

# Official Transcript of Proceedings

## NUCLEAR REGULATORY COMMISSION

ORIGINAL

ACNWT-0146

Title: Advisory Committee on Nuclear Waste  
125th Meeting

PROCESS USING ADAMS  
TEMPLATE: ACRS/ACNW-005

Docket Number: (not applicable)

Location: Rockville, Maryland

Date: Thursday, March 22, 2001

Work Order No.: NRC-125

Pages 145-191

NEAL R. GROSS AND CO., INC.  
Court Reporters and Transcribers  
1323 Rhode Island Avenue, N.W.  
Washington, D.C. 20005  
(202) 234-4433

ACNW OFFICE COPY - RETAIN FOR  
THE LIFE OF THE COMMITTEE

TRO8

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

+ + + + +

125TH ADVISORY COMMITTEE ON NUCLEAR WASTE MEETING

(ACNW)

+ + + + +

THURSDAY

MARCH 22, 2001

+ + + + +

ROCKVILLE, MARYLAND

+ + + + +

The ACNW Committee met at the  
Nuclear Regulatory Commission, Two White Flint North,  
Room T2B3, 11545 Rockville Pike, at 1:03 p.m.,  
DR. JOHN GARRICK, Chairman, presiding.

COMMITTEE MEMBERS:

DR. JOHN GARRICK, Chairman

DR. GEORGE M. HORNBERGER, Vice Chairman

MR. MILTON LEVENSON, Member

DR. RAYMOND WYMER, Member

1 ACRS STAFF PRESENT:

2 DR. ANDREW C. CAMPBELL

3 LYNN DEERING

4 SAM DURAISWAMY

5 CAROL HARRIS

6 CAROL HANLON

7 DR. JOHN LARKINS

8 HOWARD LARSON

9 JAMES LYONS

10 RICHARD K. MAJOR

11 AMARJIT SINGH

12

13 PRESENTERS:

14 NAIEM S. TANIOUS

15

16

17

18

19

20

21

22

23

24

25

I-N-D-E-X

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

<u>AGENDA ITEM</u>	<u>PAGE</u>
Presentation by Naiem S. Tanious . . . . .	149
Proposed Revisions to 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."	

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

(1:03 p.m.)

1  
2  
3 CHAIRMAN GARRICK: All right. The meeting  
4 will come to order. This afternoon we are going to  
5 get a briefing on the proposed revisions to 10 CFR  
6 Part 71, Packaging and Transportation of Radioactive  
7 Materials.

8 The committee member that has the lead on  
9 matters having to do with this topic is Milt Levenson,  
10 and so I will let you lead the discussion, Milt.

11 MR. LEVENSON: Well, this topic is of  
12 interest to the community and in two directions. One  
13 is from a standpoint of consistency in things which  
14 are safety based, but there is a very practical reason  
15 why compatibility is important.

16 Currently, we have a strange situation  
17 where fuel can be shipped half way around the world,  
18 and land in San Francisco, be transshipped to Idaho.  
19 They unload the container, find out that they made a  
20 mistake and it didn't belong there. It belonged in  
21 Savannah River.

22 And if they reload it in the same  
23 container, they can't ship it on anymore in the U.S.,  
24 and these are some of the odd things that we have to  
25 deal with in the real world.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1                   So every effort or any undertaking to make  
2 the IAEA standards and the NRC standards as -- if not  
3 fully compatible, as compatible as possible, I think  
4 is of interest to the committee. And with that, we  
5 will turn it over to our speaker.

6                   CHAIRMAN GARRICK: Introduce yourself and  
7 your position for the record.

8                   MR. TANIOUS: Yes, my name is Naiem  
9 Tanious, and I work in the Industrial Medical and  
10 Nuclear Safety Division in NMSS. And the branch we  
11 are in, the rule making and guidance branch, we do the  
12 rule making for NMSS.

13                   And we basically work with the other  
14 divisions, assemble the technical information into our  
15 rule package, and get it circulated and reviewed by  
16 the NRC offices, and then give it to the Commission.

17                   Our partners in this effort is the Spent  
18 Fuel Project Office, and what we affectionately call  
19 the Fab 5. SFPO gives us the technical input for the  
20 rule.

21                   You have had a chance to see the FRN. It  
22 is a rather large rule with a large number of issues,  
23 and we had very little time to assemble this rule.  
24 Most of the work was done between September and  
25 November of last year.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 I should also say that the transportation  
2 group, people who review transportation packages and  
3 approve designs, licensing actions, are in SFPO, and  
4 they are the ones who deal with that, with certificate  
5 holders and licensees every day.

6 Before I begin, I would like to say a few  
7 words about the Part 71, the NRC, and DOT. We in DOT  
8 co-regulate the transportation of radioactive  
9 materials in the United States, and the  
10 responsibilities between the two agencies is divided  
11 along the level of activity in the package.

12 If the package is Type A, a certain level  
13 of activity, and below that, that's DOT's  
14 responsibility; and when it is Type B and Fissile,  
15 that is NRC's responsibility. And Part 71 mostly  
16 deals with Type B and Fissile.

17 The other thing that I would also like to  
18 mention here is that the rule covers a large  
19 population of packages, from small pharmaceutical type  
20 packages for medical applications, to the Type B  
21 packages, to Fissile material packages, and to of  
22 course spent fuel, and the new dual purpose cast,  
23 which is a new package that is now being approved.

24 Let's go to the first slide. This is an  
25 overview of the whole presentation which I plan to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 give in the next 40 minutes or so. The scope of the  
2 Part 71 Rule as you mentioned in your introduction is  
3 that we try to stay compatible with the international  
4 regulations.

5 It has been about every 10 years that the  
6 IAEA revises its regulations, and we revise our Part  
7 71, and DOT, of course, revises their 49 CFR at the  
8 same time that we do.

9 So it has been the practice in the past  
10 that every time we revise Part 71 that we do it  
11 concurrently with the DOT. This effort in this  
12 particular division of the Part 71 is based on  
13 directives from the Commission.

14 I am looking at my notes here and we had  
15 several SRMs telling us how to go about doing this  
16 work. We had an emergency -- there is an SRM, Section  
17 99-200, which basically told us to roll in the  
18 unintended economic impact of the -- well, to give you  
19 a little background.

20 We had an emergency final rule a few years  
21 ago when a license discovered that a mix of briliium  
22 oxide with enriched uranium can cause criticality in  
23 transport.

24 What made this thing peculiar that it was  
25 approved under a Part 71 provision that it really does

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 not require NRC review, and so we had that emergency  
2 rule. It was adequate and it did take care of the  
3 situation.

4 But then we had after that from the public  
5 that it was too much of a fix. There was a lot of  
6 unintended economic impact on water moderated type  
7 shipments. Not the ones that have the special  
8 moderators.

9 So the Commission in this SRM told us to  
10 revise Part 71 and this general license provisions,  
11 and these exemption parts, the various sections in  
12 this fissile material exemptions. And also that we  
13 were about to embark on revising Part 71 to make it  
14 compatible with the IAEA.

15 And that we would address both in the same  
16 rule. The next SRM was SRM M9911109A, which was  
17 directing the staff to engage the stakeholders to our  
18 rule making activities, meaning to discuss the  
19 proposed rule or rule making plan in public meetings  
20 before we proposed the rule.

21 There was another one, SRM M00211, which  
22 told us to do a comparison between Part 71 and ST-1,  
23 which is this document. That is the latest IAEA  
24 regulations, and pick up the most significant  
25 differences which we would be addressing in this rule.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 I guess my second bullet here is that I  
2 will give you a little bit on where we stand on the  
3 rule, the current status of this rule. Right now it  
4 is down to the Commission, and it has been released to  
5 the public. I will give you a summary of the general  
6 public comments that we had.

7 We had three meetings last year, and we  
8 issued Part 71 issues paper, and that issues paper  
9 basically summarized 17 of these issues for the public  
10 that we wanted comments on.

11 We had one meeting here downstairs in  
12 August, and we had two meetings in September in  
13 Oakland, California, with the intent to solicit public  
14 comments, and to get public input before we write the  
15 proposed rule.

16 And our schedule called for delivering the  
17 proposed rule on March 1st of this year. And after  
18 this, I will go through some of the specific issues,  
19 and briefly describe the issue, and give you the  
20 staff's position on the proposed NRC position.

21 As you stated, and as I stated earlier,  
22 this rule is to make Part 71 compatible with TS-R-1,  
23 or ST-1, the same name, the same document essentially;  
24 and to bring Part 71 regulations to the international  
25 standards where applicable.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           There were a number of other changes that  
2           the Commission and management here wanted to do, and  
3           these were eight other changes, and that is my next  
4           bullet. So we have a total of about 11 IAEA issues,  
5           and we have 8 NRC initiated issues.

6           I should mention here that we had a  
7           petition for rule making for the double containment  
8           requirement in 71-63, and that was under  
9           consideration. And it was decided before we started  
10          writing the issues paper to roll that in as well. So  
11          we had that as one of the NRC initiated changes.

12          And of course the further revision of the  
13          general license provisions for the fissile materials  
14          for the unintended economic impact. We used the  
15          enhanced public participation process, which was  
16          directed by the Commission in one of the SRMs.

17          We had the three public meetings as I  
18          mentioned, and we established a website, and the three  
19          --

20                   CHAIRMAN GARRICK: What do you mean by  
21                   enhanced?

22                   MR. TANIOUS: That is over and above the  
23                   regular process where you engage the public via  
24                   publishing the petition, or advance notice of a  
25                   proposed rule making and the like, and get written

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 comments.

2 This is more like holding a meeting and  
3 getting verbal comments, and recording all of that,  
4 and also get comments on the website.

5 CHAIRMAN GARRICK: Oh, I see. Is that a  
6 standard NRC descriptor?

7 MR. TANIOUS: I believe it is.

8 DR. LARSON: Yes, lately it is. It is  
9 sort of a facilitated meeting. They started those  
10 probably several years ago.

11 MR. TANIOUS: It is a facilitated meeting,  
12 that is correct, yes.

13 DR. LARSON: And it costs more money, and  
14 that's why the Commission tells the staff when to do  
15 that.

16 CHAIRMAN GARRICK: Enriched.

17 MR. TANIOUS: Enriched is right. Thank  
18 you. Part of the process like I said was that we  
19 established a website under NMSS materials, and we  
20 announced the public meetings and invited the public,  
21 and it was a rather involved process, where we have  
22 the meeting recorded, and put the transcript of the  
23 meeting on the website, and provide summaries, and  
24 also put them on the website.

25 And all the comments that we received,

1 written comments, are also placed on the website. And  
2 I think I already covered my last bullet on this  
3 slide.

4 One of the SRM requirements, the last SRM  
5 that we received, giving us the deadline of March 1st,  
6 was to keep the Commission informed of our activities  
7 via briefing the Commissioner's TA's, and we made  
8 comments or copies to the Commissioner's TA's, and  
9 also gave them a briefing back on December 18th.

10 Let's go to my next slide. The current  
11 status of this rule, I think we kind of passed that  
12 first bullet. We delivered the proposed rule to the  
13 Commission, and the EDO gave it to the Commission on  
14 March 2nd of this year.

15 That is FRN if you had a chance to see or  
16 review the package. The package is a rather large  
17 package that has the FRN, which is some 300 pages. We  
18 also prepared the draft RA, and an draft EA, to  
19 support the proposed positions of the NRC.

20 The draft RA, and I will say a few words  
21 about the draft RA, as it is qualitative mostly, but  
22 the conclusion on most of the 19 issues is that there  
23 is no significant cost impact from adopting these  
24 IAEA, or at least the ones that we adopted.

25 I should also mention that I have -- that

1 I will go through the positions in a minute, but I  
2 think we have a table that may be in your package  
3 which summarizes the whole rule, which tells you which  
4 positions we have taken on any one issue or all.

5 As far as the EA, the same thing. The  
6 changes will not cause a significant environmental  
7 impact.

8 CHAIRMAN GARRICK: Now do the ones that  
9 are not adopted, is that a final issue, or is that  
10 just a timing issue, or not applicable, or what does  
11 it mean?

12 MR. TANIOUS: I think I could safely say -  
13 - and I will invite SFPO to make a comment, but I  
14 would say that issue number one, for example, I think  
15 for the foreseeable future that is final.

16 CHAIRMAN GARRICK: So you are not going to  
17 go to the international system of units?

18 MR. TANIOUS: Well, we would like to stay  
19 with the dual system because that is the Commission  
20 policy. All the comments that we had in the public  
21 meetings are against this. It is really a foolish  
22 thing.

23 It caused a lot of problems, because we  
24 all think in the English units, and I will get into  
25 more discussion on this later, but I don't see us

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 going for the CSI units in any near term. Of course,  
2 we are complying with the Commission policy here.

3 But Type C, perhaps. It is possible in  
4 the future that that might change, but we are not  
5 adopting Type C right now. But you have that  
6 background table, which is pretty handy for reference.  
7 I will go back to my slide here.

8 My third bullet says that we had been  
9 working with DOT on this rule since we began drafting  
10 the rule and even before that. We have a working  
11 group staff that is from IMNS and SFPO, and also State  
12 programs, OGC.

13 One member of our working group is from  
14 DOT, and I don't see Fred here, but he knows of this  
15 meeting. But he attended all of our meetings and had  
16 copies of the drafts to be prepared.

17 The bottom line is that we proposed the  
18 rule to the Commission, and DOT's agreement with NRC  
19 on these 11 compatibility issues.

20 MR. LEVENSON: You don't comment on  
21 whether DOT concurred with those that were NRC  
22 initiated changes, or was that not part of the review  
23 program with DOT?

24 MR. TANIUS: That is outside their  
25 pervuew if you will. They made comments. They are of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 course in the building and transportation arena, and  
2 they are the U.S. competent authority. So they have  
3 ideas and they give us comments, but most of this was  
4 an NRC thing.

5 But the reason that I singled out the IAEA  
6 is because they had an advanced notice of proposed  
7 rule last year, where they listed very much the same  
8 issues that we have in our portion of our rule.

9 That is the one that we spent most of the  
10 time discussing with them. And the last bullet is  
11 that if we get approval from the Commission to publish  
12 this proposed rule. Right now it has been released to  
13 the public, and we have taken as I said on all 19  
14 issues, and we plan to hold public meetings to discuss  
15 these proposed positions.

16 I would like to mention here that this is  
17 for your info, and that we have a Commission briefing  
18 on the 9th of April. That would be at the Commission  
19 hearing room in the afternoon on Monday, April 9th.

20 And we will be making a presentation  
21 there, and the Commission invited five members of the  
22 public, stakeholders, to give their views on this  
23 proposed rule. These are NEI public citizens groups.

24 Don't hold me to this, but I believe this  
25 is the final list, but it has not been released to us

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 yet. But it will be a large shipper of spent fuel  
2 transport, and a State program rep that will be  
3 attending this and making a presentation.

4 I will give you next sort of a flavor of  
5 the general type comments that we received from the  
6 meeting that we had downstairs, and from the other  
7 meetings as well.

8 Now, NRC should increase the number of  
9 meetings, despite the fact that we had three meetings,  
10 and that is my own view, and I think it is pretty  
11 good. Still, they wanted more meetings.

12 And given the fact that it takes a lot of  
13 effort to prepare for these meetings, and staff travel  
14 time, and to transcribe the meetings, and all the  
15 rest, you know; and to prepare the slides, and it is  
16 a tremendous amount of work.

17 So that is one of the comments that we  
18 heard. The public comment period for that issues  
19 paper was the end of September. It was September  
20 30th, and our last meeting was September 26th, I  
21 believe. So the end of the public comment period was  
22 very close to the last meeting.

23 And there were complaints about that, and  
24 they wanted an extension of the public comment period  
25 so that they would have more time to prepare comments.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           And we got letters actually requesting to  
2 extend this public comment period by six months and so  
3 forth. We could not do that in view of the schedule  
4 by the Commission to deliver the proposed rule by  
5 March 1st.

6           But we did encourage everyone -- you know,  
7 all the phone calls that we got and everything -- to  
8 submit the comments even if it is after the deadline.  
9 We will take the comments. We will take all comments.

10           And we had the comments come in as late as  
11 the middle of November, and by that time we were  
12 already drafting the proposed rule. One of the other  
13 comments is that the lack of easy access to the  
14 documents, and this is mostly meaning this document,  
15 where it is very expensive to get a hold of. It is  
16 about \$80 a copy.

17           And this last summer, I think the  
18 publisher here made the new version, and TS-R-1 is  
19 cheaper now, and it is \$18. And we tried to respond  
20 to this comment by putting all of our documents on the  
21 website, all the comments and transcripts of the  
22 meetings, and all the rest.

23           We also tried to make it easy by putting  
24 the publisher's name or direct link in our website to  
25 the publisher of this document so that they can get a

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 hold of it.

2           There were other comments about the ASME  
3 code. One of the changes here is for the adaptation of  
4 the ASME code, but they couldn't access that and we  
5 couldn't give it to them. But we put it in the public  
6 document group if they wanted to see it.

7           The other comments was mostly about the  
8 IAEA process to develop ST-1 was not open to the  
9 public. That is true. It is not open to the public.  
10 These comments were mostly directed to DOT, and DOT is  
11 the one who assembled the U.S. delegation to go to  
12 Vienna, and they are the ones who organized all the  
13 subcommittees and meetings and so forth.

14           And it did not appear feasible that the  
15 public could go and participate in the drafting of  
16 these IAEA rules. But the negative comment was that  
17 you guys go to Europe, and bring back these  
18 regulations and try to adopt it here in this country,  
19 which may not be safe, or that we didn't have a chance  
20 to influence this regulation.

21           The next comment is that DOT and NRC  
22 should coordinate and address all public comments  
23 since we both are doing this rule concurrently, and  
24 yes, we are doing this.

25           We have the working group like I

1 mentioned, and they have their own set of comments on  
2 their own website, about 60 or 65 comments, and we  
3 have our comments. Whatever comments apply to both  
4 agencies, we will coordinate.

5 One comment that we heard is the last  
6 bullet here on this slide from two of the agreements  
7 by the State representatives, and they play an  
8 important role, and they do because they adopt by  
9 agreement the NRC rules.

10 The next slide is that there were a lot of  
11 concerns about the objectives of this rule, which was  
12 to harmonization of the Part 71 with the IAEA, but the  
13 cost of implementation of these changes, especially  
14 when there is no obvious safety benefit from the  
15 change, except perhaps new models or new signs, but  
16 the old rules may be just fine.

17 The next bullet is the concern over the  
18 proposed NRC changes, causing some material to come  
19 under the NRC jurisdiction. This mostly refers to the  
20 norm, which is naturally carrying radioactive  
21 materials in oils and in slaggs.

22 And there is an issue, too, about the  
23 exemption, and we will come to that in a minute. But  
24 the changing of the definition of the radioactive  
25 material from one single value to a table, and they

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 are fearful that the NRC is seeking to increase its  
2 jurisdiction over them.

3 I think Susan Shackman was replying to  
4 someone at that meeting saying that we do not seek to  
5 bring you under NRC authority. Most of the comments  
6 were from the oil and gas industries, and mining  
7 industry.

8 Another comment is on the Part 71  
9 regulation and that it should be the minimum; meaning  
10 that the values that we have for the A-1 and A-2 or  
11 the exemption values, that should be the minimum, and  
12 irrespective of whatever new values the IAEA has.

13 The next one is that we should not make  
14 changes that result in the reduction of transportation  
15 safety.

16 CHAIRMAN GARRICK: And how did they  
17 respond to that one?

18 MR. TANIUS: We are not making any  
19 changes that result in reduction of transportation  
20 safety. All the changes will enhance safety, and when  
21 we get to the next bullet, we will cover some of the  
22 issues.

23 CHAIRMAN GARRICK: But isn't that a  
24 technicality? Do the changes in any way increase the  
25 transportation traffic, and if so, how can you really

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 say that there is no reduction in transportation  
2 safety?

3 MR. TANIOUS: I don't know if it is going  
4 to increase transportation traffic. I don't think so,  
5 but I would invite SFPO to make a comment here, you  
6 know, since they are the technical experts in this  
7 agency. I don't think that increases the traffic, but  
8 please make a comment.

9 MR. BRACH: I am Bill Brach from the Spent  
10 Fuel Project Office, and I was just talking with my  
11 staff. In a direct answer to your question, we are  
12 not aware of any proposed rule content in the 71 rule  
13 package that would result in an increase in  
14 transportation traffic.

15 CHAIRMAN GARRICK: Well, I guess my point  
16 is that the question or the comment is kind of a trap,  
17 and I think that any time you take an action to  
18 increase transportation that you increase the risk of  
19 transportation accidents. And so it is the context of  
20 the question that becomes important.

21 MR. BRACH: I believe on this overhead the  
22 third and fourth bullet can maybe be read together.  
23 In a number of the public meetings, what we have heard  
24 from a number of the stakeholders were comments that  
25 we shouldn't, if you will, lower the NRC Part 71 bar

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 or set requirements for transportation to an IAEA or  
2 other standard that we might feel is below the NRC  
3 standard.

4 But yet the NRC standard should be the  
5 minimum, and then look beyond that in enhancements to  
6 the rule making, coupled with -- clearly there was a  
7 comment that we heard from the public that we  
8 shouldn't be doing anything in changing the Part 71  
9 rule that would reduce the effectiveness of -- reduce  
10 the safety or reduce the effectiveness of our  
11 transportation safety regulations. Those two comments  
12 were often times in context provided.

13 CHAIRMAN GARRICK: And I guess the other  
14 thing that I am thinking of is downstream. You don't  
15 want to get yourself in a position where you put an  
16 undue constraint on the transportation of nuclear  
17 materials, because there are other materials that you  
18 will be writing regulations in due course on probably.

19 MR. BRACH: We agree, and I think that  
20 that comment was -- we tried in our development of the  
21 proposed rule to also look at that as well, and be  
22 sure that what we would be incorporating in Part 71  
23 would not put an undue burden on either domestic  
24 transportation or transportation in general.

25 MR. LEVENSON: You know, we talk about

1 transportation safety, and that is pretty broad, and  
2 I think the kind of things that some of us have been  
3 involved in -- John has and I have -- is that -- and,  
4 for instance, on of the requirements on a TRUPAC-2  
5 potentially results in 10,000 additional cross-country  
6 truck shipments.

7 Well, an assessment of whether the TRUPAC-  
8 2 requirements could be changed slightly, you might  
9 say that maybe you shouldn't because it slightly  
10 reduces safety of the TRUPAC-2.

11 But if it results in 15,000 fewer cross-  
12 country shipments, the total transportation safety  
13 issue, it comes out the other way.

14 MR. TANIOUS: Right. Exactly. And I  
15 think that this very point will be become more clear  
16 as we go through the issues in the next few slides.  
17 That is my last bullet, is that we have more comments  
18 on specific issues, and we will tell you on that issue  
19 what we have heard.

20 So some of the issues I have talked about  
21 already, and so we may not take too much time talking  
22 about them. But the first one, we are not adopting or  
23 changing to the SI units on. We like the dual system  
24 and all the comments that we heard, whether it is a  
25 transportation accident or a medical administration,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 where on the outside of the package it is SI -- if we  
2 comply with this, or adopt it rather.

3 And on the inside, it is English units,  
4 and you would have to have a quick conversion made  
5 right on the spot by emergency people, which defeats  
6 the intent of the whole exercise, where we are  
7 communicating information quickly about the package on  
8 the label, or the shipping papers.

9 So we are not offering that. And number  
10 two is the implied exemption value as I mentioned  
11 already. And the industry by the way was supportive  
12 of the NRC here. Most everyone said to stay with the  
13 dual system.

14 MR. LEVENSON: Now, when you say stay with  
15 the system, what does that mean? The table says  
16 adopted. Do you mean that you adopted the IAEA  
17 standard?

18 MR. TANIUS: No, the table says not  
19 adopted.

20 MR. LEVENSON: Radionuclide exemption  
21 value is adopted.

22 MR. TANIUS: Yes, we are adopting that.  
23 I'm sorry. We are adopting the --

24 MR. LEVENSON: And when it says adopted,  
25 that means that you have adopted the IAEA?

1 MR. TANIOUS: Yes. Yes.

2 MR. LEVENSON: Okay.

3 MR. TANIOUS: Although we heard many  
4 comments against it, it would be complicated to apply,  
5 and you have to calculate the radioactivity, and you  
6 have to sample the shipments, and you have to do the  
7 mixture rule, and change all the paperwork.

8 There would be a lot of expense,  
9 especially from the oil and gas, and industry, where  
10 some of their shipments right now are exempt under the  
11 70 becquerel.

12 But with the new table, which each would  
13 imply would have its own activity, they feel that  
14 there would be now as radioactive material. So  
15 despite all these problems, the staff's judgment is to  
16 stay compatible with the international commerce.

17 It is on balance to be compatible with  
18 IAEA, despite the shortcomings of going away from a  
19 single value, simple rule, to a state-of-the-art if  
20 you will model that gives you one millennium per year  
21 to every one that is close to these packages, which is  
22 better science and better engineering, but  
23 complicated, because of the costs to some of the  
24 segments of the non-radioactive material  
25 transportation entities.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 I will quickly go through the rest of  
2 them, I guess. On number three, we are adopting the  
3 new table of A-1 and A--2 that is in ST-1, again to  
4 stay compatible with international commerce.

5 It does not appear feasible that you can  
6 have your own table here in the United States and  
7 there is another table in Europe, and especially DOT  
8 is going to adopt that table as well. So we will  
9 adopt that.

10 On number four, we will adopt the  
11 requirement of criticality evaluation for the UF6  
12 fissile packages be done without considering any  
13 leakage of water. The staff had a 5 percent max on  
14 the enrichment of these packages.

15 But this issue is mostly a DOT issue, but  
16 we covered the type of packages that is in our field  
17 of authority. The next one is number five, and we are  
18 adopting that.

19 It is sort of a paper change, where the  
20 current TI index is used, but this will separate the  
21 two indices from each other; the one for radiological  
22 safety from the criticality safety.

23 Right now they are both calculated, and  
24 you take the larger one to be put on the package as a  
25 TI. This will separate the two, and you will you have

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 two labels on the package. We are adopting it and it  
2 is a good development.

3 The next one or position taken is that we  
4 are not adopting the Type C package, which is a new  
5 type package designed to withstand severe air  
6 accidents for plutonium.

7 Most of these are not adopting it because  
8 it is a brand new package, and there is not much use  
9 for it in this country, and still the IAEA is still  
10 studying this package, and there may be more  
11 modifications coming on it.

12 The rest of the issues -- 7, 8, 9, 10, 11  
13 -- number seven is a test done -- it used to be  
14 required for aerated fuel shipments, and the IAEA now  
15 is using the so-called enhanced deep emergent test,  
16 where it covers all packages that has activity greater  
17 than 10 to the 5-A2 value.

18 We are adopting that with some  
19 modification, using our own criteria to judge the  
20 results of the test.

21 And number eight is a standard clause in  
22 all the revisions of Part 71, which is grandfathering  
23 previously approved packages, and where the package is  
24 still safe, even when you change the regulations.

25 We are adopting it and proposing a phasing

1 out of the 1967 package during a 3 year transition  
2 period.

3 And for number nine, there are various  
4 definitions that have been changed, such as the CSI  
5 and TI, and so forth. I am getting ahead of myself  
6 here.

7 The last two on the compatibility issues  
8 are crush test for fissile material packages, and we  
9 are adopting that, and number 11 is the fissile  
10 material package design for air transport, and we are  
11 adopting that.

12 Before I go into the next bullet, I will  
13 just summarize by saying that out of 11 changes by the  
14 IAEA, we are adopting 9, and two we are not adopting.

15 MR. LEVENSON: Let me ask a somewhat  
16 generic question. These 11 are changes made to the  
17 IAEA document; is that right?

18 MR. TANIUS: Yes, the 11 are changes made  
19 in the recent version of the IAEA transportation  
20 standards. Of the 11, we are adopting 9.

21 MR. LEVENSON: Are there issues in the  
22 previous version with which NRC had not adopted, so  
23 that the difference between the two -- the question is  
24 whether the difference between the two larger than  
25 what is shown here?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           You have only addressed whether you have  
2           adopted or not adopted changes the IAEA made.

3           MR. TANIIOUS: I apologize for this, but  
4           the reason is to keep the table simple. There are  
5           some modifications. I can think of one, and I would  
6           invite SFPO to make comments on this.

7           For example, take number seven, the deep  
8           emergent test. In the last version of the IAEA, there  
9           was the adoption to judge the results of the test by  
10          using no ruptures. That the package or the specimen  
11          should withstand the pressure -- I think it is 290 psi  
12          -- of the test for one hour.

13          And the criteria to pass the packages with  
14          no rupture, but the staff in the SFPO felt that a  
15          rupture is difficult to define or to defend the  
16          adopted criteria called no collapse or leakage of  
17          water.

18          And I think that in this proposed rule  
19          that we are still staying with that criteria. Does  
20          this answer your question?

21          MR. LEVENSON: Well, no. If one and six  
22          were changed to adopted, the NRC's position on Part 71  
23          would not be identical to the IAEA would it? There  
24          are still differences?

25          MR. TANIIOUS: There would be differences,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 yes, but not major differences.

2 MR. LEVENSON: But is there anywhere -- if  
3 I wanted to say, well, I have a copy of the IAEA, and  
4 in order to conform to Part 71, there are only these  
5 few exceptions, is that spelled out anywhere, or do  
6 you have to go and dig through both of them page by  
7 page?

8 MR. TANIOUS: Yes, you have to. For  
9 example, on Issue 16 in your package -- if I may go to  
10 Issue 16 -- the fissile material exemptions and  
11 general license provisions, right now there are four  
12 different sections that cover general license  
13 provisions for fissile material packages.

14 And also there is some exemptions to  
15 these. These are the ones that cause this nuclear  
16 criticality safety problem. That is not in the IAEA,  
17 for example. We have it in our regulation, but they  
18 don't it. Yes, John?

19 MR. COOK: Hello. My name is John Cook,  
20 and I am with the Spent Fuel Project Office, and I  
21 think I would like to provide a little bit of  
22 information regarding your question.

23 As part of the rule making package, there  
24 is a comparison -- and this is Attachment 5 to the  
25 Commission paper, which provides a comparison between

1 TS-R-1 and Part 71. This identifies all of the  
2 differences that exist between the two sets of  
3 regulations.

4 What the rule making we have for us now is  
5 trying to do is just look at the differences that IAEA  
6 made going from their 1985 edition of their  
7 regulations to the 1996 edition of their regulations.

8 And it is those changes that we are trying  
9 to address in this rule making. There were  
10 preexisting differences between NRC regulations and  
11 IAEA regulations, but those were all individually  
12 justified and addressed in the previous NRC attempts  
13 to become compatible with the previous editions of  
14 IAEA regulations.

15 So we do have some preexisting differences  
16 and those would be identified in this comparison in  
17 Attachment 5 to the proposed rule package.

18 The changes that we see in going from the  
19 '85 edition to the '96 edition, those are the 11 that  
20 Naiem has referred to, and those are the ones that are  
21 -- that nine of which we are proposing adopting, and  
22 two of which we are proposing not to adopt.

23 MR. LEVENSON: So this exercise is not  
24 aimed at trying to reconcile past differences?

25 MR. COOK: That's correct.

1 MR. LEVENSON: It is only aimed at --  
2 well, I am sure that it is aimed at just the changes  
3 the IAEA made. The IAEA made 11 and you have  
4 addressed those.

5 MR. COOK: Right.

6 MR. LEVENSON: But you have added nine  
7 more.

8 MR. COOK: Right. The other additional  
9 issues were either initiated by the staff or by the  
10 Commission staff's requirements memo.

11 MR. LEVENSON: I guess the bottom line  
12 question is does this still mean that a foreign  
13 container can be shipped all the way across the United  
14 States as long as you don't open it; but if you open  
15 it, you can't ship it on any further? Are we still  
16 going to have that problem?

17 MR. COOK: Well, that does depend on the  
18 circumstances, but that situation could occur still.

19 MR. TANIUS: I think we are coming  
20 actually close to the end of my assigned time, but I  
21 will try to cover the rest of them in about five  
22 minutes.

23 MR. LEVENSON: Go ahead.

24 MR. TANIUS: Number 12 is a special  
25 package approval. These refer to these large object

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 packages, such as a decommissioned reactor, and NRC  
2 had experience with this, with the Trojan reactor, and  
3 this particular change is to -- that instead of going  
4 through the route of asking for exemptions from the  
5 Commission because the package itself is so unusual  
6 that it doesn't satisfy all the requirements of Part  
7 71 -- you know, various tests, like drop tests and  
8 puncture tests, and all the tests required for Type B  
9 packages, this package sometimes does not satisfy a  
10 couple of them, but still is safe, we you would ask  
11 for an exemption from the Commission.

12 Well, this is a way to streamline this,  
13 and not to the Commission for these changes. There  
14 were a lot of comments about this, and mostly feared  
15 that NRC is trying to not go through the rigorous  
16 review process.

17 The next one is an expansion of the QA  
18 requirement to Part 71. The Commission approved a  
19 rule for 50-59 for reactors, and for -- no, that's not  
20 the one. They approved one for the Part 72 to  
21 increase the NRC authority over the certificate  
22 holders, and to allow NRC to issue notice of  
23 violations.

24 That was approved last year, I think, and  
25 the Commission wanted us to consider doing the same

1 thing in Part 71. That is what that change is, number  
2 13.

3 Number 14 was the adoption of the ASME  
4 code, and it was an idea amongst the staff here to use  
5 the experience of some problem with the fabrication of  
6 spent fuel casts.

7 It was felt that if you have an authorized  
8 nuclear inspector on site using this code to develop  
9 one of the committee's of the ASME that would improve  
10 quality control and quality assurance problems.

11 But the staff, when we got to write the  
12 proposed rule, decided that we had enough sufficient  
13 improvement in the situation, and there wasn't enough  
14 problems right now. Plus, the code itself is not  
15 final.

16 The Committee that was writing this code  
17 is still studying it, and is still working on it. It  
18 is not final. So we are not adopting this right now.

19 Number 15 is adoption of change authority  
20 to allow minimal changes. I mentioned earlier by  
21 mistake that it was 50-59 on reactors, and 72-48 in  
22 Part 72, to allow the licensee to make small changes  
23 in the design or the procedure, such as that they  
24 don't have to come to the NRC for every change they  
25 make, because it is a cumbersome, costly process.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           And the Commission wanted us to do the  
2 same for Part 71, and it is a good change. The only  
3 thing I would say here is that the SFPO decided -- and  
4 rightfully so perhaps -- to go for one type of package  
5 only, the dual purpose package, the one that does  
6 interim storage and transportation.

7           The next slide is the emergency final  
8 rule, and we SFPO had a study done by Oakridge, and  
9 Oakridge came back with recommendations, about 16 or  
10 17 recommendations, saying that the original emergency  
11 final rule was correct, and fixing the problem for  
12 these special packages, but here are some fixes for  
13 the general license sections.

14           And we are adopting those, or most of  
15 them, and that would take care of this unintended  
16 economic impact that we call by the emergency final  
17 rule.

18           Number 17 is the petition that we had for  
19 the double containment of plutonium, and this proposed  
20 rule as a proposed position for the NRC to do away  
21 with the double containment requirement.

22           You mentioned TRUPAC, and that is one of  
23 the comments saying that we had all these TRUPAC  
24 designs based on this double containment requirement,  
25 which was okay back in the '70s, but not today.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 Plus, the rationale and discussion on this  
2 is quite extensive. The bottom line is the type of  
3 protection you get from a Type B package is quite  
4 adequate.

5 So the position on this 17 is a partially  
6 granted petition, meaning we approve the double  
7 containment, and drop that from our regulations, but  
8 keep 71-63A, which is the requirement for a package to  
9 be in solid form if it is over 20 curies.

10 And Number 18 is an issue about surface  
11 contamination limits, and NRC is not taking any  
12 position on this right now because it still is an  
13 issue under discussion, and under study by the IAEA.

14 The SFPO or John Cook, I think, is a  
15 member of this group, and this issue had been brought  
16 to us by the Commission, and mentioned in the last SRM  
17 by Commissioner McGaffin, but the position today is  
18 that we hold off for right now and until the position  
19 is cleared by the IAEA.

20 The last one was added after we had the  
21 public meetings, and it is sort of a reduction in  
22 burden because the events reporting requirements of  
23 30 days is now extended to 60 days.

24 I have only one more slide. I already  
25 mentioned that we will have that Commission briefing

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 on the 9th of April, where the Commission will hear us  
2 and will hear the representative from the stakeholders  
3 on this proposed rule.

4 We plan to have three public meetings or  
5 at least that is what we have planned right now.  
6 These will be probably one here and two others  
7 somewhere else in the country.

8 We plan to have 90 days public comment  
9 period, because of the size of this rule we need more  
10 time, and usually 75 days is the normal time. We will  
11 continue coordination with DOT so that we both publish  
12 the rules around the same time.

13 And it is forecasted now that we will have  
14 this rule published sometime next year, and it will be  
15 estimated one year after the end of the public comment  
16 period. That is the end of my presentation. Thank  
17 you very much.

18 MR. LEVENSON: Okay. Thank you.

19 MR. TANIOUS: Thank you.

20 MR. LEVENSON: Ray, do you have any  
21 questions?

22 DR. WYMER: No, that was very thorough and  
23 I can't think of anything to ask.

24 MR. LEVENSON: George.

25 VICE CHAIRMAN HORNBERGER: Can you tell me

1 how you apply the notions of risk-informed  
2 performance-based regulation into your decision making  
3 process in this whole thing? Can you give me some  
4 indication of how risk measures may --

5 MR. TANIUS: I think that SFPO would be  
6 better qualified to answer this question. I can  
7 certainly respond to you, but I don't want to since  
8 they are the experts on this.

9 MR. COOK: Well, I think basically the  
10 International Atomic Energy Agency regulations have  
11 been developed over a long period of time, and they  
12 are basically empirically based.

13 It would be probably not correct to say  
14 that these were risk-informed regulations since they  
15 have been around for many, many years based on  
16 practical experience with making shipments.

17 That is especially with regard to the  
18 package testing provisions for the accident resistant  
19 packaging as an example. However, more recently, as  
20 improvements are made in what we know about the  
21 radiological hazards of nuclides, and those are  
22 considered when changes are made.

23 For example, in the proposal of the  
24 revision of A-1 and A-2 values, those are based on the  
25 recent work of the ICRP, the ICRP-60 data, including

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the latest work on radionuclide modeling, to find out  
2 what is the most accurate valid to use for the oddity  
3 limits between what type of packaging is required to  
4 be accident resistant, and which type of shipments  
5 don't require accident resistant.

6 And the same is true with the radionuclide  
7 exemption values. Those values have been changed from  
8 what was previously the 70 becquerel that you heard  
9 about earlier. That was a historical value that  
10 worked very well.

11 It has been used for a long time, but IAEA  
12 decided to move from that single value to a more dose  
13 based value. And again their more recent evaluations  
14 of the dose that does occur as a result of making  
15 shipments at those specific activity limits indicate  
16 that the agency is trying to apply when it can in risk  
17 informed concepts and ideas.

18 VICE CHAIRMAN HORNBERGER: Just one quick  
19 follow-up. In particular I wonder if you could tell  
20 me how this Number 17, the double-containment of  
21 plutonium, was that granted in part, or at least in  
22 part on the basis of a risk-informed approach.

23 MR. COOK: Yes, I would say that it is.  
24 The double-containment issue, the one that you are  
25 referring to, is one that is a staff initiation. It

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 is not particularly related to the IAEA activities.

2 But we did take a look at this petition  
3 that we got and which said that plutonium should be  
4 treated on the same basis as all the other  
5 radionuclides, and then they all have their A-1 values  
6 identified, and that there is no additional  
7 justification that would warrant a double-containment  
8 for plutonium.

9 And on that basis that is why we are  
10 proposing to agree with that part of the petition in  
11 the proposed rule.

12 VICE CHAIRMAN HORNBERGER: Thank you.

13 MR. LEVENSON: I have a follow-up to  
14 George's question. Is 13 an expansion of the quality  
15 assurance requirements? Is that rooted in some risk  
16 analysis? Were there some defects found, or where  
17 did that come from?

18 MR. COOK: Well, that is not particularly  
19 a risk related initiative. That is to provide the  
20 same sort of quality assurance treatment in the  
21 transportation space that is provided in the package  
22 storage area.

23 What this does is apply more directly  
24 NRC's quality assurance program to certificate holders  
25 and to package vendors. Those entities are not

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 currently directly regulated.

2 This change would pull them under Part 71  
3 explicitly, and that would provide us the opportunity  
4 were we to conduct an inspection at those types of  
5 facilities to issue a notice of violation.

6 Whereas, currently, with them not being  
7 specifically identified in Part 71, all we can do is  
8 issue a notice of non-conformance. So that is not so  
9 much a risk issue as one of being able to enhance  
10 NRC's enforcement actions.

11 MR. LEVENSON: But shouldn't an  
12 enforcement action exist because it reduces or  
13 eliminates a risk? If there is no risk connotation,  
14 how do you justify an enhanced enforcement?

15 MR. BRACH: I am Bill Brach. Let me  
16 address that. The issue that you are raising is  
17 really more of an administrative change. As John had  
18 mentioned, historically NRC, in taking inspection  
19 follow-up and enforcement action with what we refer to  
20 as a vendor, we have issued notices of non-conformance  
21 across the agency, whether it be in Part 50 activities  
22 for reactors, or Parts 30, 40, or 70 for non-reactor  
23 activities and licensees there.

24 The standard norm for NRC correspondence  
25 following inspections is to issue a notice of

1 violation for an inspection finding. The exception  
2 has been in the past where we were inspecting vendors  
3 under previously Part 72 and Part 71, and as I believe  
4 that Naiem had mentioned, the Commission approved  
5 recently a change to Part 72, to where an inspection  
6 and follow-up activity for a vendor under Part 72,  
7 those findings are characterized as violations and  
8 that is the means for NRC communicating to the vendor  
9 for changes in Part 71 and the NRC's classification of  
10 the inspection finding would be characterized as a  
11 notice of violation.

12 The change in and of itself is not  
13 changing the enforcement sanctions available to the  
14 NRC with regard to orders or civil penalties. That  
15 stays the same as previously existing.

16 This is really a change to the  
17 nomenclature in our efforts to address and  
18 characterize the inspection findings.

19 MR. LEVENSON: Are you saying it really  
20 isn't a change in the quality assurance requirements?  
21 I mean, that is the words --

22 MR. BRACH: It is expanding the scope of  
23 the requirements under QA to facilitate the  
24 implementation on NRC's part that I mentioned.

25 MR. LEVENSON: And is this a graded

1 expansion? In other words, a little bottle that holds  
2 a radioisotope for medical purposes, does it now have  
3 the same QA requirements as a spent fuel coffin?

4 MR. TANIOUS: No, no, it is only spent  
5 fuel, I believe. This change is only for spent fuel,  
6 I think.

7 MR. BRACH: There are no changes to the QA  
8 requirements and to the changes as John was saying to  
9 the scope of whom they are applied, and how an NRC  
10 inspection follow-up activity corresponds with that  
11 entity.

12 MR. LEVENSON: Okay. That is a whole  
13 different issue. What about this comment on the side  
14 here that this Item 13 only applies to spent fuel? Is  
15 that true?

16 MR. BRACH: The proposed change under Item  
17 13 is applicable to all certificate holders under Part  
18 71. and not limited to only spent fuel certificate  
19 holders.

20 MR. TANIOUS: Right. Right. I'm sorry.  
21 Thanks for the correction.

22 MR. LEVENSON: John.

23 CHAIRMAN GARRICK: Are there guidance  
24 documents for the rule?

25 (Brief Pause.)

1 CHAIRMAN GARRICK: The transcript will  
2 note a long pause.

3 (Laughter.)

4 MR. BRACH: We understood and heard the  
5 question, but we want to make sure before we respond  
6 that we give you the correct answer.

7 (Brief Pause.)

8 MR. BRACH: After a long pause on our  
9 part, I apologize. There is no guidance provided in  
10 the rule package. It was mentioned that one change  
11 that is being proposed under Item 15, the change  
12 authority, where we are proposing a new type of  
13 categorization, a DP designation for certain casts.

14 There may be a need for regulatory  
15 guidance to be developed to go along with that change.

16 CHAIRMAN GARRICK: The thought here is  
17 that the guidance might be an opportunity to begin to  
18 introduce the risk informing process, and I just  
19 wondered if this was at all under consideration.

20 MR. BRACH: With regard to your earlier  
21 question or the other panel members' questions about  
22 the consideration of the risk informing, the answer is  
23 yes.

24 And to the extent that guidance is  
25 developed, that clearly provides both us, as well as

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 the stakeholders in commenting on that guidance  
2 opportunity, to see if there are additional avenues  
3 for risk informing or risk consideration in our  
4 actions.

5 CHAIRMAN GARRICK: Well, I like what you  
6 are doing, of trying to establish some sort of  
7 connection with the international standards. Is this  
8 going on with respect to other regulations, this same  
9 kind of practice, or is this an unusual situation?

10 MR. BRACH: In the transportation arena,  
11 it is a little unique, in that the transportation  
12 activities, there is some legislation actually that  
13 directs and mandates the Department of Transportation  
14 from an international commerce standpoint to strife to  
15 have U.S. regulations consistent with international  
16 regulations to support international commerce.

17 So in that regard, our efforts and DOT's  
18 efforts with regard to the IA standard in  
19 transportation are unique in that regard. I was  
20 looking at the staff, and there is one other area that  
21 I can think of just off the top of my head with regard  
22 to, for example, Part 20 and radiation protection  
23 standards, where I know there is much coordination and  
24 effort with our staff, and IAEA, and NCRP and ICRP,  
25 with regard to radiation protection standards.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1           But I think in the area of Part 71 and the  
2 Department of Transportation's very directed efforts  
3 to have our standards mirror and be compatible, and  
4 consistent with international standards, it may be  
5 unique in that regard in looking at other NRC 10 CFR  
6 regulations.

7           CHAIRMAN GARRICK: Thank you.

8           MR. LEVENSON: Any questions from the  
9 staff?

10           (No audible response.)

11           MR. LEVENSON: Any from the audience, any  
12 comments or questions? Please identify yourself for  
13 the record.

14           MS. GUE: Thank you for this opportunity.  
15 I am Lisa Gue, with the Public Citizens Critical Mass  
16 Energy and Environment Program.

17           And I just wanted to jump back to the  
18 brief conversation that you had early on in the  
19 presentation with respect to public comment and  
20 concern about using international standards, I guess,  
21 as a way of -- well, the concern that international  
22 standards could be used to degradate domestic  
23 standards.

24           And in addition to the conversation that  
25 you had -- and I know that Public Citizen has

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS  
1323 RHODE ISLAND AVE., N.W.  
WASHINGTON, D.C. 20005-3701

1 participated in various forums, and so I won't get  
2 into the detail of this, but just to say generally  
3 that another aspect of our concern is the increasing  
4 trends that we see in a number of different regulatory  
5 agencies, including the NRC, to punt decision making  
6 authority to unaccountable and non-transparent  
7 international agencies.

8 And so I guess we urge you to not put  
9 forward simply harmonization with international  
10 standards simply as an end in and of itself, because  
11 we certainly find that unacceptable as a policy  
12 standpoint, and frequently see its effect as being to  
13 degradate the domestic standards. Thank you.

14 MR. LEVENSON: Thank you. Anyone else?  
15 If not, I turn it back over to you.

16 CHAIRMAN GARRICK: All right. We are a  
17 little ahead of schedule, which is great and unique,  
18 and I don't know about the rest of you, but I need a  
19 break.

20 (Whereupon, the meeting was recessed at  
21 2:05 p.m.)  
22  
23  
24  
25

**CERTIFICATE**

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

Name of Proceeding: Advisory Committee on  
Nuclear Waste 125<sup>th</sup> Meeting  
Docket Number: (Not Applicable)  
Location: 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.

  
Paul Intravia  
Official Reporter  
Neal R. Gross & Co., Inc.

## Summary of NRC Part 71 Proposed Rule

	Technical Issue	NRC Proposed Position
<b>A. IAEA Compatibility Changes</b>	1. Changing Part 71 to the International System of Units (SI) Only	Not Adopted
	2. Radionuclide Exemption Values	Adopted
	3. Revision of A <sub>1</sub> and A <sub>2</sub>	Adopted
	4. Uranium Hexafluoride Package Requirements	Adopted
	5. Introduction of the Criticality Safety Index Requirements	Adopted
	6. Type C Packages and Low Dispersible Material	Not Adopted
	7. Deep Immersion Test	Adopted
	8. Grandfathering Previously Approved Packages	Adopted
	9. Changes to Various Definitions	Adopted
	10. Crush Test for Fissile Material Package Design	Adopted
	11. Fissile Material Package Designs for Transport by Aircraft	Adopted
<b>B. NRC - Initiated Changes</b>	12. Special Package Authorizations	Proposed
	13. Expansion of Part 71 Quality Assurance Requirements to Certificate of Compliance (CoC) Holders	Proposed
	14. Adoption of ASME Code	Not Proposed
	15. Change Authority	Proposed
	16. Fissile Material Exemptions and General License Provisions	Revised
	17. Double Containment of Plutonium (PRM-71-12)	Granted in Part
	18. Contamination Limits as Applied to Spent Fuel and High Level Waste (HLW) Packages	Not Proposed
	19. Modifications of Event Reporting Requirements	Proposed

# **SUMMARY OF PART 71 PROPOSED RULE**

---

**Briefing to the ACNW  
03/22/01**

**Division of Industrial and Medical Nuclear Safety  
Spent Fuel Project Office  
Office of Nuclear Material Safety and Safeguards**

# Overview

---

- **Scope of Part 71 rule**
- **Current status of rule**
- **General public comments**
- **Specific issues**
  - **public feedback**
  - **staff position**

# Scope of Rule

---

- **To make Part 71 compatible with ST-1 (TS-R-1), the IAEA transportation safety standards, and to propose additional NRC-initiated changes**
- **Total of 11 TS-R-1 issues, and 8 NRC-initiated changes**
- **Used enhanced-public-participation process, including a dedicated web site and 3 public meetings to solicit public and States comments**
- **All documents, meeting transcripts, and public comments placed on the web site, gave copies to Commissioner's TA's**

# **Current Status of Rule**

---

- **Proposed rule Package delivered to the Commission on March 1, 2001**
- **Package contains FRN, Draft RA, Draft EA**
- **Rule has been coordinated with the DOT, DOT is in agreement with NRC on the IAEA Compatibility issues**
- **If approved by the Commission, staff plans to hold public meetings to discuss the proposed rule**

# **General Public Comments**

---

- **NRC should increase the number of meetings**
- **Requests for extending the public comment period on issues paper**
- **Lack of easy access to documents**
- **IAEA process to develop TS-R-1 was not open to the public**
- **DOT and NRC should coordinate & address all public comments**
- **Agreement States play an important role in transportation**

# **General Public Comments- Continued**

---

- **Concern over harmonization with TS-R-1 vs. the cost of implementation, also over the resulting safety benefit**
- **Concern over proposed NRC changes causing some materials to come under the NRC jurisdiction**
- **Part 71 regulations should be the minimum, irrespective of the IAEA changes**
- **Rule changes should not result in reduction in transportation safety**
- **More comments on specific issues**

# **IAEA Compatibility Issues**

---

- 1. Changing Part 71 to SI units only**
- 2. Radionuclide exemption values**
- 3. Revision of A1 and A2 values**
- 4. UF6 Package Requirements**
- 5. Introduction of CSI**

# **IAEA Compatibility Issues**

---

- 6. Type C package and Low Dispersible Material**
- 7. Deep-Immersion Test**
- 8. Grandfathering previously Approved Packages**
- 9. Adoption of new/revised Part 71 definitions**

# **IAEA Compatibility Issues**

---

**10. Crush test for Fissile Material Package Design**

**11. Fissile Material Package Design for Transport by Aircraft**

# **NRC-Initiated Issues**

---

- 12. Special Package Approvals**
- 13. Expansion of Part 71 QA Requirements to Holders of CoC**
- 14. Adoption of ASME code**
- 15. Adoption of Change Authority**

# **NRC-Initiated Issues**

---

- 16. Fissile Material Exemptions and general License provisions**
- 17. Double-containmentment of Pu (PRM-71-12)**
- 18. Surface Contamination Limits as Applied to SF and HLW**
- 19. Modifications of Event Reporting Rquirements**

# **Proposed Rule Schedule**

---

- **Staff plan to have 3 public meetings**
- **90 days public comments period**
- **Continue coordination with DOT to publish around the same time**
- **Publication of final rule is estimated one year and end of public comment period**