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

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

P R O C E E D I N G S

[9:00 a.m.]

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

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

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

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

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

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

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

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

[No response.]

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

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

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

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

questions.

Also, we think it's important to point out that the plan is a living document; it represents a work-in-progress, and its real value begins now as we use it to guide decisions on what to risk-inform and what needs to

be done to accomplish those tasks.

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

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

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

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

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

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

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

However, this was more of a catalog of the Agency

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

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

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

In SECY 006, the Staff gave the Commission the

first version of the risk-informed regulation implementation plan, as the Chairman noted.

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

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

First, to include internal communication and

training plans in the risk-informed regulation implementation plan;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The plan itself contains a description of the detailed activities that are ongoing, and we attached to the package of viewgraphs, a number of backup viewgraphs that summarize those.

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

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

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

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

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

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

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

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

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

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

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

Part III is called Corporate and Management Strategies, and that focuses on the training and communications, and we'll talk about that.

And finally, there is the question of how do we

decide what to put in here? You know, to some extent, you could say everything we're doing has some connection to risk, and we put everything the Agency is doing in this plan.

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

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

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

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

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

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

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

Those view -- those screening criteria -- there are seven of them in the plan -- are shown on Slides 7 through 9. I'm not going to read each one of them, but what I do want to mention is a couple of attributes of those plans. The first four of those screening criteria really address what we call the value of risk-informing an activity.

And they're written around the Agency's four

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

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

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

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

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

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

Most of these were developed and reflect our

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

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

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

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

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

How do you decide what level of risk you're trying

to achieve? Right now, we have an ALARA concept, and in the reactor area, we have safety goals. We've put in guidance

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

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

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

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

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

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

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

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

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

And what the plan includes are the risk-informed activities to implement those strategies.

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

As Ashok had mentioned, you know, GAO had recommended back in 1999 that we develop a comprehensive

strategy that includes goals, objectives, activities, schedules, and so forth, for our transition to risk-informed regulations.

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

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

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

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

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

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

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

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

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

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

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

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

where is the Agency going in risk-informed regulation.
So that's the focus of the communication that's in Part 3 of the plan. If I could have Slide 15, please?
Where are we going to go to help communicate? Well, we plan to issue an announcement next month on the availability of this plan, questions regarding the types of feedback we'd like to have, the comment period.
In conjunction with that, we're also planning to set up some stakeholder meetings where we can discuss, both internally and externally, get input and feedback on the

plan, both technically -- are there gaps in our plan? Are there things that need to be changed, as well as the programmatic aspects.
Do people understand risk-informed regulation? We'd also want to put the plan on our website, so that anyone that goes to our website can have access to it.
Slide 16, Training program: Part 3 of the plan also discusses our training program. And the training program is designed to assist the Staff in developing knowledge and skills in PRA methods and statistics.
We consider that there are three levels of risk assessment users within NRC: Basic users, advanced users, and expert practitioners.
There are 13 courses within the current curriculum that focus on the knowledge and skills to support the basic and advanced users. Information for all of the risk assessment courses is available to Agency employees, via the Employee Training and Development web page.
From 1995 through FY2000, more than 300 students annually attended the risk assessment courses, and we expect that this will be considerably higher this year and in 2001.
Although all of the courses have been open to employees in general, the emphasis has been on risk training for reactor personnel so far, particularly reactor

inspectors and senior risk analysts.
In a couple of slides, we'll talk about how the focus is now being increased in the NMSS area. Could I have Slide 17?
In the reactor area, there is an ongoing training initiative within the nuclear reactor safety area. NRR is sponsoring a working group on improving risk expertise for reactor program personnel. The group is considering options for improving the understanding and use of probabilistic risk information and expanding the number of individuals capable of using the NRC risk assessment software tools, and

to perform and interpret risk analysis.

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

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

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

The first course developed within this new

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

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

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

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

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

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

feedback.

Slide 20, please. We're also going to develop plans to systematically apply the screening criteria in areas where they haven't been applied so far. We're going to take a look at what are the critical path items in the schedule, whether they are infrastructure items, safety goal development, training needs, and so forth, but what are the

real key things that, particularly the cross-cutting things that affect all arenas?

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

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

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

Association, to develop standards on PRA quality.

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

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

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

Stakeholder confidence: That's certainly related to the first two bullets, and that's both internal and external. Through the workshops, through our communications initiatives, we hope to be able to find out where is stakeholder confidence lacking and what do we need to do to improve stakeholder confidence?

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

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

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

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

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

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

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

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

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

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

CHAIRMAN MESERVE: Thank you for the very helpful briefing. I'm sure that all of my colleagues have some questions or comments. Let me turn first to Commissioner Merrifield.

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

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

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

ASME public comment period back between June and August.

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

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

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

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

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

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

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

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

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

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

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

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

The normal process would be, when we get the final

standard, we would endorse it; if we disagree with certain parts, there will be some exceptions. We'd endorse it with exceptions, and the it would go for public comment.

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

COMMISSIONER MERRIFIELD: That was a helpful clarification.

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

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

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

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

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

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

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

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

CHAIRMAN MESERVE: Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Going back again to that same Option 2 briefing, we also talked about the efforts

underway on the part of NEI and its membership to have peer reviews conducted on their PRAs.

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

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

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

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

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

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

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

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

With regard to participation in peer reviews at specific plants, we have scheduled one for early December at the Hatch plant, which will involve technical staff from NRR and the Office of Research, as well as project staff from NRR.

I do not believe that there has been success yet

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

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

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

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

through our aspirations.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MR. KING: I agree with everything you said,

particularly the hard work part.

[Laughter.]

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

The only thing I wanted to mention was that on the resources, we made a conscious effort not to put resources in here. We felt that this certainly would be a key input to our planning and budgeting process, but we didn't feel that this should be a resource document.

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

But the other points, I agree with.

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

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

on 50.44, combustible gas control regulation.

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

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

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

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

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

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

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

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

MR. VIRGILIO: I would just like to add to what Roy has just said, that our priorities and the detailed resource needs and how issues interact, one with the other, are, in fact, included in our operating plans.

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

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

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

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

that meets all seven of the criteria.

CHAIRMAN MESERVE: Thank you. Commissioner Dicus?

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

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

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

COMMISSIONER DICUS: They have reservations?

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

COMMISSIONER DICUS: Right.

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

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

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

How are we dealing with them?

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

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

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

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

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

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

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

But maybe I'll turn it over to Roy.

MR. ZIMMERMAN: I'll just echo what Bill said. From the interactions that NRR has had in a variety of forums overseas, my personal involvement with CRNA in areas like the changes to the reactor oversight program, going back and giving briefings from the first one and the reaction that I received the first time I did, compared to the second time and the third time, and pulling up the website and actually using the website to be able to walk through the process, and now listening to the reaction that's coming and listening to a lot of the terms that we used now being stated back from representatives from other

countries, there is a clear change.

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

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

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

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

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

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

COMMISSIONER DICUS: Okay. If I may, one more

question, Mr. Chairman?
I call this an internal briefing, because we're only hearing from the staff. In the past, we've heard from

Union of Concerned Scientists, we've heard from NEI, we've heard from other people.
Are we still communicating very well with our stakeholders on this whole issue.
MR. VIRGILIO: I'll take the waste and material area first, and if we go back to the project that Tom talked about on developing safety goals and the testing of the screening criteria, that was done with extensive stakeholder engagement and involvement. It wasn't just a noticed meeting where we had participants, but we had roundtable discussions.
And the program that has come out of that, the case studies and the approach that we're taking to develop the safety goals was developed in almost a consensus mode, working with the stakeholders.
And a wide variety of stakeholders at that, not only other federal agencies, but people that have been traditionally intervenors and opposed to some of our programs, are engaged in this process, and have agreed to this approach.
DR. TRAVERS: I think the answer is yes; that's our view.
COMMISSIONER DICUS: Yes, is a good answer.
DR. TRAVERS: But it doesn't diminish the challenge, moving forward. Just recently, at the Water

Reactor Safety Meeting, the focus of that meeting was risk, and the use of it. We included on a panel that I chaired, a variety of stakeholders, the industry, I think, Mr. Lochbaum.
COMMISSIONER DICUS: And on these issues?
DR. TRAVERS: On these issues. We were talking about PRA quality and related issues that, you know, are fundamental to these sorts of initiatives we're pursuing.
So, I mean, that's just one example, but I think that across the board, there's such a variety of opportunities that we want to continue to encourage, consistent with our goal of public confidence. I think it fits right into that overarching goal of the Agency, that it really underscores it, and that it's something we need to be continuing to be sensitive to.
COMMISSIONER DICUS: Okay, thank you, Mr. Chairman.
CHAIRMAN MESERVE: Commissioner Diaz?

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

And I strongly believe that should be done as soon

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

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

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

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

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

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

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

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

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

Because if I'm having problems in reading -- and I

guess that if I flunked Crossword Puzzles 101, I probably made it through with a C on Risk-Informed Regulation 102, I should be able to follow it, and I had a hard time going back and forth with it.

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

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

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

MR. KING: I think they are consistent. They are different, but the reason they are differences is that we have already made the decision -- remember that SECY 198 deals with Option 3, risk-informing Part 50.

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

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

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

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

COMMISSIONER DIAZ: All right, good, thank you.

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

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

But it seems to be completely out of place.

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

The one you're referring to is the first one under the practical category, and even though you may say it might make sense to go risk-inform something, if you just don't

have analytical models or you don't think you can develop them, maybe that's not the right path to go down. That's really what it's directed towards.

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

MR. KING: Yes, yes.

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

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

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

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

COMMISSIONER DIAZ: Yes.

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

COMMISSIONER DIAZ: But it should be a policy issue?

MR. KING: Yes.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PARTICIPANT: No, sir.

COMMISSIONER DIAZ: Thank you.

PARTICIPANT: We're just taking credit for --

CHAIRMAN MESERVE: Don't go any further.

[Laughter.]

COMMISSIONER DICUS: Just say no.

PARTICIPANT: All right.

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

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

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

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

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

COMMISSIONER McGAFFIGAN: But the semantics, as Commissioner

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

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

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

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

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

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

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

Those criteria eliminate large chunks of the materials program from the get-go. So as I say, I am having trouble with the premise. You know, GAO did charge us with coming up with the transition plan to risk-inform regulation, and I don't think that is our policy.

I think our policy is to make progress. Commissioner Dicus, did you --

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

COMMISSIONER MCGAFFIGAN: Yes.

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

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

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

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

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

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

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

So, there are other impediments that you all face.

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

seven criteria, the screening criteria.
And those last three will screen them out, if it's not feasible or practical. And to address your comment

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specifically, that last criterion, are there legislative impediments or are there other issues that would prevent us from going there? And that's the purpose of that seventh element.
COMMISSIONER MCGAFFIGAN: If you identify legislative impediments, and you think it's terribly important that we risk-inform them, then we can think about legislative proposals.
PARTICIPANT: Right.
COMMISSIONER MCGAFFIGAN: But that may be a relatively weird category.
COMMISSIONER DICUS: But we also have to, you know, we have to deal -- I'm going to bring up the states again, if I may, Mr. Chairman -- the issue that some of the states have nuclear power plants are clearly watching what we're doing because of their offsite emergency planning situations. And we understand that.
But our Agreement States or states that may be thinking about becoming Agreement States, are looking at what their implications could be from their own legislative issues and their own -- changing their regulations, and the impact and the cost.
COMMISSIONER MCGAFFIGAN: I agree. I think we just -- my caution is just to not oversell this. I mean, it gets down to that. Don't oversell what it is we're about. I think we

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are -- I agree with the PRA policy statement, that our goal is to increase in all regulatory matters, to the extent supported by PRA, state-of-the-art PRA methods, which --
You know, in some sense, the PRA policy statement was largely reactor-based, and I think the Commission, towards the end, tacked on materials. So, we would probably, if we were doing it today, would use words that are more neutral, if we really want to do things.
But this PRA policy statement is largely -- you know, I continue to like it. It occasionally uses words like risk-based that we have made taboo today. But it's a good foundation.
And what we're trying to do is move forward in all of our areas to the extent that it's practical, but we don't have -- it's the GAO premise that we know that at the end of this, we're going to be in a risk-informed world that I have trouble with.
DR. TRAVERS: If I could just take it one step

further, we're even being sensitive to this question of practicality and the rate at which we address these issues in the materials program.

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

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

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

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

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

COMMISSIONER DICUS: Right.

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

COMMISSIONER DICUS: Can we have smaller

documents?

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

But Commissioner Diaz wants to say something.

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

And that's the overriding criteria, and that's

what we expect when you do this.
CHAIRMAN MESERVE: That's a pretty good discussion. The one other big thought I wanted to -- does Commissioner Merrifield want to --
COMMISSIONER MERRIFIELD: We seem to be on a theme here, but one of the things I want to add is, what is the cost/benefit test? I think we've alluded to it a little bit, but we're running up against this in Part 40, I think, to some extent.
We know there are some things we might be able to do in a risk-informed perspective, but the licensees say,

good grief, we're the ones who are ultimately going to have to pay the fees, and from our perspective, we can't justify it on a cost/benefit test going down the road on this.
And I think that with our materials licensees, in general, as we go across the different regimens there, these cost/benefit issues and how it impacts the fees that we levy against these materials licensees, are even more sensitive perhaps than what we ran up against with the reactors and some of the economies of scale we have there.
So, I think that's something that, again, to back up the Chairman, I think that's something that, as we look at these things, we need to reflect on that as well.
PARTICIPANT: I agree entirely, and I think it gets to the point that Commissioner Dicus made earlier, that the Agreement States, when you're calculating costs and benefits and materials, you have to bring in their costs and benefits as well.
COMMISSIONER DICUS: I'm so delighted to have all this support for the Agreement States.
COMMISSIONER MCGAFFIGAN: The other big thought -- and I'm sort of going to play David Lochbaum for a second here -- as I went through the document --
COMMISSIONER DICUS: He's not here, so, someone has to.
COMMISSIONER MCGAFFIGAN: -- and looked at all the various

strategies and whatever you have at the back here. If he were here, he would point out that, I think that with the exception of the item we just mentioned awhile ago, the oversight process for fuel cycle facilities, improving public confidence is almost never mentioned in the back here.
But if you look at individual strategies and what they're supposed to be doing, you'll tick off three things, and I think you need to think about that.
I think there are things we are trying to do to

build public confidence in these areas, and maybe with the discussion that Commissioner Merrifield led earlier about where do we stand vis a vis Mr. Lochbaum being invited to learn more about PRAs in one of these peer reviews, or the discussion you had earlier about -- which is one of the critical issues you mentioned, how do you get public confidence in PRA -- but I think you need to figure out how to have that goal be reflected more in the back here.

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

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

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

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

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

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

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

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

COMMISSIONER MERRIFIELD: I think we've touched on

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

But one of the things hanging out at those facilities is how we go about inspecting dry cask storage

facilities. Given the fact we have a very risk-informed perspective at the vast majority of the plants, how are we going to grapple with this one element in which we still continue to have a deterministic process?

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

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

COMMISSIONER DICUS: Jump in, Marty.

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

conservatisms? Where should we be focusing our attention as regulators? Where should the folks we regulate focus their attentions?

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

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

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

Thank you, Mr. Chairman.

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

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

PARTICIPANT: Promoted.

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

risk analysts.

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

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

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

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

[Laughter.]

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

what it is that we do.

PARTICIPANT: I agree.

COMMISSIONER DIAZ: Thank you.

CHAIRMAN MESERVE: Any questions?

[No response.]

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

[Whereupon, the meeting was adjourned.]