UNITED STATES OF AMERICA

U.S. NUCLEAR REGULATORY COMMISSION

BRIEFING ON SAFETY CULTURE POLICY STATEMENT

January 24, 2011

1:00 P.M.

TRANSCRIPT OF PROCEEDINGS

Public Meeting

Before the U.S. Nuclear Regulatory Commission:

Gregory B. Jaczko, Chairman

Kristine L. Svinicki, Commissioner

George Apostolakis, Commissioner

William D. Magwood, IV, Commissioner

William C. Ostendorff, Commissioner

APPEARANCES

External Stakeholders

Tom Houghton
Senior Director, Safety-Focused Regulation, Nuclear Energy
Institute (Reactors)

Robert Link
Manager, Environmental, Health, Safety and Licensing,
AREVA (Fuel Cycle Facilities)

Billie Garde
Attorney and Partner at Clifford and Garde, LLP

Ed Maher
President, Health Physics Society

Medical, Industrial, and Agreement State Representatives

Kevin Buckley
MSc., CHP, DBMP, American Association of Physicists in
Medicine (AAPM) and Clinical Medical Physicist, the
Children's Hospital Boston, Radiology Department

George Marshall
Director, American Portable Nuclear Gauge Association
(APNGA)

Lee Cox
Director, Organization of Agreement States (North Carolina)

NRC Staff

R. William Borchardt
Executive Director for Operations

Bruce Thomadsen
Vice-Chairman, Advisory Committee on the Medical Uses of
Isotopes

Andy Campbell
Deputy Director, Office of Enforcement

Dave Solorio
Chief, Concerns Resolution Branch, Office of Enforcement

Diane Sieracki
Senior Safety Culture Program Manager, Office of Enforcement

James Firth
Project Manager, Rulemaking Branch B, FSME

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

2   CHAIRMAN JACZKO: Good afternoon everyone. The

3   Commission meets today to discuss the draft of the final Safety Culture Policy

4   Statement. The development of this policy statement has been a high priority for

5   the agency because we have long recognized the important role that Safety

6   Culture plays in maintaining safety and security.

7   Over the past three years the staff has worked hard to keep the

8   process of developing this policy statement as open, transparent and as inclusive

9   as possible. We've looked back at our own past work for lessons learned,

10   considered the experience of other regulators and industries and obtained

11   extensive input from our stakeholders and from some of our stakeholders in the

12   public, many of whom will be here today.

13   I want to thank the staff as well as all the stakeholders who played

14   such an active part in this, what has been at times I think a lengthy but I think

15   very productive discussion. Through the workshops that were held, the extended

16   public comment period and other public meetings on this issue staff and

17   stakeholders have resolved the key issues and achieved what appears to be a

18   strong overall consensus in the draft final statement. I look forward to working

19   with my Commission colleagues to bring all our hard work to fruition by finalizing

20   this policy statement. Of course once we complete this work the Commission will

21   then move on to the question of what, if any, next steps would follow.

22   Like our policy statements in several other areas. For example, the

23   Advanced Reactor Policy Statement. This policy statement is intended to

24   articulate the Commissions expectations and serve as a guide for the staff's

25   efforts. Also I think to help unify terms and ideas across a wide variety of

1   different industries and disciplines. This is a policy statement.   It's not a rule or

2   regulation nor is it therefore binding on our licensees. It is I think a very clear and

3   strong articulation of the Commissions expectations in this area.

4   There is certainly a long history to this effort. Back in early 2008

5   the Commission decided it was an appropriate time to complement our 1996

6   Policy Statement on Safety Conscious Work Environment and the 1989 Policy

7   Statement on the Safe Conduct of Nuclear Power Plant Operations. And as was

8   stated then, "After years of work in this area and after the operating experience of

9   the ROP effort the Commission should now direct the staff to provide the

10   Commission with a draft policy statement on Safety Culture. This policy

11   statement should be broad and explain the Commission's expectations for a

12   healthy Safety and Security Culture at all NRC licensees."

13   So here we are today three years later and our staff and

14   stakeholders have now faithfully answered that charge. So I look forward to

15   working with my Commission colleagues to bring all our hard work to fruition by

16   ultimately finalizing the policy statement. I understand that many of you are

17   interested in continuing the dialogue beyond the policy statement to what may

18   follow. This certainly I think is going to be the work that we'll have in front of us

19   over the next year or more as we take this policy statement and look to see what

20   if any kinds of changes we may need to make to our regulations or to other kinds

21   of aspects of our program. I think we're very pleased to have such a broad range

22   of organizations represented here today. This afternoon the Commission will

23   hear from three panels. First a panel of external stakeholders then a panel of

24   medical, industrial and Agreement State representatives and third the NRC Staff.

25   So before beginning with our first panel I'd offer any of my

1 colleagues an opportunity to make opening comments. Okay well good. We will

2 start then with Tom Houghton who's the Senior Director, Safety-Focused

3 Regulation, at Nuclear Energy Institute.

4   TOM HOUGHTON: Thank you Mr. Chairman and Commissioners

5 and thank you for the opportunity to speak to you today about this very important

6 subject. I'm going to be speaking primarily from the point of view of the power

7 reactors primarily in my remarks so there will be other panelists that will look at

8 their industry segments and be happy to answer any questions about that inter-

9 relationship later on.

10   First slide please. The power reactor industry and the industry as a

11 whole support the policy statement. We believe that the process that was used

12 to develop it using stakeholders from the industry segments involved was a very

13 useful process and it allowed people that are out in the field and looking at issues

14 to be involved in putting the words in plain English in language that the segment

15 can understand. Then we fed back to the segments to make sure that they were

16 words they could understand, it was very important. Also that it focuses on

17 leaders and supervisors and their responsibility and a commitment by them and

18 by individuals and also the focus that it puts on safety in protecting the

19 environment and the public. So we're very happy with the policy statement. We

20 believe the traits reflect appropriate behaviors and attitudes. There were

21 different methods used to look at the traits. Our feeling is that the final grouping

22 that we came up with and that the staff presented to you is appropriate.

23   The issue of the Questioning Attitude I think was a very important

24 one. One that was missed frankly in our group of expert consultation,

25 interestingly it is one of the ones that the INPO group has as one of their

1   principals. So that was another reason to think that that probably was

2   appropriate although the validation study that was done was done with just the

3   power reactor industry not with the other segments.

4   I also wanted to commend the Office of Enforcement. I think they

5   did a fantastic job on this. They bent over backwards to get public opinion and to

6   let the workshop do its work rather than trying to give signals. I think that was

7   very appropriate and I commend them to you.

8   Next slide. Our industry perspective, we agree with the Policy

9   Statement that licensees have the primary responsibility. I think that was very

10   important that that be in the statement of policy. It's one that we entirely agree

11   with and that NRC has a crucial independent oversight role of doing that. We

12   absolutely agree with that. We feel that the statement of policy is the appropriate

13   regulatory action. There are some different opinions about a Rule versus Policy

14   but our feeling is that the policy approaches the right one. Next point is the

15   common language. We've come pretty far towards the common language in the

16   statement of policy. We're very -- looking forward very much to moving to the

17   next step which is to go down into the industry segment and have the wording be

18   exactly the same as much as possible between the NRC and the regulated

19   segment so that we know what we're talking about. My final point on this slide is

20   that care does need to be made in how the policy statement is rolled out into the

21   individual industry segments. The Power Reactor Segment is quite a bit further

22   along than the others and we're more comfortable in moving into that as soon as

23   we can.

24   We also have a little concern about suppliers and vendors meaning

25   manufacturers of parts and how this policy statement will be applied to them.

1   Because we feel that if you have a company which is making one percent of its

2   product line for safety related for the NRC and 99 percent for a non-regulated

3   area that we need to be careful that they don't get into terms and conditions that

4   could make it difficult for them or make them not want to support the nuclear

5   industry.

6   Next slide please. Going to the common language, it obviously

7   makes no sense to speak in two different languages and when an inspection

8   report comes in with an aspect and we are very much in favor of continuing the

9   aspects put onto violations. We think that's a great idea and it provides a lot of

10   value to the licensees but we need to not have INPO principals and attributes

11   and NRC components and aspects. It's just it's too hard to do that. We're ready

12   to work with the NRC. We've got our sleeves rolled up. We're ready to get on

13   with it and as soon as we can get to that common language so that we are not

14   having this gap between the way we talk about things. So we would request that

15   you give, we would request that you encourage the staff to move forward

16   expeditiously in the power reactor side of the business.

17   Next slide. We have been proactively taking steps to ensure a

18   strong Nuclear Safety Culture. We actually started over two years ago. Our

19   Nuclear Strategic Issues Advisory Committee which is made up of all the Chief

20   Nuclear Officers gave us, the NEI staff, a task back in August of '08 to look at

21   Safety Culture and what could we do proactively to enhance what we do as an

22   industry and there were three things they wanted us to do. One was to look at a

23   process that would be consistent across the industry in looking at Safety Culture

24   on an ongoing basis and that's what we've put into NEI 09-07. The second was

25   the common language which was something that we want very much. The third

1   was to look at situations when plants are required to do a third party culture

2   assessment which is required under the 95-003 when you're in column 4 of the

3   action matrix.

4   In the past there's been difficulty in agreeing on methodology in that

5   assessment and we agreed to the NRC that we would work on a methodology

6   that could be endorsed for doing that type of assessment. That's been – we've

7   been working that with our pilot plants and the NRC's been observing that and

8   they will be observing another one at Hope Creek next month. This is an

9   assessment which is a – I call it a snapshot. It's looking at a survey and looking

10   on site, doing interviews and getting a look at the culture in a snapshot. The

11   ongoing effort, the 09-07 not to confuse you, is an ongoing effort by the station

12   management that goes on continuously month after month.

13   The key really is placing responsibility on site senior management

14   and the CNOs by approving our industry initiative which was approved December

15   16 is that we will implement the NEI 09-07 process by October of next year.

16   We've already set up workshops for the industry, one in each region, where the

17   pilot plants will discuss how they implemented 09-07, take questions and from

18   that point on the industry will be developing the procedures and processes for

19   each station such that they can start on October 1, 2011. Some are already

20   starting already. Some companies have jumped the gun in addition to our pilots

21   and are already starting the process so we're quite pleased with the enthusiasm

22   about that.

23   The next slide, just to give you a little more insight into what we're

24   talking about with this 09-07 and your back up slide has a picture of it. I decided

25   not to show the picture right now but if you – it's the back up there so you can

1   see what we're talking about. The concept is that it's good to have the NRC

2   aspects from violations but even more we want to have all the data we can

3   possibly collect. We want to see what the Employee Concerns Program has

4   been saying. We want to know what work force issues are out there that are

5   bothering people. We want to know about operating experience. We want to

6   know about trending in the Corrective Action Program.

7   The concept is to take all the data we possibly can, have a panel of

8   supervisors at the station, the owners of those processes and have them look at

9   their data, meet on an ongoing basis and then come to conclusions about what it

10   might be telling them about weaknesses in the culture, report that to the sight

11   leadership team and then have the sight leadership team execute that through

12   communications and whatever actions they deem necessary. We've been

13   piloting this. We piloted it for a year at the North Anna Station, Braidwood, South

14   Texas Project and Hope Creek. Their executives were very pleased with the

15   results and in fact that's what helped us get the initiative passed.

16   Next slide. I've really covered most of this. An important thing to

17   say about it here on slide seven is there are outside organizations looking at this

18   09-07 process. The Nuclear Safety Review Board or whatever the external

19   review board is for plants with corporate, corporate will be looking at these

20   results. We encourage and want the NRC to be looking at what we're doing to

21   make sure that we're doing things right. We think the avenue for that is the

22   Problem Identification and Resolution Inspection Procedure which in fact already

23   does include some looks at what the safety culture is that's going on at the

24   station.

25   Next slide. Regulatory footprint; we believe the initiative provides

1 significant advantages over the SCCI Process. We believe that we're looking at

2 more data and we'll learn more things by looking across that data. As we move

3 forward we look forward to working with the staff to have them look at the

4 effectiveness of what we're doing and see if there are improvements that could

5 be made in the oversight process.

6 Finally just to summarize, we believe we've set up a standardized

7 robust approach. Leadership of the company is what's crucial. These things

8 need to be constantly reinforced. Even the best of plants needs to look every

9 day to see what's going on with their Safety Culture and they can't become

10 complacent. With that I thank you.

11 CHAIRMAN JACZKO: Thank you, now we'll hear from Robert Link

12 who is the Manager of Environmental, Health, Safety and Licensing at AREVA.

13 ROBERT LINK: Good afternoon, I'm Bob Link, Manager of

14 Environmental, Health, Safety and Licensing for the AREVA Richland Fuel

15 Fabrication Plant. I'm also on the Nuclear Energy Institute Facility Operations

16 Committee representing all of the Fuel Cycle facilities in the United States.

17 We represent Fuel Fabrication plants both CAT I and III, other fuel related

18 facilities such as MOX, deconversion, the enrichment of plants all technologies.

19 So we have in ourselves a fairly diverse set of licensees representing three

20 different parts of the Regulation.

21 I have also participated in the original workshop held by the NRC

22 staff which developed the draft definition of traits as well as a follow up workshop

23 in Las Vegas and a number of conference calls supporting the development for

24 your consideration.

25 Next slide. The fuel cycle facilities have always maintained our

1   obligation for safety first at our facilities. Therefore we appreciate the opportunity

2   to actively participate in this important policy development effort. The fuel

3   facilities strongly support the final definition and traits being presented for your

4   consideration. As noted the challenge is to provide a clear yet encompassing

5   communication to a wide and disparate set of licensees. We believe the

6   definition accomplishes that.

7   The traits including the added "Questioning Attitude" also are useful

8   to convey the characteristics of the culture that is being stated in the policy

9   information. We believe that most if not all of the issues brought up during the

10   stakeholder outreach effort can be further dealt with in the implementation

11   process. I want to commend the NRC staff for one of the most extensive

12   outreach efforts I have ever seen. They have maintained an open and receptive

13   process even during periods of challenge by the very diverse set of inputs.

14   Next slide. One concern is the explicit inclusion of vendors and

15   suppliers of safety related components. While we believe most vendors of such

16   products or services may not object it begs the jurisdictional question that may

17   detract from the overall efficient and effective implementation of the policy which

18   then works to devalue the overall status of the policy. One option might be to

19   delay an extension for the policy to vendors and suppliers until these issues are

20   addressed. I would urge the Commission to further evaluate this aspect of the

21   Scoping Statement to assure the most effective implementation possible.

22   Next slide please. As we look forward to the implementation of this

23   policy the challenge will continue to be the development of the means that assure

24   the principals remain intact while recognizing the diverse set of environments the

25   population of licensees represents. While I respect the goal of consistent

1　nomenclature that in itself may be a difficult goal to reach. I am sure the wording

2　we use in the fuel facilities is not consistent with the reactors let alone the

3　medical industry. The plan as I understand it is to have the various offices within

4　the agency work on implementing the guidance for the variety of stakeholders

5　and licensees you have.

6　　　　　There also needs to be guidance developed with the Agreement

7　States to assure the more than 85 percent of the licensee population nationwide

8　is provided consistent expectations of their implementation. As I am an example

9　of a licensee that holds both NRC and Agreement State licenses for our nuclear

10　operations I need consistency from both of my regulating bodies especially with

11　regard to such an important aspect of expectations. This will be a critical and not

12　so easy challenge.

13　　　　　There also was mentioned the use of research and data that may

14　be available in informing the implementation and guidance going forward. As

15　with the validation study I only caution the extrapolation of findings of data and

16　research from one body of licensees to other types of licensees. This can lead to

17　unexpected results or even false or undesirable outcomes. I urge the continued

18　open dialogue and willingness to work with all stakeholders throughout the

19　implementation and guidance development phase in the future. Let's be a set of

20　learning organizations and walk before we run.

21　　　　　Next slide. As stated we strongly support the formation of this

22　important policy. At the same time we need to measure the resources that all

23　stakeholders have or may not have and the competing initiatives on our plates to

24　assure the best utilization and return on investment until safety is accomplished.

25　This may be the greatest challenge for all of us in that going forward work yet to

1   be done. Different sets of licensees are at different points on the spectrum of

2   understanding, implementing and levels of formalization or sophistication of their

3   efforts forming their Safety Culture. I urge careful consideration of the efforts and

4   commitments of the resources necessary in light of all the initiatives before us

5   including the monitoring of the relative priorities and expectations in a rational

6   way.

7   The project manager in me would love to see a detailed, integrated,

8   resource loaded work breakdown structure for the agency at large including the

9   stakeholders. While this perhaps is an unrealistic expectation, the principals of

10   management oversight for these issues is as important as the issues themselves.

11   We do not want to set ourselves up for failure. I, and the entire fuel cycle

12   industry would like to thank you for the opportunity to provide direct input to this

13   process and look forward to working with the staff on this implementation. Thank

14   you.

15   CHAIRMAN JACZKO: Thank you, and I'll turn it to Billie Garde who

16   is an attorney with Clifford and Garde.

17   BILLIE GARDE: Thank you very much for the opportunity to speak

18   to the Commissioners on this important topic. I think that the journey to get here

19   has been the entirety of my legal career. I graduated from law school in 1986.

20   The same year of the Chernobyl accident and the loss of the Challenger; both of

21   those tragedies began a journey that I think has got us here today. As my

22   statement says, "25 years is long enough to build a Policy Statement!"

23   We have spent a tremendous amount of time getting this to the right size.

24   May I have the next slide please? Beginning with Chernobyl and the study of the

25   Safety Culture at Chernobyl by the IAEA and the recommendations that came

1   out of INSAG 4.

2   All right, I'll just keep going. Where the recommendations coming

3   out of INSAG 4 laid a framework that provided a foundation in this country to

4   begin to develop what we thought was the right answer with the safety conscious

5   work environment and then came to realize was not. And of course the near

6   miss with Davis-Besse led us to re-look at what it took to make a Safety Culture

7   that all of us in the industry could rely upon as making a difference in the context

8   that all licensees have responsibilities for.

9   I was privileged to work at Millstone for a number of years on the

10   Independent Oversight Board and watch the development of ideas and

11   responses and avenues by which problems could be solved and saw tremendous

12   work done by a licensee that needed to learn quickly how to get it right. Ideas

13   and tools that now really exist throughout the industry in terms of some of the

14   best practices of how to deal with personnel issues that have a Safety Culture

15   implication and since then new ideas as licensees have faced new and different

16   challenges to their Safety Culture and have come up with answers that enable

17   them to take them where they want to go.

18   In the context of the current position NRC final action is needed as

19   we said. I am very happy that the industry and the agency have agreed upon

20   working together with a common set of language. I think that was really critical in

21   order to make sure that we can move forward and begin the important work on

22   implementation. So we have a common set of understanding, a common set of

23   traits and can start to develop what that looks like.

24   I do quite a bit of work in other industries. In particularly of late in

25   the oil and gas industry which is facing its own challenges with Safety Culture

1   and what that means and what that sounds like. I want to share with you that in

2   that context people often are tired of hearing me repeat and recommend the path

3   that the NRC and its licensees have been on for 25 years. The agency and the

4   industry is a leader in the Safety Culture throughout the United States in all

5   industries that have a potential impact on public health and safety. In particular,

6   those industries with low probability and high consequence events.

7   And in part because of that I want you guys to finalize this once and

8   for all. I want to have a final piece of work that you guys can work on; the

9   industry can work on and can finally come to rest on implementation. Because it

10 is a guidance for other industries that have to go down this same path and there

11 is no reason that other industries should have to repeat everything that was done

12 here. There are tremendous lessons to be learned and I hope they can do that.

13 As I say in my slide, the resources should now be spent on addressing the Safety

14 Culture issues not justifying the policy.

15   My comments on the process of development of Safety Culture I

16 just want to echo what others have said. This was probably the best stakeholder

17 effort I have ever been engaged in and I've been engaged in a lot of things in this

18 industry during my career. There was a wide variety of activities to identify and

19 include all stakeholders. There was really meaningful participation opportunities

20 given; significant interaction between stakeholders. There was transparency,

21 there was collaboration, robust debates and discussions all focused on getting

22 everyone to a common ground at the end of the day. You should be very proud

23 of your staff. I want to commend all of them that worked very hard on this effort.

24 The bottom line of my ultimate positions I find myself in the unique and unusual

25 place of agreeing with virtually everything. So I worked real hard --

1   CHAIRMAN JACZKO: Stop the meeting right there.

2   [laughter]

3   BILLIE GARDE: I worked real hard to try to figure something out

4   but ultimately the only thing I disagree with is I still think it should be a rule, a

5   regulation, not a policy statement but other than that I really agree and I thought,

6   is there something wrong here, and then I just realized after working on it for 25

7   years I should finally be satisfied that it really does meet most of the things in a

8   way that I'm very happy with.

9   So I agree with the determination of the Policy Statement as it's

10   developed and the definition. I agree with the exclusion of the word security from

11   the final policy statement. I know that's of concern to the Commission. I want to

12   assure you that I haven't seen any lesser emphasis on the importance of security

13   in the context of the work we did. I just spent a week at one of the fuel cycles

14   training on Safety Culture all week and gave equal billing to the importance of

15   security using the same principals as applied to the other important aspects of

16   safety. So although I know you're concerned about it I think the framework is

17   there for it to do the job that you're concerned that it does.

18   I agree with the traits. I had a big concern going into this process

19   that the environment for raising concerns as a trait was not going to be enough,

20   not be enough of a foundation or a framework to address safety conscious work

21   environment and retaliation issues. I'm convinced it is. I think it provides the

22   right measure.

23   As we saw at Davis-Besse retaliation is not the number one risk. It

24   is an important trait. It's a very important thing to get right but there are equally

25   as important traits in Safety Culture context that need to be addressed.

1   I definitely agree with the addition of Questioning Attitude addressed by the staff

2   and I think that was a tremendously important addition. And the expansion of the

3   Commission expectations to all the entities. Like I said, I worked really hard on

4   this. The only thing I don't agree with and haven't from the beginning and I'm

5   afraid will end up back here on this but I definitely want to see it tried as a policy

6   statement. It'll ultimately be that regulation as required.

7   I do have concerns about barriers to successful implementation and

8   my main concern really is in the context of all the licensees. I would have to tell

9   you that as a lawyer that spends a great deal of my time representing workers.

10   Over the last decade the more outrageous cases that I get, cases where a

11   person comes in with a letter and says, "I've been fired for talking to the NRC."

12   That would never happen in the context of an operating reactor. There still are

13   licensees out there that don't get it. Organizations in Agreement States that don't

14   have the kind of resources still have licensees that are making very common

15   mistakes. I think until we make sure this applies to all licensees, they all get this

16   policy statement, they all get some training, we're going to continue to have

17   those kinds of issues develop. Particularly in the smaller licensees but they all

18   participated in this workshop over the last couple of years and I have tremendous

19   hope that part of the outcome of that will be a lot more familiarity with the Safety

20   Culture requirements. Again, thank you for the opportunity to participate and this

21   has been a real privilege. Thank you.

22   CHAIRMAN JACZKO: We now turn to Ed Maher who is the

23   President of the Health Physics Society.

24   ED MAHER: All right well I want to thank the Commissioners for

25   inviting the Health Physics Society to speak. As you know we are an

1 organization, a professional organization of 5500 people whose sole focus is

2 radiation safety/radiation protection and as such we're very pleased with what the

3 Commission has done. In particular I want to echo that the stakeholder

4 involvement has been exceptional and a model for other federal agencies. So

5 thank you.

6   We did have a couple of issues with the comments that were due

7 back in September and I also want to basically reflect on how that has changed

8 in the final draft. We were concerned about a "one size fits all" policy. In other

9 words we had a spectrum of diversities of licenses that you had mentioned in the

10 final policy. All the way from nuclear reactor to the biotechnology where there's a

11 whole spectrum of consequences for accidents. So we feel that one policy fits all

12 is a difficult thing to put against everybody. But we do see that in your

13 implementation that's where you're going to have to -- the rubber's going to meet

14 the road in that respect. So we're looking forward to working with you in the

15 implementation phase to customize hopefully; depending on the size, the

16 resources available to the organization and the severity of consequences, the

17 guidelines; how do you show these traits exist in an organization.

18   So we feel that the culture needs to be commensured with the

19 safety other than the security significance of the organizations and its functions. I

20 think you've addressed that in the final draft fairly well and we look forward to

21 implementation where that really is going to come out.

22   The issue too is that we are pleased that this needs to be internally

23 driven. As you know the Joint Commission has a program for a number of years

24 on patient safety. They have a self-pacing program. In other words there's no

25 time table for getting to certain milestones. What you need to show is continuous

1 improvement. As was mentioned here we have a number of licensees that are in

2 the spectrum of getting to a Safety Culture. The Nuclear Power Industry is

3 probably at the top. They've been there for many years and whereas there are

4 some people who don't know what we're going to talk about when we develop --

5 roll out the program of Safety Culture.

6   So we feel that people need to be self-paced and the reason is that

7 Safety Culture, changing a culture is like an infusion in the people. It's like an

8 osmotic process. It's not going to happen by decree. It's not going to happen by

9 a time table and we feel that a self-paced program is going to be important.

10 Again, we want to emphasize – unlike my colleague to my right here – we believe

11 that this needs to be a policy rather than a regulatory approach. Again, culture is

12 something you can't change by decree or by law. It has to be infused in the

13 people so we applaud that the Commission is staying on that path of not

14 regulating.

15   The rest of the questions had to do with our responses to the

16 questions that were posed and I will talk about how in the final policy you've

17 addressed it and I felt you have for the most part. We thought that the emphasis

18 over competing goals is somewhat of a bothersome statement on initial. That in

19 some cases there could be drastic action in the interest of safety that may have

20 consequences greater than the safety issue itself. There are some examples in

21 Emergency Response, I think in Nuclear Medicine, where that could be true and I

22 could give you an example if you want to you just have to ask for it.

23   So safety over competing goals commenced with the risk involved

24 is an important part of this. In other words a little bit of wiggle room in the policy

25 that people realize they can take action. It may not be completely in the safety

1   side but for instance may improve the safety of the patient or someone you're

2   rescuing.

3   Question two is that, do Safety Culture traits require clarification?

4   We feel you've done an excellent job with the traits. We do understand what

5   they mean. We not necessarily know exactly how do you measure that in an

6   organization. How do you know in an organization that they really do have those

7   traits? So what types – we call it the proof of presence. What types of things

8   would you look for? Again, this is an implementation phase issue I believe.

9   For instance, how would the organizational structure reflect a Safety Culture or

10   how do competing budget priorities get resolved? Employee Empowerment,

11   which I like to talk about, as well as what was discussed earlier where the

12   employees have the ability to have a Questioning Attitude. We think that's

13   empowerment of the employee. In a large organization you may want to have an

14   ombudsman to do that. Certainly corrective action system, root cause analysis

15   are all indicators of the traits that you mentioned, the nine traits that you put in

16   your final draft policy.

17   The question number three, which has to do with the expectation of

18   safety and security, we believe you've clarified that and that I think most

19   licensees do understand the balance between safety and security and can

20   implement that correctly. We also point out that that will change. There'll be

21   some variation with that depending on the licensee. That not all licensees have

22   the same radionuclides and applications.

23   Question number four in the draft policy was sort of discussion

24   including complacency, again it was addressed in the final draft and that although

25   complacency is mentioned and the importance of having a robust Radiation

1   Safety Culture Program it is not something that's new. Safety Culture has been

2   around for a lot of years, a lot of organizations have done it. There's a lot of

3   lessons out there, a lot of ways to measure whether or not complacency's

4   creeping into an organization. I know Navy's got a curve that we roll over and

5   you can see where complacency is creeping in. Lots of measures out there in

6   other Safety Programs.

7   We feel that it's a cross cutting management issue that a good

8   manager can measure complacency in various areas of his program and that a

9   detailed discussion was not required in the final draft which you did not include.

10   And finally regarding the traits we feel that we looked at the

11   difference between the INPO and the workshop traits and we see that there were

12   two in there we thought I'm glad to see Questioning Attitude was put in there. I

13   think that's vitally important. That's sort of an employee empowerment thing.

14   Also Quality Training was mentioned by INPO but we feel that Quality Training

15   which I believe ended up in the final draft as Continuous Training is really not

16   comprehensive enough. We would probably like to see Quality Training or

17   Continuous Training replaced by something like Technical Competence which is

18   more comprehensive. It talks about formal education, certifications, on the job

19   training and continuing training so we think that might be a more comprehensive

20   trait to look for which is important to establish a Safety Culture in an organization.

21   That's the end of my comments.

22   CHAIRMAN JACZKO: Well thank you. Thank all of you for your

23   presentations. We'll start with Commissioner Apostolakis for questions.

24   COMMISSIONER APOSTOLAKIS: Well I was very pleased to hear

25   your praise of the staff. I think also they have done a very good job especially

1 interacting with the stakeholders. That doesn't mean I agree with everything

2 they've done but we'll discuss it later.

3   I will raise two issues because I think we only have five minutes. I

4 haven't heard anybody object to the definition, especially the industry. The

5 definition talks about core values and I'm wondering whether it's the business of

6 a federal agency to get into evaluating the values of people or organizations and

7 let alone doing something about it. What really matters to us it seems to me is

8 performance. We've been emphasizing for the last 10, 15 years we've been

9 pushing regulations that are performance based. So I would agree with a part of

10 the definition that talks about behaviors but not values and I'm wondering

11 whether you agree with that or disagree or you're happy?

12   Then you brought – all four of you I believe, you expressed

13 happiness with the fact that Questioning Attitudes is included there and that's the

14 concept of that I absolutely don't understand. What is Questioning Attitude? If I

15 ask my colleague what happened there, is that a Questioning Attitude? What do

16 you mean? Why do we want to get into things that really are very fuzzy and

17 difficult to understand and we'll come to your measurement later. So if you have

18 any comments on that I'll appreciate it.

19   TOM HOUGHTON: Yes sir.

20   COMISSIONER APOSTOLAKIS: Do you agree with the values

21 being included in the definition?

22   TOM HOUGHTON: I think that the policy statement and a

23 definition needs to include the values as well as the behaviors because the

24 values can drive the behaviors. But at the same time I agree with you that the

25 NRC's role primarily and the direction it's been going through the ROP has been

1   to be performance based, to be risk informed.

2   I think that this policy statement goes above what the NRC would

3   look at directly. I think it's something that the industry segments need to take

4   hold as part of themselves and use that in their inculcation to the staff and to the

5   way people really do their business. I think that the NRC's role is to look at the

6   outcomes, to look at the performance and to try and infer from the performance

7   whether there's a problem with the Safety Culture.

8   Now our belief is that the current approach does not look broadly

9   enough at all of the variables. Edgar Schein when he talks about Safety Culture,

10   talks about not being able to measure it but you can have archetypes which are

11   things that you can look at and you can infer from them what is that telling you

12   about the Safety Culture. That's the genesis of our 09-07 process to try to look

13   at all the things that are going on in the site, the actual outcomes and to see if

14   you can infer from that issues related to the Safety Culture and use the traits –

15   right now it's the principals of INPO, but use those as the lens to look at those

16   facts that are out there and derive conclusions from it.

17   We think that that's the primary role of the licensee with the NRC

18   looking in an oversight role and looking to see whether we're doing that

19   appropriately or not. That would be my answer to that. The Questioning Attitude

20   if I can just go on, to me that means asking why seven times. It means you're

21   having to clean off the ventilation filters for the containment building more often

22   than usual. Why is that? And having the fortitude to keep asking the question

23   until you get to the real root cause; that's what Questioning Attitude means to

24   me.

25   BILLIE GARDE: I do think that Questioning Attitude is a

1   measurable demonstrative set of behaviors that work in looking at incidents and

2   events, precursor events, near misses, you can see as you go through those as

3   I'm sure you know, where organizations don't ask the questions, pull the threads,

4   really look deep into why an event occurred, why someone took this action, why

5   a particular decision was made. I think that's what Questioning Attitude really

6   attempts to characterize.

7   The first slide which wasn't on the screen but coming out of INSAG

8   4 study of Chernobyl focuses exactly on a lack of a Questioning Attitude in the

9   context of what happened there. So I – in practice I'm comfortable at seeing how

10   sights push themselves back to that place. I think core values was a term that

11   came out of our compromise decision. We worked hard to come up with a

12   definition that everybody could agree with which is a variation of the original

13   INSAG 4 definition of Safety Culture and I think folks did want to include that

14   that's what we're all about. Our core value is safety. I wanted safety as the

15   overriding priority but it's -- I think its words that reflect that same view and words

16   that we all ultimately decided we could live with. You're not regulating. I wanted

17   a regulation, but you're not regulating core values. You're using it to define that

18   that is the core part of what's important within an organization.

19   ROBERT LINK: I would agree. I mean the core values is -- we

20   support it as a policy statement. We agree that and maybe disagree with Billie's

21   point that it should be made regulation. Commission should not try to regulate

22   the management, you know, of a business. We're clear on that. But what we do,

23   how we do it is reasonable. You need to oversee that. You need to assure that

24   we are acting in the best interest not only of our business but of our constituents

25   including the public and the environment and our own workers. That is your

1   mission and we allow that. You can't measure values, it's very, very difficult.

2   Something though that really is a basis in policy definition of what we do and who

3   we are.

4   COMMISSIONER APOSTOLAKIS: Well I think your concerns

5   would be covered by the rest of the definition because as behaviors resulting

6   from a collective committee. So without the word values there you still achieve

7   what you want. But one quick question for Ms. Garde. Do you think we are

8   ready to regulate Safety Culture? Don't we need to develop maybe methods for

9   measuring things? I know that in decision analysis they have this so-called

10   constructive scales for these sort of things like Questioning Attitude but as an

11   agency, I don't think were ready.

12   BILLIE GARDE: I think if you had gone down that path you would

13   be ready. We're ready for the Safety Culture policy statement that we've spent

14   so much time on and that's the path we went down. I think after that's put in

15   place, implementation is developed. I sincerely hope that that works; that five

16   years from now if we have another Safety Culture meeting that we feel like we

17   can pat ourselves on the back that it worked. If it doesn't, if there is some

18   incident or accident where we didn't get it right and we're relooking at what is the

19   next step then I think that's the next step we would have to start looking at. I

20   hope for all of our sakes this is right.

21   COMMISSIONER APOSTOLAKIS: Thank you Mr. Chairman.

22   CHAIRMAN JACZKO: Commissioner Magwood.

23   COMMISSIONER MAGWOOD: Thank you Mr. Chairman. To

24   begin I should make a public service announcement. I know that there's been

25   some confusion about this but if you do walk by a bar somewhere and you hear a

1 polka you have not fallen into a time warp you are probably passing a Steelers

2 bar.

3 [laughter]

4   Where they're no doubt playing the Pittsburgh Steelers Polka which

5 was written back in the 1970s and --

6   CHAIRMAN JACZKO: I thought polka was a Wisconsin thing.

7   BILLIE GARDE: It is okay. Here is a Packer person so this

8 meeting is going to take a real different turn here.

9 [laughter]

10   COMMISSIONER MAGWOOD: Just to clarify the good polkas are

11 written --

12 [laughter]

13   CHAIRMAN JACZKO: I would expect that Commissioner Svinicki

14 would have something to say about that as well.

15   COMMISSONER MAGWOOD: This gets played whenever the

16 Steelers get close to going to the Super Bowl which as you know happens quite

17 frequently.

18 [laughter]

19   I just recognize that if there were a vote taken I would clearly be

20 outvoted for what's going to happen in the Super Bowl on this panel which goes

21 to show that the Commission is not perfect.

22 [laughter]

23   CHAIRMAN JACZKO: I would note that for those of you who

24 weren't – the Commission had an informal meeting prior to the start of this

25 meeting back in our room back there. We did take an informal vote. I recognize

1   it was not noted in the Sunshine Act. It was a vote of three to one to one in favor

2   of the Packers winning the Super Bowl so, but I appreciate Commissioner

3   Magwood's statement that we are not always perfect in our vote. I'll remember

4   that every time I'm one of those ones.

5   COMMISSIONER MAGWOOD: I'll see you in two weeks to talk

6   about this further. Actually I just really have a couple of question for Ms. Garde.

7   You've iterated a few times and elaborated a little bit on your desire to see the

8   Safety Culture as a regulation as opposed to policy statement. I wanted to give

9   you an opportunity to sort of articulate what additional benefits you think could

10   come from that if that were ultimately to occur.

11   BILLIE GARDE: Well, I agree with the statement that we're not

12   quite ready yet for that. It would have been a different path and if we'd spent

13   three years going down that path we'd be talking about a set of regulatory traits

14   that would have measurements in it. I am of the school that we don't -- we really

15   don't do what isn't required and measured, and I hope that that's not true in this

16   case, but I think that if it was regulated there would be more of a P3 schedule

17   approach to it, there'd be timelines, there'd be deadlines, there'd be an inspection

18   module that may have very much the same material in it, I don't think that we

19   necessarily would have different traits, but we would have a different approach.

20   We would have an inspection module and there -- and that would be available to

21   the resident inspectors, there would be a set of definitions and there'd be a lot

22   more emphasis spent on training to that standard and requirement ahead of time,

23   and making sure that when people join the industry they'd say things are different

24   here in this culture and there's someone looking over our shoulder to make sure

25   we're not making mistakes, whether that's a retaliation mistake, whether that's

1   ignoring a safety concern, whether it's a bad near miss evaluation, the kind of

2   things that ultimately are a part of measuring Safety Culture I think would be

3   taken more seriously.

4   Unfortunately, I think there are still a lot of people and a lot of

5   people that come into this industry that are not coming from -- whether it's

6   nuclear navy, whether it's a background that has that kind of Safety Culture to

7   begin with that have a learning curve and a learning curve in which they can

8   make mistakes. And I think that if it was regulation, they wouldn't have that

9   luxury of making those mistakes. That would be part of the indoctrination into

10   walking in the door. I think you could do the same thing with this policy

11   statement; I'm just not sure we'll get the same degree of attention.

12   COMMISSIONER MAGWOOD: Given that view, do you feel that

13   the policy statement will successfully reach down to the individual level at

14   facilities? Because obviously the work you do focuses a lot on what actions

15   individuals take, and I'm curious as to whether you think the policy statement is

16   going to be successful in communicating to individual workers and managers that

17   this in their personal responsibility.

18   BILLIE GARDE: Within the power reactors, I think a lot of that is up

19   to the industry. I mean we've heard Tom commit to making those changes within

20   the industry and rolling it out. I think INPO's principles they did a really good job

21   over a period of years of rolling that out, but it was different at different facilities

22   as we've seen in terms of incidents across this country, plants that have had

23   weak Safety Cultures and issues happen even in the last four or five years.

24   I think the way it's laid out, it's possible, but it's going to take a

25   leadership commitment, it's going to take the CNOs across this country taking

1 this seriously and I'm not sure that all of them do right now. You know, I've

2 unfortunately met CNOs who think this is all of a lot of fluff, and I hope the policy

3 statement takes it another direction, takes it another step. I'm concerned about

4 Agreement States. Agreement States that, you notice, the response in cases,

5 individual cases where I've ended up, they have no idea how to do any of this,

6 and so you've got smaller licensees that have no intention of changing the way

7 they do business. So it's going to be a challenge; it's possible but it's going to be

8 a challenge.

9 COMMISSIONER MAGWOOD: Interesting, thank you very much.

10 Thank you Mr. Chairman.

11 COMMISSIONER OSTENDORFF: I appreciate everybody's

12 feedback on the outreach efforts by the NRC staff, it's very helpful for us to hear

13 your impressions on that, I glad that has been successful endeavor.   I wanted to

14 perhaps kind of pick up where I think both Commissioner Apostolakis and

15 Commissioner Magwood were headed and I'll be mindful of the time because I

16 don't know how far I can get with this, but I want to talk about the differentiation

17 between how one deals with policy, which is -- has some connotation of --

18 implication of certain values of using -- going back to Commissioner Apostolakis'

19 core value statement, but implication of values pursuant to a policy being in

20 place.

21 Now, I know that Billie has talked about, you know, regulations, and

22 I kind of look at implementation as being in the regulation category. There's

23 some fuzziness here that if we all accept that the words, and I think that we've

24 heard a lot of unanimous agreement prior to today's meeting in here that the

25 words in the policy statement themselves were pretty well agreed to by

1   everybody. The question is, what do you do with that? And I'm going to start

2   with Tom and ask with respect to the INPO efforts, NEI efforts, 09-07, the

3   Reactor Oversight Program that's in existence now, I want to ask you, how

4   would you see this policy statement being acted upon, I use that word

5   intentionally, by industry in fulfillment of the policy?

6   TOM HOUGHTON: Right, let me start by saying that I think that

7   the traits of Safety Culture that we're talking about move from -- some are

8   involved with regulation and some are involved with the pure policy statement.

9   For instance, the way we treat employees, in Employee Concerns Program,

10   they're in Allegations and Regulations, Part B, appendix -- Appendix B, Part 16

11   Corrective Action Program, are in the regulations, so there are many things that

12   are in the regulations already that are if you were doing Venn diagrams, you'd

13   show a lot of overlap. I think the -- there are some aspects which get at

14   improvement as opposed to regulation, and of course that's where INPO comes

15   in shooting for excellence and I think it's hard, with a definition and traits of Safety

16   Culture, to not be talking about excellence.

17   And I think that is where there needs to be a look by NRC as to

18   what parts of this are important for them to look at, what parts for industry, but to

19   directly answer your question, we've been working for over two years to reorient

20   ourselves more towards taking a continuous, arduous look at the Safety Culture,

21   we've got that in the NEI 09-07. INPO has an SOER 10-2 on an engaged

22   learning organization, I think that's the name of it, which is going at performance

23   improvement in all areas so that we are -- we're moving forward in trying to move

24   ourselves to the next step, where it's not just the regulation that we're looking at,

25   but we're looking at, are we engaged? Do we have a lens we can use? Are we

1   using all the resources we can use? And the action in the 09-07 is that each

2   station would look across all its -- everything that it could possible look at, bring

3   that together with a thinking group of people who look for trends and look for

4   weaknesses and emerging issues, and do this on an ongoing basis.

5   Our pilot plants, which I mentioned, they each do this somewhat

6   differently and it's very interesting, it's a real learning laboratory on how can you

7   look at all this information and derive these vague cultural conclusions from it?

8   And we're going to be continually learning, we've got a -- we've set ourselves up

9   so that this is not a one shot go do this, see you in a couple years, this is an

10   ongoing learning -- we'll have forums at which we discuss how people have been

11   successful in this. And the goal is that we don't have any more surprise events

12   that occur.

13   COMMISSIONER OSTENDORFF: Bob, do you want to quickly hit

14   your area?

15   ROBERT LINK: What I find interesting, having been in the

16   business for almost 40 years is the evolution and continuous improvement.

17   When I came out of school the first plants were being put on line, literally the

18   focus was primarily on design and hardware, a little bit on procedures but nothing

19   really.   And then we put a greater, much greater, focus on procedures and

20   process, how we did our work, how we controlled the work. Inevitably, I think,

21   we're at the point where, again, continuous improvement demands for us to look

22   at the human side even deeper.   The Policy Statement, I think, causes us to

23   reflect on that and, yes, the industry at various degrees is in that process.

24   Having been in the reactors for awhile I understand that game. I'm now in the

25   fuel cycle facilities, it's a different business, it's a different perspective, I respect

1   that.

2   There's also risk significant differences amongst the licensees,

3   that's a critical attribute to understand, and the Commission and the staff to

4   recognize and evaluate in how that affects the implementation process. Yes, we

5   want to be measured on performance, absolutely, and how we do that has to be

6   measured. The policy, though, creates an expectation that I embrace, our

7   industry embraces too, as all good management should be, point the direction,

8   get some alignment so that there's no difference in understanding what that

9   expectation is. How it's implemented day to day needs to be flexible to recognize

10   the differences of your people, what business is, and how you administrate that.

11   COMMISSIONER OSTENDORFF: Thank you. Thanks, Mr.

12   Chairman.

13   CHAIRMAN JACZKO: Commissioner Svinicki?

14   COMMISSIONER SVINICKI: Well, time is short and I don't know

15   whether to use my time to speak as a Packer backer or as a member of this

16   Commission. But I will say to all, on my mother's side, my family spread

17   throughout Wisconsin, all the Schmidt's and there are a few Schmidt's in

18   Milwaukee.

19   [laughter]

20   I think the statistics that I heard this morning is that the Steelers , I

21   don't know how many times they've gone to Super Bowl, but they won six, and

22   the Packers have gone fewer times but have won three, but that will just make it

23   all the sweeter this time around.

24   [laughter]

25

1   COMMISSIONER MAGWOOD: We'll see in two weeks.

2   [laughter]

3   COMMISSIONER SVINICKI: The Packers are favored, I would

4   also note that. My colleagues have covered some of the same questions I had.

5   We're using different terms here about implementation of the Policy Statement or

6   when, I think, the staff used the term when different sectors of the industry

7   address the Policy Statement. So I do think that it's important if we're going to

8   sends a policy statement out in the world to have some calibration on the next

9   steps. I think the near term next steps, there's pretty good alignment, there's

10   been discussion about continuing to work the terminology and staff has what they

11   call, I think, tier three where kind of sector by sector they would look at how does

12   this manifest in your particular technology area.

13   But I think looking longer term about expectations of what does it

14   mean really to implement a policy statement, and I think it depends on the policy

15   statement. Commissioner Apostolakis was reminding me just this morning of the

16   policy statement on PRA and so, they're very -- variable, the different policy

17   statements that NRC has issued over time. We issue, I think, few enough of

18   them that they have a pretty good impact and are meaningful because we don't

19   issue them unless it's an issue of some significance and importance to the

20   Commission, which clearly this is.

21   I might ask though, Tom you had talked about the industry's

22   expectation of this policy statement and then how it might bear on substantive

23   cross-cutting issues, and I'm not really -- I don't know that I understand fully the

24   conversation that's been going on there. Could you help me, I know what

25   substantive cross-cutting issues are in the context of the ROP, but what are you

1   trying to indicate in terms of this policy statement and then that issue?

2   TOM HOUGHTON: Well, thank you for the question. When we

3   started this effort, to be frank with you, the licensees didn't like substantive cross-

4   cutting issues and they said, "How can we get rid of these things?" Okay. And

5   then we stepped back and we said, you know what, that's the wrong question,

6   the wrong way to look at this. The way to look at it is, "What can we do

7   proactively to make ourselves good organizations with a strong culture to avoid

8   problems?" So we re-oriented our approach, we had thought about asking for a

9   suspension of the SCCIs while we implemented our policy and then we

10   re-thought that too and said, you know, we need to prove this before we ask for

11   any changes in the oversight process. And our feeling is if we do this right, and

12   we need to do it right first, is that there won't be – there will probably be very few,

13   if any, substantive cross-cutting issues and that it would be useful to have a

14   conversation at that point with the staff about being more efficient in how the

15   Safety Culture is looked at.

16   So that's where we're -- that's where we see progressing now is

17   that we need to, we need to prove what we're doing and we believe that it would

18   be more efficient with the NRC taking a different, more of an oversight role rather

19   than getting into a situation where you are talking about whether aspects and

20   something else gives you a substantive cross-cutting issue, which frankly gets

21   into the public domain as probably worse than a failure of a safety pump is you'd

22   have a lousy culture at your plant. What are you talking about? So we think that

23   we need to prove it, we need the common language so we're talking the same

24   way, and then we can move forward with improvement.

25   COMMISSIONER SVINICKI: Okay. Thank you. And I know -- I'm

1 aware that there's been some very high level exploration of that, but I look

2 forward to following that -- those discussions, and back and forth, as they move

3 forward. I'm not -- I understood your answer, but I'm not sure that I understood

4 exactly how we might move forward and if Safety Culture was to somehow

5 supplant some of the tools that staff uses on substantive cross-cutting issues. I

6 think we'll have to think very carefully about how we do that, and again I've made

7 no judgment either way, but I think it will be a lot more complicated than it sounds

8 on the surface.

9 　　　　　TOM HOUGHTON: It will be. Let me reiterate that we very happy

10 to have the NRC looking at us and drawing their insights from the aspects that

11 they see on inspections -- in inspections when there are violations, and we just

12 think that we ought to work together to see if there's a better way. And NRC, by

13 the way, has been looking at our pilots, giving us very thoughtful suggestions on

14 ways to improve and we've had some positive reinforcement from them as to

15 what we're doing.

16 　　　　　COMMISSIONER SVINICKI: Okay, thank you. And I would just

17 make one other reaction to something that was said in response to an earlier

18 comment, but Ms. Garde, since it was your comment, I'll allow you to respond if

19 you'd like to. Well, first of all I would say you've appeared before the

20 Commission previously in times that I've been here, but I don't think I ever got a,

21 like, bio of you and I had not realized your extensive involvement in the Millstone

22 issues, and I think that that's a very interesting kind of historical thing that

23 occurred and I appreciate all the perspectives that you brought to Safety Culture.

24 　　　　　In response to a question you were asked about regulating though,

25 I think you said something along the lines of, "Well, we're ready to issue a policy

1   statement because that's the path we picked and we didn't choose the

2   rulemaking or regulatory path." But it was more in, kind of, your closing you

3   made a general statement and you said, well, you know, "If we have -- if we don't

4   get it right in terms of the policy statement, and if there's an incident or accident, I

5   think the implication being maybe, you know, we would have been better served

6   to pick the rule making path," and it just caused me to pause for a second as you

7   said that because I was thinking, if there is an incident or accident, and you've

8   been working a lot in oil and gas lately so maybe you feel this very keenly, I think

9   that it would give me pause if the issuance or non-issuance of a policy statement

10   was a big factor in whether that was -- I think that if there was a significant

11   incident or accident, what policy makers and elected officials would be asking

12   NRC as the regulator is, "Look at the totality of your regulation and what are the

13   inadequacies there?"

14   So I just -- its policy statements I've struggled with a little bit since I

15   came to NRC. I think they're good in terms of setting an expectation and for the

16   Commission to emphasize things of importance, but they can't supplant and take

17   the place of our regulatory framework in terms of compelling certain behaviors.

18   So I draw that distinction and maybe I miss-paraphrased or miss-characterized

19   what you were saying.

20   BILLIE GARDE: No, I think as you look through the accident

21   investigations on the various big and serious accidents that our country has had,

22   they're all starting to have chapters about the Safety Culture at those particular

23   facilities; they are widely different language and approaches, as different as

24   every accident is. I think within this industry, making sure that we all are using

25   common language and common attributes and common understanding of what

1 we are looking for, and what the Commission expects of its licensee is really an

2 important piece in terms of getting it right and articulating what it's all about, but

3 at bottom if there's an accident, or an incident, culture is going to be looked at.

4 And the question is going to be did the NRC do enough to get the Safety Culture

5 question right? I mean, kind of one of the primary themes after Davis-Besse is,

6 we didn't get it right in terms of just the safety conscious work environment, fear

7 of retaliation is you were going to have to look broader.

8   This is a broad look. I'm very comfortable and happy with where

9 we're at in terms of giving guidance, direction, definition, and I think there's a

10 tremendous amount of cooperation now with the industry, much different then we

11 saw before Davis-Besse, so I'm very hopeful that this will really work to advance

12 this industry on this topic. I'm just saying if there is an accident that question is

13 going to get asked and then I think that's the question we have to ask, if we had

14 regulated it for that plant of that facility, would it have been different?

15   COMMISSIONER SVINICKI: Okay, thank you for that clarification.

16 Thank you, Mr. Chairman.

17   CHAIRMAN JACZKO: I don't really have much of a question, just

18 have a couple of comments, I think. Commissioner Svinicki asked very

19 interesting questions about the substantive cross-cutting issues and I think that is

20 certainly an area, as we go forward, I think is something that we can take a look

21 at and I appreciate it. I think how NEI's involved in that and I think it is -- I think

22 it's the right direction, and I think, as you indicated, Tom, that the idea that if NEI

23 09-07 is successful, a good performance measure for that would be a dramatic

24 reduction in substantive cross-cutting issues and I think that's a significant

25 change and I think a much better way to look at those elements of the ROP

1 because I think they have served a useful purpose even before we tied them

2 more closely I think to the Safety Culture component.

3 I think that's really good to hear and I think it's a good way for us to

4 look in the next couple of years as we go forward. I probably fall more closely, as

5 I heard from all of you, with Billie and her interest in regulation, and as I've

6 always looked at it, I think as I looked at the Safety Culture issues, I didn't think

7 we had that common understanding of terms and I think that's really been a key

8 success for the work that's gone on, with so many different stakeholders

9 participating in being able to get to the point where they can agree on this

10 language. And I know when this started, Commissioner Lyons and then

11 Chairman Kline, we had a lot of discussions about security; that was the big

12 discussion as we debated this thing. Should security have been there or not?

13 And it's interesting because as you all worked you dismissed that issue fairly

14 quickly and with a high degree of unanimity, which I think was very telling to me

15 that, you know, when you got together you really focus on, probably, issues that

16 were of more significance in getting the traits right and recognizing that security

17 didn't have to be in there and was still acceptable.

18 So I think it was a very useful discussion, but I think now that we

19 have the expectation then the question becomes, I think as, Billie, you indicated,

20 do we have the right regulatory infrastructure to, not to implement that, but for

21 those expectations to be accomplished. And at this point I don't think I know the

22 answer, I think probably some run time with the policy statement would tell us

23 that; it would give us more information one way or another so that hopefully it's

24 clear that there is, or is not, sufficient regulatory footprint now to have those

25 expectations carried out and seen fit.

1   So I think in general as others have said this has been a

2   tremendous process and it's involved a tremendous amount of stakeholders, and

3   I can't remember a time when we had this group of stakeholders sitting at a table

4   in, if not unanimous agreement, pretty close to it on what are very difficult issues.

5   And so I appreciate your efforts and your involvement and as we go with the rest

6   of the meeting, I'm sure we'll get some more input and the Commission will have

7   its own responsibilities to look at this and see what you've done and we're

8   comfortable with it. So with that I don't know if any other questions or comments

9   for this panel? Okay. Well, thank you.

10   TOM HOUGHTON: Thank you, Mr. Chairman.

11   CHAIRMAN JACZKO: We'll now turn to a second group of

12   stakeholders beginning with Kevin Buckley who's with the American Association

13   of Physicists in Medicine.

14   KEVIN BUCKLEY: Thank you for the opportunity to comment on

15   this very important topic for the American Association of Physicists in Medicine

16   and for the patients that we serve. By way of background, AAPM is a premiere

17   organization of medical physics; basically, what we try and do is take the science

18   and apply it to patient care. We represent over 7,500 medical physicists. The

19   NRC is to be commended for gathering together a wide cross section of

20   licensees to discuss this topic; they solicited our input and they responded to the

21   concerns. And there were changes made during the workshop that we all agreed

22   were for the better.

23   In terms of Safety Culture policies, it is the responsibility of the

24   licensees and the certificate holders to developing and maintaining a strong

25   safety program. It is critical that a common language and Safety Culture traits

1 and behaviors exist between the NRC and each category of licensee. The

2 AAPM concurs with the revised definition; however, it is extremely important to

3 emphasize the term "protection of people" in the definition includes the patients

4 that we serve. AAPM concurs with excluding the term "security" from the

5 definition; including "security" in the definition denigrates other equally important

6 processes to protect the patient, the public, and the environment. In this

7 category the NRC needs to acknowledge for medical institutions that patient

8 safety is first and foremost. And the use of radioactive material in the practice of

9 medicine is to enhance diagnosis in treatment of disease while ensuring that the

10 patient receives the best medical care. Although it's laudable to have a single

11 definition that we all agreed upon, it's equally important to note that

12 implementation of the traits and behaviors as they apply to specific licensee

13 categories may differ significantly.

14   In medical uses, nuclear safety does not preempt or override patient

15 safety; patient safety is our number one concern. For example, life saving

16 measures would never not be taken because a patient is contaminated. What

17 we try and do is we save the patient's life first and we deal with the contamination

18 after. The NRC must define the characteristics that, in the agency's view, is

19 definite, define a positive Safety Culture, and we also need metrics for assessing

20 them. Without specific definition, interpretation of a positive Safety Culture

21 remains subjective.

22   The AAPM believes the next critical step is to develop specific

23 actionable characteristics and behaviors specific to each licensee. This next

24 level, or "third tier," once developed will provide more meaningful in the individual

25 licensee categories and relate the general characteristics to specific behaviors

1   and indications of strong Safety Culture in that particular field. AAPM

2   recommends that the NRC work closely with Agreement States, if we don't do

3   that then the issue will not get to where we want it to be. In the absence of

4   Agreement State support, we would only be addressing about 20 percent of the

5   regulated licensees.

6   The NRC should conduct workshops in coordination with

7   Agreement States and specific to each category of licensee to clarify the NRC's

8   approach to Safety Culture and ensure those expectations are clearly

9   understood. It's a feeling of the AAPM that these should not be, basically,

10   lectures or talks in series, but they should be roundtable discussions where the

11   Agreement States can get a feel for what you actually want and how you want it

12   implemented. Guidelines explaining NRC response regarding adoption of Safety

13   Culture values must be promulgated. If stakeholders do not understand how to

14   implement Safety Culture and have clear metrics used internally to determine the

15   effectiveness and their efforts, attention will be minimal. Finally, the NRC's

16   Safety Culture implementation must be clarified so that if medical licensees can

17   demonstrate they are meeting "intent of the NRC Safety Culture policy," that the

18   licensee does not have to use methods and terminology developed by the NRC

19   staff.

20   In the medical field, radiation protection is just part of what the -- one

21   thing that we do of our overall patient safety, there's chemical safety, there's

22   safety from drugs, there's safeties from procedures, so there's a culture that's

23   developed and if we are meeting the intent of that, is is our feeling that we don't

24   want to go back and re-invent the wheel.

25   CHAIRMAN JACZKO: Thank you. We will next hear from George

1   Marshall, who's the director of the American Portable Nuclear Gauge

2   Association.

3   GEORGE MARSHALL: Good afternoon, George Marshall with

4   American Portable Nuclear Gauge Association, certainly appreciate the

5   opportunity to come here and offer comments and I found it a privilege to be part

6   of this initiative and on the panel. I think it will be a big benefit to the licensees of

7   the portable nuclear gauges. Going back to the beginning, we started with a lot

8   of good material, thanks to the reactor industry, a lot of good examples, and the

9   like, that we could play off of, and I do believe we came up with terminology that

10   can be used across all segments of radiological world, as well as the traits and

11   the characteristics. I see the flexibility in here for each segment to go beyond

12   that to explain the traits and characteristics with examples, with analogies, again,

13   pertaining to that segment, I think that will be very beneficial. Put my glasses on

14   here.

15   When you look at the gauge industry you're looking at -- sure it's

16   low risk, but there's a lot of us, you're looking at 5,000 companies, at least, and

17   that's going to be an important factor in terms of how well you can bring this to

18   these licensees because collectively, we just don't have all the resources

19   between the agencies, and the industries, and the like. So, we definitely did

20   strategize how best to get this over for them to take responsibility, you know, for

21   having that license.

22   Some of the things will be new and it occurred to me even today

23   that what this represents to this industry is going to be kind of like a missing

24   chapter. It's the things that you don't see in NUREG, it's the things that are not

25   evident currently in training. You know the concept of the safety conscious work

1 environment and human factors is all going to be new, but I think it dovetails

2 nicely with the whole idea of Safety Culture. It is, you know, you can kind of take

3 a look at this and say it's a -- I hate to use the word a scaled down version for

4 this part of the industry, but again because of some of the challenges if you look

5 at, I think we have to look at it that way, but that doesn't mean that it's still not

6 very beneficial for the segment.

7 Again, I noted here it was low risk and high visibility, unfortunately

8 sometimes we tend to taint, you know, I feel the rest of the radiological world

9 because of the fact that we're portable. Okay, I was one of those people that

10 preferred to see the word security in there, maybe for a little bit different reason

11 because that's our number one problem, is making sure these things are secured

12 and they don't get into hands outside. And when they do, unfortunately, they --

13 the media, and the like, don't just say, you know, radioactive -- I mean portable

14 nuclear gauge, they say radioactive materials. And they can make this look like

15 a Chernobyl or Hiroshima event, and that's typically where the general public is

16 getting their education about this stuff. Unfortunately, you know, we can try and

17 put education programs out there that, perhaps, would train or at least teach the

18 general public, but it's not a real exciting subject and they don't tend to pay

19 attention until, unfortunately, it's something that can be made to look like

20 something dangerous. So, again, it becomes important to do all we can with the

21 licensees themselves to take on these actions on their own to make sure these

22 incidents are reduced.

23 A couple of things that are important about Safety Culture that will

24 address this industry well is the fact that you have to offer better training. Again,

25 relatively speaking, the training is minimal for these guys, one time that's it. You

1   know I think with the fact that Safety Culture is something that we look to to be

2   continuous, perhaps the introduction of something like annual refresher training

3   is something to keep it, you know, in the eyes of these licensees.

4   Likewise, leadership in management and getting them involved and

5   getting them to embrace this is very important because right now the RSO and

6   these organizations it's an ancillary position, they're not hired for that and they

7   struggle with it and they don't get that management and leadership support, so I

8   think this is, again, a good opportunity for them, for Safety Culture to come in and

9   help out.

10   Some of the other benefits that, you know, it's interesting and I

11   know this would be a different conversation, these folks don't have the

12   infrastructure like the reactor industry, they don't have the management, they

13   don't have the structure, they don't have the organization which is something that

14   you need to really put in an effective Safety Culture, so that's going to be a

15   challenge in getting these all the way down to individuals to talk about culture,

16   they don't even know what a culture is. So there's actually a benefit there that in

17   introducing this stuff it crosses over to the corporate world, it's not your intent but

18   I think there is a benefit there. One of the things that Commissioner Apostolakis

19   brought up was the questioning attitude, well what that means to me in this is the

20   fact that in this, which is typically construction industry and the like, there is a lot

21   of peer pressure and we're trying to train new ones coming in and when it comes

22   to methodology and the like as soon as they get it back within their company

23   there's a lot of pressure there that that goes out the window cause they say, I've

24   been doing this for 30 years, I'll do it this way not that way. You know, you would

25   hope to bring that, again I don't know if that's the example you were looking for,

1   but certainly what I see is a benefit to improve the training.

2   I do think that, and I've heard this I talked to all the Agreement

3   States and the like and they do struggle with the sheer number of licensees. I

4   think that if we can improve their performance, improve their radiation safety

5   program that will in turn turn-around and lessen the workload to the Agreement

6   States and to the NRC states. Again I'd hope that you'd work with industry,

7   currently bring training to the industry through the training, through our websites,

8   through our newsletters, through anything that we can do because again, I think

9   you're going to need to utilize all the resources that you have to really -- because

10 you're not going to be able to go one on one with these folks.

11   NUREG, another point is I don't know what the criteria is or what

12 your thoughts are about perhaps there is going to be a new, NUREG just about

13 Safety Culture, but I definitely think that the idea of Safety Culture, safety

14 conscious work environment, and the like has to be in a NUREG Volume One,

15 1556 Volume One. That's pretty much the Ten Commandments for this industry,

16 be it the agencies, be it the licensees that's where they look -- and again that's

17 where that missing chapter is. You know, we talk about all the requirements and

18 the like I think adding Safety Culture is really what is going to tie all this together

19 for these folks so they can understand better about why they're doing this, why

20 are they doing all of these things?

21   Can you turn that up? But anyway, in summary, again, I think it's

22 going to be a major benefit. I think that the industry can be a big help on this,

23 and I think really focusing on on-going training and getting the management

24 involved, would be very beneficial. Thank you.

25   CHAIRMAN JACZKO: Thank you very much. We now turn to Lee

1 Cox who is the Director of the Organization of Agreement States and North

2 Carolina's Agreement State program as well.

3   LEE COX: Great, thank you. Good afternoon Mr. Chairman,

4 Commissioners, on this cold day in Rockville, Maryland. I guess I'm not going to

5 get a lot of sympathy from you Green Bay and Pittsburgh fans on this cold

6 weather after watching that cold game last night. It's not surprising that the

7 Agreement States have differing opinion from Ms. Garde and I feel like we need

8 to go have dinner the next time I'm in DC to discuss some of your comments so I

9 can better understand them.

10   Anyway, thank you for having me and thank you for the opportunity

11 to address you with the Agreement States perspectives on the proposed final

12 Safety Culture Policy Statement. While being responsible for regulating over 85

13 percent of the nations radioactive material licensees, the Agreement States

14 recognize the vital role that Safety Culture plays in everyday use of radioactive

15 materials. It is a Safety Culture that integrates safety, security, and control in its

16 effort to protect the public health and safety in the environment from hazards

17 associated with radiation. It is important to recognize that the implementation of

18 the Safety Culture is imperative for success, but does not guarantee it. Our

19 mission is to provide for reasonable assurance of adequate protection and

20 safety, not absolute assurance of perfect protection and safety. Vulnerabilities

21 should be identified and strengthened.   Safety Culture is best described as

22 always a work in progress.

23   To be successful safety efforts must be a priority of leadership and

24 prevalent throughout an organization. I believe it is Mike Boyd of the EPA that

25 coined the phrase, "Safety culture is where it's at." The Agreement States have

1   the mantra of, "Safety culture is where it's always been." Safety culture has

2   always been the preeminent thought and foundation in Agreement States

3   programs and regulated community.

4   Agreement States licensing programs have evolved into the current

5   Safety Culture of vetting policy and procedures, facilities, material devices, and

6   even individuals, as of lately. The Agreement States inspection process confirms

7   and verifies compliance of commitments, orders, and requirements. NMED,

8   which is the Nuclear Materials Events Database; NSTS, National Source

9   Tracking System; SS&D Registration, which is Sealed Source and Device

10   Registration; and the increased security controls are all valuable components of

11   this existing Safety Culture. Future license verifications system in web based

12   licensing will continue to add to this culture, with the strong and ever evolving

13   foundation of Safety Culture the Agreement States do not believe there is a need

14   for a huge shift in the safety pendulum. The Agreement States' position on the

15   proposed final Safety Culture Policy Statement is very clear, the States believe

16   that their programs already possess a strong Safety Culture foundation but are

17   always open to improving health, safety, and security with regards to hazards

18   associated with all forms of radiation exposure.

19   The Agreement States support the final Safety Culture Policy

20   Statement, its definition of Safety Culture and the corresponding nine traits. The

21   Agreement States support the final policy statement as the appropriate vehicle to

22   convey safer operations. The Agreement States agree with the Commission's

23   statement in the proposed final policy that developing a policy statement is a

24   more effective way to engage the broad scope of entities. The proposed final

25   policy statement allows flexibility and buy-in across radioactive material users to

1 establish a robust Safety Culture commensurate with the differing scopes of

2 activity.

3   Agreement States are unanimously opposed to any rulemaking

4 effort with regards to Safety Culture due to the fact that the entire foundation of

5 all Agreement States programs rest upon a firm Safety Culture environment, they

6 believe that a prescriptive rule would unnecessarily bound Safety Culture limits

7 and improvements where Safety Culture possibilities and improvements are

8 limitless. Another rulemaking effort would further strain already suffering state

9 budgets. The NRC has identified needed additional internal resources to roll out

10 Safety Culture activities with regard to the proposed final policy. The Agreement

11 States have no further resources, they are limited by existing assets to

12 accomplish any future responsibilities.

13   Over the past several years during the Safety Culture policy

14 development, the Agreement States took a lead role as co-regulators informing

15 its licensees of the developing policy. Agreement States shared and continue to

16 share information with their licensees regarding the developing Safety Culture

17 policy statement. Information was shared via web, emails, information notices,

18 letters, phone, inspections, and conferences. Licensee leadership is given notice

19 during inspection entrance and exit meetings. Safety culture has been presented

20 at local health physic society meetings, state commission meetings, and OAS

21 conferences. All Agreement States stress health safety and security as a routine

22 matter during their daily interaction with the licensed community, while ensuring

23 the regulations related to health and safety are implemented and enforced.

24 While implementation is not directly addressed in the Policy Statement, the NRC

25 should be mindful of prioritization of this effort relative to other regulatory issues

1   and work closely with the Agreement States in going forward.

2   As we advance, the Agreement States believe that the Integrated

3   Materials Performance Evaluation Program, or IMPEP, is the appropriate tool in

4   evaluating performance relative to the final policy statement. IMPEP should

5   continue to be evaluated and modified with input from the Agreement States, and

6   the Agreement States agree with the proposed final policy that an efficient and

7   effective first step is to look for ways to highlight Safety Culture within ongoing

8   revisions to NUREG-1556, or the consolidated guidance about material

9   licensees.

10   A continued collegial relationship as co-regulators should be the

11   path forward. In closing, the states place their support for this proposed final

12   Safety Culture Policy Statement. They feel it enhances the Safety Culture that

13   already exists within the state programs and we want to thank you, the Chairman

14   and the Commission, for the opportunity to share our views and work alongside

15   the Commission on this policy and any project that may come up in the future.

16   Thank you.

17   CHAIRMAN JACZKO: Thank you. Commissioner Apostolakis.

18   COMMISSIONER APOSTOLAKIS: Thank you Mr. Chairman. I'd

19   like to start with a statement, which I think I have to make because judging from

20   the reactions I got from the previous panel when I made some comments. I am

21   not questioning the significance of values or traits, like the Questioning Attitude,

22   but I'm very sensitive to what we, as regulators, can put out there in policy

23   statements or in regulations. So, there is a big difference to -- you don't have to

24   convince me that Questioning Attitude is important, but as a regulator I have no

25   idea what to do with it. So there are two different things, so let's make clear on

1   where we're coming from. Mr. Buckley, you emphasized that patient safety

2   comes first is how you put it, is that inconsistent with the policy statement? I

3   don't see the inconsistency. Why did you feel that you had to say that? I mean,

4   is it just because patient safety comes first, you are willing to harm a nurse?

5   KEVIN BUCKLEY: No, that was not the intent. The intent is that

6   there's a feeling on some of the licensees that radiation safety is the number one

7   overriding concern, more important than anything else. And what I'm saying, in

8   our case, patient safety is the number one concern. So if somebody is going to

9   get contaminated, for example in the E.R., if there was a reactor accident or a

10 bomb, they're going to have a very small risk from that radiation exposure. If

11 they don't save that person's life or do something in a very short time that person

12 will die. So, taking care of the person that's sick or injured is the number one

13 priority in radiation safety, though it's very important has to be weighed against

14 that. Now, if the patient's stable and they can decontaminate in half an hour and

15 it's not going to risk their life, obviously we'd do that to try and keep their

16 exposures to a minimum. But, if it's a life threatening situation if they don't do

17 anything the patients going to be dead in three or four minutes, they're going to

18 disregard or minimize radiation safety concerns to try and save that patient's life.

19   COMMISSIONER APOSTOLAKIS: Thank you, but -- well, again,

20 there's a broader question here which we have encountered in another context,

21 there is a certain culture in the medical community, in hospitals, medical doctors,

22 and so on and we walk a fine line, it seems to me, where we try to regulate things

23 that have to do with medicine. Do you see any conflicts or any difficulties in

24 trying, you know, in issuing a policy statement like that to the medical

25 community? I mean, besides patient comes first.

1   KEVIN BUCKLEY: Well, my concern is that if this makes it to

2   regulations -- a lot of what we do is research orientated and the reason why we

3   do that is we have very sick patients that we do conventional therapies on and

4   they are ineffective. In my hospital, I work in a children's hospital, we know

5   what's not -- what's going to happen to these children if we don't do anything,

6   they're going to die. So, we may try something that you would say, "Well gee,

7   that's very risky procedure." And yes it is, but the reason why is we've tried

8   standard practice and it hasn't worked. So that's why we have research

9   committees and they are regulated. There are IRB's in the institutions, they

10   review the efficacy of it, is it possible, is it successful, and they make a

11   determination in house. And my concern is I don't want regulators to come in

12   and say what is acceptable and what is not in terms of research to try and save

13   somebody's life.

14   COMMISSIONER APOSTOLAKIS: Thank you Mr. Chairman.

15   CHAIRMAN JACZKO: Commissioner Magwood?

16   COMMISSIONER MAGWOOD: I think that Commissioner

17   Apostolakis really kind of exhausted what I wanted to discuss with you, let me

18   focus a little bit on that and maybe approach it in a little different way. I heard

19   you sort of responding to him, I'm remembering the discussions we were having

20   several years ago about on boron/neutron capture therapy, and for those of us

21   who grew up and worked with research reactors and other things, the idea of that

22   particular technique seemed to be highly problematic, but there were many

23   people in the medical community who thought it was -- may have had benefits. I

24   think ultimately I guess we're still not entirely sure.

25   But one of the things that does occur to me is that there are certain

1   -- we have had these conversations with the medical community several times

2   with the Commission since I've been here and there does seem to be, you know,

3   I'll use the word with some trepidation, a cultural difference between physicians

4   and certainly regulators when it comes to, you know, how to assess procedures,

5   how to decide whether there's been a medical error or not, and we've had that

6   conversation quite -- on a couple of occasions here. And I wonder if what I hear

7   from you is some concern that, you know, the kinds of debates and discussions

8   we've been having where there are disagreements with how to interpret what's

9   going on, something like this if it were in regulation which you heard Ms. Garde

10   call for, would possibly stand in the way of appropriate medical activities, and I'm

11   curious as to whether, in the conversations you've had with your membership, is

12   there something you can say to us today that would help us understand how we

13   should approach dealing with that cultural difference as we go forward?

14   KEVIN BUCKLEY: The best thing that I can say to you is follow

15   what they've done in this and basically get the medical community involved.

16   When you buy into something you obviously feel better than if it's, you know,

17   forced down your throat so to speak. There was a big issue a couple of years

18   ago with increased controls because that had a major impact on hospitals

19   specifically, blood irradiator banks, where they need to have access 24/7 to

20   irradiate blood and that was a major impact because there was no buy-in from

21   the regulated community, it was basically said, you are going to do this. I think

22   everybody's that's a physician, everybody that takes care of patients wants to do

23   the right thing, that's why I think overall the Safety Culture is very important

24   because we want to do the right thing. But what we don't want to do is get in a

25   situation where we're regulated against trying to do things to improve the practice

1   of medicine.

2   COMMISSIONER MAGWOOD: Appreciate that, thank you. Let

3   me sort of ask Mr. Marshall and Mr. Cox this question together, and you respond

4   how you think, both of you have alluded to the fact that there are licensees, many

5   of which are under the auspices of the states that are small businesses that don't

6   have extensive resources. And that's something we clearly, we appreciate and

7   understand.

8   I think that as we think about Safety Culture, one of the messages

9   that we, I think, we're trying to get across here is that anyone who deals with

10   radiological materials has to approach working with them with a certain

11   characteristic, a certain psychology, you know. A psychology that, quite frankly, I

12   think in certain parts of our infrastructure, DOE Laboratories, for example,

13   something that people take pride in, having that culture, knowing how to deal with

14   radiological materials, it's kind of a selling point to some of the laboratories.

15   When you come to small businesses that work in gauges or other fields that don't

16   necessarily have that long background and are working with these materials,

17   what do you think the message is going to be to them on the policy statement?

18   Is this going to be a successful communication tool in your view and will this

19   improve the approach, or the, I guess I'll say the culture, in these smaller

20   businesses? Or is this really something that seems very distant to them. I

21   wonder if you could give some thoughts about that?

22   GEORGE MARSHALL: Well addressing the radiation safety officer

23   in a given company in my conversations with him and the like, and again as I

24   mentioned, this is in essence an ancillary position for them, so they don't have

25   that background. Nonetheless, they are professionals. And I hear a lot of

1   frustrations from them that they get the feeling that they could be doing a better

2   job. It is their job; they want to do better. So I do see this as an opportunity to

3   help them better understand that. And again, I look at them as a champion within

4   an organization. But nonetheless, they need the resources, and that's where I

5   see engaging, involving the leaders and the managers above them that can

6   come to their aid. You know, perhaps to get them to understand better.

7   But part of me wants them to go ahead and take as much training

8   as they possibly can, not that it's going to really benefit them. But if nothing else

9   maybe get some sympathy out of them for what their tasking their RSOs with.

10 So I do. I think the licensees in general can do better. They want to do better, a

11 good number of them. And then certainly the RSO. I think they do their best to

12 embrace it. And again, like I said, I view this as perhaps the missing chapter that

13 will help them better understand their responsibility and then how to convey that

14 to the rest of the organization.

15   LEE COX: I think the policy statement, just communicating with our

16 licensees, has already been effective. The Agreement States have been around

17 for over 40 years. And this -- we've been enforcing Safety Culture the entire

18 time. And I think this policy statement puts a different focus on it, which needs to

19 happen. So will a policy statement do that? I think we're already seeing, reaping

20 the benefits of just talking about it already and seeing how effective it is. So yes,

21 absolutely.

22   COMMISSIONER MAGWOOD: Appreciate that. Very good. Very

23 interesting. Thank you. Thanks Chairman.

24   CHAIRMAN JACZKO: Commissioner Ostendorff?

1   COMMISSIONER OSTENDORFF: Thank you all for being here

2   today. Kevin, looking at your slide seven says, "One size does not fit all." Just

3   kind of got this one's attention. I'm going to ask you if you could to provide an

4   example from your daily work at Children's Hospital in Boston, can you provide

5   maybe, in the context of your medical practice, provide an example of how you

6   think the Safety Culture policy might be adopted in a good way, and then

7   perhaps an example in which it should not be adopted, with respect to your daily

8   work.

9   KEVIN BUCKLEY: In terms of a good way would be a Questioning

10   Attitude on the part of everybody that takes care of a child. If they see something

11   that they don't think is right, they should stop it, or question it, or bring it up to

12   senior management, whoever it needs to be, to say, "Wait a minute, I don't think

13   this is right. This patient's only five years old. Why are we giving him adult dose

14   of radiation?" In a way I see it as a bad way is if you come out and say, "Well,

15   there's only a 50 percent chance that this procedure will save this child's life, so

16   don't do it." Well, if we tried everything that we could do normally, and we know

17   that if we don't do anything that child's going to be dead in a year, 50-50 odds

18   look a lot better than nothing.

19   COMMISSIONER OSTENDORFF: With respect your first example

20   about the Questioning Attitude, is that, I don't want to necessarily ask too pointed

21   a question about your current environment, but is that something that's

22   achievable in your current environment? Or would you need a Safety Culture

23   policy in order to make that happen?

24   KEVIN BUCKLEY: I think the Safety Culture will help along the

25   process. There is a group out there right now, and they're actually getting a book

1   out, and it's a course that says, "Why Hospitals Should Fly." And basically what

2   it comes back to is there's been reports of planes crashing because the co-pilot,

3   in fear of stepping on the toes of the pilot, forgot to tell him that, "Oh by the way,

4   we're running out of fuel. We need to do something." So you know, in the

5   hospital setting, it's a very tiered setting; it's a physician-dominated setting. But

6   the idea is that if you see something that could affect a child's life adversely, then

7   by all means you need to bring that up to your supervisor or whoever it is, that

8   can either take a second look or make sure that -- I mean you see this already in

9   surgical procedures. The physician who's going to perform a procedure normally

10   has to meet you before you are sedated an initial, or initialize where the surgery's

11   going to be done. So it's something clearly that the medical community is

12   working towards. And the hope is that, you know, with the Safety Culture from

13   the regulatory side, the nuclear side, we can implement that as well. Thank you.

14   COMMISSIONER OSTENDORFF: George, I'm going to turn to

15   you. And you commented on the importance of training and the engaging of

16   senior management and leadership, different licensing companies that your

17   organization deals with. Can you provide, perhaps, similar to the question I

18   asked Kevin, an example of where adoption of the safety cultural policy

19   statement, can you provide a positive or concrete example of where that might

20   change existing behavior in your industry from a licensee standpoint?

21   GEORGE MARSHALL: And again, going back to the missing

22   chapter, if you go to NUREG Volume One, which is really something out there for

23   putting together an application. And it says it's a checklist of all the things you

24   need to do. But what I feel it's lacking is an understanding of why. Okay? And

25   really instilling and getting across the idea, the responsibility of being a licensee,

1   for yourself, for your coworker, for the general public. I just see that that's not

2   there.

3   And again, like I said, relatively speaking there's not much training

4   right now. Part of me likes to think that maybe that was just kind of a pre-9/11

5   thing, and it's something that needs to be addressed not only to the RSO, but like

6   again the management and all the authorized users as well. But just getting the

7   concepts of Safety Culture across. What does it mean? And not only what does

8   it mean? But how do you, and again this is going to be perhaps one of our

9   challenges is, how do you not only get it in there beyond just something written

10   on a piece of paper, but almost to, you know when I think of positive Safety

11   Culture, we talked about positive, you know, interchange that word with almost

12   an esprit décor, that everyone feels that they are on board with this. And again, I

13   just think it's something that's been lacking and missing. It's not so much that

14   they hadn't gone there. It just hasn't been addressed before. So that's where I

15   see this as a big opportunity, not only for Safety Culture, but for training in

16   general in revisiting the whole idea of being a licensee and what it means. If

17   that's --

18   COMMISSIONER OSTENDORFF: That's helpful. Thank you very

19   much. Thank you, Mr. Chairman.

20   CHAIRMAN JACZKO: Commissioner Svinicki?

21   COMMISSIONER SVINICKI: I want to thank each of you for being

22   here today and being involved in this issue. Mr. Marshall, I might just ask for one

23   clarification. You had a slide, which stated, "Let industry carry the load on Safety

24   Culture," and did you have any concerns with the language in the proposed final

25   policy statement that I think is quite explicit about the fact that the ultimate

1   responsibility for creating the right environment of Safety Culture resides with the

2   licensee. So did you, were you just reemphasizing that point? Or do you have

3   some concern about the way this final proposed policy statement captures that

4   thought?

5   GEORGE MARSHALL: Again, looking at the implementation. And

6   I go back to the reactor industry, and how did it move from documents like this

7   into the reactor industry? How did you get it across, again, to the point where

8   again that esprit décor? But going again to the challenge of where you don't

9   have that opportunity to work as closely. You don't have the talents so to speak

10   on board in the infrastructure like the reactor industry does with this industry.

11   And so, like I said, it's going to be a challenge there. But I was talking more

12   about right now, when you consider how does the industry learn about their role

13   as a licensee. Certainly NUREG, the Agreement States, but administering the

14   training and the like right now is the industry. And I would hope that, you know,

15   the idea there is that we will continue to play that role in bringing Safety Culture

16   to them via, certainly number one, the training. But whatever else that we can

17   do, pretty much, because it's going to be that big of a challenge.

18   COMMISSIONER SVINICKI: Okay, so I take from your answer that

19   it was more a forward-looking statement? It wasn't meant to indicate anything

20   about the wording in the policy statement?

21   GEORGE MARSHALL: -- No, just forward-looking --

22   COMMISSIONER SVINICKI: -- about the implementation and

23   moving forward. Okay. And so that, I think you heard even with the previous

24   panel, there's been a lot of discussion and questions and answers about the

25   implementation in the next phase is, if the Commission adopts an issue with this

1   policy statement and this form, then what? And I might direct this comment to

2   Mr. Cox. We talked a little bit about the fact that it's not a regulation.

3   And therefore it's not a matter about compatibility and those types

4   of issues. We know how to flow forward requirements in a regulation to the

5   Agreement States, but this is a policy statement and not a regulation. So when

6   the Agreement States look at next steps beyond, and I'll explicitly mention

7   continued dialogue, because I think the NRC staff has talked repeatedly about

8   the next step is to continue this dialogue, so laying that aside as a somewhat I

9   think obvious step that we would continue to engage, what do Agreement States

10   see as the next step? Is it, as you said, just awareness? Or you've been at this

11   game for a long time, so nothing really changes for you?

12   LEE COX: No, I don't think we say that nothing really changes. I

13   think it becomes enhanced. And I think we agree with what's laid out in the

14   policy statement as the first next step, which is during the revisit of all the

15   NUREG-1556, that that's where the initial step should take place, is getting the

16   Safety Culture language, the culture implemented into that NUREG guidance.

17   COMMISSIONER SVINICKI: When you look very broadly at

18   implementation, maybe particularly for those who are directly regulated by the

19   NRC, and you read things in this proposed policy statement that say along the

20   lines of, "The Commission expresses its expectation that all licensees will

21   implement those necessary steps to create this culture." Do you see that leaning

22   forward into a kind of compelling or mandatory type of requirement? How do you

23   interpret words along those lines, since this is a policy statement and not a

24   regulation?

1   LEE COX: I'll start, if you don't mind. I think it's already a

2   requirement. And I think we've been doing it, not specific to the language that's

3   in this policy statement. But if you look at all the traits; if you look at your internal

4   IMPEP, the audit that goes to all the Agreement States, you'll see personal

5   responsibility in attitudes. You're already looking for that, making sure that the

6   Agreement States are auditing and inspecting their licensees for processes and

7   procedures, continuous learning, leadership safety behaviors, effective safety

8   communication. Every inspection starts with an entrance meeting with

9   leadership, with licensees. And all of this is discussed and then, excuse me, and

10 then followed up during exit meetings.

11   COMMISSIONER SVINICKI: So when, Lee, when you mentioned

12 the IMPEP process, I think you did indicate that perhaps after issuance of a

13 policy statement such as this, we would need to continue to look at the core

14 elements of the IMPEP, and for the life of me I always forget what that stands for.

15 But we all know what IMPEP is, right? It's the process by which we review

16 Agreement State programs and also our own implementation of the program. Do

17 you see that there would, are there immediate things that come to mind to you, in

18 terms of how those IMPEP reviews are done that we would need to modify

19 immediately, to make that implementation consistent with this policy statement?

20 I can't think of any right now. But do you think of any?

21   LEE COX: Not really. But I think staff, and staff is here, and can

22 back me up on this or not, is that I believe they're looking at IMPEP right now

23 with George Pangburn and the rest of the staff, looking for ways to improve and

24 make changes.

1   COMMISSIONER SVINICKI: Okay, thank you. Thank you, Mr.

2 Chairman.

3   CHAIRMAN JACZKO: Well again, I don't have any additional

4 questions. Again I want to thank all of you for being here, providing your insights.

5 I think it is very heartening to hear that after this long process that I think, almost

6 without exception, everyone seems to be in agreement with the language in the

7 policy statement itself, and the need to have that finalized. Obviously there are

8 issues and questions and challenges as we go forward from there.

9   But again, I think it is a unique situation to have such agreement

10 among such a diverse group of individuals. And I think a lot of that credit goes to

11 certainly the work of all the people who participated, both the staff and the

12 stakeholders. So again, I want to thank you for that. And we certainly hope that

13 you'll continue to be as engaged as you have been, because I think that's part of

14 what has made this such a successful process. So thank you for that. And with

15 that we'll take a quick five-minute break.

16 [break]

17   BRUCE THOMADSEN: I'm going to be presenting the comments

18 from the Advisory Commission on Medical Uses of Isotopes on the proposed

19 Safety Culture. To start with, the Advisory Committee has reviewed the NRC

20 staff's draft Safety Culture policy statement and would like to commend the staff

21 for its efforts. The Committee agrees that the nuclear radioactive material safety

22 and security are important issues influenced by the traits that define a positive

23 Safety Culture in the workplace. Safety Culture policy can be a nebulous

24 concept with many possible interpretations. However, the draft policy statement

25 is well written, highly thoughtful, appropriately balanced against competing

1   priorities in the work place within a complex regulatory framework and

2   considerate of public comments.

3   The ACMUI has some concerns about the policy statement. The

4   first is the completeness of the trait list. While good, the list of traits is not

5   exhaustive, there are many other traits of organizations with Safety Cultures

6   which are not included. For example, expecting that failures will happen and not

7   trusting that everybody will do their jobs. The policy statement does recognize

8   the existence of the other traits or other traits -- the necessity of traits. Also, all

9   the traits are good. An organization need not exhibit the traits to be safe. For

10   example, an organization without trust or respect can and likely would establish

11   procedures with layers of redundancy, possibly automatic to prevent errors since

12   leaders would have no trust that the workers would execute their jobs correctly.

13   The values of traits -- safety is easiest and most natural in an organization that

14   exhibits and inherently values such traits. That is why publicizing them would be

15   a good educational enterprise.

16   A positive Safety Culture is in the nature of an organization and

17   cannot be forced on an organization. While practices can be imposed, forcing

18   practices that appear as good traits likely will not have the same effect as if the

19   organization developed them naturally. Forcing practices that appear as good

20   traits can be counterproductive if it uses resources that could be devoted to

21   actual safety practices. Forcing good behavior can be productive and may

22   change practices and possibly eventually culture. And this is a concept that runs

23   back well over 1,000 years that you can change values by changing practices.

24   For example, the timeout before procedures forced by the joint Commission has

25   lead to the practice becoming almost routine, without thought. This may not have

1   worked as quickly by trying to change the culture first as opposed to the practice.

2   Given the last points, the statement in the policy, quote, "These traits are not

3   necessarily inspectable and were not developed for that purpose," unquote,

4   should be remembered into the future. Thank you.

5   CHAIRMAN JACZKO: I will now turn to Bill Borchardt for the staff

6   presentation.

7   R. WILLIAM BORCHARDT: Good afternoon. Oh behalf of the

8   staff, I'd just like to acknowledge and thank all of the stakeholders for their very

9   valuable contribution to the development of this proposed policy. And I

10   appreciate their being here -- many of them being here today for this Commission

11   meeting. And I'd also like to acknowledge and congratulate my colleagues at the

12   table with me and the many other offices in the NRC staff that worked on this for

13   a number of years. I think they exhibited a very open and collaborative work

14   environment in the way that they approached this and really came out with a very

15   top notch product. Andy's going to begin the briefing.

16   ANDY CAMPBELL: Thank you, Bill. Chairman, Commissioners,

17   we are pleased to be able to brief you on the proposed Safety Culture policy

18   statement and the progress we've made since we last briefed the Commission in

19   March, 2010. There are several thoughts I'd like to emphasize to initiate staff's

20   presentation. The development of this policy statement represents about three

21   years of effort by NRC staff from across the agency. This effort has included

22   extensive outreach by the staff to stakeholders representing all aspects of our

23   regulated communities and our Agreement States partners. We wish to

24   acknowledge the high level of collaborative work, as Bill mentioned, on the part

25   of many NRC staff managers who have supported this effort including those who

1   served on the Safety Culture Steering Committee, the Safety Culture Working

2   Group, as well as the administrative staff.

3   Although they are not at the table here today, they have been

4   significant contributors to developing the policy statement we are presenting to

5   the Commission and they will continue to be involved after Commission action.

6   Also, we would like to acknowledge great support from our external stakeholders

7   during the development of the proposed policy statement. External stakeholders,

8   as you heard earlier this afternoon representing our different regulated

9   communities have been fully engaged in this process of developing a policy

10   statement. They have played a key role in developing the definition and the traits

11   that will form the basis for continuing efforts to develop a common language.

12   Lastly, the stakeholders desire to maintain a close working relationship with the

13   staff after Commission action on the policy statement. The NRC staff is poised to

14   support requests, deal with questions that may arise, address those questions,

15   and work with stakeholders in developing a common language. The purpose of

16   this briefing is to focus on the development of the final Safety Culture policy

17   statement, which will be the focus. Now I'll turn the presentation over to Dave

18   Solorio for a brief discussion of the background to the proposed policy statement.

19   DAVE SOLORIO: Thank you, Andy. I'd like to offer my

20   appreciation to the Commission for the opportunity to brief you today on this

21   policy statement. The objective of the staff's presentation is to outline the

22   development of the proposed policy statement in response to Commission

23   direction. To support this goal, I want to provide you with a brief overview of

24   some of the background. And I'll be brief since we've heard some of it today

1 earlier. The Agency emphasized the importance of a positive Safety Culture as

2 early as 1989 in the Conduct of Operations Policy Statement.

3 In 1996, the Safety Conscious Work Environment Policy Statement

4 was put into place. The Agency undertook the current initiative to more fully

5 address Safety Culture concerns as a result of events attributed to weaknesses

6 in Safety Culture, for example, in 2002, the cavity issue with Davis-Besse, in

7 2007 inattentive security officers at Peach Bottom, and there were also a number

8 of materials related events that prompted the Commission to provide the

9 direction. In 2006, the Commission directed the staff to enhance the Reactor

10 Oversight Program as a first step. In 2008, the Commission asked the staff to

11 expand the NRC's policy of Safety Culture to address the unique aspects of

12 security to ensure the resulting policy is applicable to all licensees and certificate

13 holders to consider ways to increase attention to Safety Culture in the materials

14 area.

15 The staff responded with a Commission paper in May, 2009 with a

16 recommendation to publish one policy statement for both safety and security, to

17 include all licensees and certificate holders and to provide a strategy to increase

18 attention to Safety Culture in the materials area. In October, 2009 the

19 Commission provided additional direction to the staff for the development of a

20 policy statement. First, the staff was asked to continue to engage a broad range

21 of stakeholders, which you have heard we've done today, to seek opportunities

22 to comport terminology where possible, which has been a pretty successful

23 endeavor, and to consider including vendors and suppliers.

24 Since then, the staff has worked to develop a policy statement that

25 reflects our commitment to Safety Culture and the Commission's expectations

1   regarding the Safety Culture within the regulated community. We heard today

2   from several external stakeholders as well as just now from ACMUI. Their

3   comments underscore the level of engagement and involvement of the regulated

4   community and we thank them for their insights and participation in development

5   of this policy statement. Next, Diane Sieracki will discuss how the proposed

6   policy statement was developed including the development of the proposed

7   definition of traits of a positive Safety Culture. Then we'll hear from Mr. James

8   Firth who will discuss activities to increase attention to Safety Culture in the

9   materials area. Thank you.

10   DIANE SIERACKI: Thank you and good afternoon Chairman and

11   Commissioners. We did hear from our external stakeholders and I won't repeat

12   what they have already provided you. But I do want to just start with the fact that

13   we have had some direction that I want to provide you with what the staff has

14   done in response to that. Mr. Solorio has just mentioned that part of that

15   direction that we received in October, 2009 was to continue to engage our

16   stakeholders, to consider vendors and suppliers, and also to take opportunities to

17   comport terminology. You will hear what we did in response to that throughout

18   this presentation.

19   When we met the last time for a briefing was in March, 2010 and at

20   that time we had just finished a 120-day comment period through the Federal

21   Register Notice and received numerous responses to that comment period. We

22   had also just finished the three day workshop of which you heard extensive

23   comments on by our external stakeholders today. Following the briefing that we

24   provided to you in March, 2010, the staff through the program offices, many of

25   whom have supported this effort greatly throughout the past couple of years,

1   went out and did presentations to industry conferences and forums and spoke to

2   our external stakeholders at length. We held teleconferences et cetera. That

3   brought us to the fall time frame.

4   And with the input that we had from the workshop participants, as

5   well as all of the input from public comments and stakeholder feedback, the staff

6   thought it prudent to put out another revised draft Safety Culture Policy

7   Statement in the Federal Register. We did so in September, 2010 to allow

8   audience to provide comments again. During that 30 day comment period, we

9   also had a one day public meeting out at our Las Vegas hearing facility. And you

10   heard about that briefly in one of our panels previously as well. Another last

11   opportunity to get that feedback. Next slide please.

12   Based on all of that feedback and what had happened at the

13   workshop, there were a number of items that the working group and steering

14   committee, our program offices, engaged in a discussion on so that we could

15   make final resolutions that you will now see in the final statement of policy. First,

16   the 2010 workshop definitions and traits -- those were recommended, as you are

17   aware of, by the workshop. The staff took a look at those traits and we did make

18   just some very minor changes to clarify language basically to make them more

19   concise and brief. I'll give you an example. One of the traits that actually came

20   out of the workshop was personal responsibilities and attitudes. The staff

21   changed that to personal accountability. Not any substantive changes, but really

22   just for being concise and brief. With all of the support that we had, the staff also

23   supported those traits. And you will see those in the final statement of policy.

24   The treatment of security -- we mentioned that just very briefly

25   today. That was a topic that, as you know, our stakeholders did not want to see

1   security in the definition or the traits. And some of that was because topics such

2   as emergency preparedness and radiation protection felt that those stakeholders

3   had the same degree of emphasis on those areas as well. And since we couldn't

4   list all of them, it would be more appropriate to just include them in the safety

5   umbrella, if you will. The staff took a look at that and it did resonate with the

6   program offices who were participating on the steering committee.

7   And we decided that, "Yes we can keep security out of the

8   definition and traits, but it is still one of our pillars and we do still really need to

9   ensure that there is emphasis placed on security." So you will see a robust

10   discussion of security. It's the same discussion that was in the November '09

11   Federal Register Notice. We retained that and it is in the final statement of

12   policy. What we have done is we've added a preamble. It comes between the

13   definition and the traits and it gives our stakeholders the benefit of the

14   understanding that security is one of our pillars and security and safety are the

15   underlying principles of this statement of policy.

16   The next one, the inclusion of the traits themselves in the statement

17   of policy -- we had many stakeholders who supported including the traits within

18   the policy statement. And we did have some that didn't think it was a good idea.

19   And the premise under that was that it could lead to maybe some inflexibility. In

20   other words, if we were going to stay with the eight traits that we had been

21   putting out to the stakeholders throughout these last several months, that there

22   would not be flexibility in the addition of other traits, et cetera. So we did talk

23   about that. We thought that because the traits were brief and concise they

24   added some conceptual factors to the definition, we included them in the

25   statement of policy with some wording to the effect -- and you've seen some of it

1 on slides previously today -- that they are not an exhaustive list. They were not

2 made to be inspectable, but yet we would develop those at a tier three level. And

3 I'll get into that in a little bit -- an example of that as we move forward.

4 Policy versus regulation -- there were questions on the part of some

5 of our stakeholders is just what does it mean to have a policy statement. Is it

6 enforceable? What do we have to do with that? And so we thought we needed

7 to put some educational pieces out and we included that in our September 2010

8 FRN as well as the final statement of policy. It is the staff's recommendation at

9 this time that we stay with the policy statement that's supported by our external

10 stakeholders. We believe that it is a point for us to continue the dialogue for

11 common language and move along at the different paces that we need to with

12 regulated communities at where they are today. Next slide.

13 Vendors and suppliers -- we did receive input that it was important

14 to include our venders and suppliers. As you heard earlier today, the concern

15 with that is, how will that be managed in the future. The staff discussed that topic

16 and we decided that it was important to include them -- that it's important for

17 anyone related, involved in the regulated communities to have a positive Safety

18 Culture. What we will do with that and what the regulated community will do with

19 that as we move forward is something that still needs to be developed. One of

20 the action items that the reactor community did in response to the Safety Culture

21 -- Safety Conscious Work Environment Policy Statement was to include

22 language in their contracts so that those expectations would be in the realm of

23 their venders and suppliers.

24 Diversity of regulated entities -- you heard that today as well. One

25 size does not fit all. And we are working with small licensees as well as the

1 reactor community who's very far out front of this process. So we actually added

2 words into the policy statement that recognizes that diversity and that indicates

3 that we will take what you have done at this point. And this is an area to -- we

4 can take -- the regulated community can take the policy statement and build

5 upon what they already have in place.

6   Results of the INPO validation study -- we didn't talk about that very

7 extensively today. But suffice is to say it was a study that NEI did with INPO.

8 And we had our research organization here at the NRC providing some oversight

9 and a review of that process. Essentially, what they did is they developed

10 questions surrounding the traits developed by the workshop and they provided a

11 survey just specifically to the reactor community. The results of that validation

12 study did support the traits as developed by the workshop. There were some

13 different words that came out. I'll give you an example, "leadership, safety,

14 values and behaviors" is one of the traits. The study came up with management

15 behaviors and supervisor behaviors. When the staff discussed those we decided

16 that with the strong support that we got from our external stakeholders that we

17 would stay with the traits that were developed and had been supported all along

18 the way. We did add Questioning Attitude. You heard that today as well and we

19 had our stakeholders in support of that. It is now the ninth trait. One of the

20 options that we thought we could include under that Questioning Attitude was a

21 small discussion of complacency because the staff felt that that was very

22 important.

23   And the last issue that we needed to discuss was concerns with

24 next steps and I know you heard a lot of that today as well. What kind of

25 resources might it take, training, et cetera, et cetera? We view this as a policy

1 statement and a policy statement doesn't really get implemented. However,

2 there are next steps that we want to engage in and our regulated community

3 needs to -- will be using this as a spring board again for that common language

4 and getting it specific to their particular industry.

5   Next slide please. So everything that I've just discussed, the

6 resolution of those items is what you see in the final statement of policy. So the

7 definitions and traits form the workshop and as clarified by the staff are included

8 in the statement of policy. We have a robust discussion of safety. We have

9 added the preamble between the definition and the traits. Questioning Attitude

10 was added as the ninth trait and it does address complacency.

11   Next slide. We do recognize the diversity of our regulated entities

12 with some specific language to that effect. We have included venders and

13 suppliers. And we have added a caution to our stakeholders to consider

14 negative factors as they move forward and think about this concept of a positive

15 Safety Culture. That is one item that came up in our ACRS sub-committee

16 presentation. And staff discussed that and felt that it was important that we add

17 language right into the policy statement.

18   Next slide please. The next slide is the definition. You have it. I

19 don't need to read this to you. It's in our proposed final statement of policy and

20 endorsed and supported by our external stakeholders. Next slide.   The Safety

21 Culture policy traits are on this slide and the next and I want to get to -- normally,

22 I wouldn't read these to you. But I do want you to understand what is a little

23 descriptor of each one that was developed by the workshop participants. The

24 first one, leadership, values, safety values and actions, is leaders' demonstrated

25 commitment to safety in their decisions and behaviors. Personal accountability;

1   all individuals take personal responsibility for safety. Work processes; the

2   process of planning and controlling work activities is implemented so that safety

3   is maintained. Continuous learning; opportunities to learn about ways to ensure

4   safety are sought out and implemented.

5   Next slide please. Problem identification and resolution; issues

6   potentially impacting safety are promptly identified, fully evaluated and promptly

7   addressed and corrected commensurate with their significance. Environment for

8   raising concerns; a safety conscious work environment is maintained where

9   personnel feel free to raise safety concerns without fear of retaliation,

10 intimidation, harassment or discrimination. Respectful work -- I'm sorry --

11 effective safety communication; communications maintain a focus on safety.

12 Respectful work environment, trust and respect permeate the organization. And

13 finally, Questioning Attitude, individuals avoid complacency and continuously

14 challenge existing conditions and activities in order to identify discrepancies that

15 might result in error or inappropriate action.

16   Next slide please. This is a pictorial of really how -- and you've

17 heard the term traits a couple of times today. Tier one is really the overall

18 nuclear safety definition. Tier two is the descriptor, which you've just heard me

19 read and those are the traits. Tier three would be if our regulated entities choose

20 to continue along this process and they want to make them specific to their own

21 industry, they would flesh those out to make them meaningful for their industry.

22 You heard Mr. Buckley indicate that patient safety is something that's very

23 important to their particular industry. That would come under this tier three and

24 flush out the traits above it.

1   Next slide please. An example of that -- we used a process very

2   similar to affinity mapping when the stakeholders met at the workshop in

3   February. And those expert attendees for their particular fields came up with

4   what they considered important aspects of a positive Safety Culture. Those

5   aspects were then binned and then they were labeled. And that's how you

6   ended up with the traits. This same type of exercise is what our regulated

7   communities could engage in as they get into that tier three and flesh out what

8   those traits mean for their individual industries. So for example, the leadership

9   trait -- and there were upwards of 50 to 60 inputs to this. I'll just give you a

10   couple. Management in the field ensuring standards are met. Actions match

11   words. Next slide; positive reinforcement used to reinforce desired positive

12   nuclear safety behaviors. Schedules are realistic and do not challenge safety

13   standards. So it gives you an idea of how that was put together and what our

14   stakeholders can use going forward.

15   Slide 15 please. So we really do feel -- the staff feels that this is a

16   good point for us to provide a platform for common language to continue. Upon

17   endorsement of the Safety Culture Policy Statement by the Commission, the staff

18   is ready to continue outreach with our stakeholders, if they choose to have us

19   involved. We would continue working with the licensees in Agreement States

20   and we would consider providing education presentations and holding

21   workshops. And now I'd like to turn it over to James Firth. He will give you a

22   little more detail on increasing attention to Safety Culture in the materials area.

23   JAMES FIRTH: Slide 17 please. When we provided the draft

24   policy statement to the Commission, we indicated we'd continue to develop to a

25   strategy to accomplish the Commission's objectives to increase the attention to

1   Safety Culture in materials area. And to update the Commission on progress for

2   determining how stakeholder involvement could most effectively be used to

3   address Safety Culture for all NRC and Agreement State licensees and

4   certificate holders. We committed to provide the Commission with our

5   recommendations when we provide a draft policy statement for Commission

6   consideration. This is being provided separately from SECY-11-0005.

7   An outcome of the May, 2009 Commission briefing on Safety

8   Culture was for the staff to provide you a periodic update on the progress of

9   material licensees in addressing Safety Culture.   We believe that increasing the

10   awareness of Safety Culture and its importance of the safe use of radioactive

11   materials is one step towards increasing the attention to Safety Culture in the

12   materials area. We use a process of developing a policy statement in common

13   terminology to further our efforts of increasing the attention to Safety Culture.

14   Next slide please. We have placed emphasis on reaching out to

15   our stakeholders and involving them throughout the development of the policy

16   statement. Diane Sieracki has already mentioned some of the outreach that

17   we've conducted as we've proceeded from the draft policy statement to our

18   proposed final policy statement. I will be providing some additional background

19   about our outreach activities with an emphasis on outreach to stakeholders in the

20   materials area. We continue in our efforts to engage the full range of material

21   users and the development of the policy statement, increased awareness of

22   Safety Culture, and increase attention to Safety Culture in the materials area.

23   We will continue to engage the Agreement States and will present

24   that information on Safety Culture at various forums. We believe that the

25   significant amount of public outreach during the development of the proposed

1   policy statement which included discussing Safety Culture at more than 20 public

2   meetings, has contributed to the staff's progress in achieving the Commission's

3   objective of increasing attention to Safety Culture in the materials area.

4   The approach that we took with the February, 2010 workshop,

5   engaging stakeholders in the meeting, planning and empowering stakeholder

6   panel in the meeting of participants to develop the common terminology helped

7   to allow stakeholders to reconcile differences in their needs. And I think one

8   indication of that is what you heard in the two previous panels. A number of

9   licensees, certificate holders and other stakeholders have been exposed to and

10   may be using other definitions of Safety Culture and terminology. So we sought

11   to engage the receptiveness of our stakeholders to the common terminology.

12   First, we discussed at public meetings during the summer of 2010.

13   We also used the September 2010 Federal Register Notice and public meeting to

14   discuss the terminology. We used the Federal Register Notice as a means for

15   providing those licensees and certificate holders that were unable to attend the

16   public meeting an opportunity to express their views on the common terminology.

17   We believe that a participatory involvement of the development of common

18   terminology has increased the prospects for the terminology to be embraced and

19   used by our stakeholders.

20   During the time spent developing the final policy statement, the

21   external panel members at the February, 2010 workshop who talked with others

22   in their area of practice and have made contributions in public meetings that have

23   helped raise the profile of Safety Culture. A number of organizations have either

24   cosponsored sessions on Safety Culture, or invited NRC to speak on Safety

25   Culture at their conferences. This type of stakeholder involvement has helped to

1   increase the attention to Safety Culture among our licensees and certificate

2   holders. Additional opportunities for stakeholder involvement will emerge during

3   our continuing efforts to increase attention to Safety Culture.

4   Next slide please. We have worked to develop the policy

5   statement. We have sought to increase the awareness of the importance of

6   Safety Culture among our licensees and certificate holders and among the

7   Agreement States and the Agreement State licensees. We called each radiation

8   control program director to discuss our Safety Culture efforts. This effort has

9   contributed to getting information on Safety Culture to Agreement State

10   licensees. We have discussed Safety Culture and the development of the policy

11   statement in numerous FSME licensee newsletters, worked with Agreement

12   States to share information on Safety Culture with their licensees, and given

13   presentations at public meetings. We discussed Safety Culture, as I mentioned

14   before, at more than 20 different public meetings during the development of the

15   policy statement with a majority of these meetings reaching the materials

16   community. The NRC and Agreement States have been providing information on

17   Safety Culture to licensees during materials inspections such as entrance and

18   exit interviews. We plan to continue to use the same types of approaches that

19   we've been using to increase the attention to Safety Culture in the materials area

20   and will continue to work with the Agreement States to reach Agreement State

21   licensees. This includes efforts to increase the awareness of the importance of

22   positive Safety Culture to safe performance.

23   As we evaluate the oversight program for fuel cycle facilities,

24   independent spent fuel storage installations, and cast vendors, we'll work to

25   understand what those licensees and certificate holders are doing to maintain a

1   positive Safety Culture. We'll then consider how best to consider these activities

2   when making changes to our oversight programs to increase the attention to

3   Safety Culture. This will be consistent with Commission direction on the revision

4   to the fuel cycle oversight process and the evaluation of extended storage and

5   transportation of spent fuel.

6   We'll be introducing the concept of Safety Culture into documents

7   that will be used by licensees such as the consolidated guidance about material

8   licenses or NUREG-1556 that will reach a wide licensee audience. Licensees

9   and other stakeholders will have an opportunity to comment of the revised

10 guidance. We plan to continue to provide information on Safety Culture to

11 licensees during inspections and to incorporate Safety Culture into discussions

12 with individual licensees during inspections. We'll also continue to look for other

13 opportunities to increase the attention to Safety Culture among material

14 licensees and continue to involve our stakeholders. As organizations embark on

15 efforts to develop tools or standards that can be used that can favorably

16 influence licensee efforts to develop a positive Safety Culture, there may be

17 opportunities for NRC to contribute by providing our experiences and insights on

18 Safety Culture. One such opportunity is the International Radiation Protection

19 Association effort to develop documents in support of a radiation protection

20 culture.

21   Next slide, please, slide 20. As we proceeded with the

22 development of the final policy statement, we've continued to engage the

23 Agreement States and have asked them to share information on Safety Culture

24 and the development of the policy statement with their licensees. Nearly every

25 state has shared information on Safety Culture, and states have discussed

1   Safety Culture with their licensees. We are very pleased with the

2   responsiveness of the Agreement States in providing the information to their

3   licensees and believe that their efforts have contributed to the goal of increasing

4   attention to Safety Culture in the materials area. We plan to provide the final

5   policy statement to the Agreement States and will ask them to share the final

6   policy statement with their licensees.

7   We're continuing to work with the Agreement States to increase the

8   awareness of Safety Culture by their licensees. We plan to continue discussing

9   Safety Culture with Agreement States in our periodic telephone calls with the

10   Organization of Agreement States and the Conference of Radiation Control

11   Program Directors.

12   We also, in discussing the progress in material licensees in

13   addressing Safety Culture, we also want to provide some information on

14   progress that we're seeing material licensees make in addressing Safety Culture.

15   We've seen some progress in the engagement of the material licensees in the

16   development of the policy statement and the awareness of Safety Culture that

17   they are demonstrating. At this stage in our efforts to increase awareness of the

18   Safety Culture among material licensees, we're also including organizations that

19   represent the material licensees when gauging their progress. An indicator of the

20   engagement of the materials community is that the majority of comments

21   received on the policy statement and the revised draft policy statement included

22   a materials focus.

23   Also our success in discussing Safety Culture at the more than 20

24   public meetings is attributable in part to the engagement of the Agreement

25   States, licensees, and organizations. For example, the interest of the Health

1   Physics Society in Safety Culture allowed us to co-sponsor a special session on

2   Safety Culture with the Health Physics Society at their annual meeting. Also, we

3   gave invited presentations at the annual meetings of the American College of

4   Medical Physics and the American Association of Physicists in Medicine. In

5   addition, we have had substantive discussions with stakeholders at NRC-

6   sponsored conferences including the Fuel Cycle Information Exchange and the

7   Spent Fuel Storage and Transportation Licensing Conference.

8   Safety culture is also being raised by our stakeholders at topics and meetings

9   where Safety Culture is not specifically on the agenda for the meeting. For

10   example, at meetings on potential changes to NRC Radiation Protection

11   Regulations and Guidance, Safety Culture was raised in the context of the

12   medical use of isotopes, use of portable gauges, and radiography.

13   Dave Solorio will now provide the closing remarks.

14   DAVE SOLORIO: Thanks, James.

15   We have three key messages we'd like to leave you with today. The

16   development of the proposed policy statement represents nearly three years of

17   effort. It included extensive outreach as you've heard today and participation and

18   contributes to enhancing safety and security. Also, the policy statement is

19   responsive to Commission direction and shareholders representing our different

20   regulated communities widely endorse the definition traits that were developed at

21   every workshop and are now included in the policy statement -- proposed policy

22   statement. Lastly, stakeholders have requested support from the staff as they

23   attempt to utilize the policy statement to be involved -- and to be involved in any

24   further activities down the road once the Commission has take action.

1   Next slide. Looking ahead, we request Commission approval to

2   publish the proposed policy statement. As you've heard from our external

3   stakeholders, those who indicated an interest in engaging in tier three activities

4   have asked for our support. We're willing to do that -- Office of Enforcement and

5   the Program Office staff. We also anticipate the Office of Enforcement will be

6   supporting the program offices going forward as they might interact with their

7   licensee categories and we'll support external stakeholders any way we can.

8   Thank you.

9   R. WILLIAM BORCHARDT: That concludes the staff's

10   presentation.

11   COMMISSIONER APOSTOLAKIS: Thank you. Can we go to slide

12   number 9 of the staff's presentation? I'd like to ask Ms. Sieracki, what important

13   element that you would like to see in the definition am I taking away if I rephrase

14   this as follows. Nuclear Safety Culture is a set of behaviors and I'm taking out

15   core values and do you think that this is going to be a fatal flaw to the definition

16   or something important will be taken away?

17   DIANE SIERACKI: I think with the fact that we had so many

18   diverse representatives on the stakeholder panel in February and they came

19   around to this definition with a consensus and our extensive outreach efforts

20   have supported that, I believe that it should be kept in. I think that nuclear Safety

21   Culture, culture itself is -- does not really lend itself to be inspectable. I mean,

22   there are certainly performance-based areas that we can look at. So I think

23   having values in there with behaviors, that's what culture's all about. It consists

24   of values and behaviors and I think at a policy statement level and the support

25   that we got for this, I think it needs to stay in.

1   COMMISSIONER APOSTOLAKIS: Well, if the behaviors result

2   from a collective commitment, what does commitment mean? They do have

3   values that is why the behaviors are good. Is a commitment, the collective

4   commitment means it's different from values that these leaders and individuals

5   have? Are we producing something that they already have?

6   DIANE SIERACKI: What was meant by that piece of that definition

7   -- I was actually a panel member representing Dominion at the time, so I was at

8   the workshop in an entirely different role -- and part of what we discussed on a

9   collective commitment was that even though leaders really have to walk the talk

10   and bring a culture into the organization, then it's a commitment by both leaders

11   and the individuals on site and that's how that came in. So really, everybody

12   there has to commit -- that personal accountability means leaders as well as

13   individuals.

14   COMMISSIONER APOSTOLAKIS: But in order to have a

15   commitment, I have to have the values first.

16   DIANE SIERACKI: And that's why we talked --

17   COMMISSIONER APOSTOLAKIS: -- something that goes against

18   my values, don't I?

19   DIANE SIERACKI: No, but I think -- and this is just me talking -- I

20   think in an organization, the values of an organization, you tend to hire people

21   who embody some of those values. It's just a part of human nature. I think

22   values, if you spread them, walk the talk -- you will probably always have one or

23   two people that don't come on board with almost anything that you do. But

24   values of an organization, just like at the NRC, those values, we talk about them,

25   they're on our Web page, we speak about them in meetings and those are things

1   that we need to embody as a member of that organization. And these values

2   that we're talking about are that safety is first. And that we need to embrace that

3   and I think it's appropriate to have values.

4   COMMISSIONER APOSTOLAKIS: -- saying that safety is first. If

5   we have a commitment to safety first because our values lead us to that.

6   Anyway, I think we have exhausted this. Do you think there's a definition of a

7   positive Safety Culture?

8   DIANE SIERACKI: In my opinion, a positive Safety Culture are

9   when those attributes that we've talked about or those traits we've talked about

10   are present in an organization. Now, you can always take something that's the

11   flip side of that. You know, if you have good communications, what is good

12   communications? Effective so that it comes down from the top and if I ask -- if

13   I'm in a nuclear power plant and I ask a facilitation -- a facility worker down near

14   the bottom of the organization, let's say, do they understand where the

15   organization is going? Are the communications coming all the way through the

16   layers? That to me would be good communication that people know where

17   they're going. They're all heading in the same direction.

18   Now, communication if I come in and I'm asking questions and I've got

19   mechanics, I've got facility people, I've got electricians, I have HR people, they

20   don't have a clue as to what direction the organization is going in, then your

21   communications aren't good. Can that affect Safety Culture? I think it can

22   because people --

23   COMMISSIONER APOSTOLAKIS: But can it affect behavior?

24   Are these traits necessary or sufficient? I gather that they are not and Mr.

25   Thomadsen said the same thing. That, you know, this is not an exhaustive list.

1   So if I have a good culture, I don't know what that means, I don't necessarily

2   have to have all these traits and vice versa. So what really -- in my mind there is

3   no definition -- my colleagues -- my former colleagues on the ACRS have

4   experience in running plants are telling me they walk into a plant within an hour,

5   two hours they can tell whether the culture is good and I ask them why and they

6   say, "I don't know." So maybe we should acknowledge that, that there is no

7   definition and we have to take it from there. That's why I like the way the ROP

8   handled the cross-cutting issues and so on. After a certain observed behavior,

9   you point out to the licensee, "Hey, wait a minute now, this has happened four,

10   five times in your plant. Don't you think you can do something about it?" That

11   goes around the definition of what is good, how many times it should happen

12   until you take action and so on and so on. Judgment there was very crucial. So

13   it seems to me that it -- do you agree that there is no definition of positive Safety

14   Culture even though we talk about it all the time? And I talk about it myself.

15   DIANE SIERACKI: Do I agree that this is --

16   COMMISSIONER APOSTOLAKIS: Yes, there is no definition.

17   DIANE SIERACKI: That there is no definition?

18   COMMISSIONER APOSTOLAKIS: -- of a good Safety Culture or a

19   positive Safety Culture.

20   DIANE SIERACKI: No, I agree that there are good definitions of

21   Safety Culture and I think that this one supports that.

22   COMMISSIONER APOSTOLAKIS: There's more than one? Okay.

23   DIANE SIERACKI: Yes, and that's actually probably a true

24   statement because when the panelists got together, we looked at IAEA

25   characteristics and their definitions. We looked at the NRC components, INPO

1 principles, we discussed Dr. Schein -- there were members of the audience that

2 provided some presentations and there are a number of good definitions out

3 there and there are more traits than this panel came up with. But I think it's a

4 good starting point and I think because it has the commitment, the ownership of

5 that diverse group of individuals and they're committed to bringing this back into

6 their organization, I think that's the important piece.

7   And it will flesh out and probably include additional information in

8 that tier three that could address some of Dr. Thomadsen's concerns and Mr.

9 Buckley's concerns as we move along and get different things that are specific to

10 that industry. So is it the only one? No. And are those the only traits? No. But

11 it's a good place for us to start to get some common language so that all of our

12 regulated community is starting to speak the same language and understands

13 how important it is for a positive Safety Culture.

14   COMMISSIONER APOSTOLAKIS: The question was not phrased

15 well, but I agree with everything you said, but I still don't think there's a definition

16 of a positive culture. I'm sorry Mr. Chairman I went over.

17   CHAIRMAN JACZKO: Commissioner Magwood.

18   COMMISSIONER MAGWOOD: Thank you, Chairman. Let me first

19 sort of ruminate a little bit it seems to me that very often we hear how

20 government agencies do things and one group or another feels left out and feels

21 they weren't listened to or whatever and you get this quite often. I've actually

22 heard it about this agency from time to time since being here. So it is refreshing

23 to have a case where you have a parade of people -- maybe you set this up Bill,

24 I don't know, it just basically seemed to feel that they had a full say over a long

25 period of time, things were worked out in a very collegial way, and that there's a

1   product that a large number of people buy into and agree with. So it's

2   congratulations to those of you who facilitate that process. It's hard to get people

3   to come together on something as -- that has a little bit of an amorphous

4   character to it and to actually get any kind of a result, you know, even though

5   recognizing that there's always going to be ways of rewriting it or adjusting if you

6   wanted to. But that fact that you were able to make that or pull it off I thought

7   was something worth noting.

8   That said, also, and I think Mr. Cox from OAS, and I think some

9   things that you said, Diane, also alluded to one aspect of this which is kind of

10   interesting and maybe it is a bit of a default to Commissioner Apostolakis'

11   comments. And I get the sense that those of you who are participating in this

12   see the process of having achieved it as being perhaps as important if not more

13   important than the actual project itself and actually a comment on that. And if

14   that's the case, doesn't that necessitate some kind of ongoing communication,

15   outreach, workshopping type of activity to continue to get value from this. I'd

16   appreciate your thoughts on that.

17   DIANE SIERACKI: I don't know if I would agree with the statement

18   that the process was more important than the product itself. I think the process

19   lended itself to having a very good product and I think that's very important to the

20   participants. And I believe that with the extensive involvement -- and I was on

21   both sides of this -- it is very important. And I think going forward for those

22   communities who want us to be involved, and I think that's something that we

23   really do need to consider and to continue forward with. You heard George

24   Marshall talk about training and I think what he was trying to get at was that

25   some of these communities, like the reactors, are way ahead of the game. Let's

1 not reinvent the wheel. Let's share. Let's learn from each other. And I think

2 that's part of what he was trying to get at by, you know, it's ours, the regulated

3 communities. It's ours. We want to own it and we need to work together to do

4 that. So I think it will be a better process if they continue to work together and

5 continue to learn from each other. And if we can help to facilitate that and work

6 with them, I think that can only help.

7 　　　　　　COMMISSIONER MAGWOOD: Thank you. Let me sort of go to a

8 different aspect of this and ask Bill, perhaps Steve, to give us some thoughts on

9 this. Recognizing that a policy statement, and I think you phrased it this way,

10 isn't actually implemented and that it is, it exists and it does have some influence

11 on things going forward. But it's not as though there's some definitive next steps

12 that we have to take as a result of this. However, policy statements I've seen

13 since being with the agency do resonate on actions taken by the staff and by the

14 Commission down the road. And looking at perhaps other examples in history at

15 the Commission where there's been policy statements which are -- which don't

16 have definitive numbers or goals or something else like this, how have policy

17 statements like that influenced actions taken by the agency going forward? Can

18 you give us some feel for how this might up here and resonate in future actions,

19 future regulation?

20 　　　　　　R. WILLIAM BORCHARDT: I think policy statements in general

21 just end up becoming part of the -- I hate to say this -- but the culture of the

22 agency and the whole process in that we have an advanced reactor policy

23 statement. It talks about improved safety and new plants. Well, that's a clearly

24 understood expectation of the applicants, of the NRC staff, it's not a regulation,

25 but people are working together in order to try to meet that objective. We have a

1   PRA policy statement, same thing about using risk insights to the extent that we

2   can in our regulatory business. So it's not by itself a regulation. Sometimes it

3   leads to and influences the development of some more defined regulatory

4   activities. But I think it's -- having a clear statement of policy helps establish a

5   vector, if you will, on the general subject matter.

6   STEPHEN BURNS: I think Bill said it very well. It informs. It

7   provides context. It may nudge, which is interesting in terms of one philosophy of

8   regulation out there in terms of -- so the nudge factor. And so from that

9   standpoint, again, when faced square on with the question is it enforceable or not

10   enforceable, that in a sense may be the wrong question. It is what's important in

11   this sort of underlying context, underlying groundwork that it may provide for the

12   formation and the construction of what is the regulatory framework. The one, I

13   would say that Bill had mentioned, I think, the Safety Goal Policy Statement in

14   some ways is the same way. It's there. It informs how the Commission, how the

15   staff looks and I think at how the regulated industry looks at it.

16   COMMISSIONER MAGWOOD: Excellent. Thank you very much. Thank

17   you, Chairman.

18   CHAIRMAN JACZKO: Commissioner Ostendorff.

19   COMMISSIONER OSTENDORFF: Thanks Mr. Chairman. I'd like

20   to add my thanks to that of the other colleagues to all the staff that has worked

21   with the stakeholders and with your own teams to bring this to where it is today.

22   So we're appreciative of your efforts. I just wanted to thank ACMUI and Dr.

23   Thomadsen, for your engagement, involvement. I want to kind of piggy-back on

24   Commissioner Magwood here just to really understand where this goes. I'll give

25   you a contextual example. When I was at NNSA, we had subcontractors doing

1 electrical work at Los Alamos National Laboratory. And there were some

2 electrical safety incidents, and as part of the contract, we required that the

3 subcontractors and vendors coming in to provide electrical wiring support for

4 various buildings at Los Alamos, they had to sign an agreement that they had

5 conducted electrical safety training for their workers and that their workers were

6 required, were bonded, and had gone through proper licensing certification

7 training qualification requirements. That is a very specific example I'm giving

8 here intentionally. And we could do that because there was some actual

9 performance of work on site, they had to comply with existing OSHA

10 requirements for electrical safety.

11 　　　　　　I'm trying to go back to Commissioner Magwood's comment with

12 OGC and others to figure out what level, is there any expectation and I'm going

13 to kind of focus, maybe Dave, this to you and your Tier Three activities. I'm

14 trying to see as an end state where might some of these -- I know that Diane said

15 we don't really implement policy statements, but to the extent there's anything

16 that is implemented that's not in place right now for a licensee in any particular

17 area. Using my example, can you provide maybe some granularity as to where

18 you would see some of these potential practices coming into play that aren't

19 there right now?

20 　　　　　　DAVE SOLORIO: Yeah, sure. Well, actually, Bill and Mr. Burns

21 answered part of the question for me already in that, you know, we're not talking

22 about regulations, it's expectations so we really see this moving forward as a

23 multi-tiered approach. You know, some licensees are ready to move -- licensee

24 categories are ready to move right away. So, as you heard NEI earlier today, Mr.

25 Houghton speak -- they're ready to engage the staff on working on day-to-day

1   level of how you're going to roll this policy out. They already have ideas -- why?

2   Because already in the ROP there is the characteristics and attributes so now we

3   have the traits, so something akin to the attributes is what NEI wants to work on

4   going forward.

5   In the case of the materials licensees, I think we got a really good

6   appreciation from various speakers earlier today that it needs to be a more

7   gradual approach. There needs to be more time for education, training, to

8   answer questions. So I think it was your question of -- Kevin -- one of the prior

9   speakers about how this would work in a hospital environment. So, you know,

10 they -- in the case of the medical community, I think they've asked us very -- in

11 many ways and many forms, "We want you to be part of this as we try to work it

12 into what we already have." They've said through their public comments they

13 actually do a lot of what's in the Safety Culture Policy Statement right now. So

14 it's really a case of just trying to look at what they're doing, match it against what

15 the policy statement expectations are, and then making incremental changes

16 where needed.

17   R. WILLIAM BORCHARDT: And I think that what you would see

18 are company procedures or operating practices --

19   COMMISSIONER OSTENDORFF: That's what I'm getting at. I'm

20 trying to see what's going to change as far as how daily business is conducted.

21   R. WILLIAM BORCHARDT: And I think what you will end up

22 seeing as an explicit statement instructing an employee, maybe in a new

23 employee training program or in the operating procedures that they use to do

24 radiography, whatever it is, that talks explicitly about the kinds of behaviors that

25 are expected in order to have a questioning attitude, keep safety first, so

1 whereas now it might be kind of in the skill of the trade type of mindset, I think it

2 will be more explicitly documented with more clear expectations in the future.

3   JAMES FIRTH: If I could add --

4   COMMISSIONER OSTERDORFF: Yes.

5   JAMES FIRTH: I mean, on two levels. One is that as licensees if

6 they have, for example, a violation, if they looked at a root cause, having

7 information on a Safety Culture available, they might be then pinpointing root

8 causes that they might not otherwise have looked for. So are they being

9 thorough when they're looking at the identification, resolution. Also, for example,

10 the Joint Commission on Hospital Accreditation had issued a sentinel event alert

11 to its members in terms of looking at maintaining a climate of culture of safety

12 and they focused on intimidating and destructive behaviors so that people could

13 focus on addressing those problems that would allow them to perform more

14 safely. So it's also at a level of education as we go down the road in the

15 conversation so that if people are aware of the types of things that they want to

16 either avoid or the things that they want to foster to operate more safely, being

17 aware of that can help them actually take the steps. So you may see some at

18 that level as well.

19   COMMISSIONER OSTENDORFF: Thank you. I'm sorry, Andy,

20 did you have something else -- you were just saying --

21   ANDY CAMPBELL: Yeah, I was going to add that another aspect

22 of this is the staff engagement here at the NRC and some of the things the staff

23 may consider doing if you think back to the PRA policy statement. Following

24 that, we engaged in a lot of work on the staff's part and I was in NMSS at the

25 time dealing with risk informed performance based regulation and so just the fact

1   that we had a PRA policy statement that primarily looked to the reactor field, was

2   focused on the reactor field. In fact, the whole staff was looking at risk informed

3   performance based regulation in the materials area as well. So there's an effect

4   of the policy statement, Commission action on the policy statement, and then in

5   addition to working with our stakeholders, we'll be working internally with our

6   internal stakeholders to flesh out what does that mean and how do we deal with

7   that, so an aspect of a policy statement that's not a regulation, but does influence

8   how we regulate.

9   COMMISSIONER OSTENDORFF: Thank you. Thank you, Mr.

10   Chairman.

11   COMMISSIONER SVINICKI: Thank you all for your presentations

12   and to the Advisory Committee for the perspectives of the committee members

13   as well. I appreciate that. I'll build a little bit on what Commissioner Ostendorff

14   was asking, I think, and maybe we're all asking the same thing but a little bit

15   differently. We've talked about traits and other things, but another one of the

16   overall management gurus years ago was Stephen Covey and he had "Seven

17   Habits of Highly Effective People," one of which was, begin with the end in mind,

18   so perhaps I'm a little bit fixated on implementation, but I do think in making a

19   decision on issuing the policy statement, the Commission needs some insights

20   into the next steps. And Dave, you cover that in your tier three and you made a

21   comment, "I believe that there are stakeholders who" -- and this was your term --

22   "choose to move forward with tier three activities." What happens to

23   stakeholders and groups -- or classes of licensees that choose never to move

24   forward? What do we do to them in a regulatory sense?

1   DAVE SOLORIO: Maybe I misspoke in that I meant to say that

2   there are some who are really ready to move forward right away. For example,

3   NEI might, within months, they've already committed to make changes to the

4   industry guidance. In the case of other licensees, some materials licensees you

5   heard from today, they need more time to move forward, but they want to move

6   forward as you've heard from the Organization of Agreement States, for

7   example, they believe that they're doing already a lot of what is in the policy

8   statement and they look forward to -- they're looking forward to working with the

9   staff. But they're not maybe on the same time horizon as NEI is to move forward

10   within the next few months. That's kind of what I meant. So I don't really foresee

11   any of the groups that we've -- you've from today or that we've interacted with not

12   moving forward on this policy statement. They seem pretty all in support of it and

13   they want to do -- implement it at their pace.

14   COMMISSIONER SVINICKI: So was your comment more meant to

15   indicate that there will be a tailored approach or the implementation will look

16   different for different industry or some segments of the technology, but you're not

17   aware of any segments right now that are completely non-participating moving

18   forward?

19   DAVE SOLORIO: Yes, you said it much better than I did.

20   COMMISSIONER SVINICKI: Okay. I don't know that I said it any

21   better. I said it my own way which we always understand best when we rephrase

22   it. So if I go to our General Counsel's term about nudging -- so nudging is not

23   compelling, and that's the -- a little bit of distinction that I'm drawing here. We've

24   talked a lot about the policy statement and the regulation. And the proposed final

25   policy statement -- makes this statement, "While the option to consider

1   rulemaking exists, the Commission believes at this time that developing a policy

2   statement is a more effective way to engage stakeholders." I might direct this

3   first to Mr. Borchardt, but what would be the set of circumstances that the staff

4   would observe that would cause it to come to the Commission to recommend

5   rulemaking?

6   R. WILLIAM BORCHARDT: I would say operating experience and

7   in a general term through either licensee-reported events or through inspection

8   activities we develop a trend within a segment within one of the industries that

9   this was an area not being adequately addressed and that we needed to propose

10 a regulation in order to mandate Safety Culture activities. Then that's when we

11 would engage the Commission to head down that road.

12   COMMISSIONER SVINICKI: And I know this is challenging, so

13 we're talking hypothetically, but let's just say that we were talking about the

14 power reactor community. NRC, the staff engages in an annual assessment of

15 the effectiveness of the ROP, and the Commission looks at that and receives a

16 paper on that annually. Are you indicating that staff, instead of proposing a set of

17 changes to the ROP, might do something separate and distinct under the rubric

18 of Safety Culture as opposed to going to our regulations as they exist and looking

19 for deficiencies there that might be something we could tighten in, you know, Part

20 50 or something that would direct in a much more narrow and could address in a

21 more narrow and direct way whatever it is we're observing in terms of operating

22 experience?

23   R. WILLIAM BORCHARDT: Well, my personal feel is that there is

24 sufficient regulatory coverage in the power reactor in Part 50 regulations along

25 with the construct of the ROP and then now you take the recent industry initiative

1   that we can adequately and fully address Safety Culture for operating reactors.

2   That same degree of robustness does not exist for every other licensee type and

3   --

4   COMMISSIONER SVINICKI: And I take that, but I think what I'm

5   challenging here is that as -- to use the slogan that we use so much -- but as a

6   risk-informed, performance-based regulator, it just seems to me oddly tangential

7   to come at a deficiency in our regulations through regulating culture as opposed

8   to looking at our performance-based, risk-informed regulations and addressing

9   whatever if we've got operating experience that indicates something that seems

10   so much more direct to me than promulgating a regulation on culture. I don't --

11   how do you react to that?

12   R. WILLIAM BORCHARDT: I think one of the benefits of having a

13   Safety Culture is that it's a defense in depth to the regulations, that sometimes

14   you can't foresee every single event and every single alignment of

15   circumstances. And we rely on the licensee and the licensee's employees for the

16   ultimate safety of the conduct of their activities. And one of the best ways of

17   fostering that kind of behavior is to have a robust Safety Culture.

18   COMMISSIONER SVINICKI: And you're doing a good job of

19   defending the Safety Culture of regulation, but I'll go at it one other way as to say

20   that, you know, would you agree that if we can't promulgate something a bit more

21   specific and we have to get at specific operating challenges through culture and

22   values that that might suggest, as a regulator, we are uninformed about some

23   area or there's some knowledge that we need to have -- would you agree that,

24   you know, the more direct route is probably -- I think what you're saying is that

25   you can do both, but isn't it necessary to try to get more narrowly at something

1   that we need to measure and control and enforce much more directly than

2   culture and values?

3   R. WILLIAM BORCHARDT: If I'm following your line correctly, I

4   think what would happen is we're starting to talk about events within a particular

5   type of licensee or particular regulated activity and if we were to do that, then we

6   might have ten different Safety Culture statements because of the unique

7   aspects. With the tasking and what I think was very successfully done here was

8   having a very high level, broad description that can cover all licensee types. But

9   if we were to go to each individual licensee, it might be different. In fact, that's

10 why you have a tier three approach to get into the specific details of different

11 licensees. If there were technical deficiencies, safety issues identified through

12 operating experience or inspection activities unique to a particular licensee type,

13 then clearly we'd go after the technical regulation and not try to --

14   COMMISSIONER SVINICKI: Okay, and I didn't want to use

15 ridiculous examples, but I'm not -- really wasn't -- that was where I was getting to.

16 If you have an issue with, you know, containment, sump screen clogging, you

17 don't issue a regulation that says, "I need you to value not having your screen

18 clog better than you do now." I think what you do is you try to regulate to fix that

19 specific issue and I think, you know, what I don't -- I think some of the danger

20 here is to have a parallel structure where we would default to the more vague

21 and general statements as opposed to going after and regulating something that

22 needs to be regulated in a very specific way. So, and I don't know how you'll

23 balance. Obviously you'd want to keep both of them apace, but you wouldn't

24 ever want your default to be, "Well, I'm going to influence values and behaviors

25 instead of regulating the specifics of what I need to regulate."

1   R. WILLIAM BORCHARDT: Well, I mean, I'll go to the

2   Commission's principles of good regulations and that would certainly support

3   your argument about having specific technical requirements to address specific

4   technical issues and not trying to have it all fall under some kind of nebulous,

5   high-level policy statement.

6   COMMISSIONER SVINICKI: Or a regulation.

7   R. WILLIAM BORCHARDT: Or regulation.

8   COMMISSIONER SVINICKI: And again, that's where I began is

9   what would cause -- what are the circumstances that the staff would observe that

10   would cause them to say that we needed a regulation on Safety Culture and you

11   said operating experience. So I think at that we've come full circle and I'm over

12   my time. Thank you, Mr. Chairman.

13   CHAIRMAN JACZKO: Thank you, Commissioner Svinicki, I

14   appreciate it. I think this has been a very interesting discussion and I hope that

15   the Commission will continue as we look to finalize the policy statement. I think,

16   first of all, I would just say to my colleague on the left, Commissioner Apostolakis,

17   that -- on my left -- that I think values and behaviors are crucial in the statement I

18   think for the simple reason that not all entities with a good Safety Culture will

19   have necessarily the right values. Questioning attitude may be of value more

20   than a behavior. There may be circumstances in which as an organization, their

21   -- actions are taken that don't require the questions, that practices are

22   periodically revised and reviewed and staff doesn't need to do that. But as a

23   result, that they have a value to ensure that that is maintained in the future. So, I

24   think that there's a benefit to the value as well and I would just add that --

1   COMMISSIONER APOSTOLAKIS: Do Commissioners have to

2   respond to that? No?

3   [laughter]

4   CHAIRMAN JACZKO: To my statement or to --

5   COMMISSIONER APOSTOLAKIS: To your statement.

6   CHAIRMAN JACZKO: If I ask them to, they do.

7   [laughter]

8   The second point I would make to my colleague, Commissioner

9   Svinicki -- I think -- and I think it's been a very, very good discussion. I think

10 there -- and often it's a lot of this issue has come about -- that the question, that

11 the term of regulating Safety Culture has come up quite a bit. And I think we sell

12 ourselves short if we immediately dismiss that as an option. And I think it's a

13 very simple, perhaps one can consider very simple avenues here. Regulating

14 Safety Culture may mean that every three years a regulation is established as

15 every three years a licensee conducts a Safety Culture assessment. That is

16 regulating Safety Culture. It is not regulating the culture per se, but it's very

17 much the same way. For instance, we have requirements -- you can pull lots of

18 them in our regulations. We have a regulation against deliberate misconduct.

19 That is a regulation against activities and behaviors. It is not a technical

20 regulation. Now, these tend to be the more difficult kinds of regulations to

21 enforce and to take action against but our regulations are filled with activities of

22 this kind. And I don't even think in Safety Culture that if we were to regulate it

23 would be something even that directly relates to a behavior. But these things do

24 exist. It's not, you know, we have requirements for reporting. Licensees are

1   required to do reporting that is accurate and reliable. That is a regulation about

2   behaviors; it is not a regulation about technical issues.

3   So, you know, the issue could come up that we have licensees that

4   are continuing to exhibit poor behavior in the form of decreased performance and

5   the result of, you know, equipment that is not maintained properly. We have

6   regulations to ensure proper maintenance. If those are not being followed, the

7   Commission may find that it's inadvantageous to establish a regulation that

8   requires a periodic assessment of Safety Culture, for instance, as a way to get at

9   that behavior which is not getting achieved through our current relations for

10   maintenance. So I think that there are far more things here that are not as

11   challenging, even, as it may appear at the outset when we talk about this idea of

12   regulating Safety Culture. You know, as I said, there are behavioral regulations

13   in our regulations. That's part of what we do.

14   But, you know, as I said, I think the Commission certainly would

15   have some interesting discussions as we go forward and I think the point that I

16   hope we don't lose through all of this is we took a very diverse set of

17   stakeholders and we put them in several rooms at several periods of time and I

18   don't think we ever once locked the door and chained the door, and told them to

19   come up with something at the end. And they came together on something in a

20   very profound way. Now, I certainly respect Commissioner Apostolakis' views

21   about wanting to change the language, and certainly of all the rest of the

22   Commissioners will have interest in this. And I would just ask that we keep, in

23   the back of our minds, that we could all probably write this differently and,

24   perhaps, better. But there is value in the fact that so many others have agreed to

25   this.

1   And I think as, I would -- one aspect of the staff that I think, Diane,

2   of your comments, that I would disagree with. I think, Commissioner Magwood I

3   think made a profound point that there was value in this process here that may

4   be tremendously more important than the actual policy statement was the fact

5   that people got together and started talking about this and realized that across

6   this wide variety of stakeholders, there was pretty good agreement about the

7   kinds of things that we were talking about. That is not something that happens

8   all that often in anything that we do. So while I appreciate what your comments

9   were, I think, you know, I think perhaps what he was alluding to was something

10   higher here that we did in fact gain a lot just by already talking about these

11   things. And people started to ask, "Well, how would this apply to us?" That

12   means that people are starting to think about, "Well, you know, how are we doing

13   with Safety Culture?"

14   And so, you know, I think a lot of the good work of the policy

15   statement has already been accomplished. I think finalizing it is the last step. So

16   I think that we'll have very good discussions as we go forward and I hope that we

17   can finalize this and move on to those next steps because that's I think where the

18   interesting things will be. And I don't necessarily see anything – any regulations

19   immediately. I hope that we don't need that and that's not something that

20   happens. But I think there are ways to do it that are not perhaps as difficult as it

21   may appear when we really think about what kinds of things we can do.

22   So with that, I'm over my time. We have a few minutes left. I don't -- we do have

23   the SECY Paper in front of us. I don't know if -- there are things that people

24   would like to talk about, for inclusion in the SRM from this meeting, or was there

25   mostly issues for the vote on the paper?

1   COMMISSIONER APOSTOLAKIS: Well, I really don't want us to

2   lose sight of the fact that we are a performance-based agency. And I think when

3   you start talking about cultures and values and so on, it's very easy to forget that.

4   So I really want us to be focused on that. It's performance-based. We really

5   care about what people do and maybe not why they do it. So, I'm also -- I think

6   I'm going to comment on the implementation and what that means.

7   CHAIRMAN JACZKO: Okay. Anything else? Good. Well, we are

8   adjourned then. Thank you.

9   [Whereupon, the proceedings were concluded]