

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title: Independent External Review Panel Meeting

Docket Number: (n/a)

Location: Rockville, Maryland

Date: Friday, February 8, 2008

Work Order No.: NRC-2012

Pages 1-29

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

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

+ + + + +

INDEPENDENT EXTERNAL REVIEW PANEL MEETING

+ + + + +

FRIDAY

FEBRUARY 8, 2008

+ + + + +

OPEN SESSION

+ + + + +

ROCKVILLE, MARYLAND

+ + + + +

The Review Panel met at the headquarters of the Nuclear Regulatory Commission, Two White Flint North, Room T2B1, 11545 Rockville Pike, at 10:00 a.m., Mr. Thomas E. Hill, Chairman, presiding.

PANEL MEMBERS PRESENT:

- THOMAS E. HILL, Chair
- MICHAEL T. RYAN, Member
- BENJAMIN NERUD, Member

NRC STAFF PRESENT:

- AARON McCRAW
- DUNCAN WHITE
- TERRY REIS

**NEAL R. GROSS**

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

I-N-D-E-X

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

Call to Order..... 3

Introductions..... 4

Agenda ..... 5

Recommendation One..... 5

Recommendation Two..... 7

Recommendation Three..... 9

Recommendation Four..... 14

Recommendation Five..... 15

Recommendation Six..... 16

Recommendation Seven..... 17

Recommendation Eight..... 17

Recommendation Nine..... 24

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

(1:36 p.m.)

CHAIR HILL: The meeting will come to order. This is the public portion of the fifth meeting of the Independent External Review Panel to identify vulnerabilities in the U.S. Nuclear Regulatory Commission's Materials Licensing Program.

This meeting is being conducted in accordance with the provisions of the Federal Advisory Committee Act. Aaron McCraw is the Designated Federal Official for today's session.

And in accordance with the Federal Advisory Committee Act, the meeting is being transcribed to ensure an accurate account of today's discussion. I ask that you please use the microphones here at the table when making statements. I ask that you identify yourself when speaking, and speak with sufficient clarity and volume.

Any necessary side conversations, please conduct them outside the room. And if you have a cell phone or a pager, I ask that you put them in silent mode, or turn them off at this time.

The Panel appreciates your cooperation with these requests.

This is a public meeting, and if you

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 haven't already, we ask you to sign in on the sheet  
2 over here. But we'll ask everybody at the table to  
3 identify themselves, so that should get everyone on  
4 the record.

5 Members of the public will be afforded  
6 opportunity to make comments or oral statements as the  
7 meeting progresses. And there's information on the  
8 table that has a list of reference materials and  
9 documents that have been used or have been discussed,  
10 will be used by the Review Panel. And there are  
11 feedback forms also, if anybody wishes to give their  
12 comments in writing.

13 So at this time, I'll ask folks at the  
14 table to introduce themselves.

15 I'm Tom Hill, Chair of the Panel.

16 MEMBER NERUD: Ben Nerud, member of the  
17 Panel.

18 MEMBER RYAN: Mike Ryan, member of the  
19 Panel.

20 MR. WHITE: Duncan White, FSME.

21 MR. REIS: Terry Reis, FSME.

22 MR. McCRAW: Aaron McCraw, FSME.

23 CHAIR HILL: Aaron, would you give us a  
24 quick overview of the, what's on the agenda for this  
25 afternoon.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. McCRAW: The only item on the agenda  
2 for this afternoon is for you to present or summarize  
3 your draft recommendations and receive any input.

4 CHAIR HILL: Okay. With that, I'll  
5 summarize recommendations that we have, and -- Mike,  
6 you and Ben, if you want to add anything, just jump in  
7 at any time, as we get it going.

8 MEMBER RYAN: Okay.

9 CHAIR HILL: We have nine sets of  
10 recommendations, some are multi-part.

11 The first recommendation is that new  
12 applicants, who are defined as, "entities that do not  
13 have a relationship with NRC or an Agreement State, or  
14 who have not had a relationship with them in the last  
15 five years," if they are requesting to have  
16 radioactive materials added to their license, or for a  
17 license -- for a high-risk materials, Categories One  
18 versus -- like Category One versus Category Two or  
19 Three, for instance -- That, in those instances, those  
20 Licensees, the "good faith" presumption is temporarily  
21 suspended.

22 That a review of health, safety,  
23 environment, and security plans be performed, and that  
24 these are tailored to the operation, rather than just  
25 a reiteration of requirements from Guidance. That the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 information submitted be tailored for their specific  
2 operation.

3 That an on-site visit be performed. And  
4 that includes all locations of use. But we do exclude  
5 devices that are designed for mobile use, like  
6 portable moisture density gauges.

7 Recommend that a background investigation  
8 be conducted of the company, its key personnel,  
9 responsible members, responsible members of  
10 management, the Radiation Safety Officer, personnel  
11 with unescorted access.

12 And also that a review of the business  
13 plan be conducted. To assess whether the requested  
14 material really comports with planned activities.  
15 Some of the review that could be done in that regard  
16 is verifying business licenses, registrations that may  
17 be necessary.

18 You can verify tax information, with IRS  
19 or with State agencies. Check financial records to  
20 validate that it is a legitimate business. Reference  
21 checks, customer reference checks, also could be done  
22 to verify that.

23 We recommend that a process and criteria  
24 be developed that will allow a new entity to establish  
25 credible performance, so that the presumption of trust

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 can be earned. And at some point they are no longer  
2 an unknown entity with the NRC or the Agreement State,  
3 but they have a history of compliance, and that has  
4 been documented through licensing and inspection.

5 So that's the parts of recommendation  
6 number one. Ben, Mike, any additions?

7 MEMBER RYAN: No.

8 MEMBER NERUD: No.

9 CHAIR HILL: The second recommendation.  
10 That information specific to the review and decision-  
11 making procedures used by License Reviewers be  
12 examined to determine if the release of this  
13 information provides an advantage to an adversary.  
14 That information that's out there, of how the License  
15 Reviewer, how that application's going to be handled  
16 by NRC.

17 Recommend that consider expanding the  
18 current operational security program to include  
19 licensing Guidance and the process to review.  
20 Specific elements of this program that require  
21 development could include identifying essential  
22 elements needed by an adversary to exploit the  
23 licensing process.

24 Licensing Guidance. And identifying  
25 licensing Guidance and publications that contain the

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 essential elements.

2 Conducting a risk analysis to identify if  
3 the benefit of leaving that information out in the  
4 public domain is -- that gives the potential adversary  
5 an advantage, if it should remain there, or if the  
6 risk is so great that that information wants to be  
7 pulled back.

8 And establish and implement measures to  
9 safeguard and control the release of this type of  
10 information in future.

11 So that summarizes recommendation number  
12 two.

13 MEMBER RYAN: Tom, I think this is  
14 consistent with our discussion that what we're trying  
15 to recognize here is that licensing information now is  
16 out there under the presumption of trust, that people  
17 are going to use it in an effective way to do good  
18 work.

19 And we're offering this recommendation as  
20 part of our thinking that the culture has to shift a  
21 bit, to make sure that security has the same level of  
22 scrutiny as health, safety, and environmental issues.

23 And this is one element of increased  
24 emphasis on security related matters. Thank you.

25 CHAIR HILL: Ben?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MEMBER NERUD: Nothing.

2 CHAIR HILL: Recommendation number three.

3 The Panel recommends that the National Source  
4 Tracking System and the web-based licensing be  
5 integrated to allow for real-time sharing of  
6 information between the systems. That this combined  
7 system be easy to use, easy for NRC, the Agreement  
8 States, and for Licensees. The system must be  
9 integrated to present Licensees, vendors, regulators,  
10 controlled access to license information so that they  
11 can verify licenses.

12 The system needs to be designed to record  
13 transactions, transfers of radioactive material, be  
14 accomplished in a real-time manner, for the  
15 verification and transfer of those sources. An  
16 example I guess that's been used in discussions,  
17 though not in this report, is like that of a credit  
18 card.

19 Mike, you want to add a comment there?

20 MEMBER RYAN: Yes, I think the idea here  
21 is that with a real time transaction database that  
22 allows controlled access, so a vendor for example  
23 could verify that a Licensee is licensed to receive  
24 the material, and has enough of a difference between  
25 his possessed quantities and the license limit to

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 receive the new materials in a live way.

2 That the vendor could be given an okay to  
3 make the transfer, and an authorization number, and  
4 that would immediately update the database upon  
5 receipt and notification by the Licensee. You'd know  
6 it's in shipment.

7 The idea is that this really gets at the  
8 challenge the GAO's report presented. And it really  
9 answers the mail, I think, on trying to create a live  
10 up-to-date system, so regulators can be aware of  
11 what's happening on licenses as it happens.

12 Another example, as it would really  
13 address the issue of accumulation. That people are  
14 trying to legitimately accumulate sources. They  
15 couldn't go past their license limit without that  
16 being a red flag. It would hopefully be built into  
17 the system, and notify the regulator that somebody's  
18 trying to purchase more than their license allows, for  
19 example.

20 So, two things happen I think that are  
21 real important in this recommendation. One is, the  
22 National Source Tracking System and the licensing  
23 system be one system. And that it be up-to-date as  
24 transactions occur. And not wait for monthly updates  
25 or that. There are databases like credit cards, or

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 banking, or other examples, where this is done all the  
2 time. So we're recommending that be done for  
3 licenses.

4 I think we're further recommending that  
5 the obligation would really have to reside with it  
6 being a national system. So the NRC would be the  
7 logical lead, and that, then providing this to  
8 Agreement States as a national system with them being  
9 users of this national system, with their own  
10 authority for their own licenses and so forth, like  
11 would also be a part of the development.

12 But this goes a long way to giving real-  
13 time information for security and other related  
14 questions for licensing to the appropriate regulatory  
15 authorities.

16 MEMBER NERUD: The point that I'd like to  
17 make with this recommendation is, this adds defense in  
18 depth to the entire process of licensing, the vending,  
19 the acquisition process, the transportation of  
20 radioactive material. It creates a defense in depth  
21 posture and no one piece is more important than the  
22 other.

23 And this goes a long way to establishing  
24 the criteria to be able to enforce that. In some  
25 cases, this could almost become a self-policing

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 system.

2 CHAIR HILL: We recommend that all  
3 transfers of risk-significant quantities be included  
4 in this real-time web-based licensing National Source  
5 Tracking System, when it is up and running.

6 The Panel recognizes that it's going to  
7 take time and resources to get this system up and  
8 running. It's not an immediate thing that can be done  
9 tomorrow. It'll take time to develop and test the  
10 system. It'll take time to get Agreement States and  
11 Licensee input, and their participation in the  
12 development, and trials using it. Then there will be  
13 the roll-out and implementation.

14 So we recognize that it will take time and  
15 resources, and that the resources to support this need  
16 to involve planning for NRC and Agreement States'  
17 participation during development, roll-out, and  
18 ongoing support for the continued use of the system.

19 MR. REIS: May I --

20 CHAIR HILL: Yes.

21 MR. REIS: -- get a clarification? The  
22 beginning of that final part, did you recommend that  
23 it include all categories of radioactive material, all  
24 the way down to category five, is that what --

25 CHAIR HILL: No, only risk-significant,

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 which is One, Two, and --

2 MR. REIS: To whatever.

3 CHAIR HILL: To whatever the Commission  
4 determines --

5 MEMBER RYAN: Yes, it's One, Two, and  
6 Three, or whatever the Commission determines. I think  
7 it's important for us to recognize that this  
8 recommendation is trying to recognize the fact that  
9 staff is working through that very question of where's  
10 the risk-significant source lower end going to be --

11 CHAIR HILL: Yes.

12 MEMBER RYAN: -- terminated. So, we  
13 didn't try and guess where that would be, we simply  
14 want to concur that when that's defined by the Agency,  
15 that that be place below which we don't think this  
16 applies.

17 MR. REIS: Thank you.

18 CHAIR HILL: We did include in here, which  
19 I didn't read, "Category One, Two, and Three, or as  
20 otherwise determined by the Commission," as risk-  
21 significant quantities.

22 MEMBER RYAN: I think it's fair to say, in  
23 other recommendations where we talk about risk-  
24 significant sources, we're intending that same  
25 meaning.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. REIS: Yes. Okay.

2 MEMBER RYAN: And every place that shows  
3 up.

4 CHAIR HILL: And I think we've got that in  
5 here for the most part, but we might not have.

6 The fourth recommendation is the  
7 development of prescriptive physical security  
8 requirements using a risk-informed graded approach.

9 We figure that those would more than  
10 likely be more prescriptive than what is currently  
11 found in the IC orders.

12 But it would help assure physical  
13 protection of licensed materials in conformance with a  
14 risk-informed decision making process regarding  
15 security and safeguards.

16 Ben, or Mike, any other comments on that?

17 MEMBER RYAN: That's fine.

18 MEMBER NERUD: That's okay.

19 CHAIR HILL: The fifth recommendation is  
20 primarily regarding training of License Reviewers,  
21 staff. Recommend that licensing personnel be provided  
22 tools and training necessary to make risk-informed  
23 decisions that address security aspects, as well as  
24 the current training for health, safety, and  
25 environmental protection.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1           These tools could include threat awareness  
2 program.   What's the current tactics, techniques,  
3 procedures, etcetera, of adversaries?

4           It could include increased emphasis on  
5 security aspects of risk-informed decisions in the  
6 core training curriculum, and in the qualifications  
7 program.

8           A process to report and investigate all  
9 suspicious applications.   And this could include local  
10 and federal law enforcement agencies as necessary.

11           And information management databases.  
12 We'll use an example such as ChoicePoint, for use in  
13 NRC and Agreement States licensing program, to do some  
14 of those checks.

15           And here again, the resources to support  
16 this effort will need to involve planning for NRC and  
17 Agreement State participation during development, and  
18 roll-out, and ongoing support for continued use of the  
19 system.

20           MEMBER RYAN: I think, again, this is one  
21 where we recognize that not using the "good faith"  
22 presumption really shifts the culture perhaps of the  
23 Agency a bit.

24           And that this step, that this  
25 recommendation is trying to address the training and

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 the tools necessary to help staff make -- And not only  
2 here at NRC of course but Agreement States make that  
3 shift and understand the new environment that the GAO  
4 report made everybody aware of.

5 CHAIR HILL: Our sixth recommendation.  
6 That security be incorporated into the licensing  
7 culture of NRC and Agreement State Reviewers.

8 It should be elevated to be equal with  
9 health, safety, and the environment. Our discussions  
10 have been that health, safety, and environment were  
11 the three-legged stool that has been conducted real  
12 well by NRC and Agreement State. This adds the fourth  
13 leg to that chair.

14 That the training programs include more  
15 comprehensive training on security issues aimed at  
16 recognizing malevolent applicants.

17 Recommendation seven. This is regarding  
18 import and export license applicants. And our  
19 recommendation is that for those new applicants for  
20 import and export specific licenses, that the  
21 recommendations -- and number one, recommendation  
22 number one be followed. We just did not repeat that  
23 here.

24 And that the importers and exporters  
25 operating under the general license granted by

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 10 CFR 110 be required to report electronically in  
2 real time. And into the web-based Licensing National  
3 Source Tracking System, when it becomes available.

4 Emails could be done now, on that.

5 Recommendation number eight. This is  
6 regarding that subset of licenses out there that do  
7 not have upper bounds on their possession limits at  
8 this time. And it is -- The Panel recommends that NRC  
9 and the Agreement States continue to encourage  
10 Licensees to carry only as-needed possession limits.  
11 This will help determine appropriate financial  
12 assurances, the applicability of the increased control  
13 orders.

14 It also provides an awareness to Licensees  
15 that they need to dispose of unwanted and unused  
16 radioactive material, instead of holding on to it.  
17 Because there are some that hold onto material for a  
18 long time.

19 MR. WHITE: Can I ask a question?

20 CHAIR HILL: Sure.

21 MR. WHITE: Is your intention with regard  
22 to all radioactive material, or only those isotopes in  
23 the Code of Conduct?

24 CHAIR HILL: Our emphasis has been on  
25 those in the Code of Conduct. Risk-significant

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 quantities.

2 MR. REIS: Are you -- this one -- on  
3 recommendation eight, are you saying that we just  
4 needed to keep better track of those licensees that  
5 don't have possession limits? Or are you recommending  
6 that we impose possession limits on all Licensees?

7 MEMBER RYAN: I think we're recommending  
8 that we impose possession limits on all Licensees.  
9 Without a possession limit, they could order sources  
10 from lots of vendors, and theoretically get  
11 authorization for an unlimited amount of material.  
12 So, I mean, and why there wouldn't be a possession  
13 limit, the Panel didn't understand that there was any  
14 really good reason why there wasn't one.

15 MR. REIS: Okay, that is a current, just  
16 received, being in process recommendation of the  
17 Materials Program Working Group as well.

18 MEMBER RYAN: They said the same thing?

19 MR. REIS: Yes.

20 CHAIR HILL: I think they did, and --

21 MR. McCRAW: They have an exclusion in  
22 there, and that's for medical isotopes, like 35.100  
23 uses, and 35.200 uses.

24 MR. WHITE: That's why I asked the  
25 question.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 CHAIR HILL: And did they have -- it seems  
2 like I remember reading somewhere too, though, that  
3 they're making a recommendation that most of this be  
4 tightened up by December of '08. I might have got  
5 that mixed up with something else.

6 MR. McCRAW: That is correct. Their  
7 recommendation as written says that it should be  
8 completed by December 31, 2008.

9 MEMBER RYAN: And again, I think that's  
10 why we said "continue to encourage" licensees to carry  
11 only as-needed possession limits. It doesn't say  
12 recommend that all licenses have an absolute cap. So  
13 there is a little room.

14 I think the idea that there might be a  
15 particular Licensee that just based on their  
16 particular circumstances, or that type of Licensee,  
17 that that's okay, but. I think the idea for most  
18 Licensees is there's a cap that's appropriate.

19 MR. REIS: Okay.

20 CHAIR HILL: And we do recognize that  
21 35.100 and 35.200, that's different.

22 MEMBER RYAN: And I would just offer an  
23 amendment that perhaps we ought to, before we turn in  
24 a draft report, make that clear here. If you want to  
25 make that specific example that we recognize that

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 licenses grant them the 35.100 and 35.200, it may be  
2 appropriate to not specify a limit, that's fine. But  
3 I just, I offer that --

4 CHAIR HILL: Okay.

5 MEMBER RYAN: -- if we're willing to  
6 accept that comment and make an amendment here, I  
7 think that would help clarify what we, where we mean,  
8 it could be an exception.

9 And Tom, from your experience, you're  
10 thinking that's appropriate?

11 CHAIR HILL: I think that's appropriate,  
12 yes.

13 MEMBER RYAN: Okay.

14 CHAIR HILL: Short half-life?

15 MEMBER RYAN: Yes, short half-life, and --  
16 it's hard to -- I mean, by the time you get it, and  
17 the time you use it, it's half gone anyway, so.

18 CHAIR HILL: Yes.

19 MR. REIS: Okay, Tom.

20 CHAIR HILL: Yes.

21 MR. REIS: Before you go on to nine, --

22 CHAIR HILL: Yes.

23 MR. REIS: -- on the second half of seven,  
24 import-export, generally licensees be required to  
25 report in real-time. That's one that's -- I guess I'm

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 just hearing for the first time. Can you expand on  
2 that a little bit?

3 CHAIR HILL: As I recall reading  
4 10 CFR 110, they are required now to report only  
5 annually. This is what I remember.

6 MEMBER RYAN: If we have a convenient  
7 real-time system, why not keep track of it?

8 CHAIR HILL: Yes.

9 MEMBER RYAN: I think that was our  
10 thinking, was that, if this system is up and running  
11 and successful, there's no reason why you couldn't  
12 have real-time reporting for these licenses as well --  
13 Licensees, as well.

14 MR. REIS: Okay.

15 MEMBER RYAN: And they got to prepare for  
16 an annual report, but if they make a transaction and  
17 enter it into the system, it's as simple as keeping a  
18 checkbook. And that way, the NRC doesn't have to wait  
19 till the end of the year to find out that a thousand  
20 tritium light sources, or whatever it might be, have  
21 moved this way or that way.

22 It gives, I think -- and again, it's not  
23 for a health and safety reason. It's for the fact  
24 that you could have large amounts of material moving  
25 that you don't know about until you get that annual

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 report.

2 But now you'll get that transaction data,  
3 and you can see it live, and if it's an increase over  
4 past practice, and it's a very big difference, it  
5 might -- it should catch the attention. But if it  
6 seems fairly routine rates of commerce, fine.

7 But this way, you get that security  
8 insight in an ongoing way.

9 CHAIR HILL: And I think what we heard,  
10 one reason that's kind of pulled out as a separate  
11 recommendation, what we heard is that materials  
12 licensing is viewed at NRC is to be the licensing  
13 program. But then there is this other group that does  
14 the import-export. And so, and we were asked to look  
15 at import-export as well. So that's one of the  
16 reasons that that's pulled out as a separate  
17 recommendation.

18 And most all of the Licensees that OIP  
19 deals with are known to Agreement State or the NRC,  
20 because they have to have a specific license before  
21 they can get the import-export license.

22 MR. REIS: Okay. It's a two-step process,  
23 they have to --

24 CHAIR HILL: They already have to have one  
25 before they can --

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 MR. REIS: get an Agreement State license,  
2 or an NRC license, before they can get an import-  
3 export license.

4 CHAIR HILL: But for OIP, when somebody  
5 brand new comes, look at recommendation one. Go  
6 validate that that's a good license.

7 MR. REIS: Okay.

8 CHAIR HILL: That's what we're looking at  
9 there. Okay?

10 Observation number nine. We recommend  
11 that the guidance be reevaluated to eliminate reliance  
12 on the "good faith" presumption. An example is this  
13 sentence of the template paragraph in the  
14 "Implementation Guidance for Completing the Checklist.  
15 to Provide a Basis for Confidence That Radioactive  
16 Materials Will Be Used As Specified on the License."

17 MR. McCRAW: A-K-A the pre-licensing  
18 guidance.

19 MEMBER RYAN: Working group.

20 CHAIR HILL: This sentence. "Please  
21 submit your schedule for implementing the increased  
22 controls, and provide confirmation that you will not  
23 take possession of the additional radioactive  
24 materials in risk-significant quantities until you are  
25 in full compliance with the increased controls."

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1           The Panel sees that as a continuation of  
2 the "good faith" presumption, and recommends wording  
3 something to this effect, that, "you will not be  
4 allowed to take possession of the additional  
5 radioactive materials in risk-significant quantities  
6 until you are in full compliance with the increased  
7 controls, and these controls have been confirmed by  
8 inspection."

9           MR. REIS: I get it. I understand.

10           MEMBER RYAN: And again, I think -- You  
11 might think, well why would you do an inspection for  
12 that? Well, in the same way that you'd want to make  
13 sure that environmental monitoring was in place, that  
14 fenceline TLDs or bioassay program, or whatever it  
15 might be, for health, safety, or environment, you'd  
16 want to go and understand the details of it. Who will  
17 be using it, who's the vendor, are you doing it on-  
18 site, and when all those things work?

19           Security needs to be at that same level of  
20 scrutiny to verify. It's not just an extra thing,  
21 it's as important as the other three. And again,  
22 inspection is the way to really understand that the  
23 commitment that's been made, or that the drawings that  
24 have been submitted, are exactly what's happened.

25           CHAIR HILL: And that's our nine sets of

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 recommendations. So, open it up for any more  
2 comments. Terry?

3 MR. REIS: I thank you. I thank the Panel  
4 for its work. I think the staff will need to read it  
5 and digest it.

6 But my initial reaction is that you've  
7 been quite clear on what the recommendations are. I  
8 don't think -- of course, the devil is in the details.

9 You would try to look at it and see how would we go  
10 about doing this, I'm sure it would be more to it than  
11 we see.

12 But I think that you've articulated the  
13 recommendations clearly. There's nothing there that I  
14 don't understand in my position. And look forward to  
15 seeing the draft report.

16 Duncan?

17 MR. WHITE: Yes, again, I would like to  
18 thank the Panel too. I guess some of the good news is  
19 that the staff has already started to pick some of  
20 these efforts, but there's also a lot of new things  
21 here too that we have to proceed forward with.

22 And I think one of the biggest challenges  
23 is to retrain people to think differently. I think  
24 that's going to be the biggest challenge, not only for  
25 NRC, but Agreement States.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1           MEMBER RYAN:     Duncan, I think you've  
2 really hit -- What I think -- I couldn't agree with  
3 you more. I think the cultural shift is going to be  
4 an important thing to develop an ongoing effort to  
5 address. And you're right. Without people being  
6 aware, the everyday activities, and have that change,  
7 for health, safety, and environment, it's going to be  
8 a challenge to get that into place. I think you're on  
9 target.

10           And again, some of the recommendations are  
11 really specific to that. Try to address and give  
12 examples of that, so. It's a good message to take  
13 away.

14           CHAIR HILL:     And we recognize that, that  
15 won't happen overnight.

16           MEMBER RYAN:     The other thing that I think  
17 we recognize, and I hope the language in the report  
18 reflects it. That integrating the web-based tracking  
19 system and the licensing system is also a significant  
20 challenge. But I think, we think, the goal of having  
21 that --

22           Think of having that in place. If we  
23 could go to a licensing database, and say, well who is  
24 this vendor selling to? You can pull up those  
25 licenses where they made sales in the last month. And

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 we can see, yes indeed, those licenses have limits,  
2 and they haven't exceeded their limits, and they've  
3 been inspected in the last year.

4 That's a powerful tool to really guide the  
5 Agency and Agreement States in staying ahead of not  
6 only security, but health, safety, and environmental  
7 questions.

8 And helping even plan - and if you think  
9 about it, even long range planning. Like who do we  
10 inspect, and who doesn't need an inspection, whose  
11 activities have changed, and whose haven't.

12 It's hard work to get it there, I  
13 recognize that. But when you think about how many  
14 large data systems there are in the country, and how  
15 they do transactions every second, we can make this  
16 work. We can get the smart folks plugged in to make  
17 that work.

18 MR. WHITE: We appreciate your analogy to  
19 the banking system, I think that's quite apropos in  
20 this case. Because that's real-time.

21 MEMBER RYAN: And we use credit cards  
22 every day, and it's real-time, and if I go to my  
23 statement tonight, all of those transactions are going  
24 to be on my statement. So that's all we're asking to  
25 do.

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 I don't know which companies are the best  
2 to do in that. But we need to probably chat with  
3 them.

4 And again, I think what we've tried to do  
5 is talk about major principles in areas of work,  
6 without trying to get into the weeds of how to  
7 implement the recommendations. That's clearly the  
8 staff's function, and smart folks, and they'll make it  
9 happen I'm sure.

10 I know Tom and Ben would add, from what  
11 I'm going to say, so I'll say it for all three of us.

12 That without you guys helping us, meeting after  
13 meeting, and the staff being open and thorough in  
14 their presentations and detailed in their briefings,  
15 and frank and honest and open, we wouldn't have been  
16 as successful.

17 So I'd like to add that for the record,  
18 that the staff has been engaged and open and honest  
19 and forthcoming. And clearly are all focused on how  
20 do we address this issue, and make the system better,  
21 and get on with work, and make sure we're in a good  
22 environment to make that move forward. So, thanks to  
23 all.

24 CHAIR HILL: I agree. Is there any other  
25 information that we need for the record today?

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

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

MEMBER NERUD: None here.

CHAIR HILL: Well then, I guess it would be appropriate that we adjourn. Seeing there's no other members of the public here, let's stand adjourned.

(Whereupon, the above meeting of the Independent External Review Panel concluded at 2:11 p.m.)

**NEAL R. GROSS**

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701