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UNITED STATES OF AMERICA

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NUCLEAR REGULATORY COMMISSION

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TVA/NRC MEETING ADDRESSING LICENSING

AMENDMENT TO IRRADIATE TRITIUM PRODUCING

BURNABLE ABSORBER RODS IN THE WATTS BAR PLANT

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THURSDAY

JULY 3, 1997

+ + + + +

The Meeting took place in room 12B11, 11545
White Flint North, Rockville, Maryland, at 11:00 a.m.,
Robert Martin, Chair, Presiding.

PRESENT:

NRC Staff:

ROBERT MARTIN, CHAIR

SUZANNE BLACK

LAWRENCE CHANDLER

JIM DAVIS

NOEL DUDLEY

KERRI KAVANAGH

GUS LAINAS

MINDY LANDAU

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(202) 234-4433

1 PRESENT: (Cont.)

2 NRC Staff:

3 ROBERT M. LATTA

4 JIM LYONS

5 KAMAL MANOLY

6 TIM MARTIN

7 DAVID MATTHEWS

8 STEVEN MATTHEWS

9 SCOTT NEWBERRY

10 EDMUND SULLIVAN

11 CECIL THOMAS

12 GLENN TRACY

13 SHERWIN TURK

14 DICK WESSMAN

15 JIM WILSON

16 ROY ZIMMERMANN

17

18 Representing TVA:

19 BOB CALABRO

20 JIM CHARDOS

21

22 Representing DOE:

23 MAX CLAUSEN

24 TERRANCE DUNN

25

1 PRESENT: (Cont.)

2 Representing Westinghouse:

3 HANS GARKISCH

4 MICHAEL TRAVIS

5

6 Representing PNNL

7 GERALD SORENSEN

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

(11:05 a.m.)

CHAIRMAN MARTIN: Good morning, I'm Bob Martin, I'm the NRC project manager for Watts Bar activities in the Rock Hill office here.

I have a number of administrative comments I'd like to start things off with. This is a meeting between the NRC staff and the Tennessee Valley Authority to discuss TVA's application of April 30, 1997, to place lead test assemblies bearing tritium producing burnable absorber rods into the Watts Bar nuclear plant unit 1, during fuel cycle 2, which is scheduled to begin this fall.

The meeting is being held at TVA's request, for TVA accompanied by the Department of Energy and representatives and others, to present a response to the NRC's staff letter of June 24, on the safety classification of the TP bars.

The NRC staff has with us today Mr. Tim Martin, associate director for technical review, Mr. Roy Zimmermann, associate director for projects and representatives of materials engineering, mechanical engineering, quality assurance, reactor systems, special inspection, and generic issues branches.

A brief history of the particular issue will

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1 include the following approximately five milestones. The
2 first one I'll mention is the NRC staff's letter of
3 February 13, 1997, to DOE, on the safety classification of
4 the TP bars. The next will be TVA's submittal of its lead
5 test assembly license amendment application on April 30,
6 1997.

7 The next will be the NRC staff's request for
8 additional information letter to TVA dated May 29th,
9 wherein this issue is identified as question 15.

10 The next would be a meeting that was held
11 between the NRC staff and TVA on June 4. Most recently,
12 the NRC's staff letter to TVA on June 24, wherein the
13 staff requested that further licensing basis justification
14 be provided.

15 TVA is here today with DOE and others to
16 respond to the June 24 letter. I will now ask,
17 particularly for the recorder, that we go around the room
18 and identify ourselves and organizations.

19 Please, particularly if you are likely to
20 speak later, speak clearly so that she can get your name
21 and properly identify you in the transcript.

22 MR. LYONS: I'm Jim Lyons, I'm the acting
23 branch chief of reactors systems branch.

24 MS. BLACK: Suzanne Black, I'm the branch
25 chief of quality assurance and maintenance.

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1 MR. THOMAS: I'm Cecil Thomas, I'm acting
2 director of the division of reactor controls and human
3 factors.

4 MR. WESSMAN: I'm Dick Wessman, I'm chief of
5 the mechanical branch.

6 MR. LATTA: I'm Bob Latta, quality assurance,
7 NRR.

8 MR. SORENSEN: Gerald Sorensen, Pacific
9 Northwest National laboratories.

10 MR. CHARDOS: Jim Chardos, TVA project
11 manager.

12 MR. PACE: Paul Pace, Watts Bar licensing
13 manager.

14 MR. ETHRIDGE: I'm Jerry Ethridge, Pacific
15 Northwest National Laboratory.

16 MR. CALABRO: Bob Calabro, TVA, manager of
17 nuclear fuel.

18 MR. ZIMMERMANN: Roy Zimmermann, associate
19 directors for projects, NRR.

20 MR. MARTIN: Tim Martin, Associate director
21 for technical reviews, NRR.

22 MR. NEWBERRY: I'm Scott Newberry, division
23 director of safety systems, NRR.

24 MR. DAVIS: Jim Davis, materials and chemical
25 engineering branch.

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1 MR. MANOLY: Kamal Manoly, chemical materials
2 branch, NRR.

3 MS. KAVANAGH: Kerri Kavanagh, reactor systems
4 branch.

5 MR. CLAUSEN: Max Clausen, tritium project,
6 Department of Energy.

7 MR. DUNN: Terry Dunn, quality assurance,
8 Department of Energy.

9 MR. LAINAS: Gus Lainas, deputy director of
10 division of engineering, NRR.

11 MR. SULLIVAN: I'm Ted Sullivan, materials
12 engineering, NRR.

13 MR. MATTHEWS: Steve Matthews, special
14 inspection branch, NRR.

15 MR. WILSON: Jim Wilson, generic issues,
16 project branch, NRR.

17 MR. TRACY: Glenn Tracy, DEDO staff.

18 MR. DUDLEY: Noel Dudley, DEDO staff.

19 MS. LANDAU: Mindy Landau, public affairs.

20 MR. TRAVIS: Mike Travis, from Westinghouse.

21 MR. GARKISCH: Hans Garkisch from
22 Westinghouse.

23 MR. MATTHEWS: David Matthews, chief for
24 generic issues and environmental projects branch, NRR.

25 CHAIRMAN MARTIN: Paul, we are ready to turn

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1 it over to you.

2 MR. PACE: I'm passing out an agenda, and
3 given the relative shortness of the time for setting up
4 this meeting, we don't have a real slick presentation
5 here, but we thought it was important to get the issues
6 out and the information out so we could discuss them,
7 given where we are in this project.

8 The five issues that we would like to talk
9 about today, are namely to get as much of a resolution as
10 we can, and ensure that the inspections get started
11 concerning the safety classification, with the inspections
12 planned for next week and the week after.

13 That is one that Bob talked about. We had
14 some discussion, a lengthy discussion on that in a
15 conference call the other day, and we think that what we
16 have provided here should address and meet the staff's
17 need, based on that phone call.

18 There was also a brief description of design
19 margins, as they affect the -- how the code information
20 was used, as opposed to the code classification. How the
21 code design information was used in the cladding design.

22 A lot of that information on margins is
23 classified, we are not prepared to talk about classified
24 information in this meeting. We did refer the staff to
25 several tables in the classified report which talked about

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1 specific margins.

2 And we can talk in some limited amount -- we
3 will give a brief discussion on that to the extent that we
4 can, in a non-classified context.

5 And one question in the phone call about the
6 FSAR with a copy of the wording that we plan to put in
7 there to correct the discrepancy that was identified in
8 that by Westinghouse to TVA.

9 There was also a question, earlier, possible
10 subject areas, the reload safety evaluation based on when
11 that will occur, and what we can do before an August 28th
12 formal issuance of a reload safety evaluation, to resolve
13 whatever staff issues there are in that area.

14 And last, to the extent possible, I'd like to
15 see if there are any other issues falling out of the staff
16 review of the other 16 questions in the RAI that need
17 management attention or specific follow-up in the near
18 term to get those issues resolved.

19 Given that, the basic document which captures
20 the safety classification is the next page, and I'll let
21 Gerald Sorensen, from PNNL, just give a brief overview.
22 We are not going to go line by line through here, but I
23 think we can go straight to the key issues of the safety
24 classification.

25 I recognize that this has a draft stamp on the

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1 front of it. We will be prepared to provide that in
2 whatever means, formally in the docket, is necessary to
3 use it for your formal review.

4 MR. SORENSEN: Thanks, Paul. Based on the
5 conversations that were held earlier this week regarding
6 safety classification, it was concluded that Pacific
7 Northwest Lab will go back and make revisions to this
8 document entitled TTQP1-046, to identify safety functions
9 of the various complements.

10 That has been done in those areas where you
11 see revision bars. On page one, previously identify
12 safety function as a reactivity characteristics or
13 location within the stack.

14 We have now, also in addition, identified the
15 maintenance of mechanical integrity, in order to assure
16 location of the absorber within the TP bars.

17 There was a new table added. I think what you
18 have in the first several pages are just -- where those
19 things that were changed -- it is table one, which did not
20 exist previously, that identifies safety function on TP
21 bar components. The lithium aluminate pellet and stack,
22 which had previously been identified, the safety function
23 being to provide reactivity control function.

24 We had then identified the safety function of
25 the cladding end plugs and welds as being the principal

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1 structural component of the TP bar, essential to assuring
2 that the location remains where it is installed.

3 Getter pellets, the getter and liner tube
4 affect the position also, therefore the location of the
5 absorber within the TP bar, the compression spring, which
6 sits at the top of the assembly, which prevents movement
7 of the pencils during shipping and handling, and prevents
8 therefore possible damage to those pencils and pellets
9 relocation in any way that it is transported.

10 Then there was a table that begins that is now
11 called table four, which looks at the importance factors
12 of the component characteristics. It begins on page 7 and
13 identifies each of the characteristics of these various
14 components, and the level of inspection that is provided.
15 We list levels A through E, and in that discussion provide
16 a definition of what we intend by level A through level E,
17 and the level of inspection that each of those
18 characteristics receive.

19 So those are shown in table 4. This table,
20 previously, had a fifth column on the right hand end that
21 was titled safety function, with the -- with new table one
22 where you identified the safety function of the individual
23 components.

24 We have eliminated that column of the table
25 which talks about each of the characteristics of the

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1 safety function, but that is identified through the so-
2 called importance factor A through E.

3 So those are the changes that have been made
4 to this document, based on the conversations that we have
5 had over the past several weeks, and particularly the
6 conversation culminating in last Monday's -- Tuesday's
7 conference call.

8 MR. LATTA: Can I ask a question?

9 MR. SORENSEN: Sure.

10 MR. LATTA: I appreciate the rapidity with
11 which you developed the response that you provided us, and
12 the advance copy.

13 The one question I had was if you had re-
14 viewed the importance factors associated with these
15 items, subsequent to acknowledgment that there were safety
16 functions which were previously not addressed?

17 I think you told me that it had been looked
18 at, but nothing was changed?

19 MR. SORENSEN: That's correct. As we had
20 discussed on the conference call previously, and as I
21 indicated in conversations back in the beginning, at the
22 start of this project we were not sure exactly where
23 everything was going to fit in terms of classifications.

24 So a judgement was made at the beginning, at
25 the start of procurement, that we would treat everything

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1 with our appendix B QA program, and go through that
2 process for procurement of all of the components.

3 We developed this table, similar to this, very
4 early on. I think a draft of that was provided to Steve
5 Matthews during what we call an assist visit by the staff
6 out there, back early on the project.

7 I don't recall exactly when that was, but it
8 was sort of a predecessor to this table, where we had
9 identified the level of inspection that we intended to do
10 for these components, based on what we perceived their
11 function to be.

12 And as a result we have gone through several
13 revisions to this table, but have not during any of those
14 revisions revised, I guess, the level of inspection that
15 is performed to these various components.

16 MR. LATTA: The only reason I think that
17 observation is that typically the safety related
18 components, we would expect a 95 confidence level, and
19 I've noted that some of the items which are now
20 characterized as having safety functions, like the end
21 plugs, the stainless steel bar material, is still
22 characterized as a category C, which would give me
23 something less than 95/95.

24 I offer that for your information and
25 consideration, that that is generally the criteria that we

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1 would use for safety related components for a confidence
2 level.

3 MR. PACE: Those are shown on page five, what
4 the confidence levels are there.

5 MR. LATTA: Right.

6 MR. SORENSEN: And I think that the difference
7 here is the bar stock was what we started with, as we did
8 the -- at which the cladding is made from. The bar stock
9 is material that has been previously purchased by the
10 Department of Energy for use in cladding for FFTF fuel, it
11 was left over.

12 And we had gone back, this was all purchased
13 to a very high standard, at that time. We had gone back
14 through a dedication process, if you will, to assure that
15 the heat numbers matched up with all the purchased
16 procurement documents.

17 This had been material that had been purchased
18 some, I believe, 10 to 15 years earlier. So it had been
19 around for a while.

20 Look at the characteristics that are applied
21 to the individual components that come from that, such as
22 the end plug bar stock. That has a category B. I think
23 when we get down to the cladding itself, as we draw this
24 out into tubes, we have that as a category B, which does
25 get a 95/95 confidence level in terms of the level of

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1 inspection.

2 MR. MATTHEWS: Gerald, page 6 of the document,
3 in title three it says, the top from the bottom end plugs
4 are being treated as a category B item. But the first
5 time the top and bottom end plugs appears on the table
6 from page 11, at best they appear to be treated as a
7 category C item.

8 Can you explain what that delta is?

9 MR. TRAVIS: If you look at page 10 the end
10 point bar stock is B.

11 MR. MATTHEWS: Page 6 doesn't say bar stock,
12 it says top and bottom.

13 MR. TRAVIS: I'm not sure I have an answer to
14 your question at this point, Steve. I'll need to take a
15 look at that.

16 MR. PACE: I think the other thing that is --
17 just to answer Bob's question, though, is I guess based on
18 relative -- there is a relative safety significance that
19 we've tried to show here in the end levels.

20 And those with the most significant items do
21 get the 95/95, and only those with a very minor safety
22 function move down into the category C and D category, for
23 example the shipping spring, which doesn't have a function
24 at all once it is in the core.

25 MR. DAVIS: What about the cladding ones?

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1 MR. PACE: That is correct. It is made from
2 bar stock. I'm not sure the process they used to do it.

3 MR. ETHRIDGE: It's drilled and drawn.

4 MR. DAVIS: It is not normally the way you --

5 MR. SORENSEN: Probably true.

6 MR. DAVIS: It is 316. Cross -- I guess I
7 don't see what is special about 316.

8 MR. GARKISCH: The way they made it.

9 MR. CHARDOS: My understanding, they have --

10 MR. SORENSEN: Double vacuum melted process
11 and probably told you more than I understand about that,
12 at that point.

13 MR. CHARDOS: We can get you more information
14 on that. I mean -- like I said we will get you more
15 information.

16 MR. PACE: We also have a history on those
17 from a previous project.

18 MR. ETHRIDGE: And we didn't have an option to
19 go off and start all over.

20 MR. PACE: I guess at this point, Bob, where
21 are we on the classification issue? Are there -- does
22 this remain a concern, or short of the finalizing of this
23 document, and if there are any specific questions on a
24 individual component, or -- we didn't plan to present more
25 than that, but we would be glad to answer any other

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1 questions you have.

2 MR. LATTA: I believe the document's
3 acknowledgement of the safety function of the components
4 that we've been discussing, I think we are going to need
5 some time to review it. Certainly during the inspection
6 next week, we will be evaluating the implementation of
7 these aspects, which is really what is important.

8 MR. PACE: Right.

9 MR. LATTA: Is the controls associated with
10 the design and fabrication, design elements of these
11 items. But certainly it gets us beyond the hurdle of only
12 acknowledging a limited safety function for these items to
13 a broader scope of the safety functions of these TP bars,
14 which we've regarded as similar to burnable poison rods.

15 CHAIRMAN MARTIN: So Bob, we are saying that
16 there is a basis to conduct an inspection next week on --

17 MR. LATTA: That is correct, that is our
18 feeling.

19 MR. PACE: Okay, any other discussion of the
20 safety issue.

21 Our basic response to your letter Bob will be
22 that we have assigned a safety function to each and every
23 component in the TP bar, and that that is being formalized
24 through the 046 document, and that upon completion of the
25 final review, on-site, under that document, it will be

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1 available to review or to docket, I assume we need it on
2 the docket to formally review.

3 So that will be basically what our response
4 will be on Monday.

5 CHAIRMAN MARTIN: Okay. I think what you
6 have heard today, is we are not agreeing -- we are not
7 giving you agreement with your response to the issue, but
8 as I heard the principal staff members, we feel that it
9 has moved the issue forward, at least to the point where
10 there is a special ^{fic} basis for an inspection next week.

11 MR. ZIMMERMANN: What is the timing for
12 responding in writing to the June 24th letter?

13 MR. PACE: We requested it for Monday, we are
14 going to attempt to get it out then. It may be -- that is
15 our plan to try to get out. It is a fairly brief letter,
16 I expect only a one paragraph letter to say that we have -
17 - we agree with the staff that all the components are
18 safety related, and documenting that in the 046 document.

19 CHAIRMAN MARTIN: Now, the mechanics is that
20 will this document be submitted with it, with that letter?

21 MR. PACE: I think because it has to go
22 through the final sign-offs that PNNL, that That is true.
23 will be several days beyond that before we actually submit
24 that. And we can hold the letter for that, or respond on
25 Monday, if that is what you need.

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1 MR. CHARDOS: The essence of the letter was,
2 yes, we believe every piece and part of the TP bar is
3 safety related, it has a safety function. That is what
4 kind of ended, and that is what we want to say, and 046
5 will, in fact, be finalized and eventually sent to you
6 stating just that.

7 Here is table one, here is the comp on it,
8 here is the function.

9 MR. PACE: I think we also read the 24th
10 letter to say, in lieu of agreeing with the staff, present
11 a basis for disagreement. Since we have no disagreement,
12 we think there could be a simple acknowledgement letter.

13 CHAIRMAN MARTIN: What is the usefulness of --

14 MS. BLACK: You mean getting it before the
15 inspection? I don't think that we -- Bob, would you like
16 them to submit the letter Monday, or would you rather have
17 them wait and submit it with the finalized -- the letter
18 would just acknowledge that there is a safety function to
19 each part.

20 MR. LATTA: Yes. I think we probably gained
21 that level of assurance through the development of the
22 strap procedure. The purpose for the timing of that
23 letter was to coincide with our inspections out there, so
24 that there would be a mutual understanding.

25 My personal opinion, if you want to take a few

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1 more days to develop the letter, and have it in exactly
2 the form that you think is appropriate, I think that is
3 acceptable.

4 It would not impair our ability to perform the
5 inspections that were previously timed to coincide with
6 that effort.

7 MR. PACE: Let me ask PNNL, is that -- I don't
8 know what your time frame is for issuing that, I assume it
9 is fairly quick?

10 MR. SORENSEN: It is fairly quick, and as I
11 mentioned this morning, in our earlier conversations,
12 internally, that if there are things that come out of this
13 discussion today that would impact what we have in here,
14 it would be our intent to include those things before we
15 finalize this document.

16 So this document is -- was put together, and
17 changes were made as a result of conversations Tuesday,
18 faxed out Wednesday morning, copies -- it needs some going
19 through by us, as well as the conversation here.

20 So if there are any items that come up, we
21 would include those as a part of this revision, and this
22 would be finalized.

23 MR. ETHRIDGE: While not interrupting the aura
24 of happiness here. I mean, I still sense some concern on
25 Bob's part that what we've identified here, use the term

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1 generally required. That confuses me a little bit.

2 Either we require it or we don't.

3 That each of the characteristics of the
4 category B item also be category B. I mean, if that is
5 how you are going to approach inspection, we may as well
6 not come, because these were not inspected, all of these
7 to 95/95.

8 We have identified that the component itself
9 has a particular safety function, it has a certain
10 inspection, and there are characteristics of that, that do
11 not contribute to that particular item meeting that safety
12 function.

13 MR. LATTA: I understand that, and that is --
14 I think that is reasonable that you bring that up. No,
15 that is not a hard and fast requirement. I mentioned it
16 because 95/95 percent confidence level is what we would
17 normally expect for safety related components.

18 Clearly, if you've gone through the assembly,
19 made engineering judgements about confidence levels, it
20 will be evaluated when we are there. For the critical
21 characteristics associated with items such as the end
22 plugs and the getters, we would expect to see confidence
23 level equivalent to that.

24 MR. ETHRIDGE: Let me ask, is that a QA
25 function, to determine whether inspection level is

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1 appropriate? It seems to me that is an engineering
2 function, and QA function is to determine whether in fact
3 that was met.

4 So your evaluating whether that is appropriate
5 or not, is that your function, or is that a technical
6 function?

7 MR. LATTA: Well, hopefully I'm not
8 incompetent in the area of making technical judgements.
9 But clearly if the determination is made that an item has
10 a safety function, what we do is we look at the attributes
11 and quality assurance program to confirm the ability of
12 that item to perform its intended safety function.

13 If, for example, we had ascribed a quality
14 factor D to an item, which gives you -- what is it, 95/70,
15 and that was associated with the end plug, we would
16 probably take issue with that, and make an inspection
17 finding, and provide you the opportunity to address why
18 you characterized it that way, why you felt that level of
19 inspection was appropriate, and then we would evaluate
20 that.

21 MR. ETHRIDGE: Okay. I hope we -- I've got 20
22 days before I have to ship these off-site, okay? I'm
23 hoping that some of that can be done on-line, and not wait
24 for findings and responses and all sorts of things.

25 So an example that I might use is surface

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1 roughness, it might be a D or an E. That is not normally
2 95/95, so --

3 MR. LATTA: But let's use that as an example.
4 Suppose you've taken these tubes and you actually have go-
5 no-go gauges out there, and you've tested these things,
6 certainly that would be an input to our evaluation of the
7 critical function of that particular feature.

8 MR. CHARDOS: So it is not each feature
9 associated with the --

10 MR. LATTA: Exactly.

11 MR. ETHRIDGE: I just want to clarify -- I've
12 heard 95/95 on everything, and --

13 MR. LATTA: A lot of people are here for a
14 very important function, and I think it is appropriate
15 that we talk at a level which will hopefully gain success
16 for your program, and our ability to verify the accuracy
17 of the program.

18 MR. WILSON: Jerry, let's look at an example
19 that we talked about earlier. In this document, if you
20 will go to page 11, when you come out to do the
21 inspection, we would hope that you have a basis to show
22 that the summation of those three characteristics, at a
23 category C, D, and E, somehow equate to a category B as is
24 shown on page 6.

25 MR. ETHRIDGE: You've picked one that --

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1 MR. WILSON: Quite frankly, from this piece of
2 paper, I don't see how you can get there.

3 MR. ETHRIDGE: I have to agree with you on
4 this particular one. What I don't want -- I guess what I
5 want to understand is -- go to page 12, the getter tube,
6 we have a D. We are not going to have a 95/95 on the
7 link, okay?

8 MR. WILSON: We understand.

9 MR. PACE: Well, B is 95/95.

10 MR. CHARDOS: But on straightness,
11 straightness is D for that one, underneath character,
12 right? Where we have length is -- there are some
13 characteristics that are very imp, and some that are not.

14 MR. MATTHEWS: That is well understood.

15 MR. ETHRIDGE: I just wanted to clarify that.

16 MR. MATTHEWS: My one point is that we are
17 moving from that consistent story on each of the
18 components. It doesn't appear to be that way at this
19 time.

20 MR. ETHRIDGE: I would agree, we need to go
21 look at that. And I guess the other point is, if there is
22 disagreement with the staff on length, on category E, that
23 we not put that into the system, and take all the time to
24 try and resolve it. That we try and do that on-line,
25 somehow, as much as possible.

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1 MR. CHARDOS: And if we can, next week.

2 MR. PACE: Well we have the branch support to
3 resolve inspection issues like that, so that we can get a
4 sort of go-no-go as we go through that inspection, would
5 that be reasonable?

6 MR. LATTA: We would certainly work to that
7 end.

8 MR. PACE: Given the time differences and that
9 sort of thing.

10 MR. LATTA: Yes, we are certainly very
11 sensitive to your schedules.

12 CHAIRMAN MARTIN: I'm not sure what you just
13 asked, Paul.

14 MR. PACE: I'm saying, basically, if we hit a
15 95/80 or a 95/90 on a component, that we are at an
16 impasse, that that is the way it was done, and it is too
17 late to change it, if that is not acceptable to the QA
18 branch, that we can get a technical discussion telephone
19 call, almost real time, to resolve that issue, as opposed
20 to grinding the inspection to a halt, or the production to
21 a halt.

22 MR. LATTA: Dr. Ethridge's point was, you
23 know, he obviously wasn't challenging the quality
24 assurance process for these things. If that is a
25 technical issue, are we going to be in contact with our

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1 technical folks here? Certainly we can do that, it is
2 routine with our inspection program.

3 MR. PACE: The rest of the items, I think,
4 should be fairly short. If you go after --

5 CHAIRMAN MARTIN: Are we departing from the
6 safety classification issue?

7 MR. PACE: I think that we have the framework
8 in place for the inspection, and to address the --

9 MR. ETHRIDGE: What do you think you
10 understand about table 3? You know, whether those are
11 appropriate or not, or is that --

12 MR. PACE: Yes, I think the key there is, if
13 you look at table 3, that sort of shows the basic tubing
14 is 95/95, the end plug arrangement 95 for getting those
15 components; the tubes, 95/95, and then get into the really
16 lesser components inside the TP bar before we drop down
17 into the lower QA inspection levels.

18 MR. SORENSEN: And obviously we need to look
19 at table 3, whereas table 4 --

20 MR. LYONS: And need to be in sync for those
21 characteristics that are important.

22 MR. PACE: Okay. I guess the answer to your
23 question, Bob, is yes we can get past the safety issue.

24 MR. WESSMAN: Before we leave that, I want to
25 clarify my own understanding. The spider assembly and the

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1 little nuts that hold it all together and that sort of --
2 those portions, my understanding is that those are
3 manufactured and provided by Westinghouse.

4 MR. SORENSEN: That is all standard
5 Westinghouse hardware.

6 MR. WESSMAN: Those meet all the Westinghouse
7 safety related QA criteria?

8 MR. SORENSEN: What we are providing is --

9 MR. WESSMAN: And all the heads are nodding
10 yes, that is what I think I'm seeing.

11 MR. SORENSEN: What we are providing are just
12 the bars. I mean, the rods, and Westinghouse is doing all
13 the rest of the assembly with their standard hardware,
14 yes.

15 MR. WESSMAN: Thank you, that was the
16 remaining parts of the overall assembly?

17 MR. SORENSEN: Right.

18 MR. CLAUSEN: We need an acknowledgement from
19 the Westinghouse representative, on the record, that that
20 is where he is at. Is that correct, Mike?

21 MR. TRAVIS: Yes, that is core component
22 system, safety related.

23 MR. CLAUSEN: And they are provided under the
24 standard program from Westinghouse, in the normal
25 fabrication of fuel components and so forth, it is the

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1 same stuff.

2 MR. TRAVIS: No different than how we would
3 handle the burnable --

4 MR. CLAUSEN: Thank you.

5 MR. PACE: Okay, after page 20 is a letter,
6 and this is in here, generally, just as a place holder,
7 and a way to discuss the design margins issue.

8 I don't know whether since our phone call
9 we've had a chance to re-look at those tables that we
10 referenced out of the classified reports concerning the
11 design margins as they apply to the manufacture of the
12 tubes, or the cladding.

13 We had indicated, in that telephone call, and
14 agreed in that call, that these were not going to be
15 classified as code components. No relief request would be
16 required.

17 However, the issues of margin and the
18 technical use of the design process was certainly
19 available and an open subject. And any questions in that
20 area, technically, we would be glad to respond to.

21 But we think that most of those were provided
22 in the classified report. I think, Jerry, you want to
23 just talk about what this letter was?

24 MR. SORENSEN: Well, this -- I believe it was
25 Jim Davis who said we would not have the time to look at

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1 that. And what this letter does, hopefully, is just put
2 in writing the things that we discussed on the phone the
3 previous day, which we felt there was agreement that this
4 was the appropriate language that the staff was looking
5 for, related to application of the code, and our meeting
6 of code margins.

7 MR. PACE: Again, this is one that if this
8 information outside the Battelle letter needs to be
9 docketed, we can do that.

10 MR. WESSMAN: Let me ask that you take us
11 through a couple of parts of that Battelle letter of July
12 1st, because you talk in terms of compliance with the
13 intent of the applicable section in the first paragraph.

14 Could you summarize where you meet the intent,
15 and what that means to you?

16 MR. SORENSEN: I think what that -- and I'm
17 not the designer of this. But I think what that means to
18 us is that these are not code components, therefore we
19 don't say that they meet the code by virtue of having done
20 bent code components, but they meet the intent of the
21 code, in that we meet the margins, where appropriate for
22 these materials.

23 We have applied code methodologies, and used
24 the code as the guidance document, in how to do that
25 design, but do not look at these as being code class

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1 components or structures.

2 MR. SORENSEN: I think I understand what you
3 are saying, and I think we just have to review the other
4 response to the questions.

5 MR. WESSMAN: A follow-up question, I guess.
6 In a sense what you just said is not really part of the
7 document in submittal, I believe. Is that correct? So in
8 a sense the only documentation is our transcript of this
9 discussion here?

10 MR. SORENSEN: I think that is what we have
11 said in the report itself, that we met the code, or the
12 intent of the code. The question I think that was left
13 was we didn't say anything about the margins, and that is
14 what was done here.

15 And that may be -- I think the classified
16 report that was referenced is where these tables appear
17 that do show that comparison to code margins.

18 MR. PACE: I think that also calls out that
19 exception to the NG3133, it is also in that section of the
20 classified.

21 Our response to the RAI in this area, I think
22 was a question. We had used the words as a general guide.
23 I think that is what brought on the question that this is
24 the next round of trying to -- formal guidelines, and --

25 MR. WESSMAN: Well, I understand that, and I

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1 think we need to think through what you said, and then
2 what we have here, and what we have in the RAI, we may ask
3 that you develop that specific characterization that you
4 kind of summarized to us here, so that we have that
5 docketed explanation of intent, and docketed explanation
6 and general guide where it specifically applies, so that
7 we can then deal with that in our safety evaluation.

8 I don't think that is too troublesome for you,
9 is it?

10 MR. PACE: No, it is not. And I guess I would
11 ask you --

12 MR. WESSMAN: Part of having the paper trail
13 from you to us as opposed to going through a transcript of
14 a meeting.

15 MR. PACE: Okay.

16 MR. MANOLY: Excuse me. In your discussion,
17 let us talk about code margins. The code does not discuss
18 margins, and what we talked about before is just to say to
19 meet the numbers and NG as specified in the code. There
20 is no discussion of margins.

21 MR. SORENSEN: Good point. I think that was
22 the intent of this, to say that we -- you know, there are
23 margins between the design and what the code would
24 require, the code limit.

25 And I think what we are saying here is we do

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1 meet that code limit, so there is margin between the code
2 limit, the design limit, and the design limit we used.

3 MR. ETHRIDGE: I think the second -- if you
4 look at the second sentence of the second paragraph, it
5 states it pretty clearly. The stresses apply under these
6 different conditions, at margin, to the limits. That is
7 the point. There is a margin greater than one. What we
8 calculate and the one that is in there, in the engine
9 side.

10 So that just summarizes what Mr. Sorensen just
11 said.

12 MR. PACE: I think maybe the other piece of it
13 would be just to bundle the response in this area in one
14 place. I think we can provide that without a problem.
15 Can we, at the same time, respond to any issues that may
16 fall out of Jim's review?

17 I don't know, timing wise on that, but I'd
18 like to combine those into just one area, so to keep that
19 as opposed to a series of letters in one place, and
20 resolve that issue at one time.

21 If that is a timing issue, we can do
22 otherwise. But if we can combine those, I would like to.

23 MR. WESSMAN: Paul, I think that would be
24 constructive, because then you can deal with intent, you
25 can deal with the concept of general guidance, whether it

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1 is technical criteria, how you dealt with the margins, how
2 you dealt with the stress.

3 You sort of got it in bits and pieces, you've
4 sort of heard it. But I think if you get that written
5 discussion of that, that will help scratch this itch.
6 We've developed the trail that we've talked about.

7 I think we can exchange enough ideas with each
8 other, so you have an idea of what we are searching for.
9 And I think if we develop that in writing, then we can
10 link that to the language that is in the original NUREG
11 1607, from a generic standpoint, and at that point, Jim
12 can deal with that portion in our safety evaluation.

13 MR. ETHRIDGE: So I'm sensing, from the
14 comments that our response to the RAI was not sufficient
15 in this area?

16 MR. WESSMAN: I think that it is in separate
17 answers of the RAI, and we may need just to pull it
18 together. I have to rely on Jim on that, because he has
19 studied it more than I.

20 MR. PACE: I think that we were dealing with
21 maybe the key issue we were dealing with in question one,
22 was the specific code application more so than the margin.
23 The original SER said something like the margins are okay,
24 as long as they are consistent with the submittal.

25 Let's deal now with the code applicability

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1 issue. I think we've resolved the code applicability.
2 And now, if there are any questions falling out of the
3 margin issue, in the classified version, we will have to
4 work that through whatever is classified.

5 But we can get the answer back to you to
6 combine this whole thing.

7 CHAIRMAN MARTIN: Do you think, Paul, you have
8 -- you understand what our information needs are?

9 MR. PACE: I think that we know the answer.
10 It is largely what is here in this -- at least to this
11 level of detail. And --

12 CHAIRMAN MARTIN: Do you have enough to
13 construct a revised response to question one, to come back
14 to us all?

15 MR. PACE: Yes, except that I would like to
16 include whatever falls out of the review of the -- I'll
17 call it the margin issues, the margin tables, into one
18 response so we don't, again, further segment this issue.

19 CHAIRMAN MARTIN: Okay.

20 MR. LAINAS: At the risk of being a little
21 redundant, I'd like to point out, when you use terminology
22 like meets the intent of what is used as general guidance,
23 the red flag -- I would recommend that you not use that
24 kind of abbreviation, and explain --

25 MR. PACE: We will come up with a series of

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1 words to address that, specifically. We've met technical
2 requirements short of actual classification of the
3 component. And if there is any limitations on that, for
4 example, the large break LOCA issue --

5 MR. DAVIS: Until two days ago, there was --
6 that you didn't meet, general -- and now I understand
7 exactly where you stand. I also agree with -- I was
8 having a design code, and they are only using code to
9 determine these powerful stresses. Relief request and
10 things like that are not required.

11 MR. PACE: Any other discussion on that item?

12 Okay. We will go to the next page. The
13 question had come up concerning how did the Watts Bar
14 description of burnable absorber rods match this code
15 classification issue.

16 When we first got into this, preparing for our
17 June 4th meeting, Westinghouse said that their review of
18 identified that this is not consistent with the way they
19 usually describe the cladding for the BP rods.

20 Now, this issue has nothing to do with the
21 upcoming cycle, this only deals with the existing burnable
22 absorber rods in cycle one, will be using WABA rods for
23 cycle 2, those are described correctly in the FSAR, so it
24 really doesn't affect the future issue.

25 It did come up in the discussion, so we were

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1 just going to show what the proposed techs were. The
2 wording, from the proposed wording, is the same as in our
3 Sequoia plant, when they had BPRAs, which they don't have
4 anymore.

5 And consistent with the usual words of
6 Westinghouse that uses for Westinghouse plants, I don't
7 think we've reviewed generic letter 9118 on how to process
8 this discrepancy, it did not affect operability, it has
9 been entered into our corrective action program,
10 documented that way, and corrective action for that will
11 consist on an FSAR change to go to these revised words.

12 That will be processed through the 5059
13 process. We think that it will pass through that process,
14 and it will be in the corrective action plan or the QA
15 plan will be developed to implement that.

16 Likely our next revision to this will be
17 submitted February '98, is when the next revision to the
18 FSAR is scheduled for submittal.

19 MR. DAVIS: Part of what you said, you are
20 referring to the language now in the FSAR about burnable
21 absorber rod clad being designed to. Your point is that
22 applies to burnable absorbers now in cycle one, which will
23 not be in cycle two, which of course is the cycle where
24 the LTAs will be?

25 MR. PACE: That is correct. It is an issue

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1 that came up in this. It is the same issue here as it is
2 with the TP bar, if we use those technical requirements,
3 and I won't use the intent words, but all those same
4 issues were done for these BP rods, but they are also not
5 -- they are, again, used as a technical requirement, not
6 as a code requirement, code component.

7 MR. SORENSEN: Do you use NB at all?

8 MR. PACE: No.

9 MR. DAVIS: I guess you are talking about
10 burnable absorber rod clad, this is the clad for TP bar
11 and just use --

12 MR. PACE: Yes, this only deals with the
13 existing BPRAs that won't be in cycle two.

14 MR. WESSMAN: I believe this is a housekeeping
15 issue?

16 MR. PACE: That is correct. Okay. So Bob and
17 I probably will have further discussion on that as we
18 process the 5059 of that FSAR change, if anything comes
19 out of that, that is how we intend to resolve that.

20 The last issue, I guess that we had to
21 discuss, was the impact of the final reload safety
22 evaluation, that will be issued fairly late in the
23 process, basically late August.

24 That is normal for our process, so that we can
25 get the latest information out of this cycle one

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1 cooperation. And there were some questions that we didn't
2 know for sure whether we would need a conference call or a
3 meeting to discuss where we can get the staff's review
4 without having to wait for that final reload safety
5 evaluation.

6 We think that the process is really no
7 different than the rest of the core design that we will
8 use for all the other burnable absorbers, and these 32
9 pins will follow the same basic process for the reload
10 safety evaluation.

11 Westinghouse has a proprietary document, which
12 is attached to this. I put this in, again, as a place
13 holder for us to talk about, that -- just a general
14 description of what that will consist of.

15 MR. TRAVIS: Yes, the attachment to this
16 letter is the results of the core design, core physics
17 analysis, and it looks at -- compares the design with the
18 eight TP bars for assembly and 32 total in the core,
19 versus four WABAS.

20 And it looks at the long window and the short
21 window for cycle one, because right now we don't know what
22 that fuel is going to look like in terms of burn up that
23 is in cycle one, and is going to continue in cycle two.

24 So it does a comparison, it shows that the --
25 as we've told you in some of our responses, that the page

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1 -- the limits are lower in the assemblies with the TP bars
2 than they would otherwise be if they just became a WABAS.

3 We are going to -- we've provided this as a
4 proprietary document to TVA, and I believe they are going
5 to provide that.

6 MR. PACE: That is something you will need for
7 your review, we can docket that with the normal
8 proprietary controls.

9 MR. LATTA: Yes, we will need that.

10 MR. TRAVIS: I think next week will be an
11 appropriate time.

12 MR. NEWBERRY: What is your planned timing on
13 that?

14 MR. TRAVIS: We can do a fairly quick
15 turnaround. We have the document and so it would -- we
16 would be able to get it out next week. I don't know
17 whether Kerri needs it for her visit out there.

18 MS. KAVANAGH: Well, if we can get a copy of
19 it, if that is possible.

20 MR. TRAVIS: Okay, yes.

21 CHAIRMAN MARTIN: So you can have that
22 available for the beginning of Kerri's inspection, as well
23 as you are planning on sending it in?

24 MR. PACE: It would follow the usual
25 inspection rules for proprietary information, we would

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1 identify that as part of the proprietary information.

2 CHAIRMAN MARTIN: You also plan to put it on
3 the docket?

4 MR. PACE: A request that we can do that. We
5 don't need to -- we will just send it, they can send us
6 another letter for that.

7 CHAIRMAN MARTIN: Okay.

8 MR. PACE: Based on, I guess, given that that
9 description of it, does that sound like the sort of
10 information that would let you do your review without
11 having the final reload at the end of August?

12 MR. LYONS: We'll still need to see the final
13 reload analysis, but I think this will give us, you know,
14 some --

15 MS. KAVANAGH: It won't be as detailed.

16 MR. PACE: Obviously that affecting your
17 issuance of the amendment, though.

18 MS. KAVANAGH: Well, if it only takes a couple
19 of days to do the reload analysis, when it gets done then
20 it --

21 MR. PACE: Let's continue that discussion.
22 Given that, basically, you were into early September.
23 August 28th is --

24 MS. KAVANAGH: What I'm saying is, each day
25 that you are providing next week, it doesn't differ that

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1 much from the final. The final would be to say yes, we
2 confirm that what you provided earlier, therefore it is
3 okay.

4 I mean, that is part of the review, we need to
5 see the reload analysis.

6 MR. TRAVIS: Kerri, and that is what is going
7 to happen, because we looked at the short window and the
8 long -- the reload analysis.

9 MR. PACE: I guess that is one that I would
10 like to see as some sort of a confirmatory action after
11 the fact.

12 CHAIRMAN MARTIN: I think in answer to your
13 question about scheduling, under the best assumption, if
14 we have information on the final reload, you indicated
15 that even under the best of assumptions we are talking
16 about mid-September getting the licensing agreement.

17 MR. PACE: Yes, that is --

18 MR. CHARDOS: That was the premise behind
19 getting the information now, and if it is actually between
20 the long and the short, waiting until August 28th, won't -
21 - exactly where it is between the long and the short, and
22 that is really what it boils down to.

23 MS. KAVANAGH: All I'm saying is that we need
24 to confirm that it ended up in this -

25 MR. CHARDOS: And all we are asking is, can

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1 you approve it and then review that final analysis to
2 confirm that it is between the short and the long? That
3 is the only thing we are asking.

4 MR. PACE: I guess we can put in a thousand
5 WABA rods without a final review, the license process to
6 do that.

7 MS. KAVANAGH: That is part of the normal
8 review process.

9 MR. PACE: We don't normally submit reload
10 safety evaluations for the staff meetings.

11 MR. MARTIN: Right, so that is a shutdown.
12 And then you are looking for permission to load, but not
13 to operate until we finish our analysis; is that what you
14 are looking for?

15 MR. PACE: I'm looking for the amendment in
16 mid-August, so I can tell don't put the LTAs in. I can't
17 undo the process. We would have to basically take LTAs
18 out of the assemblies, we put WABAs in and change -- do a
19 different reload. Our risk moves up significantly without
20 the amendment in the mid-August -- late August time frame.

21 MR. CALABRO: I think we need to work together
22 here. Currently operating -- examine the fuel. Whether
23 or not that is in a bundle that is currently scheduled to
24 go back, we don't know. It is possible that we end up
25 doing a redesign right there in the outage. It is fairly

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1 normal. The actual final reload calculations cannot be
2 done until the actual final loading pattern, it cannot be
3 done until after we determine which is the assembly, and
4 what the redesign is.

5 And we have a lot of preliminary analysis
6 going in. Hopefully it is not going to be substantially
7 different than we had before, but I just want to make sure
8 that everybody is aware, that there is a likelihood that
9 we will do the final analysis during the outage.

10 MR. LYONS: But the license amendment will be
11 setting specific limits, and it will be based on this
12 document --

13 MR. PACE: The license amendment just says you
14 can put LTA in the core, and that is the text of the tech
15 spec change. The -- I think given the net impact of these
16 32 rods, the significance of the impact on the reload is
17 fairly minor, the equivalent of four WABAS versus 1000 in
18 the core. So it seems like -- and that is our intent, is
19 to try to provide enough information to the staff that you
20 can make a judgement that there are no core parameter
21 concerns falling out of these 32 pins, without having to
22 wait until late August or September for that amendment.

23 And I think it comes down to -- I don't know
24 exactly what the process would be if we had to go past --
25 get the additional WABAs to try to do the change-out as of

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1 this issue. And I'm sure DOE would certainly have a key
2 interest in that decision, also.

3 I don't think we can wait until mid-cycle, the
4 middle of refueling to decide to go or not go with LTA.

5 MR. NEWBERRY: Normally we look at the
6 complete review of the reload analysis before the final --

7 MR. PACE: Normally it is done under 5059. We
8 have our tech specs --

9 MR. CHARDOS: We did find out the license
10 amendment --

11 MR. PACE: But t is not as much a core
12 function issue as it is the relatively minor -- I mean,
13 the reason this thing is an amendment, the large case was
14 very minor impact on the core boundary as a result of
15 assuming all the tritium dumped into the coolant, which
16 give us a dose cal which we opted not to do a 5059 on.

17 CHAIRMAN MARTIN: Well, let's review what the
18 reload involves. There is no changes in the tech specs,
19 the reactor trip limits, or --

20 MR. PACE: That's correct.

21 CHAIRMAN MARTIN: What have you told us about
22 the change in the methodology associated with the reload?

23 MR. PACE: There is none, beyond what we have
24 currently submitted for our separate tech spec for

25 CHAIRMAN MARTIN: You mean those things

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1 peculiar to the --

2 MR. PACE: There are other license amendments
3 in house with the NRC to review associated, totally
4 independent of the LTA project for cycle two, as a result
5 of going to longer core life.

6 CHAIRMAN MARTIN: But those relate to
7 parameters other than putting the LTAs --

8 MR. PACE: Totally independent of the LTA.
9 They are consistent with each other, but independent. So
10 --

11 MR. LYONS: I guess I have to say we have to
12 look and see what we get in this document that Kerri will
13 look at next week, and we can probably make the
14 determination.

15 MR. PACE: I think that is -- yes, I guess I
16 would like to see if based on the review of this, and I
17 think we have to wait for that judgement, once you look at
18 it, can you make a decision based on that amount of
19 information, without waiting for the reload, that is
20 certainly what we are looking.

21 And we think that should be possible.

22 MR. CHARDOS: And that review will take place
23 at PNL?

24 MR. LYONS: Well, at least the start of it --

25 MR. PACE: Okay. I think that was the other

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1 issue that we thought could be scheduled in production
2 related and put in practice. I guess from there we would
3 like to go back to our item 5, which is, what can you tell
4 us on other issues that are outstanding that could impact
5 our ship decision by the 21st. Is that the shipping date?

6 MR. CHARDOS: 23rd.

7 MR. PACE: 23rd, or in that time frame.

8 CHAIRMAN MARTIN: I didn't quite follow.

9 MR. PACE: These were the issues that we know
10 about, by now, where there is some level of concern as
11 they may impact production activities for DOE. We haven't
12 heard on the others. I know the time has not been a long
13 time since we submitted the RAI response, but can you give
14 us a judgement, if not a -- I know you can't say, this is
15 approved, this is not approved.

16 But if there are issues that you see require
17 management attention to get to a resolution, we would like
18 to know those, if possible.

19 CHAIRMAN MARTIN: I can see a way of doing
20 that would be to go through the technical disciplines and
21 ask people to give you response based on what they've
22 reviewed up to this point.

23 Bob, you were going to --

24 MR. LATTA: The only point of clarification I
25 was going to add is that if he was looking specifically at

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1 the RIA questions, and during the course of this
2 discussion, clarify and make the point that that is
3 exactly what they -- yes, I'm prepared to address one or
4 two of those items, when we have the opportunity.

5 CHAIRMAN MARTIN: Do you want to address them
6 now?

7 MR. LATTA: If the other branches have --
8 willing to defer to them. All right, thank you.

9 We are referring specifically, then to your
10 submittal of June 18th, which provides a response to a
11 number of questions that the staff had provided you,
12 particularly in the area that we were looking at, in the
13 quality assurance program.

14 We had, as -- on the basis of our initial
15 inspection findings, left a number of items that we
16 requested additional information on.

17 The first one, of course, bears on the safety
18 classification of the components, and that will be
19 continued during our inspection next week.

20 The second one has to do with the
21 comparability and actually the comparison of the quality
22 assurance program requirements proposed by TVA on
23 Westinghouse to do the qualification of PNNL as supplier.
24 And PNNL's quality assurance program, which is based on a
25 NQ1 1989.

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1 I had requested, verbally, a copy of the
2 purchase order or contract which imposed your quality
3 assurance requirements on Westinghouse, and which served
4 as the basis for their audit of the PNNL.

5 I haven't received that yet, but -- and it
6 certainly isn't necessary, even for my inspection next
7 week, but it would be beneficial if I had that.

8 The other item I would like to discuss is the
9 requirements in PNNL's quality assurance program, the
10 response essentially indicated that Westinghouse did the
11 qualification based on their quality management system,
12 essentially it is their approved quality assurance
13 program, that which is reviewed by the NRC.

14 The assertion was made in the submittal that
15 the audit was predicated on NQA1 1994 criteria, and that
16 that was justified because NQA1 was referenced in
17 Westinghouse's quality management system. That is not the
18 basis on which the staff approved Westinghouse quality
19 assurance manual.

20 The approval of that manual is based on the
21 fact that they committed to Reg Guide 128, REV 3, which
22 endorses NQA1, 1983. And the standards associated with
23 N452.

24 MR. PACE: Okay, that is something that we can
25 talk about next week, because time is moving on. With the

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1 right people there next week, and we will talk about it.

2 MR. LATTA: But you asked for items that may
3 be of an issue --

4 MR. PACE: We want the hot list that we can --
5 and so our plan will be to resolve that while we are out
6 there next week. Again, it may take a conference call
7 while you are out there to tie in various parts, and to
8 the extent that you can do that as part of your
9 inspection, without impacting that inspection, we would
10 like to do that.

11 MR. LATTA: Clearly forward to Westinghouse's
12 quality assurance manual, it says they meet the
13 requirements for appendix B as prescribed by Reg guide
14 128. So that is -- that was the basis for our approval.
15 Not that it was based on NQA1, but that it was based on
16 the ANSI standards and Reg guide 128.

17 MR. PACE: I think that they've recognized
18 that, and we may just have to have further discussion on
19 that, okay?

20 CHAIRMAN MARTIN: Paul, with respect to
21 materials and mechanical engineering, in response to your
22 question a while ago about whether we saw problems today
23 or not, this would involved Dick Wessman and Jim Davis.
24 Touching base with them, I think Jim identifies about
25 seven issues in this area.

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1 And he doesn't identify any which we can bring
2 to the table today and discuss in terms of troublesome
3 issues. But the review is under way, and we are not
4 giving you the results of that today. The review is under
5 way, it will go as normal staff process.

6 MR. PACE: What about the timing of that, when
7 will we expect to see that?

8 MR. DAVIS: In the next couple of weeks.

9 MR. ETHRIDGE: We are going to be built, and
10 we are not going to be able to do anything with it, if
11 there are significant issues.

12 MR. DAVIS: If we find anything, we will let
13 you know next week.

14 MR. ETHRIDGE: Okay.

15 MR. DAVIS: The two questions are the weld
16 qualification and the NDT?

17 MR. ETHRIDGE: Right, right.

18 MR. DAVIS: And Steve has already looked at
19 that. He reported to me that you are doing an excellent
20 job and exceed the requirements that we were concerned
21 about.

22 MR. MATTHEWS: I'd like to clarify --

23 (General laughter.)

24 MR. MATTHEWS: What I reported was that from
25 the problematic review that is -- I have not seen any

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1 ending results or actual -- or welding taking place.

2 Problematically, what I understand is -- the week of the
3 14th we will find out if there really is a problematic
4 control --

5 MR. PACE: All right, I appreciate that. And
6 that is exactly the sort of information that we needed --

7 MR. CHARDOS: So you will let us know next
8 week if there is anything in 07 that looks like it is a
9 real problem.

10 CHAIRMAN MARTIN: And I'll ask for Jim's
11 concurrence in this, but I believe the issues that are in
12 the systems area, it is a bit more premature to give you a
13 projection on those, proportionately so much of that
14 review is yet to take place next week, in our activities.

15 MR. ETHRIDGE: Kerri, does the review next
16 week go beyond the thermo-hydraulics?

17 MS. KAVANAGH: Well, we are also going to have
18 the bounding reload losses that --

19 MR. CHARDOS: Westinghouse info.

20 MS. KAVANAGH: No, it is not really going
21 beyond the thermo-hydraulics.

22 MR. PACE: Any others?

23 MR. DUNN: I'll just ask for a clarification.
24 In order to use the reg guide 1.28 Rev 3 gives you the
25 option --

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1 MR. LATTA: I think QA1 1983 gives you very
2 specific fabrication. We haven't approved anything beyond
3 1983.

4 MR. DUNN: That is correct, and there has been
5 nothing added to it.

6 MR. LATTA: I'll come back and discuss that
7 issue. I've made my point. I think we can work on it
8 next week. We are certainly not going to argue NQA
9 applicability here, as far as I know.

10 MR. DUNN: Well my one question, you are not
11 challenging the fact that NQA1 --

12 MR. LATTA: NQA1 1983 has been endorsed by
13 that -- we have not endorsed subsequent revisions of NQA1.
14 And I have very little control over it all.

15 MR. PACE: Is there anything that you can tell
16 us now concerning -- this Monday is the end of the Federal
17 Register Posting. I don't know if that can be discussed
18 prior to that being completed. But is there any concerns
19 that could come out of any action, comments from the
20 public, from the posting?

21 CHAIRMAN MARTIN: No, I can't provide anything
22 more.

23 MR. PACE: I guess that is one that we would
24 like to hear as soon as the posting is complete, which I
25 believe is Monday. If there is anything that would impact

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1 the Shelby side of the house, impact on the issuance of
2 the amendment.

3 Okay, I guess that --

4 MR. ETHRIDGE: I only had one other issue. The
5 question is the audit has been split now into two? Is
6 that for your convenience, or are you thinking you are
7 helping us, or what?

8 MR. MATTHEWS: You mean about coming next
9 week?

10 MR. ETHRIDGE: Yes, just wondering what the
11 timing was.

12 MR. MATTHEWS: That is the only way we could
13 accommodate our resources.

14 MR. LATTA: From your standpoint, would it be
15 best if we coordinated our inspection efforts? I mean,
16 obviously, we've moved towards that end, but the --

17 MR. ETHRIDGE: From my perspective, if I've
18 got people here two weeks in a row right when I'm
19 manufacturing rods, my administrative support that is
20 available to you, so you've had an opportunity -- and if
21 there is any flexibility, at all, my preference would be
22 that.

23 MR. LATTA: Part of the decision to come
24 during this period of time that is when you had indicated
25 the manufacturing evolutions would be ongoing. But as

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1 steve indicated, it was done primarily by availability of
2 resources.

3 MR. ETHRIDGE: I just wanted to understand. I
4 just got some word that it was now split, and I was just
5 trying to think of my resources as far as accommodating
6 your needs.

7 MR. MATTHEWS: The second week -- I would
8 characterize the first week as more of a software week,
9 and the second week, would be the hardware, actually
10 looking at verification and implementation. There will
11 only be two inspectors involved that week.

12 MR. ETHRIDGE: The second week will be you
13 and?

14 MR. MATTHEWS: Bob Pettes. You don't need to
15 assign the entire administrative staff to help us out.

16 MR. PACE: Max, anything?

17 MR. CLAUSEN: No. We've had more than
18 adequate attention here today, and I appreciate that.

19 MR. PACE: I think we have defined a path to
20 follow up on these things. We will coordinate closer with
21 Bob on the developing and the following up on these
22 products that we've talked about. So we will keep this
23 going from our side, and we really appreciate the prompt
24 review to get this resolved.

25 That is all we have, Bob.

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CHAIRMAN MARTIN: All right, then we are
concluded. Thank you.

(Whereupon, the above-entitled matter was
concluded at 12:19 p:m.)

C E R T I F I C A T E

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: TVA/NRC MEETING ADDRESSING LICENSING
AMENDMENT TO IRRADIATE TRITIUM
PRODUCING BURNABLE ABSORBER RODS IN
THE WATTS BAR PLANT

Docket Number: N/A

Place of Proceeding: ROCKVILLE, MARYLAND

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



IRENE GRAY
Official Reporter
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