it here.
- 7 If there's something that can be done within the
- 8 Nuclear Regulatory Commission and to better protect the
- 9 public, that's what would we would be interested in.
- In other words, if the minimum regulation is exceeded,
- 11 and I know there is a low as reasonably achievable, which
- 12 | sounds very good, but it also doesn't have the requirements
- 13 that it be adhered to.
- 14 As low as reasonably achievable is difficult to pin
- 15 down. It's a subjective standard, I guess is the word I'm
- 16 looking for, rather than an objective standard.
- 17 And if as low as reasonably achievable is half of the
- 18 objective standard, then why not make the objective standard
- 19 half, or a tenth, if that's what the claim is?
- 20 Am I making myself clear?
- 21 >>CHAIRMAN BOLLWERK: All right, thank you. Next
- would be Miscellaneous C, which was formerly Contention 4,

1 failure to address the impact of terrorist attacks.

>>MR. ZELLER: Yes, I know that the Supreme Court
passed on review of the Ninth Circuit decision, and I'll
just have to say as an observer, I don't know how it can be
justified outside of legal terms with regards to venue and
what-not; how the Commission could justify it's decision to
abide by that decision only within the place where it was

>>CHAIRMAN BOLLWERK: Can I interrupt you one second? Can you move the mic a little closer? I think the court reporter is having some difficulties.

>>MR. ZELLER: Yes, I'm sorry.

decided.

>>CHAIRMAN BOLLWERK: Thank you.

>>MR. ZELLER: I would repeat; it's hard to understand how the Commission can justify outside of the constraints of the -- I guess for want of a better term -- the legal discussion, that even within that time -- even within that frame, how can it be justified that it would only be adhered to within the Ninth -- within that district where the decision was made in the Ninth Circuit. We think that's unreasonable.

>>CHAIRMAN BOLLWERK: All right.

```
1
                             And the fact that the Supreme Court
               >>MR. ZELLER:
2
    has let it stand seems to me that it should apply
3
    nationally.
4
              >>CHAIRMAN BOLLWERK: All right. Miscellaneous E,
5
    which was formerly Contention 6, whether Bellefonte will
    adequately limit atmospheric emissions of radionuclides.
6
7
              >>MR. ZELLER: I think that one speaks for itself.
8
    Thank you.
9
              >>CHAIRMAN BOLLWERK: All right. Then NEPA L,
10
    formerly Contention 14, waste confidence, high-level nuclear
11
    waste from irradiated fuel.
12
         I think you mentioned this previously in our argument.
13
              >>MR. ZELLER: Right. We feel that environmental
    report fails to provide sufficient discussion of the
14
15
    environmental impacts here, and I've already stated the
16
    same.
17
              >>CHAIRMAN BOLLWERK: All right. Contention
18
    FSAR-C, which was formerly a portion of Contention 15,
19
    global warming impacts are omitted from TVA License
20
    Application, severe weather and carbon footprint.
21
                             Yes. The only thing I would add to
              >>MR. ZELLER:
22
    this is that in addition to the reliance on the Design
```

```
1
    Control Document, which is devoid of any discussion of the
2
    acceleration and severe weather impacts, which is stated in
3
    the contention, we also see in the July 11 request for
4
    information, the staff asking TVA to discuss and provide
5
    references for impacts of climate change on water supply.
    And this is on Page 4 of the RAI.
6
7
         That's question 5.2-2, and then two questions later,
8
    5.2-4, describe the origin for the temperature data
9
    collected from 1974 to 1990, and provide that data.
10
         This is in reference to Section 5.2.2.2.2 -- there's
11
    four 2's there -- of thermal impacts given the ongoing
12
    drought in the Southeast.
13
         So, there's outstanding questions here, which this
14
    contention is based on.
15
              >>CHAIRMAN BOLLWERK: All right. Anything further
16
    on that one?
17
              >>MR. ZELLER: Pardon?
18
              >>CHAIRMAN BOLLWERK: Anything further on that
19
    one?
20
              >>MR. ZELLER: No. That's all I have, Your Honor.
21
              >>CHAIRMAN BOLLWERK: Then there was NEPA M, which
22
    was formerly in another portion of Contention 15, global
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warming impacts are omitted from the TVA license application
1
2
    carbon footprint.
3
              >>MR. ZELLER: Also, we've said enough about that.
4
              >>CHAIRMAN BOLLWERK: All right. Then there's
5
    NEPA O, formerly part of Contention 17 -- sorry; formerly
    Contention 17, the inadequacy of the environmental reports
6
7
    analysis of human health impacts of irradiate fuel disposal.
8
              >>MR. ZELLER: Yes. All I would add is to point
9
    out that TVA's conclusions are not reasonable or supported
10
    by credible evidence.
11
         We believe the evidence shows that human health impacts
12
    disposing of spent fuel from their proposed Bellefonte plant
13
    would be large and we detail these in later contentions.
14
              >>CHAIRMAN BOLLWERK: All right. And then I
15
    believe the last one is contention NEPA Q, which was
16
    formerly Contention 19, the environmental reports improper
17
    characterization of health effects from the uranium fuel
18
    cycle is small and failure to adequately compare them to
19
    health effects of alternative energy sources. I think you
20
    made reference to this one previously.
21
              >>MR. ZELLER:
                              Yes.
22
              >>CHAIRMAN BOLLWERK: If you'd like to elaborate
```

- on that, this would be the time to do that, obviously.
- 2 >>MR. ZELLER: Yes, I would. Thank you, Your
- 3 Honor.
- 4 19, Contention 19, the likely incidence of cancer,
- 5 | illness and mortality is significantly in excess of the
- 6 mortality from exposure to natural sources of radiation.
- We're relying on our technical expert here, again, Dr.
- 8 Arjun Makhijani, and he has said here that applying BIER-7
- 9 risk factors, that the annual expected cancers based on
- 10 average males and females are cancer incidence over 40 years
- of operation would be 102 cancers. Cancer deaths over 40
- 12 | years of operation would be 51.
- We submit that this is not a small impact over this
- 14 period of time. This is a large impact. Therefore, we feel
- 15 that the contention demonstrates a genuine and material
- dispute regarding the adequacy of the Environmental Report
- 17 to address these environmental and public health impacts
- 18 | from the Bellefonte nuclear power plant and the -- and to
- 19 adequately weigh the relative cost benefits of alternative
- 20 | sources of energy which would not have that level of
- 21 morbidity and mortality.
- 22 Beyond that, I think the contention stands for itself.

```
1
                                     All right.
               >>CHAIRMAN BOLLWERK:
                                                 Let me then --
2
    again, I offered you the opportunity, but if anyone has any
3
    questions about any of these that we've gone over?
4
         All right. Let me then turn to the Applicant and see
5
    if they have any argument or discussion they'd like to have
    on any of these contentions, as we've been going through
6
7
    them.
8
                               Thank you, Your Honor.
               >>MR. BURDOCK:
9
    to be brief.
10
         The one issue that unites these nine contentions is
11
    that they are all outside the scope of this proceeding.
12
          The scope of this proceeding is defined in the notice
13
    of hearing for this proceeding, which states that the
14
    hearing will consider the application dated October 30th,
15
     2007, filed by Tennessee Valley Authority.
16
          So, therefore, this proceeding must focus on the actual
17
    application. And it's not a forum to attack any NRC issue
18
    with which the Petitioners disagree.
19
         Additionally, as we mentioned before regarding these
20
    challenges to the regulations, the Petitioners have not
21
    provided waiver requests or the required affidavits.
22
         Additionally, the Commission has provided other factors
```

- 1 to consider in determining these challenges, one of which is
- 2 | whether there are unique issues that are specific to that
- 3 plant, and clearly these nine contentions could have been
- 4 made for any plant, and there are no unique circumstances
- 5 | with Bellefonte.
- 6 I'll try to briefly address some of Mr. Zeller's
- 7 points.
- 8 He began with Contention 1 with Miscellaneous A and
- 9 discussed the human error. This contention is outside the
- 10 | scope because he's challenging issues that are in the Design
- 11 | Control Document. These issues are considered resolved in
- 12 this proceeding.
- 13 Additionally, with contention -- another part of this,
- 14 | with AFI-A, Mr. Zeller himself claims that this is plainly
- outside the control of this proceeding when he's discussing
- 16 the Energy Policy Act of 2005, and we agree with that, and
- 17 | it cannot support an admissible contention here.
- 18 Turning to Miscellaneous B regarding due process,
- 19 Contention 2. This is a direct attack on the Commission
- 20 | regulations in 10 CFR Part 20 and are outside the scope of
- 21 this proceeding.
- 22 Contention Miscellaneous C, regarding terrorist

- 1 attacks, the Commission has made it clear that the
- 2 environmental impacts of terrorist attacks do not need to be
- 3 considered in this proceeding.
- 4 Contention 14, which is NEPA L, is a direct attack on
- 5 the waste confidence rule, in 10 CFR Part 5123, and is
- 6 therefore outside the scope of this proceeding.
- 7 Contentions FSAR C regarding global warming is also
- 8 outside the scope of this proceeding, as it's a challenge to
- 9 the Design Control Document itself.
- 10 Petitioners raised an RAI for the first time today. A
- 11 | we discussed earlier, those RAI's cannot by themselves
- 12 provide support for an admissible contention.
- Contention 17, which is also NEPA O regarding Yucca
- Mountain, is clearly outside the scope of this proceeding.
- 15 The Petitioners challenge the EPA regulations and the NRC's
- 16 | implementing regulations regarding the dose standards at
- 17 Yucca Mountain, and this is clearly outside the scope of
- 18 this proceeding.
- 19 Finally, Contention NEPA Q, regarding the health
- 20 effects of the uranium fuel cycle, is outside the scope as
- 21 | it's a challenge to NRC policy.
- 22 That's all I have. Thank you.

```
1
              >>CHAIRMAN BOLLWERK: Let me interrupt one second.
2
    I think I may have missed one when I was going through. I
3
    think I did.
         Let me go back to Mr. Zeller. I apologize.
4
5
         There was also a NEPA P, which was formerly Contention
    18, the inadequacy of environmental reports' reliance on
6
7
    Table S3 regarding radioactive effluence from the uranium
8
    fuel cycle. I apologize.
9
              >>MR. ZELLER: Yes, that's the one. We had
10
    discussed that.
11
              >>CHAIRMAN BOLLWERK: You thought there was
12
    something missing and you couldn't quite put your finger on
13
    it.
14
              >>MR. ZELLER: We had discussed that.
15
              >>CHAIRMAN BOLLWERK: I apologize for that, sir.
16
              >>MR. ZELLER: That's all right. Thank you.
17
              >>CHAIRMAN BOLLWERK: We'll come back to you all.
18
    Thank you.
19
         Go ahead, sir.
20
              >>MR. ZELLER: We're just requesting that the
21
    contention be admitted and held in abeyance pending the
22
    outcome of the general proceeding.
```

1 >>CHAIRMAN BOLLWERK: Okay. Anything else?

>>MR. ZELLER: Yes, I would just say briefly with regards to the rule being subject to an attack in the adjudicatory proceeding under 10 CFR 2.335, that there is a sole exception there, which says that special circumstances such that would not serve the purposes for which the rule was adopted.

In other words, if the rule is not -- the purpose of the rule is, the spirit of the law is somehow undermined or negated, that the rule -- the purpose of the rule should be somehow dealt with at some level.

Not only at the rulemaking level, but at the petition level or at the licensing level because it does have an impact here. The rules are made in order to have an impact on the licensing procedures.

So, this is a juncture we've come to before, where for one reason or another it seems that it's not appropriate to bring up an issue at a licensing proceeding and at some other point in time the rulemaking procedure is also not the place to bring it up.

I don't know if that's the case here, but sometimes it does seem like a little bit like grasping at a cloud because

- 1 there doesn't seem to be a pigeonhole place for concerns
- 2 raised by the public or other interested parties to raise an
- 3 issue.
- 4 It seems to me that sometimes we get, "Well, we
- 5 appreciate your concerns, but you really should go talk to
- 6 somebody else about this problem."
- And so, therefore, there's no cop on the beat, in other
- 8 words.
- 9 And I did -- I would just also point out and bring up
- 10 that the recent decision which I mentioned before in the
- 11 First Circuit about that NRC must consider new and
- 12 | significant information regarding environmental impacts
- 13 before renewing a nuclear power plants operating license.
- 14 The NRC must channel into generic rulemaking the
- 15 | challenging parties concerns about the effects of new and
- 16 | significant information on an individual licensing decision.
- 17 The NRC may not refuse to provide at least one path by
- 18 which the challenging party may establish a connection
- 19 between the rulemaking and the licensing proceeding.
- 20 This is to stop things from falling through the cracks.
- 21 So, if there is a sincere approach to dealing with some of
- 22 | the concerns we have raised, if they have not been done as

- 1 eloquently as they might, and I admit there are -- we are
- 2 human, and so we also suffer from human error from time to
- 3 time, and so there needs to be some way to deal with these
- 4 | concerns if you agree they are legitimate in some way, shape
- 5 or form and not simply put aside. I guess that's my prayer
- 6 at this point.
- 7 Many of these issues are raised by citizens living in
- 8 this area who have genuine concerns, and if they don't fall
- 9 into one category or another, the Commission we feel should
- 10 at least make some attempt, a sincere attempt, to deal with
- 11 them at some level, either at the Commission staff level if
- 12 | not during the Atomic Safety Licensing Board licensing
- decision. And this is apart from our prospective request
- 14 for rulemaking.
- 15 This is more along the lines of the kind of the bread
- and butter, or the many issues that we have raised here in
- 17 | this 109-page petition.
- We do appreciate you hearing our concerns.
- 19 >>CHAIRMAN BOLLWERK: Thank you. Let's go back to
- 20 | the Applicant then and see if you had any comments on that
- 21 particular contention.
- >>MR. BURDOCK: Thank you, Your Honor. Regarding

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1
    Contention 18, I would also say that contention is outside
2
    the scope and is acknowledged by that as outside the scope
3
    by the Petitioners in their petition to intervene.
4
         Petitioners are correct that Section 2.335 does provide
5
    certain exceptions, but Petitioners have not satisfied those
    exceptions for any of these contentions.
6
7
         Section 2.335, Paragraph B, requires a request for a
8
    waiver, which must include an affidavit that states with
9
    particularity the special circumstances alleged to justify
10
    the waiver or exception requested.
11
         Additionally, the Commission, in the Millstone
12
    decision, which we discuss in our briefings, states that
13
    there's other standards that must be satisfied, one of which
14
    I already mentioned; that there are circumstances that are
15
    unique to that facility rather than to a large common class
16
    of facilities, and those standards simply have not been met
17
    in this proceeding for these contentions.
18
         Turning back to Contention 18, the Petitioners rely
19
    upon --
20
               >>CHAIRMAN BOLLWERK: Contention 19?
21
              >>MR. BURDOCK: Contention 18.
22
              >>CHAIRMAN BOLLWERK: All right.
                                                 I thought we
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1
    were still talking about Contention 18.
2
              >>MR. BURDOCK: I think that was the one that --
3
              >>CHAIRMAN BOLLWERK: Did I miss something?
4
    think I'm confused.
5
              >>MR. BURDOCK: I did make a comment on 18.
6
    turning back to it.
7
              >>CHAIRMAN BOLLWERK: All right.
8
              >>MR. BURDOCK: The Petitioners discussed this
9
    First Circuit decision, Massachusetts versus NRC, and
10
    Mr. Frantz has already discussed how that doesn't apply
11
    here.
12
         It does not allow the Petitioners to hold any
13
    contentions in abeyance in this proceeding pending the
14
    rulemaking. For these contentions, the relief that
15
    Petitioners request is to submit a rulemaking petition, but
16
    that does not support admissibility of these contentions.
17
         Thank you.
18
              >>CHAIRMAN BOLLWERK: All right. Thank you. Let
19
    me turn to the staff. Any comments that you all have on any
20
    of these contentions that Mr. Zeller has talked about?
21
              >>MS. HODGDON: No, we have no comments. We
22
    briefed --
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1
               >>CHAIRMAN BOLLWERK: You may need to move the mic
2
    a little closer.
3
              >>MS. HODGDON: Okay. Thank you. No, we have
           We briefed Massachusetts, the case cited in our --
4
5
    several places, I think, in our response, and we've said
    much of the same thing that the Applicant did regarding the
6
7
    fact that it's not applicable here, and that's all the staff
8
    has to say on all these contentions.
9
              >>CHAIRMAN BOLLWERK: All right. Anything that
10
    the Board Members want to say before I turn back to Mr.
11
    Zeller?
             No?
12
         All right, sir. Anything further you want to say in
13
    terms of what you've heard from the Applicant or the Staff
14
    on these contentions?
15
              >>MR. ZELLER: Thank you, Your Honor. The only
16
    thing I would add is that I do understand that this is a
17
    give-and-take process, and I honor the contributions of the
18
    Applicant here in dealing with some of the contentions we
19
    have raised.
20
         I do still have an outstanding question, which relates
21
    to the Nuclear Regulatory Commission's staff itself, and I
22
    appreciate they are also doing their best under difficult
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- 1 circumstances, with limited resources, but at some point in
- 2 | time I hope to hear something tantamount to "on the other
- 3 | hand" from representatives of the Nuclear Regulatory
- 4 Commission staff.
- 5 Whether it's in regard to Contention A, well, we agree
- 6 with the Applicant in this case; on the other hand, we agree
- 7 | with the petitioners for this reason.
- 8 To be in lockstep with the Applicant over the course of
- 9 this proceeding from the petition to the reply, I believe
- 10 | it's passing strange. And so with all due respect, like I
- 11 say, to people who are doing the best they can with limited
- 12 resources, I cannot fathom how that can be the case every
- 13 | single time.
- 14 Plainly, from time to time the Atomic Safety Licensing
- 15 | Board -- other boards, I should say, have admitted
- 16 | contentions and we participated in some of those
- 17 proceedings.
- 18 So, there must be some legitimate contentions out
- 19 there, but I -- again, I cannot understand why the NRC staff
- 20 | never seems to agree that, yes, this is a contention that
- 21 | should be admitted.
- 22 That's all I have to say about that subject, and I

233 appreciate very much the opportunity to be here in 1 2 Scottsboro with you here today. 3 We're pleased that the Panel has come to the community, which has the greatest interest in the decision which is 4 5 before you all. So, I appreciate you for coming to the community, which is most effected. 6 7 Thank you very much. 8 >>CHAIRMAN BOLLWERK: Thank you, sir. 9 (Audience Clapping) 10 >>CHAIRMAN BOLLWERK: I'll just make one 11 observation. There are times that the Staff does agree that 12 the contention is admissible. I have seen it myself. It 13 does happen. It didn't happen in this case, but it does 14 happen from time to time. So, again, the Staff makes its 15 own judgment about those things. 16 At this point we've concluded basically the hearing 17 from the participants about the admissibility of the 18 contentions, as well as the question of standing of BEST and 19 the question of the timeliness of the Petition. 20 Our job at this point now will be to take all the 21 information we've received both in writing and orally and to

make a decision with respect to each one of these

22

1 | contentions as well those two issues.

Under the rules, we have 45 days from the time the
reply is filed within which to do that. Or alternatively if
we are not going to make that schedule, we need to let the
Commission know what the problem is and when we expect to do
so, and we'll either make the 45 days or we'll tell the
Commission.

8 That's basically the way we approached it in the past 9 and that's what we'll do in this case.

There were a couple of administrative matters that I wanted to mention to the parties.

Again, several of these deal with sort of the contingency if we were to admit a contention we need to think about a few things. We're not ruling one way or the other on anything today, but simply looking ahead at possibilities.

Before I mention that, however, there's one thing,
Mr. Zeller. I think we still don't have a notice of
appearance from you and we asked for one in the last order
that we issued or one of the last orders we issued by the
end of last week.

You had indicated previously that you had submitted one

- 1 and I think maybe on the 1st of April. I'm losing the
- 2 bubble on that. We have searched the Agency's records and
- 3 cannot find it.
- 4 So, I guess I would ask simply that you either resubmit
- 5 the one you submitted previously, if you would, or just
- 6 submit a new one.
- 7 Again, there is a letter, I think, that was submitted
- 8 by your co-representative that indicated you were sending in
- 9 a notice of appearance, but we haven't been able to find it,
- and we've talked with the Office of the Secretary. We
- 11 | checked ourselves in the record to try to find it and it
- 12 | isn't available.
- So, again, it's not -- it's simply a question of
- 14 resubmitting what you already did, that would certainly be
- 15 appropriate, or just put together a new one that conforms
- with the rules and simply submit it and then we'll have it
- 17 on the record.
- 18 | >>MR. ZELLER: I'll do that.
- 19 >>CHAIRMAN BOLLWERK: I appreciate that.
- 20 In terms of the scheduling and discovery matters,
- 21 assuming a contention is admitted, in setting Section
- 22 2.332(d) schedule, the Board will assume that merits

- determination with respect to any admitted contentions would
- 2 be based on an evidentiary hearing must await the issuance
- 3 of the staff's FEIS or FSER. That's fairly standard to
- 4 Commission practice.
- I know, for instance, in the Vogtle ESP proceeding we
- 6 did ask the Commission about the possibility of moving
- 7 | forward before the FEIS, the Final Environmental Impact
- 8 Statement, was completed.
- 9 We were told fairly definitively that that was not the
- 10 current practice, and so we would need to wait until the
- 11 FEIS or the FSER were issued before we could go to
- 12 evidentiary hearing.
- Now, I'll also say in the Vogtle case we also moved
- 14 forward on summary disposition motions after the DEIS in
- 15 that case since there were environmental contentions that
- were issued.
- 17 So, there is that possibility, and one of the things is
- 18 | we said if we were to set a schedule, we would be looking at
- 19 that sort of submission if the parties were interested in
- 20 | seeking summary disposition, and we did do that prior to the
- 21 issuance of the FEIS after the DEIS came out.
- 22 After the Staff had indicated what its position was

- 1 | relative to -- and the DEIS relative to that particular
- 2 | issue in general, and the Applicant did submit an additional
- 3 -- or submitted a summary disposition motion. So, that is a
- 4 possibility.
- 5 Assuming contentions admitted, the parties should be
- 6 aware that general discovery provisions under Section 2.336,
- 7 including the need for the NRC staff to provide a hearing
- 8 | file, will be activated regardless of whether there's any
- 9 Board order or party discovery request. That's in the
- 10 rules.
- 11 Also, relative to general discovery, the parties may
- 12 | wish to discuss whether they want to prepare and produce
- 13 privilege logs or waive the production and the preparation
- 14 of such logs.
- 15 Again, I would point you to the Vogtle ESP proceeding
- 16 | if you want to look at an example where there was an action
- 17 agreement among all the parties to waive the production of a
- development of a privilege log, something you may wish to
- 19 consider.
- I believe at this point, that brings us to a close in
- 21 terms of things that I needed to talk about
- 22 administratively.

- On behalf of the Board, I do want to thank the 1 2 participants today for your presentations to us. I think we 3 all found them -- we've talked about them at lunch time and 4 in the breaks. We found them to be useful to clarify things 5 in our minds as to what your positions were. 6 We found them uniformly pretty much across the board to 7 be very useful and excellent, and we do appreciate very much 8 what you've provided us with today. 9 So, on behalf the Board I want to thank all of you for 10 the presentations you made. It's been a long day. 11 started 9:00 and we're about to wrap up close to 4:15, but 12 you've hung in there with us today and we really very much 13 appreciate that. 14 I would mention that this proceeding is being web 15 streamed. I mentioned it before. As we come to a close, I 16 would again ask anyone that's watching the web streaming 17 that's interested in providing us with comments, the e-mail 18 address is web stream -- I'm hearing some beeping here. 19 Does someone have something on? 20 I heard something go off. All right.
- 21 The e-mail address is webstreamingmaster -- I better 22 get my -- hold on here -- make sure I don't mess this up.

239 1 Webstreammaster, one word, dot resource@nrc.gov. 2 Webstreammaster.resource@nrc.gov. 3 Again, comments, negative, positive, whatever you have 4 to say about the accessing and use and having the 5 opportunity to watch this proceeding via web streaming would be very useful to the Board and to the Commission. 6 7 Actually, when the pilot is done, we will be reporting 8 to the Commission on how things went and they'll make a 9 decision in consultation with the Board -- the Panel rather, 10 the Licensing Board Panel, as to how we move forward on it. 11 So, your comments would be appreciated and will be 12 utilized. 13 Some thank yous that we need to give are very important 14 to us. 15 We thank very much the City of Scottsboro for making 16

the Scottsboro Goosepond Civic Center available to us. been a good venue for our hearing.

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We especially want to thank Staffers Debbie Woods and Larry Bowen, who have been just terrific. Mr. Bowen was here last night till probably 10 o'clock, I think, working with Onstream, our web streaming contractor. So, he really put in a lot of hours. And Debbie also helped us out a lot

1 | in putting this proceeding on.

Also, to our Panel IT specialist, Joe Deucher, who has
been hanging in there in terms of the web streaming that
we've been doing. We really appreciate his efforts, as well
as to the folks from Onstream Media, who are the ones
working with us on our pilot project.

To Erica LaPlante and Sherverne, our law clerk and administrative staff person, we thank you very much for everything you've done.

And also to Lorraine Carter and our real-time court reporter. As the web streaming has been going on, there's actually been captioning of a type going out over the web and they will also be producing the transcript that I mentioned earlier. That will be available, publicly available on the NRC website, www.nrc.gov in the electronic hearing docket.

Again, if you missed part of the web stream, you want to find out what happened, please feel free to go to the NRC website within the next seven days and the full transcript will be available for anyone to review.

At this point, let me see if any of the Board Members have any comments they want to make? Judge Baratta?

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1
                                 I just want to second the
               >>JUDGE BARATTA:
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    appreciation we have for the support staff here. Larry did
3
    an excellent job and we appreciate that.
4
              >>CHAIRMAN BOLLWERK: All right. Judge Sager?
5
                               I'd also like to echo that comment
              >>JUDGE SAGER:
    and just say thank you to the people of Scottsboro for their
6
7
    hospitality.
8
              >>CHAIRMAN BOLLWERK: All right. At this point,
9
    if there's nothing else for the Board, again, we thank all
10
    of you; the participants, the folks in the audience today
11
    that took the time to come and see what this was all about.
12
    We hope you found it interesting.
13
         Also, the folks that were part of our web stream.
14
         The case at this point stands submitted for decision by
15
    the Board in terms of the contention admission standing and
16
    timeliness issues that we have before us, and the Board
17
    stands adjourned.
18
         Thank you very much.
19
          (Whereupon, the proceedings were concluded.)
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