

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON BUSINESS PROCESS
REENGINEERING FOR MATERIALS LICENSING
AREA - PUBLIC MEETING

Location: Rockville, Maryland

Date: Thursday, May 11, 1995

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2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON BUSINESS PROCESS REENGINEERING
5 FOR MATERIALS LICENSING AREA - PUBLIC MEETING
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8 Nuclear Regulatory Commission
9 One White Flint North
10 Rockville, Maryland
11

12 Thursday, May 11, 1995
13

14 The Commission met in open session, pursuant to
15 notice, at 10:00 a.m., Ivan Selin, Chairman, presiding.
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17 COMMISSIONERS PRESENT:
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19 IVAN SELIN, Chairman of the Commission
20 KENNETH C. ROGERS, Commissioner
21 E. GAIL de PLANQUE, Commissioner
22 SHIRLEY A. JACKSON, Commissioner
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1 STAFF SEATED AT THE COMMISSION TABLE:

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3 JOHN HOYLE, Secretary of the Commission

4

5 KAREN CYR, General Counsel

6 HUGH THOMPSON, Deputy Executive Director, NMSS and

7 Operations Support

8 DR. CARL PAPERIELLO, Director, NMSS

9 DR. PATRICIA RATHBUN, BPR Core Team Leader, NMSS

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P R O C E E D I N G S

[10:00 a.m.]

CHAIRMAN SELIN: Good morning, ladies and gentlemen.

It's my pleasure to note that this will be the first meeting at which Commissioner Jackson will attend, our newest Commissioner and our prospective next Chairman.

Welcome, Dr. Jackson.

COMMISSIONER JACKSON: Thank you.

CHAIRMAN SELIN: This morning the Commission is to receive a briefing from the staff on the use of business process reengineering to formulate fundamental changes in material license activities. When we have phrases like "business process engineering," and when we have Taylor gone and Thompson here, we know we have to listen very carefully. So, I want you to know we're going to be paying very close attention.

MR. THOMPSON: You picked a good one to come to for your first Commission meeting.

CHAIRMAN SELIN: The purpose of this effort is to identify new and individual approaches to material licensing in order to lessen the adverse impacts that these effects have on our licensees while maintaining an adequate level of health and safety. In fact, the Commissioners have felt a certain unease that we have not -- it's not been evident to

1 us exactly what the risk benefit calculations are that would
2 lead to the areas that we would license carefully and the
3 other areas that we don't license at all. So, this is a
4 very welcome effort.

5 We know it's not going to be easy to make
6 fundamental changes. The agency has been doing a lot of
7 these things for a long time. NMSS in particular, because
8 of the highly diverse kind of work that it does, has been
9 very highly decentralized and there are many benefits to
10 that, but inevitably there are practices from branch to
11 branch and division to division that don't compare so
12 consistently with each other. So, this is an effort that we
13 welcome.

14 We look forward to the briefing to provide us with
15 some initial recommendations that will serve to facilitate
16 change and we'd be particularly grateful if in your
17 presentation today, Mr. Thompson, Mr. Paperiello, and Ms.
18 Rathbun, that you pointed out where you feel that you're
19 just ready to do this and you want to keep us informed in
20 where guidance and reaction would be needed. I'm sure it
21 would be welcome throughout, but it might be needed more one
22 place than others.

23 MR. THOMPSON: It's always welcome.

24 CHAIRMAN SELIN: Commissioners?

25 COMMISSIONER ROGERS: Just you threw me a little

1 curve here in that the R in DPR is redesign in most of this,
2 although I did see reengineering creep up someplace in it.
3 I've always had a little problem with reengineering
4 something that hasn't been engineered in the first place.
5 So, I like redesign.

6 DR. PAPERIELLO: I might add I'm not quite sure it
7 was designed in the first place either. It evolved.

8 MR. THOMPSON: Evolved, that's right.

9 Thank you, Mr. Chairman. As you know, the
10 Commission did approve the staff's information technology
11 strategy in 1993 and one fundamental part of that was to
12 reevaluate a number of our systems and before we developed
13 information systems to make sure that that system was
14 automating a process that was effective and efficient. This
15 is the second such BPR effort we've had underway and by far
16 I believe the most effective and the presentation today has
17 been one that I have been particularly enthusiastic about
18 because it has both integration of headquarters, the field
19 operation activities, a real program licensing activity that
20 we are doing, and identifies what I believe are some real
21 effectiveness in improving and streamlining the process that
22 we have underway with respect to the material licensing
23 program.

24 Dr. Paperiello will give the briefing and Pat
25 Rathbun, Dr. Rathbun, who is the head of the core team, I

1 think have done an outstanding job and I think Dr.
2 Paperiello will introduce briefing the members of the team
3 who represent the regions and Headquarters, a number of
4 Headquarters offices. I think it's just the type of
5 activity and effort that really we are taking advantage of
6 the information technology capabilities that we have.

7 With that I'll turn it over to Dr. Paperiello.

8 DR. PAPERIELLO: Yes. Good morning. Thank you.

9 Can I have the first slide, please?

10 [Slide.]

11 DR. PAPERIELLO: Last November we initiated a task
12 to take a look at how we regulate material license
13 activities with a view to automate the process and save
14 resources while improving the timeliness. The process has
15 led us to go well beyond automation to propose a fundamental
16 change in material licensing program. As shown on this
17 slide though, the materials program is integrated with other
18 -- it's not just licensing. It includes inspections,
19 regulations, data evaluation and incident response. I think
20 these changes that we envision are going to have major
21 impacts on how we do inspections and the way we regulate.
22 One of the things that I do propose to do starting near the
23 end of this year, once we get a lot of these initiatives
24 underway, is apply the process to the inspection program
25 where there will be a lot of opportunity for savings.

1 Let me describe the problem. If I take a look at
2 data that I have for the last ten years, the materials
3 licensing casework has amounted to about a half a year's
4 work. We've always had a half a year's work in the hopper,
5 2,000 cases. It peaked in 1991 at 3,000 cases due to
6 amendments that were filed in response to the full fee
7 recovery rule and financial assurance rule. Currently we're
8 at 1,800 cases and we're slowly coming down. However,
9 progress is very slow. The resources for the current
10 program are going to be reduced by roughly a third over the
11 next several years in downsizing. As I've noted in various
12 earlier reports to you, particularly in the medical program
13 and in phase 1 of the regulatory impact survey, licensing
14 guidance is out of date. It receives the lowest priority in
15 the budget and much of what is issued is issued in a very ad
16 hoc and not a formal way. And based on my recollection, at
17 least when I was a materials section chief in the late '70s,
18 and the recollection of the senior staff at NMSS to backlog
19 when the whole program was here in Headquarters and there
20 was no regionalization was even worse than it is now.

21 Traditionally, the way the large caseload has been
22 managed is we've given priority to applications for new
23 licenses and amendments and we let renewals just drift. A
24 licensee can remain under timely renewal for several years.
25 Legally they can remain under timely renewal and function

1 forever. To keep the backlog numbers as low as possible,
2 various people do certain things. For example, when you do
3 renewals, you do the easy ones. You don't do the hard ones.
4 Subsequently, when you sit down with a renewal application
5 that's three or four years old, so much of the regulations
6 have changed and the guidance has changed that you wind up
7 either issuing a 20 page deficiency letter, which I've seen
8 when I was in the region, or you literally have to ask the
9 licensee to completely resubmit the application. Of course,
10 that costs you money and it has cost them money. Of course,
11 the situation is aggravated when our licensing guidance may
12 be 10 or 20 years out of date.

13 In the past few years, we have made progress in
14 the backlog. That's why we're down to 1,800, by diverting
15 resources from the inspection of low priority licensees but
16 progress has been slow, but resources will shrink and
17 nothing is being done to maintain licensing guidance.

18 The program has got to be changed to bring it into
19 line with the available resources. I thought that I would
20 use automation because I knew of very inefficient procedures
21 that were being used when I was in Region 3. I was
22 introduced to the concept of business process reengineering
23 by IRM and this is the path that we took.

24 Can I have the next slide?

25 [Slide.]

1 DR. PAPERIELLO: I'd like to recognize the people
2 who are on the team. The core team who did most of the work
3 was headed by Pat Rathbun, guided by the business process
4 reengineering consultants from Computer Sciences
5 Corporation.

6 Could I ask the people here that are on the team
7 to stand up? Thank you.

8 If you look at the list, they are staff people.
9 One supervisor and the rest were staff people from here and
10 NMSS and the regions. These are the people who do the work.
11 This is the heart of business process reengineering. You
12 get the process reviewed by the people who actually do the
13 work. However, there were two oversight committees, a
14 steering group which I headed and made up of managers in
15 both the region and Headquarters offices at my level, and an
16 executive team made up of the NRC senior executives, the
17 office directors. Their function was to review and guide
18 the core team's work. They provided a very essential
19 function. For example, the discussion I have here on fees
20 was Jesse Funches as part of the steering committee. The
21 team said fees are a problem or a bottleneck in reviewing
22 licenses, but he and his staff were the ones that provided a
23 solution. So, there was a lot of help provided to the core
24 team.

25 Next slide, please.

1 [Slide.]

2 DR. PAPERIELLO: This is what we thought the
3 process was when we started, an eight step process and we
4 could automate it.

5 Next slide.

6 [Slide.]

7 DR. PAPERIELLO: The team did a complete systems
8 analysis of the actual process by interviewing everyone
9 involved in the process both in Headquarters and the
10 regions. This icon represents the actual as-found process.
11 Now, there is a detailed description in a manual we put
12 together on the process of what each of these things was,
13 but it was much more involved than the eight steps. It's
14 characterized by a large number of handoffs and players,
15 particularly with regard to administrative matters such as
16 fee collection, information entry into the license and
17 tracking system and ensuring entry of all relevant documents
18 into the docket files and NUDOCS. In spite of this, as the
19 Inspector General reported I think about a month ago to you,
20 intermediate decisions, that is the basis for decisions by
21 reviewers to seek additional information from applicants
22 isn't documented.

23 Can I have the next slide?

24 [Slide.]

25 DR. PAPERIELLO: The team found on the average

1 that there were 54 handoffs for an average licensing action
2 that took about 84 days. Now, 84 days may not sound too
3 bad, but remember most of these are amendments. They should
4 be the simplest thing we do. When you start taking a look
5 at how long it's taking for us to do renewals, you start
6 dealing with years.

7 But anyway, of this 84 days, and again it's an
8 average, only 1.8 days were spent in actual processing and
9 82.2 days were dead time. Paper was in transit or in a
10 queue. Our goal is the creation of a process such that the
11 handoffs and cycle time are drastically reduced as shown and
12 these goals are meant to be stretching.

13 As an aside, if you read the book on reengineering
14 a corporation, when you start finding a lot of handoffs and
15 a lot of paper being moved around, you have a process that
16 is ideal for reengineering.

17 Next slide.

18 [Slide.]

19 DR. PAPERIELLO: This is the new process. Now,
20 I'm going to go into the various parts of the process later,
21 but this process model that has been put together uses
22 state-of-the-art technology. But every step of it, all the
23 technology and processes being used, you can find in another
24 federal agency or in some private corporation within an hour
25 and a half drive of this office. The longest is an hour and

1 a half to the FCC up in Gettysburg. Most of it is here in
2 Montgomery County.

3 Next slide.

4 [Slide.]

5 DR. PAPERIELLO: However, to streamline this, it
6 forced us to reconsider how we regulate material licenses.
7 After 40 years of regulation, uses of radioactive material
8 have matured. There exists a large infrastructure of people
9 and institutions experienced in the safe use of radioactive
10 material and most retuning uses, such as gauging, laboratory
11 biological tracer studies and diagnostic nuclear medicine
12 pose only a limited hazard to the user or the public. We
13 believe that most uses by qualified individuals can be
14 safety regulated through performance requirements, most of
15 which are already in existing NRC regulations.

16 We believe the current practice of reviewing and
17 making binding requirements that detail -- the licensees
18 submit their how-to procedures. This is how many times I'm
19 going to turn my survey meter on or I'm going to use a
20 survey meter that has this sensitivity and this range. I'm
21 going to do a survey once a week or once every other week or
22 whatever. We review those. We make those procedures
23 through tie-down conditions a binding legal requirement and
24 we believe that practice can greatly be reduced. If we do
25 that, then we have fewer license conditions and a license

1 with fewer conditions doesn't need to be renewed. The
2 problem is every time the licensee wants a change, they have
3 to submit an amendment request. We amend it and add that as
4 a condition on their license as the license grows and it
5 gets to be multiple pages and you almost have to do a
6 renewal periodically to clean out all the debris so
7 everybody can figure out what the licensee has to do.

8 So, if you say, "Look, you have to meet dose
9 limits. You have to meet contamination limits," and I'm
10 thinking of mostly the simpler ones where people know how to
11 do this sort of thing, we won't have to amend the license
12 and unless there's a major change in the license, we really
13 don't have to renew it. So, we can reduce the frequency of
14 a licensing error interaction with the licensees if we make
15 those changes.

16 Could I have the next slide?

17 [Slide.]

18 DR. PAPERIELLO: Now, how are we going to do it?
19 We all know that resources are tight and are going down. We
20 propose to get some of the staff resources for streamlining
21 by immediately extending most licenses by five years.
22 Currently you have a five year license. So, we would go to
23 a ten year license. This eliminates most license renewals
24 for the next five years. Since the payment can be a
25 critical path in the materials licensing process, we also

1 propose to separate payment of fees from the process of
2 issuing a license and continue to work at streamlining the
3 fee structure. We then propose to move to phase 2 of the
4 program which is to develop the automated systems, prototype
5 them, train the staff and develop the infrastructure to
6 support the system, also establish an electronic licensing
7 manual. Essentially we will get the licensing manual, we
8 will put it on the computer. If you use things like
9 groupware -- one thing, and we're not endorsing a particular
10 product because a lot will do this, Lotus Notes. The
11 license reviewer could be working on an application with a
12 keystroke and call up the regulations, the licensing
13 guidance, any document he needs for reference under Windows
14 just as another window with all that material on it. That
15 guidance would also be available to licensees
16 electronically. We are also proposing the development of a
17 standard license condition for broad scope licensees. These
18 are our major universities, major manufacturers, major
19 medical institutions functionally equivalent to 50.59. In
20 other words, these people have radiation safety committees,
21 a large infrastructure to support the program. So
22 therefore, just like our nuclear power plant, if they want
23 to change a procedure that does have a major safety effect,
24 but I decided I'm going to survey a certain type of
25 laboratory once every two weeks. I mean the laboratory user

1 does it, but I check on. Experience shows me after two
2 years I don't have a problem. Why don't I back off to every
3 four weeks? Right now they have to come in with an
4 amendment. This would allow them to change those procedures
5 themselves with a process that we envision to be similar to
6 50.59. They change their procedure, the Radiation Safety
7 Committee reviews it and approves it and that's it.

8 This has already been done pursuant to Commission
9 direct for uranium recovery licenses. So, we're not
10 really -- we're just taking something we've already done and
11 applying it to this process.

12 Next slide.

13 [Slide.]

14 DR. PAPERIELLO: I said we proposed to extend most
15 licenses. We believe at this point about 200 to 300 we
16 won't. This describes the basis for not extending. Now,
17 eventually we may. At least in this first across the board
18 we propose not to do it for licensees that require an
19 emergency plan. There's only about eight of them.

20 A licensee subject to financial assurance
21 requirements where we do not have an acceptable
22 decommissioning funding plan because that plan has to be
23 submitted with renewal. It would be a fairly large
24 licensee.

25 A licensee currently on a site decommissioning

1 management list. We have about 50, but I think about ten or
2 11 are not even licensees. So, it's about 40.

3 A licensee for which an environmental assessment
4 is needed. That's a large amount of material. I think
5 there's only two.

6 License for which the license has received a major
7 escalated enforcement action at the last inspection, of
8 which there may be about 150 to 200, somewhere in that
9 range.

10 COMMISSIONER de PLANQUE: Carl, will this
11 extension require public notice and comment?

12 DR. PAPERIELLO: It hasn't been brought to our
13 attention by OGC. See, there's no life -- there's nothing
14 in the regulations that indicate how long a materials
15 license is supposed to be.

16 MS. CYR: There's nothing in the statute that sets
17 a particular time limit for them and many of them are under
18 timely renewal. We have a timely renewal provision. So for
19 many of them, that may be in a sense what happens. We
20 haven't exactly worked out depending on -- I don't know that
21 it will be a uniform thing we will do for every particular
22 across the board.

23 COMMISSIONER de PLANQUE: But this is probably
24 something we can do without having to go through that
25 process.

1 DR. PAPERIELLO: That's what we believe. That's
2 what we believe.

3 CHAIRMAN SELIN: I would be uncomfortable without
4 having some public discussion of such a change in practice,
5 even though there's no policy statement in the statute.

6 DR. PAPERIELLO: Yes, sir.

7 CHAIRMAN SELIN: You know, we are governed by
8 English law and if you've done it long enough it's become
9 the law just by having done it.

10 DR. PAPERIELLO: Yes, sir.

11 CHAIRMAN SELIN: It doesn't mean we need a formal
12 rule change, but at least there should be some discussion in
13 my opinion before a change like that would be just
14 instituted.

15 DR. PAPERIELLO: Yes, sir.

16 Next slide.

17 [Slide.]

18 DR. PAPERIELLO: This shows you a map we have been
19 maintaining, where we believe we are in the process. We're
20 ready to build and test the system and that's exactly what
21 will be done. We will take an area of the building and we
22 will set up a laboratory and it will be basically some
23 people and the equipment and we will model and run dummy
24 samples through to make sure that, in fact, the system, the
25 procedures work.

1 Next slide.

2 [Slide.]

3 DR. PAPERIELLO: We propose to decouple fee
4 collection from the processing of most licensing actions.
5 Although steps have been taken to initiate licensing reviews
6 prior to ensuring licensees have submitted the correct fee,
7 this is the direction of the EDO, and the check clears, fee
8 clearance does hamper licensing timeliness because reviewers
9 have to constantly look over their shoulder to see where the
10 fee situation stands. We propose the implementation of a
11 new fee concept. A first year fee would include the annual
12 fee as well as the fee for the initial review. In later
13 years, the annual fee will be charged on the anniversary of
14 the license and a license would not be effective until the
15 fee was paid. This is an interesting case where we gained a
16 little something extra because fees looking at this said,
17 "We could turn around and make life easier for us if rather
18 than billing all the licensee at the same time we could turn
19 around and spread the billing out over a period of a year."
20 The staff plans on working on the appropriate rulemaking
21 this summer to accomplish this task.

22 MR. THOMPSON: Yes. This is one of the type items
23 we'll have to come back to the Commission for formal
24 approval on before we're able to implement those.

25 DR. PAPERIELLO: Yes.

1 COMMISSIONER ROGERS: Do you really know that it's
2 going to spread out reasonably uniformly over the year or is
3 that just a whole -- I mean do you have some basis of
4 knowing?

5 DR. PAPERIELLO: I would have to ask Fees that.

6 COMMISSIONER ROGERS: It's clear to me that you
7 still might not have somehow some clumping in the calendar.

8 MR. THOMPSON: I think there may be some clumping
9 but generally we do things annually. We know we have a
10 problem.

11 COMMISSIONER ROGERS: Yes, I understand.

12 MR. THOMPSON: What I can't tell you precisely is
13 how evenly the other distribution is, but it has to be
14 better than once a year.

15 COMMISSIONER ROGERS: Well, it will be an
16 improvement. It's just a question --

17 MR. THOMPSON: Right.

18 DR. PAPERIELLO: I will be an improvement. I
19 don't know how much. I think over a long period of time it
20 will probably average out. But initially I don't know.

21 We also plan additional procedural actions to
22 streamline. And some of these, we are going to be coming
23 back to you for approval. For example, there is no clear
24 basis for our five year license. A long time ago, long
25 before my time, it was two years.

1 The concept from talking to people who have been
2 around for a long time was that this area was so magic, so
3 complicated, that every couple of years we ought to
4 reexamine the basis for licensing somebody and that's why we
5 had a five year or two year renewal. Well, again, as I
6 said, many of the applications we license have not changed
7 very much in years and they're fairly standard. And there's
8 other areas under my responsibility, not just material
9 licenses, that when I ask people why do we do what we do,
10 it's because we've always done it this way.

11 I'll give you an example. Transportation casks
12 are certified for five years. If I have a radiographic
13 camera which is, in fact, with its overpack the shipping
14 container for the source, I certify the camera as a camera
15 indefinitely and the camera as a transportation device for
16 five years. Why? Because two different groups did it. So,
17 what I want to do not only just for material licensees that
18 we're addressing today, but for every license or certificate
19 issued by NMSS, I want to develop a policy on duration based
20 on risk, technological stability and the institutional
21 stability. Before I do anything with it, I will send it to
22 the Commission for approval and it would be paper to justify
23 why we're doing what we're doing.

24 But my own view is there's certain material
25 licenses, for gauges for example, to specifically license

1 gauges, could be issued for almost indefinitely, whereas
2 certain things we might want to keep. Something like major
3 manufacturers we may want to keep every ten years. I don't
4 know. I want a policy on it that has not evolved, but
5 something we sit down and think about because there is major
6 resource savings if we can reduce the number of renewals
7 that we do.

8 COMMISSIONER JACKSON: Is your policy on license
9 duration and where you are in developing that consistent
10 with the time line you showed us earlier?

11 DR. PAPERIELLO: Oh, yes. I anticipate we would
12 have this paper to you by the end of this year.

13 CHAIRMAN SELIN: What about things that now are
14 just on general license, that are not really licensed
15 sources? Is that included in the --

16 DR. PAPERIELLO: I'm going to mention this later.
17 You will be getting a paper by the end of this month on
18 general licenses. We're going to propose, and I'm getting
19 ahead of myself, but an operations committee with the
20 agreement states. This streamlining process will make it
21 very easy to create a class of registered devices that we
22 have a hook on because right now if I have to take 4500
23 general license gauges and make them specific licenses, I
24 can't afford it. They may not afford it and I can't afford
25 it. Where if I have a very automatic process like this,

1 then we could do it. However, since the agreement states
2 have two-thirds of the generally licensed devices and most
3 of the smeltings, if they're not on board our fix won't
4 work.

5 Plus the fact I had another idea that I popped on
6 the agreement states at the last meeting and I thought it
7 was off the wall and they kind of liked it. That is that we
8 would not --

9 COMMISSIONER de PLANQUE: What does that mean?

10 DR. PAPERIELLO: I said, well, we won't allow
11 people to own generally licensed devices. They can be
12 leased and then the handful of vendors can keep track of
13 where the devices are and I thought that was a bit unusual,
14 except some people around said, "That's the way it was done
15 30 years ago." Well, since that's before my time, I don't
16 know. I'm not proposing -- I'm just saying --

17 CHAIRMAN SELIN: Generally, this is to clean up
18 what we do today, to do it a lot better and have a much
19 better base before we take a look at --

20 DR. PAPERIELLO: Right.

21 CHAIRMAN SELIN: -- additions and subtractions to
22 our jurisdiction.

23 DR. PAPERIELLO: This will provide a very clean
24 system that if we want to pull in some or a portion of the
25 general licenses under the specific license umbrella, we can

1 do it cheaply. As I point out, we have an indefinite
2 license because that's what a general license is today, an
3 indefinite license.

4 CHAIRMAN SELIN: Just for a moment on your off-
5 the-wall advice, unless there's a clear health and safety
6 imperative, we can't do what you just suggested, to forbid
7 people from owning devices, unless we can make a case that
8 there's a health and safety --

9 DR. PAPERIELLO: You're right, but we could make
10 it financially worthwhile. In other words, if you want --
11 well, the point is there have been pieces that were leased.
12 3M, when it had static eliminators, they were all leased.
13 Static eliminators were not owned, they were leased.

14 CHAIRMAN SELIN: But it wasn't because of the
15 safety requirements.

16 DR. PAPERIELLO: I understand that. I understand
17 that. But we may have to come up with an option. If you
18 lease it, then you don't need a specific license for it. If
19 you want to own it, you need a specific license for it. I'm
20 getting away from the other discussion.

21 MR. THOMPSON: You are correct, Mr. Chairman. We
22 do have to have our regulations based on a health and safety
23 reason. There are some generally licensed devices now that
24 we may be able to demonstrate under a more rigorous review
25 than we've done in the past that they may be appropriately

1 covered by a specific license requirement. I think that's
2 the type of review that we'd have to do to be able to look
3 at those things.

4 DR. PAPERIELLO: I really wasn't prepared for
5 that.

6 CHAIRMAN SELIN: You weren't prepared the last
7 time you raised it either. Why should you be prepared now?

8 COMMISSIONER de PLANQUE: It gets better each
9 time.

10 CHAIRMAN SELIN: By the second time, you should -
11 -

12 DR. PAPERIELLO: Just working. We're going to
13 look at our regulations and licensing documents to also
14 achieve the vision. We have standard license conditions.
15 We put in all licenses with sealed sources to do leak tests.
16 Well, the way I put it, since the time Madam Curie
17 encapsulated radium in gold, we have been leak testing
18 sources. But we do not have a universal leak testing
19 requirement in our regs. We have pieces here and there.
20 You have to leak test brachytherapy sources. The State of
21 Illinois, in their equivalent of Part 20, has a universal
22 leak testing requirement. Well, there is a case of where
23 something we put in every license for a sealed source has a
24 leak testing requirement. Why shouldn't that be in a
25 regulation? The same way other -- we have about 70 or 80

1 standard license conditions we use and we need to determine
2 if we want people to do it, it ought to be in a regulation
3 and we shouldn't be imposing routine things through
4 licensing. When we do that, that of course creates greater
5 stability.

6 We expect that we're going to have to be making
7 organizational or administrative changes as we change the
8 process. For example, right now license applications are
9 submitted to the region. It may be more efficient to have
10 them all submitted to a central location because our vision
11 is that license applications will come in. We're going to
12 encourage people to do it electronically, but if they come
13 in on paper, they will be scanned and put into a computer
14 system and it might be probably beneficial to do it in one
15 location rather than multiple locations. We don't know. We
16 have to look at the technology and determine how easy it is
17 to use.

18 Can I have the next slide?

19 [Slide.]

20 DR. PAPERIELLO: Let's talk a little bit about
21 details in the new process. We have something we call the
22 Virtual Regulatory Product Design Center and it mimics what
23 we have found in other federal agencies. This is not a
24 location, it's a concept. If it's a location, it's going to
25 be where a computer file server lives. The function of this

1 -- and it will be a process managed by Headquarters but
2 using regional people as well as Headquarters people, using
3 groupware, which is a type of computer software that does a
4 lot of things for you, a much higher level -- I call it an
5 extra dimension to our current WordPerfect office and E-
6 mail. So, there can be collaborative efforts by the people
7 who actually do the work on various documents without them
8 physically being located in the same place. The products
9 that we will develop are what we need to implement this
10 process, to extend the license duration, to build a single
11 licensing manual, to create the 50.59 amendment and the
12 guidance we're going to use to come up with criteria that we
13 might allow for an indefinite license and all the changes
14 that we're proposing to do and put the team together to do
15 does not have to be done in a physical location. We can
16 have people in various offices work together on this. That
17 concept is being used elsewhere in this area and that's what
18 we call our Regulatory Product Design Center.

19 Next slide.

20 [Slide.]

21 DR. PAPERIELLO: Let's talk about how we would
22 process the application. The application would come in and
23 would have an immediate, you might say, once over. A
24 completely bad application would be rejected. The
25 application would then be reviewed just like a reviewer does

1 now, but now the reviewer would be assisted by an expert
2 system on a computer. We anticipate with what we would hope
3 would be straightforward requirements that would be
4 explicitly stated that simple application, things for
5 gauges, gas -- I show a gas chromatograph because to my mind
6 that's about the simplest thing we license and it represents
7 almost no hazard.

8 The inspector or the license reviewer would be
9 walked through the review and if the process was
10 satisfactory, the computer would generate a license.

11 For more complicated reviews, I'll give you an
12 example, broad scope, major new broad scope, the system
13 would allow the review to be broken down into components.
14 We may have an expert on incineration here in Headquarters.
15 So, if there was a request for incineration, that would be
16 reviewed in Headquarters. If there was a certain type of
17 waste disposal that was unusual, that would go somewhere.
18 So, therefore, the review could be done in parallel by
19 different people with the appropriate expertise.

20 Let me give you an example how this will really
21 help. Well logging. The Region IV being in Texas and the
22 Southwest gets a lot of well logging applications. Region
23 I, being in Philadelphia, it's rare. In fact, one of the
24 interesting things, we developed a procedure for
25 certification of license reviewers and they had to do two of

1 every kind. Well, Region I had problems certifying its
2 reviewers because they couldn't get enough well logging
3 applications. So, they actually created a process, "Well,
4 we'll mail them up to Region I so Region I can do them and
5 the reviewer can get qualified." Well, the obvious thing is
6 why even do them in Region I? Why not have all well logging
7 reviews done in Region IV regardless of which region gets
8 them because they a lot of them and are expert? This whole
9 system would allow us to do that.

10 Next slide.

11 [Slide.]

12 DR. PAPERIELLO: I'd like to talk about work
13 teams. This whole project has been an example of a self-
14 directed work team in action. I'm enthusiastic about teams
15 and I always have been. I have been served on teams myself,
16 at least mostly on the inspection part, having led not only
17 an IIT a few years ago, but an AIT, and I've been on a lot
18 of task groups in the agency. I think it's a good way for
19 NMSS to handle a lot of its future challenges. I have a
20 highly educated staff. I did check. Forty-seven percent of
21 my staff have advanced degrees. Twenty percent of my staff
22 have Ph.Ds. I think when I look around the table, most of
23 us have worked in several areas, different areas in our
24 lives and have done reasonably well or we wouldn't even be
25 here. I think our staff can do the same.

1 We are likely in NMSS to be presented with a lot
2 of one-of-a-kind licensing and the traditional way that we
3 have licensed, "Well, we're going to create this great
4 standard review plan," we're just not going to survive.
5 We're going to have to put together teams that can quickly
6 create review procedures in a short period of time and then
7 implement them. I don't know what they're going to be for.

8 We were briefed a couple weeks ago by DOE on,
9 "What is your views of 11 different ways of disposing of
10 plutonium? And by the way, we'd like to have you license
11 it if we ever get authorization." Which am I going to do?
12 So, if I'm asked to do that and the Commission agrees to do
13 that, I'm going to have to do it quickly and we're going to
14 have to work on a very loose environment. I believe the
15 self-directed work teams is an ideal way to use the talents
16 of highly educated, motivated people. That's sort of the
17 concept behind reengineering. It's almost like the
18 transition from a special purpose computer to a general
19 purpose computer. Now, the fact that we have a lot of
20 people with a lot of education, people can do a lot of
21 things. It's not like things may have been a long time ago
22 where people did one very, very small piece.

23 Next slide.

24 [Slide.]

25 MR. THOMPSON: Before we get on the next slide, I

1 might want to add in that that this was one of the areas
2 that we were able to work in a partnership arrangements with
3 the NTEU. In addition to the traditional activities, it
4 would work very well with the union incorporating with this
5 and knowledgeable of where we're going on because obviously
6 a lot activities here will affect the ways in implementing
7 the procedures and I think it would work very, very well
8 with the union partnership in NMSS and with the agency
9 partnership also.

10 DR. PAPERIELLO: The next two slides show how our
11 vision directly addresses all four national program review
12 functional areas. But I'm going to be very honest. We
13 didn't use these. In other words, this is how it fell out.
14 We did what we did and then --

15 CHAIRMAN SELIN: You did what you did because it
16 was very sensible. The NPR is very sensible.

17 DR. PAPERIELLO: I think that's --

18 CHAIRMAN SELIN: But seriously, they didn't invent
19 these ideas. This is part of good management.

20 DR. PAPERIELLO: And I agree, but I have to be
21 honest. I can say, "Isn't this wonderful, I do it," but I
22 did it to be very efficient and address the thing. I will
23 say the concept of putting the customers ahead was certainly
24 in our view. I believe very much in empowering employees
25 and certainly getting back the basics in cutting red tape.

1 Can I have the next slide?

2 [Slide.]

3 DR. PAPERIELLO: Safety implications. I'm going
4 to be very -- a few members of the executive committee did
5 express --

6 COMMISSIONER JACKSON: Actually, I wanted to take
7 you back a slide.

8 DR. PAPERIELLO: Yes, sir.

9 COMMISSIONER JACKSON: You talked about the
10 participation of the agreement states in the regulatory
11 product development. Can you expand on that a bit?

12 DR. PAPERIELLO: Yes. The Commission has given us
13 direction that in developing regulations and developing
14 doing things that impact them, that we should seek early and
15 substantial -- I think the words are early and substantial
16 involvement. This process will allow them to do that. We
17 plan on doing that to the extent they want to participate
18 because in some cases when you ask them, they're just not
19 interested in doing it.

20 COMMISSIONER JACKSON: So you're saying that to
21 this point they have not been involved?

22 DR. PAPERIELLO: Not in what I'm presenting today,
23 no. They have been briefed on it, but they did not
24 participate in the process, no.

25 DR. RATHBUN: Yesterday they were briefed by Don

1 Cool at the Conference of Radiation Control -- how do you
2 say that, CRCPD Committee. My understanding from --

3 COMMISSIONER JACKSON: That helps me.

4 DR. RATHBUN: Excuse me. I'm struggling with this
5 too. My understanding is that they were very receptive to
6 this. In the next six weeks, we are planning to visit
7 either three or four agreement states to roll out this
8 concept there too and will at that point try to take their
9 input. But that's in the planning stage.

10 COMMISSIONER de PLANQUE: Which ones do you plan
11 to go to? Have you determined that?

12 DR. RATHBUN: We are currently talking about Utah,
13 Illinois, Texas, and what's the other one? We have one
14 other one.

15 MR. PELCHAT: We are talking about going to
16 Oklahoma.

17 DR. RATHBUN: But we will bring that up --

18 MR. THOMPSON: Oklahoma is not an agreement state
19 yet.

20 MR. PELCHAT: No, sir, but they have agreement
21 state licensing process.

22 MR. THOMPSON: Okay.

23 COMMISSIONER de PLANQUE: Okay.

24 DR. PAPERIELLO: Frankly, in part, when we started
25 we didn't realize we were going to wind up at this point.

1 So, when you envisioned that you were just going to automate
2 what you were already doing, and you weren't going to make
3 the kind of changes it looked like we want to make, we just
4 didn't know we were going to be here.

5 CHAIRMAN SELIN: Never automate what you're
6 already doing. I'm serious. This is the opportunity not
7 only to clean things up that have been a mess for 20 years,
8 but to see opportunities that you couldn't carry out if you
9 didn't have --

10 DR. PAPERIELLO: That's exactly what happened.

11 COMMISSIONER ROGERS: Yes, and if you automate too
12 fast, you lock into something that you should have gotten
13 rid of.

14 CHAIRMAN SELIN: Two-thirds of the licensees are
15 there. So, are you looking at the ability of using some
16 of -- I mean is this just for us or can it be broken down
17 into PC-based units that agreement states --

18 DR. PAPERIELLO: Oh, these are all PC-based.

19 CHAIRMAN SELIN: So, it's intrinsically a
20 devolvable system that the agreement states could pick up?

21 DR. PAPERIELLO: Oh, yes.

22 CHAIRMAN SELIN: So, therefore, you're really very
23 interested in their reaction, to make sure their concerns
24 are taken into account before the design is finalized?

25 MR. THOMPSON: Well, I think all the elements, as

1 I see it, are there. Some of the things that we face that
2 the agreement states don't face is they don't have regional
3 offices and they don't have centers of expertise. They
4 typically are co-located in an area, but much of the process
5 of how the process can work, we would like their input on.
6 But particularly with the regulatory guide, changes in
7 regulations obviously will be coordinated very closely with
8 the agreement states and the concept of putting in
9 regulations, those things in the past that have been license
10 conditions, I think we'll coordinate closely with -- it will
11 make the agreement states life a lot easier, just like it
12 makes our life easier on that.

13 MS. CYR: But that's sort of consistent with where
14 you're going with the policy which is being more flexible in
15 that how that uses various -- where they have it in the
16 regulations or license conditions anyway.

17 COMMISSIONER JACKSON: But since so much of what
18 you're doing does seem to rest on this system approach, user
19 friendliness would seem to dictate that their input would be
20 useful to you earlier rather than later.

21 DR. PAPERIELLO: Yes. We did plan on inviting
22 them to participate to the degree they wanted to
23 participate. Certainly any changes in regulations, things
24 that -- I mean there are things that would affect them
25 directly. If we change Part 20 to require sealed sources to

1 be leak tested, that's clearly something we have to
2 coordinate with them. If I decide that I'm going to use a
3 certain brand of groupware, that's a little touchier because
4 they're probably under the same requirements that we are.
5 We have competitive bidding and all the rest of that sort of
6 thing. So, there's a range of things we're going to do here
7 --

8 CHAIRMAN SELIN: That's actually not an issue.

9 DR. PAPERIELLO: I understand.

10 CHAIRMAN SELIN: All software these days can read
11 all other software.

12 DR. PAPERIELLO: That's right.

13 CHAIRMAN SELIN: So you could develop it under
14 Microsoft stuff and Lotus will pick it up.

15 DR. PAPERIELLO: I'm trying to address the
16 question of how much do they get involved in what decisions
17 and all.

18 COMMISSIONER JACKSON: But it seems to me that
19 they haven't really been involved that much to this point.

20 DR. PAPERIELLO: No, they haven't. They were
21 briefed -- I briefed them in -- well, my staff did. I
22 talked to them on another subject early in April. Again, we
23 didn't really expect to get to this point when we started
24 out in November.

25 COMMISSIONER de PLANQUE: I asked for which states

1 because I was hoping to hear at least Illinois and also
2 Texas because it's my understanding that they have some
3 systems --

4 DR. PAPERIELLO: Yes.

5 COMMISSIONER de PLANQUE: -- from which we may
6 learn as well.

7 DR. PAPERIELLO: That's exactly why we're going to
8 visit them.

9 COMMISSIONER de PLANQUE: Good.

10 MR. THOMPSON: Commissioner Rogers had a question.

11 COMMISSIONER ROGERS: Yes. On this question of
12 who participated, I haven't seen any evidence that you had
13 any input from licensees themselves in this.

14 DR. PAPERIELLO: We did not have input from
15 licensees directly in this particular thing. We do have the
16 input from phase 2 of the regulatory impact survey where we
17 did -- this was done now about a year ago in which we
18 finally got a contractor's report. At least it's on its way
19 up to the Commission right now, that paper transmitting the
20 report. Basically what the licensees are telling us in
21 terms of regulations, they understand and know what's in the
22 regulations and they understand and know what's in the
23 licensing guide. But when you start looking at any kind of
24 guidance documents that gets further from those things,
25 their degree of knowledge goes down. They are impacted by

1 delays in licensing. About half of them say that. So,
2 therefore, insofar as the licensees have commented on --
3 they have not been though involved in this --

4 COMMISSIONER ROGERS: They've stated their
5 problems and they're working on a solution.

6 DR. PAPERIELLO: They say they're problems and we
7 believe these are addressing the problems that they
8 enunciated to us as a result of that survey.

9 COMMISSIONER ROGERS: I understand that, but we
10 are trying to get a little feedback from them on our
11 solution.

12 MR. THOMPSON: Absolutely, and we will put that as
13 part of our program to clearly have an opportunity to get
14 licensee and the groups of licensees input on the process
15 because part of it obviously they have a vested interest and
16 I think they would certainly want to participate and we'll
17 provide that opportunity for them.

18 DR. RATHBUN: In phase 2, we have actually already
19 modified the CSC contract to include a module on what we're
20 calling licensing readiness to accept both the automated
21 aspect of this project as well as the regulatory changes
22 that we might have to propose. It would be easy for us to
23 incorporate public meetings. It would be simple.

24 DR. PAPERIELLO: Let's talk about the safety
25 implications because a few members of the executive

1 committee did raise concerns over the potential safety
2 implications of the new process. So, I will discuss the
3 issue.

4 We are going to be less involved in "how"
5 procedures for simple licenses. I mentioned previously
6 about phase 2 of the regulatory impact survey. My belief is
7 the more we can put what licensees need and ought to do in
8 our regulations and the licensing guides and keep them
9 current, we will promote safety. Most licensees want to do
10 the right thing. However --

11 Next slide.

12 [Slide.]

13 DR. PAPERIELLO: I plan to use two tools to
14 monitor licensee safety performance in this program. First,
15 new licensees and those with amendments which substantially
16 change the scope of their activities will receive
17 inspections within six months of the licensing action. This
18 is a commitment I made to you earlier. Our current manual
19 Chapter 2800 on the inspection program has been issued and
20 has that change in it. We used to do it. This makes it a
21 high priority inspection. You will inspect new licensees
22 and licensees with major amendments within six months of the
23 issuance of the document. This will provide immediate
24 information on the licensee's ability to meet performance
25 based requirements.

1 Secondly, we'll use the AEOD database on reported
2 events to measure what you, Chairman Selin, have
3 characterized some time ago as output indicators as a second
4 measure of licensee safety performance. They'll include
5 occupational and public over exposures, violations of NRC
6 effluent limits, lost material, medical misadministrations
7 and the events of the type reportable under 30.50 involving
8 various upset conditions. If we detect increases in these
9 output indicators, we'll take whatever action we need to
10 reverse the trend.

11 We're going to start off this process with simple
12 licenses. We are going to be dealing with -- gauge licenses
13 and gas chromatographs make up roughly 3,000 of our 6,500
14 licenses. Medical licenses, particularly diagnostic nuclear
15 medicine, make up about another 1,500 to 1,600. So, we're
16 dealing with some licenses where the quantity of material
17 used is not particularly hazardous and you would have to
18 work hard at violating a regulatory limit. So, if you start
19 with the simpler licenses and see that licensees are capable
20 of working in that environment, then we will basically
21 expand it to the larger licenses.

22 At the other end, I just believe that most large
23 academic licensees are perfectly capable of meeting
24 performance regulations. They have very large programs and
25 very knowledgeable people.

1 COMMISSIONER de PLANQUE: Carl, on the
2 inspections, who would be doing this? Would these be people
3 who are part of your prototype group or separate?

4 DR. PAPERIELLO: That would be the regional
5 inspector, the same inspectors that do them now.

6 COMMISSIONER de PLANQUE: Okay.

7 DR. PAPERIELLO: But some of these people are
8 going to be involved in all this prototype. The whole
9 concept of this Virtual Regulatory Products Center is the
10 people in the field are going to be spending part of their
11 time. It won't be, "We in Headquarters write all the
12 procedures and you people out in the field, you use them."
13 It's a joint sharing of the responsibility and so people who
14 are developing procedures are people who actually have to
15 use them and do use them and bring in their operating
16 experience to developing procedures.

17 COMMISSIONER de PLANQUE: Do you see any possible
18 role in this exercise for agreement states people, either as
19 a cooperative or learning --

20 DR. PAPERIELLO: I haven't given it a thought. I
21 guess we could.

22 MR. THOMPSON: We have that kind of initiative as
23 one thing that we're considering in the longer phase of
24 where we are headed. That is, as we get more and more
25 agreement states, it may make lots of sense to really have

1 the agreement states participate under some type of
2 interagency agreement or -- I don't want to use the
3 contract, to be able to have California people inspect in
4 California if we didn't have a high representation of
5 inspectors there. Alaska may be one where you might be able
6 to get some type of state support. So, this concept that
7 we're looking at, we haven't matured our thinking in that
8 area.

9 DR. PAPERIELLO: The next slide.

10 [Slide.]

11 DR. PAPERIELLO: I may --

12 COMMISSIONER ROGERS: Talk about agreement states.

13 DR. PAPERIELLO: I had planned on it.

14 They have been briefed and I briefed or we briefed
15 them early in April on the meeting here in Headquarters with
16 the management people. There was another briefing for the
17 conference yesterday. The process, the actual change in the
18 process is going to be implemented in controlled phases over
19 about a two year time frame. It will be ample opportunity
20 to look at the potential interaction with the agreement
21 states. The guidance, the changing the licensing documents
22 will be open to agreement state participation. The reality
23 is if we chose a certain kind of groupware and they can
24 procure it or we can provide it for them, they can go on a
25 PC and participate in a team over the telephone lines.

1 Any new technology or processes we develop will be
2 available to the agreement states if they want to use it and
3 essentially any of the regulatory tools we develop they can
4 use. As I said, if we have to change regulations, they'll
5 fully be part of that change in the regulations.

6 COMMISSIONER de PLANQUE: Carl, I guess over the
7 past several months we've all given a lot of lip service,
8 which is good, towards cooperation with the agreement
9 states. I think that's been easy for us to do. The hard
10 part now is to make it work in reality. There's so much
11 opportunity here in what you're proposing to really get a
12 cooperative venture going with the agreement states. So, I
13 guess I would also be looking for potential ways to use
14 them, possibly on the steering committee or use them as
15 intensely as you possibly can, hopefully in some sort of
16 informal cooperative voluntary way rather than have to get
17 into all these administrative difficulties.

18 DR. PAPERIELLO: Right.

19 COMMISSIONER de PLANQUE: But I guess I would
20 encourage seeking involvement in any way possible to get
21 their experience and their buy-in.

22 DR. PAPERIELLO: That's right.

23 [Slide.]

24 DR. PAPERIELLO: Let me discuss on the last slide
25 the principal near-term actions. We are going to make a

1 major effort to reduce the existing backlog by creating a
2 backlog team to get -- I'd like to see the backlog to 300
3 cases, about a month's work. I think friction won't let us
4 do any better than that.

5 Developing a licensing manual. We're in the
6 process. I have staff in the process of assembling all of
7 the licensing material we've ever issued. I want to take
8 it -- I have to put it in one location and see what I have.
9 I'd like to reduce the volume, the whole team has been given
10 a goal, cut it in half and produce for the first time a
11 single comprehensive licensing manual. I intend to publish
12 it in electronic format and on paper as a NUREG and this
13 will replace all existing guidance. I'll do away with
14 policy and guidance directives and licensing guides and we
15 will have one document. This will be functionally
16 equivalent, the same as NUREG-0800, which is the NRR
17 standard review plan. We have other -- our licensing guide
18 for Yucca Mountain, our licensing guide for low-level waste,
19 all our other licensing guides that we have are NUREGs. So,
20 this is only a replication of past practice.

21 What will be new is my goal to have it in
22 electronic format to maintain the maintainability and it
23 will be maintained. My concept is to assign various
24 portions of it to different organizational units. For
25 example, Region III might be responsible for the medical

1 guidance and Region I might be responsible for the
2 radiography guidance. There will be a clock and every two
3 years or three years or whatever looks -- it depends on the
4 change in the technology, that particular organization will
5 have the responsibility to revise the guidance. We will put
6 it out in draft for comment and we will incorporate the
7 comments.

8 One of the responses we got in the phase 1 of the
9 regulatory impact survey is in 1985 and 1986 when we
10 regionalized licensing, the agency issued about ten
11 licensing guides, put them out for interim use and draft
12 comment and they were never issued in final. The reason
13 they were never issued in final is there never was any
14 resources budgeted to issue them in final. So, I think that
15 if we make it easy to do, we simplify the volume and we keep
16 them current, we can keep that particular guidance current.

17 Incidentally, I'll brag that in Region III our
18 regional procedures were up to date. They were revised
19 every two years. As Deputy RA, I had 35 procedures that I
20 was responsible and the admin. people once a quarter would
21 send me a memo, "You have these eight or whatever number of
22 procedures to review this quarter," and I'd review them and
23 maybe half of them would have to be changed and the other
24 half were okay to reissue as is. So, I'm familiar with how
25 you could do this and it can be done.

1 Anyway, that's the process that we envision.

2 MR. THOMPSON: That completes our briefing. I
3 guess I would say we have requested the Commission's
4 approval to endorse the fundamental approach. I think we
5 own you a bit more detail on how the license rule extension
6 would be -- if you'll approve that approach, how that would
7 be actually executed with respect to the public comment
8 activities. The rulemakings with respect to the fees, we
9 obviously will -- and the other rulemakings will come back
10 specifically to the Commission. But essentially we're
11 asking for the Commission's endorsement of this approach to
12 streamline the material licensing effort and activity and
13 we'll certainly include the public meeting approach that
14 you've discussed and licensee implementation and the
15 agreement states as you discussed today.

16 So, we're prepared to answer any questions you may
17 have.

18 CHAIRMAN SELIN: Commissioner Rogers?

19 COMMISSIONER ROGERS: Well, first let me say that
20 I really think this is an outstanding effort. It really
21 reflects a dramatic change from an incremental approach to
22 looking at what we're doing. I really want to commend
23 everybody that was involved with that and I know Dr.
24 Rathbun's group was very important in this. I think it's
25 really exciting. I think there are a lot of things to talk

1 about. There are a lot of issues to express some concern
2 about as we proceed along, if we do proceed along if the
3 Commission approves going ahead. But I think that the
4 approach that's taken here is really very commendable in the
5 sense that it seems to me that you really just said, "Let's
6 look at the whole thing all over again and see if we can't
7 do it in a different way, in a better way." That's what we
8 have to do. We just can't make incremental changes. We've
9 got to think more dramatically, I think, about possible
10 change.

11 I really am excited about the process that's led
12 you to this point as an example of perhaps something that
13 we'll have to apply in a somewhat different way, perhaps in
14 other parts of the organization. So, I think it's a very
15 interesting piece of work, very exciting, very promising.
16 But I do think that there are a lot of things that we'll
17 have to look at. So, I have a couple of questions about
18 some concerns that I have. But one thing that we didn't
19 hear about are resources here. In the paper you sent us,
20 you had a slide 17 that was an investment breakout. I'm
21 surprised that we didn't hear anything about the resources
22 here this morning. Can you say something about that?

23 DR. PAPERIELLO: Yes, I can. I can.

24 By deferring renewals and by eventually reducing
25 the frequency of renewals, we free up a lot of resources

1 immediately to work on the program. Over the long-term, I
2 envision -- and let me give you some numbers. Currently, 50
3 percent of our licensing resources are spent on renewal.
4 These are numbers I knew were sort of shockers to me when we
5 got into this. Thirty-five percent of our resources are
6 spent on amendments and 15 percent are spent on news. So,
7 therefore, if you want to save resources in licensing, so
8 therefore for the benefit of us, we should look at renewals
9 and amendments.

10 However, I had other needs. I had license -- the
11 feedback I had from licensees is part of two regulatory
12 impact surveys I did which says, "I want to make the world
13 better for them too. So, I need timeliness on what I do and
14 I need clear guidance on what I do and I've got to give them
15 flexibility." So, a major portion of the resources are
16 going to come from the process itself because I don't need
17 as many people to do licensing.

18 Secondly, the medical program. The medical
19 program today is about 65 percent done. As of the end of
20 September, going into the next fiscal year, we expect to be
21 75 percent completed in terms of the tracks. The only
22 remaining work that remains from fiscal '96 on just about is
23 completion of the National Academy study and any rule
24 changes. About a quarter of the program involves either
25 rule changes in Part 35 and change in guidance. So, those

1 resources will be available. And we're going to have
2 consultants to help us in terms of the automation part in
3 the information technology. So, we're doing it with -- we
4 are just moving people from existing programs around.

5 I propose to incorporate the balance of the
6 medical program within BPR because regardless of how the
7 National Academy -- let's make something up. The National
8 Academy says, "Don't change anything." I don't think that's
9 going to happen. Let's say that. I would still streamline
10 Part 35 and I would still streamline the medical program.
11 So, therefore, BPR would call for doing something with Part
12 35. It's going to ask us to do some things with other parts
13 of the regulations, except Part 35 is one of the more
14 prescriptive -- not only just prescriptive, but how to.
15 "You will survey your laboratory for betas once a week."
16 There is no other regulation we have that is quite that
17 prescriptive. So, there are things that -- the resources
18 are coming within the framework of the current budget.

19 COMMISSIONER ROGERS: Well, let me ask that
20 question a little bit differently because I think we're
21 drifting into a collection of other considerations here,
22 from at least what I'm interested in. That is if I look at
23 your slide 17 in your report, you list NMSS personnel under
24 the old process at an annual cost of about \$17.5 million and
25 under the new process \$13.8. It just occurred to me that

1 that's not a very dramatic difference. So, if we're talking
2 about a very dramatic change in how we do things, I would
3 have expected a bigger difference, just offhand. What
4 you're saying is that you're planning to incorporate --
5 well, use the same people that you have right now and
6 therefore more or less carry those costs along. I'm just
7 asking you how you got those numbers, whether that's the
8 basis or whether it's a reanalysis of what you really mean.

9 DR. PAPERIELLO: No, it's the basis of what the
10 budget projections were that had already been decided on
11 maybe about three months ago.

12 COMMISSIONER ROGERS: All right. So it's not
13 really constructed from zero base using this process.

14 DR. PAPERIELLO: No, it isn't.

15 COMMISSIONER ROGERS: All right. That's the
16 answer.

17 Now, about the capital, it looks to me like you're
18 talking what, about a million dollars in capital investment
19 here roughly?

20 DR. PAPERIELLO: In fiscal '96, yes.

21 COMMISSIONER ROGERS: Well, it says one time. It
22 doesn't say what year. It just says one time.

23 DR. PAPERIELLO: Well, right now it's in the
24 budget for fiscal '96.

25 COMMISSIONER ROGERS: And so, what's the

1 difference between technical infrastructure and capital
2 infrastructure? What do those involve? Some involves
3 computer hardware and some involves arranging the building
4 around or what?

5 DR. PAPERIELLO: It involves consulting assistance
6 and the like.

7 DR. RATHBUN: And we will have to do some space
8 modifications because we'll have to set up work stations,
9 prototyping stations. So, that's in there too.

10 COMMISSIONER ROGERS: Yes. Well, I think it would
11 be nice to see what the breakdown of these things is, just
12 so we have a little better feeling about it.

13 DR. PAPERIELLO: Sure.

14 DR. RATHBUN: Right.

15 COMMISSIONER ROGERS: So much for cost. A couple
16 other questions.

17 One is I'm a little bit concerned about the basis
18 of assuming the skill of the craft will cover certain
19 things. That's fine, but how do you know that they have
20 those skills? How do you know a particular licensee, in
21 fact, possesses the recognized skills of the craft, whatever
22 they are, in a sort of totally automated system? How do you
23 check that?

24 DR. PAPERIELLO: Well, you would look at the
25 applications. Today they have to submit the qualifications

1 of the staff involved and the reality is when you look at
2 some of the things that we ask them to do, we're not dealing
3 with things that are very profound, and I'll give you an
4 example. Look at a laboratory that uses millicurie
5 quantities of tritium or C-14 for tracers. Probably 80
6 percent of all the university laboratories who use
7 radioisotopes are using millicurie quantities of tritiated
8 C-14 labeled, P-32, sulfur-35, compounds like that.

9 You don't need a whole lot of skill. You're
10 talking about laboratories --

11 COMMISSIONER ROGERS: Well, I'm talking about how
12 do we know when somebody files an application electronically
13 with us that their claims are valid as to their skills of
14 the craft?

15 DR. PAPERIELLO: Well, we would review the
16 application the same as if we're on paper. Then, of course,
17 if we inspect them within six months and find out that it's
18 drastically different than --

19 COMMISSIONER ROGERS: Well, then they're in real
20 trouble, of course, I would hope. But how do you tell this
21 from an electronic submission or a paper submission for that
22 matter?

23 MR. THOMPSON: As I understand it, there's a
24 couple ways that give me the level of confidence that where
25 the staff is headed is the right way. One, by involving the

1 regional inspecting and licensing people who kind of
2 basically have the experience. They will have, I think,
3 that input as to which of those type licensees -- renewals,
4 you basically have some knowledge of renewals, if you're
5 going to do renewals.

6 COMMISSIONER ROGERS: Oh, yes.

7 MR. THOMPSON: It's the new ones --

8 COMMISSIONER ROGERS: Unless they've lost it. You
9 know? All their trained people might have left the day
10 before they filed the license application.

11 MR. THOMPSON: And that's one of the things that
12 we have to be -- we would not have one of the more automated
13 processes for licenses for which the intelligence screening
14 process you put in place says, "All staff has been replaced
15 in the last six months. I think part of the thing is being
16 intelligent in a systematic way to decide what are those key
17 factors. If you have an experienced radiation safety
18 officer who's been there for five years, you have a level of
19 confidence that that's the --

20 COMMISSIONER ROGERS: Well, that's right, but what
21 you're telling me is that somebody is going to exercise this
22 judgment. So, there's a human in the loop here. This is
23 not just a totally automated "send us in the application,
24 the computer will check it and send you by return mail your
25 license."

1 MR. THOMPSON: Yes.

2 COMMISSIONER ROGERS: I think you have to explain
3 that to us.

4 DR. PAPERIELLO: It's going to be more like using
5 a -- somebody said use the analogy of Turbo Tax. Well, I've
6 never used it, so I really don't know the analogy. This is
7 not going to be something where I get an application
8 electronically, no human being looks at it and the computer
9 reviews it and then issues a license. This is going to be
10 an application that's going to come in, we're going to get
11 it on an electronic format so the reviewer can look at it on
12 a screen, on a window, and we don't have to move a lot of
13 paper around and make multiple Xerox copies, which is what's
14 going on now, and where the person will have, instead of a
15 paper check sheet list, will have a computerized check list
16 that says, "Look at this," and the reviewer will be able to
17 pull up the reference material to show the acceptance --

18 COMMISSIONER ROGERS: I see. So, the expert
19 system is to assist this reviewer. Is that how --

20 DR. PAPERIELLO: Yes, right.

21 COMMISSIONER ROGERS: See, that wasn't clear in
22 what you sent us. There was a reference to the expert
23 systems, but an expert system could be automated, it does
24 the check itself on the electronic submission and there is
25 no intervention of a human hand.

1 DR. PAPERIELLO: No, that's not what's going to
2 be -- and also there is going to be 100 percent QA check, at
3 least for the first six months, and a smaller percentage but
4 a QA check thereafter of every license that is issued in
5 this process to make sure, in fact, something does not fall
6 through the cracks. So, it is not a machine review of an
7 application. It's computer-aided assistance to ensure all
8 the reviewers do the same kind of review. We have had
9 complaints about whether there's uniformity among the
10 regions. This certainly will ensure documentation that it
11 was looked at and documentation of the deficiencies that
12 were identified and the basis for asking for more
13 information, which we've been told we're not doing right
14 now. So, that's how the system will work.

15 COMMISSIONER ROGERS: All right.

16 DR. PAPERIELLO: There will be a lot of human
17 intelligence applied except a lot of the paper will go away.

18 COMMISSIONER ROGERS: Yes. I think it could be a
19 little clearer exactly how that part of the process is going
20 to work.

21 DR. RATHBUN: Commissioner Rogers, there's another
22 sort of trap that the BPR team falls into and that is these
23 processes and procedures are what we work out thoroughly in
24 the next phase, but it's really a bad answer for me to tell
25 you, "Oh, phase 2." You know what I'm saying? But the

1 actual true mechanics of some of this, that's what is the
2 business of phase 2.

3 COMMISSIONER ROGERS: That's the prototype.

4 DR. RATHBUN: Exactly.

5 COMMISSIONER ROGERS: And that's absolutely
6 essential.

7 The other question relates to the self-managed
8 teams. When you address that in your remarks, you indicated
9 that most of what these teams will be looking at are --
10 maybe I'm putting words in your mouth, but sort of one-of-
11 a-kind type of situations. So, there one is not so
12 concerned about consistency. If each is an individual
13 special case that has to be decided on its own merits or
14 taking into account special circumstances, then the question
15 of total consistency from team to team is not such a big
16 issue. But I am a little concerned about how you maintain a
17 regulatory consistency when you have a number of self-
18 managed teams running at the same time.

19 DR. PAPERIELLO: Well, I think in the way we did
20 in this process. We had a steering committee which was made
21 up of people at the division director level, both in
22 Headquarters and in the regions and from a variety of
23 offices, not just from NMSS, and an executive committee
24 headed by the Deputy EDO and the office directors to --

25 COMMISSIONER ROGERS: Yes, but that's a lot of

1 superstructure that you put on the system during this
2 development phase. So, that presumably is mostly going to
3 go away if you adopt this for the long term.

4 DR. PAPERIELLO: I didn't plan on that.

5 COMMISSIONER ROGERS: Really?

6 DR. PAPERIELLO: Because it only involves --

7 COMMISSIONER ROGERS: You mean you intended to
8 keep the same --

9 DR. PAPERIELLO: The superstructure only gets
10 involved -- the steering committee met with the team maybe
11 an average of once every three weeks. It's not an
12 outrageous burden. People at that level get involved in
13 task forces all the time, all over in periodic meetings. I
14 think that's the part of a responsibility of the manager.

15 MR. THOMPSON: Are we talking the same thing? I
16 think you're down into the implementation phase in the out
17 years.

18 COMMISSIONER ROGERS: Steady state operations.

19 MR. THOMPSON: Steady operations and you may still
20 be -- still working our way through the process.

21 COMMISSIONER ROGERS: Yes. I'm not talking about
22 phase 2, I'm talking about the ultimate, once you've arrived
23 and the system is working.

24 MR. THOMPSON: I'm not sure that we've really
25 thought that process out.

1 COMMISSIONER ROGERS: If you still are using self-
2 managed teams, then how do you maintain consistency on a
3 policy basis or even in terms of practice from team to team?
4 That's really what the question is.

5 MR. THOMPSON: As I say, they may well be unique
6 license applications which we will get management attention
7 just to start off with. I don't think we would ask a self-
8 managed team to start a de novo review of a new AVLIS or
9 some system that we've never licensed before. So, I don't
10 think we've thought that -- at least I haven't thought that
11 thing through. You got somebody that's thought it through?

12 DR. RATHBUN: The team wants to answer.

13 COMMISSIONER ROGERS: Would you use a microphone?

14 MR. THOMPSON: Identify yourself, John.

15 MR. PELCHAT: Good morning. I'm John Pelchat with
16 the core team. What we see as being the tool to maintain
17 consistency amongst the teams will be the centralized
18 licensing manual that will place all the information and all
19 the policy that the teams need in order to perform their
20 function in one place and at one time. It's the use of this
21 up-to-date, dynamically maintained manual that will allow us
22 to be consistent.

23 COMMISSIONER ROGERS: Well, it will help
24 certainly. But I'd like to hear more on that. I don't
25 expect to hear it all from you right now, but it does seem

1 to me that you'll have this dilemma of how much you put in
2 the manual to make it a totally prescriptive system and
3 then, of course, there's not much judgment involved by the
4 teams. The self-management questions become much less
5 significant. On the other hand, it's a very rigid system
6 then. If you really want to open up things a little bit to
7 provide a somewhat less prescriptive approach, which is what
8 we're trying to do in some other areas of regulation, then
9 you do have the problem of how do you communicate from team
10 to team in such a way as to maintain a reasonable level of
11 consistency.

12 MR. PELCHAT: One other thing that we were -- if I
13 may, Commissioner. One other thing that we were looking at
14 too, especially at the onset of the new process, is we were
15 looking at a 100 percent quality assurance audit program
16 where we would be looking at each action and we would have
17 active feedbacks into the licensing process when we found
18 things that we thought needed to be shared with the staff
19 and with the teams. That was a mechanism that is part of
20 the design, intrinsic to the design.

21 DR. PAPERIELLO: I think there's two different
22 things here. The day to day work and actually reviewing
23 licenses is not going to be drastically different than it is
24 now. When I make a change -- for example, you've approved
25 setting up a spent fuel program office. We're going to have

1 to develop a way of reviewing the multi-purpose cask. In my
2 mind, getting the people who have reviewed casks in the past
3 and say, "Okay, this is a somewhat different animal and we
4 have very tight constraints." You make a proposal on how
5 we're mechanically going to do that review. That is a self-
6 directed team. Management maintains oversight of the whole
7 thing and the like. But the actual day to day work is going
8 to be done no different. Once you developed the product and
9 management endorses the product, then it's no different than
10 we do now.

11 COMMISSIONER ROGERS: Well, I think you picked a
12 bad example because that clearly is a unique situation.
13 What I'm concerned about is routine matters that come before
14 self-managed groups and how to maintain consistency. That's
15 really my question, not one-of-a-kind situations where I
16 wouldn't have any trouble with your description at all. But
17 I don't think that's the kind of problem I'm asking about.

18 DR. PAPERIELLO: Commissioner, I don't have any
19 routine things that I right now plan on giving to a self-
20 directed team. So, maybe that's part of the -- no, but I'm
21 looking at them for using these on these one -- you know,
22 it's something you're going to do once. You want
23 innovation, you want ideas, you want people doing it. It's
24 not a way of doing business on a routine. Once they come up
25 with a product and we memorialize it, then it becomes a

1 routine thing and it's managed away and, depending on the
2 significance, it gets raised to the Commission's level for
3 approval and that becomes the agency's way of policy.

4 I'm suggesting that we use the intelligence and
5 the skills of our staff and not just a handful of managers
6 to come up with new and innovative ideas to present to you.

7 MR. THOMPSON: I think John Madera from Region
8 III, a section team, a member of the team also, wants to add
9 --

10 DR. RATHBUN: This is a self-managed team.

11 COMMISSIONER ROGERS: That's becoming very
12 apparent.

13 DR. RATHBUN: This is an example.

14 MR. MADERA: Hello. I just want to state that
15 self-managed teams is a concept that requires management
16 involvement. It isn't just people working together in a
17 group to do a specific action. Management has to be fully
18 behind self-managed teams and, in fact, management's role is
19 basically just to mentor and help the team accomplish the
20 goals that are identified by management and the leaders of
21 the particular teams. But teams will be working toward the
22 mission or the goal mandated by management, but they will be
23 doing it themselves, not so much overseen by managers as we
24 do it today. So, it's a unique concept and it's really, I
25 feel, the way we need to go to be able to utilize all of the

1 expertise in the agency.

2 COMMISSIONER ROGERS: Fine.

3 CHAIRMAN SELIN: Commissioner de Planque?

4 COMMISSIONER de PLANQUE: One of the questions
5 that occurs to me is that some of the things that are now in
6 our regulatory framework have come about because of GAO
7 reports or blue ribbon committees or groups looking at
8 specific problems and items get added to license conditions
9 or they get added to rules in response to those types of
10 things. How are you capturing those previous mandates,
11 shall we say, as you go about this new process?

12 DR. PAPERIELLO: We have found some of them and
13 we're going to have to look at it and reconsider. Obviously
14 we have, over the years, created a lot of these. I think of
15 them, frankly, and I've looked at some from the '70s, are
16 out of date. They're just out of date. Circumstances have
17 changed in 20 years. They're just out of date.

18 COMMISSIONER de PLANQUE: I guess my only thought
19 was at least that needs to be addressed somehow.

20 DR. PAPERIELLO: We need to consider it.

21 COMMISSIONER de PLANQUE: And if we are making a
22 change that is different from something that was instituted
23 in response to something like that, we should do so
24 knowingly and be prepared to defend that.

25 DR. PAPERIELLO: That's correct.

1 COMMISSIONER de PLANQUE: Okay. Well, I think
2 you've done an absolutely fantastic job with this. There's
3 one part of it that I can't let escape notice in terms of
4 commendation and that is the way you went out to other
5 organizations to see what they've done and tried to learn
6 from them.

7 DR. PAPERIELLO: Oh, yes.

8 COMMISSIONER de PLANQUE: As you know, I always
9 ask what other government agencies are doing or what the
10 private sector is doing. So, I was very impressed with what
11 you've done in that regard and I did want to commend you for
12 doing that. So, I think you're on the right track.

13 CHAIRMAN SELIN: Commissioner Jackson?

14 COMMISSIONER JACKSON: Just a few checkpoints.

15 I assume you have internal time lines built in.
16 They aren't explicitly discussed, but that's your --

17 DR. PAPERIELLO: Yes, we do.

18 COMMISSIONER JACKSON: Is training meeting
19 included in your investment budget?

20 DR. PAPERIELLO: Yes, training will be, but I
21 can't explain the concept.

22 DR. RATHBUN: The buzzword is called "just in time
23 training." Really what this means is we involve the
24 trainers from day one. There is a licensing course coming
25 up in Chattanooga. Two of our team members are

1 participating in that and I believe that our CSC contractors
2 will be joining. We know we have to have a totally radical
3 way of doing training. We can't take the whole agency and
4 throw them down to Chattanooga and teach them how to do
5 licensing this new way. They have to learn it day by day
6 with us.

7 We've talked to Paul Bird, who I think is still
8 here. We've talked to Ken Raglin and we know that we have
9 got to incorporate the training modules as we go.

10 COMMISSIONER JACKSON: In looking again at the
11 investment or your business case, you mentioned that the
12 figures for the new process that you have built in are
13 consistent with or predicated on previous budget decisions.
14 All I wanted to ask is that you have a certain degree of
15 aggressiveness about your budget, consistent with what your
16 regulatory responsibilities are. You don't build up to a
17 budget, but that if there are other opportunities that --

18 DR. PAPERIELLO: Yes. We're going to apply the
19 technique to the inspection side of the house probably in
20 about another six to eight months. I want to get some
21 things done here and then I want to apply it to inspection.
22 In fact, looking back at it, I would have probably done this
23 more aggressively than I did. But as I said, it was IRM who
24 introduced me into the process and I wasn't -- I was
25 hesitant. I will tell you when I started this process last

1 November I was very hesitant. I believe in it now because I
2 see what it did, but I want to look at essentially the
3 balance of the materials program starting this fall with the
4 same technique and I believe there will be additional
5 savings. There are going to be necessary savings. If we no
6 longer inspect the licensees performing their own detailed
7 procedures which we have made regulatory requirements, we
8 are going to shorten the inspection process.

9 Secondly, I can then focus on what I call -- well,
10 we call them output indicators. I call them the fundamental
11 safety indicators, what are dose. Dose, in my mind as a
12 health physicist, dose and potential dose is safety, at
13 least in the materials, byproduct materials. When you deal
14 with fuel you have a different issue. When you deal with
15 reactors, you have a different -- use of byproduct material.
16 We can focus the inspections there. I want to capture the
17 information.

18 Right now if I want to know the results of an
19 inspection done three years ago, there's a painful hand
20 search. So, I want to establish -- in establishing the
21 materials licensing database, which we already have, but
22 revising it, I want to have space to put in inspection
23 results so if somebody asks me three years from now, "How
24 many cases do people exceed NRC effluent limits?" I would be
25 able to find that information out and I can't do that. So,

1 the results of the inspection are there, are in our records,
2 but somebody has to go through a lot of paper to fine it.
3 So, there's a whole lot of things that I want to do with the
4 balance of our program.

5 COMMISSIONER JACKSON: That kind of database
6 restructuring is implied in your budget?

7 DR. PAPERIELLO: Only for the licensing side, not
8 on the inspection side.

9 COMMISSIONER JACKSON: Okay.

10 DR. PAPERIELLO: But my experience with some of
11 the people who are gurus in this area indicates to me it
12 wouldn't be that much extra to add on.

13 COMMISSIONER JACKSON: Well, database
14 reconfiguration can be a black hole.

15 Last question/comment. This is beating the dead
16 horse, but it has life in it. Back to the agreement states.
17 Now, I know your focus is on licensees, but the agreement
18 states are not going to go away and I noted in the text of
19 the SECY that you talked about giving telephone briefings,
20 two telephone briefings to the Organization of Agreement
21 States. Again, even with agreement states, we still have
22 ultimate responsibility and I'm just saying you cannot
23 ignore how whatever you develop affects our ability to do
24 what we have to do vis-a-vis the agreement states.

25 DR. PAPERIELLO: I understand that.

1 COMMISSIONER JACKSON: Okay.

2 CHAIRMAN SELIN: Thank you.

3 I'd like to identify myself with the comments,
4 particularly Commissioner Rogers' summary. I agree with
5 that completely. In fact, you've had some problems this
6 morning, but the problems are that you've done such a
7 terrific job you've raised our expectations a lot faster
8 than you expected when you were preparing the report. I
9 think you ought to take that very seriously in the following
10 sense. You're off to what I think is a wonderful start.
11 So, now is the time to ask some more fundamental questions
12 than you were prepared to ask, why are we licensing gas
13 chromatographs to begin with, that kind of thing.

14 So, this is the time to ask the big questions
15 before you get too far into your workshop and figure out a
16 more efficient way to do them. It has to do with what do we
17 license. Don't take for granted that because things are
18 messy and done through license conditions they should be in
19 the center. That's how we got into that mess on the fuel
20 facilities. We knew it was a mess, so we said, "Let's
21 regularize it," and we didn't realize how expensive it would
22 be and how little payoff there would be. So, you've got to
23 be careful of those.

24 This might not be exactly the right place, but a
25 lot of what you've done is sort of affected by our regional

1 structure and I don't think our regional structure for
2 materials makes any sense. I think you alluded to it a
3 little bit. Why do we have well loggers inspectors in
4 Region I when we don't have well loggers in Region I? Maybe
5 this isn't quite the right place, but you ought to be
6 rethinking quite fundamentally how we should be distributing
7 resources, material resources in the regions.

8 Now, I realize licensing is the least of the
9 things that materials people do in the region. So this may
10 be not the right tail to wag the dog, but don't take the
11 structure as a given either as you go into it.

12 On the agreement states, you had something in your
13 chart, but you didn't repeat it. That is we have a lot to
14 learn from them as well as them from us. We have 29
15 independent experiments going out there. They may not be
16 independent, but they are quite different. So, maybe the
17 horse really is dead at this point, but they're not
18 briefings. They have to be interactions and we have to get
19 things back from them, not just one way communications of
20 what we're doing. I'm quite certain that you will give the
21 Commission the last word, Dr. Paperiello. The briefing
22 never ends.

23 DR. PAPERIELLO: We recognize that, but I have to
24 be honest. When we started off on this, we went hell bent
25 for leather and --

1 CHAIRMAN SELIN: You started off doing a small
2 thing. You were going to automate some stuff and clean it
3 up and use computers to be more efficient. You've gotten
4 way beyond your original thing.

5 DR. PAPERIELLO: That's right.

6 CHAIRMAN SELIN: Now is the time to stand back and
7 say, "What are the potentials that your success has opened
8 for you?" and make sure that you get them right, even if it
9 does slow you down a little bit.

10 When I was in business, we had the story about
11 this one fellow who made 31 sales calls in one day. The
12 record was 34. We asked him, "How did you do it?" He said,
13 "It was terrible. I would have made 35 but the last guy
14 insisted on giving me an order."

15 So, don't lose track of what we're really trying
16 to do, just to make your schedule. I assume that although
17 you're worried about, "Let's not write the regs too fast
18 because they're hard to change the software," it should be
19 pretty easy to change though, within given regulations. So,
20 if you figure out new mechanics or better ways to do things,
21 I just take that as a given. If I'm wrong, just tell me
22 some other time that I'm wrong, but not now on this
23 question.

24 I guess those are the main things. But I do think
25 the agreement state is probably the biggest single issue

1 because you start out saying, "How can we run the NRC budget
2 more efficiently?" What you're really asking is how can you
3 have the states regulate materials licensees more
4 efficiently. As you've said over and over, the two-thirds
5 of them are under agreement states and the trend is for more
6 and more. You ought to at some point just stand back and
7 see do you want to do things a little differently if you
8 take that as the objective, not just putting it in our
9 budget.

10 I think it's a terrific job and it's far more than
11 you or I actually expected you to come up with last
12 November. But your success obliges you to take a broader
13 view of what you're doing and had intended to do and I think
14 we'll all be much better off for that.

15 Thank you very much.

16 MR. THOMPSON: Thank you.

17 [Whereupon, at 11:34 a.m., the meeting was
18 concluded.]

19

20

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22

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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 BUSINESS PROCESS
REENGINEERING FOR MATERIALS LICENSING
AREA - PUBLIC MEETING

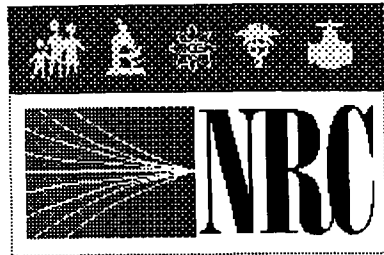
PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Thursday, May 11, 1995

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: Carol Lynch

Reporter: Peter Lynch



**NMSS Materials Licensing
Business Process Redesign Project**

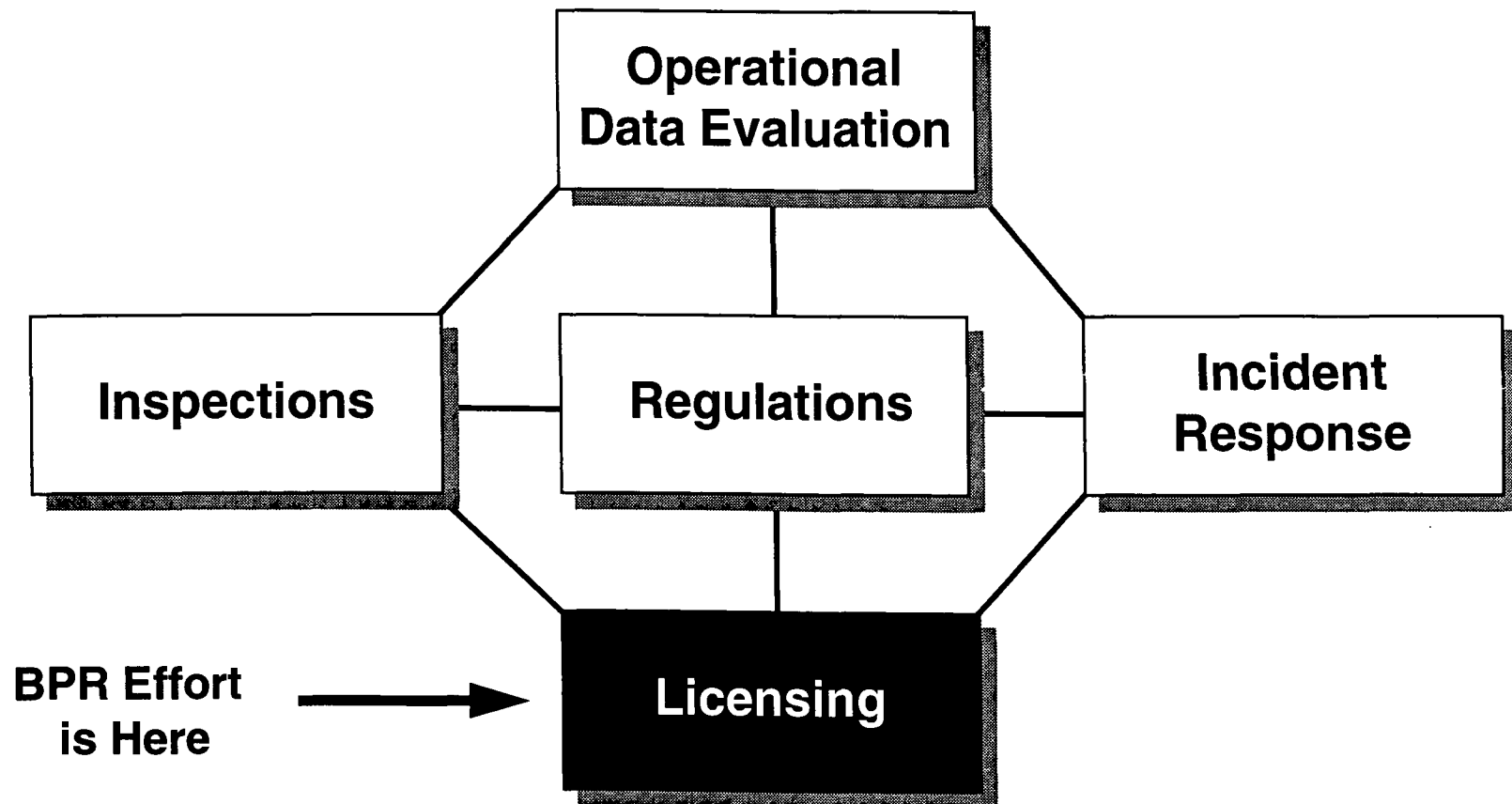
Commission Briefing

by

Carl J. Paperiello

May 11, 1995

Relationship of Materials Licensing BPR to Other Key NRC Areas



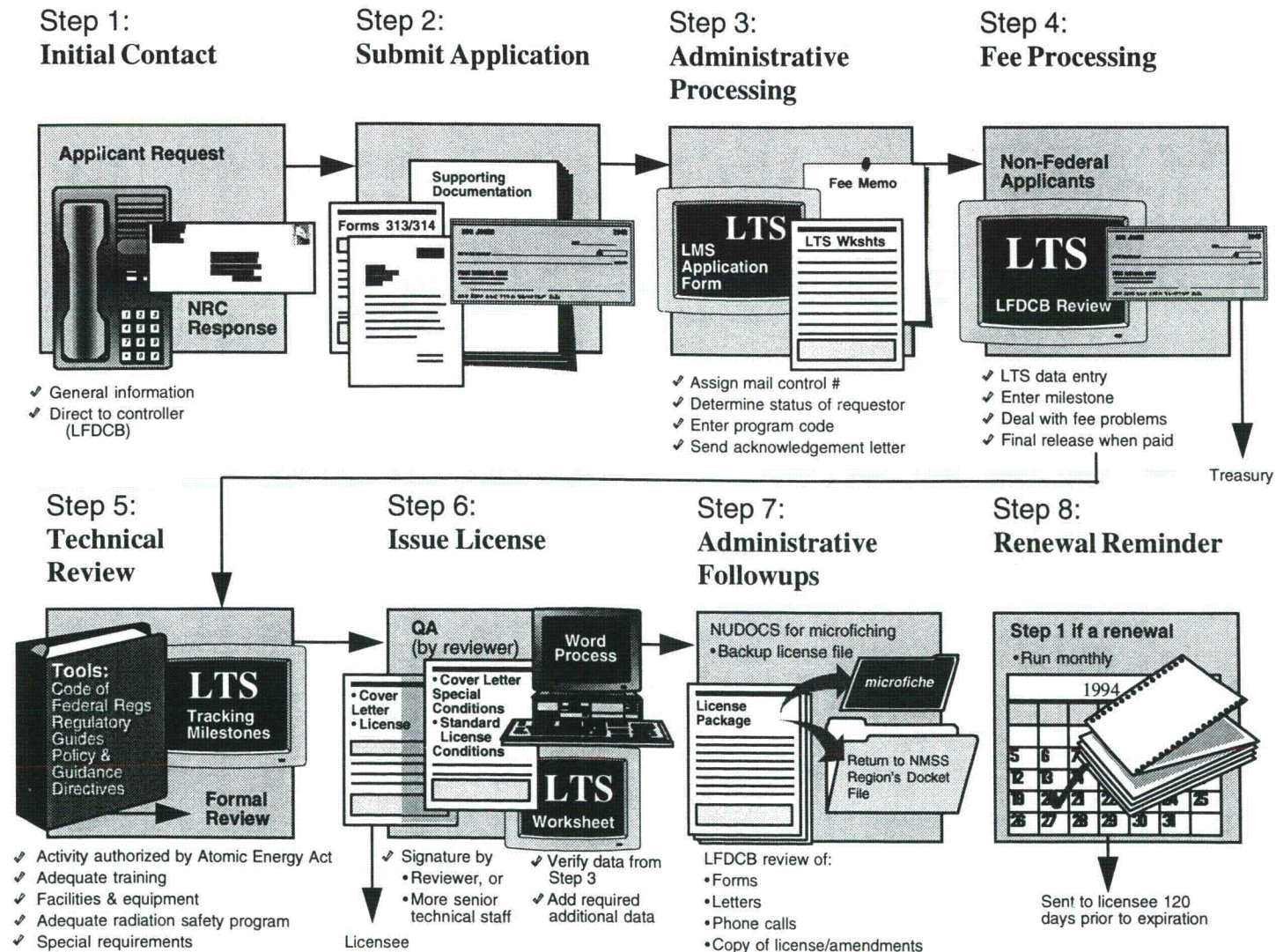
Cross Functional BPR Team Members

Name	Grade Level	Job Title
NRC		
Patricia Rathbun (Tm Ldr)	15	Special Assistant, IMNS/NMSS
Keith Brown	13	Health Physicist, RI
John Madera	15	Section Chief, RIII
Maureen Moriarty	11	Licensing Mgmt System Analyst, NMSS
John Pelchat	13	Health Physicist, RII
William Usilton	15	Senior Computer Systems Analyst, IRM
Patricia Vacca	15	Senior Project Manager, NMSS
Jack Whitten	14	Senior Health Physicist, RIV

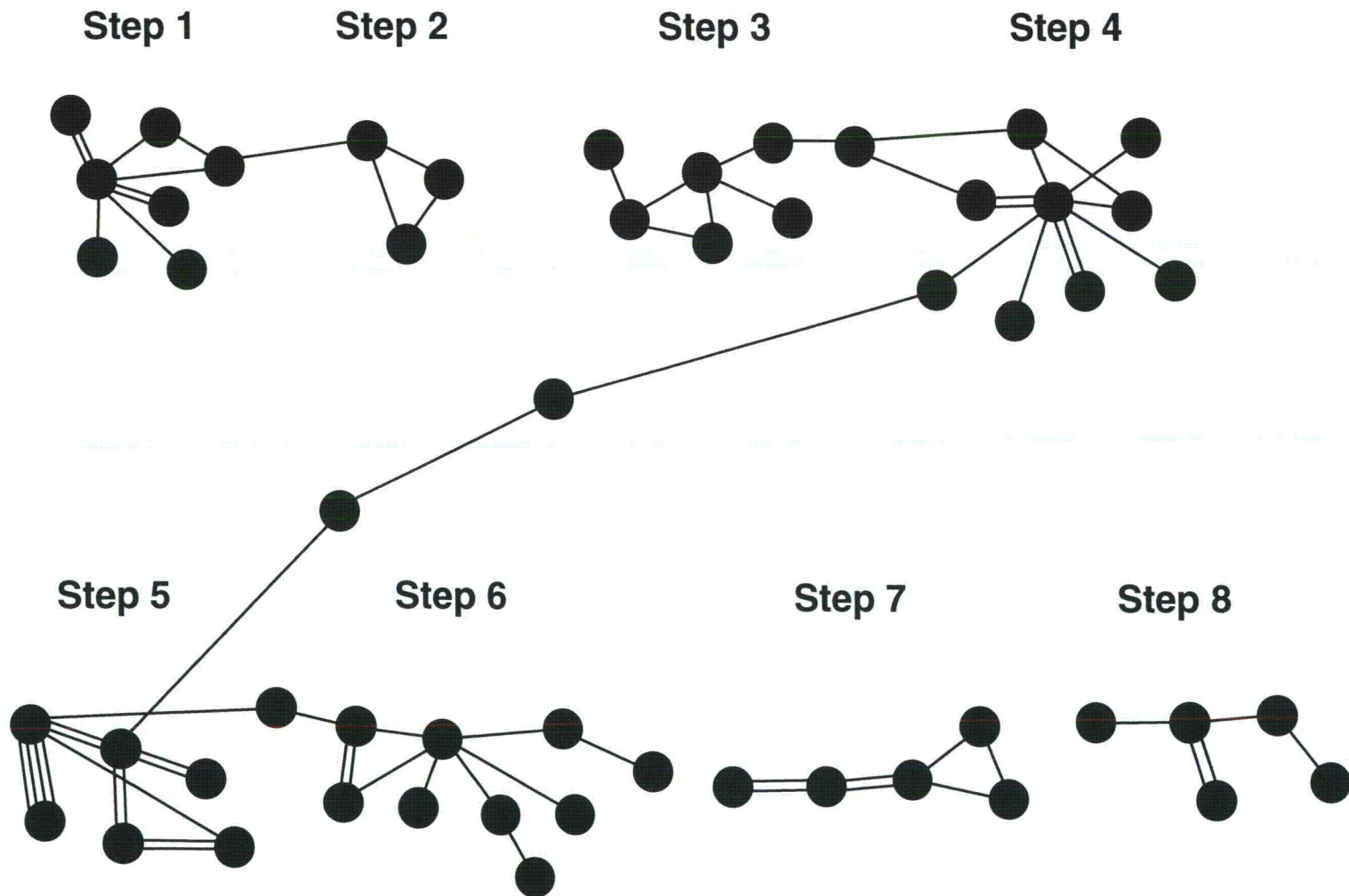
CSC Consultants

Karl Leatham (Tm Ldr)
David Greenwald
Johan Margono

Current 8-Step Materials Licensing Process

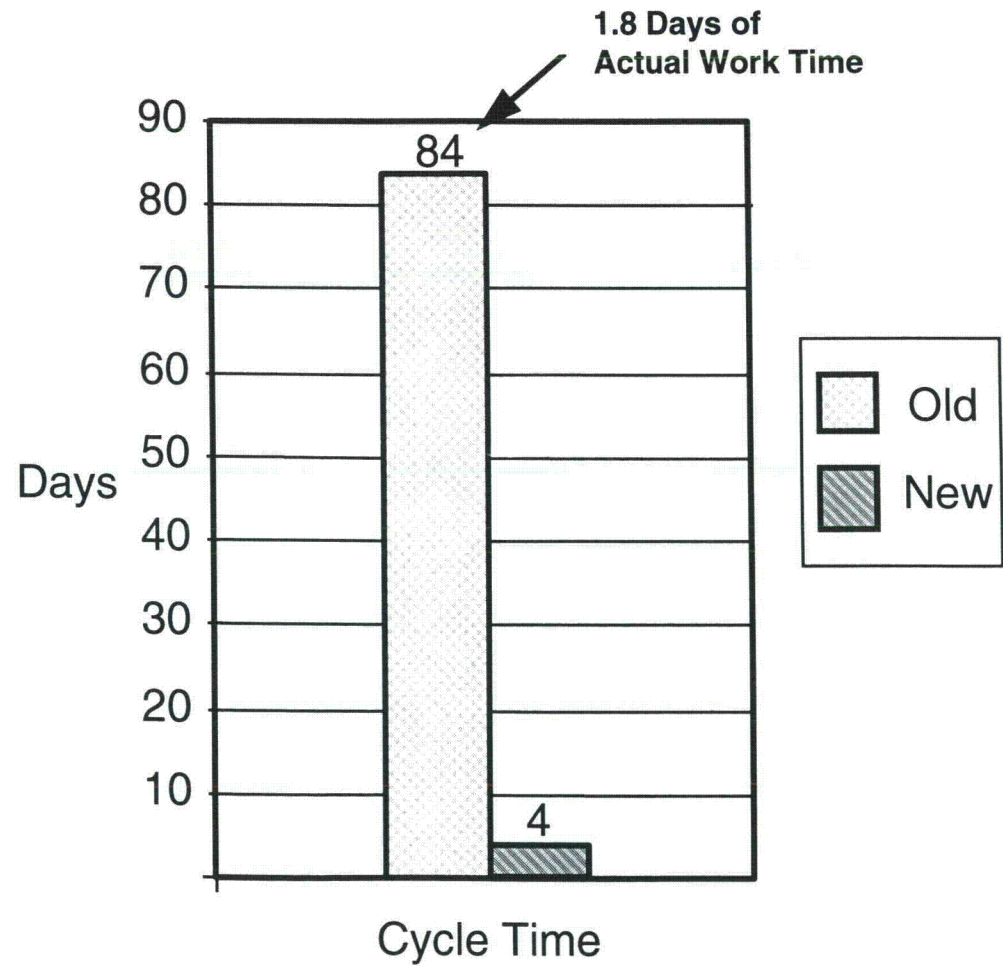
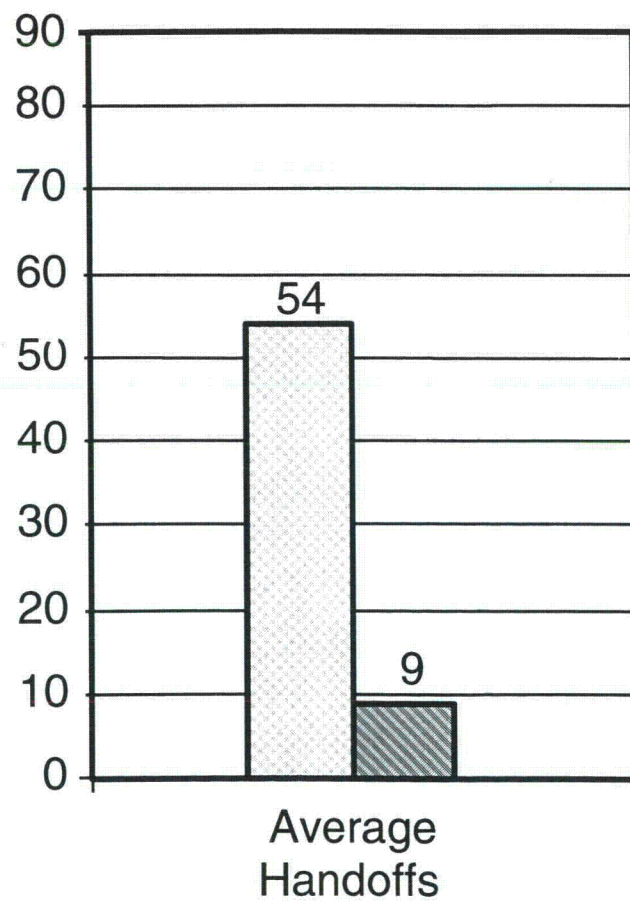


Process Flow in the Current 8-Step Process

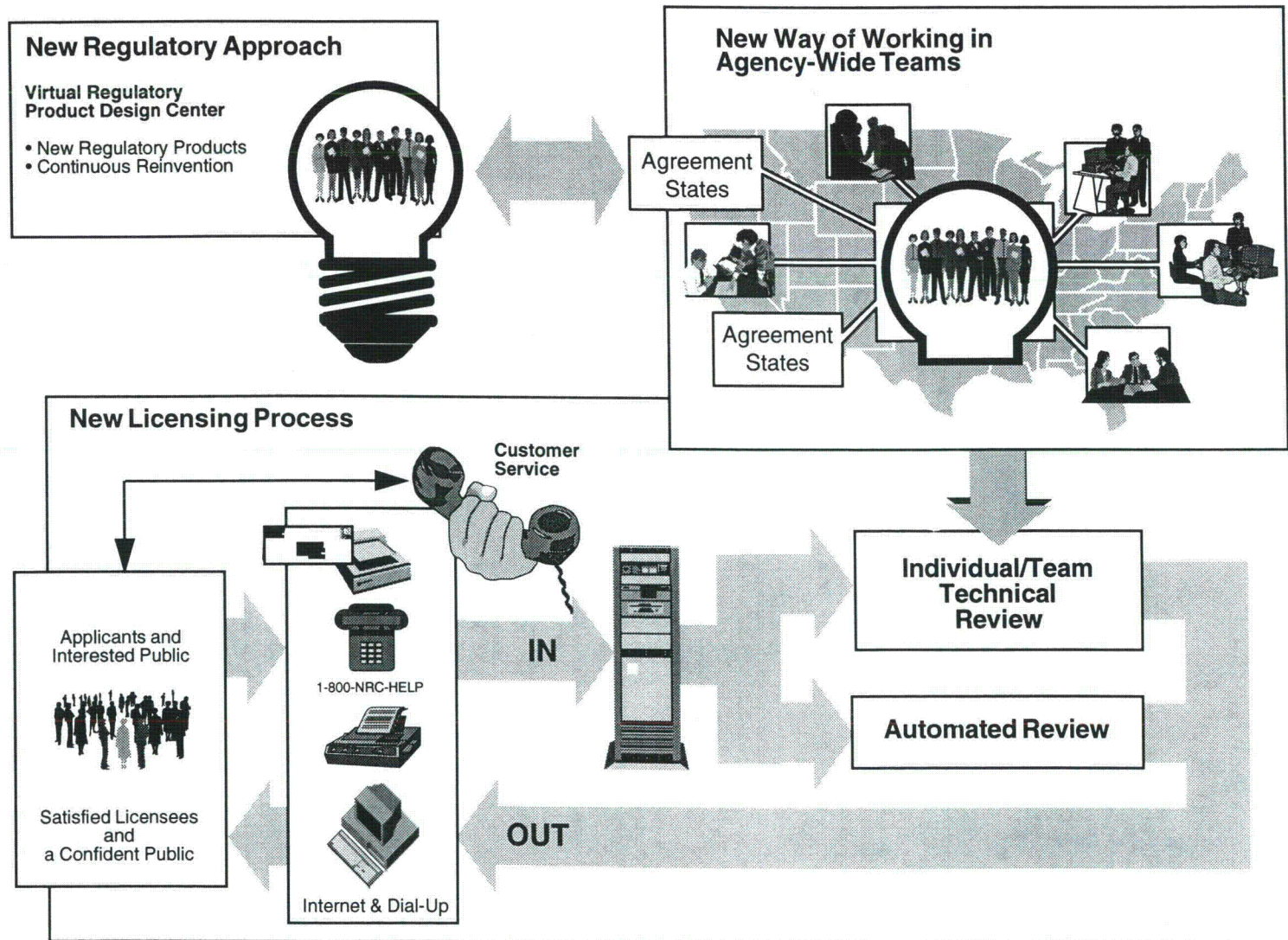


Findings

Efficiency Improvements



The New Materials Licensing Process



Regulatory Basis of the New Materials Licensing Process - “Vision 2000”

- ✓ Use a graded approach to match review intensity to safety hazard
- ✓ Automated review if uses are routine and applicant has adequate resources
- ✓ For routine uses, performance requirements will be codified in NRC’s regulations
- ✓ The NRC will neither review nor make requirements by license condition of practices and procedures that are within the “skill of the craft” of the applicant
- ✓ Results-oriented regulatory approach

New Process Implementation

For Immediate Implementation

- ✓ On a one-time basis, extend qualified material licenses by 5 years.
- ✓ Separate payment of fees from the process of issuing a license and continue to streamline the fee structure for material licenses.
- ✓ Proceed to Phase II (Prototype Phase of the BPR project) including development of supporting guidance and an integrated automated system
- ✓ Develop a standard license condition for broadscope licensees functionally equivalent to 10 CFR 50.59

The First Major Implementation Initiative - One-time Extension of Eligible Licenses by 5 Years

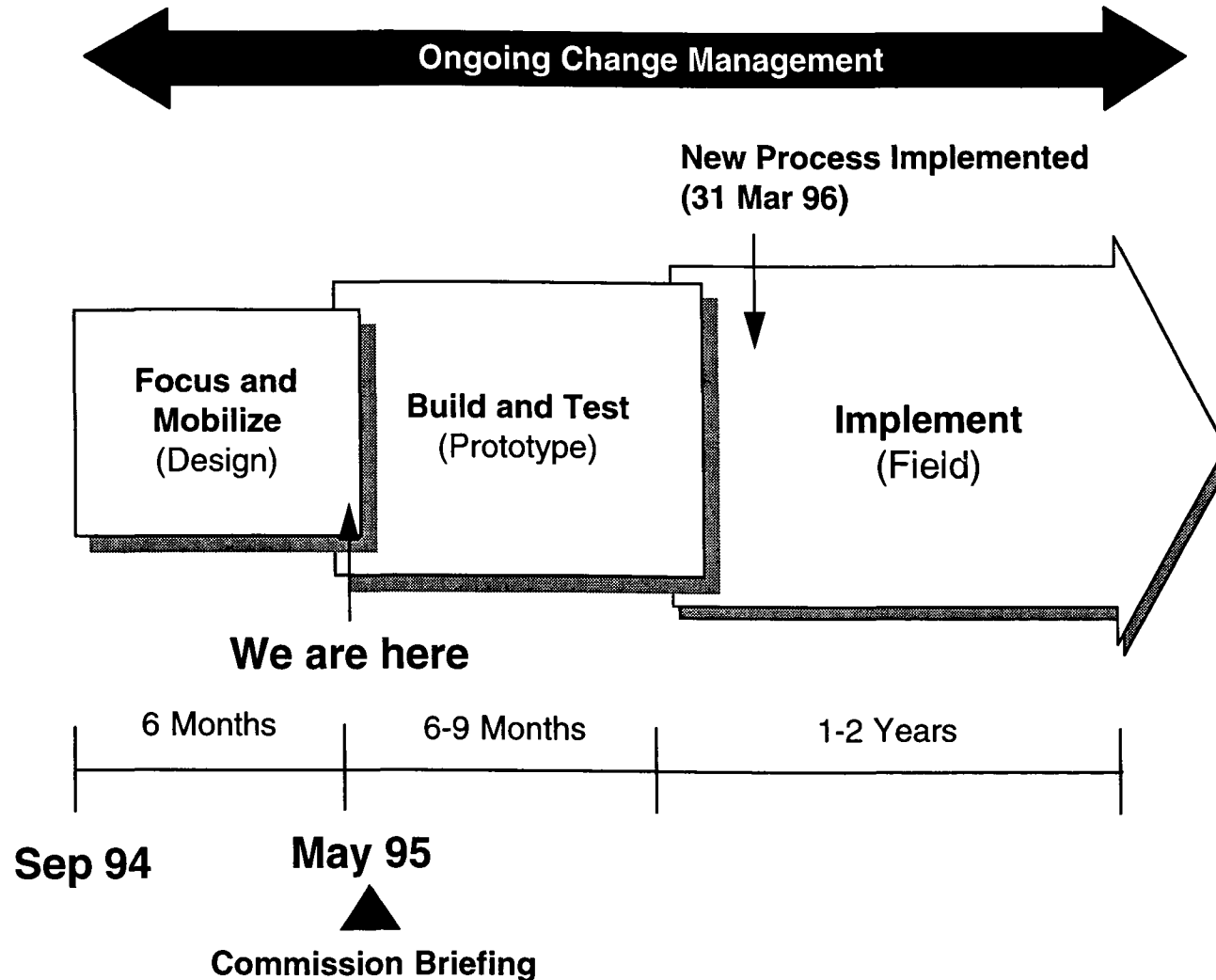
Base Rule

- ✓ On a one-time basis, extend eligible licenses by five years. Disqualify automatic extension based on the following possible criteria:

Disqualifiers

- ✓ Any licensee required to provide an emergency plan for responding to the release of radioactive material
- ✓ Any licensee subject to financial assurance requirements who has not submitted an acceptable decommissioning funding plan or certification of financial assurance
- ✓ Any license currently on the Site Decommissioning Management Plan list
- ✓ Any license for which an Environmental Assessment is needed
- ✓ Any license for which the licensee has received a Severity Level I, II, or III violation, or an order, a CAL, or other significant enforcement action at the last inspection

Where We Are on the Journey



Changes to Fee Structure and Collection

Separate Fees from Licensing

- ✓ Simplifies fee process
- ✓ Removes fee collection from critical path in licensing process
- ✓ Reduces burden on staff

Establish Two Annual Fees

- ✓ One annual fee for first year licenses whose application requires staff review
- ✓ Other annual fee includes average yearly costs and includes first year licenses processed through automated review
- ✓ New license not effective until fee paid

Assess Annual Fee on License Anniversary Date

- ✓ Predictable for licensee and NRC
- ✓ More uniform distribution of NRC workload

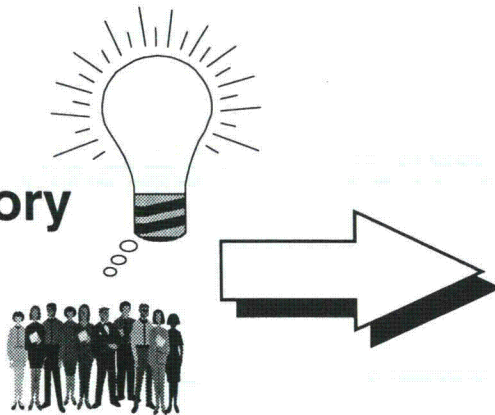
New Process Implementation

For
Development
and
Implementation

- ✓ Develop an NMSS policy on license duration based on risk, technological stability, and institutional stability
- ✓ Fundamentally reexamine the NRC's licensing and regulatory scheme for materials users to implement the regulatory vision
- ✓ Make needed organizational and administrative changes to implement the above in accordance with applicable agency directives and policies

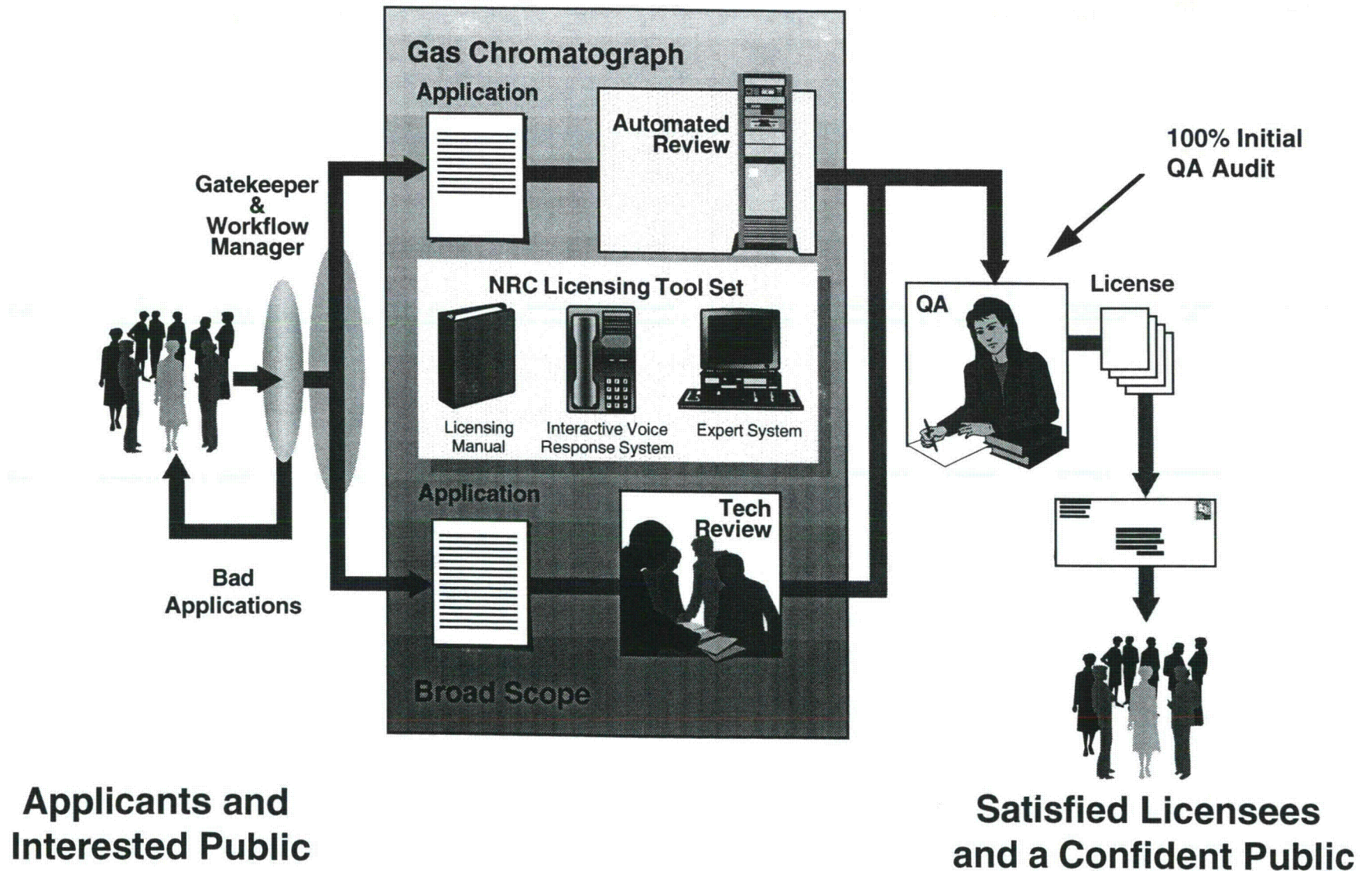
Highlights of the New Process

**Virtual
Regulatory
Product
Design
Center**

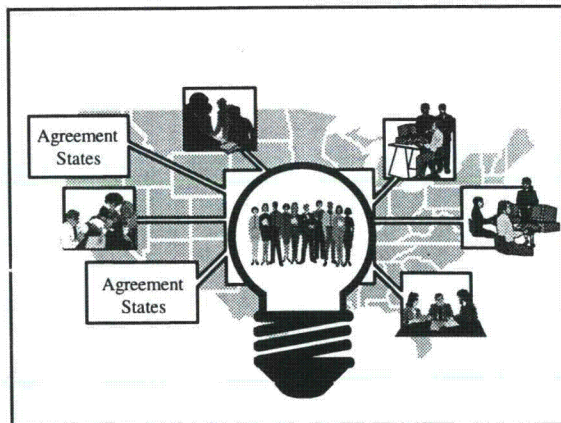


- Extended license duration
- Single licensing manual
- Safety-based expert system-aided application review
- 10 CFR 50.59 equivalence
- Introduction of registration concept
- Indefinite licenses
- Education products and requirements

Graded Processing of Licenses



A New Way of Working in Agency-wide Teams



- ✓ A new partnering culture
- ✓ Collaborative team-based decisions
- ✓ Parallel concurrence
- ✓ Agency-wide goals
- ✓ Transcend regional boundaries
- ✓ NRC skills database
- ✓ Single guidance database
- ✓ NRC-Agreement State cooperation
- ✓ Rapid access to centrally stored data
- ✓ Manage by exception
- ✓ Better worklife

Our Vision Directly Addresses All Four NPR Functional Areas

Cutting Red Tape

- ✓ Automated review of licenses through the use of expert systems
- ✓ Participation of Agreement States in NRC regulatory product development
- ✓ Five-year extension of qualified licenses
- ✓ Intra-agency collaboration across geographical boundaries
- ✓ Parallel development, review, and concurrence of regulatory products
- ✓ Separate fees from the issuance of licenses

Putting the Customer First

- ✓ Accelerated license issuance without adversely impacting public health and safety
- ✓ Customer service as a single point of contact
- ✓ User-friendly, publicly accessible electronic regulatory products and databases
- ✓ Electronic application process

Our Vision Directly Addresses All Four NPR Functional Areas (cont.)

Empower Employees to Get Results

- ✓ Comprehensive licensing manual available electronically
- ✓ Self-managed work teams
- ✓ Strengthened labor management partnering culture
- ✓ Enhanced job satisfaction through greater professionalism

Cutting Back to Basics

- ✓ Elimination of redundant paper work and overlapping tracking systems
- ✓ Consolidation of regulatory guidance documents
- ✓ Improved productivity through use of new electronic tools
- ✓ Streamlined license review process

Safety Implications of the New Process

Graded Review Commensurate with Potential Risk of Activity

- ✓ Automated review of less complex licenses
- ✓ More complex licenses receive full technical review
- ✓ NRC expertise pooled and focused on issues

Clarify and Codify Regulatory Guidance

- ✓ Licensees gain greater overall understanding
- ✓ Improved Licensee Submittals

Safety Implications of the New Process

Extensive Quality Assurance

- ✓ 100% QA audits in first 6 months of implementation
- ✓ System improvements derived from QA problem analysis

Use Performance Indicators

- ✓ Early inspection results used to validate and improve new process
- ✓ AEOD database analyzed and compared to past licensee performance

Agreement State Liaison

- ✓ Agreement State representatives briefed on BPR project vision, implementation schedule, and future liaison activities
- ✓ New materials licensing process implemented in controlled phases over 2 year time span
- ✓ Ample opportunity to evaluate potential ripple effects on Agreement States
- ✓ Guidance consolidation efforts open to Agreement State participation
- ✓ New technology and process available to Agreement States for potential use
- ✓ Potential use of regulatory tools developed by Agreement States

Principal Near Term Actions

Backlog Elimination

- ✓ Major effort devoted to reduce the existing backlog
- ✓ “Backlog team” formed to get backlog to about 300 cases (1 month’s work)

Licensing Manual Development

- ✓ Assemble and review all materials licensing guidance
- ✓ Reduce volume by at least half
- ✓ Produce a single comprehensive licensing manual
- ✓ Published in electronic format as NUREG and will replace all existing guidance. Functionally equivalent to NRR’s NUREG-0800, Reactor Standard Review Plan