# THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES PUBLIC HEALTH SERVICE CENTERS FOR DISEASE CONTROL AND PREVENTION NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes the

#### ADVISORY BOARD ON

### RADIATION AND WORKER HEALTH

The verbatim transcript of the Meeting of the Advisory Board on Radiation and Worker Health held via Teleconference on Tuesday, February 5, 2002.

AAACH LEE & ASSOCIATES

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# <u>Legend of the Transcript</u>:

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KAREN BROWN
KAREN BUTLER
KEN CRASE
MARK GRIFFON
JEFFREY L. KOTSCH
RICHARD MILLER
JERRY TUDOR

1	PROCEEDINGS
2	1:00 p.m.
3	DR. ZIEMER: Maybe we should go ahead and
4	take an initial roll call here, Cori, do you
5	think?
6	MS. HOMER: Is Kim, the court recorder, on?
7	MS. NEWSOM: Yes, Cori. I'm here.
8	MS. HOMER: Thank you, Kim.
9	We can go ahead and start. Let me go ahead.
10	I'll find a roster and take roll.
11	You're here.
12	DR. Anderson?
13	[No response]
14	DR. ZIEMER: Henry's not on yet, then, okay.
15	MS. HOMER: Dr. Andrade is here.
16	<b>DR. ANDRADE</b> : Right, I'm here.
17	MS. HOMER: Dr. DeHart?
18	DR. DeHART: Yes.
19	MS. HOMER: Okay. Mr. Espinosa?
20	[No response]
21	DR. ZIEMER: I thought I heard Rich come on.
22	No?
23	[No response]
24	MS. HOMER: Sally, we know you're here.
25	MS. GADOLA: Yes.

1	MS. HOMER: Dr. Melius?
2	DR. MELIUS: I'm here.
3	MS. HOMER: Okay.
4	MS. Munn?
5	MS. MUNN: Yes, here.
6	MS. HOMER: Presley, I know you're here.
7	MR. PRESLEY: I'm here.
8	MS. HOMER: And Dr. Roessler?
9	DR. ROESSLER: I'm here.
10	MS. HOMER: Okay. Well, we don't yet have
11	Dr. Anderson or Mr. Espinosa.
12	DR. ZIEMER: We can wait just a moment.
13	Let's see, we have the court reporter on?
14	MS. NEWSOM: Yes.
15	DR. ZIEMER: Larry Elliott's here. Cori is
16	on.
17	MS. KELLEY: Alice Kelley.
18	MS. HOMOKI-TITUS: Liz Homoki-Titus.
19	
	DR. ZIEMER: I'm sorry?
20	MS. HOMOKI-TITUS: Liz Homoki-Titus. I'm
21	one of the attorneys with NIOSH.
22	MS. ARMSTRONG: And Mary Armstrong. I'm an
23	attorney with NIOSH, too.
24	DR. ZIEMER: Mary, right.
25	Before we officially start, let's - this is

Paul Ziemer, and I'm going to ask each one if you do have comments and so on as we proceed, please identify yourself each time you talk. We don't all recognize each other's voices yet, I'm sure. So that will be helpful.

I think it would be helpful while we're doing the roll call and we still are waiting for Dr. Anderson and - let's see, who else was missing?

MS. HOMER: Mr. Espinosa.

DR. ZIEMER: Espinosa. While we're waiting for those two to join us, let us find out if we have additional visitors to the call.

Are there any members of the public on the line? And if there are would you please identify yourself by name for the record, and if you represent a particular organization please identify that.

MR. BARNES: My name is James Barnes, B-A-R-N-E-S. I'm the Radiation Safety Officer for the Rocketdyne Division of Boeing.

DR. ZIEMER: Thank you, James.

Anyone else?

MR. GRIFFON: This is Mark Griffon. I'm a health physicist consultant for PACE

1	International Union.
2	DR. ZIEMER: Thank you, Mark.
3	Others?
4	MR. KOTSCH: Jeff Kotsch is here,
5	K-O-T-S-C-H, health physicist with the Department
6	of Labor.
7	DR. ZIEMER: Okay, Jeff.
8	Any others?
9	MR. TUDOR: Jerry Tudor, sick worker at Oak
10	Ridge.
11	DR. ZIEMER: Could you give us that again?
12	I could barely hear that one.
13	MR. TUDOR: Jerry Tudor, T-U-D-O-R.
14	DR. ZIEMER: Jerry Tudor, okay.
15	MR. TUDOR: Sick worker at Oak Ridge.
16	DR. ZIEMER: Oak Ridge, okay. Thank you,
17	Jerry.
18	Any others?
19	[No responses]
20	DR. ZIEMER: Okay, so it appears we have
21	four members of the public on the line. If
22	others come aboard -
23	Who just joined us?
24	MS. BROWN: This is Karen Brown from
25	Savannah River Site. I've got Ken Crase here

1 with me. 2 DR. ZIEMER: Okay, Ken. 3 MS. BROWN: And Karen Butler. DR. ZIEMER: Ken Crase and Karen Butler from 4 5 the Savannah River Site. 6 MS. BROWN: Westinghouse Savannah River 7 Company. DR. ZIEMER: Okay. Thank you, Ken, welcome, 8 9 and Karen. Now we're still - I think we're still 10 waiting for Henry Anderson and Richard Espinosa 11 12 to join the call. Either of those come aboard 13 yet? 14 [No responses] DR. ZIEMER: And let me ask Cori or one of 15 16 the staff, is anyone there, can you independently 17 check their numbers and see if there's any 18 problems? MR. ELLIOTT: Dr. Ziemer, this is Larry 19 20 Elliott. I'll have Nichole call both and see if 21 there's a problem. DR. ZIEMER: Okay. While that's underway, 22 23 we do have a quorum so we can proceed. But we also, as part of our operating procedures, have 2.4

expressed the intent to try to have all members

of the Board present during votes, so we're not at a position where we're voting on anything at the moment. I would like to - but we will later in the call.

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I would like to review for everyone the purpose of this meeting. This meeting is intended to allow discussion and a vote on some draft comments that a working group developed during our January meeting in Washington. These are specific comments relating to the proposed rulemaking of NIOSH as set forth in 42 CFR 81.

The comments - that is, the proposed recommendations that we will be voting on - we will read those in full so that the members of the public will also have the text of those available, and an opportunity to hear and ask any questions that they may wish to have. But that's the main focus of this meeting, is simply for the committee to vote, to discuss and vote on the committee's recommendations.

I think somebody just came aboard.

DR. ANDERSON: Yes, Henry Anderson.

DR. ZIEMER: Okay, very good. Henry, this is Ziemer speaking. We just had taken the roll call. We learned you were missing. Welcome

1 aboard. And someone else just joined us? 2 I believe so. 3 MS. HOMER: MR. KATZ: Sorry, yes. This is Ted Katz. 4 5 MS. HOMER: Oh, hi, Ted. DR. ZIEMER: Okay, Ted Katz has joined. 6 7 MR. ELLIOTT: And Nichole - Larry Elliott here - Nichole says that Rich Espinosa is now 8 9 trying to get on. 10 DR. ZIEMER: Okay. MR. ELLIOTT: And while he's trying to get 11 on, Dr. Ziemer, I would mention for everyone on 12 the call, and the public included, that the draft 13 letter and recommendations are located on our web 14 site if they choose to use that as a venue to 15 16 read through as they are read into the record 17 during the call. 18 DR. ZIEMER: Okay. MR. ELLIOTT: The web site is 19 www.cdc.gov/niosh/ocas, and go to the Board 20 21 aspect page of that web site. 22 I think somebody joined us while I was 23 speaking. MR. ESPINOSA: I just did. This is Richard 24

25

Espinosa.

DR. ZIEMER: Okay, Rich, thanks. Rich and Henry, we took the roll call. All members of the Board are present. We have a number of - and there are several of the NIOSH staff members as well.

Someone else just joined?

MR. MILLER: Yeah, Richard Miller here.

DR. ZIEMER: Richard Miller, thank you.

Richard, we've asked everyone to indicate who they're representing, Rich, and if you would do that officially for the record.

MR. MILLER: Sure. Government Accountability Project.

DR. ZIEMER: Thank you.

So for the benefit of Rich and Henry, Henry Anderson and Rich Espinosa, who just joined us, I just reviewed for those present that the purpose of this call was to discuss and vote on the proposed recommendations of the Board relating to 42 CFR 81.

Now I think it would be appropriate at this time, it was just mentioned that the draft that we'll be looking at is also on the web site if members of the public wish to pull that up, and the web site address was just given.

We are going to read into the record this document, and let me first tell you that there's two parts, really three parts to the document. The first is a letter which comes over my signature to Secretary Thompson, and this letter describes the initial meeting of the Board and the items discussed. It includes the general what we were calling the recommendations dealing with the composition of the committee.

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Then there is an attachment which contains specific recommendations on 42 CFR 81 - that is the specific comments, of which there are three. And then as a matter of information we were including as attachment two for the Secretary the agenda from the January meeting, which requires no action. It's just a piece of information.

So with that as background, I'm going to ask Mr. Elliott if he would read the draft letter and then the attachment one. I assume that no one wishes us to read attachment two, which is simply the agenda of the last meeting.

MR. ELLIOTT: This is Larry Elliott. I will read the letter and the attachment one.

NANCY LEE & ASSOCIATES

Dear Secretary Thompson:

The Advisory Board on Radiation and Worker

Health held its first meeting on January 22 and 23, 2002, in Washington, D.C. All of the currently appointed members were present as well as the designated Federal Official who serves as the Executive Secretary. The sessions were open to the public in accordance with FACA requirements and were attended by a variety of individuals representing themselves or interest groups. A copy of the meeting Agenda is enclosed for your information.

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In preparation for the meeting, the Board members individually reviewed proposed NIOSH rulemaking for 42 CFR 81 (Guidelines for Determining the Probability of Causation Under the Energy Employees Occupational Illness Compensation Program Act of 2000) and 42 CFR 82 (Methods for Radiation Dose Reconstruction Under the Energy Employees Occupational Illness Compensation Program Act of 2000). The members also reviewed written comments by subject matter experts and by members of the public for these two rules. At the Board sessions, formal presentations were made by NIOSH staff members on these and related issues. Also, comments were provided by some members of the public who were

in attendance.

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Under the provisions of the President's

Executive Order of December 7, 2000, the Advisory

Board has very specific responsibilities on

advising the Secretary of Health and Human

Services. In accordance with those

responsibilities, I am pleased to provide the

Advisory Board's recommendations concerning the

proposed Guidelines for Determining Probability

of Causation as set forth in 42 CFR Part 81.

These recommendations are summarized in

Attachment 1.

In addition to dealing with the specific items mandated by the Executive Order, the Advisory Board wishes to comment on its current composition and makeup. We note that since the Public Law under which the Advisory Board was established provides for up to 20 members, and since the current number of members appointed is 10, there may be additional future appointments made to the Board. As a means of providing improved balance among the various sectors represented by the Board membership, the Board suggests that additional representation from the nuclear production workers sector would be a

clear advantage and benefit to the Board in carrying out its mandate.

Please let me know if additional information or clarification is needed concerning the recommendations contained herein.

Sincerely, Paul L. Ziemer, Ph.D., CHP, Chairman.

Attachment 1: Recommendations and Comments from the Advisory Board on Radiation and Worker Health.

The following comprise recommendations and comments from the Board in the context of responses to the three major questions found in Section I of the Preamble to the proposed rule, 42 CFR Part 81:

1. The Board agrees that the NIOSH guidelines and procedures for probability of causation determinations have been developed using the best and most current scientific information relating radiation exposures to cancer risks. The use of current recommendations from independent expert bodies lends strength to the approach proposed by NIOSH. The NIOSH approach also implements the spirit of concern for nuclear workers that was inherent in the

legislation underlying this compensation program. In this context, the NIOSH guidelines and procedures provide an appropriate application of sound science to the compensation process.

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2. The Board also agrees that the proposed NIOSH procedures appropriately allow for the incorporation of new scientific information into the compensation procedures as this new information becomes available. However, given the limited time that the Board has had to review the details of the probability of causation procedures and the potential impact of changes in the NIOSH IREP on compensation decisions, the Board recommends that the regulations be amended to formalize the role of the Board in reviewing any substantial changes in these procedures that is, the NIOSH IREP. This change should include publication of planned changes in the Federal Register, an appropriate opportunity for public comment, and then reviewed by this Board before finalization. Although these actions are included in the Preamble Background, Section III, Subsection I, Paragraph 3 of 42 CFR Part 81, making them part of the rule itself would formalize the updating process, significantly

strengthening assurance that review of revisions will occur.

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The Board has also noted the differences 3. between the approach being used in this compensation program and that of the Atomic Veterans Act. There are significant differences in the categories of compensation covered by the In some cases, the Atomic Veterans Act two acts. required primarily that the claimants were present in a specific area, had one of the specified cancers, and were therefore compensated. This proposed rule is an effort to address much more complicated situations and to face the reality that simple exposure to radiation does not automatically presume the development of disease. The Board recognizes the excellent efforts of NIOSH staff and their subject matter experts in bringing the best known current science to an appropriate method for translating experience gained in the veterans exposure calculations to this civilian nuclear worker proposal.

DR. ZIEMER: Thank you very much, Larry.

That completes the reading of the main
letter and the attachment containing the three

NANCY LEE & ASSOCIATES

recommendations.

And I'm going to allow a period of public comment here. Before I do that, I want to note for the record that I have received, and I believe perhaps other members of the committee have received, the fax transmission from the Government Accountability Project. And I will ask that copies of these documents be made part of our official record. I'm not proposing that we read them here, but I want to identify them.

The first is a letter directed to me by Richard Miller dated January 29th, 2002, and that letter will become part of the record. And then as attachments to that letter there was a news release dated January 25th, 2002. The news release was from the Department of Veterans Affairs. It's entitled "VA Compensates More Veterans Exposed to Radiation." And that news release then will become part of our record.

And then finally, as a another attachment, there was a copy of a statement of Senator Paul Wellstone dated May 15<sup>th</sup>, 2000. This is a statement from a hearing on "The Compensation Plan for Department of Energy workers," and Senator Wellstone's statements of that date then

1 will also be included.

So just for the record, I want to make sure - I want to ask the other members of the Board, did everyone receive copies of that as well, of those documents? Or let me just ask you, is there anyone on the Board that did not?

[No responses]

DR. ZIEMER: Apparently not. Okay.

Now let me call for those members of the public who are on the phone at this time, are there any of you who wish to make comments or statements at this time?

MR. BARNES: This is James Barnes with Rocketdyne.

DR. ZIEMER: Yes, James.

MR. BARNES: Would you please repeat that web site address again?

MR. ELLIOTT: Yes, I will. This is Larry Elliott. I will.

It's <a href="www.cdc.gov/niosh">www.cdc.gov/niosh</a>, and once you're on that page you can go to the left-hand side, you'll see OCAS. In OCAS, then go to the left-hand toolbar and click on the Advisory Board, and you'll see the subject of today's discussion.

MR. BARNES: Thank you.

DR. ZIEMER: Thank you.

Anyone else?

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MR. MILLER: This is Richard Miller speaking.

DR. ZIEMER: Yes, Richard.

MR. MILLER: I just wanted to be clear here that the cover letter which you read a moment ago, I think may have done a good job of, shall we say, finessing the notion of additional representation from the nuclear worker production sector. So I'm heartened, I guess, because I never expected the Board to take action on anything I would say, or others might say, brought up that was sort of off the agenda in the way in which it was at your last meeting. So I wanted to commend you all for taking that up.

Secondly, I also just wanted to get one small point of clarification without hopefully starting a firestorm here, and that is there's one sentence in your recommendation which — and I don't have it in front of me — but in sum says that simple exposure to radiation doesn't necessarily lead to disease. It's sort of innocuous enough in and of itself. I just wanted to just get some sense of clarity that the

intention of the Board wasn't to weigh into the whole question of the linear no-threshold debate with that particular observation. Is that correct?

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DR. ZIEMER: I don't think we were - this is Ziemer. Let me just reply, Richard, to your question, and then others on the Board who were involved in the drafting can also comment.

We certainly did not have discussions on the linear no-threshold issue, because in part that is already, if I can put it this way, becomes a non-issue the way that the regulation was And also, it was not part of our written. comment on the veterans - I don't think anyone was trying to evaluate any merits of how the veterans thing was written. We're simply pointing out that the issue that we're dealing with now, which includes the dose reconstruction probability of causation, is a step that is more complex. It simply does not assume compensation based on the fact that a person was at a There has to be a dose reconstruction. location. That was, I think, was the point being made, in that sense was different.

Let me ask if other members of the Board

wish to comment, any of the drafters of that statement.

DR. ANDRADE: This is Tony Andrade from Los Alamos.

I'd also like to add that the methodologies that have been adopted by NIOSH include ICRP 60 through 67, okay. Now those documents include several discussions about where basic data involving risk come from, okay. And in those documents there is inherent, or there has already been, an analysis done on where the linear nothreshold theory is indeed used for conservatism.

So I don't think it was, number one, mandated that this body debate the LNT theory. That's, again, number one. We would get nowhere. But number two, the conservatism of LNT is used in determining some of the risks associated especially with solid tumors. And so inherent in the methods used by NIOSH, you already have that conservatism.

Maybe Genevieve can weigh in here.

agree with Tony on that. And Paul, in particular

DR. ROESSLER: I guess the only comment, I

I don't think that we're referring at all to the

linear no-threshold model. I don't think that's pertinent for us to discuss because that's a part of the assumption.

MR. MILLER: Right. I think Genevieve --

**DR. ZIEMER:** Does that answer the question that you had asked?

MR. MILLER: I think it does.

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DR. ZIEMER: I think it was a matter of clarification.

MR. MILLER: Yeah, I just didn't understand why the sentence was in there, because I wasn't around for your second day of deliberations. And I apologize, but it was unclear what value added that sentence made if it wasn't opening that discussion. What is the purpose of that sentence, I guess that's all I was inquiring about. I didn't quite understand what it - it didn't seem to quite fit in with the flow of everything else that was going on in that recommendation.

DR. ANDRADE: This is Tony Andrade. And I think I would underscore what Paul answered in the beginning, and that is that simply means exposed to radiation, like we all are as we sit here and talk, does not necessarily - it's just

recognizing the fact that that does not necessarily cause disease. In fact, what we're doing is we're taking, we starting at a point in which a disease has been recognized and trying to find causation that could very well have been from radiation, and as a matter of fact giving the greatest benefit of the doubt to that particular probability. So I think it's necessary for that phrase to be there.

DR. ZIEMER: I suspect maybe part of Richard's question is that perhaps you have extended the previous thought and interpret that as a comment on the veterans' model, and it's not necessarily that at all. It's just - it's another statement.

**UNIDENTIFIED:** Exactly.

DR. ZIEMER: So it's not an assessment of the veterans' model.

UNIDENTIFIED: No.

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DR. MELIUS: This is Jim Melius. I had a hand in writing some of this.

DR. ZIEMER: Yes, Jim.

DR. MELIUS: I concur with, and I think again we're commenting on this legislation and the application to the regulations that NIOSH has

1 developed. And secondly, really recognize that 2 this deals with a much more complicated 3 situation. So I think the wording on that is relatively clear in terms of what we're talking 4 5 about, and it's couched in a way that we're not getting into this other scientific soundness 6 7 issue. DR. ZIEMER: Are there other comments from 8 members of the general public? 9 10 [No responses] DR. ZIEMER: Jerry, Mark, Jeff, Ken, Karen, 11 12 Ted? Any of you have other comments? Paul, this is Ken Crase. 13 MR. CRASE: 14 DR. ZIEMER: Ken? Speak up please, Ken. 15 MR. CRASE: Ken Crase, Savannah River Site. 16 DR. ZIEMER: Yes, Ken. MR. CRASE: Has the Board dealt with the 17 issue of the probability of causation tables and 18 the scientific merit associated with using 19 20 (inaudible) data to (inaudible)? 21 DR. ZIEMER: Ken, let me answer that in 22 part. If you look at the public law itself and the 23

mandate of the Board, what you find basically is

that there is a legal requirement that that be

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1 the approach used. And so the Board's - the main 2 question for the Board comes down to are we using 3 the best and latest methods for that approach. The law itself, in a sense, requires that that's 4 5 the approach that we use. MR. CRASE: So your answer, I think, Paul, 6 7 is that it's outside the scope of the -DR. ZIEMER: Yes, that's correct. 8 9 Anyone else on the Board want to comment on that issue? 10 11 [No responses] 12 Again, let me ask if DR. ZIEMER: Okay. there are any further public comments? 13 14 [No responses] 15 DR. ZIEMER: If not, I would like to ask -16 to formalize this, ask one of the Board members, would be in order to move the adoption of the 17 letter and the attachment. 18 19 DR. ANDERSON: Paul, this is Andy. I have 20 just one issue to raise, if I may. 2.1 DR. ZIEMER: This is who? DR. ANDERSON: Dr. Anderson. 22 23 DR. ZIEMER: Oh, yeah, Andy. Is this before we have the motion on the table? 24 DR. ANDERSON: Before, I have a suggested 25

1 minor change. 2 DR. ZIEMER: Yeah. Well, let's get the document on the table, and then we'll make 3 changes. 4 5 DR. ANDERSON: Okay. 6 DR. ZIEMER: Is that agreeable? 7 DR. ANDERSON: Sure. 8 DR. ZIEMER: Yeah. So would someone wish to 9 move the adoption of the letter and the 10 attachment? 11 This is Roy DeHart. DR. DeHART: 12 their adoption. 13 DR. ZIEMER: Is there a second? MS. MUNN: Second, Wanda Munn. 14 15 DR. ZIEMER: Thank you, Wanda. 16 Now we'll ask for any modifications or changes. Let's take the letter itself first. 17 MR. ESPINOSA: This is Richard Espinosa. 18 DR. ZIEMER: Yes, Richard. 19 20 MR. ESPINOSA: On our letter, the law 21 requires equal representation. I would like to see an amendment made to put not just a second 22 23 from the production workers, but to add another 2.4 one as well.

DR. ZIEMER: Okay, before I recognize that

as a formal motion, let me make a preliminary comment, and then I'll entertain that as a motion.

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When we met in Washington, there was basically a formal recommendation that we do what we said here in this letter. In the meantime, I have reviewed the Executive Memorandum and the mandate to the Board, and it would be pretty easy to say that the Board even commenting on its own makeup is outside its own scope. And perhaps, Richard Miller, may be why you were a little surprised.

But we did determine at the meeting that it would be useful to at least raise the issue. And so I took what the Board had recommended at the meeting, which was that there be an additional member added, and couch that in terms of a suggestion since, if you look at the Executive Memorandum, we have no authority to make recommendations outside the scope of the three items in the Executive Memorandum. But I thought it was appropriate, and that's why it's in the letter.

And that's why we're using the language in addition to dealing with those specific items we

1 wish to comment, and then as a means of - see how 2 the wording is there, let me get this latest 3 version - but it's a suggested addition to improve the balance. Now whether that's one or 4 5 two or more may not so much be the issue, but I certainly will entertain if you want to make a 6 7 formal motion to amend, that's quite in order. So at this point is this being made as a 8 9 specific motion, then? MR. ESPINOSA: Yes, I would like to make it 10 as a specific motion. 11 12 DR. ZIEMER: Okay. Then would you repeat the words on that, then, Rich? 13 MR. ESPINOSA: Well, I would like to amend 14 the motion to add - amend the letter, I guess, to 15 16 add two more workers to the Board. 17 MR. ELLIOTT: This is Larry Elliott, if I 18 might comment. 19 DR. ZIEMER: Let's get a second first, and 20 then we can debate it. 2.1 Does anyone wish to second that? DR. MELIUS: I'll second, and I think I'd 22 23 like to offer what would be called a friendly 24 amendment.

DR. ZIEMER: Okay, but - okay, let's take

1 Richard's comment. Who seconded? 2 DR. MELIUS: Jim Melius; I'm sorry. 3 DR. ZIEMER: Thank you, Jim. And let's get Larry Elliott's comment, and then Jim. 4 5 MR. ELLIOTT: Larry Elliott here. The substance of your comment, the Board's 6 7 discussion, has been communicated to the Department, and as you are aware the White House 8 has received correspondence on this as well. 9 just for your consideration I'd offer that. 10 11 DR. ZIEMER: So there is a sensitivity 12 already to it. 13 All right. UNIDENTIFIED: 14 DR. ZIEMER: Thank you. 15 And Jim, you had a friendly amendment? 16 DR. MELIUS: I think it would be a friendly 17 amendment, and it may deal with the nature of this suggestion. 18 19 Other than specifying a particular number, 20 whether it be two, three, four or whatever, or 21 one, that we simply add a - leave it as it is currently written, but at the end of 22 "representative" add a parentheses S, so it would 23 leave it open in terms of how - what number would 2.4 25 be involved (inaudible) making a general

1 recommendation that that might be (inaudible) of 2 the appointing authority here would then 3 essentially be given some leeway in terms of numbers or choices of how they want to continue 4 5 to add people to the Board. MR. ESPINOSA: That's a good point. 6 This is 7 Richard Espinosa again. Due to Jim Melius' comments I'd like to 8 9 withdraw my motion and concur with Jim.

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DR. ZIEMER: How would you be wording that? I don't know, Jim, if you're making that as a motion or almost a friendly amendment to what we have already on the table.

DR. MELIUS: Either way, I didn't (inaudible). But it would be that the Board recommends that a representative, and then after "representative" parentheses S, meaning it could be more than one.

DR. ROESSLER: This is Gen. Can I comment, Paul?

DR. ZIEMER: Um-hum (affirmative).

In reading as they're talking DR. ROESSLER: here, I have to admit that my perception when I read that was that we were recommending one. as I re-read that paragraph I think it's

completely open. We talk about there may be additional future appointments; that's plural. And then in the next sentence it says the Board suggests that additional representation, and that is - to me that reads -DR. ZIEMER: That's open-ended. DR. ROESSLER: Open-ended. DR. ZIEMER: And actually - I'll mention this for everyone's benefit - actually I had

DR. ZIEMER: And actually - I'll mention this for everyone's benefit - actually I had massaged the original words of the original draft that the Board had a little bit to make that a little more open-ended. So we're not saying one.

DR. MELIUS: Yeah. And actually before it came up, before Richard made the proposed amendment, I was thinking of it as just sort of an additional grammatical clarification based on the way that paragraph was written.

DR. ZIEMER: Yeah. The latest draft says additional representation from nuclear production workers sector. Is that sufficiently open-ended to meet the intent of - well, let me ask Richard Espinosa first.

Does that meet the intent that you had?

MR. ESPINOSA: Let's see, I'm trying to find it in my paperwork.

DR. ZIEMER: Because there have been a couple of versions. The draft has - there's been a few iterations, and some updating on that wording.

Is that, the draft that you read to us,

Larry, what does the sentence say? I think it's

like the last sentence in that paragraph.

MR. ELLIOTT: It reads - this is Larry
Elliott - it reads:

As a means of providing improved balance among the various sectors represented by the Board membership, the Board suggests that additional representation from the nuclear production workers sector would be a clear advantage and benefit to the Board in carrying out its mandate.

DR. MELIUS: This is Jim Melius. I

(inaudible), but that latest round, that latest

draft literally just appeared on my e-mail during
this meeting.

DR. ZIEMER: Okay. I think that meets the intent of what you were suggesting, Jim, does it not?

DR. MELIUS: I agree with that.

DR. ZIEMER: Okay.

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1 DR. MELIUS: And I think it actually 2 addresses some of Richard's comments earlier, 3 too. MR. ESPINOSA: Yeah, actually it does. 4 5 DR. ZIEMER: Okay. Okay. Are there any other comments on the letter 6 7 itself? MS. MUNN: This is Wanda. 8 9 Wanda, please. DR. ZIEMER: MS. MUNN: I have a comment on that same 10 sentence, and I had not seen this most recent 11 12 wording of that particular paragraph. MS. NEWSOM: Wanda, can you speak up, 13 14 please? MS. MUNN: Yes, I certainly can. 15 Maybe I 16 can get my mike a little closer to my mouth. 17 this better? DR. ZIEMER: Good. 18 19 MS. MUNN: I guess, as you all know, from 20 the outset I considered this a very sensitive issue and one that bordered on what our charter 2.1 recommendation is. And further, I have real 22 23 concern with the intent, but you all know that 2.4 already.

I had intended to propose that we reword

that sentence slightly to convey what I thought was the intent when it was passed, so that it would read - the first part of it would read as a means of diminishing any perceived imbalance amongst the various sectors represented by the Board membership, et cetera. I am not convinced that there is an imbalance because I don't know the Presidential intent in having chosen this group. I know what the law says, and I know you can only be so balanced with so many groups and geographies. The geography is almost impossible.

It seems to me that if there is an imbalance - and I feel, my personal opinion is that it's not - but if there is perceived imbalance and that's the desire of the Board to point that out, then in my view that's what we should say, rather than saying that it's not balanced.

DR. ZIEMER: Are you then proposing an amended version, or would you like to propose an amended sentence?

MS. MUNN: I would propose an amended
sentence which reads - and you will have to help
me with (inaudible), because I don't have the
newest version.

DR. ZIEMER: Okay.

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MS. MUNN: But only the first part of that would be my recommendation, and I would move that we would restructure the sentence to read as a means of diminishing any perceived imbalance amongst the various sectors represented by the Board membership, the Board recommends that additional representation, and then whatever your latest version says.

DR. ZIEMER: Okay, you've heard the motion.

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DR. ZIEMER: Okay, you've heard the motion.
Is there a second?

MR. PRESLEY: I'll second it. This is Bob Presley.

DR. ZIEMER: Bob has seconded.

Now we'll have discussion on the proposed amendment to that sentence. The proposed amendment, as I understand it, would read as a means of diminishing any perceived imbalance amongst the various sectors, and then the rest of the sentence would read the same.

Is there discussion, pro or con?

DR. ROESSLER: This is Gen. I like our letter because - I like your letter because you're very objective sounding. And I guess in this particular case I'd prefer the wording that we already have. This adds a little tone of

1 being not - maybe it would come across as not as 2 objective. It's just my perception. 3 DR. ZIEMER: Okay. So you speak against the amendment. 4 5 DR. ROESSLER: I speak for keeping the letter as is. 6 7 DR. ZIEMER: Others, pro or con? MR. ESPINOSA: This is Richard Espinosa. 8 9 DR. ZIEMER: Richard, yes. 10 MR. ESPINOSA: I agree with Gen. DR. ZIEMER: Okay. So you speak against the 11 amendment. 12 13 Others, pro, con? 14 15

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OR. MELIUS: This is Jim Melius. I was sort of struggling trying to find some other wording, and this is just sort of wordsmithing. And I understand the wording that's been offered, but I really think it - I really just don't think it fits in with the way the letter's been written so far. I'm also struggling to come up with any other way of rewording it to capture that other thought that Wanda -

MS. MUNN: This is Wanda again. I guess in response to a couple of the comments that have been made, it seems to me that saying "provided

improved balance" is no more objective than saying "diminishing any perceived imbalance." If we leave the wording as it is in the original letter, then we are essentially saying that we do not believe that the Board is balanced. And if that's the intent, then of course that wording should stand.

DR. ZIEMER: This is Ziemer again.

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One way in which it might be possible to cover both concepts by saying - and I'm not proposing this, but it's food for thought here for the moment - as a means of diminishing any perceived or actual imbalance, which implies we don't necessarily know if there is one or the other or both.

MS. MUNN: This is Wanda. I would certainly accept that as a compromise.

MR. PRESLEY: This is Bob. I have no problem with that.

DR. ROESSLER: This is Gen. Now that Wanda mentions it, I think she's right. The comment that we have, as a means of providing improved balance, does imply that we think there is imbalance. So maybe something more objective, yes, would be better.

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MS. GADOLA: This is Sally. I agree with what you've just added. I think that it's also impossible to say exactly how everyone feels and to really understand everyone's entire background. So the wording that you just proposed really covers the whole picture.

DR. ZIEMER: Wanda, if you would want to consider that as a friendly amendment, the Chair doesn't usually make amendments, but you might want to modify your wording if your seconder would accept it.

MS. MUNN: I would certainly propose that that wording be accepted and incorporated into my amendment.

MR. PRESLEY: This is Bob Presley. I'll agree.

DR. ZIEMER: Okay. The seconder has accepted. So the proposed amendment now would be as a means of diminishing any perceived or actual imbalance amongst the various sectors, and so on, and the rest of the sentence would be the same.

Is that correct?

MR. ESPINOSA: Yeah, this is Richard

Espinosa. Can you add that - let me see. Can

you read that inside of that paragraph so I can

1 hear it completely? 2 DR. ZIEMER: I will read - this is Ziemer 3 again - as I have it here, and then we may have to double check with our court reporter: 4 5 As a means of diminishing any perceived or actual imbalance amongst the various sectors 6 7 represented by the Board membership, the Board suggests that additional representation from the 8 9 nuclear production workers sector would be a clear advantage and benefit to the Board in 10 carrying out its mandate. 11 12 MR. ESPINOSA: Okav. 13 DR. ZIEMER: Wanda, would that now be your motion? 14 15 MS. MUNN: That would be my motion. 16 you. 17 DR. ZIEMER: Let me ask the Board if you're ready to vote on the amendment. 18 19 DR. ANDERSON: Can you read it again? 20 DR. ZIEMER: As a means of diminishing any 2.1 perceived or real - did I say real or actual? 22 UNIDENTIFIED: You said real originally. 23 DR. ZIEMER: - any perceived or real imbalance amongst the various sectors represented 24

by the Board membership, the Board suggests that

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1	additional representation from the nuclear
2	production workers sector would be a clear
3	advantage and benefit to the Board in carrying
4	out its mandate.
5	DR. ANDERSON: Thank you.
6	DR. ZIEMER: Okay. We will then vote on
7	this amended sentence. Are you ready to vote?
8	[No responses]
9	DR. ZIEMER: Okay. All in favor of the
LO	proposed amended sentence will say aye.
L1	[Ayes respond]
L2	DR. ZIEMER: All opposed will say no.
L3	[No responses]
L4	DR. ZIEMER: Any abstention?
L5	[No responses]
L6	DR. ZIEMER: The ayes have it.
L7	Now we're back to the main motion, which is
L8	the letter as amended.
L9	DR. ANDRADE: I'd like to propose that we
20	adopt the letter - this is Tony Andrade - as
21	amended.
22	DR. ANDERSON: I'll second that.
23	DR. ZIEMER: Well, that's already - that
24	motion's already before us, is it not?
) E	INTREMETER: It is

1 DR. ZIEMER: Yeah. 2 DR. ANDERSON: I call the question. 3 DR. ZIEMER: Okay. The question's been called for. 4 5 And incidentally, just as a matter of information or point of information, tell you 6 7 that although your document has a heading at the top that says Advisory Board on Radiation and 8 9 Worker Health, there has actually been a letterhead developed by Cori which is the 10 Advisory Board letterhead. So that letterhead 11 12 will say Advisory Board on Radiation and Worker 13 Health across the top. It will have a Health and Human Services logo, I believe, and will list all 14 15 the Board members. 16 So with that, let me call for the vote on 17 the letter. 18 All who approve say aye. 19 [Ayes respond] 20 DR. ZIEMER: All who oppose, no. 21 [No responses] 22 DR. ZIEMER: Any abstentions? 23 [No responses] 2.4 DR. ZIEMER: The letter is adopted. 25 Now let's see, let me ask the court

reporter, was the original motion to adopt the letter plus the amendment?

UNIDENTIFIED: It was.

DR. ZIEMER: Okay. Well, the Chair has inadvertently split the motion, and a Chair's prerogative is to do that. I will not tell the group I have split the original motion into two parts, part one being the letter, part two being the attachment. So I'm going to have interpreted the original motion as being a two-part motion, and we have voted on the first part, which is the approval of the letter.

DR. DeHART: Paul, this is Roy.

DR. ZIEMER: Yeah.

DR. DeHART: Just for a point of order, when there is a call for the question, that is to stop debate and be voted on itself.

DR. ZIEMER: That is if there's a formal call to stop debate. If the Chair recognizes that as a motion to stop debate, then it requires a second and an immediate two-thirds vote to stop debate. I took that as an informal call that everyone was ready to vote. I did not recognize that as a motion to stop debate.

DR. DeHART: Thank you.

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1 DR. ANDERSON: That's right. 2 DR. ZIEMER: Okay. No, I recognize that a 3 call for the question if taken as a formal motion has to be voted on in itself. 4 5 Now we come to attachment one, and this is on the floor as part of the original motion which 6 7 the Chair has split into two. And the correct version of this - I think an earlier version that 8 9 we sent out inadvertently had the title Worker 10 Safety; it should say Worker Health, recommendations and comments from the Advisory 11 Board on Radiation and Worker Health. 12 And let's now ask for any comments. 13 14 incidently, if necessary we can subsplit this 15 into three parts, but if we can agree to try to 16 take it as a whole we will. DR. ANDERSON: This is Andy. I have just 17 one small comment. 18 19 DR. ZIEMER: Yes, Andy. 20 DR. ANDERSON: In number one, on the last 21 line it says application of sound science. I 22 have always had a bugaboo about sound science. 23 DR. ZIEMER: As opposed to unsound science.

DR. ANDERSON: Right. And so I would
suggest taking out "sound" and saying application

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1 of the existing science. Not to make a value 2 judgment, but it is - we're saying it's an 3 appropriate application of existing science in the compensation process. 4 5 DR. ZIEMER: Yes. Let me just interpret that as a motion to amend. 6 7 Is there a second? UNIDENTIFIED: Second. 8 9 DR. ZIEMER: Any discussion? 10 [No responses] 11 DR. ZIEMER: We can do this one, I think, 12 pretty quickly. 13 Then all in favor of that amendment say aye. 14 [Ayes respond] 15 DR. ZIEMER: Any opposed? 16 [No responses] 17 DR. ZIEMER: Any abstentions? No. [No responses] 18 19 DR. ZIEMER: Okay. The document now says 20 application of the existing science. Thank you. 2.1 DR. DeHART: This is Roy with a suggestion. Instead of having the order one, two, three as we 22 currently have it, which is different from the 23 2.4 order of the comment page in the Federal Registry 25 (sic), I would suggest that two and three be

1 reversed. 2 DR. ZIEMER: Thank you. I think that can -3 that doesn't even require action. That's just a format thing. These numbers should correspond -4 5 in fact, the implication is that they correspond to the three major questions. And I think they -6 7 the order got out of order because there was some uncertainty as to question two before, as you 8 9 recall. Without objection, we'll change the order. 10 [No responses] 11 DR. ZIEMER: Number two becomes number 12 three, number three becomes number two, I 13 believe. Is that correct? 14 15 DR. DeHART: Yes, yes. 16 DR. ZIEMER: Without objection we'll do 17 that. Thank you. Other comments or recommendation or 18 modifications? 19 20 MS. MUNN: Just a couple questions. This is 2.1 Wanda. DR. ZIEMER: 22 Yes. 23 MS. MUNN: When the attachment was being read - again, I'm working from the older version; 24

I don't have the latest one that's just come out.

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But I thought I heard in what is numbered two, the fifth line from the bottom, I thought I heard "review" in that line being read as "reviewed," and if so I think we've used it probably incorrectly. I think "review," grammatically speaking, is the correct word. It's two lines up from the (inaudible). DR. ZIEMER: This is the old number two or

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the new number two?

MS. MUNN: The old number two.

DR. ZIEMER: Old number two.

MR. ELLIOTT: Would you like me to read that again as it's currently presented?

This is Larry Elliott, Dr. Ziemer.

MS. MUNN: Well - hi, Larry. I'll read you the sentence.

This change should include publication of the planned changes in the Federal Register, an appropriate opportunity for public comment, and then review - and I thought I heard you say reviewed - by this Board before finalization.

MR. ELLIOTT: It does read "review," and perhaps I did misspeak.

DR. ZIEMER: Yes, review is the correct word, I think, right.

NANCY LEE & ASSOCIATES

1 MS. MUNN: Very good. And the only other 2 thing I wanted to make sure that I heard in the 3 very last line of that same section, assurance that revision - that review of revisions will 4 5 occur. DR. ZIEMER: The words "review of" were 6 7 added to the original draft, because what we're interested in is that the proposed revisions be 8 9 reviewed. 10 MS. MUNN: I understand. I just wanted to make sure I heard correctly. 11 DR. ZIEMER: So I think from the earlier 12 version the words "review of" was added. And let 13 14 me suggest, and I might do this if everyone 15 agrees, I think that same line, review of 16 revisions, the real intent is not that there 17 simply be review of the revisions, but review of the revisions by the Board. 18 19 MS. MUNN: Yes. 20 DR. ZIEMER: And I would suggest that we add 2.1 the phrase "by the Board" as a further clarification of that. 22 23 Would there be any objection to that? 2.4 [No responses] 25

DR. ZIEMER: Can we take it by consent that

1	without objection the sentence would now read
2	review of revisions by the Board will occur?
3	[No responses]
4	DR. ZIEMER: Okay, that's under old item
5	two, which is now item three.
6	Okay. Further comment, changes, additions?
7	[No responses]
8	DR. ZIEMER: I'm hearing none. Does that
9	mean that we're ready to vote on the attachment?
LO	[No responses]
L1	DR. ZIEMER: It appears that we are ready to
L2	vote on the attachment. With those two rather
L3	minor changes, the change in order, two.
L4	Okay, all who support these recommendations
L5	say aye.
L6	[Ayes respond]
L7	DR. ZIEMER: Any opposed, say no.
L8	[No responses]
L9	DR. ZIEMER: Any abstentions?
20	[No responses]
21	DR. ZIEMER: It appears we have consensus.
22	Thank you.
23	Then these will be prepared on our new
24	letterhead and sent forward together with the
25	second attachment, which is simply the copy of

the agenda for informational purposes.

A reminder that we have the meeting coming up. Let me ask Cori or Larry, do you have any specific information that you want to relate today on the upcoming meeting, which is just a week off?

MR. ELLIOTT: Larry Elliott here. The meeting next - it will be Wednesday and Thursday next week -

DR. ZIEMER: Wednesday and Thursday,  $13^{\rm th}$  and  $14^{\rm th}$ .

MR. ELLIOTT: -  $13^{\rm th}$  and the  $14^{\rm th}$  in Washington, D.C., again at the -

MS. HOMER: Washington Court.

MR. ELLIOTT: Washington Court. We -

DR. ZIEMER: Which, folks, incidentally is virtually next door to the hotel we were in last time.

MS. HOMER: Right down the block.

MR. ELLIOTT: Right. Later this week you can all expect to receive your travel from Nichole. And in that Fed Ex package will also be two technical implementation guidelines for your reading in advance of the meeting, one on external dose reconstruction and the other on

internal dose reconstruction. And those will fit into the agenda items as you'll see them on the agenda.

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The second Fed Ex shipment that you will receive this week will come from Cori, and it will contain your briefing booklets for that meeting. We're going to have a busy meeting. This is to take up dose reconstruction rule, 42 CFR 82, and particularly we'll spend time on the implementation guidelines for the internal and external dose.

Are there any questions about this upcoming meeting?

DR. MELIUS: Yes, this is Jim Melius. If I recall correctly, I thought this next meeting was going to be on the special exposure cohort issue.

MR. ELLIOTT: No. That will be at a later
meeting. We're not prepared at this time to
really -

DR. MELIUS: How much later, Larry?

MR. ELLIOTT: Well, we set the tentative meeting in March, the 25<sup>th</sup> and the 26<sup>th</sup>, and we hope that the SEC guidelines will be available for the Board's review at that time, after they've gone through review in the Department.

1	DR. MELIUS: Are they going to be presented
2	to us as regulations that have been published in
3	the Federal Register, or what's the nature of our
4	review?
5	MR. ELLIOTT: Right now you will be
6	reviewing what looks like policy guidelines.
7	DR. MELIUS: Thank you.
8	DR. ZIEMER: Okay. Any other questions?
9	[No responses]
10	DR. ZIEMER: If not, let me thank everyone
11	for their participation. Members of the public
12	who joined us today, thank you for your input.
13	I'll entertain a motion for adjournment.
14	MR. PRESLEY: So moved. This is Bob
15	Presley.
16	DR. ZIEMER: Okay. Seconded?
17	DR. DeHART: Second, Roy DeHart.
18	DR. ZIEMER: I guess all in favor will just
19	probably hang up.
20	UNIDENTIFIED: See you next week.
21	DR. ZIEMER: Thank you very much.
22	[Whereupon, the meeting was adjourned at
23	approximately 2:02 p.m.]

## <u>C E R T I F I C A T E</u>

STATE OF GEORGIA )
COUNTY OF DEKALB )

I, KIM S. NEWSOM, being a Certified Court
Reporter in and for the State of Georgia, do hereby
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52 pages, was reduced to typewriting by me personally
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WITNESS MY HAND AND OFFICIAL SEAL this  $21^{\rm st}$  day of February, 2002.

KIM S. NEWSOM, CCR-CVR CCR No. B-1642

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