1 UNITED STATES OF AMERICA

2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON SAFETY CULTURE

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6 TUESDAY

7 MARCH 30, 2010

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9 The Commission convened at 9:30 a.m., the

10 Honorable Gregory B. Jaczko, Chairman, presiding.

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12 NUCLEAR REGULATORY COMMISSION

13 GREGORY B. JACZKO, CHAIRMAN

14 KRISTINE L. SVINICKI, COMMISSIONER

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1 **NRC STAFF – PANEL 1**

2 BRUCE MALLETT, DEDR

3 LAURA GERKE, OE

4 DAVE SOLORIO, OE

5 JAMES FIRTH, FSME

6 ALEX MURRAY, NTEU

7

8 **PANEL 2**

9 SHAWN SEELEY, CHAIR, ORGANIZATION OF

10 AGREEMENT STATES

11 WILLIAM WEBSTER, SENIOR VICE PRESIDENT, INDUSTRY

12 EVALUATION, INSTITUTE OF NUCLEAR POWER OPERATIONS

13 BILLIE PIRNER GARDE, ATTORNEY, CLIFFORD &

14 GARDE, LLP

15 DUANN THISTLETHWAITE, DIRECTOR

16 MANUFACTURING COMPLIANCE, TRIAD ISOTOPES, INC.

17 ROBERT LINK, MANAGER, ENVIRONMENTAL, HEALTH, SAFETY, &

18 LICENSING, AREVA

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1 P R O C E E D I N G

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6 CHAIRMAN JACZKO: Good morning.

7 We are in a period of transition at the

8 Commission.

9 So, we have several members who have been

10 confirmed and appointed to their positions, but not

11 yet sworn in.

12 So, we will eventually fill in the rest of

13 the seats.

14 Next time you see us there will be people

15 where there are microphones.

16 For now, we're just the two of us today.

17 Good morning everyone.

18 Today we are meeting to receive a briefing

19 on the agency safety culture initiatives.

20 One of those important issues that we will

21 be discussing today, not how we've dealt with

22 safety culture internally, but how we are dealing

1 with our external stakeholders.

2 And ultimately with the facilities that we

3 regulate and license.

4 The agency has increasingly focused on

5 safety culture in recent years for the simple

6 reason that we have found that a deteriorating

7 safety culture is often associated with safety

8 problems.

9 Sound rules and procedures are certainly

10 necessary to enhance and to satisfy our safety

11 goals, but the NRC and our licensees all need to

12 continually work to cultivate the type of open

13 collaborative organizational culture that will best

14 enable us to meet our safety and security goals.

15 I think the agenda today reflects our active

16 efforts to promote safety culture both here at the

17 NRC and with NRC Agreement State licensees and

18 certificate holders.

19 The NRC can take pride in the results of

20 our internal safety culture survey conducted by our

21 Inspector General.

22 It reported that the agency safety culture

1 and work climate scores are top-notch and compare
2 favorably with those of high-performing private
3 sector companies.
4 As always we can't rest on our successes
5 and have to strive for continuous improvement.
6 I look forward to hearing an update
7 from the staff on our ongoing efforts to implement
8 the internal safety culture task force
9 recommendations, as well as our follow-up actions
10 to the 2009 survey.
11 In terms of promoting safety culture within
12 the regulated community, we have made significant
13 progress towards developing a final revision of our
14 safety culture policy statement.
15 The draft statement makes clear that safety
16 culture is no less important to our materials
17 licensees than it is for reactor facilities, and
18 that security issues are an important component of
19 safety culture.
20 I want to recognize the tremendous work by
21 our staff and those public stakeholders who
22 participated throughout this process.

1 The staff held a public workshop on other
2 public meetings and solicited written comments
3 prior to developing the draft policy statement.
4 These efforts were a great success and the
5 Commission will benefit greatly from the extensive
6 public input in reaching a final decision on the
7 draft statement.
8 We will hear first this morning an update
9 from the staff on several issues and then from a
10 diverse panel stakeholders on our efforts to
11 promote safety culture.
12 I look forward to a very productive
13 meeting, and Commissioners Svinicki, would you like
14 to make any opening remarks?
15 COMMISSIONER SVINICKI: Yes, thank you, Mr.
16 Chairman.
17 This is obviously a very important topic
18 for all of the reasons that you have outlined.
19 I look forward to getting the staff's
20 update, and I do welcome all of our external
21 participants who traveled.
22 I appreciate them taking the time to

1 contribute to our meeting today. Thank you.

2 CHAIRMAN JACZKO: Bruce, I will turn it over to you.

3 MR. MALLETT: Thank you, Chairman Jaczko, and good

4 morning to you and good morning Commissioner Svinicki.

5 You will hear several briefings today, as

6 you indicated, talking about our efforts and

7 activities both from an external safety culture

8 aspect for licensees that we regulate and from an

9 internal safety culture aspect for us, ourselves.

10 We have several experts at the table on the

11 staff, and as you will hear on the following panels

12 there are several experts behind me that I think

13 will give you a very good diverse view of where we

14 are and where we stand with regard to both our

15 internal and external actions.

16 Before we start I want to make a few

17 comments.

18 The first one, I would echo what you said,

19 Chairman, we believe that a strong safety culture

20 or core values for an organization is essential to

21 any organization and how they perform, to perform

22 well.

1 In fact, it's essential for that
2 organization to drive the focus on safety and
3 security as a priority.
4 It is also essential for the leaders in
5 that organization to espouse to those core values
6 of the safety culture.
7 We're going to brief you, as I said, in
8 two areas.
9 With regard to internal safety culture, we
10 have very positive results from our 2009 Office of
11 the Inspector General Safety and Climate Survey,
12 and we're going to talk to you about that and how
13 we've used those.
14 As you mentioned, also, how we've used the
15 results of the task force to enhance our look at
16 the things and actions we need to do from an
17 internal aspect to support safety culture.
18 It has turned out that that's a very good
19 road map.
20 I would emphasize one key item.
21 We also are focusing on an open and
22 collaborative work environment on the internal

1 safety culture. We will talk to you about that.

2 Regarding external safety culture, I'll

3 mention three things. We have looked and gained

4 significant insights from licensees who have had

5 many issues with incidents and when you look back

6 at the characteristics that led to that, you do

7 gain insights almost from precursors to problems in

8 this area of safety culture.

9 We have been working with stakeholders, as

10 you said Chairman, we've gotten tremendous effort

11 from them and the staff in this area.

12 I think you will see that.

13 I think the biggest thing we have gained is

14 having a common understanding of what the

15 characteristics are of a good safety culture.

16 With that, I will turn it over to Roy

17 Zimmerman, our Director of Office Enforcement, who

18 will introduce our speakers and what we will tell

19 you about today.

20 MR. ZIMMERMAN: Thank you, Bruce.

21 I would like to provide a little bit more

22 granularity before the presenters

1 actually speak.

2 As has been indicated, we very much have

3 been looking forward to this opportunity to be able

4 update you on the progress we have been making on

5 both the internal and external safety culture

6 fronts.

7 The work that has been done, has been done

8 by many offices, is not being run out of one

9 particular office.

10 It takes a lot of offices together.

11 It's not just for the internal safety

12 culture either, it's the external safety culture as

13 well that we have a large number of internal

14 offices that are devoting a lot of good people and

15 a lot of good time to be able to make this into a

16 success.

17 I wanted to thank our partners for the

18 efforts on this.

19 It will be continuing through the year.

20 We, obviously, could not do this without

21 the other offices.

22 As we get into the presentations, Laura

1 Gerke, who is the Acting Senior Safety Culture
2 Manager is going to address a couple of areas for
3 us.
4 She is going to address the updates for the
5 internal safety culture steering committee, and she
6 is going to update us where we are on the IG safety
7 culture and climate survey and give an update for
8 those reports that came out last year.
9 Her focus will solely be on the internal
10 side.
11 Dave Solorio will then pick up.
12 He is a Branch Chief in the Office of
13 Enforcement, and he will also status staff efforts.
14 This time related to the draft policy
15 statement; where are we on that, how we move
16 forward, what types of comments did we get from the
17 public comment period that ended earlier in the
18 month.
19 As well as the efforts to try to come up
20 with a common definition and traits.
21 We have been working with our stakeholders.
22 We will talk about the February workshop and give

1 you an idea of the progress that has been made to
2 see if we can come up with a common definition the
3 NRC can use, that the industry can use, power
4 reactors, small radiographers, is there one size
5 that everybody can align on and are there
6 overarching traits that would apply to those
7 organizations before they cascade down into more
8 customized approach?
9 Then, Dave will be followed by James Firth
10 who is a Program Manager in the Office of Federal
11 and State Materials and Environmental Management
12 programs, also known as FSME, and he will be
13 discussing the outreach that we're doing with the
14 materials licensees in the Agreement States in
15 order to be able to ensure that safety culture is a
16 topic that is getting appropriately discussed, that
17 there is a full understanding of the initiative,
18 and to try to draw at as much of the materials folks
19 because they are such a large number and so
20 diverse, along with the support of the Agreement
21 States.
22 With that, let me turn to Laura Gerke to

1 start our presentation.

2 MS. GERKE: Good morning.

3 The purpose of my briefing today is

4 twofold.

5 I do want to provide an update on the

6 implementation of the recommendations from the

7 internal safety culture task force, which was

8 issued one year ago, and then I will also be

9 providing some details on the analysis of and

10 actions already taken in response to the OIG

11 survey.

12 Next slide, please.

13 Regarding the task force recommendations

14 there were five recommendations, and we have

15 already made at least some degree of progress on

16 all of them.

17 First, regarding incorporating safety

18 culture into the strategic plan.

19 We have been working with the strategic

20 plan workgroup, which will be revising the plan for

21 FY-11 through FY-15, and we are anticipating that

22 safety culture will be included in there as part of

1 the organizational excellence outcome and as the
2 text and more details of the strategic plan are
3 worked out through this year, we will be an active
4 participant to make sure that we have
5 organizational references to safety culture in
6 there.
7 Next, regarding training on internal safety
8 culture.
9 This is a two-pronged approach.
10 Training specifically on what safety
11 culture is, so we have piloted a course for
12 supervisors on culture and core values, and then we
13 have also been working with human resources on
14 including a component in their great new training
15 that they have -- onboarding training for brand-new
16 employees to make sure there's a safety culture
17 component in that.
18 In addition to doing specific safety
19 culture training, what we found from the task force
20 and then what we heard again from the safety
21 culture survey results is communication underlies
22 everything.

1 We really want to offer some more
2 opportunities to strengthen the interpersonal
3 communication skill set, particularly of first-line
4 supervisors.
5 HR's Leader's Academy already has a lot of
6 training in there, so we are going to take a fresh
7 look because this gets at the feedback we got that
8 employees wanted more feedback on performance
9 expectations, on how they were doing on the
10 performance, and how decisions are made.
11 So, that will all fill in to that
12 communication goal that we have, which all of that
13 underlies and strengthens safety culture.
14 Regarding improving our issue resolution
15 processes.
16 We have a contractor in place who has been
17 interviewing the owners of the various programs,
18 these are programs such as differing views,
19 NRR's corrective action program, the Regions Ask
20 Management, employee suggestion.
21 So, we have a number of programs out there
22 but we are not sure that there is really sharing of

1 best practices among them, or for using the same
2 terminology.
3 So the contractor is going to identify us
4 some gaps, some strengths, where we can work from
5 there and we are getting a report on that in April.
6 That will, hopefully, give us a roadmap for
7 actions to move forward on.
8 Next slide, please.
9 Establishing expectations for maintaining
10 policies and procedures.
11 This gets at office-level policies.
12 The agency has already undertaken updating
13 agency-level 1, such as management directives, but
14 this again during the task force, when we were data
15 gathering we heard particularly from new employees
16 that it is challenging for them when they come into
17 their jobs they want to go look at what guidance
18 there is to do their jobs. It is often quite out of
19 date and they would be then directed to go talk to
20 a staff member and get an oral history -- oral
21 presentation of how to do it.
22 That is one tool for knowledge management

1 and knowledge transfer, but we really need to
2 document what we have in place.
3 CFO has a number of different working
4 groups that are preparing for the Operating Plan for
5 FY-11, and we are going to work through there and
6 hopefully include a measure that will get us
7 started on the path, first to do a census of what
8 is out there because we think some of the guidance
9 we have there may not even be useful anymore so we
10 don't need it, and in other cases we need to get a
11 plan together to update what is out there and
12 equally important, to maintain these once we get
13 them updated.
14 We also need to just take a strategic look
15 at this because we think there needs to be greater
16 uniformity, because different offices call their
17 guidance different things.
18 We also have already heard from my first
19 meeting with the CFOs group last week, very useful
20 input, that this is quite resource intensive.
21 We will need to be taking a look at that,
22 but we are making a step there and we're positive

1 we can get something included in that Operating Plan for
2 next year.
3 Regarding the safety culture program
4 manager position, this is a new position just
5 created last October, the permanent holder is June
6 Cai who, thankfully, returns from maternity leave
7 next week.
8 So, she will renew efforts in that area,
9 but we share a vision for this position that it is
10 to provide a point of contact for the agency that
11 is a coordinating role.
12 However, we really do not want it to be
13 perceived as Office of Enforcement own safety
14 culture.
15 We really want to cultivate relationships
16 throughout the agency so that each office can be their
17 own grassroots cultivator, and we can do a better
18 job of sharing best practices and we need help from
19 that, we don't want it to be just OE's ownership of it.
20 MR. ZIMMERMAN: A moment of kibbitzing that Laura
21 made the comment about thankfully June will be back next
22 week, and I can understand that because she's been working

1 very hard.

2 We really couldn't have gotten it done

3 without Laura. She has done a tremendous job not

4 just within OE, but in spearheading this entire

5 initiative.

6 She came over on rotation from NRR. We were

7 very appreciative of that and she has done a great job.

8 MS. GERKE: Thank you. Then, turning to the safety culture

9 survey, yes our results were great and we had a good

10 response rate.

11 What we are doing, we've conducted a lot

12 of different analysis. I will describe that and

13 then I also want to describe how we translated that

14 analysis into actions because you can keep slicing

15 and dicing the survey in many fascinating ways, but

16 we finally do want to move forward and act on that

17 as well.

18 We have looked at the survey from the

19 agency-wide level, from office level, and some

20 offices can also take that down to the division

21 level.

22 Then we also looked at the results and

1 compared them with the kinds of themes that we
2 heard from the task force report last year.
3 We found that there were some new issues
4 that emerged from that, mainly because the survey
5 has a broader based approach.
6 It also echoed many of the themes that we
7 heard, such as the need for modeling the safety
8 culture by our leaders and the need for enhanced
9 communication, but the other themes that started to
10 emerge were things such as adequacy of computer
11 support, are different employees held to different
12 standards of ethical conduct, and what can we do to
13 do a better job of bringing employees together
14 since we are spread among different offices.
15 This gave us an approach to take of
16 additional analysis by conducting agency-wide focus
17 groups.
18 We wanted to better understand some of the
19 surveys, because the survey gives you a one point
20 of data but we don't exactly know what employees
21 meant by those responses.
22 We are in the process of conducting those

1 agency-wide focus groups, we've already conducted 12
2 we will have eight more conducted within the next
3 month, and then we will get the results of from
4 those in June.
5 While we were working on developing which
6 demographics we wanted to look at, what questions
7 we wanted to develop, we heard from a lot of
8 offices so already I think there is a good job of
9 collaboration with other offices on what they want
10 to see.
11 To quote one office Director, he said, "I need
12 to understand the results for the organization for
13 which I can exert the most influence."
14 So while they liked the idea of an agency-wide focus,
15 they really wanted office specific information.
16 Office of Enforcement is going to offer
17 service to those offices that are interested to
18 have facilitated discussions in the May/June time
19 frame on their own specific issues that they want
20 to explore.
21 That gives you an idea of the different
22 analysis we've done and then what have we actually

1 done to translate that into actions and moving
2 forward, and as a result of the senior leadership
3 meeting last November already there are themes
4 identified that the agency can start tackling.
5 Those are items such as communication where we
6 now have the EDO conducting the listening sessions,
7 knowledge management, we had a KM fair, so we've
8 already moved forward in those areas.
9 Another theme which Bruce mentioned, was
10 the open collaborative work environment.
11 That is something we already had in place
12 here, but we want a renewed focus on it.
13 In part, because that is going to improve
14 our decision-making as we do what we can to get
15 more employees voices heard earlier on in the
16 decision-making process.
17 This also will respond to the concern we
18 heard both on the survey and on the task force that
19 many administrative employees and those in
20 corporate support need some clarity on how the very
21 vital role they play contributes to the
22 accomplishment of our public health and safety

1 mission.

2 There will be more to come on that, there

3 has already been some effort.

4 Finally, office specific action plans in March,

5 offices submitted their own action plans where they

6 plan to act on those themes that they heard

7 emerging when they analyzed their data.

8 We hear a lot of good things in there of

9 having seminars periodically on the performance

10 management process, or looking at how they can

11 refine their roles and responsibilities.

12 It helps because it takes it down to the

13 office level.

14 Next slide, please.

15 So for next steps, certainly as we see our

16 internal safety culture program maturing, we will

17 be looking at what the outcome is from the external

18 policy statement efforts that you are going to hear

19 from the other panelists.

20 Again, we want to cultivate these agency

21 contacts in different offices.

22 We already have started that with the

1 development of these action plans, but we are going
2 to further strengthen that.
3 We also want to look at getting
4 relationships going with other agencies in the
5 Federal government.
6 We have already reached out to the
7 Department of Transportation and the National
8 Transportation Safety Board, because we think there
9 is some good ideas that we can share and learn from
10 in that arena.
11 Meanwhile, we will continue to implement
12 the task force recommendations and continue to act
13 on the survey data, and I would just end by saying
14 that this is a new program for the agency.
15 It is somewhat, a work in progress, but a
16 lot of progress has already been made.
17 Thank you.
18 MR. SOLORIO: Good morning, Chairman.
19 Good morning Commissioner.
20 I am Dave Solorio, I'm the Branch Chief in
21 the Concerns Resolution Branch in the Office of
22 Enforcement.

1 Next slide, please.

2 This morning I'm going to be providing you

3 with a status report, as well as information

4 addressing staff efforts to engage stakeholders in

5 the NRC safety culture initiative.

6 I will cover any new issues that have come

7 to light on the draft safety culture policy

8 statement, the efforts we have made on developing

9 common terminology and additionally, Mr. Firth will

10 discuss the efforts we've made to increase

11 attention in the materials area.

12 Also provide an update on the actions we

13 are taking in response to the two relevant Staff

14 Requirements Memorandums on this initiative.

15 Finally, I will discuss what we see as our

16 path forward in this initiative.

17 Next slide.

18 In 2008, the Commission initially directed

19 the staff to expand the Commission's policy

20 statement on safety culture.

21 The direction included concerted ways to

22 increase attention to safety culture in the

1 materials area, reach out to Agreement States, and
2 all licensees and certificate holders to consider
3 how stakeholder involvement can most effectively be
4 used to address safety culture, consider the unique
5 aspects of security.
6 Although we provided the Commission with
7 information in May of last year on the progress in
8 these areas, they are continuing focus of this
9 initiative.
10 For that reason we've included an update in
11 this briefing today.
12 Next slide.
13 In May 2009 in SECY-09-0075, the staff
14 provided recommendations for the development of a
15 draft safety culture policy statement in response
16 to the 2008 Staff Requirements Memorandum.
17 In October 2009, the Commission provided
18 additional direction to the staff regarding the
19 development of the safety culture policy statement.
20 The direction was to publish a draft safety
21 culture policy statement for public comment,
22 consider incorporating suppliers and vendors

1 into the draft safety culture policy statement, and
2 continue to engage a broad range of stakeholders
3 including the Agreement States with the interest
4 in nuclear safety, so that the resulting
5 policy statement benefited from
6 a spectrum of views and provides a necessary
7 foundation for safety culture for the nuclear
8 industry and to seek opportunities to comport to
9 safety culture terminology where possible of existing standards
10 and references utilized by those we regulate.
11 Next slide.
12 To address the Commission direction with respect to
13 ensuring the policy statement benefited from a
14 spectrum of views, we undertook a number of
15 initiatives on this slide.
16 First, we published a draft safety culture
17 policy statement from November to March of this
18 year, we provided informational briefing to the
19 ACRS in the fall of 2009, and held a public meeting
20 in the materials area to talk about safety culture.
21 We published an additional Federal Register
22 Notice and a meeting notice in order to get

1 stakeholder focus for participating in a public
2 workshop last month.
3 One purpose of the workshop was to get a
4 wide spectrum of views from a number of licensee
5 groups on a common safety culture terminology, and
6 the feedback from attendees we got was that it was
7 a pretty successful effort.
8 We'd already established an external
9 website on safety culture and we leveraged that
10 website by posting a lot of the information we used
11 to plan and prepare for the February workshop to
12 get focus on the safety culture policy statement by
13 licensees and others we reregulate.
14 With respect to materials, specific users
15 outreach, we undertook a
16 large number of activities
17 over the last few months to highlight the existence
18 of the draft safety culture policy statement as
19 well as to get their engagement in the February
20 workshop.
21 Mr. James Firth of FSME will speak on that
22 in more details in a few minutes.

1 Next slide.

2 In a Federal Register Notice dated

3 November 6, 2009, we published a draft safety

4 culture policy statement and the comment period

5 closed on March 1.

6 We provided some more time beyond the

7 additional 90 days that was directed by the

8 Commission, because we got feedback from

9 stakeholders that more time would be beneficial

10 following the February workshop.

11 In response to the November Federal

12 Register Notice there was about 50 individuals or

13 organizations that commented on the policy

14 statement.

15 The following are themes we read from the

16 comments. but I want to say these are preliminary

17 because we're still in the process of working with

18 program offices to figure out what it means to

19 everyone.

20 Most thought a policy statement should be

21 used rather than a regulation.

22 In particular, many Agreement States

1 supported a policy statement.

2 Most thought a policy statement is

3 acceptable at a high level.

4 Most were concerned with how a policy

5 statement would be implemented.

6 Next slide.

7 Most commenters said they preferred a

8 single safety culture definition applicable to all

9 licensees and certificate holders.

10 Some suggested the differences among

11 varying types of licensees would best be highlighted in

12 the traits.

13 Most were comfortable with the NRC's draft

14 safety culture definition; however, at the February

15 workshop, and in response to the Federal Register

16 Notice, a number of commenters said that they

17 prefer the NRC start with the workshop draft definition.

18 Finally most felt, including the February workshop

19 panelists, the term security and other aspects such

20 as quality assurance or radiation protection didn't

21 need to be included in the definition, because

22 these aspects were understood to be necessary for

1 protection of people and the environment.

2 Security was prominently highlighted in the

3 traits that the February workshop panelists came up

4 with though.

5 Next slide.

6 We wanted to highlight the February 2010

7 public workshop because it was a very significant

8 activity where we were able to accomplish several

9 objectives.

10 We obtained significant amount of input

11 from a wide spectrum of stakeholders.

12 And the parties we regulate made success in

13 comporting safety culture terminology.

14 To plan the workshop we established an

15 external workshop planning steering committee to

16 structure a workshop to facilitate interaction.

17 The group was composed of individuals from

18 the Organization of Agreement States, materials

19 uses both industrial and medical, power reactors

20 including NEI and INPO, fuel cycle, an Indian Tribe

21 member, and a member of the public.

22 Some of those are here today.

1 We tried to ensure that there was balance
2 representation among panel members.
3 Many of the individuals agreed also to
4 serve as panelists at the February workshop, and we
5 utilized the panelists as lightning rods to solicit
6 comments from their stakeholders also participating
7 in the workshop.
8 There was good cooperation by all parties
9 at the workshop and a healthy respect for differing
10 views.
11 We used technology to support remote
12 participation at the workshop because we understood
13 there were some that just couldn't make it.
14 Panel members were able to align on a safety
15 culture definition and traits.
16 Lastly, I want to recognize a tremendous
17 support from the EDO staff to the offices of NMSS,
18 NRR, NRO, FSME, Research, NSIR, Region IV, and
19 support staff from the Office of OIS and ADM for
20 their support in this workshop.
21 Their support greatly contributed to a
22 successful workshop.

1 Next slide.

2 This is the definition of the February

3 workshop that panel members

4 and other workshop attendees

5 were able to align on.

6 While some panel members said they could

7 make some changes if given a chance, all agreed

8 they could live with this definition.

9 Most panel members said they would prefer

10 the NRC start with this definition as a starting

11 point, rather than the NRC's draft definition.

12 Next slide, please.

13 In addition to the common safety culture

14 definition, the panelists were able to arrive at a

15 set of eight high-level traits to support a strong

16 safety culture.

17 We noted six of these traits aligned pretty

18 well with the NRC's draft safety culture policy

19 statement characteristics and INPO's principles.

20 All eight of these traits are outlined on

21 slides 19 and 20.

22 I want to highlight a little more

1 background on a couple of traits to give you a
2 better sense of how these traits were developed
3 from specific behaviors that the panelists felt
4 were critical for a positive safety culture.
5 Problem, resolution, and metrics.
6 A more detailed description is the
7 organization ensures the issues potentially
8 impacting safety and security are promptly
9 identified, fully evaluated, and promptly
10 addressed, and corrected commensurate with their
11 significance.
12 Processes and procedures.
13 Processes for planning and controlling work
14 activities were implemented such that safety is
15 maintained.
16 Encouraging report of problems.
17 The organization retains a safety conscious
18 work environment in which personnel feel free to
19 raise concerns without fear of retaliation.
20 Next slide.
21 Somewhat more interesting is that there
22 were two traits included on this slide that were

1 not included in the NRC's draft safety culture
2 policy statement characteristics or INPO's principles.
3 Effective safety communications and
4 respectful work environment.
5 Effective safety communications was added
6 to convey the thought that effective communication
7 is essential to maintain a focus on safety.
8 A respectful work environment was added to
9 convey the thought that trust and respect permeate
10 an organization with a strong safety culture.
11 I will conclude this part of the
12 presentation by recognizing the very outstanding
13 effort of the panelists at the workshop and working
14 together to come up with common terminology and also the
15 other workshop participants who made their
16 contributions.
17 To the staff it appeared this was a very
18 successful exercise.
19 Now I will turn the presentation over to
20 Mr. James Firth, Project Manager of FSME, to
21 provide more details on the materials specific
22 outreach, and I will pick it up again with next

1 steps.

2 MR. FIRTH: Next slide.

3 When we provide a draft policy statement to

4 the Commission, we indicated we would develop a

5 strategy to accomplish the Commission's objective

6 to increase the attention to safety culture by

7 materials licensees.

8 We committed to provide the Commission with

9 our recommendations when we provide a draft final

10 policy statement for Commission consideration.

11 An outcome of the May 2009 briefing on

12 safety culture was for the staff to provide you

13 with a periodic update on the progress materials

14 licensees are making to address safety culture.

15 We believe that increasing the awareness of

16 safety culture and its importance in the safe use

17 of nuclear materials is one step towards increasing

18 the attention materials users will give to safety

19 culture.

20 We used the publication of the draft policy

21 statement to further our efforts to increase the

22 attention of safety culture by materials licensees.

1 In response to the Commission's meeting
2 with the Organization of Agreement States and
3 Conference of Radiation Control Program Directors,
4 the Commission asked the staff to work with
5 these organizations on several issues including the
6 feedback from Agreement State licensees on the draft
7 policy statement.
8 Next slide, please.
9 We continued our efforts of engaging
10 material users in the development process for the
11 safety culture policy statement.
12 We included a presentation on the
13 development of the draft policy statement at the
14 fuel cycle information exchange and in other
15 meetings.
16 After the draft policy statement was published,
17 we took steps to make stakeholders aware of our
18 efforts in the area of safety culture and of ways to
19 be involved in the process.
20 We used the publication of the draft policy
21 statement and the public workshop to further our
22 efforts to involve material users in the process

1 and to increase their awareness of safety culture.
2 We used approaches such as mail, or
3 electronic mail, providing copies of the draft
4 policy statements during inspections, posting
5 information on the NRC website, presenting
6 information at meetings where materials licensees
7 or organizations whose membership includes mutual users
8 are in attendance.
9 Although the composition of the panel and
10 the organization of the workshop were discussed
11 earlier, it is worthwhile to highlight a few other
12 areas and how it helped to engage a variety of
13 material users in the development of the draft
14 policy statement, and developing a definition of
15 safety culture and safety culture terminology
16 that can be used by NRC, the Agreement States,
17 licensees, certificate holders, and other
18 stakeholders.
19 We structured the workshop to allow other
20 meeting participants to provide their views and
21 perspectives.
22 We contacted many nongovernmental

1 organizations and licensees to participate in the
2 February workshop, and we feel we were successful
3 in getting a wide range of materials interests at
4 the February workshop and commenting on the policy
5 statement.
6 This allowed us to incorporate the views of
7 a wider cross-section of material users, including
8 cask manufacturers, academic, medical users,
9 contractors, and others.
10 Also, when preparing for the workshop,
11 some panel members would contact others to solicit
12 their views.
13 In doing so that increased the attention to
14 safety culture and NRC's efforts to develop a
15 policy statement.
16 Looking forward we are planning to
17 develop -- continue our efforts to engage a whole
18 range of material users in the development of the
19 draft policy statement.
20 Increase their awareness of the safety
21 culture and increase the attention that material
22 users give to safety culture.

1 We will continue to engage the Agreement
2 States and will continue to present information on
3 safety culture in meetings where material users are
4 in attendance, including the fuel cycle information
5 exchange this year.
6 The staff has recently provided its plan for
7 revising the fuel cycle oversight process and
8 responding to Commission direction on the spent
9 fuel storage and transportation plant programs.
10 As we implement these plans, we will seek
11 to incorporate safety culture perspectives
12 consistent with the final policy statement and
13 stakeholder involvement.
14 Next slide, please.
15 We informed the states of the opportunity
16 to comment on the draft policy statement and
17 requested they share the draft policy statement
18 with their licensees.
19 We also called each radiation control
20 program director to discuss our safety culture
21 efforts, and our request
22 for them to share the draft

1 policy statement with their licensees.

2 We provided our state contacts with a copy

3 of the draft policy statement, links to an

4 electronic copy of the draft policy statement on

5 the NRC website on safety culture, the safety

6 culture summary appropriate to Agreement State

7 licensees as suggested by the briefers in the

8 September 2009 briefing to the Commission by the

9 Organization of Agreement States and the Conference

10 of Radiation Control Program Directors and

11 information on the February 2010 public workshop.

12 We've receive comments on the draft policy

13 statement from the boards of the Organization of

14 Agreement States, the Conference of Radiation

15 Control Program Directors, and 11 of the 37

16 Agreement States.

17 We were very pleased with the

18 responsiveness of the Agreement States in providing

19 information to their licensees and believe that

20 their efforts have contributed to our goal of

21 increasing the attention to safety culture among

22 Agreement State licensees.

1 At least 35 Agreement States have shared
2 information on safety culture with their licensees,
3 which is a very large fraction of the Agreement
4 States.
5 We are continuing to work with the
6 Agreement States to increase the awareness of
7 safety culture by their licensees.
8 We continue to discuss safety culture and the
9 development of the policy statement in our
10 periodic telephone calls with the Organization of
11 the Agreement States and the Conference of
12 Radiation Control Program Directors.
13 After the states shared information on the
14 draft policy statement, we would receive an
15 occasional call from an Agreement State licensee
16 with questions.
17 Although it is a limited sampling, they
18 share some of the same questions and concerns as
19 NRC licensees.
20 One example is a company located in the
21 State of Wisconsin which has a couple of small
22 gauges that is not a core part of their

1 work, they have difficulty in understanding
2 what the policy statement would mean for them and
3 also had difficulty in understanding some aspects of
4 the draft policy statement.
5 These are similar questions and concerns
6 articulated by some of the panel workshop
7 participants.
8 MR. SOLORIO: Okay.
9 Where do we go from here?
10 Our next steps are to evaluate the information we
11 received from public comments in the February workshop.
12 First, we need to check in with the NRC
13 stakeholders to get their input, and this also
14 includes leveraging insights and experience of our
15 NRC steering committee.
16 We will continue to leverage momentum we
17 establish with the external workshop planning
18 steering committee, and workshop panel is to get
19 the word out and also get feedback on the results
20 of the February workshop.
21 We will be looking for opportunities to
22 communicate the draft safety culture policy

1 statement and the workshop results, and seek
2 feedback in a more focused manner with some
3 specific licensee forums we have planned in the
4 coming months.
5 Once we can align with stakeholders on the
6 definition of traits we envision revising the draft
7 safety culture policy statement and hold another
8 public meeting in the fall of this year with the
9 possibility of another Federal Register Notice to
10 get wider dissemination of the policy statement if
11 needed.
12 We will continue to work towards completing
13 the revised draft policy statement by March of
14 2011.
15 As I mentioned earlier when I presented the
16 public comments on the policy statement, a number
17 of commenters indicated that implementation was an area
18 where they have the most concerns.
19 We see implementation to be the next step
20 that will require us to work more closely with the
21 program offices and the Regions
22 responsible for oversight and interactions and we

1 realize it might not be a one-size-fits-all policy
2 and therefore, some licensee groups might be able
3 to implement it more quickly, others will take more
4 time.
5 As an example, the reactor oversight
6 program would be reviewed to determine whether the
7 program needs to be modified as a result of a final
8 policy statement and take into consideration the
9 outcomes from the ongoing NEI pilot initiative.
10 This concludes my remarks.
11 MR. MALLETT: This concludes the staff
12 presentation, and we are ready for questions.
13 CHAIRMAN JACZKO: Thank you, Bruce.
14 I think this has been a very interesting
15 presentation.
16 A lot of work has been done and I think a
17 lot of good dialogue has been had with
18 stakeholders.
19 I was just going through the presentations
20 looking to compare all the different versions of
21 the policy statements and the different traits, I
22 have to admit, I kind of like the workshop policy

1 statement.

2 I think it gets at some good issues that we

3 don't necessarily have covered in ours.

4 I think in particular, it ties issues back

5 to public health and safety which I think in our

6 initial statement we never really had done.

7 Which is probably one of those things

8 because we think about it all the time we don't always

9 think to state it directly.

10 It is in there, but it's not as direct.

11 I think it was really a good enhancement.

12 I will certainly throw that out there

13 specifically on the policy statement, on the

14 definition. I know a lot of stakeholders indicated

15 that they would like to see that workshop developed

16 definition become the definition we use, what is

17 the staff's thinking right now about that and

18 whether or not we would do that?

19 MR. ZIMMERMAN: Let me respond to that, Chairman.

20 As you indicated and others have indicated

21 the workshop in our view, I think you'll hear

22 from the second panel was unique in a lot of ways

1 and accomplished a great deal, it really was a good
2 expenditure of several days.
3 I'm not sure how often we get that large a
4 variance of our licensees in Agreement States that
5 they regulate all coming together in one place and
6 try to arrive at a single location.
7 There were questions that were asked of us
8 in terms of when this meeting occurs, will we
9 endorse the recommendation that they came up with.
10 It really was them doing it. The NRC held
11 back and watched them do this activity.
12 We indicated not likely, that we are early
13 enough in the phase where we really need to do,
14 particularly as James was saying in the materials
15 area, we really need to get out of Dodge and to get
16 to the right venues, the right forums, and help to
17 get the word out and answer their questions whether
18 we call them town hall meetings, workshops,
19 symposiums, whatever they are.
20 We need to engage as many folks as we can
21 because although the workshop was webcast, you are
22 still not getting a lot of the population that has

1 a good sense about where we are moving to and we
2 don't want to surprise them.
3 We need to use written communications and
4 meetings that are arranged and we are working with
5 the other offices and working with our
6 stakeholders.
7 Where would be a good place for us to show
8 up, give us a few minutes on the agenda, and let us
9 educate those folks in those areas and answer their
10 questions.
11 CHAIRMAN JACZKO: So, when you go on with these
12 conditions will the staff present both the NRC definition as
13 well as the workshop agreed upon definition?
14 MR. ZIMMERMAN: I don't take we've fully thought
15 that through, but we don't want to lose where we started
16 because some input came in and said we like the NRC
17 definition.
18 I think more may have came in and said we
19 like what came out of the workshop.
20 So, we need to allow that vetting to take
21 place on both and whether they morph into one or
22 very little touches the one that the industry came

1 up with.

2 We also need to recognize that the NRC

3 wants to be able to endorse one that will serve not

4 only for the industry we regulate but also for

5 ourselves.

6 We need to be true to our own staff to make

7 sure that we are getting feedback from them about

8 whether there is something here that they are very

9 comfortable with, or if there's any aspects that

10 trouble them.

11 CHAIRMAN JACZKO: I appreciate that and I think

12 the one caution I would throw out there, and I think Dave it

13 was a point you closed with, is really the next step in many

14 ways is going to be the most important which is once we

15 finalize a policy statement, what we do with it.

16 While there is some difference between the

17 statement that we have, the statement of INPO, all

18 the others that have put together definitions and

19 traits, there is also a lot of commonality.

20 We are very much tweaking around the edges

21 here.

22 I think there's generally a pretty good

1 agreed-upon consensus of what we are talking about and what
2 makes up what we are talking about.
3 I think we want to be careful that we don't
4 let the perfect be the enemy of the good here and
5 not move on to the next steps.
6 We can always put out something and
7 eventually there will never come a time in which
8 everyone agrees when we are just talking about
9 words in this way to what we are talking about.
10 I just want to make sure we are not trying
11 to be too perfect here and not let us move forward,
12 and actually get a final policy statement that we
13 can begin working with.
14 MR. ZIMMERMAN: Well said.
15 Another way we've looked at it is in terms
16 of fatal flaws.
17 And recognizing the fact that the industry
18 built this on their own and they want to own this
19 definition.
20 So there is some emotion that comes with it
21 that this is ours, we built it, we would like to be
22 able to see the way we can lay this out in a policy

1 statement and make it work, rather than something
2 that the Federal government moves forward on them.
3 So, that's resonated with us, we have
4 listened to that, and they work extremely well
5 together.
6 There is a leaning amongst us to want to be
7 able to do what you said, which is to be able to
8 move in the direction that they came out of the
9 workshop.
10 We want to broaden the players further to
11 let others get their licks in.
12 MR. MALLETT: If I could add though, regardless of
13 what the final words say, I think it is very important to keep
14 in mind that it's the common understanding of what those
15 mean.
16 In the end will be the best success, if you
17 will, to this effort.
18 CHAIRMAN JACZKO: I think that is very well
19 spoken.
20 I would take, as I said, given while there are
21 some differences, there is a lot of commonality.
22 I think I would say that perhaps underlying

1 there is at least some degree of alignment right
2 now on the meeting which is good.
3 Another issue and this was of interest when
4 we initially did the policy statement and the
5 Commission had some back-and-forth about it. And
6 that was the role of security and to what extent
7 security was a part of safety culture come, to what
8 extent it was separate, what extent it should
9 deserve its own policy statement.
10 We seem to have certainly, I think, moved
11 from the most extreme separation in which we have
12 two policy statements, one for safety and one for
13 security culture, in to one.
14 Now it seems like as part of the
15 discussions there is a movement away or towards
16 even more integration with really everything under
17 the rubric of just safety.
18 That security is one aspect of that, like
19 EP and others.
20 If you could comment on that a little bit
21 more and talk about where you think that issue is
22 and where you think that will go as we move

1 forward.

2 MR. SOLORIO: The draft policy statement we

3 provided last year included some words on security.

4 What we're reporting to you today is

5 essentially what the public has commented on.

6 We're not saying it's the final answer.

7 As I said in my closing remarks, we need to

8 look within the agency and see other stakeholders

9 and see what views they have on this before we

10 consider the final steps.

11 So right now, we are just looking at public

12 comments. It is their view, they made a good case

13 for why they believe that to be the case, and we

14 will have to consider that moving forward and how

15 we formulate the final draft policy that we will

16 submit you.

17 MR. ZIMMERMAN: I can add a little bit on that.

18 The area where the stakeholders at the workshop

19 ran in to the rub on security was on the definition, because

20 they didn't know where to stop; should we put emergency

21 preparedness in there, should we put health physics in

22 there, what other areas would go in there.

1 They went into it with a mindset that it
2 was under this umbrella of safety, all of these could
3 fit underneath that area.
4 With regard to the broader policy
5 statement, I don't believe they have any issue with
6 security coming up in the policy statement itself.
7 It was just in that succinct definition.
8 CHAIRMAN JACZKO: Thanks Roy, I think that is a good
9 clarification.
10 I appreciate that.
11 That is, to some extent, been one of the
12 main components of the policy statement, but I think
13 it was well said.
14 I think this is an important issue and an
15 important initiative, and I would just encourage
16 you to see if we can't beat March 2011.
17 I think there is certainly an important
18 point to do a lot of outreach.
19 I think we've done a fair amount of
20 outreach here, and I think we have enough
21 information.
22 At some point the Commission is going to

1 have to weigh in and I'm sure we will go through
2 the similar kinds of discussions where we will all have
3 very different ideas about how to say these things
4 and word them, and it won't likely be exactly the
5 same as everything we've seen and we'll have to
6 make some decisions about whether we go with what
7 has been said or at our own modification.
8 I think we are very close and I would say
9 that we should seize the momentum we have and come
10 to closure on this as soon as we can.
11 The next steps will probably be the more
12 challenging about how do we deal with this, does it
13 require regulation, does it require changes in our
14 oversight, do we modify our oversight process and
15 those kinds of things, and I think that will be
16 additional work in and of itself.
17 I'm very optimistic because it does seem
18 like we are very close and there does seem to be
19 generally good alignment on the kinds of things
20 that are important here and generally what we need
21 to achieve. Commissioner Svinicki.
22 COMMISSIONER SVINICKI: Thank you.

1 Thank you all for the presentations.

2 Laura, so June is returning next week and I

3 noticed she provided you the opportunity to

4 participate in a Commission meeting in time to

5 return to do you that service.

6 I will add my voice to Mr. Zimmerman's in

7 thanking you for your willingness to take this on

8 as an assignment and the contributions you made

9 here.

10 I will start with just a couple of

11 questions on the internal safety culture side.

12 One of the results of the OIG safety

13 culture and climate survey was, I'll characterize

14 it more generally, some concerns about first-line

15 supervisors and them having enough time in their

16 assignment to be able -- or the frequent we have a

17 culture of rotating our managers to different

18 positions.

19 I noticed you mentioned that there is a

20 focus on training for supervisors on culture and

21 core values.

22 I am pleased that you are addressing that,

1 are there any other kind of corollary initiatives
2 in are looking at the OIG results related to
3 first-line supervisors and kind of tackling that
4 issue; is there anything else that you'd add in
5 that area?
6 MS. GERKE: We are expecting to get some more
7 information because it is part of the agency-wide focus
8 groups.
9 We had a focus group composed just of
10 first-line supervisors so that they could have a
11 voice as well in response to some of the concerns
12 we have heard about communication in the churn in
13 the first-line supervisor ranks.
14 Additionally, some specific offices had
15 concerns in that area and so we have some office
16 specific focus groups as well.
17 Part of it we will get more information and
18 then we are going to review exactly what does that
19 mean.
20 Is the churn in the supervisory ranks
21 necessarily a bad thing because sometimes that does
22 help for cross training and helps develop them for

1 the future.

2 Is it just that we need to do a

3 better job of communicating with staff of why this

4 is happening and why it is important for the agency

5 as a whole, but then also looking at are there ways

6 we could lengthen the period a little that they are

7 in place.

8 In part we are waiting for more information

9 and in part we are still moving forward on the

10 different training.

11 COMMISSIONER SVINICKI: It is clear that NRC does

12 these rotations for a purpose as you mentioned, and we

13 don't want to loose that enhancement to the agency's

14 succession planning.

15 We also sometimes hear from external

16 stakeholders that turnover can also for maybe

17 they're licensing action, they feel we have a lot

18 of churn.

19 I appreciate we are looking carefully and

20 trying to strike the right balance.

21 I think that is important.

22 Another task force recommendation if I

1 think I have this right, is to further integrate
2 the internal safety culture framework into
3 performance management tools and employee
4 accountability.
5 I was wondering if this was headed towards
6 an objective of perhaps in employee performance
7 appraisals looking at assessment to a safety
8 culture.
9 My first thought is, would you run up
10 against the same thing that the challenge for
11 safety culture in general, which is the subjective
12 metrics of that, so certainly if it is something
13 that we are going to assess employees performance.
14 Is that the direction that it is going or by a
15 closer integration, do we just mean that we want the
16 general way that we articulate the performance
17 standards for employees to reflect our safety
18 culture values, or would it be a specific
19 assessment against safety culture standards?
20 MS. GERKE: The first step is to get it in our
21 high-level organizational framework which would be in the
22 strategic plan.

1 That is what we are hoping to do in this next
2 revision is to have it again in the organizational
3 excellence outcome there.
4 Then, we will include measures.
5 Part of it could be from this survey, that
6 can be one way you measure.
7 It is more, then we want to filter it down
8 into performance management and we're not sure how
9 we would do that yet.
10 It might be more of the other
11 characteristics that we see of safety culture which
12 gets into updating of the office guidance and the
13 desk guides having uniformity there.
14 The training providing feedback on
15 performance and setting the expectations.
16 We probably would be looking more at the
17 different characteristics rather than a safety
18 culture metric all of its own, the different things
19 that feed into having a healthy safety culture.
20 COMMISSIONER SVINICKI: And having mentioned
21 updating internal policies and procedures, I think I've
22 commented on this in the past when we heard the survey

1 results, particularly of new employees, their frustration of
2 finding that office manuals and things were outdated.
3 I have kind of been trying to track this a
4 little bit, so much so that as I visited licensees
5 I've sometimes asked them to canvass and get
6 different timelines of how long it takes some of
7 them to update an internal procedure or manual, and
8 I remember visiting a licensee that was a power
9 reactor licensee very embarrassed to tell me that
10 they were really working on the issue because it
11 could take as long as 18 months to update something
12 and they found that that was not an acceptable
13 level to them.
14 I know we at NRC we struggle with things
15 that are much more outdated even than that.
16 What kind of -- how much do you think we're
17 going to be able to advance the ball there?
18 In the two years I've been at NRC this is an
19 issue I've heard about a number of times, how can
20 we really get to the root of it and chip away at
21 it?
22 You mentioned having it in people's

1 performance appraisals, that would certainly be a
2 direct way to motivate behavior, but what kinds of
3 specific actions are we thinking about?
4 MS. GERKE: First, we're fortunate to have a very
5 good approach to follow with what the agency did with the
6 management directives, and I think we're going to take that
7 approach with office level as well.
8 That we would first look at what is out
9 there.
10 With some of them, the guidance might not
11 even be needed, so we shouldn't have it there
12 because that is just confusing to employees if it's
13 not being relevant and used.
14 The next step is to really work with the
15 offices and when I was briefing the CFOs, one of
16 the working groups on this last week, I got some
17 good feedback already that we need to be looking at
18 the standardization so that there is common
19 terminology used among the offices.
20 We have to be very mindful that this is not
21 a task that people willingly embrace because it is
22 kind of a pain to have to go back and look at all

1 of these.

2 Yet, it is so important.

3 We need to have a lot of input from the

4 offices on them setting the priorities of which are

5 the most important instructions so that we can gain

6 support for this from the get-go, by then

7 prioritizing which ones they want to do first and

8 then what the management directive plan was, they

9 do it over five years.

10 So, you have a five year plan which makes

11 it a little more -- you can bite off the task a

12 little bit better that way, and you do a little bit

13 each year but then you also -- it's important to

14 incorporate in there maintaining the procedures too

15 once you get them up to date.

16 The first step is to get it into the

17 operating plans so that will get offices attention,

18 I don't want to just get their attention, I want

19 them to be involved in creating an operating plan

20 measures as well.

21 Eventually we'll filter in to the

22 performance plans as well.

1 COMMISSIONER SVINICKI: I think you struck on an
2 important early note which is if you encourage them to take
3 a very critical eye first to whether something is needed,
4 not just to say here is all of this material and let's
5 update all of it if the first step is to say how much of this
6 do I really need.
7 I think that also maybe will attract people
8 to the task a little bit if they can chop it down
9 first and then update it.
10 I think that is a very practical approach.
11 To turn to external safety culture for a
12 few questions here, I was very pleased that staff
13 extended the comment period.
14 I had remembered going in on the policy
15 statement hearing from the organization of
16 Agreement States and when I thought about all of
17 the entities that they were going to have to try to
18 outreach to, I thought that a longer comment period
19 was certainly merited.
20 So, I'm glad that we after the workshop and
21 getting the feedback that some additional time
22 would be helpful.

1 I think we did that as a very practical
2 step and I was supportive of that.
3 You mentioned that commenters said that they do
4 prefer the common definition, and the Chairman talked
5 a little bit about the workshop definition and the
6 NRC definition, but my question will be a little
7 different.
8 In terms of a common definition for
9 different types of licensees and the different
10 types of nuclear materials applications, what is
11 staff's view of how optimistic are we about that?
12 The ability to be able to say that often
13 when we try to -- I know on the next panel we are
14 going to hear from nuclear medicine applications
15 and different groups, if you're trying to stick to
16 some common things and the Chairman said at its
17 core there are some real commonality, but are we
18 going to have to have the addenda of then 16
19 different caveats and statements we make for
20 different types of use of nuclear materials.
21 MR. FIRTH: I will take that.
22 In terms of a common definition I think

1 what we were hearing from stakeholders is that they
2 really believe that it would be useful to have one
3 common definition.
4 The level of definitions that are in play
5 at the moment generally are not that they would
6 apply to one set and not another, it's a question
7 whether they resonate with a broad section and
8 whether they will adopt it.
9 One thing we are going to be facing is a
10 number of licensees will also be dealing with the
11 OSHA definition of safety culture.
12 It is not just the NRC definition in terms
13 of nuclear materials that there is other
14 definitions that are in play in different areas.
15 There's probably going to be not perfect
16 uniformity, but there is an opportunity for finding
17 a definition that resonates.
18 COMMISSIONER SVINICKI: You did use the example of
19 saying you heard from a materials licensee in the State of
20 Wisconsin who had the most fundamental questions of how does
21 this apply to me.
22 We've got everyone from the power reactor

1 licensee or INPO level of sophistication and
2 familiarity with safety culture down to somebody
3 that I think you said has a couple of sources and
4 says what does this mean to me and how is it going
5 to apply.
6 I also note that we got, I think you said,
7 11 of 37 Agreement States submitted comments.
8 I'm hoping that through OAS and CRCPD that
9 we feel that we have more than the views of only 11
10 Agreement States.
11 I know on the next panel we have OAS, so
12 maybe I can direct that question to them.
13 I know my time is limited, I did want to
14 hear -- in terms of the NEI safety culture pilots,
15 is there anything that you can tell me in terms of
16 the status of it, or I've forgotten really what the
17 timeline is in terms of getting any results of
18 those pilots, and then what might we do with the
19 results of that in terms of the ROP?
20 MR. SOLORIO: The pilots are on-going even now.
21 Four plants, four regions.
22 There was a public meeting held a few weeks

1 ago where the NEI and the staff were working
2 closely with them on looking at these pilots and
3 talked about lessons learned and things they can do
4 for next steps.
5 It is moving along, there is a lot of
6 feedback being given to the industry from the staff
7 on the specifics of the process and I know that
8 they are working to address a lot of the comments
9 they've received from the staff.
10 As I said earlier, once that is done NRR
11 would be looking at what insights would they
12 leverage from the process into their current
13 programs and go from there.
14 I don't know if anyone wants to add
15 anymore.
16 MR. MALLETT: If I remember correctly, thanks
17 Dave, that the plan is to finish that feedback and the
18 lessons learned from the pilot studies and present them to
19 the staff of the NRC.
20 I thought the schedule was sometime this
21 summer to do that.
22 COMMISSIONER SVINICKI: I knew that the pilots

1 were on-going so thank you for that update.

2 Thank you, Mr. Chairman.

3 CHAIRMAN JACZKO: Thank you, Bruce for the staff

4 presentation I think we will now hear from Alex Murray with

5 the perspective from the union.

6 MR. MURRAY: Thank you very much Chairman Jaczko,

7 Commissioner Svinicki, and staff as well.

8 I really appreciate this opportunity to

9 comment on the internal safety culture and climate

10 it is very kind of you.

11 My name is Alex Murray, I am a Vice

12 President in the NTEU, and my day job I'm a senior

13 reviewer in the Office of Nuclear Material Safety

14 and Safeguards.

15 The NTEU is very pleased that the NRC is

16 continuing its efforts in pursuing improvements in

17 the safety culture, in the internal safety culture,

18 and I'd just like to make a number of pragmatic

19 comments if I could.

20 First, the original safety culture report

21 was discussed at last year's Commission meeting,

22 May 2009, if I recall exactly.

1 It identified some concerns.

2 In the Office of Inspector General, safety

3 culture climate survey which was completed last

4 fall, if I recall, it generally found some of the

5 same types of concerns, maybe I should use the

6 phrase similar concerns.

7 The NTEU would like to note that we've been

8 discussing safety culture for about a year now.

9 The office of the EDO, Executive Director

10 for Operations, the Office of Enforcement, they are

11 making some very good initial steps.

12 It is a work in progress.

13 Having said that, I wanted to point out

14 that so far at the working staff level, the people

15 who do the safety reviews, the people who do a lot

16 of the discussions, the first and second line

17 managers, not too much has changed in the interim

18 year.

19 I encourage the NRC, the Commission, the

20 upper managers, and of course, the rest of the

21 managers and staff to try and work and make this

22 safety culture a real, real commitment to improving

1 the situation here at the NRC.

2 We, the NTEU, we don't want to see a sense

3 of complacency develop because we have two surveys,

4 we now have a safety culture program, we're THE best

5 place in the agency to work.

6 We're good.

7 For a lot of the feedback that we get

8 internally, it is good, but we keep getting this

9 sense there's a veneer of safety culture.

10 We have had many people approach the NTEU

11 in the past year with concerns when about a month,

12 five weeks ago it came up that I was going to speak

13 at this Commission meeting, it was as if I'd run

14 into a hornets nest.

15 I think everyone here, Commission, senior

16 managers need to be aware that there's an

17 undercurrent of major concerns.

18 I easily have five to ten, I will use the

19 term critical, e-mails on safety culture.

20 You need to be aware of that.

21 I think we need to avoid the sense of

22 complacency, we don't want to have this complacency

1 led us to a situation where we can have a major
2 incident or potentially an accident condition
3 develop like a TMI or a Sequoyah Fuels or Davis
4 Besse where many of the people in this room could
5 be hauled in before Congress to testify and/or
6 people could get hurt.
7 We don't want that to happen.
8 Let me just mention some of the things for
9 which we have found in the intervening year that people have
10 responded to the NTEU.
11 We don't compile data, but there does seem
12 to be some -- or there do seem to be some
13 differences across the different offices.
14 It seems that licensing organizations seem
15 to have more safety culture concerns than
16 non-licensing organizations.
17 I want to say some of these were touched
18 upon in the Q&A session just a moment ago.
19 There are a couple of themes which have
20 dominated the more recent feedback to the NTEU from
21 staff.
22 One is, I will use the term management

1 system, but really that involves all of us and the
2 second is a very high percentage of the staff at
3 the agency which is new to the NRC.
4 Many of those new staff only have
5 a few years of actual work experience.
6 So, they truly are new engineers,
7 scientists, and so forth.
8 Let me just mention a couple of recurring
9 themes which come up about the management system.
10 This was touched upon a moment ago by
11 Commissioner Svinicki's questions.
12 Management at all levels, including the
13 first line supervisors, have a relatively high
14 turnover or rotation rate.
15 Sometimes it's as short as a year.
16 Staff have commented very heavily about
17 this, that before the manager learns what they are
18 managing or even some of the staff that they are
19 managing, they are gone.
20 With that sort of situation the
21 manager/supervisor approach brings a lot of
22 fundamental safety concerns -- safety culture

1 concerns which can gravitate into actual safety
2 concerns.
3 Some of this is just standard discussion of
4 issues which occur in licensing or safety issues
5 which occur here at the NRC and so forth.
6 The manager's focus tends not to be as much
7 on the safety issues or the actual progress that is
8 being made to resolve something, but more on how do
9 I get to the next position, where am I going next.
10 The focus is wrong.
11 There is an emphasis on schedule.
12 Yes, schedule is important, but many times
13 the feedback the NTEU has received the emphasis
14 schedule seems to take priority over most other
15 items.
16 We may have to rethink how we adjust, if
17 you will, this emphasis on schedule.
18 Something else which has occurred in the
19 past 10, 15 plus years ago, I am not going to say that
20 was a Nirvana; however, at that time when there
21 were discussions between supervisors, managers, and
22 staff even between staff themselves, it was much

1 more collegial.

2 What tends to happen, or maybe I should say there's too high

3 a prevalence right now of occurrence where it

4 becomes more personal, that there isn't necessarily this

5 free flow of ideas.

6 Some of the e-mails I received the past

7 four or five weeks where I was advised not to bring

8 this up, it would be bad for my career.

9 That is not good for safety culture.

10 There are some other issues which we will

11 try to bring up in the focus groups, I think I

12 should just mention one other one related to the

13 management system and that is we at the agency have

14 positions, some of our managers, with clear

15 conflicts of interest.

16 It is not fair to them, it's not fair to

17 the staff, it's not fair to the agency.

18 If there's an issue which comes up

19 frequently the management system which the staff

20 might say is the cause -- or a cause, a party in

21 the issue that needs resolution also decides upon

22 an issue and this can be an issue anything from

1 safety concerns to DPO's, to non-concurrence
2 reports, even down to more germane items like
3 grievances.
4 If the same person already has , if you will, a dog in the metaphorical
5 fight, they're not going to really impartially and fairly evaluate
6 ideas from other people.
7 So we need to think how we address some of those
8 conflicts of interest.
9 Let me just mention a second item which
10 came up in the proceeding Q&A, this is a recurring
11 theme which I've also heard a lot about from
12 feedback from staff both in the past five weeks and
13 this past year, and this concerns the high fraction
14 of new staff.
15 Junior staff is good, I still consider
16 myself a junior staff, yes, I still have black
17 hair, its natural.
18 The ankle is shot, but one out of two ain't
19 bad.
20 The junior staff are assigned positions and
21 partially because of the turnover in management,
22 management focus on other items, they don't get

1 adequate guidance from either the supervisors or
2 necessarily senior staff are assigned to them who
3 can give them guidance or mentoring.
4 What often happens is when the junior staff
5 completes the review because of the schedule
6 requirements there is no time to do an adequate
7 peer review.
8 Sometimes we're fortunate and the review is
9 adequate, but other times we do have to go back or
10 iterate or take extra time, or sometimes we're just
11 lucky.
12 Lucky is not good for safety culture.
13 Lucky is not good for a regulatory agency.
14 We need to think about that.
15 Junior staff go on a lot of rotations just
16 like the first-line managers.
17 Rotations, again are good, they're good
18 training opportunities but sometimes, again, the
19 junior staff get them mentality -- I'm here for three months
20 or six months I'm going to look where I'm going to
21 go the next three months and six months rather than
22 focusing on what I am doing now.

1 That can have a -- effect on the
2 safety culture.
3 Of course, I have two other items on junior
4 staff.
5 Junior staff tend to be, because they're
6 new, because they don’t know the system, they tend to be less willing to raise
7 issues, including safety issues to management.
8 Unless there’s an adequate way to keep
9 involving them, get them teamed up with senior
10 staff to help them, they may find issues and yet
11 the issues aren't brought up, they're lost, they
12 evaporate.
13 Anyway, let me just mention a few things
14 in closing.
15 All of the activities which are occurring on
16 safety culture, particularly the internal safety
17 culture, are very very good, but as I say I'm still
18 here at the NTEU, others in the NTEU are getting
19 this feedback that a number of items, concerns
20 going on which we generally would not be happy with
21 as a licensee we might not even tolerate them.
22 Conflict of interest, for example, we would

1 probably cite a licensee about.

2 The NTEU believes that we can do something

3 about this, that we can do some reasonable

4 approaches that can address these safety culture

5 concerns.

6 I will just mention a couple very quickly,

7 perhaps we can design a system where we rotate

8 managers and/or junior staff around where, yes,

9 they are still getting the training they need but

10 perhaps they have two or three rotations in the

11 same division or office, so in a parallel branch or

12 division, that way they will see some of the same

13 issues, become a little more conversant on the

14 salient points of the safety issues, licensing

15 issues, what have you and it will help improve the

16 dialogue at all levels and ultimately improve

17 safety culture.

18 Another item which was mentioned over the

19 past few weeks to me was perhaps all staff should be

20 required to concur on reports.

21 Right now, in general, major reports,

22 licensing actions, discussions of generic issues,

1 etc. are just signed out and concurred on by the
2 program managers and the management chain.
3 Significant senior, junior, or other staff
4 who contribute to those reports are not required to
5 concur.
6 Very important, let's have the balance.
7 If people make significant contributions to the report
8 it is not that they should have the opportunity to
9 concur on these reports, but actually put it down
10 in writing sometimes reports go out the door
11 without senior staff or other staff members knowing
12 they are gone.
13 That does not speak well to the safety
14 culture.
15 I heard knowledge management mentioned,
16 knowledge management is very dear to my heart.
17 Very important to have senior staff
18 communicate what they know about all aspects of the
19 NRC, of the technology of the safety regulatory
20 aspects, and what have you to junior staff.
21 One of the best ways to do that is with
22 mentoring.

1 In the past couple of years that seems to
2 have gotten lost as we have been more into the
3 online computer-based training, if you want to know
4 about knowledge management go click on this website and
5 here it comes up, slides, presentation slides.
6 Those are great, but it's not the same as a
7 one-on-one with a real-life person.
8 I think it is important to think about
9 that.
10 I will just mention one last possible
11 suggestion about how to address some of the
12 potential conflict of interest which seems exist in
13 our current system.
14 Perhaps we can use something like one of
15 the advisory committees, say the Advisory Committee
16 on Reactor Safeguards, to do some independent
17 reviews of major issues, perhaps such as DPO's,
18 such as significant non-concurrences, etc..
19 Something to think about.
20 Finally, let me just close by saying the
21 NTEU knows this is a work in progress, let's keep
22 the metaphorical football moving, we know there

1 will be focus groups coming up on safety culture
2 and over the next few months, we are going to try
3 to be involved and help out and provide positive
4 input wherever we can and we encourage all of the
5 staff to be involved in those focus groups if you
6 are called upon to be involved.
7 We intend to work with everyone here in the
8 room and all the staff members and managers across
9 the agency to improve safety culture.
10 Once again, I want to thank you very much
11 for your kind attention.
12 Thank you.
13 CHAIRMAN JACZKO: Thank you, Alex for those
14 comments and I think there are certainly some good things in
15 there, and I hope as the focus groups go forward we will
16 hear more of that and review those issues.
17 I do want to make one comment on the
18 conflict of interest, I believe and correct me
19 if I'm wrong, you're not referring to the fact that
20 there is a conflict with an external party, but
21 it's an internal process issue in terms of managers
22 may be reviewing decisions.

1 MR. MURRAY: That is correct.

2 It is an internal process where there is a

3 potential conflict of interest.

4 CHAIRMAN JACZKO: Okay, but not with an external

5 party?

6 MR. MURRAY: Not with an external party, that's correct..

7 CHAIRMAN JACZKO: Okay, thank you.

8 At this point we will take a quick break,

9 we will change all of the names, and then we will

10 move on to our stakeholder panel.

11 Thanks.

12 We will now resume our discussion of safety

13 culture with our stakeholder panel and we are very

14 privileged to have a very distinguished group of

15 individuals who have been involved in this process

16 in to lots of different ways, and I think will

17 provide us with some good insights about how we

18 continue to move these issues forward and first

19 with finalizing the policy statement and

20 alternately with figuring out exactly what we do

21 with the policy statement once we have it.

22 We will begin with Shawn Seeley who is the

1 Chair of the Organization of Agreement States, and
2 Shawn, we will start with you.
3 MR. SEELEY: Thank you and good morning.
4 I indeed welcomed the opportunity to
5 represent the states today on the perspective
6 during this process of developing the definition of
7 the safety culture.
8 I further want to thank the staff for all
9 of the hard work that they have put in to date.
10 I know it has been, looking at my notes,
11 last January or February 4 was the first workshop
12 and I can't believe it has been a year, but thanks
13 for all of the hard work they put in and the courtesy
14 that was extended to myself and the Organization of
15 Agreement States on that.
16 Next slide, please.
17 Agreement States recognize the role that a
18 positive safety culture plays in everyday use of
19 radioactive materials by our licensees.
20 We are, therefore, strongly in favor of the
21 development of this policy statement in lieu of a
22 formal regulation.

1 As you know it is much easier for us to
2 implement those policies rather than to go through
3 the rulemaking process in most of our states, which
4 could be three months to three years in some cases.
5 We further recognize that we are a key
6 co-regulator in this endeavor.
7 The final definition should cover a wide
8 range of radiation disciplines to enhance the safe
9 use of radiation.
10 Keep in mind a lot of our programs regulate
11 much more than just the radioactive materials side
12 of things.
13 As we all have heard from the Conference of Radiation
14 Control Program Directors, lately there has been a lot of CT
15 issues, dose issues, and if you read USA Today
16 yesterday, tanning is now going to be a priority in
17 a lot of our programs.
18 We have a lot of fingers in the pie so to
19 speak.
20 Next slide, please.
21 As part of the process I was invited to
22 attend the three-day workshop in early February,

1 and I want to first thank the greater DC area for
2 making me feel welcome because when I left Maine,
3 my grass was almost green and you had all kinds of
4 snow on the ground with a lot more on the way that
5 week.
6 In my opinion the workshop was a huge
7 success.
8 It was truly amazing to sit back for three
9 days and watch three very distinct and separate
10 groups with very differing views on safety culture
11 and radioactive views in general to come
12 up with almost a consensus, or as I
13 think they put it at the end of the workshop, “can
14 we live with it,” was the statement.
15 I think they arrived -- you saw the
16 definition that they came at.
17 It was just an amazing process in itself
18 and my hat is off to the EDO's office for the great
19 facilitation that week, because I think that really
20 drove the stakeholders to come up with that
21 definition.
22 Next slide, please.

1 As Mr. Firth mentioned, the Organization of
2 Agreement States did comment, we did have 11 of our
3 sister states comment as well, but that doesn't
4 necessarily reflect that there are only 11 states
5 that are interested.
6 Many more comments, verbal comments were
7 received in those 35 out of 37 that did respond
8 that we are doing something in the Agreement
9 States.
10 Overall, it is very positive.
11 We did comment shortly after, as
12 Commissioner Svinicki said, that the comment period
13 was extended, we appreciated that and therefore, we
14 got a great outreach to get those comments --
15 solicit those comments.
16 We recognize that a strong safety culture
17 starts at the top with management in any
18 organization or entity, and it's a top to bottom
19 approach.
20 This includes all supervisors, all levels
21 of the organization, they have to be all held
22 accountable at all steps, and they have to really

1 practice what they preach throughout the whole
2 organization.
3 Next slide, please.
4 As you have heard today, in the
5 development of the definition you have to take in,
6 at least in the Nuclear Regulatory Commission, all
7 radioactive material uses.
8 Furthermore, a lot of us in the states have
9 to go to the OSHA definitions and maybe the FDA
10 definitions and incorporate those.
11 It may be a challenge when it comes to us
12 implementing two or three different definitions in
13 the end.
14 Any definition should be clear, concise,
15 and to the point.
16 It should be easy to follow, and as often
17 mentioned, early and often stakeholder input is
18 vital to any process, especially this one.
19 Next slide, please.
20 During the implementation any guidance that
21 comes out has to be unburdensome, easy to follow.
22 This ideal should be implemented or

1 incorporated in any training programs that are
2 within organizations and entities and really driven
3 home day in and day out, practice what they preach.
4 Next slide, please.
5 Any process may have its unintended
6 consequences.
7 As I mentioned the states have a lot of
8 areas going on dealing with a lot of radioactive
9 material uses.
10 The unattended consequence with the strain
11 on resources, some states may view that as an
12 unfunded mandate for moving forward, we will do
13 what we can to get the word out.
14 Throughout the workshop, as you mentioned,
15 security was taken out, we feel security is part of
16 safety but that doesn’t means it can't be captured
17 somewhere else.
18 It doesn't mean it can't be captured
19 somewhere else.
20 Whether it's in the traits or the
21 implementing guidance further in the policy
22 statement.

1 Next slide, please.

2 Despite the fear of what is next, most of

3 the states, I think, the view was, well.

4 they were thinking a year down the road

5 will be implementation. Despite that fear, we

6 will spread the word, spread the good word or

7 spread the cheer whatever you want to call it.

8 In our inspections, I know when I go out

9 and do inspections, one of the last things I leave

10 with at the exit briefings is just that.

11 The Commission is coming up with this

12 safety culture definition, this is what it looks

13 like, most states are already inspecting against

14 that.

15 Albeit we probably don't call it that from

16 time to time, but now that it's going to be a

17 formal definition we will have a policy statement,

18 we'll have it to look forward to.

19 I want to point out that last week in the

20 Baltimore Sun there was an article that the State

21 of Maryland took enforcement action on a licensee,

22 and in these newspaper article it was clearly

1 stated that it was a failure of implementing a good
2 safety culture within the organization which led to
3 the enforcement action.
4 As an example, it is out there now and
5 being stressed amongst all of the Agreement States.
6 Again I want to thank you for the
7 opportunity to actively participate in this
8 process.
9 I pledge our support to spread the word and
10 to get the word out to our licensees and look
11 forward to working with the staff on this or any
12 other project that may come up.
13 Thank you.
14 CHAIRMAN JACZKO: Now, we will turn to Bill
15 Webster who is the Senior Vice President for Industry
16 Evaluation at the Institute of Nuclear Power Operations.
17 MR. WEBSTER: Thank you Mr. Chairman, and it is
18 our distinct privilege to be here today and to represent the
19 power reactor community in this briefing for the NRC
20 Commissioners.
21 I would like to begin as our appreciation
22 to share our thoughts and ideas.

1 Nuclear safety culture has been central to
2 what we have done at INPO over the years and to the
3 power reactor community.
4 This morning I would like to cover three
5 broad areas.
6 First is to discuss what INPO and the power
7 reactor community are doing today to foster a
8 healthy safety culture.
9 Second, I would like to offer a few
10 comments concerning the draft policy statement and
11 then last, share some considerations on how we
12 could best implement the policy statement going
13 forward.
14 As a jump off point, first slide, please, I
15 would like to take a moment and describe INPO as
16 a point of reference.
17 We are an independent, not-for-profit
18 corporation created by the nuclear energy industry
19 following the Three Mile Island accident in 1979.
20 Our mission is to promote the highest
21 standards of safety and reliability to promote
22 excellence in the operation of commercial nuclear

1 plants.

2 INPO carries out its mission through

3 programs of plant evaluations, training and

4 accreditation, and assistance in the analysis of

5 operating experience.

6 We sponsor the National Academy for Nuclear

7 Training, which provides a wide array of leadership

8 courses but also credits training programs

9 throughout the United States at the nuclear

10 stations.

11 All U.S. organizations that operate a

12 commercial nuclear power plants are INPO members.

13 Additionally, several countries that

14 operate nuclear plants are participants in INPO, in

15 addition to most being nuclear steam supply system,

16 architect engineering, and construction firms.

17 In addition, INPO represents the U.S.

18 nuclear industry in the World Association of

19 Nuclear Operators, or WANO, which is an

20 organization that really carries forward and

21 promotes the same standards worldwide.

22 For over 30 years, through our evaluation assistance,

1 analysis and training efforts, we have worked
2 with our members to set model and internalize
3 organizational values and individual behaviors that
4 serve to make nuclear safety the overriding
5 priority of their organizations.
6 Although it has been called different
7 things at different times, focus on fundamentals,
8 nuclear professionalism, core values, safety
9 culture has been central to INPO activities and to
10 the industry improvements that we have seen.
11 For example, back in 1989, Zack Pate, who was then the
12 President and CEO of INPO, introduced the
13 attributes of a nuclear professional.
14 These today still serve as the touchstone
15 of nuclear safety in most of our activities.
16 Let me quote Dr. Pate.
17 "The nuclear professionalism viewed with
18 the highest respect for the reactor core and all
19 his or her activities."
20 As a result of the industries learning from
21 the Davis-Bessie reactor head degradation issue in
22 2002, INPO sponsored the development of the

1 principles for a strong safety culture.

2 These describe the key elements, the key

3 principles and attributes of a healthy safety

4 culture.

5 An advisory group that was comprised of

6 international domestic leaders and nuclear

7 operating organizations, a member of the Defense

8 Nuclear Facilities Safety Board and several behavioral

9 scientists assisted INPO in the development of

10 what's commonly called the principles.

11 The advisory group built upon safety

12 culture research that had been completed at the

13 IAEA, NASA, and in consultant with Dr. Edwin Schein,

14 Professor Emeritus at MIT who is a well-known expert in both

15 organizational culture and leadership.

16 Dr. Schein today remains a member of the

17 INPO Advisory Council and has been instrumental in

18 much of our thinking with respect to nuclear safety

19 culture.

20 Last year we continued our efforts in the

21 safety culture area and we developed an addendum to

22 the safety culture principles that defined the

1 behaviors that the executive management, first line
2 supervisor, individual contributor level for each
3 of the principles.
4 Next slide, please.
5 This slide shows the industry's definition
6 and supporting principles for a safety culture.
7 As a point of reference the safety culture
8 principles are really developed from the
9 perspective of an operational and organizational
10 leader.
11 They are intended and were written so that
12 they could become operationalized to strengthen a
13 site and an organization's safety culture.
14 The definition has several key aspects that
15 I would like to highlight.
16 Safety culture is rooted in an
17 organization's values.
18 Safety culture is evident in the behaviors
19 that are exhibited within an organization.
20 Leadership will shape the safety culture of
21 an organization and people in an organization must
22 understand safety culture in terms that are

1 applicable to their role and their position in an
2 organization.
3 Based on operating experience we have
4 gathered using these principles, we are able to
5 draw some general conclusions about safety culture
6 in the U.S. industry today.
7 I think first is that most significant
8 industry events, both internationally and
9 domestically, that have challenged nuclear safety
10 are due to either the absence or a significance weakness in
11 at least two or more of the safety culture
12 principles.
13 Second, our review of plants that either
14 chronically lag in performance or have a
15 significant decline in performance over a short
16 time, we have found that weaknesses in at least one
17 or more of the principles has been at the root of
18 that particular either lag or decline in
19 performance.
20 Third, it is crucial for nuclear leaders to
21 recognize the complexity and breadth nuances and
22 subtleties of implementing a healthy safety

1 culture.

2 Last, is that safety culture is not an all

3 or nothing concept, there isn't either we have

4 safety culture or we don't have safety culture.

5 It is always a work in progress.

6 Every organization has strengths and

7 weaknesses, every organization has pockets in the

8 organization that have their own unique strengths

9 and weaknesses.

10 Next slide, please.

11 I would like to now cover what INPO and

12 industry are currently doing and I will begin with

13 some ideas or thoughts on INPO activities.

14 As you are likely aware, we conduct plant

15 evaluations at every site every 18 to 24 months.

16 We rigorously review events, observe workers,

17 conduct interviews to identify strengths and

18 vulnerabilities to the safety culture at the member

19 site.

20 These strengths and vulnerabilities are

21 communicated directly at all levels of management

22 up to and including the chief executive officer of

1 the parent organization as part of each plant
2 evaluation.
3 Additionally, INPO has incorporated the
4 safety culture principles and attributes in all of our
5 leadership development courses.
6 For example, in 2009 over 70 leadership
7 courses were taught at INPO to 1700 leaders and
8 this included people that are on Board of Directors
9 to first level supervisors.
10 Today, industry operating experience is
11 reviewed on an ongoing basis at INPO and whenever
12 appropriate, safety culture tags are applied to
13 particular events or shortfalls and these are
14 trended both at the member level and also looking
15 for generic or industry-wide trends.
16 We also provide leadership -- provide
17 assistance to provide leadership ideas on how they
18 can improve their safety culture.
19 This assistance typically includes sharing
20 of solutions and direct involvement of other
21 industry leaders that have had success and
22 experience in fostering a healthy safety culture.

1 Today, the safety culture principles are
2 embedded at each one of our member sites. We see
3 them frequently as part of employee training
4 programs, as part of leadership development courses
5 at member sites.
6 It is not uncommon to have a weekly safety
7 culture topic that is discussed at various venues
8 whether it be morning meanings, shop briefings,
9 control room briefings, or management review
10 meetings.
11 Typically stations perform a periodic
12 assessment on a two-year frequency to assess the
13 health of their work environment and safety culture
14 and action plans are taken as a result of those
15 surveys.
16 Many utilities have implemented the
17 principles and their corrective action trend
18 programs so they can identify for themselves early
19 precursors of a decline in safety culture.
20 Next slide, please.
21 What I would like to do now is provide some
22 comments on the draft policy statement and these

1 are consistent with the discussions and input that
2 have been previously provided.
3 First, is that we feel nuclear safety
4 culture needs to be the preeminent thought in the
5 policy statement.
6 The policy statement should focus on the
7 behaviors, values, and decisions that affect --
8 directly affect nuclear safety or the integrity of
9 the reactor core.
10 Management, operations, and protection of
11 critical safety functions such as reactivity
12 control and monitoring, decay heat removal, emergency power, fission
13 product barrier integrity should be the prominent
14 aspects of the policy statement.
15 We do have the strong recognition that the
16 behaviors and values and actions that are
17 applicable to this nuclear safety are equally
18 applicable in security, radiation protection,
19 emergency preparedness, and industrial safety.
20 The second is to highlight the recognition
21 of line management as having the primary
22 responsibility and obligation for the safety

1 culture within their organization.

2 We would recommend that that be reinforced

3 as part of the policy statement.

4 Last, the common language that was talked

5 about a moment ago is important.

6 Safety culture is complex. Having multiple

7 definitions, multiple sub-tier language that

8 describes safety culture can be confusing and it

9 can dilute the effectiveness of fostering a healthy

10 safety culture at the stations,

11 particularly a station that may be

12 struggling with enhancing their safety culture.

13 The more elegant, the more sharp, the more

14 consistent we can be in the language the greater

15 the probability that we are going to move safety

16 culture forward as an industry.

17 Next slide, please.

18 Considerations going forward: First is to

19 develop the common language and underlying

20 descriptive attributes.

21 We feel that the meeting back in February

22 was an important first step and one we support in

1 coming up with a common definition and traits for
2 safety culture.
3 We also do recognize for the different
4 stakeholders and users of the nuclear technology
5 that there may be some sub-tier descriptive
6 attributes that may be applicable to their
7 particular use of the technology and that would be
8 an appropriate subsequent development activity.
9 We encourage further work to bring this to
10 resolution.
11 The second is that we need to maintain the
12 focus on nuclear safety culture, as I just
13 mentioned. If we get this right, if we get these
14 behaviors, values, attributes right they
15 will easily fall over into the other areas that
16 we have talked about.
17 The third is that we need to develop and
18 implement a standard assessment methodology based
19 either on the principles or the traits as we move
20 forward on a common language.
21 This needs to be both on an ongoing basis,
22 it needs to be periodic assessment that has a high

1 degree of fidelity to the safety culture language, and
2 it needs to be a process that can be applied, or what I
3 might term for cause, where we feel
4 that there is a shortfall in safety
5 culture that we can agree that this would be the right
6 methodology that would result in actionable
7 shortfalls that could be implemented by a member.
8 We feel that the work has been done with
9 the NEI initiative and the work that is being done
10 now really is the basis of the United Services Alliance
11 Methodology.
12 They are making good progress. It looks to
13 be the right direction we need to follow through to take in
14 the comments we have received from the most recent
15 interaction with the NRC and continue to move these
16 forward.
17 Having this process in place will be very
18 important in the implementation of the statement
19 going forward.
20 Lastly, as already stated, it is the things
21 we can do to keep the line organization engaged
22 will be very important.

1 Some final thoughts.

2 Through our work in this area, we have

3 gained an appreciation for the key elements related

4 to nuclear safety cultures.

5 In 2008 at the Regulatory Information

6 Conference, Admiral Jim Ellis, the INPO President

7 and CEO made the following points concerning a

8 healthy safety culture.

9 First, he emphasized that the nuclear

10 operating companies leadership is responsible for

11 the health of the safety culture, and the

12 supporting organizations oversight committees and

13 consultants need to support that ultimate

14 obligation and to be very cautious about diluting

15 that obligation.

16 Second is that the foundation for nuclear

17 safety culture is the composite set of leadership

18 organizational behaviors shaping the culture of an

19 organization.

20 The descriptive language of leadership

21 behaviors contained in nuclear principles for a

22 strong safety culture was good step in that

1 direction.

2 Our members need to rigorously reinforce

3 these behaviors in multiple venues and throughout

4 every process in the plant.

5 We can never take safety culture for

6 granted, we can never assume it is in place because

7 every "understands it."

8 Third, the evaluation of nuclear safety

9 culture requires close, comprehensive observation

10 and analysis of behaviors, decisions, and plant

11 performance.

12 This can be enhanced and supplemented

13 through interviews and surveys of the organization,

14 but regular objective evaluations of an

15 organization's safety culture is fundamental to a

16 healthy safety culture.

17 Lastly, a recognition that safety culture

18 is a continuum.

19 Every organization has strengths and

20 vulnerabilities and elements of the nuclear safety

21 culture.

22 It requires constant work.

1 Today we have the tools to help us asses,
2 measure, and foster a healthy safety culture and
3 these need to be a part of the fabric of a
4 constantly improving environment to safety.
5 Thank you.
6 CHAIRMAN JACZKO: Thank you, Bill.
7 Now we will turn to Billie Garde who is an
8 attorney and partner with Clifford and Garde.
9 MS. GARDE: Thank you very much for inviting me to
10 visit with you today on the work being done on the safety
11 culture area.
12 As most of you know, I have done work in this area
13 representing workers and working with utilities on safety
14 culture issues for over 20 years, and feel that the
15 perspective that I brought to the workshop was unique.
16 In the context of that, we didn't have a
17 lot outside public participant, or citizen
18 interveners, or folks representing groups of
19 workers.
20 I really appreciated the opportunity to
21 participate and have those views heard.
22 I think the workshop was a tremendous

1 success, I think you heard that from everyone that
2 participated.
3 It was really a very interesting and unique
4 experience in the annals of these types of things
5 in that there were so many diverse groups and we
6 all worked really closely together for a common
7 goal and shared a lot of views and opinions, and
8 had perspectives that I think we all left with that we
9 didn't have when we got there.
10 It really was a success and I want to thank
11 and acknowledge the staff and the pre-work that
12 went into making it as successful as it was.
13 I do think as you move down the journey
14 toward finalization of the culture, another
15 workshop which obviously will be a little bit different
16 because it will be more advanced, would be helpful
17 to try to pull things together in getting closer
18 to closure.
19 I also want to share with you a few
20 perspectives on the draft policy statement.
21 I do think it is very important that there
22 be a common definition, and I think Shawn, you said

1 that the standard we were given was, can you live
2 with it – low standard.
3 We had to change our approach a little bit,
4 but given that standard it really challenged all of
5 us to make sure that the things that were really
6 important to us were included, and that we could
7 live with the outcome as recognizing that.
8 I haven't given up my fight for the words
9 the overriding priority, but I could live with the
10 lesser words that we picked, or different words
11 that we picked.
12 I had a personal concern, I wanted to make
13 sure I expressed to you in two areas; one is about
14 the safety conscious work environment and the
15 importance of the piece that that plays in the
16 safety culture.
17 I have been concerned, frankly, since the
18 INPO principles were finalized that it did not
19 include the safety conscious work environment.
20 I understand the position of INPO that
21 all of that is incorporated in the principles, but
22 I think that the amount of work that we have done

1 on the safety conscious work environment area, and
2 the critical importance of really giving voice to
3 an insistence that there not be retaliation
4 tolerated as part of a work environment deserves
5 special recognition and callout.
6 Although I think we can get to an agreement
7 on all of those things, I agree they're all
8 variations on the same themes for respect,
9 communication, et cetera. It really is important that we
10 get to a common set of attributes.
11 I think we have wasted a lot of time over
12 the last ten years arguing about issues that we
13 don't have the same platform on.
14 And that all of us it would be more
15 efficient, it would be better regulated, it would
16 be better and that wasn't a mistake.
17 I think it should be regulated, I think it
18 is better to assess and easier to follow if we have
19 the same terminology, and we are using the same
20 language that means the same thing.
21 I think as we all work together to try to
22 get to a final position on this that we have to

1 make sure that that doesn't get lost.

2 Certainly 20 years from where this

3 started -- this discussion on safety culture

4 started, we didn't start with the safety conscious

5 work environment in 1991.

6 That really has developed since then, so I

7 think we need to make sure we incorporate those

8 lessons because in my experience where these work

9 environments get off track is, and then can result

10 in an erosion of safety culture, it frequently goes

11 back to leadership, but there's still a lot of

12 folks in industry that think leadership in this

13 industry is yelling real loud.

14 That isn't it, and I think it is time that

15 we are able to say that respectful work

16 environments that do not -- are not based on that

17 kind of intimidating and harassing behaviors have

18 to have a common understanding.

19 It's just not okay in 2010 and 2011 to say,

20 well that's just the way he or she behaves so we

21 all just have to adjust to those types of

22 unacceptable behaviors, because professionals and

1 people that we want to pay attention to safety
2 first, don't.
3 Human nature just does not react well to
4 being managed by humiliation.
5 If we don't get that out of this industry,
6 it will continue to cause problems that will occupy
7 a lot of time and energy.
8 I want to take a few minutes, again, my
9 slides speak for themselves.
10 I do believe regulation is important in this
11 area. I know that that's a minority view, but as we
12 go through the rest of this year I would just like
13 that thought to be kept in mind.
14 I also want to make the point that getting
15 this right and getting this finalized before we
16 start new construction, in my opinion, is critical.
17 Annette and I have a long history going
18 back to Comanche Peak where this agency was really
19 brought to its knees by hundreds of allegations
20 that stopped construction in its path.
21 We didn't have a way to deal with it then,
22 we sorted it out, but that sort out took a

1 tremendous amount of time and energy.

2 Now, we're facing construction that has a

3 lot more challenges because of the international

4 activities, because of a different licensing

5 process, there is a lot more challenges that face

6 new construction and I think it is critical that we

7 get this right before we start so

8 that we're not trying to fix it along

9 the way.

10 I think if you're going to have a

11 successful new series of plants built, that

12 everybody has to start with the same platform.

13 We can't bring in contractors who don't

14 understand what the term safety conscious work

15 environment means, that don't come from a

16 background that has safety culture in it, and

17 expect we are going to get different results.

18 I think getting this finished is critical

19 to making that piece work.

20 I just wanted to wrap up with a couple of

21 comments on internal NRC safety culture activities.

22 I want to recognize the substantial

1 progress that's been made within the agency from a
2 time when really intimidation was a significant
3 factor and how this agency was managed.
4 There has been from the Commission and
5 Commissioners and many of the senior managers a
6 strong recognition that the freedom to raise
7 concerns and express differing opinions is the
8 foundation for good decision-making and better
9 public policy and, ultimately, better safety and
10 generally I think there is a healthy respect for
11 that for the diversity of opinions and
12 collaborations.
13 I urge you to be vigilant because it is not
14 yet fully grounded.
15 There are pockets within your organization,
16 you heard a little bit about from Alex, and I will
17 tell you as a lawyer that gets calls from NRC staff
18 folks frequently that actually those calls have
19 gone up to me as well in the last year.
20 So we still have pockets of problems and I
21 think most of those pockets of problems are
22 attributable to managers and supervisors who don't

1 really believe that free flow of information means
2 what it says.
3 I think you can congratulate yourself on
4 the progress that has been made, but it would be an
5 error to think that you are where you wanted to get
6 to.
7 The role of the Commission in expressing no
8 tolerance for intimidating behaviors, for having an
9 expectation for open communications, and a real
10 interest in the results of the survey that show
11 pockets of problems that you operate the same way
12 you would if you were running a plant, which is
13 that you have an expectation that there would be work
14 plans to solve those problems and that they're
15 accountable to you and that those problems get
16 solved, because they are not going to solve
17 themselves.
18 I think that among the things you are
19 working on from the internal safety culture
20 perspective, it is very, very important that you
21 have a better internal alternative avenue for NRC
22 employees to obtain timely and effective responses

1 to their concerns because, again, going back to the
2 80s and the 90s, what ended up happening as most of
3 those people who were around then is the NRC staff
4 that had differing professional opinions found
5 their way to people who would listen to them.
6 Whether that was Congress, private
7 attorneys, whether that was citizen intervenor
8 groups, so the NRC's internal debates about
9 technical issues sometimes safety issues, ended up being played out
10 in the newspapers, in Congressional hearings with
11 public interest losing confidence in your agency.
12 Your agency has developed and put a lot of
13 work into reestablishing its own reputation for
14 integrity.
15 You'll lose that if you don't have an
16 internal process that honors the internal descent
17 and the internal differences of opinion, so you
18 can make sure that they are worked internally.
19 Or we will end up right back where we were
20 before with a real loss of the progress that you've
21 made.
22 I urge you to take the recommendation

1 seriously and really put some attention and get
2 some input from the staff as well about what will
3 work that will enable employees to raise their
4 concerns and get a full and fair hearing.
5 With that I conclude my comments, a little
6 bit over, sorry.
7 CHAIRMAN JACZKO: Thank you Billie, and I
8 appreciate those comments and we will have questions and
9 comments afterwards.
10 I'm going to pronounce both your first and
11 last name incorrectly, so why don't you do it for
12 me and I will try to repeat it.
13 MS. THISTLETHWAITE: Duann Thistlethwaite.
14 CHAIRMAN JACZKO: Duann Thistlethwaite, you are
15 the Society of Nuclear -- I'm sorry, you are the Director of
16 Manufacturing Compliance at Triad Isotopes with the Society of Nuclear
17 Medicine.
18 MS. THISTLETHWAITE: Thank you very much for
19 having me here today and I appreciate all of the help from
20 the staff during our workshop.
21 It was a very unique experience.
22 I am a member of what we refer to as the

1 medical materials licensees or the fringe group, so
2 we are a little bit different.
3 I wanted to start, first slide, please.
4 I wanted to start by just introducing
5 myself in some background, I've been in nuclear
6 pharmacy practice since '92, board certified in
7 '94, and now a fellow of the American
8 Pharmacist Association.
9 In that, since I was a pharmacy student I
10 always started with I have to thank one of my first
11 supervisors of saying start a meeting with a safety
12 message, so I wanted to just share that with you
13 today to think safety, and act safely.
14 Why I start that way is because it is very
15 important no matter what your job or what you are
16 doing to always put safety first and to put that in
17 everything you do, every aspect whether you are a
18 leader or front line worker to try to carry that
19 forward.
20 I wanted to just give a synopsis of one of
21 the guiding principles from my company, Triad
22 Isotopes, and it does deal with safety.

1 Our priority to our customers, partners,
2 and fellow employees is to operate in an
3 environment that features the best possible safety
4 regulations and precautions.
5 We will offer the safest products, work
6 environment, and delivery method in our industry,
7 so this does run deep and holds true to where I
8 come from.
9 A little bit about the organization I'm
10 representing today for the Society of Nuclear
11 Medicine.
12 We were founded in 1954 to make sure to
13 promote the science, technology, and practical
14 applications of nuclear medicine.
15 With over 16,000 members from physicians,
16 technologists, and scientists we want to make sure
17 to follow our mission to improve healthcare by
18 advancing molecular imaging and therapy.
19 Next slide, please.
20 Materials/Medical doesn't always fit into
21 the proper line with all the other licensees that
22 are covered by the NRC, and we have a unique nature

1 of radiopharmaceuticals, nuclear pharmacies, and
2 nuclear medicine.
3 The NRC must differentiate these
4 operational and our practice settings from others
5 in which nuclear materials are used.
6 Next slide, please.
7 There is actually a paradigm difference
8 between us and the other licensees. We come from a
9 variety of different industries in all shapes and
10 sizes.
11 From one person in a radiography department
12 to organizations with either hundreds or thousands
13 of employees which could be academics or institutions.
14 From hospitals to pharmacies to mobile
15 imaging centers these are all included in our
16 group.
17 Next slide, please.
18 The concept of safety, itself, with
19 respect to nuclear materials conjures up images of
20 nuclear weapons, power plants, dirty bombs, etc.
21 Most of these scenarios and legitimate
22 concerns thereof are beyond our realm of

1 operations.

2 We like to say that our drugs basically

3 could just cause massive disruption if they are in

4 the wrong hands.

5 Next slide, please.

6 On the following sides what I did was

7 instead of trying to speak for my company or the

8 side of nuclear medicine, I did phrased this as

9 myself.

10 I didn't want to come across as being too

11 robust in saying that I spoke for the side of

12 nuclear medicine or for my company as a whole, so

13 that is why I phrased these in this manner.

14 I believe that there is a positive outcome

15 for radiation in helping to optimize patient care.

16 I believe that the benefits are

17 commensurate with the risk.

18 I believe that safety culture must go from

19 the bench to the bedside, from our research to the

20 actual patients themselves.

21 Next slide, please.

22 I do believe in the concept of safety

1 culture and with definition that was developed in
2 the February 2010 workshop.
3 As my friends and colleagues have said here
4 at the table, it was something that we decided we
5 could all live with.
6 After a few arm wrestles.
7 I believe in the concepts of the general
8 categories for the traits themselves.
9 I do believe the NRC should take great care
10 in the implementation of this, this was a
11 typographical error where I said regulation instead
12 of policy, so maybe it was a Freudian slip.
13 Across licensees it represents as one size
14 may not fit all.
15 Next slide, please.
16 I believe in the idea of zero tolerance for
17 violations is an unattainable goal which will lead
18 to under reporting of issues and eventually
19 deteriorate the fabric of a safety conscious work
20 environment.
21 This could be used in the NRC's internal
22 applications of safety culture, and as we move

1 forward in the implementation.

2 A lot of people when you are looking at

3 metrics would like to put a zero, but again even in

4 six sigma that's an unattainable goal.

5 I believe the idea of a safety culture

6 cannot be burdensome for those involved.

7 It should be something that becomes second

8 nature.

9 It should be something that is evident and

10 apparent in all that we do.

11 If it's just seen as extra paperwork or an

12 extra tick on a check sheet, then that will be seen

13 as burdensome or complacent and not be effective.

14 Next slide, please.

15 I believe that a positive safety culture

16 should encompass our patients, our personnel, the

17 public, and the environment.

18 I believe that without a doubt it is every

19 person's responsibility, no matter their position

20 to consciously cultivate the culture of safety.

21 On this, in touching our patients and the

22 personnel and the environment, this is one of those

1 things like I said again that it does go from bench
2 to bedside.
3 Whether we are doing research on a new drug
4 that we are bringing forward, we have to make sure
5 that safety does come up in the conversation and
6 make sure that it's a part of our process moving
7 forward, and also as we go to patients there is
8 less talk now about patients being released after
9 they've had iodine therapy and making sure that
10 we're -- making sure that they are as safe as
11 possible and the public is as safe as possible as
12 well.
13 In cultivating a safety culture, this is
14 something that everybody has to take on themselves.
15 It can't be something that is just a policy
16 on a book because we have lots of policies on books
17 that some are followed more than others but it has
18 to mean something to the people.
19 Next slide, please.
20 In the medical community, security itself
21 is inherent in our safety culture.
22 That is why I felt that security did not

1 need to be drawn out in the policy statement.

2 There is lots of things that are inherent

3 and if we started throwing everything in, that

4 simple definition would become three or four pages

5 long.

6 Security and safety do go hand-in-hand to

7 ensure our products are handled properly from the

8 bench to the bedside.

9 Next slide, please.

10 I wanted to thank you all for this

11 opportunity to be here and special thanks to my

12 company for allowing me the time and to my family

13 and to my nuclear pharmacist friends.

14 I wanted to encourage us all to take

15 personal responsibility and action in safety and

16 moving safety culture forward.

17 It isn't something you can just read, it

18 must be something that you do.

19 Thank you.

20 CHAIRMAN JACZKO: Thank you very much for that

21 presentation.

22 We will now turn to our final presenter Robert

1 Link who is the Manager of Environmental Health Safety and
2 Licensing in AREVA.
3 MR. LINK: Good morning. I am Bob Link, Manager of EHS&L,
4 AREVA Richland, Washington, fuel fabrication facility.
5 I represented the fuel cycle facilities at
6 the recent safety culture workshop in February, and
7 as part of that workshop panel I was part of the
8 fuel facility and industry licensees break-out
9 session.
10 So, I am trying to balance a number of
11 perspectives, my own professional point of view
12 based on 40 years of professional experience, my
13 company and site point of view, all fuel
14 facilities, and to the best of my abilities a bit
15 of the industrial licensees.
16 By definition we have a safety culture, we
17 believe we have a good one due to our recognized
18 responsibilities.
19 Some of us have more formality developed
20 programs and others including procedures and even
21 metrics.
22 Therefore, we strongly support the concept

1 of attaining and maintaining a strong safety
2 culture.
3 For example, at the NRC's request, the
4 representative of Westinghouse's Columbia, S.C. fuel
5 facility represented its comprehensive safety first
6 program at the NRC's RIC conference in 2009.
7 We recognized that the draft strawman safety
8 culture definition used at the beginning of the
9 workshop was based on IAEA and INSAG definition with some
10 minimal modifications.
11 The workshop also had input from at least
12 nine models including INPO. They all contained a
13 lot of similarities, but some differences.
14 One noteworthy difference in the strawman that the
15 workshop started with recognized both IAEA and NRC
16 definitions and included the phrase, "received the
17 attention as warranted by their significance."
18 This did not make it into the workshop
19 final product even though some of the participants
20 lobbied for the concept as a workshop by consensus
21 was driven to, "can you live with it" standard.
22 The workshop also developed from scratch a

1 number of traits, characteristics, and attributes.

2 While each model has a slightly different

3 set in number and content, there is a significant

4 overlap of similarities.

5 One recommendation I make is for those

6 traits not to be made a formal part of the policy

7 statement itself, but to be used in the supporting

8 information.

9 I believe there is a basis to have some

10 flexibility of the traits due to the diversity of

11 licensees' functions and risk.

12 A process concern is that there appears to

13 be a significant reactor, or ROP, point of view.

14 Instead of paradigm filters influencing the

15 perspective of the staff causing some difficulties in

16 the definition, as well as the traits from a

17 diverse points of view held by different

18 stakeholders.

19 In comments the staff recognizes reactors

20 have been on this journey for a longer period of

21 time and has a level of sophistication that is

22 different from the other set of licensees.

1 But with that comes an implication if not
2 explicit expectation that it is just a matter of
3 time versus perhaps there is an appropriate
4 different set of expectations or level of
5 sophistication based on risk of the diverse set of
6 licensees.
7 While I am aware that the staff had earlier
8 discussions with stakeholders on the subject of
9 whether policy should include safety and security
10 explicitly, and while we do not oppose it, we
11 consider security a subset of safety, a 1A 1B
12 relationship rather than a 1 versus 2 relationship.
13 I know a number a licensees still had
14 trouble with the need for the word security, and
15 again, can you live with it criteria played into
16 the ultimate result.
17 The diversity of licensees creates a
18 challenge for the concept of nuclear safety first.
19 While we are all committed to the
20 importance of maintaining strong safety culture, the
21 definition of mission, function, and risk profiles
22 in the nuclear context represent a broad spectrum

1 of how that obligation is carried out.

2 For instance, with regard to fuel cycle

3 facilities, we have a small number, about seven

4 facilities nationwide.

5 They're governed by three different

6 10 CFR parts, and within 10 CFR 70

7 there are three formal categories of plants

8 with differing regulations applicable.

9 And even within one category of license

10 each site has a different scope of activities and

11 associated risks and methods to carry out those

12 missions.

13 While the basic principles are the same with regard

14 to safety culture; the details and means of its

15 accomplishment can take a variety of methods.

16 Then there is an additional spectrum of the

17 gauge NDT radiographers represent in form and function

18 to add to the diversity of the entities that are

19 covered by such a policy.

20 Many of us operate within Agreement States,

21 and that represents an additional aspect of

22 diversity of the regulators we interact with and

1 respond to with regard to the proposed policy
2 implementation.
3 An interesting perspective I gleamed from
4 the workshop is that safety first concept for
5 medical licensees includes life and death protocols
6 for the patient.
7 The broader protocol for safety beyond
8 nuclear causes us to put into perspective, is
9 nuclear safety always first?
10 Some fuel facilities including my own,
11 primary risk is chemical, not nuclear or
12 radiological.
13 We, as licensees, are the responsible party
14 for safety and must set a clear and unambiguous
15 message to all employees, contractors, and visitors
16 regarding all forms of safety.
17 As I can guarantee you, we have safety
18 first as our mantra. The differentiation of what
19 kind of safety can complicate the message's
20 clarity.
21 Perspective must be maintained at all
22 times.

1 Some of us have employees that say if I can
2 improve safety by 10 to the minus 8 that policy would indicate I should
3 input that improvement, but with limited resources
4 management must allocate those resources to the
5 greatest value use.
6 The debate of what is safe enough is heard
7 every day in the field.
8 With regard to fostering a safety culture
9 we make continuous decisions every day.
10 Some overt, some just basically a part of
11 our culture.
12 I made the decision to come here today and
13 yet I guarantee you that from a safety culture
14 basis, I would have had a higher value and impact
15 if I was on the floor in my facility today.
16 So, if I would make my decisions solely on safety
17 culture I wouldn't even be here.
18 I would believe that balance and
19 significance must be strived for continuously.
20 While procedures and programs are
21 important, mentoring, communicating and
22 demonstrating safety culture is most critical.

1 These attributes are more difficult to
2 measure and assess.
3 The task of assessing safety culture is
4 difficult at best.
5 The school of hard knocks has taught me a
6 lot, but the reality is that we have a significant
7 workforce in transition, and it is the obligation
8 of our generation to make the knocks fewer and less
9 severe for our replacements.
10 Yet, some of the attributes are easily
11 identified, for instance a corrective action
12 program, but even in these tools and programs you
13 must drill down to see their effective and aggressive use.
14 Characteristics, attributes, and behaviors
15 are all subjective, all are actions or mental
16 state conditions of individuals.
17 Observing, interviewing, and surveys are
18 the primary means for assessing safety culture.
19 These are techniques we as technical folk
20 are not proficient at.
21 Getting into the head of an individual in
22 the organization is difficult and subjective.

1 I know better what a safety culture feels
2 like versus objective evidence looks like.
3 In my experience, it is always easier to
4 identify a poor safety culture than certify a good
5 one.
6 This leads me to my last comment and its
7 implementations, this is why some of us, including
8 me, are anxious about this initiative.
9 Safety culture is a difficult concept to
10 write an inspection manual for, yet ultimately,
11 this is what is required.
12 While the NRC does not have a formal
13 regulation by this policy formation action and we are not
14 recommending the rulemaking, it is of high
15 importance to form a policy which is a statement of
16 expectation.
17 This expectation drives some form and level
18 of measurement. Are we living up to this
19 expectation policy or are we not?
20 There are demonstrated examples in history
21 that actual analysis has found efficient safety
22 culture as root or contributing causes of

1 significant incidents, it is more difficult to identify
2 leading indicators or small or lower significant
3 lagging indicators that are used to mitigate and
4 self-correct.
5 One significant area that both agency and
6 industry needs to be cautious about is setting
7 expectations with inadequate resources, people,
8 tools, and training.
9 One of the worst things we can do is set an
10 expectation without adequate resources or time for
11 implementation and setting us up for failure.
12 Therefore, it is imperative that the NRC
13 staff work closely with the various regulated
14 communities and Agreement States to prioritize this
15 effort among the other higher priority initiatives.
16 Even this step may require measured
17 engagement by all parties.
18 In this regard, the fuel cycle facilities
19 safety culture implementation should be integrated
20 with a yet to be developed enhanced oversight
21 process.
22 I urge the Commission to look -- to

1 continue looking at implementation challenges
2 during their deliberations on policy development
3 as inevitably the staff and licensees and
4 behaviors will be driven by those most important
5 policies.
6 The devil is in the detail of the necessary
7 resources for all are needed to succeed.
8 Perhaps you should reflect on the list of 8
9 characteristics in the draft and apply them to the
10 formation of the policy itself as an initial
11 self-assessment before you finalize your
12 endorsement.
13 I would end my remarks by stressing again
14 the fuel cycle facilities consider a strong
15 safety culture to be a necessary operational
16 element and that the plants have had site-specific
17 programs in place for some time.
18 Thank you.
19 CHAIRMAN JACZKO: Thank you, Mr. Link for those
20 comments.
21 We heard from a variety of different
22 stakeholders with a variety of different views, and

1 you all generally agreed on the definition and
2 generally agreed on the standard that you achieve
3 the definition which was, could you live with it.
4 I think that is certainly an okay standard
5 sometimes if what you are trying to do is get to
6 consensus, and from hearing each of you
7 individually it is clear that there was a
8 tremendous amount of work that was put into this and that
9 there was not uniformity of views going in and
10 there probably wasn't uniformity of views going
11 out, which is why I think that common definition is
12 so important that you were able to come up with
13 because it does represent a lot of good work that
14 you all put in and I think
15 that the staff helped
16 facilitate, so I think it's something we should --
17 I personally will take and put a lot of weight into
18 because I think those kinds of consensuses are not
19 easily achieved and when they are they are
20 something to be cherished.

1 One thing that we have heard commonly from
2 everyone is the need for common definition.
3 I think that hearing from all of you that
4 that seems like, at least from your perspective,
5 you've achieved a common definition.
6 This was touched off by a point, that I
7 think Mr. Link, you had said.
8 I'm not so clear that I've heard from
9 everyone that they believe there should be common
10 traits.
11 Each one of you could comment on that just
12 briefly, yes or no, whether you believe that there
13 should be common traits or whether when we get into
14 the traits that there might be differences among
15 different licensees. I'll start with you Shawn.
16 MR. SEELEY: I am not necessarily going to
17 disagree with you on that, Mr. Chairman, but as a
18 co-regulator it was thought early on that we shouldn't
19 really have that type of input on the traits as we may have
20 to be going out and reviewing that policy in the end.
21 My theory was to leave it up to the
22 stakeholders at the meeting to come up with those

1 traits because if we unfairly influence the process
2 it may be detrimental in the end.
3 By that being said, I strongly urge the
4 Commission, the staff to look at what the
5 workgroup -- the workshop produced for the
6 definition and the traits and go with that.
7 I think you may lose some credibility if
8 you don't take any of those comments and say we
9 don't want to do that.
10 That is my two-cents-worth worth on that
11 and I will let those guys address the traits.
12 MR. WEBSTER: Mr. Chairman, our experience with
13 the principles document is, of course, we have a definition
14 and sub-tier principles and really the grist occurs at
15 the principle level.
16 What my concern would be that if we stick
17 with just a common definition and don't get to the
18 trait level, that we will lose that grist as to
19 what the definition really means.
20 I think we should give thoughtful
21 consideration to sub-tier attributes that might be
22 a part or illustrate those traits that might be

1 specific to the application of the technology.

2 MS. GARDE: I think it is critical that we have a

3 common set of attributes or principles.

4 Some of them may be applicable in different

5 ways to the other industries, and I think if we sit

6 down and work that out we can figure out a way to

7 address that because it was clear that there were

8 differences, some differences, for example we spent

9 a lot of time on a discussion about leadership.

10 One of the points that was really

11 well-founded was that we have to make sure that if

12 we've got essentially a leaderless person, we have

13 one radiographer out there on the field how does

14 that apply.

15 There's some really important discussions

16 to be held, but I think we've got to get away from

17 INPO has its set of principles, the NRC has its set

18 of traits, every utility comes up with their own

19 list of behavior expectations and then what are we

20 measuring.

21 To the extent it's at all possible I think

22 we have to have a common set of definitions of

1 traits or principles or whatever we call them.

2 We didn't get that far in the workshop, I

3 think that really was -- ideally they

4 wanted us to have some more time on that, but it

5 took a lot of time to get where we got.

6 CHAIRMAN JACZKO: You didn't get the traits or you

7 did develop some?

8 MS. GARDE: We did develop -- we did the exercise

9 were you write things on a board and put all of the stickies

10 under, so we grouped everything and we came up with a list

11 of traits, but we didn't have the time to sit down and say,

12 here are all of the things we put under like problem

13 identification and resolution and how can we refine that.

14 CHAIRMAN JACZKO: Thank you.

15 MS. THISTLETHWAITE: I did like the high-level

16 categories from the affinity diagram.

17 I thought it showed the differences where

18 we all worked separately and came up with the

19 characteristics for our group of licensees.

20 So, the high-level categories, the eight

21 main themes as I called them, I think those were

22 uniform enough or ubiquitous enough that they touched on everyone but,

1 the specifics underneath I think that's where the
2 flexibility must be so that you can have those.
3 MR. LINK: I think we can work toward the common
4 set of traits.
5 The issue is how those traits are going to
6 be used through the implementation of measuring the
7 expectation.
8 Billie's already mentioned the concept of
9 leadership for a one person company.
10 What does that mean in practical terms?
11 There needs to be a flexibility of what
12 that traits looks like for the different sets of
13 licensees.
14 We have what we believe is very robust
15 corrective action program while other smaller --
16 much smaller companies might not be able to have
17 that type of infrastructure on the level of
18 proceduralization and procedures that would support
19 that.
20 They may have a very good capability to
21 step back and look at incidents that they had and
22 learn from them, which is really the practice and

1 the behavior you are looking for.

2 CHAIRMAN JACZKO: Thank you, I appreciate that and

3 I think that is helpful.

4 It certainly gives us a sense of how to

5 proceed and it does seem that we can look to

6 commonality among the definition and the traits

7 it's within those traits that we apply them to

8 different licensees and classes of licensees we get

9 a sense of the differences at that level.

10 Bill, you had touched on this comment, and this gets

11 a little bit -- it seems like we are leaning a

12 little bit forward in implementation.

13 Originally a focus, for me, going in was to

14 look at the policy statement.

15 I'm certainly pleased with where we are on

16 the policy statement. I think we have made a lot of

17 progress, and I think we are very close to getting

18 something that we can all agree on and move forward

19 and I think that gets us into the next challenge

20 which is implementation.

21 Bill, you made a comment about the need for

22 objective evaluation.

1 Implicit in there is the assumption that
2 that is something that is possible.
3 Certainly as I talk about this issue with
4 people, I think I hear differing views about
5 whether or not that is something that is possible
6 in this area.
7 If you could touch a little bit on that or
8 maybe what INPO's experience has been about
9 objective evaluation of some or either of these traits or the
10 definitions, or INPO's principles or how you go about
11 doing that objective evaluation.
12 MR. WEBSTER: There are a couple of things that are
13 important to an objective evaluation to me is clarity in
14 what the standard is and that that standard is understood
15 and agreed upon.
16 The second is the rigor by which the
17 assessment tool is developed, tested, and the
18 fidelity of that tool and being able to measure the
19 data that you have relative to the integrity of
20 that standard has been identified.
21 In also think the composition of the team and the people
22 looking at it become important, there needs to be a

1 degree of independence included, at least in some
2 periodic basis and looking at safety culture.
3 As I say, it is hard for a fish to see the
4 water it swims in.
5 That degree of independence is important.
6 The experience of the team both
7 operationally and in understanding of the
8 organizational development concepts are important.
9 I think as those things come together, you
10 moved towards a higher degree of objectivity.
11 CHAIRMAN JACZKO: I appreciate that and certainly
12 an area at INPO you have a tremendous amount of expertise in
13 this aspect.
14 I think as we go forward one of the most
15 important issues will be how we deal with
16 implementation and whether that is a regulation,
17 whether it is something that is industry-specific I
18 think that will be the next big discussion, but I
19 think we will be get a long way forward if we can
20 come to common understanding of the definitions in
21 the traits and finalize the policy statement.
22 I think that gets us a long way to be able

1 to do this.

2 I thought I would just close, Billie in

3 reference to your comments, there were some very

4 interesting comments, in particular the comments on

5 internal safety culture.

6 One of the things that -- a comment you had

7 made, Bill, I think was comparable to Billie's was

8 that I think Bill you emphasized there is no

9 perfect safety culture and that we as an

10 organization will strive to improve and there will

11 always be areas in which we can improve and make

12 improvements.

13 I appreciate your comments Billie about

14 continuing to work to make sure that we are

15 fostering the right kind of behaviors in our

16 managers and leaders at this agency.

17 I think that echoes a little bit of what we

18 heard from the union as well.

19 I think those are good comments and I know

20 the staff here certainly works very hard to ensure

21 that we have an environment in which we do tolerate

22 those differing views and continue to work on

1 communication to make sure we are communicating
2 that effectively.
3 We have put in place -- the staff is
4 working to put in place plans to address the safety
5 culture survey results, and I think those will go a
6 long ways towards addressing those areas of
7 improvement.
8 One of the interesting issues that came out
9 of the presentation we had from the contractor who
10 talked about the survey results was very
11 complimentary and said that just to let you know it
12 will be hard to do better than this.
13 You really want to talk about and think
14 about maintenance.
15 Almost every person, and I think you heard
16 reaction from the staff, almost every person here
17 at the agency heard those words and said, that's
18 not for we are about, we're about continuous
19 improvement and for us maintenance isn't good
20 enough but there are areas where we can continue to
21 improve.
22 I think your feedback is welcome and will

1 certainly look at those areas and I know the staff
2 is interested in doing that.
3 With that I want to thank you all for your
4 contributions.
5 I think it has been a very useful
6 discussion so far and I think we have a lot more
7 work to do, but I think we have really made a lot
8 of progress, so I will turn to Commissioner
9 Svinicki for questions.
10 COMMISSIONER SVINICKI: Thank you.
11 Again, I would add to what the Chairman
12 said in thanking you all.
13 It is obvious some of you have very
14 extensive and long involvement in safety culture
15 issues.
16 I don't have as extensive of an involvement or
17 background so I really have benefited from hearing
18 your presentations today, and
19 your broader contributions to this
20 issue.
21 I debated but I'm going to take a minute or
22 two of my time to ask, I've become sufficiently

1 intrigued about the February workshop for the
2 reason that NRC staff conduct a lot of public
3 meetings, a fair number of workshops, and I think
4 this is the first time were I have heard everything
5 from -- Mr. Seeley said it was a huge success, I
6 put that in quotes, and then I heard from Mr.
7 Webster it was a significant step forward in
8 resolving some of our issues.
9 I heard a number of things I might say were
10 the reasons why I heard it was facilitated, which
11 I'm a fan of and I think often is helpful in
12 getting some concrete results down on paper.
13 I have heard that there was a good mix of
14 we were successful in getting the right people in
15 the room to be involved in the meeting.
16 It may be, although we joked about saying
17 can you live with it, maybe we kind of calibrated
18 the meeting expectations for what level of
19 enthusiasm we were trying to get in the work
20 product or investment.
21 We do conduct a lot of workshops and I'm
22 very interested in making them as effective as

1 possible.

2 As a group of diverse participants, is

3 there anything you would add as to why

4 you felt this was a uniquely successful workshop?

5 MS. GARDE: From my experience with NRC meetings,

6 this meeting had a lot more, as Mr. Zimmerman said,

7 leadership by the attendees.

8 The NRC staff was there, they bookended the

9 presentations, they clearly put a lot of work into

10 setting it up. We had a number of preliminary phone

11 calls so issues that sometimes I think play out in a

12 meeting and then kind of bollix up a meeting, we

13 really worked out on the phone ahead of time which

14 I think made it go a lot more smoothly, but it was

15 one in which I really want to credit the staff for

16 a phenomenal encouragement of our discussion on our

17 individual perspectives and a lot of respect for

18 that and a lot of belief that what we said mattered.

19 I don't know how everybody else felt, but

20 we were very engaged.

21 We felt like we were really making a

22 difference. Oftentimes at NRC meetings you feel like

1 you're not making a difference I'm coming to say my
2 point, and it is going to be heard but it is not
3 going to be listened to or worked in.
4 I've been doing NRC meetings for a very
5 long time and this was very unique.
6 The staff really should be complimented and
7 to the extent they have lessons to take away to
8 incorporate in meetings going forward, I.
9 really encourage them to do it because it
10 was a unique meeting.
11 COMMISSIONER SVINICKI: I had forgotten on my list
12 is, Ms. Garde, you had mentioned pre-work was your term you
13 had credited that as another helpful item so I appreciate that
14 you mentioned that again.
15 I've said that there is obviously a lot of
16 extensive history and that I don't have as much
17 background on safety culture so I did what I
18 frequently do which was trying to review the issue
19 on some of the Commission history.
20 Ms. Garde, I will say even in documents I was
21 looking at last night, you were quoted and your
22 contributions were mentioned there.

1 I know that previous Commissions have taken
2 up staff recommendations to initiate rulemaking in
3 the terminology and acronyms I noticed changed
4 little bit over the years safety conscious work
5 environment, safety culture.
6 I think Ms. Garde you were indicating it has been a
7 very evolving field of knowledge, but it is
8 interesting to me, and I was aware that the
9 Commission had not approved the recommendations to
10 initiate rulemaking to regulate either safety
11 conscious work environment or safety culture, but
12 what surprised me a little bit was the strength of
13 the language that some of them used and I will just
14 briefly say that then Chairman Meserve said the
15 Commission in the past and so this was voting on a
16 2002 paper and he was reflecting on work prior to
17 that, "the Commission in the past has chosen not to
18 undertake direct regulation of safety culture.
19 The reasons for the Commission's reluctance
20 stem from the recognition that any attempt to
21 evaluate safety culture is necessarily subjective,
22 would intrude on management practices that should

1 be the responsibility of the licensee, would stifle
2 licensee initiative and might even be unnecessary
3 given the steadily improving safety performance of
4 the industry."
5 I have to quote Commissioner McGaffigan who was, I'm told, often
6 very plainspoken, but he said, "I join with my fellow
7 Commissioners in rejecting proceeding with
8 rulemaking.
9 I disapprove going forward with such
10 rulemaking armed solely with the hope that
11 objective and appropriate regulatory means and
12 measures will be discovered along the way."
13 This is from 2002 and as I sit here and
14 listen, I see that this has been a very evolving
15 outreach with stakeholders, the issue itself has
16 been evolving, and I think INPO's been doing a lot
17 of work so the foundational knowledge has been a
18 evolving over time.
19 I might ask if any of you that have this
20 longer history with this issue hearing those quotes
21 and reflecting that this is 8 years from when these
22 words were written, where do you think we are today

1 in terms of this measurement issue? And Chairman
2 Jaczko mentioned this as well, of trying to find
3 objective indicators of this.
4 On that broad topic, and Ms. Garde, I will
5 credit that you were quoted in here, you have
6 articulated a consistent position on this issue.
7 MS. GARDE: I'm interested to hear what you say,
8 but I would like to answer too.
9 MR. WEBSTER: A couple of points is absolute
10 measures of safety culture continue to be elusive.
11 We look at things that are outcomes.
12 At the RIC, Mr. Borchardt covered several key measures
13 that indicated the right decisions are being made
14 with respect to safety.
15 What you really need is actionable
16 information and actionable information by the
17 leadership team in terms of where the culture that
18 the health, the attitude, the values are going
19 within an organization.
20 To some degree, objective measures aren't
21 as helpful it is just some sense as to the movement
22 of the organization and you need to continually

1 move on that.

2 Our sense is that an absolute measure that you

3 could somehow pinpoint movement of a broad term of

4 safety culture is not within reach.

5 What is within reach is techniques and

6 assessment methods and oversight that allow you to

7 make decisions and to do the right things to

8 enhance the values and the attitudes and behaviors

9 of the workforce.

10 I think to some degree as I think back on

11 those conversations at that period of time, I know

12 it was certainly a very bruising time for the

13 industry back then, is a real recognition as it

14 comes back that it's the leadership of that

15 operating organization that needs to own this.

16 Others of us will always be looking at some sort

17 of metrics and some sort of understanding as to

18 what is going on to oversee what is happening.

19 MS. GARDE: I, not surprisingly, have a different

20 view.

21 I think that the NRC should go as far as it

22 is comfortable within regulating, when I say

1 regulating I mean setting forth expectations that
2 are measurable, are repeatable, but set standards
3 of behaviors and conduct and the issues that you
4 are looking at that underpin safety culture that
5 you can measure.
6 I point to an example that is really unique
7 to the NRC.
8 When I am speaking to other industries and
9 agencies, I use this example a lot, they say why is
10 the NRC different.
11 When you put into place 10 CFR 50.7 so
12 you set out a regulatory expectation that you would
13 not tolerate a behavior, which is retaliations for
14 people raising concerns, you elevated the bar for
15 how people in this industry behave.
16 It is measurable, it is subjective, people
17 are not going to say they retaliated against one -- it
18 isn't easy to go in and do those kind of
19 investigations.
20 That is only one attribute, but it is an
21 attribute in my view of safety culture, and I
22 believe it changed your whole industry.

1 It now has made it -- you can have a
2 dialogue with your plant personnel with new
3 supervisors when they come into the industry from
4 somewhere else, we behave differently here.
5 This is a different industry and there are
6 different standards of expectations of behavior.
7 I believe the agency can do that with
8 safety culture.
9 I think we could get there.
10 You made reference to the USA methodology,
11 there has been a decade of synergy work in
12 measuring safety cultures.
13 We've got almost ten more years experience
14 than we had in 2002.
15 We could sit down and come up with a set of
16 principles that continue to elevate the industry
17 expectations and behaviors and make it even better
18 than it is now.
19 I think you can do it.
20 Industries don't like being regulated, I
21 understand that that is an objection, but I think
22 in the long run, you end up with a better position

1 to take this industry into the future.

2 You get a platform to say to the American

3 public we are regulating differently, we are doing

4 things differently, we have put in place changes

5 from other accidents and incidents where we have

6 attacked the issue of safety culture and we have

7 set up those expectations.

8 I think that takes you to a different place

9 with the American public which I think you can get

10 to and is a lot different than it was in 2002.

11 COMMISSIONER SVINICKI: Thank you.

12 It sounds like this dialogue will continue.

13 Hopefully it won't be bruising to use your term

14 particularly because we're having such promising

15 workshops.

16 Very quickly, Mr. Seeley, I wanted to ask

17 you again, I know it is a tall order for the

18 Agreement States to try to have a communication

19 outward to the various licensees and I think that

20 that a lot of good work has been done there by

21 OAS, but as the Chairman said lean forward to more

22 of an implementation question on a policy

1 statement.

2 Something we deal with Agreement

3 States is our compatibility, we need to have

4 compatibility between your regulations and our

5 regulations.

6 In the area of a policy statement, has OAS

7 or any of the Agreement States, have they begun to

8 engage with the NRC staff in terms of how we treat

9 the notion of compatibility if the policy statement

10 were to be finalized in the general form that you

11 see it now?

12 MR. SEELEY: Not per se, but I know through the

13 IMPEP, Integrated Materials Performance Evaluation Program,

14 those types of policies and procedures -- what are the

15 Agreement States following, what is the guide, what is the

16 bar that is raised in those incidences.

17 I know we have had informal discussions

18 regarding those policies and procedures, and in

19 fact, I believe some of the IMPEP procedures are

20 being updated regularly and we continually are

21 adding our comments here and there, but I don't

22 think there is anything formal in writing yet, but

1 I do know that I can guarantee you it will be a
2 buzzword that will be discussed during IMPEP
3 reviews from here on out.
4 COMMISSIONER SVINICKI: At least notionally, what
5 compatibility means in this case is we are at least in the
6 beginning of our thinking about that and defining it.
7 MR. SEELEY: Correct.
8 COMMISSIONER SVINICKI: Thank you.
9 Thank you, Mr. Chairman.
10 CHAIRMAN JACZKO: I would certainly echo
11 Commissioner SvInicki's comments, I think this has been a
12 very interesting meeting.
13 There is certainly a lot of interesting
14 issues to go forward on with implementation, and I
15 think we are very close on finalizing the policy
16 statement.
17 I encourage the staff to continue to work
18 with the stakeholders and see if we can't finalize
19 that soon and have that as a document that we can
20 all use then and at a minimum bring some
21 commonality and answer those more difficult
22 questions about what is the right approach for

1 implementation and have things changed since 2002.

2 I think that will in itself be a very

3 interesting discussion and we may ask that you all

4 continue to use the metric of what you can live

5 with, and perhaps out of that we will find there is

6 also an agreement on the implementation question.

7 I appreciate all of your contributions and

8 the work of the staff as well on this area both

9 internally and externally.

10 Thank you very much.

11

12 (WHEREUPON, THE MEETING WAS ADJOURNED)

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