

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

OFFICE OF THE SECRETARY

BRIEFING ON RISK-INFORMED REGULATION

IMPLEMENTATION PLAN

PUBLIC MEETING

Nuclear Regulatory Commission

One White Flint North

Commissioner's Conference Room

11555 Rockville Pike

Rockville, Maryland

Friday, November 17, 2000

The Commission met in open session, pursuant to notice, at 9:00 a.m., the Honorable RICHARD A. MESERVE, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

RICHARD A. MESERVE, Chairman of the Commission

GRETA J. DICUS, Member of the Commission

NILS J. DIAZ, Member of the Commission

EDWARD MCGAFFIGAN, JR., Member of the Commission

JEFFREY S. MERRIFIELD, Member of the Commission

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STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

KAREN D. CYR, General Counsel

ANNETTE L. VIETTI-COOK, Secretary

THOMAS KING, Director, Division of Risk, Analysis & Applications, RES

ASHOK THADANI, Director, RES

WILLIAM D. TRAVERS, Executive Director for Operations

ROY ZIMMERMAN, Deputy Director, Office of Nuclear Reactor Regulation

MARTIN VIRGILIO, Deputy Director, Office of Nuclear Material Safety and Safeguards

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3 CHAIRMAN MESERVE: Good morning, ladies and
4 gentlemen. I'd like to welcome you all to today's briefing
5 on the latest update of the NRC's Risk-Informed Regulation
6 Implementation Plan.

7 As I think all of you are very fully aware, this
8 is the effort of risk-informing our regulations. It's a
9 very important activity for the Commission.

10 It is one that is consuming a large measure of the
11 intellectual resources of the Commission because of its
12 importance in rethinking our regulatory requirements.

13 And I think this is a very useful meeting, because
14 it is helpful from time to time to step back and to look at
15 the entirety of our efforts in this area, and to see how
16 they relate to one another and how they all hang together.

17 For the benefit of the audience, I should indicate
18 that this is a followon to a Commission meeting that we had
19 in March, in which we saw an earlier version of this plan.
20 And we had an opportunity for an exchange with the Staff and
21 others.

22 We now have a revised version, and updated version
23 of the plan that has been extensively revised and
24 supplemented now to add both the materials and the waste
25 area plans. The previous one had just dealt with reactors.

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1 So this is an expansion of our previous plan in a
2 variety of different dimensions. So I very much look
3 forward to having this staff discussion of it.

4 Let me turn to my colleagues and see if they have
5 any opening remarks.

6 [No response.]

7 CHAIRMAN MESERVE: If not, Dr. Travers, you may
8 proceed.

9 DR. TRAVERS: Thank you, Mr. Chairman. Good
10 morning. We are certainly pleased to be here this morning,
11 to, as you indicated, give you a briefing on the development
12 of, maintenance, and revision of the risk-informed
13 regulation implementation plan.

14 This plan has been developed to help implement
15 many of the strategies in our strategic plan, which are
16 linked to risk-informed initiatives.

17 The briefing will focus on the programmatic
18 aspects of the plan, for example, objectives, structure, and
19 content, recognizing that there are also many details in the
20 plan which we may cover in response to some of your
21 questions.

22 Also, we think it's important to point out that
23 the plan is a living document; it represents a

24 work-in-progress, and its real value begins now as we use it
25 to guide decisions on what to risk-inform and what needs to

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1 be done to accomplish those tasks.

2 As we use the plan and as we receive feedback on
3 it, we intend to modify it accordingly.

4 At the table joining me is Mr. Thadani, who, of
5 course, is Director of the Office of Research, Ashok; Roy
6 Zimmerman, Deputy Director of the Office of Nuclear
7 Regulator Regulation; Marty Virgilio, Deputy Director of the
8 Office of Nuclear Materials Safety and Safeguards, and Tom
9 King, who is the Director of the Division of Risk Analysis
10 and Applications in the Office of Research.

11 And with that very brief introduction, let me turn
12 it over to Ashok.

13 MR. THADANI: Thank you, Bill. Good morning. May
14 I have the first viewgraph, please?

15 A lot has happened since the issuance of the PRA
16 policy statement in 1995, in which the Commission endorsed
17 the use of PRA information in regulatory decisions to the
18 extent supported by methods and data.

19 A major goal of the risk-informed activities is to
20 better focus our attention on safety. This has a companion
21 benefit of potentially reducing unnecessary burden.

22 Subsequent to the issuance of the policy
23 statement, the Staff developed a PRA implementation plan to
24 describe ongoing activities.

25 However, this was more of a catalog of the Agency

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1 activities where PRA techniques are utilized, not a plan for
2 where we should go.

3 In 1999, GAO had urged the development of an
4 overarching strategy to risk-inform our regulations. We
5 feel that the risk-informed regulation implementation plan,
6 when coupled with the strategic plan, and the operating
7 plan, lays out such a strategy in a manner which best
8 informs the Agency's processes, and is most easily used by
9 the Staff in our planning, budgeting, and
10 performance-monitoring process.

11 Also, in 1999, the Commission issued a white paper
12 on risk-informed regulation. In that paper, the Commission
13 described its views on performance-based regulation, as well
14 as defined the terms, performance-based and risk-informed
15 regulation.

16 In SECY 006, the Staff gave the Commission the
17 first version of the risk-informed regulation implementation

18 plan, as the Chairman noted.

19 The Staff acknowledge that the plan was
20 incomplete, and the Staff committed to fill in the gaps in
21 the next revision of the risk-informed implementation plan.

22 Since the issuance of this report and the
23 Commission brief, the Commission directed the Staff to do
24 two things:

25 First, to include internal communication and

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1 training plans in the risk-informed regulation
2 implementation plan;

3 And, two, to identify internal and external factors
4 that may adversely affect the planning process.

5 Also, during this period, of course, a strategic
6 plan was developed and issued which included strategies
7 regarding risk-informed regulations.

8 May I have the next, please? The development and
9 the implementation of the plan involves collaboration
10 between the three major Offices here, NRR, NMSS, and the
11 Office of Research. And all the activities and the effort
12 that has gone on in terms of developing SECY 0213 is the
13 effort of all of the Offices together.

14 Also, we have benefitted from interactions with
15 stakeholders through workshops and periodic meetings with
16 the PRA Steering Committee.

17 We also gained valuable feedback from our
18 international partners regarding risk-informed approaches to
19 a program we call COBRA.

20 Now, our briefing is going to cover a number of
21 areas, and, first and foremost, I believe that SECY 0213 is
22 responsive to the Commission's direction and addresses the
23 major issues that were raised by GAO regarding what should
24 be risk-informed, why, how, and when, as well as focusing on
25 the issues of communication and training.

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1 However, as Bill Travers also has mentioned, it
2 must be recognized that this plan is a living document and
3 will change as comments are received and as we gain
4 experience in its application.

5 Another part of the briefing relates to some of
6 the challenges that we face. I don't want to understate the
7 many challenges that I believe lie in front of us.

8 Some of these challenges relate to, for example,
9 ensuring that the risk analyses used in redefining our
10 regulations and requirements are based on sound technical
11 bases. To that extent, we are working with various
12 standards committees, both the ASME, ANS, and the National

13 Fire Protection Association in attempting to develop sound
14 standards that could be utilized. And we do have some
15 challenges ahead of us on that.

16 We're also working with the industry to determine
17 how the public can access up-to-date PRA information. After
18 all these public health and safety decisions, it is critical
19 that all the information used in these decisions is made
20 available to the public.

21 We are interacting, both with internal and
22 external stakeholders, trying to make sure that the
23 processes, the activities we're going through, are done in a
24 very transparent manner, and I believe that that's important
25 in terms of developing their confidence, that we do that.

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1 We also have a number of implementation issues,
2 and you will hear much of what I'm describing in more detail
3 as we go through the briefing. We do have a significant
4 number of important implementation issues.

5 The NRC Steering Committee is, in fact, actively
6 engaged in attempting to deal with these issues. We are
7 also working with the industry's counterpart working group
8 to make sure that these issues are getting appropriate
9 attention.

10 In fact, at our next meeting, which is the fifth
11 meeting of the Industry Working Group, is scheduled for next
12 week, early next week, and where the focus is going to be
13 public access to PRA information and the role of the
14 standards in these activities.

15 In addition to the technical challenges, our
16 future activities are also focused on important matters that
17 have already been indicated here, training and
18 communication.

19 Finally, as noted in SECY 0213, we will apply the
20 guidelines we have developed to determine the extent to
21 which we can make the revised regulations,
22 performance-based.

23 Tom is going to go into a number of details. As
24 Bill noted, all the Offices are present here if there are
25 questions addressing areas of their responsibilities. Tom?

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1 MR. KING: Thank you, Ashok. As Dr. Travers
2 mentioned, I'm going to focus on the key programmatic
3 elements of the plan -- objectives, structure, general
4 guidance.

5 The plan itself contains a description of the
6 detailed activities that are ongoing, and we attached to the

7 package of viewgraphs, a number of backup viewgraphs that
8 summarize those.

9 I'm not going to cover those in the briefing, but
10 certainly if you have questions, we're here to answer those
11 questions on any aspect of the plan.

12 Can I have Slide 4, please? We see three main
13 purposes of the risk-informed regulation implementation
14 plan:

15 The first is to implement the strategic plan
16 strategies. The strategic plan contains about a dozen
17 strategies that include the use of risk information in their
18 description.

19 By laying out the risk-informed regulation
20 implementation plan according to those strategies, we can
21 take a look and make a judgment on are the activities that
22 we have planned sufficient to implement those strategies?
23 So that's the first objective.

24 The second objective is to serve as a road map for
25 risk-informed regulation. In effect, it provides a way to

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1 do a systematic approach to define where we're going and how
2 we intend to get there.

3 That includes making decisions on what should be
4 risk-informed, and then in look at once that decision is
5 made, what's the best way to risk-inform that particular
6 activity? It provides general guidelines dealing with
7 risk-informed regulation. It will describe the schedule and
8 milestones; infrastructure needs; training and communication
9 needs.

10 And the third major purpose is to define the
11 communication and training needs, which we think are
12 certainly important, important for public confidence,
13 important for dealing internally with our own staff to get
14 them up to speed, to promote buy-in in risk-informed
15 regulation.

16 The communication and training that's described in
17 the plan focuses on the broad issue of what risk-informed
18 regulation, as well as the specific activities. We're going
19 to talk about both of those in a little more detail later.

20 Slide 5, please. The basic organization of the
21 plan: Part I is what we call the general guidelines. And
22 we're going to talk about those in the next several slides.

23 Part II includes the arena activities; that's
24 where the detailed activities are listed. Those are the
25 things that are covered in the backup viewgraphs.

11

1 Part III is called Corporate and Management

2 Strategies, and that focuses on the training and
3 communications, and we'll talk about that.

4 And finally, there is the question of how do we
5 decide what to put in here? You know, to some extent, you
6 could say everything we're doing has some connection to
7 risk, and we put everything the Agency is doing in this
8 plan.

9 But that sort of defeats the purpose of it. What
10 we decided to do in defining the scope of the plan, was to
11 include those activities that were initiated specifically as
12 a result of the 1995 policy statement, as well as those
13 activities that are key to the transition to risk-informed
14 regulation.

15 By that, I mean, for example, the IPE for external
16 events. That was initiated before the 1995 policy
17 statement, but that body of information is key to our
18 transition, so that activity is included in here.

19 Examples of things that are not included are the
20 work on thermal hydraulic codes. That's certainly key.
21 Good thermal hydraulic analysis tools are certainly key to
22 risk-informed regulation; they're also key to our
23 deterministic process as well.

24 So we made a judgment not to put that kind of
25 activity in here. If I could have Slide 6, please?

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1 We talk about the general guidance in Part 1. We
2 view it that one of the main purposes of this plan is to
3 describe where we want to go in risk-informed regulation.
4 In effect, we believe the 1995 Commission policy statement
5 presented the Commission's vision on where it wanted to go
6 when it stated that it supports the increased use of PRA
7 technology in all regulatory matters, to the extent
8 supported by state-of-the art methods and data and
9 complementary deterministic approach.

10 We believe that's a good vision statement. The
11 question then becomes how to implement that vision
12 statement, and we've developed a set of what we call
13 screening criteria to do that.

14 We view those screening criteria, if they are
15 applied in a systematic fashion, will result in the Agency
16 decisions as to what should be risk-informed and what should
17 not be risk-informed.

18 Those view -- those screening criteria -- there
19 are seven of them in the plan -- are shown on Slides 7
20 through 9. I'm not going to read each one of them, but what
21 I do want to mention is a couple of attributes of those
22 plans. The first four of those screening criteria really

23 address what we call the value of risk-informing an
24 activity.

25 And they're written around the Agency's four

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1 performance goals: Maintain safety; improve effectiveness,
2 efficiency, and realism, and so forth.

3 And if you go through and apply those criteria and
4 the answers to those result in a determination that there is
5 value to risk-informing that particular activity, then you
6 would move on and apply the last three criteria, which are
7 more addressing the practicality of doing the
8 risk-informing.

9 And that addresses issues like are there models
10 and data available or could they be reasonably developed?
11 Is there a net benefit? Are there other impediments, and so
12 forth?

13 If we could go to Slide 10, please, other general
14 guidance that's in Part 1: Once you decide to risk-inform
15 an activity, it's important that you provide a consistent
16 thought process in doing that risk-informed activity.

17 By that I mean, what are the important
18 considerations that you need to think about as you're
19 risk-informing an activity? These are discussed in Part 1.
20 They break down into basically three broad categories:

21 Those related to complementing the traditional
22 approach; those relating to defining the level of risk that
23 you want to achieve as you risk-inform the activity; and
24 those related to implementation.

25 Most of these were developed and reflect our

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1 experience to date in the risk-informed activities,
2 primarily in the reactor area. The ones that relate to
3 complementing our deterministic approach, are primarily
4 maintaining the defense-in-depth philosophy and safety
5 margins.

6 What we've done in the implementation plan is try
7 to put in a consistent set of questions that each -- as you
8 go through and risk-inform each activity, you'd have to
9 think about it.

10 Now, the answers may be different, depending on
11 the activity you're trying to risk-inform, but the questions
12 ought to be the same. For example, defense in depth, what's
13 the balance between prevention and mitigation that you want
14 to maintain?

15 That may be different, depending on the activity
16 you look at, but that's a kind of question that everybody
17 ought to be asking themselves as they try and risk-inform an

18 activity.

19 Safety margins: What kind of safety margins do
20 you need to account for uncertainties? And there are
21 questions like that that are listed in the general guidance
22 Part 1 of the plan.

23 How do you decide what level of risk you're trying
24 to achieve? Right now, we have an ALARA concept, and in the
25 reactor area, we have safety goals. We've put in guidance

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1 concerning -- or questions concerning if you're going to use
2 the ALARA concept, here are the kinds of things you need to
3 think about; if you're going to develop safety goals, here's
4 the kinds of things you want to think about.

5 We put an appendix in that lists a fairly
6 extensive set of questions that we believe would help
7 provide some guidance for anyone who wants to go and try and
8 develop a safety goal.

9 There are questions like, you know, what's the
10 population at risk that you're trying to protect? Are you
11 dealing with accidents only, or is normal operation
12 included?

13 Are you dealing with early or latent health
14 issues. And there is a whole host of questions like that.

15 That gets you to Slide 11. The third general
16 category is what we call implementation issues. These were
17 things we've learned so far, primarily from experience in
18 the reactor area.

19 The first one, Ashok has mentioned. We have a
20 performance-based initiative. Our view is that if you're
21 going to risk-inform an activity, you need to ask yourself
22 the question, can I do that in a performance-based fashion?

23 So we've made a connection to the
24 performance-based guidelines that have been developed and
25 set up to the Commission in SECY-00-0191.

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1 There is the issue of voluntary versus mandatory,
2 which we realize is a policy issue, but it is something
3 that, as you're risk-informing, you need to address. It's
4 the same thing with selective implementation and regulatory
5 oversight. What are the implications for the oversight
6 program?

7 Slide 12 shows the general structure of Part 2,
8 starting with the three arenas. Each arena has the four
9 performance goals, and under those performance goals, there
10 are a number of strategies.

11 And what the plan includes are the risk-informed

12 activities to implement those strategies.

13 Now, the plan is limited to the key activities and
14 milestones. The details of those activities, we would
15 expect to be in each Office's operating plan. And by
16 details, that would be things like ACRS meetings and so
17 forth.

18 As Ashok had mentioned, you know, GAO had
19 recommended back in 1999 that we develop a comprehensive
20 strategy that includes goals, objectives, activities,
21 schedules, and so forth, for our transition to risk-informed
22 regulations.

23 We believe that this structure is consistent with
24 that GAO recommendation; it fits our strategic plan. And
25 although we may not have included every detail that GAO

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1 envisioned, we believe that it addresses the fundamental
2 items, and is appropriate for our activities.

3 Slide 13, quickly. This is just an example of
4 under the reactor arena, the performance goal of maintain
5 safety has four strategies and 22 activities associated with
6 it.

7 Overall, if you look across all the arenas, there
8 are 12 strategies and 48 activities included in the plan.

9 If I could have Slide 14, please, where we talk
10 about communication. This is discussed in Part 3 of the
11 plan, the Corporate and Management Strategies.

12 We see two purposes to the communications section
13 in the risk-informed regulation implementation plan:

14 One is to describe what is risk-informed
15 regulation, and the second is to describe what are we doing
16 to risk-inform the Agency's requirements and practices?

17 I think that regarding the first, or what is
18 risk-informed regulation, it's important that the key
19 messages that we get across are that safety is our first
20 priority, and that risk-informed regulation helps focus on
21 safety; that the changes that we propose to make are well
22 grounded in terms of technical bases and good quality
23 analysis.

24 It also would -- a key message to get across is
25 that risk-informed regulation is a complement to our

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1 deterministic process. We're not throwing away the concepts
2 of defense-in-depth and safety margins. There has been some
3 concern in the past that maybe risk-informed regulation is a
4 little too much like deregulation, but that's certainly not
5 the case, and we feel one of the key messages is to get that
6 across.

7 The other key purpose of the communication is to
8 describe to people, both internally and externally, where
9 are we going in risk-informed regulation?

10 We would expect that as individual activities are
11 risk-informed, for example, the reactor oversight process,
12 there is a communication aspect associated with that, and
13 we'd expect that communication aspect to be described in
14 Part 2, the detailed plans. But the broader implementation
15 plan, by itself, is to get across the broader picture of
16 where is the Agency going in risk-informed regulation.

17 So that's the focus of the communication that's in
18 Part 3 of the plan. If I could have Slide 15, please?

19 Where are we going to go to help communicate?
20 Well, we plan to issue an announcement next month on the
21 availability of this plan, questions regarding the types of
22 feedback we'd like to have, the comment period.

23 In conjunction with that, we're also planning to
24 set up some stakeholder meetings where we can discuss, both
25 internally and externally, get input and feedback on the

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1 plan, both technically -- are there gaps in our plan? Are
2 there things that need to be changed, as well as the
3 programmatic aspects.

4 Do people understand risk-informed regulation?
5 We'd also want to put the plan on our website, so that
6 anyone that goes to our website can have access to it.

7 Slide 16, Training program: Part 3 of the plan
8 also discusses our training program. And the training
9 program is designed to assist the Staff in developing
10 knowledge and skills in PRA methods and statistics.

11 We consider that there are three levels of risk
12 assessment users within NRC: Basic users, advanced users,
13 and expert practitioners.

14 There are 13 courses within the current curriculum
15 that focus on the knowledge and skills to support the basic
16 and advanced users. Information for all of the risk
17 assessment courses is available to Agency employees, via the
18 Employee Training and Development web page.

19 From 1995 through FY2000, more than 300 students
20 annually attended the risk assessment courses, and we expect
21 that this will be considerably higher this year and in
22 2001.

23 Although all of the courses have been open to
24 employees in general, the emphasis has been on risk training
25 for reactor personnel so far, particularly reactor

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1 inspectors and senior risk analysts.

2 In a couple of slides, we'll talk about how the
3 focus is now being increased in the NMSS area. Could I have
4 Slide 17?

5 In the reactor area, there is an ongoing training
6 initiative within the nuclear reactor safety area. NRR is
7 sponsoring a working group on improving risk expertise for
8 reactor program personnel. The group is considering options
9 for improving the understanding and use of probabilistic
10 risk information and expanding the number of individuals
11 capable of using the NRC risk assessment software tools, and
12 to perform and interpret risk analysis.

13 The intention is to create a small cadre of
14 individuals who can assist the senior reactor analysts'
15 reviews of issues arising from the probabilistic
16 implementation of the reactor oversight process.

17 Slide 18. In the NMSS area, there is also an
18 ongoing initiative regarding risk training in the NMSS
19 arena, both the materials and the waste. And that would be
20 in support of NMSS risk-informing its programs.

21 NMSS will be using a three-tiered approach to
22 train its staff. Tier I will be targeted to managers and
23 supervisors; Tier II to NMSS technical staff; and Tier III
24 to risk analysts and specialists.

25 The first course developed within this new

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1 initiative is a Tier II course called Introduction to Risk
2 Assessment in NMSS. The pilot version of this course was
3 completed in September of 2000. Eight sessions of the
4 course are scheduled in Fiscal Year 2001.

5 A higher level version of this course will be
6 called Risk Assessment for NMSS Technical Managers, and will
7 become a Tier I course. Two sessions of this course are
8 scheduled in FY2001.

9 Slide 19 Other Future Activities: As was
10 mentioned earlier, this plan is a work-in-progress. As Dr.
11 Travers mentioned, we believe the real value that will come
12 from the plan is going to be as we start to use it,
13 systematically apply the screening criteria and
14 systematically look at the activities.

15 We believe that by doing that, we'll be able to
16 look for other opportunities for risk-informing our
17 activities, gaps in our current plans, infrastructure needs,
18 additional communication and training needs.

19 What we plan to do, as I mentioned, is solicit
20 internal and external feedback. We've talked to ACRS once
21 on this, and they plan to scheduled a Subcommittee meeting.
22 We plan to talk to ACNW, and we certainly hope to get some

23 feedback from GAO, our website.

24 And we're going to schedule some workshops over
25 the next several months for both internal and external

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1 feedback.

2 Slide 20, please. We're also going to develop
3 plans to systematically apply the screening criteria in
4 areas where they haven't been applied so far. We're going
5 to take a look at what are the critical path items in the
6 schedule, whether they are infrastructure items, safety goal
7 development, training needs, and so forth, but what are the
8 real key things that, particularly the cross-cutting things
9 that affect all arenas?

10 We're also going to try to identify additional
11 infrastructure needs, whether that's methods or data, or
12 whether we need to modify some other Agency documents,
13 rulemaking handbooks, regulatory analysis guidelines,
14 whatever it may be.

15 And although there is not a bullet, we need to
16 look at success measures. The strategic plan has success
17 measures associated with its strategies. Some of those
18 success measures in each of the arenas rely on the
19 implementation plan, and we need to go, now that we have an
20 implementation plan with all the pieces put together, take a
21 look at developing the success measures for the strategic
22 plan related to this implementation plan.

23 Slide 21, key challenges: Ashok already mentioned
24 these briefly: PRA quality, we continue to work with the
25 standards organizations, ANS, ASME, National Fire Protection

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1 Association, to develop standards on PRA quality.

2 We also are continuing to work with the industry,
3 particularly NEI, on their certification program. We feel
4 those are very important initiatives. We feel that the --
5 although there has been some schedule slips in those, we
6 feel they are continuing, and we're going to continue to
7 fully participate in those.

8 As Ashok mentioned, public availability of
9 up-to-date risk information has been an issue. It's been an
10 issue, I think, for public confidence, as well as for the
11 Staff being able to utilize the most recent information.

12 That is a subject that's been discussed with the
13 industry, and the PRA Steering Committee is meeting with the
14 NEI counterpart steering committee next Tuesday to discuss
15 this issue.

16 Stakeholder confidence: That's certainly related

17 to the first two bullets, and that's both internal and
18 external. Through the workshops, through our communications
19 initiatives, we hope to be able to find out where is
20 stakeholder confidence lacking and what do we need to do to
21 improve stakeholder confidence?

22 Development of materials and waste safety goals:
23 These will be a challenge. They involve diverse areas.
24 There are many stakeholders involved, many considerations in
25 developing safety goals.

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1 NMSS has embarked on some case studies to try and
2 lay the ground work for what the issues are, and we feel
3 that those are certainly going to be a key challenge.

4 And these are not the only challenges; there are
5 other challenges. You know, what is the industry interest
6 in some of these activities? Getting pilot plants involved,
7 and so forth, so there are a number of things that have to
8 be addressed to effectively implement the plan.

9 Slide 22, in summary -- and we haven't sat still
10 over the past six months when we tried to put this plan
11 together. Attached to the SECY 00213 paper, there is an
12 attachment that describes the key things that have happened
13 over the past six months.

14 You know, examples are: Implementing the Revised
15 Reactor Oversight Process; the progress on risk-informing
16 Part 50 on the standards; NMSS workshops and case studies on
17 their risk-informed activities; planning and workshops on
18 risk-informing the fuel cycle facility oversight process.
19 There are a number of things listed there, so we're not
20 sitting still while we work on this plan.

21 We're trying to use this plan to help adjust what
22 we're doing, fill in any gaps, better coordinate and
23 communicate.

24 The PRA Steering Committee is certainly, I think,
25 key in dealing with some of these high-level issues. It

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1 provides high-level direction for resolution of some of
2 these major challenges.

3 And our intent is -- as we mentioned, this is a
4 living document. We intend to update it every six months to
5 reflect experience, to reflect feedback.

6 And the next version, we would expect to provide
7 to the Commission, probably in late Spring. So with that,
8 I'll conclude this presentation, and we can open it up to
9 questions.

10 CHAIRMAN MESERVE: Thank you for the very helpful
11 briefing. I'm sure that all of my colleagues have some

12 questions or comments. Let me turn first to Commissioner
13 Merrifield.

14 COMMISSIONER MERRIFIELD: Thank you very much, Mr.
15 Chairman. In your briefing, you talked a little about
16 ongoing discussions between ourselves and other bodies
17 working PRA standards, including ASME, and I was wondering
18 if you could to into a little bit deeper, specifically as it
19 relates to the ongoing discussions with ASME, relative to
20 the PRA standard?

21 This is something what we go in our Option 2
22 briefing, and I think it would be helpful to get an update
23 in terms of that process.

24 MR. KING: Let me just summarize where we stand:
25 You know, we had the public comment period, and it was an

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1 ASME public comment period back between June and August.

2 I signed out a fairly negative letter with a
3 number of comments on the standard. Subsequent to that,
4 going out, we have met with ASME folks, we have met with the
5 other participants in the standards development activity.

6 We've developed and agreed upon a set of
7 principles and objectives for the standard to help guide
8 revising it.

9 We have supplied some technical experts, along
10 with the industry, in what they call a small task group, to
11 get together, take those principles and objectives, and take
12 a stab at rewriting one section of the standard to reflect
13 the direction that we think it needs to go in, and reflect
14 implementing those principles and standards. That's been
15 done.

16 And that had a very favorable output. That was
17 done, I think, back in October -- September or October.

18 The plan now is to have that group get together
19 and do the rest of the standard, following those same
20 guidelines. That meeting is scheduled for January 15th,
21 where that group is going to get together and finish the
22 job.

23 It then goes back to the full project team, ASME
24 project team that had been working on the standard from the
25 beginning, for any comments they may have. ASME will need

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1 to decide, do they want to go back out for another round of
2 public comment with the standard or not?

3 If they do, that will add several months to the
4 process. If they don't, then they finalize the reworked
5 draft and it will go to the next level of the ASME process,

6 a consensus board.

7 And we would expect that if they don't go back out
8 for public comment, we would hope to have a final standard
9 in the April or May timeframe. But we're pleased with the
10 way things are going at this point.

11 DR. THADANI: If I may just make two comments in
12 that regard: The first has to do with the industry peer
13 review process. We are engaged in terms of making sure we
14 understand what that peer review process is, and we're
15 planning to send people to observe the process.

16 I think that will be valuable input to us as we go
17 forward.

18 The second issue has to do with -- because it was
19 in the SRM, the Commission encouraged the Staff to encourage
20 ASME to go for public comment with the next version, which
21 is supposed to be a final version of the ASME standard.

22 The normal process would be, when we get the final
23 standard, we would endorse it; if we disagree with certain
24 parts, there will be some exceptions. We'd endorse it with
25 exceptions, and the it would go for public comment.

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1 If we encourage ASME to go for public comment now,
2 that's what Tom means, that then there will be two periods
3 of public comment, and that's why that could add several
4 months to the schedule.

5 COMMISSIONER MERRIFIELD: That was a helpful
6 clarification.

7 COMMISSIONER MCGAFFIGAN: Mr. Chairman, just on
8 that point, if Commissioner Merrifield would allow, I still
9 believe that the Commission was right in the guidance it
10 gave you, that the ASME -- that the Rev 13 or whatever
11 you're going to call this thing, is going to be wildly
12 different from anything anybody except this working group,
13 which I don't know whether it meets in open session or not,
14 has ever seen.

15 And, you know, it may be -- it's not going to be
16 Rev 10; it's not going to be Rev 12, and so I -- people will
17 be voting, as I understand the ASME process, on that
18 document, without much of the public having ever seen it.

19 DR. THADANI: There is some answer. While we're
20 optimistic, because of the group that's been put together,
21 when we laid out the objectives, they took a sample, they
22 ran through a sample.

23 The group briefed both the industry steering group
24 and the NRC steering group, and we felt that we were
25 optimistic that that approach was going to work.

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1 However, the product of this group, which I think
2 will be discussed in January, for the whole standard, is
3 going to go to yet another group, and that has to pass some
4 judgment. In that sense, Commissioner McGaffigan, you're
5 right; there are two parts.

6 It's going to be significantly different, we
7 believe. It may be, in fact, different than what we think
8 it's going to be as well.

9 COMMISSIONER MCGAFFIGAN: Just to complete the
10 thought, I mean, if you're -- I've got a sense that you're
11 asking the Commission to revisit the guidance they gave you
12 a month ago.

13 If you are, then I think you need to do it
14 formally, and you'll get an answer. If you're not, then I
15 hope you carry out the guidance that you've already gotten.

16 CHAIRMAN MESERVE: Commissioner Merrifield?

17 COMMISSIONER MERRIFIELD: Going back again to that
18 same Option 2 briefing, we also talked about the efforts
19 underway on the part of NEI and its membership to have peer
20 reviews conducted on their PRAs.

21 I was wondering if we could get an update in terms
22 of where we are, we, the NRC, are, in that process, and also
23 where the public is in that process?

24 I know there was some discussion about having Mr.
25 David Lochbaum incorporated in some part in those reviews,

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1 and I was wondering if you could briefly update on that
2 status? That may be an NRR question.

3 MR. KING: I know a letter has recently gone out
4 with a number of questions and comments on the NEI document
5 that came in. I'll let Roy fill you in on the details.

6 MR. ZIMMERMAN: We're going to ask Rich Barrett to
7 address that.

8 MR. BARRETT: Well, we are reviewing NEI 0002,
9 which is the description of the peer review process. That's
10 a joint activity between the Office of Nuclear Reactor
11 Regulation and the Office of Research.

12 And we have put together our first request for
13 additional information which was submitted to NEI on the
14 19th of September, and that request for additional
15 information -- excuse me, my name is Richard Barrett. I'm
16 with the NRR staff.

17 That request for information is very balanced; it
18 has in it, requests for additional technical information, as
19 well as additional information regarding the process.

20 With regard to participation in peer reviews at
21 specific plants, we have scheduled one for early December at

22 the Hatch plant, which will involve technical staff from NRR
23 and the Office of Research, as well as project staff from
24 NRR.

25 I do not believe that there has been success yet

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1 in scheduling participation by Mr. Lochbaum in any of the
2 peer reviews, but I do know that he is in contact with NEI
3 on that subject, and they're working to arrange something.

4 COMMISSIONER MERRIFIELD: Mr. Chairman, I've got a
5 couple more questions, but I'd like to defer those for now
6 to give the other members of the Commission an opportunity
7 to ask questions.

8 CHAIRMAN MESERVE: Thank you. I'm going to make
9 an observation and invite your comment.

10 This is now the second of these documents that I
11 have seen, and I think there has been significant progress
12 in it; that you've prepared a document that ties into the
13 strategic plan in a thoughtful way, and we intended the
14 strategic plan to be used as a mechanism for us to think
15 through our aspirations.

16 And you've resorted the material in a way that
17 ties it to the plan. I think that that is fully consistent
18 with what we all aspired to do.

19 You've obviously expanded the scope of the
20 document by including the waste and materials areas, and
21 consistent with the Commission guidance, have started on the
22 process of thinking through the communications issues that
23 are very important here, and on the training issues.

24 I have the sense, however, that we still have a
25 ways to go on this, in that particularly in the waste and

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1 materials areas, this document is still a lot closer to
2 being a catalog of the activities that we have underway for
3 perhaps reasons independent of our risk-informed regulation
4 and that we're using risk as a tool in evaluating SCs and
5 Yucca Mountain and so forth.

6 And that's understanding, in that this is a
7 difficult foray into those areas. But there are things that
8 are clearly missing from this. If it's to be a plan that,
9 there is no sense one would have from reading this of
10 priorities.

11 There is no sense of the resources that need to be
12 developed that are associated with various of the
13 activities.

14 The expiration of the tools that need to be
15 developed does not -- not really as fully developed as it
16 might be.

17 The items that are critical path items or that
18 have cross-cutting dimensions, that are foundational ones,
19 are not separated from the other activities.

20 So we have a document that gives us a series of
21 the activities, but we don't see the foundation on which
22 it's built and how the activities link to each other and how
23 they need -- and how they relate to each other, and which
24 ones are important, and which ones aren't, what kind of
25 resources we're allocating to it.

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1 And really what's perhaps even most critical is
2 that one would hope to see in a plan, is that it gives you
3 from stepping back, that one would have a sense of where are
4 there holes? Where are things that we -- now that we've
5 looked at the entirety of the activities, where are the
6 things that we should -- that we're missing?

7 Where are the items that should be part of a
8 comprehensive strategy to think about this problem that we
9 just don't have available to us. So, I'm very pleased to
10 hear that this is a living document.

11 I think it is, and I think it's understandable, in
12 fact, that we're sort of groping our way into this area.
13 This is hard work.

14 And particularly in the materials and waste area,
15 there is a certain value, I think, in doing some concrete
16 projects, learning from them, and then seeking to use that
17 as the foundation for expanding.

18 But that being said, this is a document, I think
19 that falls short of being a plan of the type that we've
20 described, and I think it reflects a very commendable effort
21 to improvement on the last one, but we still have a ways to
22 go.

23 And I'd invite your reaction or comment to any or
24 all of that.

25 MR. KING: I agree with everything you said,

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1 particularly the hard work part.

2 [Laughter.]

3 MR. KING: As the pieces came together on this,
4 and they came together toward the end, we started doing some
5 of the things you mentioned like looking for the holes. And
6 there are clearly some areas that are holes that have to be
7 reflected or filled in the next version of the plan.

8 The only thing I wanted to mention was that on the
9 resources, we made a conscious effort not to put resources
10 in here. We felt that this certainly would be a key input

11 to our planning and budgeting process, but we didn't feel
12 that this should be a resource document.

13 Now, you know, if the Commission has different
14 views, you know, we'll certainly reflect those. But that
15 was one conscious decision we made.

16 But the other points, I agree with.

17 DR. THADANI: On this issue of resources, not only
18 is this plan a living plan, but we're also learning, and
19 gaining experience as we go forward. And it's very clear to
20 me that with this knowledge, we're going to have to step
21 back and make some adjustments, and take a look to see what
22 regulations we're going to take on and what kind of
23 resources will it take.

24 We now have, I'd say, a much better understanding,
25 because we've done a reasonable amount of work, for example,

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1 on 50.44, combustible gas control regulation.

2 And we still have a long way to go on that. I
3 think we are going to fold in that experience and step back
4 and take a look, given the activities we have defined in
5 this plant, what are the implications in terms of resources?
6 So we may be --[tape side ends mid-sentence.]

7 CHAIRMAN MESERVE: [Tape side begins
8 mid-sentence.] -- issue might not be budget type
9 information. Is that one of -- just to make an observation,
10 if you read through this, I think the Commission has a sense
11 from the papers we've received, what the Staff is, in fact,
12 spending a significant amount of time on, things like 50.44,
13 for example, as one that's a hard issue that you've been
14 grappling with.

15 And you don't get a sense of the proportion
16 between the various activities as a result of the way this
17 is arrayed, or of its importance.

18 MR. ZIMMERMAN: I guess I would just add agreement
19 with your point so that we can continue to improve the plan.

20 I know the areas that you mentioned regarding
21 priorities, the resources, the tools needed, the critical
22 path.

23 Some of that information, I think, resides in each
24 Office's operating plan. And it's a matter of grappling
25 with that information and seeing how to best package it in

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1 one document so you don't need to travel from one document
2 to another.

3 But, clearly, there is additional clarity that can
4 be raised along the lines that you indicate.

5 MR. VIRGILIO: I would just like to add to what Roy

6 has just said, that our priorities and the detailed resource
7 needs and how issues interact, one with the other, are, in
8 fact, included in our operating plans.

9 And there was a conscious decision not to include
10 that level of detail in this document, as well.

11 Going back to an earlier point you made, though,
12 with regard to the waste and materials area, we did, I
13 think, populate a matrix as we filled this out, taking
14 ongoing activities and looking at how they fit into the
15 strategies. I agree with you that I think the next step is
16 to take a look, very objectively, and say, do we have
17 everything that's necessary and sufficient now to accomplish
18 the strategies that are called for?

19 And that may, in fact, identify the gaps, going
20 through that exercise would identify the gaps.

21 To start a new project, though, what we want to do
22 is make sure what we run it through that screening criteria,
23 and that it does satisfy that criteria before we do invest
24 resources in it. So it will work both ways, ensuring that
25 we have filled the gaps, but ensuring that we do it in a way

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1 that meets all seven of the criteria.

2 CHAIRMAN MESERVE: Thank you. Commissioner Dicus?

3 COMMISSIONER DICUS: Thank you, Mr. Chairman. Let
4 me go to Slide 7. You make the issue that we will make the
5 NRC regulatory process more efficient, effective, or
6 realistic, or Agreement States.

7 Tell me what your interaction is with the
8 Agreement States and how the Agreement States are reacting
9 to this issue.

10 MR. VIRGILIO: This comes from the strategic plan,
11 and I'll take it at that level. We've had some interaction
12 with the Agreement States regarding the --

13 COMMISSIONER DICUS: They have reservations?

14 MR. VIRGILIO: They certainly do. That's where I
15 was going. They certainly do. Not only about this
16 document, but I think about the strategic plan, in general.

17 COMMISSIONER DICUS: Right.

18 MR. VIRGILIO: So we're going to have to work
19 through that. I think the National Materials Program
20 provides us a forum to work through some of these issues.

21 COMMISSIONER DICUS: Okay, then let me carry this
22 to a different level: Our international colleagues are
23 looking at us very closely and very seriously on where we're
24 going and what we're doing, as to whether and how it affects
25 their programs and what they might ultimately have to do or

1 have to change or have to react to or have to respond to,
2 whatever word you want to use.

3 How are we dealing with them?

4 DR. THADANI: Yes, you're quite correct. There is
5 a fair amount of, I'd say, apprehension on the part of a
6 number of Western European countries, certainly, that they
7 have indicated in various forums.

8 What we have proposed to them, and whenever we get
9 opportunities such as the Nuclear Energy Agency efforts, the
10 Committee for Safety of Nuclear Installations and the
11 Committee for Nuclear Regulatory activities, particularly
12 those two committees, we make every effort to try to explain
13 what we're doing, and why we're doing it.

14 I think the most central issue is going to be for
15 that community to have confidence and really develop that
16 confidence that once they understand that we are, indeed,
17 going to make sure there is good scientific and technical
18 basis that these are, indeed, sound technical decisions that
19 we're making, I think there will be increased confidence
20 then.

21 But it's not going to come -- it's not going to be
22 an instant change; it's going to be a process. And they are
23 watching how well we're going to develop our technical basis
24 on this.

25 DR. TRAVERS: If I might add just a few thoughts

1 -- and I know Roy wants to say something -- concerns remain,
2 but I think we've had some fair success in some of the
3 international forums that we've participated in, CRNA, CSNI,
4 IAEA, where we have been given a rather good opportunity to
5 explain what we're doing and what we're doing, I think, more
6 importantly, in the context of our rather careful, we think,
7 approach to risk-informing initiatives that we have underway
8 at the Commission.

9 So my own sense, in some of the interactions I've
10 had personally, is that the level of concern started up
11 here, and it's been driven down some. There are still
12 interactions that need to take place, and we want to
13 continue to encourage that to happen.

14 But maybe I'll turn it over to Roy.

15 MR. ZIMMERMAN: I'll just echo what Bill said.
16 From the interactions that NRR has had in a variety of
17 forums overseas, my personal involvement with CRNA in areas
18 like the changes to the reactor oversight program, going
19 back and giving briefings from the first one and the
20 reaction that I received the first time I did, compared to
21 the second time and the third time, and pulling up the

22 website and actually using the website to be able to walk
23 through the process, and now listening to the reaction
24 that's coming and listening to a lot of the terms that we
25 used now being stated back from representatives from other

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1 countries, there is a clear change.

2 And, again, it's proceeding slowly, and that's the
3 way that we have presented it; that we're still in, with
4 regard to oversight, initial -- that we're still learning.

5 So, we provide when we go through these briefings,
6 the areas that we think are working well, and we also go
7 over some of the challenges that we're identifying. And I
8 think that that balance being presented, leads to good
9 dialogue.

10 COMMISSIONER DICUS: Okay, that's for NRR. That's
11 for reactors. How about for NMSS, what have you seen?

12 MR. VIRGILIO: I'll cite one example, and I think
13 that in light of the Tokamura event, what we're seeing is an
14 interest, internationally, in upgrading the safety at the
15 fuel cycle facilities.

16 As you know, we've just promulgated our new Part
17 70 which has a strong risk-based or risk-informed component
18 to it with regard to the ISAs. And I do see that we're
19 leading.

20 I think we're heading toward a world leadership
21 role with regard to fuel cycle facility safety.

22 COMMISSIONER DICUS: Okay. If I may, one more
23 question, Mr. Chairman?

24 I call this an internal briefing, because we're
25 only hearing from the staff. In the past, we've heard from

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1 Union of Concerned Scientists, we've heard from NEI, we've
2 heard from other people.

3 Are we still communicating very well with our
4 stakeholders on this whole issue.

5 MR. VIRGILIO: I'll take the waste and material
6 area first, and if we go back to the project that Tom talked
7 about on developing safety goals and the testing of the
8 screening criteria, that was done with extensive stakeholder
9 engagement and involvement. It wasn't just a noticed
10 meeting where we had participants, but we had roundtable
11 discussions.

12 And the program that has come out of that, the
13 case studies and the approach that we're taking to develop
14 the safety goals was developed in almost a consensus mode,
15 working with the stakeholders.

16 And a wide variety of stakeholders at that, not
17 only other federal agencies, but people that have been
18 traditionally intervenors and opposed to some of our
19 programs, are engaged in this process, and have agreed to
20 this approach.

21 DR. TRAVERS: I think the answer is yes; that's
22 our view.

23 COMMISSIONER DICUS: Yes, is a good answer.

24 DR. TRAVERS: But it doesn't diminish the
25 challenge, moving forward. Just recently, at the Water

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1 Reactor Safety Meeting, the focus of that meeting was risk,
2 and the use of it. We included on a panel that I chaired, a
3 variety of stakeholders, the industry, I think, Mr.
4 Lochbaum.

5 COMMISSIONER DICUS: And on these issues?

6 DR. TRAVERS: On these issues. We were talking
7 about PRA quality and related issues that, you know, are
8 fundamental to these sorts of initiatives we're pursuing.

9 So, I mean, that's just one example, but I think
10 that across the board, there's such a variety of
11 opportunities that we want to continue to encourage,
12 consistent with our goal of public confidence. I think it
13 fits right into that overarching goal of the Agency, that it
14 really underscores it, and that it's something we need to be
15 continuing to be sensitive to.

16 COMMISSIONER DICUS: Okay, thank you, Mr.
17 Chairman.

18 CHAIRMAN MESERVE: Commissioner Diaz?

19 COMMISSIONER DIAZ: Thank you, Mr. Chairman.
20 First, I'd like to express my support for the inquiries of
21 Commissioner Merrifield regarding the quality of the PRA. I
22 still believe this is a very important issue that should be
23 concluded, finalized, you know, taken to a point of
24 utilization, you know.

25 And I strongly believe that should be done as soon

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1 as possible. I don't think that's an issue that should be
2 in the background.

3 To me, it is a priority issue. I'm going to turn
4 to Slide 4, and I'm going to probably be following along the
5 lines of the Chairman, with a series of issues, and try to
6 address some specific concerns that I have.

7 As you know, I have always been concerned with the
8 use of the English language as a proper tool and how
9 consistent you have to be with what we want to express. The
10 first line in here kind of concerns me.

11 It says implement strategic plan strategies, and
12 as many people were saying, we actually implement operating
13 plans. I think we need to be, you know, really aware that
14 the strategic plan is a guidance document.

15 And that the risk-informed regulation
16 implementation plan should rely on the strategic plan as a
17 guidance. But it should always be upgrading, prioritizing,
18 and making those, you know, overall goals into firmer, more
19 convergent goals.

20 You know, anytime -- and you know this much better
21 than I do -- that when you start on a process, the first
22 thing that happens is you diverge. That's how you get
23 multiple opinions, but eventually you should converge. And
24 I think that this process should now be in a converging
25 path.

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1 Going to Bullet Number 2, it says Road Map to
2 Risk-Informed Regulations, which I think is what the
3 Commission had asked. I think we used those words, and I
4 think that's a good goal.

5 I hate to admit this in public, but I flunked
6 Crossword Puzzles 101. And the SECY 000213, in many parts,
7 looked to me like a crossword puzzle and not like a road
8 map.

9 And I think Commissioner Merrifield has so many
10 times brought up the fact that people have difficulty in
11 following what we're trying to do, and I would like to
12 encourage the Staff to look at this SECY and really to try
13 to converge it into a road map.

14 Because if I'm having problems in reading -- and I
15 guess that if I flunked Crossword Puzzles 101, I probably
16 made it through with a C on Risk-Informed Regulation 102, I
17 should be able to follow it, and I had a hard time going
18 back and forth with it.

19 Going back to page number 7, and on the same vein,
20 these are documents that the Commission has approved before,
21 and now we get SECY 0213, and I was looking at the screening
22 criteria on this new SECY and the SECY 0198 on
23 risk-informing Part 50.

24 And it seems to me like there are some
25 differences. Are they consistent? The question is, are

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1 these two SECYS consistent, self-consistent, you know,
2 inclusive of each other, or have there been differences now
3 that have been brought out by this process?

4 MR. KING: I think they are consistent. They are

5 different, but the reason they are differences is that we
6 have already made the decision -- remember that SECY 198
7 deals with Option 3, risk-informing Part 50.

8 The decision has been made to go do that. The
9 screening criteria in the 213 paper are really directed
10 toward making the decision. For example, should I go
11 risk-inform Part 50? That decision has been made, so the
12 screening criteria in the 198 paper are more directed
13 towards, okay, how do I pick the exact regulations within
14 Part 50 that I'm going to work on.

15 So they are a little bit more narrowly focused,
16 but I think they're consistent.

17 COMMISSIONER DIAZ: All right. I did notice some
18 difference, and you might want to look at that.

19 DR. THADANI: I also will give you my views. I
20 think they are consistent in that sense.

21 COMMISSIONER DIAZ: All right, good, thank you.

22 On page 8 -- and I'm going very quickly -- in the
23 draft criteria, I kind of agree with all the actions, but
24 why is it reliant on existing data and analytical model
25 criteria for being risk-informed? The others are -- and

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1 prove they do, but relying on a -- and this is a matter of
2 semantics; I understand that.

3 But it seems to be completely out of place.

4 MR. KING: These seven criteria, I said, really
5 are broken into two general categories: The first four deal
6 with the value of risk-informing; is it worth doing? And
7 the last three deal with, is it practical to do it?

8 The one you're referring to is the first one under
9 the practical category, and even though you may say it might
10 make sense to go risk-inform something, if you just don't
11 have analytical models or you don't think you can develop
12 them, maybe that's not the right path to go down. That's
13 really what it's directed towards.

14 COMMISSIONER DIAZ: So it is an issue of
15 establishing whether you're going to have the
16 phenomenological base, you know, to be able to go in that
17 path, rather relying. You would be establishing, rather
18 than relying?

19 MR. KING: Yes, yes.

20 COMMISSIONER DIAZ: All right. It's semantics
21 again.

22 Let's see, on page 11, again, I think Tom King
23 says that the issue of selective implementation and
24 voluntary versus mandatory clearly are policy issues for the
25 Commission.

1 However, the SECY states that the Staff intends to
2 address both of these issues on a case-by-case basis. Could
3 you explain how a policy issue can be addressed on a
4 case-by-case basis?

5 MR. KING: Well, the voluntary versus mandatory
6 issue was raised to the Commission in the context of
7 risk-informing Part 50.

8 COMMISSIONER DIAZ: Yes.

9 MR. KING: It has not been raised, as far as I
10 know, in the context of other things like NMSS activities.
11 So, even though the Commission made a policy decision on
12 Part 50 regarding that matter, we didn't feel that it was
13 appropriate to extrapolate that to everything else, so
14 that's why we said case-by-case.

15 COMMISSIONER DIAZ: But it should be a policy
16 issue?

17 MR. KING: Yes.

18 COMMISSIONER DIAZ: It should not be something
19 decided on a case-by-case basis.

20 MR. KING: It should be a policy issue, I agree.

21 COMMISSIONER DIAZ: It should be a policy issue,
22 and that's an inconsistency that I just point out in the
23 document.

24 Also, right from this page and in the SECY, it
25 addresses what I think is a policy issue that the Commission

1 has been clear on. It says in the SECY that risk-informed
2 regulation -- performance-based regulation.

3 And then the rest of the phrase is a little bit
4 confusing. If risk-informed changes are to be made, they
5 should be made in a performance-based fashion whenever
6 possible.

7 And, you know, it's a matter of emphasis. Again,
8 we try to separate them. We believe that there are cases in
9 which they do not go together.

10 This might be taking the position the Commission
11 took, a little bit further than I think we intended. So, I
12 think it is clear that if we can make it that, fine. And it
13 does say "wherever possible".

14 But I think the emphasis is that they do not
15 necessarily have to be, and "should" is a word that
16 sometimes, you know, is taken to be a "shall". We want to
17 make sure that it remains "should," and that people do not
18 interpret that this is "shall". The Commission has said
19 that risk-informed, and, if possible, performance-based.
20 And that is a policy issue that was decided. Does that make

21 sense?

22 DR. THADANI: Yes. Our intention is to do just
23 what you said. What we do want to do, though, is to make
24 sure that the high-level guidelines that have been developed
25 and that were provided to the Commission in SECY 0191, I

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1 think it was, we want to make sure that as we develop
2 revised regulation, that we systematically go through the
3 process to see if the guidelines can be applied or cannot be
4 applied.

5 And we need to develop the proper framework so
6 that there is some consistency in the application of those
7 guidelines. So we would hope that for each change that we
8 go through, each major change in a regulation, that we'll go
9 through that process. It may not apply in some cases.

10 COMMISSIONER DIAZ: Okay, all right. I think I
11 have taken too much time, but let me just do one quick
12 little more thing. In your page B-19 on the back, you're
13 asking to implement implementation activities, risk-inform
14 Part 35.

15 When I got to the Commission in December of 1996,
16 we had just finished Part 35. In February of '97, we
17 decided that it was not good and that we were going to do it
18 again.

19 And I think we just did risk-inform Part 35. And
20 so are we going to do it again?

21 PARTICIPANT: No, sir.

22 COMMISSIONER DIAZ: Thank you.

23 PARTICIPANT: We're just taking credit for --

24 CHAIRMAN MESERVE: Don't go any further.

25 [Laughter.]

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1 COMMISSIONER DICUS: Just say no.

2 PARTICIPANT: All right.

3 DR. TRAVERS: I think that all we are saying,
4 Commissioner Diaz, is that the OMB hasn't approved the rule
5 yet, and it isn't published in the Federal Register, and,
6 therefore, it's still a future activity, even though we're
7 finished with it.

8 MR. KING: I think we'd be unanimous on that one.

9 COMMISSIONER MCGAFFIGAN: I'm going to start at a really basic
10 level. This document -- GAO's challenge to us was to
11 outline a plan for the transition to risk-informed
12 regulation. Is there any policy that the Commission has
13 that I'm not aware of it, where we have said that our goal
14 is to transition to risk-informed regulation; that at the
15 end of this process, we will have only risk-informed

16 regulation?

17 DR. THADANI: I don't know of any such policy in
18 terms of transition to risk-informed, because we have been
19 -- I mean, I can tell you that I have applied these
20 techniques, I have applied them 15 years ago in terms of
21 backfit positions and so on.

22 So, it's been a progressive use of these
23 techniques in our decisions, and the Commission said that in
24 the policy statement.

25 COMMISSIONER MCGAFFIGAN: But the semantics, as Commissioner

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1 Diaz said, is important. And I think there is a danger. I
2 mean, we got this charge from GAO, and I see it cropping
3 into the document, you know, the words, transition to
4 risk-informed regulation, and I think it leads to a
5 misunderstanding.

6 I think that in the best of place where have solid
7 PRAs in the reactor space, or at least PRAs that we feel are
8 good enough to make a lot of progress with, we still are not
9 going to end up in a risk-informed world, so long as the
10 existing reactors are out there.

11 I think that with the next generation of reactors,
12 we're going to be more robust in using PRA and many of you
13 risk-inform from the start. But even in reactor space,
14 we're going to end up in this mixed world.

15 In material space, to try to defend the materials
16 folks more aggressively than they themselves did to the
17 Chairman's line of questioning, I think that much of it is
18 not going to be risk-informed, and that's why it looks --

19 There are a few areas. The ISA is mentioned,
20 although we're not asking for a PRA-quality ISA. We made
21 that clear in Part 70.

22 And performance assessment for repositories, and I
23 think in transportation and cask issues, they're looking --
24 and there may be some real data on which to do risk type
25 activities.

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1 But my sense, and this goes to some of the
2 questions that Commissioner Dicus was asking, I think
3 several of these screening criteria, on the practical end,
4 tend to eliminate large chunks of the materials programs as
5 places where we're going to really have, you know, the net
6 benefit criterion and the existence of analytical models and
7 risk data.

8 Those criteria eliminate large chunks of the
9 materials program from the get-go. So as I say, I am having

10 trouble with the premise. You know, GAO did charge us with
11 coming up with the transition plan to risk-inform
12 regulation, and I don't think that is our policy.

13 I think our policy is to make progress.

14 Commissioner Dicus, did you --

15 COMMISSIONER DICUS: No, I think we have a -- if I
16 can jump in, if I may?

17 COMMISSIONER MCGAFFIGAN: Yes.

18 COMMISSIONER DICUS: A schizophrenic process here.
19 We're going down one road with NRR. I don't disagree with
20 that, but I think we're challenged in NMSS in what we're
21 doing, and we know that, I think.

22 But I'm not sure we're addressing it, and maybe
23 that's part of it.

24 COMMISSIONER MCGAFFIGAN: I just think that there is only so
25 much we can do. And so having a comprehensive plan for all

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1 materials areas, maybe the plan is to be more transparent
2 for the Chairman as to which areas are not passing the
3 screening criteria.

4 But a lot of folks in the materials area, I think
5 sort of have their hands on their wallets as they watch you
6 guys work, because the net benefit test is one that they're
7 going to have problems with.

8 So I would urge us to be careful about using the
9 words, transition to risk-informed regulation, because it
10 implies an endpoint which perhaps we will be at with
11 reactors in 2050, but we will never -- but with materials --

12 One of the constraints in materials that, again,
13 is not mentioned in the paper, but you did this massive risk
14 study last year, and a some of the constraints in the
15 materials area to be risk-informed come from statutes. They
16 come from sister agencies -- we'll leave out names -- who
17 aren't risk-informed, don't use risk in a consistent way.

18 So, there are other impediments that you all face.

19 MR. VIRGILIO: We would agree with you, and if I
20 wasn't clear, let me repeat that I think that in populating
21 that matrix, and going back and filling in what it is we're
22 going to risk-inform, we have to be very sensitive to the
23 seven criteria, the screening criteria.

24 And those last three will screen them out, if it's
25 not feasible or practical. And to address your comment

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1 specifically, that last criterion, are there legislative
2 impediments or are there other issues that would prevent us
3 from going there? And that's the purpose of that seventh
4 element.

5 PARTICIPANT: If you identify legislative
6 impediments, and you think it's terribly important that we
7 risk-inform them, then we can think about legislative
8 proposals.

9 PARTICIPANT: Right.

10 PARTICIPANT: But that may be a relatively weird
11 category.

12 COMMISSIONER DICUS: But we also have to, you
13 know, we have to deal -- I'm going to bring up the states
14 again, if I may, Mr. Chairman -- the issue that some of the
15 states have nuclear power plants are clearly watching what
16 we're doing because of their offsite emergency planning
17 situations. And we understand that.

18 But our Agreement States or states that may be
19 thinking about becoming Agreement States, are looking at
20 what their implications could be from their own legislative
21 issues and their own -- changing their regulations, and the
22 impact and the cost.

23 COMMISSIONER MCGAFFIGAN: I agree. I think we just -- my
24 caution is just to not oversell this. I mean, it gets down
25 to that. Don't oversell what it is we're about. I think we

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1 are -- I agree with the PRA policy statement, that our goal
2 is to increase in all regulatory matters, to the extent
3 supported by PRA, state-of-the-art PRA methods, which --

4 You know, in some sense, the PRA policy statement
5 was largely reactor-based, and I think the Commission,
6 towards the end, tacked on materials. So, we would
7 probably, if we were doing it today, would use words that
8 are more neutral, if we really want to do things.

9 But this PRA policy statement is largely -- you
10 know, I continue to like it. It occasionally uses words
11 like risk-based that we have made taboo today. But it's a
12 good foundation.

13 And what we're trying to do is move forward in all
14 of our areas to the extent that it's practical, but we don't
15 have -- it's the GAO premise that we know that at the end of
16 this, we're going to be in a risk-informed world that I have
17 trouble with.

18 MR. VIRGILIO: If I could just take it one step
19 further, we're even being sensitive to this question of
20 practicality and the rate at which we address these issues
21 in the materials program.

22 For example, not too long ago, we discussed the
23 possibility of risk-informing the over -- a similar
24 oversight process for fuel facilities. And when we engaged
25 industry stakeholders, what they told us is, at least for

1 the moment, they really couldn't support their small
2 community and the resources that they would need to bring to
3 bear on the issues, that the were ones that they couldn't
4 support in the timeframe that we were discussing doing it.

5 So, even before we look at the practicalities of
6 risk-informing a particular requirement, we've been
7 sensitive to the issue of how fast we can pursue some of
8 these changes with our interested stakeholders.

9 CHAIRMAN MESERVE: Let me just indicate that I
10 think it's exactly this kind of discussion, the pace at
11 which you're going and why you're exploring areas and why
12 you're not, that belong in the document. After all, this is
13 the plan. And if it's -- if there are considerations that
14 are guiding you that aren't articulated here, then we're
15 overselling with this plan.

16 COMMISSIONER MCGAFFIGAN: I think that what they're doing, in
17 screening things, that they've told us in the plan, what the
18 screening criteria are. They haven't told us what they
19 screened out.

20 COMMISSIONER DICUS: Right.

21 COMMISSIONER MCGAFFIGAN: They haven't told us what these --
22 and that might actually allay some concerns if they did
23 that, but I hate this -- we've got so many large documents
24 that keep getting larger around here.

25 COMMISSIONER DICUS: Can we have smaller

1 documents?

2 COMMISSIONER MCGAFFIGAN: And I hate the thought of these
3 guys, you know -- of this thing doubling every six months,
4 because we'll even have less chance of getting our arms
5 around it. So the more burden we put on it -- I'm usually
6 preaching this to GAO, and I may be preaching it to
7 ourselves at the moment.

8 But Commissioner Diaz wants to say something.

9 COMMISSIONER DIAZ: I just want to say that really
10 the Commission has been suspected from the very beginning of
11 this process, that the screening criteria will clearly
12 establish, you know, should this be risk-informed? Should
13 this be performance-based? Should it be both, or neither?

14 And that's the overriding criteria, and that's
15 what we expect when you do this.

16 CHAIRMAN MESERVE: That's a pretty good
17 discussion. The one other big thought I wanted to -- does
18 Commissioner Merrifield want to --

19 COMMISSIONER MERRIFIELD: We seem to be on a theme
20 here, but one of the things I want to add is, what is the

21 cost/benefit test? I think we've alluded to it a little
22 bit, but we're running up against this in Part 40, I think,
23 to some extent.

24 We know there are some things we might be able to
25 do in a risk-informed perspective, but the licensees say,

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1 good grief, we're the ones who are ultimately going to have
2 to pay the fees, and from our perspective, we can't justify
3 it on a cost/benefit test going down the road on this.

4 And I think that with our materials licensees, in
5 general, as we go across the different regimens there, these
6 cost/benefit issues and how it impacts the fees that we levy
7 against these materials licensees, are even more sensitive
8 perhaps than what we ran up against with the reactors and
9 some of the economies of scale we have there.

10 So, I think that's something that, again, to back
11 up the Chairman, I think that's something that, as we look
12 at these things, we need to reflect on that as well.

13 PARTICIPANT: I agree entirely, and I think it
14 gets to the point that Commissioner Dicus made earlier, that
15 the Agreement States, when you're calculating costs and
16 benefits and materials, you have to bring in their costs and
17 benefits as well.

18 COMMISSIONER DICUS: I'm so delighted to have all
19 this support for the Agreement States.

20 COMMISSIONER MCGAFFIGAN: The other big thought -- and I'm
21 sort of going to play David Lochbaum for a second here -- as
22 I went through the document --

23 COMMISSIONER DICUS: He's not here, so, someone
24 has to.

25 COMMISSIONER MCGAFFIGAN: -- and looked at all the various

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1 strategies and whatever you have at the back here. If he
2 were here, he would point out that, I think that with the
3 exception of the item we just mentioned awhile ago, the
4 oversight process for fuel cycle facilities, improving
5 public confidence is almost never mentioned in the back
6 here.

7 But if you look at individual strategies and what
8 they're supposed to be doing, you'll tick off three things,
9 and I think you need to think about that.

10 I think there are things we are trying to do to
11 build public confidence in these areas, and maybe with the
12 discussion that Commissioner Merrifield led earlier about
13 where do we stand vis a vis Mr. Lochbaum being invited to
14 learn more about PRAs in one of these peer reviews, or the

15 discussion you had earlier about -- which is one of the
16 critical issues you mentioned, how do you get public
17 confidence in PRA -- but I think you need to figure out how
18 to have that goal be reflected more in the back here.

19 Because at the moment, the number of times the
20 first three goals are mentioned, you know, sort of page
21 after page after page, and the fourth goal in our strategic
22 plan is largely an afterthought, it would look like. I know
23 it isn't, but that's what the paper would make it appear.

24 PARTICIPANT: If I can go back to the past
25 discussion just for a moment, it was somewhat weighted in

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1 the materials area, but it also dealt with reactors, and
2 there was some discussion on that.

3 But we clearly agree that we need to have a
4 measured approach toward the initiatives we take in the
5 reactor area for risk-informing for the reasons that we
6 said; that they are very challenging areas, and we can only
7 do so many at one time.

8 And that gets to the Chairman's comment about the
9 priorities for listing these. And in our interactions with
10 GAO, we have brought that point forward quite strongly; that
11 we felt that it was important that we do take a measured
12 approach and learn as we go forward with this, and feed that
13 back into our process.

14 So it's not trying to risk-inform everything
15 simultaneously in the reactor area, either, and there may be
16 certain areas that are not appropriate to risk-inform.

17 DR. THADANI: Commissioner McGaffigan, if I may, I
18 think -- thank you for pointing out the importance of public
19 confidence. Certainly, we're very sensitive to that, but we
20 have to make sure that that part of the report does include
21 that. Thanks for pointing that out. I think it's a very
22 important issue.

23 CHAIRMAN MESERVE: I know that Commissioner
24 Merrifield had some other questions.

25 COMMISSIONER MERRIFIELD: I think we've touched on

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1 most of them, but I do have one very brief one: It has
2 occurred to me that at the plant, out at the nuclear power
3 plants, we've gone down the road towards a risk-informed
4 process.

5 But one of the things hanging out at those
6 facilities is how we go about inspecting dry cask storage
7 facilities. Given the fact we have a very risk-informed
8 perspective at the vast majority of the plants, how are we
9 going to grapple with this one element in which we still

10 continue to have a deterministic process?

11 Do we have a time line for that, and how that
12 might get all wrapped together, perhaps?

13 MR. ZIMMERMAN: I'm not aware that we have a
14 timeframe for it. I think it goes into one of those
15 activities that we want to look at to see if there is more
16 that can be done. We have a process now for doing the
17 inspections, but to move that forward and to see what we can
18 do in a risk-informed way, again, I'm not aware of an
19 initiative currently underway, but it sounds like maybe
20 Marty is.

21 COMMISSIONER DICUS: Jump in, Marty.

22 MR. VIRGILIO: We have been working with research
23 in developing a PRA on a dry cask storage system. What that
24 will help us do is not necessarily worry -- it's not a
25 bottom line issue, but the issue is where do we have

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1 conservativisms? Where should we be focusing our attention as
2 regulators? Where should the folks we regulate focus their
3 attentions?

4 And that will be the outcome of that effort. The
5 PRA is on about a two-year time line right now, and then the
6 results will be factored into our licensing and our
7 inspection activities.

8 COMMISSIONER MERRIFIELD: It just seemed to me
9 that we've gone down the road towards having a process
10 that's relatively transparent, and we have performance
11 indicators at the plant, yet we still have this lingering
12 issue associated with those casks, and there is a
13 possibility for us to be sending different signals, both to
14 our licensees, as well stakeholders about how we go about
15 inspecting these.

16 These are two different things, but at the very
17 same site.

18 Thank you, Mr. Chairman.

19 CHAIRMAN MESERVE: Let me ask my colleagues, are
20 there any other questions?

21 COMMISSIONER DIAZ: Let me just make a point on
22 page 16, kind of -- training and it seems to me like we have
23 made senior risk analysts a very valuable commodity in the
24 Commission, and they are quickly being, you know, bumped up.

25 PARTICIPANT: Promoted.

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1 COMMISSIONER DIAZ: Promoted. And, you know, it
2 says in here, we have emphasis on reactor inspectors and
3 risk analysts.

4 I do believe that there should be an emphasis on
5 having a cadre of risk analysts that are at headquarters,
6 that could serve, you know, in other places and could be
7 promoted, even if they don't -- the slot is not there, to
8 offer the people the opportunity to get at that level of
9 performance, that they could see it as a career enhancement.

10 And we probably will need them, so that's an
11 issue.

12 DR. THADANI: We do offer those opportunities.
13 This is not just in the context of the so-called senior risk
14 analyst. There are many others. As Tom noted, there are
15 about 300 people a year taking these courses.

16 COMMISSIONER DIAZ: At that level, I think we need
17 them at that level. Just to agree and compliment
18 Commissioner McGaffigan on David Lochbaum.

19 [Laughter.]

20 COMMISSIONER DIAZ: I have a little diploma in my
21 office where I wrote myself, one of these self-given
22 diplomas, where David Lochbaum agreed with me twice in a
23 public meeting, and in a stakeholders' meeting, saying that
24 it's not what we write on public confidence and how we see
25 it, which is very important, but it is the final result of

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1 what it is that we do.

2 PARTICIPANT: I agree.

3 COMMISSIONER DIAZ: Thank you.

4 CHAIRMAN MESERVE: Any questions?

5 [No response.]

6 CHAIRMAN MESERVE: Good. I'd like to thank the
7 Staff for a very helpful and informative briefing. This is
8 obviously, as you indicated, a work-in-progress. It's one
9 that we're following very closely, and one in which the
10 entirety of the Commission is obviously very interested.
11 And with that, we're adjourned.

12 [Whereupon, the meeting was adjourned.]