

ORIGINAL

**UNITED STATES OF AMERICA**  
**NUCLEAR REGULATORY COMMISSION**

**Title:**           **BRIEFING ON BPR PROJECT ON REDESIGNED  
MATERIALS LICENSING PROCESS - PUBLIC  
MEETING**

**Location:**       **Rockville, Maryland**

**Date:**           **Tuesday, February 18, 1997**

**Pages:**          **1 - 68**

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1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON BPR PROJECT ON REDESIGNED  
5 MATERIALS LICENSING PROCESS

6 \*\*\*

7 PUBLIC MEETING

8 \*\*\*

9 Nuclear Regulatory Commission  
10 Commission Hearing Room  
11 11555 Rockville Pike  
12 Rockville, Maryland  
13

14 Tuesday, February 18, 1997  
15

16 The Commission met in open session, pursuant to  
17 notice, at 1:02 p.m., the Honorable SHIRLEY A. JACKSON,  
18 Chairman of the Commission, presiding.

19 COMMISSIONERS PRESENT:

20 SHIRLEY A. JACKSON, Chairman of the Commission  
21 KENNETH C. ROGERS, Member of the Commission  
22 GRETA J. DICUS, Member of the Commission  
23 EDWARD McGAFFIGAN, JR., Member of the Commission  
24 NILS J. DIAZ, Member of the Commission  
25

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1 STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

2 JOHN C. HOYLE, Secretary of the Commission

3 KAREN D. CYR, General Counsel

4 HUGH THOMPSON, Deputy EDO

5 BRUCE MALLET, Director DNMS, Region II

6 DAVID FOGLE, Chief, Industrial Licensing Project,  
7 State of Texas

8 CARL PAPERIELLO, Director, NMSS

9 DONALD COOL, Director, Division of Industrial &  
10 Medical Nuclear Safety, NMSS

11 PATRICIA RATHBUN, BPR Core Team Leader, NMSS

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

[1:02 p.m.]

CHAIRMAN JACKSON: Good afternoon, ladies and gentlemen. Today the staff and a representative from the State of Texas, an agreement State, will brief the Commission on the Business Process Redesign Project. The staff last briefed the Commission on BPR in July of 1996, and as a result of that briefing, the Commission directed the staff through a staff requirements memorandum to take three actions.

First, to arrange for Commissioner visits to the BPR laboratory in 2 White Flint North. Second, to address the directives in a 1995 SRM. And third, to provide a briefing on the initial trial of the BPR pilot program to reform the materials licensing process.

The staff has acted on the first two items, and the purpose of today's briefing is to provide the Commission with the results of the BPR pilot program.

Today's presentation also provides the Commission with its first formal briefing since the staff addressed the 1995 SRM directives in a September Commission paper. In that regard, the commission may have questions for the staff regarding the overarching materials licensing BPR program in a broader context than just the pilot program and what the results are that have been realized through the BPR relative

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1 to the amount of resources expended.

2 We appreciate the attendance of the agreement  
3 State representative and look forward to hearing your views  
4 on the BPR licenses pilot program. We also look forward to  
5 hearing from the staff both from headquarters and the  
6 region.

7 I understand that the staff's paper, SECY-97-034,  
8 describing the progress of the BPR pilot program, and the  
9 staff and the agreement States viewgraphs are available at  
10 the entrances to the meeting room.

11 If my fellow Commissioners have nothing to add,  
12 Mr. Thompson, please proceed.

13 MR. THOMPSON: Thank you, Chairman Jackson,  
14 Commissioners. Good afternoon. With me at the table, as  
15 you said, from my far left, is Dave Fogle, from the State of  
16 Texas; Bruce Mallett, the Region II Division of Nuclear  
17 Materials; Carl Paperiello, who is the Office Director from  
18 NMSS; Don Cool, who is the Division Director for the  
19 materials licensing activities; and Pat Rathbun, who is the  
20 head of the BPR activities and the team, I believe is, most  
21 of the team members are in the back. So we probably have  
22 people who really can answer any of the questions that may  
23 come up today.

24 As you know, the Material Licensing Business  
25 Process Redesign Project began about 2-1/2 years ago, and

1 the goal was to design a new licensing process that would  
2 maintain or improve the public safety, yet give us an order-  
3 of-magnitude improvement in the speed, and that's what we  
4 have been working on for all these years, and obviously part  
5 of the process was to insure that we understood the process  
6 before we went to automate it.

7 As you mentioned earlier, we -- the Commissioners,  
8 most of the Commissioners I think have viewed the test lab  
9 for the prototype, the BPR lab, and I think we have only one  
10 Commissioner that we are currently making the arrangements  
11 for final visits, but after that the team conducted a small  
12 focus pilot exercise in the BPR lab using the computer-  
13 assisted licensing prototype. The headquarters pilot  
14 exercise was followed by a second phase of the pilot test  
15 conducted in Region II using actual portable gauge license  
16 applications. In today's briefing we will describe the  
17 results from the pilot test and lay out our plans for the  
18 next steps in this project.

19 In addition, Dr. Bruce Mallett, from the Region  
20 II, will give you the regional perspective, as we'll hear  
21 from Dave Fogle from the State of Texas, as their desire to  
22 see how it would work for the agreement States.

23 The staff is very pleased with the progress to  
24 date, but we still have lots of things to do, and with that  
25 I'll turn it over to Dr. Paperiello for a few opening

1 remarks.

2 DR. PAPERIELLO: Donald Cool's going to present  
3 most of the, make most of the presentation today, but I'd  
4 like to remind people of how we got started into this  
5 program. The problem we were out to solve with the  
6 licensing backlog in the regions was a half a year's work.  
7 The budget at FTE was shrinking, and it is shrinking, for  
8 this activity.

9 The licensing guides and the standard review plans  
10 that we had available for licensing had been last written in  
11 the mid-eighties, and there was no provision in the budget  
12 for revising or updating them, and they were out of date,  
13 and in fact we had changed regulations since they were  
14 written and never changed the licensing guides. And a  
15 substantial portion, almost 50 percent of the licensing of  
16 the FTE expended for licensing of the FTE expended for  
17 licensing was actually in the renewal area. So with the  
18 needs and to bring the program into line with the resources,  
19 we launched this effort. That's kind of how we got started.

20 I would note that since we started this effort a  
21 couple of years ago, the Commission a year ago initiated  
22 strategic assessment, and somewhere this year we're going to  
23 have to incorporate the direction from strategic assessment  
24 into BPR, because one of the lessons you learn when you do  
25 BPR is one way to save resources is to find things you don't



1 have to do.

2 For example, basically changing the frequency of  
3 renewal from 5 years to 10 years is essentially one way of  
4 saving resources by not doing something. We have an  
5 opportunity when we revise -- if we revise regulations based  
6 on Commission direction and strategic assessment -- to look  
7 for things, requirements that we just don't provide any  
8 added safety. And by altering our requirements, we may be  
9 able to save resources there, both on our part and on the  
10 part of licensees. So somewhere this year we're going to  
11 have to incorporate the strategic assessment directions into  
12 the direction we're going on BPR. I'd like to just take  
13 notice of that.

14 With that I will turn it over to Don Cool, who  
15 will discuss what we achieved in the pilot we ran.

16 DR. COOL: Thank you, Carl. Chairman Jackson,  
17 Commissioners.

18 Go ahead and put the first slide up. My daughters  
19 contributed their cold to me over the weekend, so I hope my  
20 voice holds up through this.

21 I wanted to start very briefly with a little bit  
22 of history, and we've touched on most of the points here in  
23 this slide. We have briefed the Commission on a couple of  
24 occasions, and you did indeed provide us several specific  
25 tasks to go off and do back last July. We're here today to

1 focus principally on that third task, which was to go do a  
2 pilot program of the licensing program.

3 Go ahead and go to the next slide.

4 The BPR project was actually started back in  
5 September of 1994, and the staff created a vision of the new  
6 licensing process which it presented to the Commission in  
7 1995. Since that time we have been working on each of the  
8 three principal areas within that vision, and have in fact  
9 accomplished a number of things in each of those areas to  
10 date.

11 For example, in the area of working in teams, that  
12 area with the map of the United States, we have created the  
13 redesign center. We have created some systems for working  
14 in teams, a methodology for working in teams. Contrary to  
15 what you might suspect, while this agency is very good at  
16 using a team in an emergency situation or a AIT or an IIT  
17 type of situation, it has not been common practice for the  
18 staff to use a team approach in approaching more routine  
19 problems. Rather we tend to be individualized experts, go  
20 off and attack something.

21 So in fact it was not the normal way of doing  
22 business for the staff to get together and just suddenly be  
23 able to work harmoniously in a team. We have had to develop  
24 methodologies, facilitation, and computer support systems to  
25 enable us to work efficiently in developing teams.

1           In the area of guidance consolidation we have  
2 looked at and developed a methodology for consolidating  
3 guidance. We have in fact done the first of the  
4 consolidations doing portable gauges, that being the largest  
5 single class of materials licensees which we have, and doing  
6 that in terms of a risk uniform performance-based approach,  
7 trying to simplify that and move it to a performance  
8 orientation. That was in fact part of what we were testing  
9 in this pilot project.

10           We've also developed things related to our  
11 technical assistance requests, making that electronic and  
12 available so that now both in my office and in the regions  
13 we can call up that data base of particular technical  
14 systems actions, be able to determine whether or not we've  
15 answered the question before, speed that particular process  
16 along, as well as look at and change the license duration  
17 with the Commission's approval just a few weeks ago to move  
18 to 10-year license terms.

19           The third area, dealing with the actual licensing  
20 process, was the focus of this particular pilot, and in  
21 particular, testing the computer-assisted reviews of the  
22 licensing applications.

23           CHAIRMAN JACKSON: How much have we actually  
24 expended resource-wise in terms of dollars and people to  
25 this point?

1 DR. COOL: 2.8 million in terms of dollars net  
2 total, and I'm not sure, I don't have an FTE number right in  
3 front of me. We can get that for you, if you'd like. For  
4 that we've bought actually a large number of things and  
5 developed a fair number of ideas, including the laboratory  
6 product center, a lot of the infrastructure and software  
7 systems, business practice facilitation support, a great  
8 deal of training in those activities, groupware. So a  
9 variety of things go into that. It's not all spent in one  
10 particular place or location.

11 COMMISSIONER MCGAFFIGAN: On the FTE's, an order  
12 of magnitude, is it 10, 15, what number of FTE?

13 DR. RATHBUN: Just kind of estimating roughly I  
14 would say it's about between 12 and 17.

15 CHAIRMAN JACKSON: And as you go along, I'd be  
16 interested in hearing to what extent the software you've  
17 developed is applicable beyond that relating to portable  
18 gauges. That's number 1. But more importantly and more  
19 broadly, to what extent is it compatible with either  
20 existing systems or systems the agency is developing, and in  
21 particular I'm thinking about ADAMS, and I'm interested in  
22 to what extent that is a bottleneck or not or to what extent  
23 what you've developed is compatible with that or not, and  
24 what is being done both within your organization and with  
25 the CIO to address this. These are very important issues,



1 particularly if you're telling us that you've already spent  
2 \$3 million on a pilot, and 12 to 17 FTE have been involved.

3 DR. COOL: We will certainly do that.

4 If I can go ahead and have the next slide.

5 Those questions I particularly hope to get to when  
6 we get close to the end of the briefing and where we're  
7 going in next steps.

8 This is a slightly different way of looking at  
9 some of the things that we've done. Racked out in terms of  
10 the amount of automation that was necessary or desirable to  
11 do these. Some of the actions that we took didn't need any  
12 automation to accomplish them, such as the license extension  
13 changes to duration.

14 Some of the actions, such as consolidating  
15 guidance, making guidance available on the Internet of  
16 technical assistance data base, required some automation.  
17 You could do guidance consolidation and do a paper copy, and  
18 in fact we did that. That's a published NUREG. You can  
19 take it a step farther and make it more useful by having it  
20 available on-line on the Internet, which that document is,  
21 and by using the software systems that are now available  
22 today to facilitate group development processes.

23 On the other hand, considerable more computer  
24 assistance and expertise is needed if you go to a computer-  
25 assisted license review process, which is what we were

1     piloting.

2                 CHAIRMAN JACKSON:  What have we spent the \$3  
3     million on?

4                 DR. COOL:  I'm sorry?

5                 CHAIRMAN JACKSON:  You went through some things  
6     that really didn't involve much automation, and I guess I'm  
7     curious as to what we spent the 2.8, that is circa \$3  
8     million on.

9                 DR. COOL:  Okay.  That breaks down into a couple  
10    of large categories.  One is IT systems, the development of  
11    the BRP laboratory, the associated computers and systems  
12    which are in there, the purchase of the software systems,  
13    both Lotus Notes, which this is the software package we use  
14    to facilitate group interactions and development of  
15    products, and the various software packages that were  
16    necessary to develop the licensing application that we  
17    piloted down in Region II.

18                The other big category, the sort of a broad block,  
19    was contractor support services in terms of facilitation of  
20    my staff in developing the BPR ideas, facilitation of the  
21    process of developing what we sometimes refer to as the  
22    business diamond, the things of values and goals and jobs  
23    and skills and metrics that go along with these activities.  
24    The support systems for the servers, we have used  
25    contractors to support and maintain our Lotus Notes server,

1 our development server, some of the activities, in  
2 particular training, that went along with getting our staff  
3 to use these software packages, to learn how to put  
4 materials onto the Internet, do the HTML, the hypertext  
5 coding, which is associated with that.

6 So there are two blocks. One was hardware, if you  
7 will, and in that I'm going to include things like the  
8 software packages, and the other was the facilitation  
9 support and assistance and us working our way through the  
10 process, because when we embarked on this process, BPR was  
11 an idea you read about in the trade literature. We had no  
12 way of just starting to walk down the path for ourselves.

13 So part of what we went out and purchased was  
14 someone to walk us down the path who has been down that  
15 path, done that for other both government organizations and  
16 private industry in terms of business process redesign  
17 philosophy, the kinds of approaches, the kinds of pitfalls.  
18 Now that doesn't mean that we managed to avoid all of the  
19 potholes. You have to sort of fall into some of them on  
20 your own. But a fair amount of that money actually went  
21 into the support to help us walk down that path and know  
22 what path we were generally trying to walk down.

23 CHAIRMAN JACKSON: How many people are involved in  
24 the kind of licensing actions that you hope the BPR  
25 ultimately will cover?

1 DR. COOL: I would say virtually all of my staff  
2 and in the regions.

3 CHAIRMAN JACKSON: So how many people are we  
4 talking about?

5 DR. COOL: The net budget for my materials program  
6 is slightly over 100 FTE's. Of that actual reviewers is in  
7 the regions probably something on the order of 25 to 30  
8 reviewers in the four regions who are the actual reviewers.  
9 Then there are associated with that people like the  
10 administrative assistants, the licensing assistants, who  
11 receive the application, have to docket it, have to forward  
12 it to fees. You get a variety of people who end up having  
13 to touch that application at some point in the process.

14 CHAIRMAN JACKSON: I guess -- so the natural  
15 question becomes should I apply a linear or a multiplicative  
16 factor to figure out what it would take to expand a BPR to  
17 all these people in your organization. You say 100, and  
18 you've used 12 to 17 FTE's, so you're talking a factor of 6  
19 to 8. And so is that what we have to look forward to, six  
20 to eight times the 3 million that's already been spent? I  
21 mean, and I'm not trying to give you a hard time, I'm  
22 really --

23 DR. COOL: I would say no, very frankly.

24 CHAIRMAN JACKSON: Okay.

25 DR. COOL: Because a lot of it has to go in on the



1 front end, looking at the idea, generating the idea, testing  
2 whether the idea will in fact work, developing the  
3 underlying system. We're now to the point where we can  
4 start to implement things, build on it, expand it, as you  
5 mentioned. And we believe that it is expandable, both up in  
6 terms of more complex licenses and to the potentials for  
7 registration, as we discussed with the general license  
8 program.

9 And once you have the underlying system, then you  
10 can create another set of screens. It doesn't come free,  
11 but it doesn't, I believe, scale linearly.

12 CHAIRMAN JACKSON: If I look on viewgraph 5, the  
13 one that has the BPR recommendations, where are we exactly  
14 with respect to the three areas that are on that slide?

15 DR. COOL: Area 1, no automation. License  
16 extension is done. The duration is done. The move to  
17 performance-based licensing and implementation of strategic  
18 assessment obviously ongoing.

19 In terms of the consolidate and revising guidance,  
20 the first document was portable gauges. The draft is done,  
21 public comment completed. We anticipate to move very  
22 quickly to make that a final document.

23 From there the additional subject areas, such as  
24 fixed gauge, self-shielded irradiators, radiography, well  
25 logging, the whole suite of those and right now we have

1 about 19 or so topical areas laid out, have been made part  
2 of my division operating plan over the next three years. It  
3 will be an ongoing operation over that period of time.

4 The fully automation portion, as you mentioned,  
5 that we'll have to pace with the development of the agency's  
6 infrastructure.

7 Our anticipation is that we will move to create  
8 the automation screens that can be associated with each of  
9 the licensee types as we develop the consolidated guidance  
10 document that goes along with that particular licensee type.

11 CHAIRMAN JACKSON: Dr. Paperiello, you were going  
12 to make a comment?

13 DR. PAPERIELLO: Yes. I would point out that the  
14 tools, all the automation tools to do the guidance revision,  
15 we have. Nothing other than actually writing the things --  
16 we don't have to do any -- you know, we actually have the  
17 right text but we do not have to add any more in terms of  
18 computer hardware or software.

19 I would point out we talked about writing  
20 software. In fact, we used all off-the-shelf software. We  
21 did not, you know, write programs ourselves, so there was  
22 nothing like that.

23 Most of the money was spent on contractors.

24 CHAIRMAN JACKSON: That's my impression. Okay.

25 COMMISSIONER McGAFFIGAN: Could I just follow up?

1 The contractor-facilitator part of the \$2.8 million, could  
2 you tell me what percentage of that was?

3 DR. RATHBUN: Let me try this with a little more  
4 accurate numbers. I've never broken it this way  
5 specifically, but the first part of BPR, just getting us  
6 through to the vision and laying out -- you know, the  
7 interviews, the vision, that was \$350,000, so if you want to  
8 just sit down and conceptualize something and actually take  
9 it to a vision of the future, that is what it cost us to do  
10 this, and we conducted about 75 interviews in all regions.

11 Now it becomes more complex after that because  
12 normally you would go on in the BPR and then automate what  
13 you visioned. Because we had a number of tasks we had to  
14 accomplish -- the 10-year license, the one-time license  
15 extension, and the guidance consolidation -- that moves us  
16 out into this other part, and I am going to say that we  
17 probably spent close to a million dollars in both buying the  
18 Lotus Notes, getting the Staff accustomed to that, setting  
19 up the templates, and, frankly, having one false start,  
20 which we told you about last time.

21 Now that you would not have to account for in  
22 future projects. Presumably we learned our lesson on that,  
23 because now that we are down to it, it only took us six  
24 weeks to do that portable gauge.

25 Then you have the development of the -- well, wait

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1 a minute. In doing these tasks, we had to -- we used the  
2 contractors. They went with us on the interviews. They  
3 designed templates. They wrote reports and they also  
4 facilitated every team session and team met daily for a  
5 period of a year and contractors were with us during that  
6 entire process.

7 The IT development, then, is probably at least  
8 another \$1.2 million just in building that system, and I  
9 would have to go to CSC and ask them to --

10 CHAIRMAN JACKSON: This is not a budget hearing.

11 DR. RATHBUN: I understand. It's just -- so you  
12 have got, those are your big chunks and then we have  
13 training.

14 CHAIRMAN JACKSON: Well, I'll just say that, and I  
15 don't want to preempt whatever you are planning to discuss  
16 as we go along, you know, my concern is less a detailed,  
17 specific breakdown, because this is not a budget hearing,  
18 but rather how to have a better sense of exactly where you  
19 are, did you accomplish everything that was in the previous  
20 SRM, where you are going from here and how quickly, and how  
21 this ties into -- and back to the compatibility issues with  
22 other ongoing efforts in terms of information technology and  
23 automation in the agency.

24 I mean I think you can separately provide detailed  
25 breakdowns --



1 DR. RATHBUN: Okay.

2 CHAIRMAN JACKSON: I am not interested in hearing  
3 about \$350,000.

4 DR. RATHBUN: Okay.

5 CHAIRMAN JACKSON: But rather what are we  
6 accomplishing and where do we expect to go and how quickly  
7 for the dollars expended. Okay?

8 DR. COOL: Okay, and our anticipation was to get  
9 to that in just a little while, after we had walked through  
10 the pilot.

11 We can jump to that if you would like  
12 immediately --

13 CHAIRMAN JACKSON: No, let's just work our way  
14 through it.

15 DR. COOL: Okay.

16 CHAIRMAN JACKSON: I mean I guess I am looking at  
17 the full automation and you are saying that we haven't  
18 gotten there, even relative to portable gauges?

19 DR. PAPERIELLO: No. We have.

20 CHAIRMAN JACKSON: Oh, you have. Okay.

21 MR. THOMPSON: Let me just say, we are automated  
22 but we are not fully-automated in our infrastructure and we  
23 have tested out in the pilot and we'll discuss that, but it  
24 is not in the system where we can just dial up right now and  
25 I think that is what we are really talking about.

1           Either you would have to have I think a stand-  
2 alone machine to be able to do it like we set up the pilot  
3 down in Region II, and it was automated. It was fully  
4 automated in the region but it is not integrated, fully  
5 integrated -- maybe it is fully automated but not fully  
6 integrated.

7           CHAIRMAN JACKSON: That sounds good.

8           DR. PAPERIELLO: Fundamentally the agency's  
9 information management system is still paper.

10          CHAIRMAN JACKSON: No, I understand that and I'm  
11 sure the CIO is listening very carefully.

12          [Laughter.]

13          CHAIRMAN JACKSON: And if he is not, he should be  
14 listening very carefully.

15          MR. THOMPSON: I'm sure he is. Okay, Don, I want  
16 you to move forward on it.

17          DR. COOL: Okay. Let's go ahead and then quickly  
18 walk through the pilot.

19          Our objective was to see whether or not the system  
20 could in fact work.

21          We picked portable gauges because they are  
22 relatively simple devices. There are two spaced reviews so  
23 there is an inherent degree of safety built into them, and  
24 at 19 percent of the licensees they were by far the biggest  
25 single chunk, so we could take a big chunk out with this

1 particular challenge.

2 We were looking at the test in terms of the  
3 technical review and QA review. We boxed off other things  
4 like exactly how you do all of the incoming receipt of  
5 electronic applications, how you might fire back out  
6 electronically a finished license, and a variety of those  
7 sorts of activities so we constrain the system, and that  
8 introduces some artificialities when you get to how long did  
9 it take and how confident you are about how long it took.

10 We did use the consolidated guidance documents  
11 that had been developed.

12 We can go ahead and go to the next slide, very  
13 quickly.

14 The development process --

15 CHAIRMAN JACKSON: Let me just take you back.

16 DR. COOL: I'm sorry.

17 CHAIRMAN JACKSON: You mentioned new portable  
18 gauge license applications only, but in the opening remarks  
19 you mentioned that the bulk of what you have to deal with  
20 are license renewals.

21 How close are you to being able to handle renewals  
22 and/or amendments for the portable gauges?

23 DR. COOL: Renewals will be very quick to be able  
24 to take in because they look exactly like the new  
25 application so you can roll the renewals right in.

1           The amendments should also come very easily as you  
2   have an electronic system, calling up the file, seeing which  
3   change, and authorizing that also then comes much more  
4   quickly because you with the system can click on the screen  
5   as opposed to having to go off and find the text file, pull  
6   it out of the docket file, flip it open, flip through the --

7           CHAIRMAN JACKSON: What is your target date for  
8   that, for having that piece of it relative to portable  
9   gauges tied up?

10          DR. COOL: I don't have a date for you at the  
11   moment, ma'am.

12          CHAIRMAN JACKSON: Okay. You should think about  
13   doing this. See, this is the classic kind of thing where  
14   somebody calls up -- "Chairman Jackson, please come downtown  
15   and see Senator So-and-So --"

16          You know, he has the licensees who are upset  
17   because of how long it takes to renew a license or amend a  
18   license.

19          "Ah, but Senator, you know, we have a redesign  
20   materials process." "Right. How long is it going to take  
21   then to review my constituent's license amendment? "

22          That is the kind of thing from a practical point  
23   of view, you know, that is really helpful to us. Okay?  
24   Thanks.

25          DR. COOL: When we come back to the "where do we



1 go from here" at the end, I would like to talk a little bit  
2 more about why I gave you the answer I did.

3 CHAIRMAN JACKSON: Okay, fine. I think I know  
4 part of the reason.

5 DR. COOL: The iterative development process,  
6 working through the development of the application screens  
7 in Headquarters and our regions; go ahead and go to the  
8 next slide.

9 The Information Technology Management Reform Act a  
10 couple years ago, one of the things that directed the  
11 Federal Government to do was to develop and build IT systems  
12 in a modular fashion. That is exactly what we tried to do  
13 in this particular case, building a structure and a module  
14 with the technical staff sitting side by side with the  
15 people who were actually doing the screen development, so  
16 you build a little, test a little, build a little, test a  
17 little -- refine the process -- say, no, that doesn't quite  
18 get us where we need to go -- in a very efficient process  
19 actually over a relatively small number of weeks last Fall.

20 In a matter of months they had the working model  
21 that could be tested within the laboratory and headquarters.

22 CHAIRMAN JACKSON: What is rapid application  
23 development?

24 DR. COOL: Build and test, build and test, build  
25 and test with the people sitting side by side.

1           CHAIRMAN JACKSON: Okay. Go ahead and go to the  
2 next slide, the Headquarters testing.

3           We used as the feed material for that some  
4 licenses that have already been issued, pulled that  
5 information out of the docket files to test it, tested the  
6 system, looked at in terms of going out and grabbing the  
7 guidance process flow, kinds of screens, what works, what  
8 didn't work -- a variety of things, and as you might  
9 suspect, found a number of things that needed to be refined,  
10 needed to be debugged.

11           Developed no fatal flaws from that -- the thing  
12 did what we wanted it to do, identified a number of areas to  
13 be improved.

14           It also validated to the extent we could the kinds  
15 of jobs reviewer, quality assurance person, and some of  
16 those activities. That proved out very nicely also.

17           So we refined the system and moved on to the  
18 region.

19           COMMISSIONER DICUS: What were some of the things  
20 that you found that you needed to fix, to redo?

21           DR. COOL: Well --

22           COMMISSIONER DICUS: I think in the paper noted  
23 some major issues and some minor issues.

24           DR. COOL: There were a number of work flow issues  
25 that came out of this.

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1           How does the license reviewer hand it off and how  
2       does the QA person know to pick it up? Some of those  
3       things, which caused us to go back and look at what we refer  
4       to as business rules.

5           The old system that we are all very used to -- it  
6       takes it, carries it over, puts it on the desk. The next  
7       person has it sitting in his pile, does things.

8           Well, it's a little bit different with the  
9       electronic system in terms of, oh, I now have it, it's now  
10      in my queue, for example.

11          Some of the things about how to go and pick up and  
12      correlate activities in the IT space, depending on the level  
13      of complexity some of them are minor debuggings. It's  
14      calling the wrong place on the code. Some of them, more  
15      major in terms of the logic train of the relational  
16      database.

17          CHAIRMAN JACKSON: How much did you interact with  
18      IRM on this can how helpful were they to you?

19          DR. COOL: We had a person from IRM on our core  
20      team interacting with us on an almost daily basis and they  
21      were quite useful to us.

22          We had those folks participating with us, although  
23      most of the rapid development activity was the contractor  
24      developing the screens with my reviewers from the region  
25      sitting there talking about this particular application.

1 CHAIRMAN JACKSON: Who helped you with the work  
2 flow issues?

3 DR. COOL: The contractor. My reviewers. My  
4 licensing assistants from the regions.

5 We tried to go out and to pick the people who do  
6 this job on a routine basis in the old process and say,  
7 okay, now it does this -- where would it next go logically  
8 under the old system? How do I make sure that I manage to  
9 get all the steps done, all the buttons touched -- so we  
10 have used a variety of people within the regions and  
11 headquarters.

12 COMMISSIONER DICUS: Do you think all the problems  
13 are resolved or do you still have some with regard to what  
14 you have identified to date?

15 DR. COOL: I would venture to say that no computer  
16 system ever has all of the problems resolved. I think all  
17 of the major ones we're certainly there.

18 We are down to things like it calls the data up in  
19 the wrong format. It doesn't quite print it on the standard  
20 license page at the moment. There's formatting issues and  
21 some of those sorts of things --

22 CHAIRMAN JACKSON: I would like to put the  
23 question this way. Relative to portable gauges, do you have  
24 a product that you are using today, so that if someone sends  
25 in a new license application relative to a portable gauge

1 that you will use this system as opposed to your paper-  
2 intensive system?

3 DR. COOL: We have a system which is ready to do  
4 that when I make the guidance final and make that the way  
5 that we license portable gauges, then based out of Region II  
6 we will be using this system for at least some of those  
7 applications because I do not have underlying infrastructure  
8 in other systems ready to make that a network application  
9 for all of my reviewers, but we will be issuing -- I expect  
10 us to be using it to review and issue licenses.

11 CHAIRMAN JACKSON: Do you want to give us a target  
12 date? That is the date you can't give us yet? All right.

13 DR. COOL: Stand-alone, we'll be doing that before  
14 the end of the fiscal year.

15 COMMISSIONER DICUS: For portable gauge.

16 DR. COOL: For portable gauges -- and I think that  
17 is the issue we are going to discuss later on, integrating  
18 this in ADAMS and the platforms that are going to be  
19 compatible is the key element.

20 DR. PAPERIELLO: I'd like to go back to a  
21 question, a question of IRM involvement.

22 We in NMSS are not experts on information  
23 technology and I would say depending upon when you start  
24 dealing with the technical analyses we do, and I am talking  
25 about numerical analyses, modelling, and things like that on

1 computers, we are quite knowledgeable.

2 When it comes to information technology, we are  
3 not, and we have to heavily rely on contractor support and  
4 some support from IRM.

5 If there is a lessons learned, at least the lesson  
6 I learned, in any future project like this, I will not get  
7 involved with it without full partnership with now it would  
8 be the CIO organization, which I would say IRM was not.

9 I am not saying -- if it was anybody's fault it  
10 was my own fault for having gotten into this without  
11 realizing maybe all of the resources I would have needed,  
12 that kind of resources, but I would say that is a lessons  
13 learned out of this.

14 CHAIRMAN JACKSON: No, that's -- and I appreciate  
15 your making that comment, Dr. Paperiello, because I think  
16 where we want to go, and I think you have already spoken to  
17 it, is that if we have a resource here or a putative  
18 resource in IRM-CIO, that on the one hand in the working  
19 organizations, you know, we have to be willing to go there  
20 and make use of what resources exist. On the other hand,  
21 that organization has to be working with you to see what in  
22 fact can be offered by that organization to help not only  
23 purchase technology but to optimize information flow, work  
24 flow, and you mentioned that.

25 Of course, you know, you have people who are

1 technical reviewers who do this, who do that, and one has to  
2 ask where are the resources best deployed in which ones --  
3 but I think you have essentially spoken to it in the comment  
4 you made, and that is a good lessons learned out of this.

5 MR. THOMPSON: I might want to add, because I  
6 obviously was dealing with IRM at the same time, there  
7 are -- this is probably the first big BPR effort this agency  
8 has undertaken, and there was limited IRM experience and IRM  
9 often is subject to doing a lot of work by contractors, as  
10 opposed to that, so it wasn't that they weren't prepared and  
11 willing to assist.

12 I think it is a kind of a combination of the right  
13 mix and skills and as I think Carl said, I think they were  
14 there in and their heart was there. I am not sure they  
15 didn't have much more than a body and mind to go with it  
16 because I think they put one of their better IRM liaison  
17 people to work with the contractors.

18 There wasn't I don't think an IRM lack of desire.  
19 I think what they found both in budget space and other space  
20 is the fact that it was a -- the program offices had more of  
21 the capital and they were focused on other activities, and  
22 supported them as best they could.

23 CHAIRMAN JACKSON: Okay. Commissioner McGaffigan.

24 COMMISSIONER MCGAFFIGAN: Could I ask on Lotus  
25 Notes, whose advice was it to use Lotus Notes? It is a very

1 good program. A lot people use it around the country in the  
2 business community. Was that from your contractor? Was  
3 there --

4 DR. PAPERIELLO: It was the contractor.

5 COMMISSIONER MCGAFFIGAN: And did IRM happily go  
6 along with that or unhappily or what was the --

7 DR. PAPERIELLO: They approached it, I think, with  
8 skepticism, as we did.

9 It was suggested. We said we will go ahead and  
10 try it. We got into it and it has proven to be pretty  
11 effective.

12 There are with any sort of system the potential  
13 drawbacks. The earlier version of Notes, when we started  
14 this, did not have any way to interface with the Internet.

15 That almost killed it for us at one point. The  
16 new version of Notes does, so as the systems grow,  
17 capabilities change.

18 COMMISSIONER MCGAFFIGAN: My experience with  
19 software systems in a totally different setting is that the  
20 perfect is oftentimes the enemy of the good.

21 Software people oftentimes tend to try to say, you  
22 know, give us enough money and enough time and we'll come up  
23 with the perfect system. They never get it and meanwhile  
24 you miss the benefits of the good enough system for many,  
25 many years in between.



1           CHAIRMAN JACKSON: Well, to me the ultimate metric  
2 is can you process an application? Not can you process it  
3 in the way that if we all had this perfect world would do  
4 it, but can you do it, because in the end that is what the  
5 job is, right? That is what the regulatory function is, and  
6 that is what we want to get to.

7           MR. THOMPSON: And I think that's what our pilot  
8 program I think did.

9           DR. COOL: I can jump five pages --

10          CHAIRMAN JACKSON: We have got to hear about the  
11 regions and the states --

12                 [Laughter.]

13          DR. COOL: All right.

14          CHAIRMAN JACKSON: I can't let Dr. Mallett and Mr.  
15 Fogle sit at this table and not have their say.

16          DR. COOL: Yes, ma'am. Okay, then mushing forward  
17 with all undue speed so we can get to them in a moment.

18                 We ran the test in Region II. We had participants  
19 from almost every region, Headquarters staff and several  
20 states, Georgia, Illinois and Texas all had individuals  
21 participating. We provided training to these individuals,  
22 the adult learning concept, quote on quote, just in time  
23 where you provide them some training, you immediately get  
24 them on the system and let them use it to reinforce it.  
25 That proved, in fact, to be very effective through that

1 process.

2 CHAIRMAN JACKSON: Well, before you even go  
3 further, I do want to give you cudon on that one. I think  
4 that you did truly follow what the '95 SRM asked you to do  
5 in involving the regions and the states, the agreement  
6 states, and that is, you know, a kind of a model and so I  
7 commend you on that.

8 DR. COOL: Thank you.

9 The regional test used the information system as  
10 we had revised it and improved it from the Headquarters. We  
11 used the guidance in an on-line system. That particular  
12 version, we were pulling off the NRC intranet. However, the  
13 same version is on the Internet outside on our external  
14 page.

15 For the regional test, we did real reviews, real  
16 applications. For real applications and for dummy  
17 applications from each of the major portable gauge vendors  
18 who participated with us.

19 CHAIRMAN JACKSON: So the vendors did participate?

20 DR. COOL: We had all four major portable gauge  
21 vendors participate and we had four actual applications that  
22 participated.

23 CHAIRMAN JACKSON: All right.

24 DR. COOL: We performed both a computer-assisted  
25 review and a paper-based review. We did those in parallel

1 at the same time on different floors of the building down in  
2 Atlanta so that we could check to see whether we were  
3 getting the same product, same result. We ran stopwatches  
4 on it to see how long different segments lasted, how long it  
5 took to do various pieces.

6 We tested various roles, the reviewer role,  
7 handing it off to the QA reviewer. A customer service  
8 person, the person in the licensing assistance type role,  
9 bringing the application in, getting it queued up, a manager  
10 assigning it to somebody so that they knew they had it. So  
11 we tested a variety of job roles and hand-offs.

12 We also during that same week had people play in  
13 various roles, pretending to be an applicant testing the  
14 system, doing applications, being a reviewer doing a QA  
15 review, a variety of those things during the course of the  
16 week.

17 Going ahead on to the next slide, then.

18 In terms of the results, first in terms of the  
19 consolidated guidance, we received very positive feedback on  
20 both the consolidated guidance document, NUREG-1556, and on  
21 the electronic licensing system. The gauge vendors and the  
22 four applicants were asked to and did both fill out a paper  
23 application and an electronic application and we  
24 specifically solicited their feedback on how that worked  
25 down to and including were you able to load it up, what kind

1 of problems did you have installing it, how did the screens  
2 work, were you able to get out, printing issues, a variety  
3 of those things and we provided and we got a great deal of  
4 feedback on that.

5 That feedback was almost unanimously positive in  
6 terms of the guidance, the performance orientation of that  
7 guidance, its usefulness and on the electronic system  
8 associated with this particular app.

9 CHAIRMAN JACKSON: Now, I don't want to keep  
10 beating the same horse but I guess I'm interested. To the  
11 extent, then, that you used off-the-shelf software, how  
12 quickly adaptable is it to other applications than portable  
13 gauges?

14 DR. COOL: I believe as quickly adaptable as  
15 someone can sit down with a reviewer and create the set of  
16 screens that goes along with that particular kind of  
17 licensee type. So that if and in fact, as I will mention in  
18 a moment, we are working on the consolidated guidance for  
19 radiography to implement the rule which the Commission  
20 approved in October. We will write that to the new form.  
21 When that consolidated document is ready and out for  
22 comment, my intention is to have a couple people sit down  
23 with some of the IT folks and develop a set of screens that  
24 goes along with that.

25 CHAIRMAN JACKSON: All right.

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1 DR. COOL: The next slide.

2 In terms of the system itself, the computer-  
3 assisted review and the paper review were technically  
4 equivalent and provided the same level of safety. Meaning  
5 they generated the exact same license, they generated it at  
6 the same conditions in the same order. There were some  
7 formatting glitches. It didn't pull up the date in quite  
8 the right format, for example. It turned out that, through  
9 all of this, we had managed to forget to have it assign the  
10 docket number and print it on the top of the license, for  
11 example. Some things like that, you go how did we manage to  
12 miss those.

13 They identified the same deficiencies. There was  
14 one additional deficiency identified in the paper version  
15 because, in fact, the electronic version prompted the  
16 applicant to include his authorization for field sites. The  
17 licensee didn't manage to get that same authorization  
18 clipped to the paper copy so, in fact, the electronic  
19 version may perhaps have indicated some additional benefits  
20 because it does indicate to you whether or not you have  
21 checked off all of the areas and edited all of the areas  
22 that need to be part of the license. So there was one less  
23 deficiency identified in the electronic review.

24 We demonstrated that we could print out the paper  
25 that was necessary to document that particular application

1 and we demonstrated that the overall metric, goal, target of  
2 this operation, which was to have the average turnaround  
3 time of 12 days is obtainable.

4 Now these are simple devices.

5 Go ahead and go on to the next slide.

6 The average turnaround time for these is nowhere  
7 close to 89 or 84 days. Rough estimate of the turnaround  
8 time on a portable gauge under the old system, 18 days. We  
9 turned four of them around in one day.

10 The majority of that, I believe, can be attributed  
11 to the guidance, consolidated guidance, which provided all  
12 the information which everyone needed. It resulted in very  
13 good applications that had essentially no deficiencies  
14 associated with it.

15 Within the constraints of the system that we had  
16 which is a very artificial system, timing only certain  
17 components of it, there was not a great deal of difference  
18 between a paper reviewer who had a copy of the NUREG right  
19 there and the electronic version where the copy of the  
20 guidance could be brought up on the screen with very few  
21 deficiencies, very little reason to go back and forth. Not  
22 a whole lot of difference of time.

23 But as you move to other pieces, the input/output  
24 processing or as you expand it toward more complicated ones,  
25 those differences not sufficient here to be able to really

1 call them out for this simple class of licensees will, I  
2 believe, become more evident or it becomes more complicated,  
3 there's more pieces to look at, where there are more things  
4 you would have to run around and do. Within the constraint  
5 of this pilot test, we weren't looking at a system that  
6 would allow us to really differentiate between those two.

7 CHAIRMAN JACKSON: Would you say, then, that in  
8 some sense the pilot was less a test of the efficacy of  
9 automation and more a test of the efficacy of process  
10 reengineering for this class of licenses?

11 DR. COOL: it was a test of the electronic system  
12 to the extent that we were testing to see whether or not it  
13 would work. It, in fact, did work, it ran at a comparable  
14 speed, perhaps a little bit faster if you click the  
15 stopwatches, so it tested that. But it did, in fact, also  
16 have a major component of testing process and, in  
17 particular, I think it validated the value of the  
18 consolidated guidance, having a document which, in one  
19 place, is the standard format and content, the standard --

20 CHAIRMAN JACKSON: That's what I put in what I  
21 call a process reengineering.

22 DR. COOL: Yes, yes, that's correct.

23 CHAIRMAN JACKSON: And that is an important point  
24 because, from my perspective, I have been in various  
25 technical organizations and the goal is not necessarily

1 automation, per se. It is automation as part of an  
2 optimization of work process and so the fact that the two  
3 both were roughly a day but you came down from an eight-day  
4 current estimated average -- 18 day, I'm sorry -- is not  
5 something to run away from. Because as we go forward with  
6 constrained resources, we have to understand how automation  
7 is part of an optimization process. It is part of it. But  
8 an equally, probably as important part, has to do with the  
9 guidance, other ways to optimize how the information is  
10 handled. So don't back away from that, the fact that a lot  
11 of it was due to the consolidated guidance.

12 Commissioner McGaffigan.

13 COMMISSIONER McGAFFIGAN: It's really on the same  
14 point.

15 The consolidated guidance, what this chart tells  
16 me is that that really, I don't know how many areas you set  
17 at the outset, we have rules --

18 DR. PAPERIELLO: About 19.

19 COMMISSIONER McGAFFIGAN: Nineteen different areas  
20 and in many cases we've changed rules and not changed  
21 guidance documents and all of that. The payoff sounds like  
22 getting all those guidance documents up to date, whether you  
23 have electronics or paper.

24 DR. PAPERIELLO: It is getting them up to date,  
25 it's consolidating them because unfortunately we put out



1 different kinds. Yes.

2 DR. COOL: That is exactly right.

3 CHAIRMAN JACKSON: What I would tell you is that  
4 the IMTRA, the new law, essentially says that you should  
5 look at work process and its optimization and understand  
6 paper flow before you make a decision about automation and  
7 that's why, in fact, this is not a trivial point.

8 COMMISSIONER McGAFFIGAN: The other point I would  
9 make, and I filled out a soccer application this weekend for  
10 a soccer tournament on the Internet, so it had a glitch. I  
11 kept entering zero and it kept giving me one and I  
12 couldn't -- but in any case, I honestly am a paper person.  
13 It may reflect my generation. But I'm not so sure when you  
14 get to the more complex licenses where you have to go back  
15 and forth, that doing that on a computer screen is better  
16 than doing it with a piece of paper on your desk.

17 I am from Missouri. As I have said in other  
18 hearings, when it comes to something like that, it wouldn't  
19 be for me.

20 CHAIRMAN JACKSON: Yes, but I think the way that  
21 addresses all of the above, whatever the "above" is, is  
22 again, and I hate to sound repetitive, although I am  
23 obviously being that, is looking at work process because  
24 that allows you to address where doing it by hand or with  
25 paper still may be perfectly adequate but where automating

1 can actually help you do it better.

2 DR. COOL: I agree. And with that I am going to  
3 turn to Bruce Mallett from Region II to give us perspectives  
4 of the host of the pilot.

5 DR. MALLET: Chairman Jackson, Commissioners,  
6 thanks for letting me be here today.

7 CHAIRMAN JACKSON: Well, thank you for being here  
8 today.

9 DR. MALLET: I want to first, before I give you  
10 comments specifically on the pilot, I wanted to give you  
11 three general insights that we noticed and that we learned  
12 part of out of the pilot process and Carl is looking at me  
13 so I will be careful what I give you as insights.

14 CHAIRMAN JACKSON: We're looking at Carl.

15 [Laughter.]

16 DR. MALLET: First of all, I think one of the  
17 things we did with the pilot is we set a list of objectives  
18 in place. There was a lot of gnashing of teeth but I think  
19 you mentioned in your SRM in 1995, we should focus the work  
20 on unique packets to complete and that's what we did. And I  
21 believe in your Commission paper, those objectives are  
22 spelled out. We also spelled out the scope and I think that  
23 helped succeed in the project.

24 Another thing we did which you suggested in your  
25 SRM, we put it out with the people that would use it. We

1 had regional people involved in the pilot and, as Mr. Fogle  
2 will attest to, we had agreement state people involved in  
3 the pilot.

4 But third, I'm not sure comes through. We also  
5 established a sponsor at a senior manager level. Don Cool  
6 and I co-sponsored this pilot and what that did was give  
7 Carl a neck to wring if we didn't meet the schedule and  
8 deadline. But I think it also showed us something.

9 You have been asking questions along where are you  
10 and where are you going. One of the ways to get there is if  
11 you put the person in charge that it is going to be their  
12 project it seems to work. I believe that is how we  
13 succeeded in the pilot or helped succeed, along with a lot  
14 of work from other people.

15 Now let me give you some specific perspectives on  
16 the pilot and what we think it did.

17 The first slide talks about improve the concept of  
18 work. We took the design that the group had worked on that  
19 Pat Rathbun talked about and we tested that out and we  
20 proved that that design will work and we were quite pleased  
21 with it. The key things in the design I thought were good  
22 was the electronic referencing to the guidance as well as we  
23 proved you could take a diskette, send it to an applicant,  
24 receive that back and electronically load it into your  
25 system and it works quite well.

1           As far as the second bullet there, efficiency  
2 gains, we talked a little bit about that. I think,  
3 Commissioner McGaffigan, you mentioned the benefits for  
4 other type of licenses. Let me list a few that we observed  
5 during the pilot that I think will help in the other  
6 licenses. Some things I didn't believe that we would gain  
7 out of it but we reserved and they are a very great benefit.

8           One is it focused the reviewer on a quick glance  
9 of what the applicant had put in and where the applicant was  
10 going to cause some procedure they need to look at in more  
11 depth. You mentioned before to us how you tie this into  
12 risk, into safety risk. If you pull up that screen, you  
13 will see right away where the applicants deviated from what  
14 is the key safety risk and we didn't figure on getting that  
15 benefit but you can see it right away.

16           Another one was we heard from both applicants and  
17 the reviewers. All the guidance was there. They didn't  
18 have to go down the hall, ask by word of mouth, do you have  
19 the latest guidance. They didn't have to call someone, they  
20 didn't have to go look up some 14-volume set to find the  
21 guidance. It was all there. A big benefit. I think it  
22 will save you time over the long run, although not in this  
23 application because it's so simple.

24           Another item that my administrative staff told me  
25 is it will save time in retyping things. In the current

1 process now, we take an application from an applicant, type  
2 it into a tracking system, pass it on to a reviewer who then  
3 types it into some license document. With this process,  
4 once you loaded the disk in, it filled in all those  
5 documents. I think that has tremendous capabilities.

6 So the second bullet, I think the efficiency gains  
7 were not so much seen in a turnaround time for portable  
8 gauges but I think as a basic structure for other difficult,  
9 complex cases you will see that.

10 And it was more efficient for applicants. I think  
11 two things I would comment on that they told us was one is  
12 the online guidance was much easier to follow but also that  
13 it flagged items for them. If you look in the computer or  
14 even in the hard copy of the NUREG, it flags things to watch  
15 out for and that was a comment from them that they liked  
16 that.

17 So if I could have the next slide?

18 Another thing we felt the pilot showed us is that  
19 the consolidated guidance was useful and saved time. I  
20 mentioned before not having to search the some -- one time  
21 we looked, I think there's about 14 different sources of  
22 references for reviewers. What the beauty of this system  
23 showed us is you don't have to go out and look for them.  
24 Once we reviewed them and put them all together in one  
25 document, you can just point and click, so to speak, in the

1 computer and it's right there. Very handy for the  
2 applicants as well as the reviewers.

3 COMMISSIONER McGAFFIGAN: Could I ask, what do you  
4 do for the other 18 categories today, some of which have  
5 guidance documents that don't even reflect the rule?

6 DR. MALLETT: There are basically three steps.  
7 One is, the reviewer looks at the standard review plan that  
8 is out for those and then they go down the hall and talk to  
9 other reviewers to find out who knows is there anything new  
10 in this area, plus they also looked at -- Don Cool mentioned  
11 the TAR database, the technical assistant request database,  
12 to see if there was anything in that subject area. Plus you  
13 usually turn around behind your desk to some 14 volumes of  
14 things and leaf through them.

15 Now, the reviewers that are experienced, of  
16 course, they can do it fairly quickly. But the risk is you  
17 miss something. The beauty of this process is consolidating  
18 all the guidance now and keeping it updated in one location.

19 Did that answer your question?

20 COMMISSIONER McGAFFIGAN: Yes, thank you.

21 COMMISSIONER DIAZ: Isn't it possible, maybe I  
22 missed something, that as you -- as the process gets more  
23 complex, all you have to do is, you know, change your  
24 protocol and as you change your protocol you will be able to  
25 address more and different issues. I don't see where that

1 would be much more different from where you are now.

2 DR. MALLET: Well, there is a particular guidance  
3 document out there that says, for this type use that they  
4 want to use, these are some things that we have asked them  
5 for in the past. You might want to look at that.

6 For example, on a portable gauge user, you have a  
7 simple leak test that they can or cannot elect to do because  
8 most of those things are fairly straightforward radioactive  
9 materials. At a research facility, like a large broad  
10 scope, you might have something that's an alpha emitter that  
11 is a significant difficulty in leak testing. You might have  
12 a special procedure for that and so, for that, you might  
13 have that further guidance in that area.

14 COMMISSIONER DIAZ: So you will just bring in an  
15 additional protocol?

16 DR. MALLET: That's right. You can add to the  
17 basic, that's correct.

18 The second bullet I had there was there was a  
19 built-in benefit for consistency. What was -- we heard was  
20 both the applicants and reviewers had the same guidance  
21 looking at it at the same time, so you didn't have to deal  
22 with a difference in do you have the latest version, do I  
23 not have the latest version and so forth. And that was  
24 quite comforting.

25 And then last, I put a bullet of access to

1 guidance. I think a benefit we will gain from this we  
2 didn't realize is now when somebody calls in and says, I  
3 want to apply for a portable gauge application, we have a  
4 person go down the hall, collect that particular document,  
5 come back, have somebody put a label on it and mail it to  
6 them. With this system now, you can tell them, go to the  
7 home page, it's listed in the home page, and pull it up.  
8 And that was -- we see a great benefit from that in savings  
9 of administrative resources.

10 I guess I would summarize up by saying that from  
11 the regional perspective, the users liked it, the system, we  
12 proved it works, and we want it.

13 [Laughter.]

14 DR. MALLETT: I think Don Cool's going to talk  
15 about that date you've been asking her for.

16 But before he does that, I would like to turn it  
17 over to Mr. David Fogle from the State of Texas. Okay.

18 MR. FOGLE: It is an interesting segue to what I  
19 have. I appreciate that. Thank you.

20 CHAIRMAN JACKSON: Please speak into the  
21 microphone.

22 MR. FOGLE: To give you a better idea.

23 Good afternoon. Thank you. Chairman,  
24 Commissioners. To give you a better perspective from where  
25 I come from, I am, as the plate says, chief of the



1 Industrial Licensing Project for the Texas Department of  
2 Health, the Bureau of Radiation Control, where I've been  
3 doing materials licensing for the last 7 years. And a year  
4 and a half out, I was given a staff of four license  
5 reviewers to assist me. But my first bullet -- what I mean  
6 by participation barometer is that I've been involved  
7 whenever the NRC has asked for agreement-State participation  
8 in different events, several times. Back in 1992 in dose  
9 radiography, new rules were being altered at that time, and  
10 agreement-State input was sought at that time. Basically  
11 NRC said this is what we have, what do you think? Two years  
12 later in dose radiography it was still around, and they said  
13 well, we think this is what we want to do, what do you  
14 think?

15 Well, to say that what I did three weeks and a day  
16 ago is unprecedented, I don't think is taking it lightly.  
17 Basically what happened is that I showed up along with the  
18 other agreement-State participants to the Atlanta Region II  
19 headquarters, and within an hour of my arrival I was  
20 actually doing application entry into the relicensing  
21 program. Within an hour and a half to two hours I was  
22 completely knowledgeable on how to do entry review, QA  
23 review, and then also customer service. So I would venture  
24 to say that that is an unprecedented level of agreement-  
25 State input at that level.

1           My comment on performance base draft reg guide --  
2   pardon me, draft NUREG-1556, is that when it was first being  
3   authored there was agreement-State input represented from  
4   North Carolina, represented from Illinois, New Hampshire,  
5   and Washington were all involved in either the authoring or  
6   the editing of that NUREG. And many States have gone to the  
7   performance base guidance. Texas has not. This is supposed  
8   to be something I'm supposed to do with my copious free time  
9   is to produce guidance of this nature. It is an excellent  
10   idea, and the agreement States that were represented at the  
11   pilot do believe that this is the way to go.

12           On to the electronic licensing information. What  
13   did you say, yes, I want it. We're also very interested in  
14   seeing this adapted to gas chromatography, fixed gauging,  
15   and perhaps even in some medical applications. Most readily  
16   we're thinking of bone mineral analyzers, eye applicators,  
17   high-rate dose afterloaders.

18           This day and age I think we're all asked  
19   certainly, all asked to do more with less, and a good  
20   example of that is, and I have hard numbers, not with me,  
21   but back at the office, to indicate that from 1993 to  
22   current the number of licensing actions in the State of  
23   Texas has gone up 40 percent, while staff remain the same.

24           Well, what really gives there is time. It takes  
25   much more time to review the work that you have, and a

1 system like this would be not only a great benefit to the  
2 license reviewers, to the people who pay our -- the citizens  
3 of Texas -- but also to the licensee, our customer, because  
4 you're getting the product to them much faster, and  
5 certainly in the application of new license applications,  
6 they're waiting to hear from you so they can order their  
7 material, they can receive their material, they can use the  
8 radioactive material.

9 COMMISSIONER McGAFFIGAN: Madam Chairman.

10 CHAIRMAN JACKSON: Please.

11 COMMISSIONER McGAFFIGAN: This really goes back to  
12 our staff, I think, that technically if agreement States,  
13 individually or -- it would have to be individually, with  
14 their different computer systems, were to come to us and say  
15 I want this, is that going to be a big problem, or, since  
16 Lotus Notes underlies this, will that be relative -- perhaps  
17 be relatively easy? I mean, did we do this at all from  
18 the -- and are there any restraints in terms of any  
19 contracts we signed that limits our use of this to this  
20 agency? Or is it something that we can propagate to  
21 agreement States if there's compatible computer systems?

22 DR. COOL: I think there's a couple of pieces to  
23 those couple different parts -- parts of the question.

24 The infrastructure is standard system built on  
25 Powerbuilder and SY base. Lotus Notes doesn't actually

1 underlie this particular application set of screens. From a  
2 transferability standpoint to put it on a machine in Texas  
3 technologically should not be a problem.

4 I'm not sure this agency has ever actually thought  
5 through the steps that would be necessary to migrate out a  
6 system like this, but -- and someone from the CIO's office  
7 would probably be better placed to specifically answer this.  
8 I would not see a reason why when the system was developed  
9 and hardened, and I'm going to talk about where we have to  
10 go in a minute, that it could not be placed out. It might  
11 be that the optimal path would be to have the States who  
12 wish to do it work with the contractor perhaps with their  
13 own small contract to the same contractor to develop the  
14 right set of cross-references to the State's regulations and  
15 the State's version of the guidance document, because so  
16 many of this keys in and the Texas regs don't number the  
17 same way as the NRC regs or the Illinois regs, so there  
18 would be some tailoring to that, but conceptually it should  
19 not be a problem.

20 COMMISSIONER MCGAFFIGAN: It just strikes me as  
21 this could be a tremendous benefit to the agreement States  
22 where, you know, we've done most of the up-front pothole-  
23 riding-through, whatever -- and they get a fairly smooth  
24 product at the end of it.

25 DR. COOL: Exactly.

1           MR. FOGLE: To help answer that, I did take a copy  
2 of the entry application back with me to show some  
3 individuals that work with me where the NRC is going, and  
4 they were very excited, to say the least. So it's not a  
5 hardware issue at all.

6           CHAIRMAN JACKSON: You know, the possibility  
7 probably exists, either in the context of meetings of the  
8 Organization of Agreement States or perhaps through the  
9 regional offices for the NRC to conduct mini-workshops to  
10 perhaps not only share the information but let us say  
11 proselytize a little bit, so before I get to my closing  
12 remarks I urge you to consider.

13          DR. COOL: We are in fact scheduled to have a  
14 booth in the poster session at the conference of radiation  
15 control programs.

16           [Laughter.]

17          DR. COOL: We weren't calling it by quite those  
18 same terms, but in fact we intended to set up the system,  
19 show it, and run it on a longer basis than you can get one  
20 of those wonderful little 15-minute segues on the front  
21 stage.

22          CHAIRMAN JACKSON: Right. Very good.

23          DR. COOL: We'll move along to the next steps, and  
24 I want to try and address two areas here, first in terms of  
25 the guidance consolidation itself. As I mentioned a little

1 bit earlier, we see great benefit in this, and as you  
2 mentioned, Madam Chairman, there is a huge jump to be gained  
3 by having that guidance consolidated. There are a whole  
4 series of actions to get us to the point where the guidance  
5 will be consolidated for all of the various classes of  
6 licensees.

7 Step number 1 obviously is to go ahead and  
8 finalize the portable-gauge document. The public comment  
9 period has been completed. We've gotten public comments on  
10 it. We've subjected it to a test. I think we can move  
11 forward very rapidly within the next month or two to make  
12 that a final document and make that the basis for doing the  
13 portable-gauge licenses.

14 Immediately after that you can start to attack  
15 some of the very similar things, things like fixed gauges,  
16 self-shielded irradiators, a number of places that use  
17 sealed sources where devices are designed in already which  
18 are very similar for which this application can very quickly  
19 in terms of guidance development. A number of the  
20 applications are very similar to the sorts of things you  
21 would see in guidance are very similar, to move those very  
22 quickly during the first half of this year, by the end of  
23 the fiscal year have those drafts on the street.

24 We are moving forward already with radiography,  
25 using this approach to write the guidance that will be used

1 to implement the rule, which is still under OMB clearance  
2 and so yet has not even become effective. Our intention is  
3 to implement the new rule with the new approach to guidance,  
4 to move from there then into other areas where the  
5 regulations are relatively stable, they've undergone a more  
6 recent revision such as irradiators, well logging, some of  
7 those issues.

8 And then a little bit later in the cycle, down the  
9 line a year and a half, two years, to be bringing on the  
10 guidance associated with broad-scope applications, medical  
11 applications, for which we have ongoing contemplated  
12 significant changes to the regulatory structure such that  
13 you write the consolidated guidance document to go along  
14 with the new rulemaking rather than pumping resources into a  
15 consolidated document for something which we are undergoing  
16 simultaneous change. And to do that in the process where we  
17 would be looking at developing application screens from  
18 electronic systems to implement that which can be relatively  
19 readily facilitated by an electronic assistance during the  
20 comment period associated with each of those consolidated  
21 guidance documents.

22 So those pace along as you schedule them out, and  
23 we've in fact laid out a schedule within my operating plan  
24 to look at doing those taking into account those factors.  
25 We plan to move forward with that, adjust that as necessary

1 to respond to assessment directions. We're looking at that  
2 same system, underlying information, as being part of the  
3 basis for the generally licensed devices where we might go  
4 in a registration system.

5 This fundamental set of information is the exact  
6 same set of information you would want a registrant or  
7 someone else to have available to them. So we believe there  
8 is a great deal of crossover to that.

9 In terms of the electronic system, this gets back  
10 to some of the points that you brought up, in terms of  
11 portable gauges itself, continue to refine the application  
12 through what in the industry is referred to as beta testing.  
13 Yes, we identified some other glitches that need to be  
14 fixed.

15 There are some things that need to be done to make  
16 this a system that you have confidence in. There's  
17 essentially no security password controls, backups, that you  
18 build into it in the three or four-month developmental  
19 window that you want to have in place if you're using it as  
20 your processing system. Those need to be accomplished.

21 You need to continue to work through the process,  
22 let reviewers continue to use it. In a week's time you  
23 identify some things; you'll continue to find those sorts of  
24 things. As Bruce mentioned, we plan to use the sponsor  
25 approach. Region II will be the sponsor for this activity.



1 It'll reside in Region II. It'll be used in Region II to  
2 review applications that come in. We may send applications  
3 from the other regions down there to run them through that  
4 particular system.

5 We will have to have some workarounds. What do we  
6 do to make sure that we generate the right kind of  
7 documentation to put in the licensing file in order to  
8 accommodate the present system, the present requirements for  
9 having files and backups that meet archive requirements. We  
10 will continue to do those things over the next few months.

11 So one answer to your question is we will be  
12 processing applications. Once the document is final and  
13 that becomes the baseline for licensing portable gauges, we  
14 will be doing at least some of them that way as we continue  
15 to harden-down the system.

16 As I mentioned with other types of licenses,  
17 develop the associated application screens as you bring each  
18 one of those consolidated documents along. As you  
19 mentioned, it makes no sense to electrify that which you  
20 haven't already gone through and consolidated and pulled the  
21 information together, looked at what the questions are that  
22 you really have to ask. So that's our process, our plan to  
23 bring each one of those along as we run through that  
24 guidance system.

25 In terms of bringing it on line as a network

1 application, that obviously has to pace along with where the  
2 agency is and the CIO is in terms of the underlying  
3 information management system, document control systems,  
4 electronic document systems, code name ADAM. Our  
5 understanding, we've been meeting with the CIO, Carl met  
6 with Mr. Gallante this morning, is that the CIO will be  
7 selecting the fundamental software packages probably in the  
8 next 90 days or so. I'm not sure how firm a number that is.

9 DR. PAPERIELLO: I won't hold him to that number,  
10 but we had a discussion, it's in that time frame, that I  
11 believe they're going to have the underlying software that's  
12 going to support ADAM identified.

13 DR. COOL: Once we have that software identified,  
14 we can look and see whether we have to make any changes in  
15 order to be able to be compatible with the infrastructure.  
16 And then as those systems are brought on line, we can also  
17 bring on line to a greater extent the system that we have  
18 developed. And so that will be a hand-in-hand process which  
19 we will need to walk down with them as the infrastructure is  
20 available to use it, as the network capabilities are  
21 available, as we have hardened and secured it such that it  
22 meets the standards, it has the proper kinds of backups that  
23 we don't lose the information, that it becomes an online  
24 system. And so the answer to that question is I can't  
25 really give you a date for being able to do that, because

1 that will be a hand-in-hand process as we select software  
2 test systems, validate systems out, and move in that  
3 direction.

4 CHAIRMAN JACKSON: Okay. I have a followup  
5 comment and a couple of questions.

6 I agree with you, when you talk about refinement  
7 of the information system from the point of view, you  
8 mentioned no security, no password controls, no backup.  
9 Those are very serious issues that one has to deal with as  
10 up-front as one can.

11 But there's a difference, I would think, between  
12 that and what I'll call iterative performance improvements,  
13 where you may have an already usable or good system, and it  
14 strikes me that that kind of iterative performance  
15 improvement is something that IRM or the CIO ought to be  
16 doing for you, and not necessarily have it done by the  
17 resources of people who are materials licensing people. It  
18 just strikes me that it's a question of how resources get  
19 used.

20 I had a couple of followup questions on your SECY.  
21 You had an attachment to that SECY that showed that as far  
22 as training plans are concerned the staff intends to conduct  
23 a BPR of the administrative support functions within NMSS,  
24 and NMSS was mentioned also in SECY 96-205 last September.  
25 And this is a good, may be a good idea, but now my

1 understanding though is that the regions perform basically  
2 the materials licensing function, not the headquarters. And  
3 so the question is, how will this new effort relative to BPR  
4 of administrative support and NMSS affect continued progress  
5 toward licensing process reform, which is what our goal was  
6 here, and it was the original objective.

7           You mentioned a kind of pacing in terms of dealing  
8 with fixed-gauge, self-shielded irradiators, radiography  
9 licensing, well-logging, and broad-scope applications. And  
10 so the real issue becomes one of, if it's a question of  
11 expenditure of resources, that you keep the momentum going  
12 in the licensing area, not that it's, you know, that you  
13 don't want to obviously streamline administrative support  
14 functions as much as you can, but what the Commission has  
15 supported you in doing is streamlining the licensing,  
16 materials licensing process.

17           And so -- but my questions are not meant to  
18 question the wisdom net net of streamlining or BPRing  
19 secretarial or administrative support functions, but given  
20 the bumpy road we've gone along to get to where we are, it's  
21 important that we don't lose that momentum, and that we  
22 don't divert resources that could be used to help the  
23 regions do their regulatory function, you know, unless this  
24 is all part of an integrated picture. And so that's my one  
25 caveat about that.

1 Commissioner Rogers, you have some questions.

2 COMMISSIONER ROGERS: Well, we had a lot of good  
3 words said today and a lot of wisdom --

4 [Laughter.]

5 COMMISSIONER ROGERS: -- folks, and I'm not going  
6 to add to that. I think that they're all good things,  
7 they're all things that have to be kept in mind as you  
8 proceed. I'd just like to say that I, in reflecting on this  
9 project, I really want to compliment NMSS and Dr. Paperiello  
10 for getting started on it, and this was really the first  
11 major BPR effort at NRC, and I think that it so far looks  
12 like it's being successful and being very carefully and well  
13 executed. And I hope we can learn lessons from it that will  
14 allow us to take the same kind of critical review of all of  
15 our other licensing activities in other areas.

16 Thank you very much.

17 CHAIRMAN JACKSON: Commissioner Dicus.

18 COMMISSIONER DICUS: It follows up a bit I think  
19 on the Chairman's question or statement about overall  
20 resources. The comment is made in the SECY paper I believe  
21 it is that the verification of the information that's  
22 presented in this format, together perhaps with other  
23 formats, but is going to have to be done in the inspection  
24 part of the program.

25 And some of the language would imply, or perhaps

1 suggest, that while there may be a savings for the agency,  
2 not to mention licensees, et cetera, but a savings for the  
3 agency, perhaps in FTE, time, whatever, at some point, it  
4 could be lost because it's going to overload the inspection  
5 part of the program. And I just want to raise this to make  
6 you aware of it, and if you had any thoughts on it.

7 DR. COOL: Well, we're certainly aware of that  
8 particular issue. It's been an issue that we spent actually  
9 a lot of time talking about where do we go and what is the  
10 tradeoff, because there are two kinds of touches. There are  
11 inspection touches, and there are licensing touches. We in  
12 fact as part of the routine program can do an initial  
13 inspection of each license that we issue. This would change  
14 the list of things that they look for. But fundamentally I  
15 don't believe it would change significantly the amount of  
16 time we would actually spend, because we put a great deal of  
17 priority on having an initial inspection out there shortly  
18 after they've had the material to make sure that the set of  
19 commitments they've given, whether it's old system or new  
20 system, have actually been translated into a program. And  
21 that becomes equally important irrespective of whether  
22 they're doing it under this particular guidance, 1556, or  
23 whether it's under the older guidance.

24 CHAIRMAN JACKSON: Do you have a question,  
25 Commissioner Diaz?

1           COMMISSIONER DIAZ: Yes. Follow along these same  
2 comments, but it seems to me like you have taken two big  
3 steps already. One is develop the consolidated guidance  
4 document, that was certainly good, and then going to the  
5 electronic processing. But we don't want to let you off so  
6 easy, so we'll ask the next question. What provisions have  
7 you made or have you been considering in taking the next  
8 step in making this into a true expert system and providing  
9 full Internet access to handle licensing.

10           DR. COOL: Let me answer that in two halves, the  
11 latter first. We spent a great deal of time thinking about  
12 Internet access. That's very much the way we would like to  
13 be able to go as the infrastructure allows the acceptance of  
14 an application from that mode and we can process it, handle  
15 it correctly, retrieve it and archive it. We have already  
16 taken the steps and plan to have the steps of having the  
17 documents available on the Internet for someone to use and  
18 download. So it is a logical next step as we have the  
19 infrastructure availabilities to allow them to fill it out  
20 as Commissioner McGaffigan was dealing with soccer, or  
21 buying tickets from American Airlines or whomever.

22           [Laughter.]

23           DR. COOL: The second question, we have also  
24 thought about some, although not as much yet. We are still  
25 at this point putting the reviewer in the loop looking at

1 the application.

2 Now, a logical step is, as we gain some more  
3 confidence, letting the computer look and see if they have  
4 clicked that they have committed to the standard condition,  
5 letting the computer only flag those pieces for which they  
6 have requested a special provision or otherwise. We have  
7 not taken that step yet but the system does not preclude  
8 adding to it, probably relatively simply, a quick scan by  
9 the system saying, check, check, check, check, go look at  
10 items 5 and 26.

11 COMMISSIONER DIAZ: That's precisely the point.  
12 It seems to be a very simple thing to do. Why not take a  
13 risk and go and do it while you're taking these steps?

14 CHAIRMAN JACKSON: It's a question of where you  
15 start, where they're coming from.

16 COMMISSIONER McGAFFIGAN: Could I just ask, as you  
17 go down, in this case, you don't have any technical diagrams  
18 that would be part of a normal license application for a  
19 portable gauge but in the other 18 areas, I am sure in the  
20 reactor world we have very, very complex documents that are  
21 volumes and lengths at times. But in your world, what is  
22 the worst? Of the 18 categories yet to be done, which will  
23 be the hardest to apply this paradigm to?

24 DR. COOL: Probably the big, broad-scope programs  
25 where the license is covering licensee programs of radiation



1 protection and bioassay and for which there are very few  
2 things you can just say, I commit to do X. Because the  
3 license is issued for programs.

4 And in between that are a variety of things in  
5 medical areas where you need to look at certain procedures  
6 or some of the more complex isotope productions, things like  
7 the productions of sealed sources or devices -- sealed  
8 source device reviews, for example, where you've got a lot  
9 of detailed technical drawings and have to go through a lot  
10 of specifications still require a great deal of interaction  
11 where you can't simply check some things off. So you've got  
12 a whole range. We picked that on the bottom end and there  
13 are several other categories. Even though they may be more  
14 risky like radiography, for which this approach covers  
15 virtually all of it.

16 COMMISSIONER MCGAFFIGAN: Right. But is your  
17 intent to be flexible? I mean, as you go through the other  
18 18 categories and this paradigm doesn't work perfectly  
19 you'll say, okay, it doesn't work and we're going to do  
20 something -- we'll stick with paper, we'll get the  
21 consolidated guidance done but we'll stick with paper? Or  
22 what is the intent as you go forward?

23 DR. COOL: The intent is to apply it as it works.  
24 So even for those pieces of program where you may need to do  
25 detailed reviews in certain areas, there are probably other

1 areas for which this can assist. Name, address, contact and  
2 some other things still always come up; you might as well  
3 use the system to the extent you can use it but without  
4 being slavish to it.

5 DR. MALLET: Don, let me add to that, I think  
6 what you'll find, though, what I learned this morning,  
7 something new, is there is a section of this now that allows  
8 the reviewer to comment on their basis for why they made a  
9 certain decision and it is documented right into the record  
10 as something we've been trying to achieve for a long time  
11 and I think you'll find reviewers will like the ease of  
12 doing that and will gain benefit in those more complicated  
13 cases having that in there.

14 COMMISSIONER MCGAFFIGAN: Well, my final comment  
15 is only that I don't know how we got into the situation  
16 where our guidance was as you described it when this process  
17 started but I commend every effort to fix it and use  
18 whatever flexibility you need to fix it. It strikes me we  
19 should not do new rules if we can't see within a finite  
20 period of time a way to get reg guides out and standard  
21 review plans and all that sort of stuff to implement the  
22 rule. And the resources have to be there. You know, you  
23 have to come to us as a commission and say the resources,  
24 you know, there is a mismatch here and we have to fix it.

25 And so I don't want to revisit the past but where

1     you guys started from is obviously not an acceptable place  
2     to start from and I am glad you are trying to get out of it  
3     as rapidly as possible.

4             CHAIRMAN JACKSON: I think, if I can speak, they  
5     are starting from a point of, particularly in the materials  
6     area, you know, there is a lot out there that has to be  
7     fixed and within the last year-and-a-half to two years the  
8     Commission has given the staff explicit guidance that is  
9     they bring forward new rules. They should be bringing  
10    forward the regulatory guidance, as well as standard review  
11    plans that go along with those rules so as to not end up in  
12    this kind of lead/lag situation. So the guidance from the  
13    Commission is already there in that particular context.

14            MR. THOMPSON: That's right and that has been the  
15    practice. It is the old rules that were there, probably  
16    from the time I started working for the NRC, that have  
17    created a lot of the problems that we find today that we are  
18    addressing.

19            CHAIRMAN JACKSON: I think Dr. Paperiello had an  
20    itch?

21            DR. PAPERIELLO: We can consolidate the guidance  
22    within this framework. There is no problem there. For the  
23    complicated receipts, where we have shielding that we have  
24    to calculate or structural issues that way, yes, that's  
25    going to be. But the computer helps you. The computer

1 forces people to walk through every step that has to be  
2 submitted and make sure the applicant, not only that we re-  
3 dot the "i" and cross the "t" but by providing it to the  
4 applicant who sees exactly what the reviewer is going to  
5 look at forces the applicant to do the same thing, so it is  
6 a discipline in the process.

7 CHAIRMAN JACKSON: Thank you.

8 The Commission would like to thank the staff and  
9 Mr. Fogle, the representative from the Texas Agreement State  
10 Program, for this briefing. It has been very informative  
11 and useful and the Commission particularly appreciates the  
12 agreement states' perspectives as we reform our licensing  
13 processes because any improvements or efficiencies that the  
14 staff makes in NRC's business practices we hope could be  
15 easily adapted and accepted by the agreement state programs  
16 with appropriate modifications. And particularly if we can  
17 resolve issues once in a manner that is agreeable to both  
18 the federal and state regulators, we will end up minimizing  
19 the cost to our citizens and to our licensees as the case  
20 may be.

21 But what the staff has shown today though is that  
22 through the successful results of the BPR pilot program, the  
23 materials licensing processes can be reformed to provide  
24 greater efficiencies without a loss that you've told us of  
25 technical quality or safety and, in fact, the pilot program

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1 seems to demonstrate the license applicants' satisfaction  
2 with the process, which is a significant achievement for a  
3 regulatory agency. So I am cautiously optimistic that the  
4 improved efficiencies and customer satisfaction can be  
5 propagated and continued over longer time periods if the  
6 program is implemented NRC wide as well as within your  
7 particular area, Dr. Paperiello.

8           And so I think we are all urging the staff to  
9 proceed rapidly particularly with the implementation phase  
10 to the greatest extent you can. But aside from the  
11 program's, the pilot program's success, there has been a  
12 fair amount of resources invested and -- and the issue  
13 becomes what the scale factor is in terms of going. What do  
14 we take away as lessons learned? And so the next year will  
15 be a critical time for this project and it's important to be  
16 able to report some tangible results to the Commission. And  
17 so in that case, then, there has to be a movement beyond  
18 process and a focus on implementation and there was  
19 something that Dr. Mallett mentioned that I think are good,  
20 overarching metrics. We have talked a lot about them. One  
21 is consolidation of guidance, consistency and resource  
22 savings.

23           I think falling out of this, and I would also say  
24 customer satisfaction. And you can think of customers both  
25 in the sense of license applicants, licensees as well as

1 agreement states and our own regional offices. I mean, they  
2 are our internal customers. And I would just urge you to  
3 focus particularly on the issue of the role of what I call  
4 work process optimization as we are making or as a  
5 prerequisite to information technology investments. And  
6 also that we move along to creating, as Commissioner Diaz  
7 has said, a truly more expert system but particularly one,  
8 and you spoke to this, that provides the appropriate  
9 Internet access.

10 We know we have to deal with things like security  
11 and controls of various kinds as we do that. But it is  
12 important if we really want to move beyond mailing out  
13 diskettes but actually have people do it on line.

14 So again, the Commission commends the staff and  
15 the agreement states on the success of the pilot program and  
16 we thank you for the briefing. And so unless there are  
17 further comments by the commissioners, we are adjourned,  
18 just on time.

19 [Whereupon, at 2:32 p.m., the briefing was  
20 concluded.]

21  
22  
23  
24  
25

CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON BPR PROJECT ON REDESIGNED  
MATERIALS LICENSING PROCESS - PUBLIC  
MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Tuesday, February 18, 1997

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: John Ulmer

Reporter: Jon Hundley

# Business Process Redesign Project



## Commission Briefing

*Presented by:*

**Dr. Carl Paperiello**

**Dr. Donald Cool**

**Dr. Patricia Rathbun**

**February 18, 1997**



# Agenda

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- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| ✓ Introduction                    | Dr. Carl Paperiello               |
| ✓ NMSS report on Pilot Test       | Dr. Donald Cool                   |
| ✓ Regional perspectives           | Dr. Bruce Mallett                 |
| ✓ Agreement State<br>perspectives | Mr. David Fogle<br>State of Texas |
| ✓ Next Steps                      | Dr. Donald Cool                   |

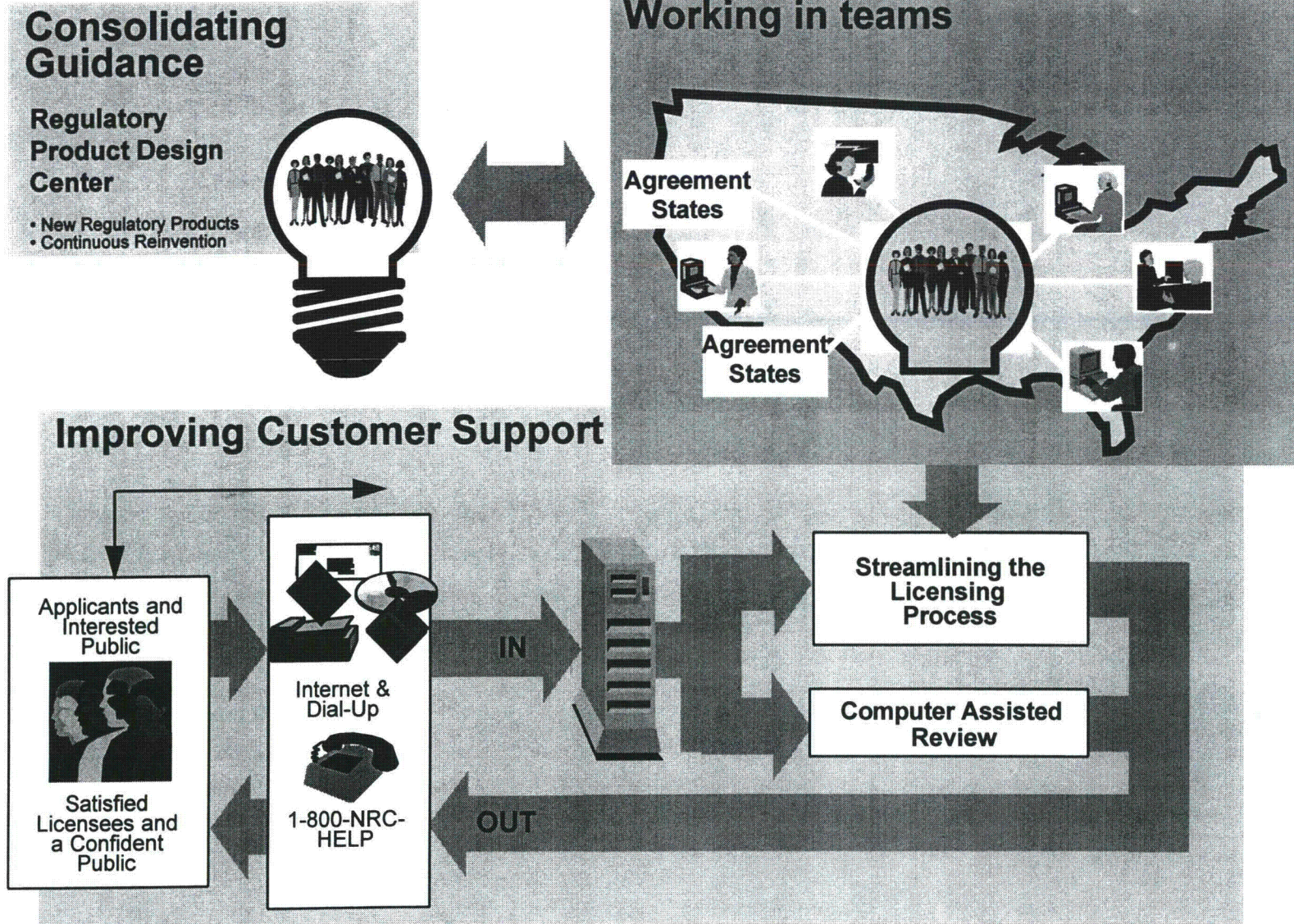
# History

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- ✓ Briefed Commission June 1995
- ✓ Briefed Commission July 1996
- ✓ SRM issued July 1996
  - Detailed breakout of actions
  - Commissioners visit to the RPDC
  - Pilot

# The Materials Licensing Process Vision

This vision was created in the Spring, 1995, by the Phase I NMSS BPR Team





# Key BPR Recommendations

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## **No Automation**

One time license extension

Change license duration to 10 years

Move to more performance-based license  
(fewer amendments)

## **Semi-Automated**

Consolidate and revise the guidance

## **Full Automation**

Develop the  
licensing information  
system

# Pilot Objective & Scope

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- ✓ Objective: determine the feasibility of performing computer-assisted review of Portable Gauge license applications
- ✓ New Portable Gauge license applications only
- ✓ Tested technical & QA review subprocesses
- ✓ Used redesigned consolidated guidance (Draft NUREG-1556, Volume 1, dated 9/96)

# Pilot Process

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- ✓ Iterative development of licensing information system
- ✓ Headquarters and regional testing

# Iterative Development

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- ✓ Technical staff working in collaboration with the Information Technology (IT) team, using Rapid Application Development
- ✓ Using IRM-established standards for hardware and software products and technology
- ✓ Results: a working model of the prototype licensing information system and business practices

# Headquarters Testing

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- ✓ Used recently issued Portable Gauge licenses as source of test applications
- ✓ Tested the electronic information system prototype to be used for reviewing license applications
- ✓ Results: demonstrated viability of information system and the supporting business practices



# Regional Testing

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- ✓ Conducted in Region II
- ✓ Participants included RII, RIII, RIV, HQ, and Agreement States (GA, IL, TX) representatives
- ✓ Provided training to participants

## Regional Testing (cont.)

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- ✓ Used modified licensing information system prototype
- ✓ Used on-line consolidated guidance for application preparation and review
- ✓ Used 4 actual applications for new licenses and 4 mock applications from gauge vendors (used consolidated guidance)

## Regional Testing (cont.)

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- ✓ Performed computer-assisted and paper-based review of actual applications in parallel to ensure safety
- ✓ Tested components of several key roles proposed in the new process: Customer Service, Technical Reviewer, QA Reviewer, and Manager
- ✓ Conducted additional testing of application preparation software by Regional and Agreement State participants

# Pilot Test Results

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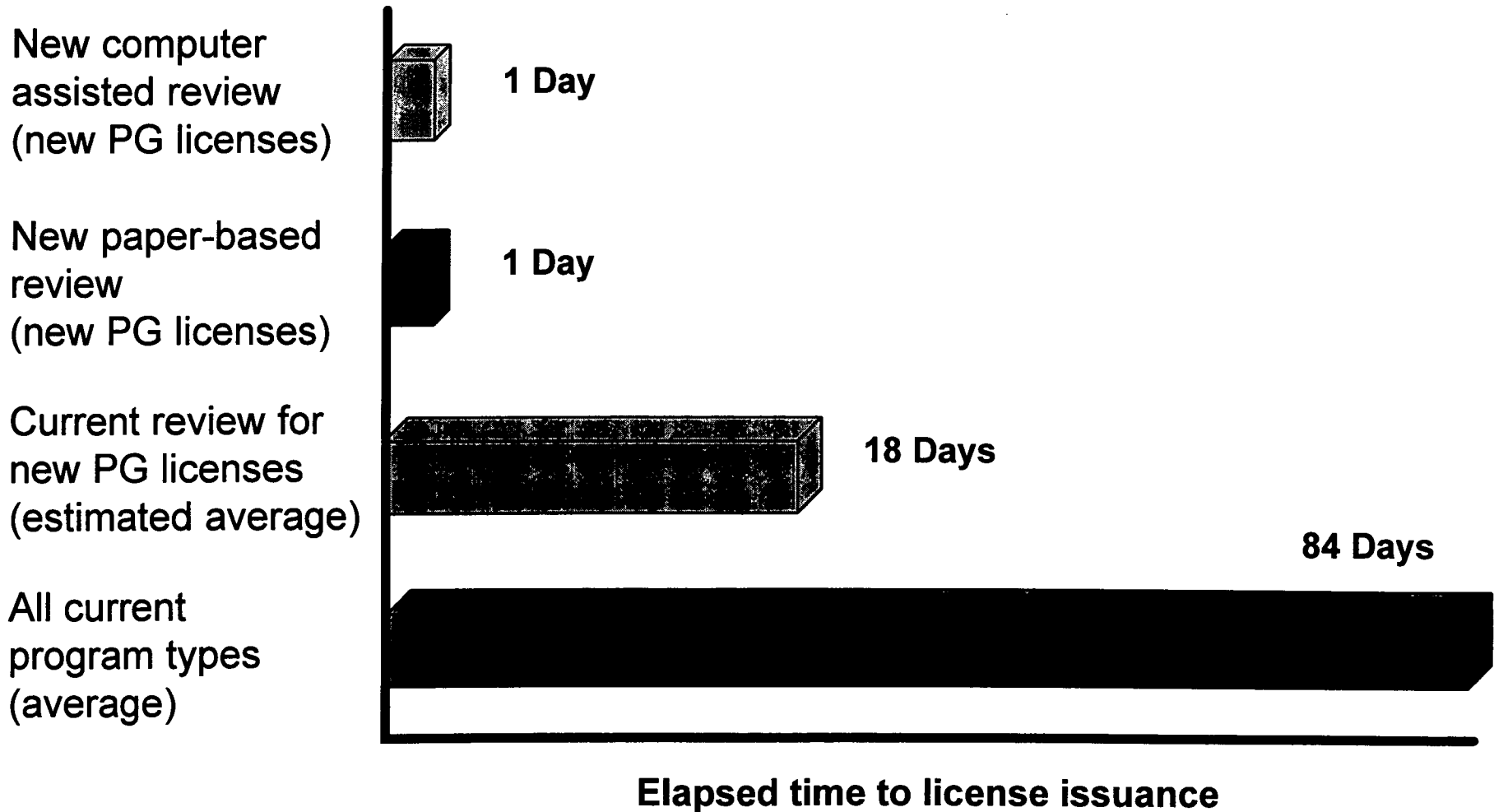
- ✓ Received positive feedback on electronic licensing information system and consolidated guidance
- ✓ Demonstrated speed, consistency, and accessibility of on-line guidance

# Test Results (cont.)

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- ✓ Demonstrated computer-assisted and paper-based review processes are technically equivalent & provide the same level of safety
- ✓ Demonstrated the ability to produce paper copies of licensing materials, enabling transition from the current system
- ✓ Demonstrated that proposed average cycle time of 12 days is attainable

# Licensing Process Comparison



# **Regional Perspectives**

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**Dr. Bruce Mallett**  
**Director DNMS, Region II**

# Regional Perspectives

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- ✓ Proved the concept will work for the licensing process
- ✓ Efficiency gains will be in the review process for more complicated licenses
- ✓ Process was more efficient for applicants



# Regional Perspectives (cont.)

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- ✓ Consolidated guidance was useful and saved time
- ✓ There was a built-in benefit for consistency by applicant and license reviewer
- ✓ Access to guidance documents in electronic database will save resources

# **Agreement State Perspectives**

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**Mr. David Fogle  
Chief, Industrial Licensing Project  
State of Texas**

# Agreement State Perspectives

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- ✓ Participation barometer
- ✓ Participation in this project
- ✓ Performance-based Draft NUREG-1556, Volume 1
- ✓ Electronic licensing information system concept applied to the States

# Next Steps

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- ✓ Continue guidance consolidation
  - number of licensees
  - regulation development
  - implementation of DSI directions
  
- ✓ Continue refinement of information system
  - IT application based on consolidated guidance for each program type
  - implementation paced by NRC infrastructure development