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UNITED STATES NUCLEAR REGULATORY COMMISSION
BRIEFING ON EXTERNAL SAFETY CULTURE

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WEDNESDAY

May 27, 2009

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The Commission convened at 9:30 a.m., the Honorable Gregory B. Jaczko,
Chairman presiding.

NUCLEAR REGULATORY COMMISSION

GREGORY B. JACZKO, CHAIRMAN

PETER B. LYONS, COMMISSIONER

DALE E. KLEIN, COMMISSIONER

KRISTINE L. SVINICKI, COMMISSIONER

1 PANEL 1: NRC STAFF

2 WILLIAM BORCHARDT, Executive Director for Operations

3 MARTIN VIRGILIO, Deputy Executive Director for Materials, Waste,
4 Research, State, Tribal, and Compliance Programs

5 CYNTHIA CARPENTER, Director, Office of Enforcement

6 PATRICIA HOLAHAN, Director, Division of Security Operations,

7 NSIR

8 JIM WIGGINS, Deputy Director, Office of Nuclear Reactor

9 Regulation (NRR)

10 JAMES FIRTH, Project Manager, Rulemaking Branch B, FSME

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

2 CHAIRMAN JACZKO: Good morning. Today we have, I think, a
3 very unique opportunity to talk about safety culture. We've got a morning session
4 where we'll focus on the work that's been done to develop a draft policy statement
5 on safety culture, which is really focused on licensees and licensee performance,
6 expectation for licensees.

7 This afternoon we'll then have a meeting which I think completes that
8 activity in an important way, which is to look internally at the agency itself and see
9 how we're doing in safety culture within our own agency, and I think that will be a
10 very useful meeting as well as we can compare and contrast the two different
11 approaches.

12 The safety culture, I think, has been an important issue for some time for
13 this agency, and it is -- I think the Commission is recognizing -- various
14 Commissioners have spoken about this issue that in many ways at the heart of
15 safety problems and safety incidents that we've seen recently has fundamentally
16 been challenges in safety culture. And we have facilities, whether it's
17 Davis-Besse, whether it's Nuclear Fuel Services in Tennessee where we've seen
18 significant safety culture challenges that have led to safety problems.

19 So, I've always thought it's important that we focus on safety culture as a
20 way to try and ultimately have a leading indicator or ability to eliminate safety
21 challenges before they would ever begin.

22 And we have done a lot, certainly, over the last several years in this area,

1 including we've done policy statements on safe operation of nuclear plants and
2 safety conscious work environment.

3 We've taken safety culture issues and we've implemented them into the
4 Reactor Oversight Program. So, I think today's efforts will focus on what we're
5 doing with the draft policy statement.

6 And we recently received this from the staff and I certainly want to
7 congratulate the staff on putting together the draft policy statement. This is a wide,
8 diverse array of stakeholders that I think you interacted with and I suspect when
9 we move to releasing this draft policy statement we will get a wide and diverse
10 array of comments and feedback on the approach that we've taken.

11 So, I think this has been a good process so far, and most importantly I look
12 forward to this meeting and look forward to moving forward to get the policy
13 statement out there for public comment so we can go through and complete the
14 activity really of developing a strong policy statement in this regard.

15 So, Bill, I would turn it over to you unless any Commissioners have any
16 comments?

17 COMMISSIONER KLEIN: I'd just like to compliment the Agency for
18 its long history in safety culture.

19 I think as you indicated you had two policy statements, one in '89, another
20 one in '96. In 2006, we changed the Reactor Oversight Program so you had a
21 great track record in that area. And I think the poster in the elevators that show
22 "Uncle Bill Wants You to Respond to the Safety Culture Survey" demonstrates the

1 activity.

2 So, I'm not sure we can market his poster anywhere, but the fact that we do
3 want the input from the staff on how to make things better.

4 Even with all of our efforts we occasionally see lapses, you know, in safety
5 culture, and so I think it's one of those continuous improvement activities that we
6 need to work on.

7 CHAIRMAN JACZKO: Thanks. Any other comments?

8 MR. BORCHARDT: Good morning. As you mentioned we have two
9 Commission meetings today. They're at slightly different stages in the process
10 and I'd say that the one on external safety culture is we're still in the interactive
11 phase with all the stakeholders and we expect to have more very meaningful
12 discussions and participation from external stakeholders after we release the draft
13 policy statement.

14 In fact, a number of us will be going to INPO next month to continue some
15 discussions to see an interaction between what INPO is doing and what we have
16 under consideration.

17 Marty Virgilio has been the lead in the EDO's office for safety culture issues,
18 so he'll be beginning this morning's discussions.

19 MR. VIRGILIO: Thank you, Bill. Good morning. The goal for
20 briefing today is to provide you a basic understanding of the staff's proposal that
21 was contained in the Commission paper, the SECY paper we provided you.

22 The draft safety culture policy statement and responding to -- if you recall,

1 one of the milestones in this project was the Staff Requirements Memo that you
2 sent us back in February of 2008 and in that Staff Requirements Memo you asked
3 us some specific questions. So, we want to respond to those questions as part of
4 the presentation today as well.

5 I would like to start by sort of underscoring what you said in your opening
6 remarks that a positive safety culture is really a fundamental to the strategies of
7 our better performing licensees when it comes to safety and security and carrying
8 out their licensed activities.

9 On the flip side of that, I also want to acknowledge that as you did, Mr.
10 Chairman, that there's a lot of lessons learned from some significant events.

11 If you look at Davis-Besse, if you look at the Challenger and Columbia
12 space shuttle disasters, if you look at the Tokai-Mura inadvertent criticality
13 accident in Japan; all of those track back when you look at the root causes to
14 safety culture deficiencies.

15 Just on slide three we have our speakers today: Cindy Carpenter, the
16 Director of our Office of Enforcement, is going to talk about the development of the
17 policy statement and the staff's recommendations.

18 Trish Holahan, the Director of our Division of Security Operations in our
19 Office of Nuclear Security Incident Response, will talk about the issues from the
20 SRM that prompted the most discussion of all as we worked through this and this
21 is safety culture, security culture. Do we have one statement or do we have two
22 statements? How do you balance all of that? And Trish is going to talk a little bit

1 about that.

2 Also at the table today this morning with us we have Jim Wiggins, who is
3 the Deputy Director of our Office of Nuclear Reactor Regulation and James Firth, a
4 Project Manager in our Office of Federal and State Materials and Environmental
5 Management Programs and they're going to assist us in responding to questions
6 that you might have with regard to the Reactor Oversight Process or how we're
7 dealing with the material licensees as we move forward on safety culture issues.

8 And finally, I want to also acknowledge the members of the Safety Culture
9 Working Group and the Steering Committee for their good work in developing the
10 policy statement, and seated behind me in the well are some of those people.

11 I'd specifically like to call out Stewart Magruder and Isabel Schoenfeld for
12 the work that they did in pulling this all together.

13 On slide four, just again underscoring some of the things that we've already
14 said. The NRC has long recognized the importance of safety culture.

15 As Dr. Klein mentioned, in 1989 the Commission published its policy
16 statement on Conduct of Operations that provided some expectations for a
17 positive safety culture at nuclear power plants. And I'll underscore this was very
18 focused at nuclear power plants, and it's had its origins in an incident that we
19 experienced at Peach Bottom nuclear power plant with inattentive operators --
20 sleeping operators.

21 In 1996 the Commission then published a policy statement on Freedom of
22 Employees in the Nuclear Industry to Raise Safety Concerns without Fear of

1 Retaliation.

2 This is a very important milestone, I think, in the history of the Commission's
3 actions around safety culture, and it set forth our expectations that licensees and
4 other employers would establish and maintain a safety conscious work
5 environment, which is one -- but one very important -- element of a good safety
6 culture.

7 Then, based in part on our lessons learned from the Reactor Oversight
8 Process and our own recognition that a lot of the actions that we had taken in the
9 past were really focused on the reactor licensees, in -- it was probably in the
10 2007-2008 time frame that the staff began to start looking at should we be
11 expanding what we've done in the area of safety culture to the material licensees?

12 Should we be looking at our applicants as opposed to just focusing on the
13 operating reactors? And we also started to ask ourselves questions about how do
14 we bring security into this?

15 How do we integrate safety and security into our thinking about safety
16 culture and security culture and what the expectations ought to be?

17 Slide five. I mentioned that as part of this presentation we're going to
18 respond to the questions that you asked us in the 2008 Staff Requirements Memo.

19 These are two of the questions -- whether safety culture as applied to
20 reactors needs to be strengthened? And then how to increase the attention of
21 safety culture in the materials area?

22 And then on slide six, how stakeholder involvement can be most effectively

1 used to address safety culture, and then whether publishing the Commission's
2 expectations for safety culture and security culture are best accomplished in one
3 statement or in two separate statements?

4 That's the conclusion of my opening remarks and now Cindy is going to talk
5 about the definition of safety culture, its characteristics, and some of our current
6 activities.

7 MS. CARPENTER: Thank you, Marty. On slide 7, to develop the
8 draft safety culture policy statement the staff reviewed a wide variety of
9 informational sources, including NRC lessons learned, domestic and international
10 documents, organizational science literature, and they also sought input from our
11 stakeholders, internal and external.

12 And we did this through public meetings, presentations to various forums
13 and stakeholder organizations, and teleconferences with various stakeholders
14 also, including state representatives.

15 So as a first step, they looked at the definition of safety culture. The
16 proposed definition was derived from the International Atomic Energy Agency
17 Safety Culture Definition and that was adopted by the Nuclear Regulatory
18 Commission, the NRC, for the Reactor Oversight Process.

19 The staff proposes revising this definition to that that you see on this slide.
20 And the reason for the proposal to revise it is to make it more applicable to more
21 than just nuclear power plants to make it more generic and also to acknowledge
22 the importance of nuclear security issues within the licensee safety culture. And

1 this is to adequately communicate the equal importance of nuclear security and
2 nuclear safety in a positive safety culture. Next slide, please.

3 The safety culture characteristics discussed in the proposed draft policy
4 statement are the modifications to the current safety culture components that are
5 used in the Reactor Oversight Process.

6 The staff proposes modifying these definitions to improve the overall
7 organization and the clarity of the definitions to include security in each of the
8 definitions and to improve their applicability to a wider range of licensees and
9 certificate holders.

10 The safety culture characteristics that you see here on this slide and the
11 next slide retain the concepts of the original 13 safety culture components of the
12 Reactor Oversight Process and they also articulate areas that are important to
13 safety culture.

14 Each of the safety culture characteristics includes an explanation that
15 enhances the understanding of the important concepts of the characteristic.
16 These characteristics describe areas that the staff has identified as being
17 indicative of a positive safety culture. And we believe that they may help the
18 licensees and certificate holders to develop and maintain a positive safety culture.

19 Now, although these characteristics are intended to generically apply to a
20 wide range of activities and entities that the NRC regulates, they have not been
21 applied yet to the full range of licensees.

22 We also recognize that the revised set of characteristics may not be all

1 inclusive and that there may be other attributes and characteristics in
2 organizations and individuals that might also be indicative of a positive safety
3 culture.

4 So, we recommend that the staff seek additional input from licensees,
5 certificate holders and stakeholders.

6 We've included several questions in the proposed Federal Register Notice
7 in order to help us refine the characteristics and to engage our stakeholders. Slide
8 10.

9 The staff also reviewed other agency processes to determine if the safety
10 culture components developed in the Reactor Oversight Process might be
11 applicable to other agency oversight and assessment processes.

12 In the fuel cycle environment the staff began reviews of the fuel facility
13 inspection procedures and other oversight programs and processes as part of a
14 pilot.

15 In response to Commission direction, the staff now is undertaking a
16 comprehensive effort to develop a revised fuel cycle oversight process to make it
17 more risk informed and performance-based.

18 As part of this effort, the staff intends to work to incorporate the safety
19 culture considerations into the new fuel cycle oversight process by leveraging
20 progress from the Reactor Oversight Process and insights from safety culture
21 pilots that were conducted.

22 For new reactors, the staff and the new reactor construction stakeholders

1 recognize that a strong safety culture during new reactor construction is
2 paramount for ensuring that the newly constructed plant is in compliance with its
3 design and capable of operating safely following construction.

4 As a result, the safety culture characteristics are being considered in the
5 oversight process that's being developed by the Office of New Reactors.

6 The security cornerstone of the Reactor Oversight Process is an evaluation
7 of the licensee's implementation of its security program.

8 The staff has issued several generic communications related to security
9 inspection process and human performance issues. The development of this draft
10 policy statement has also helped focus attention on the safety and security
11 interface.

12 For industry activities, the Institute of Nuclear Power Operations has
13 published guidance to the U.S. nuclear power reactor industry on safety culture
14 and they conduct plant evaluations at the nuclear power plants.

15 These plant evaluations include a review of areas that are important to
16 safety culture and they incorporate the Institute of Nuclear Power Operation's
17 principles and attributes of safety culture in their review.

18 For the nuclear reactor industry, through the Nuclear Energy Institute, they
19 have two initiatives under way.

20 The first initiative, NEI has proposed to develop guidance for standardizing
21 safety culture assessments. The proposed guidance would use the utility services
22 alliance safety culture assessments approach and would also use INPO's

1 principles for a strong nuclear safety culture.

2 The second is a high level concept of an industry approach of a site nuclear
3 safety culture process directed by the site leadership team in coordination with the
4 governing nuclear safety review board.

5 The staff recognized the value of and we encourage the industry initiatives
6 regarding safety culture areas important to safety culture. But the staff also
7 acknowledges the continuing need for independent regulatory oversight as part of
8 the overall process.

9 We're engaging the stakeholders with the goal of having greater alignment
10 in the terminology and approaches that we use to address areas that are important
11 to safety culture.

12 And we've spent several years reviewing how we look at licensee safety
13 culture from our inspection and our oversight programs, and as you know, this was
14 an opportune time to look at ourselves also and to see what value it might also
15 hold for our own internal processes to ensure that we are doing everything
16 possible to keep our safety foremost in our priorities.

17 So, this includes our internal safety culture activity, which we'll hear more
18 about this afternoon at the Commission meeting. Next slide.

19 With respect to the specific questions that the Commission asked in the
20 Staff Requirements Memorandum, first, the Commission asked whether safety
21 culture as applied to reactors needs to be strengthened.

22 One of the lessons learned from Davis-Besse was that a weak safety

1 culture was a contributing cause.

2 Partially in response to this, the Reactor Oversight Process was enhanced
3 in mid-2006 by assigning cross-cutting aspects to inspection findings as
4 applicable.

5 We believe that this process of considering cross-cutting aspects of
6 inspection findings is effective because it offers insights into a licensee's safety
7 culture.

8 By tagging cross-cutting aspects to inspection findings, the staff has been
9 able to gain insights into performance areas that have the potential to reflect
10 organizational dynamics including safety culture.

11 When recurring aspects are identified, safety culture assessments are
12 conducted to determine if organizational safety culture challenges exist.

13 We looked at the lessons learned from 18 months of implementation of the
14 Reactor Oversight Process. We also looked at the lessons learned from the
15 supplemental inspection, the 95003 that was conducted at Palo Verde. Also,
16 internal reviews and feedback from both internal and external stakeholders. And
17 the staff implemented improvements in January of 2009 to the Reactor Oversight
18 Process.

19 We believe that the combined focus of the NRC and the nuclear power
20 industry on areas important to safety culture has increased attention to this area
21 among the operating power plants and could have contributed to the relatively low
22 number of units that are currently in the degraded cornerstone or the multiple

1 degraded cornerstone of the Reactor Oversight Process. Next slide.

2 We're aware that an increasing number of licensees are also conducting
3 assessments of areas important to safety culture as a result of NRC identified
4 substantive cross-cutting issues and the NRC's regulatory response is focused on
5 licensee's corrective actions and their demonstrated improvement through
6 subsequent inspections -- assessments and inspection findings.

7 We recognize the value of and support the industry's initiative to develop
8 guidance for standardizing safety culture assessments and other initiatives with
9 respect to reviewing and assessing areas important to safety culture.

10 In addition, the staff will continue to enhance and refine the Reactor
11 Oversight Process guidance related to areas important to safety culture as needed
12 and in accordance with established process based on any lessons learned in
13 internal and external feedback.

14 So, we believe that the safety culture as applied to reactors -- we believe
15 that the NRC safety culture as applied to reactors and the NRC's oversight of
16 areas important to safety culture has been strengthened, but we will continue to
17 look at this and make refinements to our processes as needed.

18 In developing the draft policy statement, the Commission asked how to
19 increase attention to safety culture in the materials area and how stakeholder
20 involvement can most effectively be used to address safety culture for all NRC and
21 Agreement State licensees and certificate holders.

22 As background, the NRC administers approximately 3,400 materials

1 licensees to approximately 18,900 that are administered by the Agreement States.

2 To accomplish the Commission's objective of having the Policy Statement
3 apply to all licensees and certificate holders, we need to consider how to reach
4 those licensees that are operating under Agreement State jurisdiction.

5 We will continue to engage the Agreement States in how best to increase
6 the attention that Agreement States and Agreement State licensees give to safety
7 culture.

8 We've shared the draft Policy Statement with the Agreement States and we
9 intend to request that the Agreement States share the draft policy statement with
10 their licensees.

11 Because a policy statement does not have the same status as a regulation,
12 the Agreement States cannot be required to implement elements of a policy
13 statement. So, consequently, the Commission's expectations would not be a
14 matter of compatibility, and we would not assign a compatibility category to the
15 expectations expressed in the policy statement.

16 We would need to conduct a rulemaking if the Commission determined that
17 the Agreement States should implement a program involving the oversight of
18 safety culture or if it seeks to make other substantive changes that would be
19 legally binding on the NRC Agreement State licensees.

20 Publishing the draft policy statement and engaging the Agreement States
21 and other stakeholders on these issues will assist the staff in our efforts to
22 increase awareness of safety culture among our licensees and provide us with

1 another opportunity to reach a wider cross section of stakeholders, such as the
2 materials licensees, research and test reactors, and certificate holders who maybe
3 were not reached by our initial efforts to draft the policy statement. Slide 14.

4 The Commission asked how to increase attention to safety culture in the
5 materials area. In the development of the draft policy statement, the staff sought
6 insights and feedback from stakeholders by reaching out to all types of licensees
7 and certificate holders and we've provided information in a variety of forums, such
8 as stakeholder organizational meetings, newsletters and teleconferences and we
9 also published a number of questions in the Federal Register Notice -- in the
10 Federal Register.

11 Efforts were made to reach out to as many licensees and certificate holders
12 as possible to obtain their views related to safety culture, to make our stakeholders
13 aware of the NRC's efforts to update the policy statement and to increase their
14 awareness of the importance of safety culture to the safe and secure use of
15 radioactive materials.

16 These efforts sought to reach stakeholders involved with power reactors,
17 the research and test reactors, new reactor construction, and the many uses of
18 byproduct material. We've published and solicited public comment on the policy
19 questions using the Federal Register and the safety culture public website.

20 An important part of the outreach efforts was a public workshop that we
21 held to discuss policy issues associated with safety culture and the development
22 of the draft policy statement.

1 We sought to structure the public meeting and the policy questions in a way
2 that would help open up the dialogue with the many types of licensees and
3 stakeholders.

4 The goal was to provide as much of an opportunity as possible for our
5 stakeholders to provide input before we began drafting the policy statement.

6 We used the webinar technology with a goal of lowering as much as
7 possible the barriers to the smaller and more remote stakeholders from actively
8 participating in the workshop.

9 We had over 160 participants in the workshop and 60 of them were by
10 webinar and one of the panelists actually participated by phone. The staff also
11 used established mailing lists to publicize the public meeting.

12 It was organized to address the questions related to the safe handling and
13 the security in the policy statement, reactor issues and materials issues. We had
14 breakout sessions for the reactor side, and we had breakout sessions devoted to
15 the materials side.

16 We had a diverse set of stakeholders, including a joint representative of the
17 Organization of Agreement States and the Conference of Radiation Control
18 Program Directors, utilities, non-government organizations, a lawyer specializing in
19 employment law and materials licensees.

20 Next, Trish Holahan will discuss the staff's review and recommendations on
21 safety and security culture.

22 MS. HOLAHAN: Thank you, Cindy. Mr. Chairman, Commissioners.

1 I'm going to talk about the next three slides.

2 The Commission asked whether publishing NRC's expectations for safety
3 culture and for security culture was best accomplished in one policy statement or
4 in two separate ones.

5 To consider the safety and security issues in the above options, the staff
6 gathered data related to organizational safety/security culture literature,
7 international reports, and other non-nuclear reports. The staff also reviewed
8 stakeholder input from the workshop.

9 We evaluated various options and concluded that there is one overarching
10 culture -- a safety culture where safety and security are considered equally and
11 treated equally.

12 The staff derived its recommendation on the following considerations.

13 A single policy statement builds on the fact that safety and security have the
14 same ultimate purpose of protecting people and the environment from unintended
15 radiation exposure and encourages ways -- and encourages attention to the way
16 safety and security interface.

17 The policy statement should give special attention to the safety and security
18 interface within the overarching safety culture. It should acknowledge clearly that
19 the goals of ensuring safety and security may be accomplished differently, and it
20 should apply to the entire spectrum of licensees and certificate holders.

21 Also, it is important for licensees and certificate holders to provide
22 personnel in the safety and security sectors with an appreciation of the importance

1 of each, and that's a key component -- emphasizing the need for integration and
2 balance to achieve optimized protection.

3 Most stakeholder comments supported one policy statement using the term
4 safety culture. Most noted that the policy statement should recognize that security
5 culture is one of several integrated parts of safety culture.

6 There is no real distinction between cultures and it's not a standalone
7 radiation safety culture, a nuclear criticality safety culture, a fire safety culture, et
8 cetera. All of these programs are focused on safety for a particular discipline.

9 The licensee safety culture is approached as an integrated manner across
10 disciplined boundaries. They commented that the NRC should indicate that there
11 is a distinction between these cultures. On the next slide.

12 Although many safety and security activities are complementary or
13 synergistic, there are clearly differences.

14 The safety culture characteristics were found to apply to activities involving
15 security, but the primary difference is how the information is shared.

16 The safety staff is typically focused on preventing errors that would result in
17 an inadvertent accident, while the security staff is focused on preventing deliberate
18 attacks or diversion of materials.

19 When the goal is maintaining safety, there is clear value in widely
20 disseminating information and in collaboration, but for the goal of maintaining
21 security, the balance of sharing of information is balanced with the need to know
22 and the information actually available. Next slide.

1 The staff recommends that safety and security culture be incorporated in a
2 joint policy statement and that safety and security should be treated equally.

3 The proposed safety culture characteristics include security in addition to
4 safety in their descriptions to re-enforce that safety and security should be treated
5 equally.

6 The staff agreed that the NRC should base the policy statement on the
7 following criteria with regard to how culture affects the safety and security
8 functions and goals: ensure equal treatment of safety and security functions and
9 goals; articulate that both safety and security serve the same ultimate purpose of
10 protecting people and the environment; acknowledge that the goals of ensuring
11 safety and security may be accomplished in different ways from unintended
12 radiation exposure; acknowledge that cultural manifestations come from a
13 common or shared source of values, beliefs, and attitudes; encourage attention to
14 the ways in which safety and security interface; and finally, ensure that the policy
15 statement is understandable to the spectrum of licensees. And that's a key point
16 as well.

17 And now I would like to turn it back to Cindy.

18 MS. CARPENTER: Thank you. The draft policy statement conveys
19 the Commission's expectations that all licensees and certificate holders establish
20 and maintain a positive safety culture that establishes that nuclear safety issues
21 and nuclear security issues receive the attention warranted by their significance.

22 It recognizes that the steps that the licensees and certificate holders may

1 take to maintain a positive safety culture may be influenced by the safety and
2 security significance of the licensed activities and also the nature and the
3 complexity of the organization and functions.

4 It also conveys that safety and security activities are closely intertwined and
5 it is therefore critical to consideration of these activities be integrated so as not to
6 diminish or adversely affect either safety or security.

7 As Trish mentioned, one of the questions considered was whether
8 publishing the Commission's expectations for safety culture and security culture is
9 best accomplished in one or two policy statements.

10 And as you heard, based upon the staff's evaluation we recommend that
11 the Commission's expectations for safety culture and security culture be
12 addressed in one safety culture policy statement while making it clear the safety
13 and security functions and issues be given the equal importance within the
14 overarching safety culture.

15 The draft policy statement also makes clear that there are at times
16 differences in safety and security objectives and goals that need to be addressed
17 by safety and security interface considerations.

18 The draft policy statement also addresses some of the characteristics of a
19 positive safety culture, slide 19.

20 The draft policy statement also makes it clear that the licensees and
21 certificate holders bear the primary responsibility for safely handling and securing
22 radioactive materials and therefore, they have the primary responsibility to

1 establish and maintain a positive safety culture that establishes that nuclear safety
2 issues and nuclear security issues as overriding priority receive the attention
3 warranted by their significance.

4 But the draft policy statement also makes clear that the NRC has an
5 independent oversight role through inspection and assessment processes,
6 including addressing licensee performance related to safety culture.

7 When we say "independent", we mean to look at safety culture from a
8 slightly different perspective than that of the licensee. We believe that it's
9 important that we not both, the licensee and regulator, are looking at the same
10 things in the same way. We need a prism and not a looking glass.

11 We believe that the approach taken in the draft policy statement, which is
12 focused on the expected outcome is consistent with the NRC's
13 performance-based approach to regulation and helps to make the policy
14 applicable to all types of licensees and certificate holders. Slide 20.

15 Continuing efforts on our part to emphasize the importance of safety culture
16 will help to foster within licensees and certificate holders the value of constant
17 vigilance in support of maintaining a positive safety culture.

18 We believe that more interaction is needed, though, with our stakeholders
19 on the draft policy statement and the revised safety culture characteristics to
20 ensure the appropriate outreach to and input from our stakeholders and that
21 particularly is the wide range of material licensees, the Agreement States, as well
22 as the reactor licensees.

1 Therefore, we recommend that the draft policy statement be published for
2 public comment to enable greater outreach to and involvement of all of our
3 stakeholders prior to developing the draft final policy statement for Commission
4 consideration.

5 This outreach should include how the NRC's oversight programs can best
6 address areas important to safety culture for the range of licensees and certificate
7 holders.

8 We anticipate holding another public meeting in the fall of 2009, and we
9 anticipate providing the final policy statement for Commission consideration in the
10 spring of 2010.

11 That concludes my remarks.

12 MR. BORCHARDT: That completes the staff's presentation.

13 CHAIRMAN JACZKO: Well, thank you. I think it was a very good
14 presentation. I think today I start the questioning.

15 Maybe, Cindy, you could comment. I think one of the issues where there
16 appeared to be some disagreement among the staff on this issue -- not one, I
17 think, necessarily that the Commission anticipated there being disagreement on,
18 but it had to do with the listing of the safety culture characteristics and where they
19 should go in the policy statement. I think we had a non-concurrence on that.

20 Maybe you could perhaps address that and I think in general the approach
21 of asking that question in the draft about where those things would go, I think, is a
22 good way to try and address that. But maybe you could comment a little bit on

1 what the issues were there and I think, Isabelle, if you wanted to comment as well
2 that would be fine.

3 MS. CARPENTER: Let me take a first step at that. There was
4 discussion among the staff as to whether the characteristics -- there are nine
5 characteristics of safety culture that we've identified -- and there was discussion
6 among the staff as to whether we should actually put them into -- there's an actual
7 part of the policy statement called the "Statement of Policy".

8 And some staff believe that it should be -- that the nine characteristics
9 describe when the Commission gives their expectations for a positive safety
10 culture that the nine characteristics describe that and they should also be included
11 in the statement of policy.

12 And there was some discussion -- there were aspects underneath of that
13 that actually describe each of those characteristics. Should they also be in the
14 Statement of Policy?

15 So, some staff believe that this would give our stakeholders, particularly the
16 power reactors understand safety culture we believe now, but for all of the wide
17 range of materials licensees, it would give them a better explanation of what the
18 Commission's expectations were and what really constitutes a positive safety
19 culture.

20 There were also discussions about by putting it there, many staff believed
21 that we should keep the Statement of Policy part of it very concise; to be very clear
22 on what the Commission's expectations were, but by having the safety culture

1 characteristics are still in the policy statement, but not in the Statement of Policy
2 that that accomplished that.

3 So, one of the things we did is with one of the questions in the Federal
4 Register Notice, we included a question to ask licensees, particularly the wide
5 ranging materials licensees, if they felt that they would understand better the
6 Commission's expectations if it was in a Statement of Policy or did they
7 understand that if it was included in the policy statement but not specifically the
8 statement of policy. Isabelle?

9 MS. SCHOENFELD: I think Cindy described the situation very well.
10 I just wanted to add that I believe that putting the characteristics in the statement,
11 a policy section, is consistent with updating the 1989 policy statement.

12 There are many reasons I gave in my non-concurrence, but that's primary.
13 We had characteristics. There was quite a good explanation at that time of safety
14 culture.

15 Since then, we've had additional knowledge, lessons learned, et cetera, so
16 we've modified those characteristics and I think in the Commission asking for an
17 update and expansion of that policy statement, we should be following the
18 importance of the characteristics as far as the Commission's expectations by
19 putting them as well this time in a statement of policy.

20 CHAIRMAN JACZKO: Well, thanks. I appreciate that and I think
21 those are some very good ideas and thoughts in there. And as I think I said
22 earlier, we're certainly not the last step in the process here, and I suspect we'll get

1 comments from stakeholders as we put this on as well about their thoughts on that
2 and in particular how it may be communicated to licensees and what their thoughts
3 would be about how that information goes, and as well as other stakeholders, too.

4 On the issue of characteristics, one of the I think complementary efforts
5 that's gone on in safety culture has been the work of INPO and INPO I think has
6 eight characteristics or -- I'm not sure the phrase they use to describe them -- or
7 attributes, I think, of safety culture.

8 Cindy, if you want to comment on how the nine that you have here mesh
9 with those eight, and obviously, there's differences -- there's differences in
10 number, but maybe what some of the differences are in terms of the content.

11 MS. CARPENTER: I think the content of the characteristics, there's
12 a lot of alignment between -- it's the principles of -- they use principles as theirs
13 and we have characteristics.

14 There is alignment between them, and we do have a crosswalk between
15 them, so a lot of the underlying concepts are there, but there is difference in the
16 terminology. And as you noted, there are eight of them with INPO and there are
17 nine characteristics that we're proposing right now.

18 So, there's more work that we need to do with them, and I think that's -- like
19 I said, there is alignment there. We know what the concepts are.

20 When they originally developed the 13 safety culture components for the
21 Reactor Oversight Process, there was work done with -- we were aware of the
22 INPO principles, but the industry has expressed a desire to have more of a

1 common terminology.

2 So, as Bill mentioned in his opening remarks, we've been talking to INPO
3 now. We would like to work with them. We have a meeting scheduled for
4 June 17th with them, and we're going to work together to see if there's some way
5 to come up with an alignment perhaps in what we do with the principles and the
6 characteristics in how we express them.

7 They may not be the same, but we believe they should be complementary
8 processes where the industry isn't confused by that.

9 CHAIRMAN JACZKO: Well, I think that's certainly a good path
10 forward, and I'm sure as I said there will be lots of -- we'll get lots of comments
11 probably on that as well. And I think -- I can certainly understand ideas about
12 wanting to bring those into alignment, but there can also be differences.

13 To some extent INPO has a slightly different -- although complementary --
14 role, sometimes, to the work that we do, but in the end their principles for safety
15 culture may not in the end be the same as what we do.

16 They also can have a focus on management in a way that we don't really
17 regulate as an entity. So, I think it's good to have discussion and where we can
18 get consistent terminology is important, but I don't necessarily know that we're
19 necessarily going to have the same attributes and characteristics as they have
20 principles.

21 I will have some additional questions perhaps. Commissioner Lyons?

22 COMMISSIONER LYONS: Well, let me start by complimenting all of

1 you, certainly, the group that worked on pulling together the proposal. I think they
2 did a very, very admirable job.

3 I appreciate, Trish, as you went through the rationale for a single statement
4 encompassing safety and security. I don't think it's any secret that I was the one
5 who probably expressed the most questions as to whether security should be in a
6 separate -- separate culture statement.

7 MS. HOLAHAN: And it was a very dynamic discussion.

8 COMMISSIONER LYONS: But I very much appreciate that this was
9 looked at carefully. I'm quite happy to support the suggestion that your group is
10 making. And I appreciate the way that you -- that you discussed how both safety
11 and security mesh together in an overall goal of public safety.

12 So, I will not continue to push the two-statement idea, but I very much
13 appreciate that it was looked at carefully.

14 Some suggestions or comments that I would have before I get into
15 questions. To me, the Statement of Policy is perhaps longer than it needs to be.
16 And that can certainly come out in the public comment process that we'll be going
17 into.

18 I worry that the policy statement might perhaps be somewhat better
19 incorporated into licensees' thinking if it were considerably shorter and stayed at
20 much higher levels. That's just my opinion and we can certainly see what comes
21 back in the way of a public comment.

22 A point that's already been discussed. Greg raised it and Bill, you raised it

1 in your comments, was the differences with INPO. And I think to whatever extent
2 possible that we can have alignment with us, between the safety culture
3 discussions that we have, to whatever extent we can align with INPO I think that's
4 very positive.

5 Now as Greg said and I agree, there may be reasons, there probably are
6 reasons, why the two will not exactly overlap.

7 INPO is going to have a somewhat different focus in some key areas, but I
8 also think that in the vast majority of areas they can overlap. And I would at least
9 hope that we look for as much commonality between our definitions and INPO's
10 definitions not that one is right and the other is wrong, but I think the more we can
11 use common language and the more we can bring those together, I think it would
12 be positive.

13 Another suggestion I'd like to make and I'd like perhaps as my first question
14 to ask if this was considered, and that was, was there consideration of a single
15 policy statement for internal and external safety culture? Wording it in such a way
16 that it would be applicable not only to the folks on the outside, our licensees, but
17 on the inside as well?

18 I recognize that would be a challenge, but I can't help thinking there could
19 be benefits if you could find a general enough, broadly overarching statement that
20 could apply both internally and externally.

21 I'll ask that same question for the internal group this afternoon, but could
22 somebody perhaps comment on that?

1 MS. CARPENTER: Let me take a first try at that one. They did look
2 at the definition of safety culture and much of it is applicable to internal safety
3 culture also, but there are differences in our -- they talked about -- we talked about
4 it, actually, should there be a policy statement in the definition.

5 So, they -- I don't really even know that. I'm going to ask June Cai if she
6 could address that because honestly, I just --

7 COMMISSIONER LYONS: Either that, or I'll ask this afternoon.

8 MR. VIRGILIO: While June is coming to the microphone what I'd like
9 to say is what we did align on was the attributes. Cindy talked about the attributes
10 and one of the things that you'll hear about this afternoon is those very same
11 attributes that we're looking at externally will apply internally as well.

12 MS. CARPENTER: When you look at the actual task group reports,
13 they actually did use the characteristics of safety culture. So, each of those are
14 used and there is an attempt to align those internally.

15 We talk about accountability. We talk about work practices. We talk about
16 decision-making. Each of those characteristics were addressed within the internal
17 safety culture task group. And so, we are trying to align those and that was one of
18 the reasons we wanted to keep these two efforts aligned with each other.

19 We had similar people including June and Isabelle on both task groups so
20 that they could align up those characteristics with each other and then the aspects
21 or the attributes underneath that piece of it, but the actual definition of that I'm not
22 sure about.

1 MS. CAI: Just to add to what Marty and Cindy said, that's very
2 correct. We did look at the definition and we came up with an internal safety
3 culture statement to interpret that statement for the NRC environment so that it
4 was a little bit more understandable to all staff, especially folks in the nontechnical
5 area, so we'll talk about that this afternoon.

6 Also, we did take the nine characteristics and we developed specific
7 examples applicable to the NRC environment, and that's part of our proposed
8 internal safety culture framework, and we'll talk about that a little bit more this
9 afternoon.

10 As far as the specific policy statement, we did discuss that briefly in the
11 beginning of our activities when we were looking to develop our recommendations,
12 and we came to the conclusion that there's a lot of -- already a lot of good
13 communications out there in terms of what the NRC organizational values are,
14 good principles, statements of our values and visions and behaviors and
15 characteristics for the Agency.

16 So, recognizing that there's already a lot of communications in those areas,
17 we really focused on more programmatic type changes and enhancements as a
18 focus of our recommendations.

19 Now, in this proposed framework, I did talk about, you know, we have the
20 characteristics of the other portion of it. We'll have the picture this afternoon. We
21 do talk about there should be a better integration of the various values, principles,
22 statements. And so that's where we came out.

1 It's a better integration of the communications that's already out there on
2 what we mean by safety culture, but then the focus of our recommendations are
3 on specific programs, processes, actionable type actions.

4 COMMISSIONER LYONS: Thank you, June, and maybe we can
5 discuss it more this afternoon and at least my thought is and I think both of you --
6 both Cindy and June, you spoke to my general point, which is I think at the highest
7 level they ought to be very, very similar, and in my mind ideally identical and then
8 diverge as they come down.

9 I think that's some other --

10 MS. CAI: I think we did try and we can talk about that in more detail
11 this afternoon.

12 COMMISSIONER LYONS: Maybe my suggestion would be to make
13 that very, very apparent in the policy statement as a possibility.

14 But I'm way over time and I'll look forward to more questions.

15 CHAIRMAN JACZKO: Sure. Dr. Klein?

16 COMMISSIONER KLEIN: I assume that when you finally come
17 down with your final policy statement that it will supersede those that were
18 determined in '89 and '96; is that your intent?

19 MS. CARPENTER: I don't know if we've actually thought that all the
20 way through that one. The 1989 one was the conduct of reactor operations and
21 that was following the inattentive operators at Peach Bottom.

22 In 1996 it was the safety conscious work environment. So, I don't know if

1 we've actually thought about superseding that yet, but that's something we'll take
2 under consideration.

3 COMMISSIONER KLEIN: And when you came up with your
4 characteristics, did you have a gigantic list and narrow it down to the final ones?

5 MS. CARPENTER: What they did with the characteristics is there
6 were 13 safety culture components that were developed after looking at
7 international and national information, and that included the eight principles that
8 INPO uses. And they developed the 13 safety culture components for the Reactor
9 Oversight Process, so there was a lot of vetting of that with the industry.

10 On these, what they did is with the 18-month implementation of the Reactor
11 Oversight Process and then after Palo Verde, there was a lot of stepping back and
12 looking at the 13 components that were developed for the Reactor Oversight
13 Process, and they felt like there was some redundancy there. There was overlap
14 in some cases, and so they took the 13 and all the concepts of the 13 are still
15 there, but they reorganized them, and that's how they came up with the nine.

16 They also made it more generic by including security in the definitions. And
17 they also looked at -- there were several other ones like safety policies or
18 self-assessments that were incorporated into other characteristics.

19 And so, how they came up with that was taking the 13 and then looking at
20 that very holistically and saying is this the best way that we want to define these
21 characteristics now? And that's how they came up with the nine. So, it was really
22 a refinement of the 13 into the nine.

1 But we still need to do some work on those, and we think there might be
2 other characteristics that might be indicative of positive safety culture, but there's
3 more work to do with those.

4 COMMISSIONER KLEIN: Thanks. Do you have enough information
5 on the pilot plant for the fuel cycle facilities to talk about how that's going?

6 MS. CARPENTER: Well, they did the initial part of the pilot with the
7 fuel facility. They did two of the pilots. They did Westinghouse and they did
8 Global and they looked at the inspection procedures. And the purpose of that pilot
9 was to see if the 13 components from the Reactor Oversight Process, were they
10 already in the inspection program in the assessment program for fuel facilities, and
11 they determined that there were aspects of those already there.

12 They also determined that the 13 safety culture components did apply. But
13 that's where they basically put that on hold because the next step now is to go into
14 the revised fuel cycle oversight process.

15 And so, the pilot's pretty much -- we had information from that. It was good
16 information, but that's going to be rolled into the next aspect of developing the
17 oversight process.

18 And June is actually a part-time member of that task group that's going to
19 put that together, so they're just beginning to look at those components. We're
20 going to look at the characteristics now as they go forward.

21 COMMISSIONER KLEIN: Thanks. Well, I wouldn't want Jim to
22 escape and not get to participate.

1 I noticed when we had our AARM meeting, we talked about some
2 cross-cutting issues on the ROP, and one of the issues that you had looked at was
3 the cross regional communications and clarifications. Can you talk about how
4 that's going?

5 MR. WIGGINS: Well, it's a cross regional coordination. Consistency
6 has always been a concern with the ROP, especially in this substantive
7 cross-cutting issues because there's arguably much more judgment in the
8 identification of an issue as a substantive cross-cutting issue than there would be
9 in other parts of the ROP.

10 So, we try to -- we try to solve that through periodic frequent meetings
11 among the division directors that are involved from the Regions and in
12 headquarters to try to get some consistency, try to make sure we understand how
13 the -- what the intent is, in the application of the ROP. I think it's going all right.

14 I think you might get different views if you as different stakeholders, but I
15 think we're making progress in trying to clarify the terms. A lot of what we do in
16 the manual chapter guidance is try to clarify the terms so that they can be
17 predictably implemented out in the Region and try to -- not so much take the
18 judgment out of the system.

19 I think you really can't when you're talking about these type of issues, but at
20 least provide a more consistent framework that the four Regions can interpret the
21 same way and apply the same way in their meetings. So, I think it's going fairly
22 well.

1 But, still, we're not going to declare victory on it. This is something we need
2 to keep our eye on.

3 COMMISSIONER KLEIN: Thanks. I've got more questions, but we'll
4 wait for the next round. Thanks.

5 CHAIRMAN JACZKO: Commissioner Svinicki?

6 COMMISSIONER SVINICKI: Thank you, Mr. Chairman. It's an
7 interesting position for me to be in because I was not involved in the staff direction
8 that got us to today, and this is also the first policy statement to come before the
9 Commission as a voting matter during my time here. So, maybe what I would do
10 today is draw on the vast experience on the other side of the table.

11 I have some very foundational questions kind of about policy statements
12 and about this policy statement, but I think first I would touch on a topic that Dr.
13 Klein kind of came at from a different angle.

14 I would come at it this way and say we do have the two, the 1989 and the
15 1996 policy statements, and I would ask when you look at those and then look at
16 this draft policy statement, what are the essential elements that were not there in
17 the other policy statements that this policy statement provides?

18 MS. CARPENTER: The 1996 -- the 1989 policy statement focused
19 on conduct of reactor operations. It focused on the conduct for power reactors
20 and the reactor operators. It did not focus on security issues. It did not focus on
21 the other wide range of stakeholders.

22 So, one of the elements there -- and it was kept at a very high level where it

1 talked about the attentiveness of the operators.

2 1996 policy statement was on safety conscious work environment, and that,
3 of course, is definitely in this policy statement. But again, it focused on safety
4 conscious work environment, so that's just one of the aspects of safety culture.

5 And so, you know, it was also very narrowly defined. And so, again, this
6 is -- now that did apply to all licensees, but again, this policy statement takes in
7 many of the different attributes. It is much wider. It's trying to take in the security
8 issues and also many of the other aspects of safety culture.

9 We've learned a lot since then. And it's trying to take all those lessons
10 learned into consideration. So, it's much broader and it's intended to apply to the
11 wide range of licensees that we have and also to speak to the security issues.

12 COMMISSIONER SVINICKI: Well, then are there some elements of
13 the '96 policy statement that could be subsumed eventually in this policy
14 statement?

15 MS. CARPENTER: I would imagine the majority of the 1996 one
16 should be subsumed into this one.

17 COMMISSIONER SVINICKI: Do we ever rescind a policy
18 statement? Is that something mechanically that the Commission does?

19 MS. CARPENTER: Well, I don't really know.

20 COMMISSIONER SVINICKI: I'm getting a nod here from Mr. Firth.

21 MR. FIRTH: Yes, the Commission has rescinded policy statements.

22 And often usually something else has superseded that.

1 COMMISSIONER SVINICKI: Okay. And Bill, I'm sorry. You had a
2 comment?

3 MR. BORCHARDT: Just I agree with what Cindy said. The first two
4 policy statements reacted to particular events. I think what is different about this
5 one in addition to what Cindy said is it really takes into account the international
6 experience as well as the domestic experience because this is an area of interest
7 internationally as well.

8 It's very consistent with the approach going on in many other countries, and
9 it's a much more holistic view. So, I think it's -- from that perspective -- a much
10 stronger policy statement than the previous two.

11 COMMISSIONER SVINICKI: In your view, should a policy statement
12 eventually translate into regulatory requirements? And if it doesn't, is there just a
13 foundational inconsistency there?

14 MR. BORCHARDT: I don't think it's absolutely necessary as long as
15 we have regulatory avenues to conduct our activities that are performed-based,
16 that allow us to go and look at the safety impacts.

17 A policy statement in this area, I think when you take into consideration all
18 else that is going on, the role of INPO, our role and the fact that we can do direct
19 safety inspections, which also tell you about safety culture, that we have enough
20 regulatory authorities to affect corrective actions.

21 COMMISSIONER SVINICKI: The one specific I can think of is the
22 '89 policy statement that talked about, well, maybe eventually we would have a

1 rulemaking on fitness for duty. And if you fast forward to 2008, there was fitness
2 for duty requirements put in place.

3 So, that's I think specifically what I'm reflecting on in the question.

4 Obviously, a policy statement is policy, as you said, but if it's not translatable into
5 regulatory action, and that brings me to the ROP, and I won't let Mr. Wiggins get
6 off either.

7 But, you know, there's been a lot of stakeholder outreach in development of
8 the draft policy and there will be more to come, but there is a note here that some
9 stakeholders commented that the current ROP safety culture guidance is too
10 narrow, prescriptive, subjective, and complex and that it is not a leading indicator
11 of declining performance.

12 Now, in Cindy's presentation -- but I won't pick on her -- but she talked
13 about, I think, an enhanced focus on safety culture could have contributed to the
14 relatively low number of units in Column III and Column IV.

15 I guess my question for you Jim would be how could you ever know that or
16 prove it?

17 MR. WIGGINS: You can't prove it. You're exactly right. You can
18 infer it, though. You can see what the performance is and how many plants are
19 lining up in the latter columns.

20 You can also note and incorporate what you know -- what we actually know
21 is going on at the facilities. It's much more attention to this area now than there
22 has been in the past prior to how we currently handle substantive cross-cutting

1 issues and these types of things.

2 Whether it's for licensees trying to avoid the issue or on a more positive
3 spin trying to fix the problems -- fix issues before they manifest themselves into
4 significant problems. There's much more of that going on now than there had
5 been in the past.

6 So, it's an inference in the paper. That's why it's worded the way it is. It's
7 not very categorical in terms of the -- because of A then B.

8 MR. BORCHARDT: I think the industry is paying attention to this for
9 the same reasons you're going to hear this afternoon. We're paying attention to
10 internal safety culture because they're bringing on new staff. We've brought on a
11 lot of new staff. They don't come with that safety culture.

12 If the people came from the nuclear industry into the NRC, they would come
13 with a certain safety culture, but the people coming from other industries or directly
14 out of school, this is not something that's taught or internalized by those people.
15 So, the industry recognizes it as well, and they really are paying very serious
16 attention to it.

17 COMMISSIONER SVINICKI: Okay. Thank you, Mr. Chairman.

18 CHAIRMAN JACZKO: Well, I think those were good questions, and I
19 think the issue when I originally -- the issue about a regulatory follow-on, I think, is
20 a good issue and a good question. And when I originally proposed the policy
21 statement a lot of people -- a lot of different stakeholders asked me well, what
22 does that mean for regulations? And I said well, let's try to do this one step at a

1 time, and focus on the policy statement because I think it does capture more
2 broadly ideas that we've talked a lot about for some time and we've done a lot of
3 work incrementally on implementing and adapting and adopting and working with.

4 And I think the policy statement gives us an opportunity to take a step back
5 without responding to a particular crisis or a particular incident, I think, as Bill
6 suggested provide a policy and a sense of where the Commission thinks safety
7 culture should be and what role it should play. And I think certainly it's a good
8 question to ask: Should there be a regulatory follow-on?

9 My personal view is I don't know and I think that in the end will depend on
10 what the policy statement really says and if we really have then the regulatory
11 foothold to address the kinds of policies we -- or the kinds of issues that are in the
12 policy or whether or not we need to change those. And if so, what kinds of
13 changes we need to make.

14 So, I think that's probably an issue that we'll continue to talk about and I
15 think it's a good point as we go forward.

16 On the issue of assessments, which I think is an important piece. It's an
17 area where the industry has made suggestions about the things that they can do.
18 I remember when I first started hearing about this issue; the question was always,
19 "Well, can you measure safety culture?"

20 And, of course, there's a lot of people out there, contractors who make a lot
21 of money telling people they can measure safety culture. So, it's perhaps
22 something that is measurable and one of the probably most useful ways is through

1 self-assessments and other kinds of surveys.

2 I don't know if you want to comment, Cindy, a little bit on what you're seeing
3 out there right now; what you think of the industry initiatives going on in that area
4 and if you think that's something that's going to continue to be successful? Or Jim
5 if you want to comment on that; either one?

6 MR. WIGGINS: Let me try that, Chairman. Basically, as you know
7 there are two -- and as Cindy said in her presentation there are two elements of --
8 or two industry initiatives that are joined, but they all focus on safety culture.

9 One is to establish an industry sponsored guideline for industry performing
10 self-assessments of safety culture, which is becoming a more common thing
11 across the fleet now to people who are doing it on their own, whether it's our
12 influence or INPO influence or their own desires. They're doing that.

13 That has a lot of value and it directly ties, in my view, back to one of the
14 organizational lessons that we could learn out of Palo Verde. We spent a lot of
15 time on that inspection, NRC time, looking at the licensee's third party
16 assessment. And this guideline would, if we could work to where we can accept it,
17 we would reduce that amount of time from a first principle look through inspection
18 to checking that they -- that the licensee adhered to the guideline. And then we
19 could focus on the corrective actions, which is where I think the real value is in the
20 effort.

21 The second industry initiative really is focused on the antecedents to safety
22 culture activities on our part that's the substantive cross-cutting issues. That's a

1 more detailed, arguably a more provocative idea.

2 As you know, we tie our efforts in safety culture to substantive cross-cutting
3 issues. This licensee -- this industry effort focuses on, I would say, a more holistic,
4 more integrated way that industry would at a site-by-site basis integrate findings
5 and whether they're audit finding, NRC findings, operating experience, the whole
6 plethora of things that can give them insights into performance, and they would be
7 able to integrate this.

8 Now, industry desires to offer that to us as something that would arguably
9 remove substantive cross-cutting issues from the discussion. We're not there yet.

10 And as Cindy said, we believe we have -- we strongly believe we have an
11 independent role in safety culture. How that role plays out, that is subject to some
12 discussion. But it's early in the decision right now. It's early in the discussions
13 between us and industry, and we're putting effort in.

14 We want to hear what they have to say because we think if a site would
15 adopt this and apply it along with the self-assessment methodology, they would be
16 better off for it. It's a question of how much credit that could be gotten in our
17 oversight process and that's what we really need to work through further.

18 CHAIRMAN JACZKO: Well, I think that certainly my sense as we
19 move forward, we have the policy statement, which I think is an entity unto itself
20 and I think it's important that we do move that forward.

21 Certainly, if there is a standardized protocol for the self-assessments, I think
22 that's also something to talk about. Probably the long-term and the most

1 long-term issue is really that last piece of what if any changes we make to the
2 ROP.

3 And I think if we do proceed down that road and I'm not sure at this point
4 that there's utility in that, but if we do, I think we would certainly want to engage
5 the wide variety of stakeholders that we had involved.

6 I think really one of the hallmarks of the ROP is the fact that it was really a
7 negotiated program with diverse stakeholders represented -- licensee, industry,
8 public interest and a wide variety of people that put together what I think is really a
9 robust and very profound regulatory tool, an oversight tool.

10 So, I think we'll want to tamper with that, I think, very cautiously. But
11 certainly, I think there is merit in looking at a consistent self-assessment process.
12 And again, it just perhaps would ease the review. And whether that's NRC
13 generated, whether that's something that we had from external stakeholders, I'm
14 not necessarily concerned one way or another.

15 I will stop right there, then, and turn to Commissioner Lyons.

16 COMMISSIONER LYONS: I guess continuing on that same theme,
17 I, too, want to talk a little bit about some of the industry ideas that you just went
18 through, Jim. I, too, am not ready to abandon substantive cross-cutting issues. I
19 think they're a very important regulatory tool.

20 At the same time, I think that some of the NEI suggestions, certainly better
21 uniformity in the safety culture assessments. I think the NEI's point that the way
22 they're proposing potentially has a greater diversity of inputs into assessment of

1 safety culture or something related to safety culture. I think that's probably a very
2 good point.

3 And at least in my own thinking, I could easily imagine working towards
4 some modifications in what we're doing in the ROP that might take advantage of
5 some of the industry/NEI ideas almost as a first tier that applies -- that we would
6 expect to be applied at all reactor licensees, coupled with perhaps another tier of
7 NRC oversight above that, where our oversight might focus on those licensees
8 that seem to be having greater difficulties, where perhaps more specific tools or
9 specific oversight that we would bring to bear might be appropriate.

10 I don't know if that's inconsistent with what Greg said or not, but at least I
11 would hope very much that we continue to encourage and evaluate, maybe even
12 consider pilots to evaluate some of the industry proposals and see how they might
13 mesh with some of the ideas that we also have in this area.

14 Changing gears quite completely, I wonder if as a part of the evaluations
15 involving Agreement States that have gone on up to this point, do we know if any
16 of the states have existing safety culture policies or programs for their materials
17 licensees that we could build on? And I don't know if this is a question for James
18 or if it's a question --

19 MR. VIRGILIO: Let James start.

20 MR. FIRTH: We're not aware that any of the states have any formal
21 safety culture policy that they do. Similar to what we do in materials, it's integrated
22 in terms of what they do on a day-to-day basis.

1 So, the feedback we had in the workshop in February was that they're
2 basically looking at it. It's sort of integrated. They look at safety and security
3 together, but in terms of formalizing it in terms of a policy, we have not seen that.

4 COMMISSIONER LYONS: I hope as we move ahead with safety
5 culture in the materials area, perhaps we continue to ask that, perhaps that's the
6 definitive statement, James. But to the extent that the states have begun to
7 discuss this, then I would hope that any ways that we can from the states, we at
8 least seek out and try to build on what they've already done.

9 And along that same line, in reading I think it was Enclosure 8 of the report
10 to the Commission, I got the impression that the work on safety culture for
11 materials licensees is at a considerably earlier stage than that for the reactor world
12 and is very much a work in progress.

13 I found myself wondering in reading Enclosure 8, given that it is very much
14 in progress, if it would be perhaps useful for the Commission to ask for an interim
15 status report from the staff on the materials -- on safety culture with materials
16 licensees as we continue to work through this.

17 And I would be curious in responses that any of you might have to the
18 Commission's asking for such an interim report which might help the Commission
19 understand where you are moving and perhaps bring some of the thinking on
20 materials licensees more up to the level that I think we already have with reactor
21 licensees.

22 MR. VIRGILIO: I'd like to start off on that. I would agree that if you

1 look across the materials licensees we're dealing with less sophisticated, less
2 systematic programs.

3 We could start with DOE's high level waste program, look at what's
4 happening at Westinghouse, Columbia Fuel Cycle facilities, NFS, and GE Global
5 as all, you know, sort of in the formative stages.

6 You and I when we visited LES I was quite impressed by what we heard
7 from the management team there about safety culture, but it nowhere matches
8 where the reactor program -- the licensees are today.

9 I would also note that where we probably have some of our most risk
10 significant activities with our radiographers and some of our smaller licensees, I
11 think we have little or no systematic programs at that level.

12 And then I would further note that if you look at the abnormal occurrence
13 report that we send to Congress every year that's dominated by the medical
14 licensees where I think we probably have -- if I then step back and say, "Well,
15 where do we have the most to gain by this policy statement?" I clearly believe it's
16 in that area, in the materials that we regulate. And so I agree with you.

17 I'm not sure about interim reports. I think we do have a lot of work to do in
18 that area and probably the most safety significant gains to be made in that area.

19 COMMISSIONER LYONS: Well, perhaps the Commission could
20 weigh that in the SRM process and maybe it depends on what time scales we're
21 looking at for moving through the overall process that's being initiated here today.

22 But I can't help thinking that some sort of an internal report, even if it's a TA

1 Report, could be very useful to the Commission in understanding how this area is
2 evolving and hopefully starting to catch up to the sophistication in the reactor area.

3 But I'll stop there. Thanks.

4 CHAIRMAN JACZKO: Dr. Klein?

5 COMMISSIONER KLEIN: Thanks. Well, I had a similar follow-up
6 question that Commissioner Lyons had. I think if you look at the ROP in that
7 massive structure that we have. We have a culture that we can measure over a
8 large number of individuals.

9 When you look at the materials side, you have really a challenge because
10 you have the fuel cycle facilities, which are fairly large in operation, all the way
11 down to a single individual. So, how do you measure a safety culture on an
12 individual?

13 That one is going to be a challenge because it's a culture of one in its
14 performance. So, I think in the materials area you have such a wide diversity. Jim
15 has such an easier job in the ROP because he knows where those reactors are.

16 So, I guess in terms of getting back to the questions of the Agreement
17 States and the NRC. You know, we have sort of the Agreement States that we
18 look at and then we have those states that we look at. Could you talk about how
19 you've interfaced those two in terms of the programs?

20 MR. FIRTH: Okay. In terms of our reaching out to the stakeholders,
21 we've made an effort to reach both the Agreement States and the non-Agreement
22 States, the states that NRC has jurisdiction. So, we've taken advantage of

1 monthly teleconferences with OAS and CRCPD.

2 We've also used the state liaison officers which capture the non-Agreement
3 States as well as the Agreement States to keep them informed of what we're doing
4 and how we're proceeding. So, we've been including all of the states and their
5 interests.

6 We are hoping that as we get a draft policy statement that's available that
7 that will allow us to better interact with the states because up until this point it's still
8 been a little bit abstract, so we feel that as we have a draft policy statement that
9 our interactions will be a lot more concrete and we'll be able to make a lot more
10 progress with the states.

11 COMMISSIONER KLEIN: Do you feel you got pretty good
12 engagement from the states, Agreement States?

13 MR. FIRTH: It's still a matter, I think, in terms of priorities. A policy
14 statement since it's not directly impacting them I think is going to be a lower
15 priority than things that they're having to deal with on a day-to-day basis. And
16 they're still dealing with the increase in terms of security and the NSTS, so they
17 have a lot of other things going on.

18 So, I think if you look over the long-term there's a better opportunity to work
19 with the states. In the near-term it's probably been a little bit more of a challenge
20 in terms of resources and other priorities.

21 COMMISSIONER KLEIN: When you look at -- after this is all
22 finalized and finished, obviously, Jim can communicate very clearly through the

1 ROP process and things of that about the safety culture.

2 Could you talk a little bit about how you intend to communicate the safety
3 culture aspects to the materials area? Just a global level of how you intend to
4 communicate our expectations and then what we expect them to do and how we
5 will monitor that?

6 MS. CARPENTER: Again, with the Agreement States, we hope that
7 the non-Agreement States will share it with them. For the Agreement States, we
8 hope to ask the Agreement States to share it with their licensees and for the other
9 materials licensees, reach out through the different venues that are out there, such
10 as professional societies for reactor operators to have professional societies, to
11 reach out in that forum.

12 And the different societies that are out there, is just an email list. James did
13 some more of that with the other stakeholders, but I think there is a lot of work that
14 the staff still needs to do, but there was a lot of outreach.

15 MR. VIRGILIO: Let me add to what Cindy said. I can see visionary
16 looking down the road that clearly when we respond to events now, both NRC and
17 Agreement States, the vision of the policy statement and the expectations we've
18 set, I think we would look more carefully at the root cause of events or contributing
19 factors to events.

20 If you look even further down the road do you think about an inspection
21 program that one would implement for the materials licensees; fuel cycle all the
22 way down to maybe the individual medical licensees. That's something we haven't

1 sorted out yet, but it could be part of the implementation plan. Those details have
2 yet to be worked out.

3 MR. WIGGINS: If I can make one additional comment, it may be for
4 us at NRR simple for the operating reactors, but we have a cadre of 30-some
5 research and test reactors that this would be a first-of-a-kind activity for them to
6 impose this type of an expectation. How that would be done is something we
7 need to consider moving forward.

8 We already talked yesterday about our stakeholder involvement. We need
9 to include the RTR community. I'm a proponent of recruiting participation; in other
10 words, calling individuals in that we know in the community that are
11 knowledgeable and opinion leaders in the community, get them engaged, try to
12 enlist their engagement, because I think that will be -- that will be mighty -- that
13 would be a challenge for us to decide how this would be implemented or what
14 does it look like in a research and test reactor environment?

15 MS. CARPENTER: We're also finding ourselves, along with the
16 smaller licensee materials licensees as we do enforcement in the alternative
17 dispute resolution program, we find cases out there and they talk to each other.
18 They see what's on our website, but we're using elements of safety culture in our
19 alternative dispute resolution, the confirmatory orders that we issue out there.

20 And we saw that with Nuclear Fuel Services and we look at some of the
21 licensees on the west coast where it's radiographers. You can see elements there
22 and the regions are negotiating pieces of that when they're doing their mediation

1 sessions as part of the enforcement program, too.

2 And we know that they look -- that the licensees are looking at that also.

3 So, that is another way that the word is getting out there about expectations with
4 respect to safety culture.

5 COMMISSIONER KLEIN: Jim, I think your comments on the RTR is
6 really a good one. Did the TRTR group participate in any of these workshops?

7 MR. FIRTH: They did not participate on the panel for the workshop,
8 and I'm not aware that any the RTR members of the community made comments
9 in any of the sessions.

10 We did make specific effort to reach them. We considered them for the
11 panel, but we had to -- we're trying to balance all of the different stakeholders that
12 we have. And I think if they were going to be on the panel it would have been --
13 cleared the hurdle for them to participate.

14 We also made earlier efforts to talk to them at their annual meeting, but in
15 terms of the workshop, I do not believe that they made a comment.

16 MR. WIGGINS: Well, as you know, one of our early stops would be
17 in the test reactor and training reactor community, the TRTR organization. We try
18 to deal with them as an industry representative.

19 I also think it's important that there are key opinion leaders, key people out
20 there that are more or less what I would characterize as the licensee at particular
21 facilities, and that's -- I think we need to outreach to those folks to get them
22 engaged in this activity.

1 I think the -- if the Commission elects to go forward with publishing the draft
2 policy statement, I would think that would give us some added leverage to be able
3 to raise the level of attention and interest by the people in the RTR community on
4 this, because eventually it will impact them.

5 If we don't go to a rulemaking type thing, we would easily build this into the
6 oversight of the inspection program that we have for our reactors, whether they're
7 operating or research and test reactors. So, they would be looking at some of this
8 in the inspection program, probably not as we do with reactors.

9 You don't look at safety culture per se, but you look at the elements and
10 you look at the essential pieces of work activities that are indicative of where the
11 safety culture is at the facility. So, they will be impacted by it.

12 COMMISSIONER KLEIN: Well, having been a former licensee, you
13 wouldn't want to surprise your licensees either. So, it would be good to outreach
14 to them to let them know about the safety culture, what's going on, and how they
15 can participate and maybe suggestions on how they can do that.

16 CHAIRMAN JACZKO: Do you want to comment?

17 MS. SCHOENFELD: Yes, just to say I think Jim is absolutely right in
18 terms of how we do outreach to the RTR community, more than just the RTR
19 group.

20 But I did want to mention that the staff gave a presentation at the test
21 research and training reactors annual meeting and discussed the development of
22 the safety culture policy statement.

1 COMMISSIONER SVINICKI: We drew the contrasts earlier between
2 the existing policy statements and this draft policy statement of reaching the
3 materials area and the materials activity. So, I want to return to this question of
4 Agreement State licensees because I think it's so foundational to what we're
5 talking about here.

6 And we -- I appreciate that the staff stepped through in the paper some of
7 the mechanics of how could you, with a policy statement, actually touch that
8 community of Agreement State licensees?

9 My reaction to is at as a first blush was that we're many steps back from
10 where we might try to flow those requirements out to that community of licensees,
11 but there are, nonetheless, the mechanical challenges of that. They are the
12 Agreement States licensees, so we would have to think forward how we were
13 going to do that.

14 If the Commission as a matter of policy wants to touch its own materials
15 licensees and yet finds itself unable to touch the Agreement State licensees, then
16 it seems to me that's going to be kind of hard to reconcile. It's the same type of
17 activities. It's just occurring in a different geographic location.

18 And I know that at least a representative of OAS and CRCPD, I think, came
19 to the workshop that you held and they had what I'm going to characterize as a
20 plea for us going forward.

21 And they asked for three essential elements in the approach: that it needs
22 to be, one, performance-based; two, appropriately consider the relative risk of the

1 activities; and three, be generic enough to address the range of different types of
2 licensees.

3 And as I understand it, they raised an interesting point, which is that you're
4 not going to have one interpretation of safety culture policy for 35 Agreement
5 States. You're going to have 35 and trending upward depending on making
6 progress in New Jersey and others. So, you're going to have variations on this
7 policy for these Agreement State licensees.

8 So, I appreciate that staff is already telegraphing to the Commission in this
9 paper that we're going to need to think real carefully about those activities.

10 And I guess it gets back to my very first question, to get back to the
11 practical effect of a policy statement and why you issue one and what you hope to
12 be the intended effect as it translates out to the regulated community.

13 So, if you think about this ask or plea from the Agreement States and the
14 draft policy statement, where do you think we are in comparison to what they've
15 asked of us going forward? Would anyone want to comment?

16 MR. FIRTH: Okay. The policy statement we focused to keep on a
17 very high level, and that's sort of a level of detail question. And part of that is to
18 make it applicable across the wide range of licensees. And a key element of the
19 policy statement is the definition of safety culture, and that definition of safety
20 culture gives some flexibility in terms of -- and it's performance-based, because it's
21 focused on the outcome.

22 So, the third point in terms of being generic in how we can get consistency

1 across the Agreement States, I think as we move forward we can be talking with
2 the Agreement States in terms of the definition because based on the information
3 we have now, it's probably consistent with a lot of what they do in their programs.

4 But it's still a question in terms of how you get the consistency. And a lot of
5 that, viewing it long-term in terms of there's an opportunity in terms of just the
6 discussion in terms of how they're focusing on it and how we're focusing on it, will
7 allow us to move forward.

8 The question earlier came up in terms of how we might be implementing
9 things in the materials area, and that's going to give another opportunity in terms
10 of having -- allowing the Agreement States to see or be involved in terms of what
11 we're doing in terms of increasing our attention to safety culture with materials
12 licensees. It will allow them to see this is what NRC is doing and see how that
13 may or may not work in their own programs.

14 COMMISSIONER SVINICKI: And I think you indicated something
15 that I think is a very practical reality right now for the Agreement States. In your
16 earlier answer you talked about the Agreement States still working through the
17 increased controls and other security issues.

18 And I know when we had the Agreement States and CRCPD in to meet with
19 the Commission they, I think, were just trying to take a few deep breaths after what
20 I'll say was their Herculean efforts to accommodate all of the orders and post-9/11
21 security enhancements.

22 So, I think I would agree with you that I think that that's where their focus

1 has been and maybe now they're just reaching a point where they could turn their
2 attention to another Commission initiative such as this one and Marty sits in and
3 has reviewed a lot of IMPEP reviews.

4 Do you have any thought on that about currently their focus right now or,
5 you know, candidly their reaction to sit back and say, you know, holy smokes,
6 what's the next thing that the Commission is sending to us to deal with?

7 MR. VIRGILIO: Some of the states, I'll put another layer on top of
8 that is the economic challenge that some of the states face. If you look at states
9 like Arizona today. They're hardly making ends meet with respect to the existing
10 program. So, they're going to be particularly challenged to implement any
11 additional requirements or expectations -- let me put it that way -- in this area.

12 So, again, I think we have a real challenge with respect to implementation
13 in this particular area, the material licensees. But, again, I think I see that we have
14 the most safety benefits to gain in this area, if you look at the events that we're
15 experiencing, including the abnormal occurrences we report to Congress.

16 COMMISSIONER SVINICKI: Would you like to make a comment?

17 MR. PANGBURN: George Pangburn, FSME. I think the states can
18 do an awful lot when they have enough time. And I think the fact that we are early
19 in the process may in fact argue for a better sort of implementation framework for
20 the Agreement States.

21 If on the other hand in some of the cases where we've had increased
22 controls and we had relatively little time it was difficult for them because they need

1 planning, they need to work ahead with their legislative committees in order to get
2 the resources to do the kinds of things that we want to do.

3 So, this early dialogue that we've had through the workshop and through
4 the future and plant workshops here I think really argues for bringing the states
5 along in a measured fashion in a graded approach which we've recognized from
6 the very get-go as Dr. Klein pointed out, whether it's a one-person operation or a
7 sophisticated irradiator or broad scope licensee.

8 I think those kinds of things really help us and will help the Agreement
9 States in coming along with NRC in this regard.

10 COMMISSIONER SVINICKI: Thank you, and just as a concluding
11 thought. I know I'm over my time, but in thinking about talking about the existing
12 policy statements and setting this draft in context, I might suggest that the
13 introductory section would be beefed up.

14 I think people do need to understand the context of this draft policy
15 statement with the existing policy statement. So, I think that would be a good
16 augmentation of what's there. Thank you, Mr. Chairman.

17 CHAIRMAN JACZKO: Any other questions or comments from
18 anyone? Well, I thank the staff. I think we had a very good discussion. There's
19 obviously a lot of issues that have been raised.

20 I think, as I said in the onset, part of that may be to some extent -- the
21 Agreement States for instance, they haven't seen the actual draft yet, and so I
22 think probably the best path forward is to -- for the Commission to move, to vote,

1 to resolve any issues that we may have at the draft stage.

2 But I think probably the best approach we could take is to get it out there so
3 people can comment and we can get some of this direct feedback from people and
4 see where the challenges may be going forward.

5 I'm certainly hopeful that I think in the end the Agreement States will
6 recognize that this is perhaps a valuable tool for them in having a policy statement
7 I think as Commissioner Lyons said that is concise and easily explainable to
8 people will be an asset for them, maybe more so than complicated regulations
9 about safety requirements.

10 Sometimes when you're talking about an individual user of a radiography
11 camera, maybe they just need to know a little bit more about focusing on safety
12 culture and what their specific regulatory requirements are.

13 So, I do hope that we'll be able to move forward with the policy statement
14 soon and do get it out for comment because I think all these areas, research and
15 test reactors, would all benefit from seeing it and being able to comment.

16 So, I thank the staff and the Commission for a good meeting and look
17 forward to the next steps on this. Thank you.

18 (Whereupon, the meeting was adjourned.)

19