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NUCLEAR REGULATORY COMMISSION

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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

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528TH MEETING

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FRIDAY,

DECEMBER 9, 2005

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The Committee met in Room T-2B3 of the U.S. Nuclear Regulatory Commission, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, at 8:30 a.m., Graham B. Wallis, Chairman, presiding.

PRESENT:

GRAHAM B. WALLIS
ACRS Chairman

WILLIAM J. SHACK
ACRS Vice Chairman

JOHN E. SIEBER
ACRS Member-at-Large

GEORGE E. APOSTOLAKIS ACRS Member

MARIO V. BONACA
ACRS Member

RICHARD S. DENNING

ACRS Member

THOMAS S. KRESS

ACRS Member

DANA A. POWERS

ACRS Member

VICTOR H. RANSOM

ACRS Member

A-G-E-N-D-A

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	12.2) Briefing by and discussions with representatives of the NRC staff regarding staff activities associated with responding to the Commission's RM related to safety conscious work environment and safety culture, and related matters	6

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

(8:35 a.m.)

CHAIRMAN WALLIS: Good morning. The meeting will now come to order. This is the third day of the 528th Meeting of the Advisory Committee on Reactor Safeguards. During today's meeting, the Committee will consider the following: staff activities associated with responding to the Commission's staff requirements memorandum related to safety conscious work environment and safety culture. Future ACRS activities, report of the Planning and Procedures Subcommittee, reconciliation of ACRS comments and recommendations, election of ACRS officers for Calendar Year 2006, draft ACRS Report on the NRC Safety Research Program, and the preparation of ACRS Reports.

This meeting is being conducted in accordance with the provisions of the Federal Advisory Committee Act. Mr. Sam Duraisway is the designated federal official for the initial portion of the meeting. We have received no written comments, nor requests for time to make oral statements from members of the public regarding today's session. A transcript of a portion of the meeting is being kept and it is requested that the

speakers use one of the microphones, identify themselves and speak with sufficient clarity and volume so that they can be readily heard.

The only other thing I wish to say is to remind you that we are having a Christmas party during lunchtime today and we will go to work directly after it.

The first item on the agenda concerns the safety conscious work environment and safety culture, and our lead member on this issue is Dr. Mario Bonaca. I turn this over to you, Mario.

MEMBER BONACA: Good morning. In response to the Commission's August 3, 2004 SRM, the NRC staff is developing an approach to enhance the reactor oversight process to more fully address separate culture. Implementation of the approach is scheduled -- or Phase I of the approach is scheduled for March 6, 2006.

The NRC staff has met with stakeholders twice and the last time was recently, November 29 and 30, 2005, so they have feedback from the individual evaluations. At the meeting, three separate culture initiatives -- objectives were identified. The first one was to provide better opportunities for the NRC staff to diagnose safety

culture weaknesses and take appropriate action before the resultant development of cornerstones.

The second was to provide the NRC staff with a structured process to determine the need to specifically evaluate NRSC safety culture after Performance 12 problems have transpired to a degraded cornerstone.

And finally, to provide the NRC staff with a systematic safety culture evaluation process and the tool to review a licensee self-assessment.

Today, the staff presentation will update the Committee on these activities, and give us some information on the status. We have also planned the Subcommittee Meeting of Subculture for January 25, 2006 to examine international activities and also to continue to report a review as a committee on the safety culture area.

With that, I'll turn it over to the staff for their presentation.

MEMBER JOHNSON: Good morning. My name is Michael Johnson. I'm Director of the Office of Enforcement. I'm joined at the table by Isabelle Schoenfeld, who is Chief of the Safety Culture Working Group, and on my left is Jim Cobey, who is

the Chief of the Reactor Project's Branch III in Region 1. And we're here, again, to talk about safety culture.

I believe it's been a couple of years since the staff last met with the ACRS on safety culture and, at that time, we and the industry had a renewed interest in safety culture, particularly as a result of the incident at Davis-Besse.

At the conclusion of that meeting with the ACRS, in the ACRS' letter, the ACRS agreed that a safety culture is important from a safety -- important to safety performance. The letter stated that the regulatory framework is largely in place for monitoring aspects of safety culture, and that that framework is appropriately performance-based. The letter indicated that actions are appropriately based on risk significance and in accordance with the Action Matrix, the ROP Action Matrix, and that broader evaluations, such as evaluations of personnel attitudes and so on, really belong to the industry.

Since that time two years ago, as we promised, we've continued to monitor the efforts of the industry and international entities in their efforts related to safety culture. In addition to

that, we proposed a set of options for the Commission with respect to safety culture, and we got, at that time, a direction from them related to safety culture. And so one of the purposes -- in fact, one of the primary purposes of today's meeting was to bring you up to date, if you will, regarding what's transpired in the intervening couple of years, including our most recent direction from the Commission and our response to that direction. There's been a lot of -- of sort of a flurry of staff activities, particularly in the recent months, on safety culture. And so we want to talk about that.

Isabelle is going to discuss the background. Much of it will be familiar to you, but we think it's important to do that again, to remind you of where -- how we got started in this most recent push on safety culture.

Gene is going to discuss the current status and he's going to focus in on the November 29th and November 30th meetings, including staff's planned approach, so you'll have, at least at a high level, an understanding of where we -- how we plan to move out to address the Commission's direction. And then I'll come back at the end and try to

summarize and talk about the next -- what we see as the staff's next steps. That's what we're going to do.

If there are no questions on that, Isabelle?

MS. SCHOENFELD: As Mike already mentioned, I'm going to provide just quick background information for you and first discuss what some of the drivers were for this work.

The -- of course, the SECY paper, 04011, that was issued in August 2004. We also had recommendations from the Davis-Besse Lessons Learned Task Force, GAO recommendations related to enhancing safety culture and the reactor oversight process.

In addition, there has been strong Congressional interest in this area, as provided to the Commissioners from the Senators on the Environment and Public Works Committee and also Congressional staff in meetings with NRC staff.

I just want to quickly run through what the major direction was in that SECY 04011. One thing was to enhance the reactor oversight process treatment of cross-cutting issues to lead to safety culture, ensure inspectors are trained in safety culture, develop a process to determine the need for

a specific safety culture evaluation for plans and cornerstone to the Action Matrix, and also to continue monitoring industry and international efforts and involve stakeholders in making changes to the ROP.

The -- as Mike mentioned, the SECY paper offered a number of options to the Commissioners and in their response, they not only told us what to do, but what not to do, and we thought it was important for folks to know that as well. They said not to revise the 1989 policy statement on the conduct of operations and not to encourage licensee self-assessment of safety culture through the development of a guidance document. Also, not to develop an inspection process for systematically assessing safety culture to result in additional Agency actions, or to use NRC surveys of licensee personnel. Not -- to proactively work with the international community to develop objective performance indicators, nor to engage the industry to develop an industry process to address safety culture, similar to what we've done in the training area. And not to develop criteria or possible intervention strategies for the NRC to take when training in the area of safety conscious work

environment, safety culture exists. And the licensee has failed to take appropriate action.

CHAIRMAN WALLIS: What did they approve?

MS. SCHOENFELD: Well, they approved what I have just mentioned there.

CHAIRMAN WALLIS: Oh, I see. Okay. I didn't know if I'd get that message.

MEMBER APOSTOLAKIS: So this is what they want you to do?

MS. SCHOENFELD: Yes.

MEMBER APOSTOLAKIS: And the other two slides is not?

MS. SCHOENFELD: That's right, correct.

MEMBER APOSTOLAKIS: Because the way they're listed here is as if they were asking you to do these things.

CHAIRMAN WALLIS: Yes.

MS. SCHOENFELD: Yes. This occurred -- I'm sorry --

MEMBER APOSTOLAKIS: The next slide. Let's go to the next slide.

MS. SCHOENFELD: Yeah.

MEMBER APOSTOLAKIS: Okay. You have the word "disapproved" at the top --

MS. SCHOENFELD: Yeah.

MEMBER APOSTOLAKIS: -- and then it says "revised." So all these things --

MS. SCHOENFELD: Sorry.

CHAIRMAN WALLIS: Okay. So they approved that first --

MEMBER APOSTOLAKIS: Let us look at them because it doesn't make sense. It just doesn't make sense.

MS. SCHOENFELD: Okay. Okay.

MEMBER JOHNSON: Well, it seems to be incompatible and you're supposed to ensure inspectors are properly trained in safety culture, but you're not supposed to develop an inspection process. So how can you do one without the other? But maybe you're going to tell us about that.

MS. SCHOENFELD: Well, I can try to address that question right now. What we believe they meant there was that we should not develop a specific evaluation of safety processes --

MEMBER JOHNSON: No, not a checklist. Not a checklist, so they're saying.

MS. SCHOENFELD: We are okay -- as a safety culture inspection procedure.

MEMBER APOSTOLAKIS: But if we go, I think, to the next slide --

MEMBER JOHNSON: Yeah.

MEMBER APOSTOLAKIS: How can the Commission ask you not to do the last bullet? It doesn't make sense, does it?

MEMBER JOHNSON: Yeah, let me -- perhaps what we should do is provide a little bit more context on each of these individual bullets because what we did was we laid out a spectrum of options, Option 1 not being -- a spectrum of options and the Commission picked and chose, if you will, from those options. Now, this option -- what they were -- what we were really saying was, in this option, we would rely -- what the staff would do is wait until something happened and then react. That would be our sole approach, our primary approach to safety culture. And so that the Commission was telling us, with respect to disapproval of this option was, don't just wait to react, but be more reactive. And so you get that context if you think about the things that they approved.

MEMBER APOSTOLAKIS: But that's not what the bullet says.

MEMBER JOHNSON: Right. Well, yes. This should not be the only thing you do. You should also --

MEMBER APOSTOLAKIS: I understand that, Mike, but --

MEMBER JOHNSON: In addition to other things.

MEMBER APOSTOLAKIS: I mean, if we don't do the last bullet, we might as well go home.

MEMBER JOHNSON: You're right.

MS. SCHOENFELD: And I think that they responded -- they gave us direction to do that when plans for the cornerstone --

MEMBER APOSTOLAKIS: It seems to me that both of these bullets -- I mean, they should be positive. You should work with international communities.

MEMBER JOHNSON: Right.

MEMBER APOSTOLAKIS: You should engage the industry.

MS. SCHOENFELD: Yes. They did want us to continue to do that, to engage the industry and to work on the international efforts. They did state that in the SRS.

MEMBER BONACA: Well, they may have said it, but that is approved, these couple of bullets.

MEMBER JOHNSON: Yeah, let's --

MEMBER APOSTOLAKIS: They can't cut

these.

MEMBER JOHNSON: Let me just talk about the second bullet for a second. Let me talk about the second bullet, if I can.

CHAIRMAN WALLIS: Yes.

MEMBER JOHNSON: The second bullet -- we had an option that said, our approach to overseeing safety quality issues should be along the line of the INPO training accreditation, our INPO training process and the way we oversee that. So we would rely on the industry to establish standards, if you will, and to -- and to sort of oversee safety culture. And our role as the regulator would be simply to touch that and make sure that it is on track.

So, what the Commission said was, no, don't do that. And by implication, when you look at what they approve is, they were saying, do more.

MEMBER APOSTOLAKIS: Do more. That's what it says.

MEMBER JOHNSON: Do more, right. With respect to the first bullet, proactively work within international community to develop objective performance indicators, I think the emphasis you should take from that bullet is all performance

indicators. Don't rely on performance indicators as a way to try to oversee safety culture. Do -- you know, find some other way to engage to oversee safety culture.

So it's -- we probably need to provide greater context for these bullets.

MEMBER BONACA: Yeah, you already said that. So that means nonperformance in here -- that means not specific measures, okay. So what are they going to rely on, just quantitative insights? I'm trying to understand. I mean, it's just that --

MEMBER APOSTOLAKIS: You mean the ROP --

MEMBER BONACA: No, I'm talking about --

MEMBER APOSTOLAKIS: -- the psychosis?

MEMBER DENNING: But how do you do performance-based regulation without performance indicators? Are the two just so intimately tied that you can still do that?

MEMBER JOHNSON: Well, I think -- I think we're going to talk about -- I know we're going to talk about how we plan to approach it and I think we have a vision for how we could oversee safety culture without relying on, for examples, numbers of items in the backlog or numbers of trends in allegations that are reported to the Agency. It

was sort -- there was sort of a thought that was, if you think you're not going to be able to find a series of performance indicators that give you the insights that you need, that you can apply broadly, if you will, across plants to decide where there's a common safety problem, we think we have a way to do that, and we'll talk about that in a few minutes.

CHAIRMAN WALLIS: But does the international community already have performance indicators? Don't some --

MS. SCHOENFELD: No, they do not.

CHAIRMAN WALLIS: Don't some countries have some performance indicators?

MS. SCHOENFELD: Jay, do you want to address that?

MR. PERSENSKY: Jay Persensky from the NRC, from the Office of Research. There are a number of countries that are in the process of developing -- IAEA has actually a draft document that we've looked at in terms of their way of looking at performance indicators. I think beyond what Mike said is that this particular option -- you have to look at the Commission paper as discrete options, that each one of these was viewed as a separate thing. So, for instance, the one that you

were concerned about, George, the one on developing a way to look at safety culture after a plant is in trouble. They didn't want us to do only that. So they disapproved that option, but included it in what they did approve. So, it's sort of an add-in. But from the standpoint of indicators, the Performance Indicator Program within the ROP is very specific and very specifically defined with a lot of interaction with the industry to come up with it and it's meant to be a single number, and I don't think the Commission believed that we could get to that point. And from my experience with the international community, they're not doing that either. They're looking at multiple measures in our language, rather than in indicators. So that's where's they're going.

MEMBER APOSTOLAKIS: I think, to repeat the same phrase, what we have here is failure to communicate. I mean, these two slides are very misleading.

MEMBER JOHNSON: I understand. And whenever we talk about this, we always find ourselves in the -- with the need to explain what we laid out for the Commission and how the Commission --

MEMBER APOSTOLAKIS: That's why it's a tough subject.

MEMBER JOHNSON: -- pick and choose, pick and choose.

Can we get back to the previous slide for a second? I wanted to make sure that we're also clear on that? Thanks.

So, if you look at those bullets, revise the 1989 policy statement on the conduct of operations, again, you know, if we take that approach -- if you take that single option that we provided, which was what we need to do on safety culture, and revise the policy statement, the Commission said, no. Now, we don't read that as the Commission ruling out that possibility in addition to some of the other things that we do, but that sole -- that wasn't going to be enough. We believe --

MEMBER APOSTOLAKIS: So they don't want you to revise the statements?

MEMBER JOHNSON: Alone, as an approach to safety culture. The second bullet, you might recall that we revised the -- we issued a RIS on safety conscious work environment that provides guidance to licensees on -- in the area of training,

but expectations, guidance, if you will, with respect to safety conscious work environment. And this option was -- the staff was offering to do something very similar for safety culture and the Commission said no with respect to that. Again, as a, no, that's not -- don't rely on that as a single option to go forward. And I think that we've sort of touched on the last two, to some extent, or the last two are pretty self-explanatory. The third one, I'll just -- I'll just mention, that development inspection process for systematically assessing safety cultures is the result of additional Agency actions. I think of that sort of as a diagnostic inspection that we would do at every plant. So we would go out and sample plants, regardless of performance. Every plant is, for example, a part of the baseline inspections that we do and then we would come back and make conclusions about whether they had problems with safety culture. And the Commission was saying, don't do that. That's not a wise way to approach this. So that -- I think that rounds out --

MEMBER APOSTOLAKIS: Let me ask you something a little more general, Mike, and the other presenters. Safety has been a concern to the

Nuclear people from Day One. In 1947, I believe, Edward Teller formed the predecessor to this Committee. So we're talking about nearly -- what, 57-some years. And we've had some incidents in the way, and you know, safety, and the NRC being very active in all that. Why don't we have a good safety culture now? What is it that happened the last few years and then, all of a sudden, this has become an important issue? You would expect this industry to really have a very high level of safety culture. Maybe it does, and maybe we have some isolated incidents that turned out to be pretty bad. But I'm a little bit at a loss to understand, you know, after several decades of worrying about safety, all of a sudden, we have to worry about people actually thinking safety. Do you have any thoughts on that?

MEMBER JOHNSON: I have some that I'll offer and then I'll ask if other folks have thoughts. I think it is true that we have continued to worry about safety and we've done -- we've continued to revise our oversight, and I know the industry's advanced in terms of the way they consider safety, safety culture, in terms of what they looked at. And if you look at the -- what the international community has done, starting with some

of the early documents, NSAG4, but those documents have progressed. With respect to us in the NRC, I think one of the things -- I truly believe that even though we've made progress, Davis-Besse was sort of a watershed event for us because when we created the ROP, what we -- it was sort of created with the premise that if plants have green PI's and green inspection findings, we can infer that their safety culture is okay. And what we -- what Davis-Besse taught us is, it's possible for a plant to have green PI's and green performance indicators and still have underlying problems with respect to safety culture where you find a large -- a hole in the head and then, as you pull the string, you find substantial problems with respect to safety culture.

MEMBER BONACA: Since you brought up Davis-Besse, I mean, that's an important example because, again, there were no warnings that we saw from the ROP. Have you done an analysis of what has been found later to see if there are indicators of -- that the safety culture had been -- later on, we concluded, had been within the plant? I mean, has an analysis been done to understand specifically?

MEMBER APOSTOLAKIS: And what were the problems with the ROP itself?

MEMBER BONACA: That's right.

MEMBER APOSTOLAKIS: Why didn't the ROP give us some indication that something was going wrong?

MEMBER JOHNSON: Well, and in fact, some of that --

MEMBER BONACA: Well, I have a question. I don't know if an analogy has been done to see if there were indicators and one could have noticed if we had been sensitized to the importance of those indicators from a perspective of safety culture?

MEMBER JOHNSON: I think that analysis has been done. You'll recall that Art Howell -- I know Art Howell was before the Committee, talking about Davis-Besse Lessons Learned. We have -- there are recommendations that go to having the staff re-look at the ROP in light of Davis-Besse. And, in fact, that, I think, is really the genesis, the in-invigoration, if you will, of attention that really is what we're talking about today. Because we know, I've spoken with Art, I've spoken with Jim Dyer, there was a sense -- there is a sense, I think, that as we know -- look now at what we knew then, we probably didn't do a good enough job in terms of questioning, in terms of documenting, in terms of

being able to handle it in the process, to bring it forward to take action. And so that's a part of what we're doing in terms of enhancing the ROP to better treat safety culture.

MEMBER BONACA: But within the ROP, you already had, you know -- you had safety culture in the environment. It is something you look at in the inspections, corrective action program and so on. So you already had some elements that you looked at. From further analysis after the event, I mean, you found that they were okay or there were indicators there that really had a degraded corrective action program, for example? I don't know.

MEMBER JOHNSON: Well, I guess, the thing -- the other point I should mention is, you remember that at the time of Davis-Besse, the ROP was still relatively new. We're talking about early 2001 -- or in 2001 we were making the decision, or in 2002. So the ROP was a year into implementation. So, -- and subsequent to that, we've done a lot. We've added some questions specifically to address proper identification inspection procedure. So we've made some changes since then. One of the things that we plan to do after we figured out all the changes that we want to make is to go back to Davis-Besse and

say, now, with these changes in mind, would we have been better able to address the issues of Davis-Besse before they resulted in that?

MEMBER APOSTOLAKIS: But, Mike, my question was really broader than that. Why has there been a deterioration of this, or is it just that we're finding out now?

MR. COBEY: Let me take a crack, George.

MEMBER APOSTOLAKIS: Sure.

MR. COBEY: Gene Cobey. I'm a Branch Chief in Region One. The last time I spoke before you was when you were in Region One and I was the SRA, so I was talking a lot about PRA and that kind of stuff. So this is a little different for me.

To go to your question, George, I think the Nuclear industry and the NRC has, over the years, developed and has placed a priority on safety. Most facilities do have a healthy safety culture, all right. But over the years, if you look back, there has been those discrete plants that have been in the previous processes, labeled as watch list plans or whatever. They were the cyclical plants and the perennial performance problem plants. And we dealt with those performance problems within the processes that existed at the time.

I would say, given my experience with some of those plants, and my involvement recently here with safety culture, it's a fair assessment to look back and say, underlying those performance problems, although we didn't recognize it at the time, safety culture was really at the heart in driving much of that performance problem, and we just didn't recognize it and call it that at the time. We looked more at the outputs and didn't get as much into what was causing it. And as an implementer in the field, an individual that deals with licensees, from my perspective, there's been an evolving recognition over the past few years that there is something to meet where we looked before, and that's the safety culture that, does the utility put safety first and how in which they do that, and do they do that as an organization? Do they do that as individuals? Do they do that as leaders? And if the do not, over time, it will deteriorate. And it's those plants that do not recognize that and do not prevent that that ultimately become those plants that have performance problems.

So, I would say, to answer your question, the majority of plants do have a healthy safety culture. But I think what we recognize is

those plants that we previously thought were performance problem plants really, probably at the end of the line, the heart of it, really had a weak safety culture.

MEMBER SIEBER: I think one of the factors that's very important is that the standards that an organization sets for itself, you know, basically the whole industry is self-regulating. And you're looking at performance indicators like the performance of mitigating systems and so forth. But those kinds of problems come far after the deterioration of the culture itself. If you have an organization that has become lax and doesn't -- is not inquisitive, has relatively low standards, it'll have a modest amount of corrective action work orders. And so from a performance standard, if that's one of the things you're measuring, it looks pretty good. The problem is that there's a catastrophe awaiting in the wings for an organization that's basically lazy and it's the management that sets that tone. So I think that you can have a plant whose culture is deteriorating. It's sort of a sleeper. You may not be able to pick it out right away, and that's why this Agency has to be proactive in looking at those kinds of things, so

that it can flush out where the standards are low, where the degree of inquisitiveness of employees is low. I think there's been improvements over the last 30 or 40 years compared to what I remember from the 1960's. But we're not there yet.

MEMBER BONACA: Okay, why don't we see where we go.

MEMBER APOSTOLAKIS: How many slides have you got there?

MEMBER JOHNSON: We can get through this. This is not a problem.

MS. SCHOENFELD: Okay. So we had these directions, the direction to do something to enhance the ROP, to get it to lead into a safety culture and we took a number of steps. Initially, organizationally, we established a Safety Culture Steering Committee, which Mike Johnson, chairs. We established a Safety Culture Working Group and a Support Team. Recently, we have a Regional Team led by Gene Cobey with representatives from each of the regions to assist us in this work.

One of the first things the Working Group did, one of the first activities was to do a comprehensive review of safety culture and its features, and this includes the international

community, industry, to identify what is generally thought as being important features of safety culture, or those characteristics and attributes that make for a safety culture.

Next -- we had been working on that, and in October, we issued a Commission paper, the Status of Safety Culture Initiatives and Schedule for Near Term to deliverables, and we -- which addressed our activities, provided a status of what we had accomplished and provided a schedule. That was an information paper. The Commission has turned it into a notation code paper and we're now awaiting the SRM on that paper.

But since then, we have -- we had a meeting in August, a public stakeholder meeting in August. We had one in October and we had a 2-day meeting in November and we had one yesterday. Following the October meeting, we have taken a fresh start in working with our stakeholders and in developing an approach to enhance the ROP. Gene Cobey will be talking about that approach in terms of what we have identified with our stakeholders as being responsive to the Commission's direction in the August SRM.

With that, I'll turn it over to Gene.

MEMBER JOHNSON: I think --

MS. SCHOENFELD: Are there questions?

MEMBER BONACA: Just one question. It seems to me that, you know, if you really want to look at safety culture issues, which are really behind performance, I mean, they really -- that's in the monthly record of influencing their own performance, you have to have an intrusive process. I mean there is no way that you cannot be intrusive. But it seems to me that all this direction that is approved discourages intrusiveness and, in fact, the feedback you also get from the industry is, you know, don't come too close.

MS. SCHOENFELD: Well, I --

MEMBER BONACA: So maybe as you go through your presentation, you may want to address that?

MS. SCHOENFELD: Yes.

MEMBER BONACA: You know, put this too much constraint on. I mean, you may not be able to develop anything new if you try to stay on -- and you're kept that way.

MEMBER JOHNSON: Yeah, I think --

MS. SCHOENFELD: Gene will--

MEMBER JOHNSON: I think Gene will cover

that.

MEMBER BONACA: Okay.

MEMBER JOHNSON: I do think there is a way, in terms of what we looked at and being intrusive, if you will, some of that intrusiveness, I think, does belong to the industry legitimately. Some of it belongs to us, and so we've got to figure out where that is. And I think there is a way, actually, to get there to be -- to better approach it.

I don't want to minimize -- I do want to tell you that this "FRESH START," or this bullet that says, "FRESH START," the Commission had a meeting with the staff to talk about Davis-Besse Lessons Learned and primarily they were intending to focus on the Lessons Learned Corrective Action Program that the staff has developed. The staff went through its presentation and at the end of that presentation, the Commission, led by Commissioner Merrifield, but joined by some of the other Commissioners, said, hey, you know, Staff, we think you're headed off on the wrong path with respect to safety culture. And they were referring to what's in that paper there that Isabelle mentioned, that Section 050187. And so this FRESH START was the

Commission saying, "Go back to Ground Zero in terms of how you think about advancing safety culture to meet the direction that we gave you on the bullets that we covered earlier." Re-engage with stakeholders. And so what you hear Gene talk about is going to be how we went back, re-engaged, and where we are today. But I don't want to minimize the point that the Commission really, really gave us a strong message to stop and re-engage with stakeholders.

MEMBER BONACA: Gene?

MR. COBEY: Okay. On November 29th and 30th, we held a 2-day public meeting with a fairly large number of external stakeholders. It was a very productive meeting. During that meeting --

MEMBER APOSTOLAKIS: Can you name a few, Gene? Who were these people?

MR. COBEY: Billy Garr, Dave Lockbaum, Paul Blanche, NEI, INFO, Dave Collins. We held it in Two White Flint Auditorium and there was a healthy collection.

MEMBER APOSTOLAKIS: Good.

MR. COBEY: And it was a very diverse set of news on safety culture and what's important. We -- the meeting was facilitated by Chip Cameron,

and because of that, we were able to --

MEMBER APOSTOLAKIS: Who is this person?

MR. COBEY: Chip Cameron is --

MS. SCHOENFELD: NRC Office of General Counsel. He's a Facilitator for NRC.

MR. COBEY: So we had a successful meeting where we discussed the definition of "safety culture" and what's important about safety culture. We discussed our current activities, both NRC as well as industry activities, and discussed how they cover safety culture today, without changing anything. From that, we identified what were the areas that we could enhance, both our processes and the industry processes, to more effectively cover safety culture, commensurate with the guidance the Commission gave us, which we've previously talked about.

And then the last big achievement was we developed the potential conceptual approach. We had come into the meeting with about ten conceptual approaches that had been identified by various stakeholders, and through the process of reviewing and discussing those, we developed a new approach that took into account various people's views, what people thought was important to accomplish, and

consistent with the Commission's guidance, and that was now referred to as Option G. So you'll hear Option G referred to, and that is the conceptual approach that was developed during that 2-day meeting.

MEMBER APOSTOLAKIS: Now can you tell us, in your view, what was the major disagreement at that meeting? Was there a point where there were two diverging views? Because you had an interesting mix of stakeholders.

MR. COBEY: Actually when we left that meeting, I would say we had consensus or alignment on every issue. But we had general agreement on how to proceed forward on all issues.

MEMBER APOSTOLAKIS: Is that right?

MR. COBEY: Now, if you look at the various stakeholders, take an industry stakeholder, there would be a bias to having less intrusiveness. Okay. If you have an external stakeholder that's had an intervener type of history, there's a bias to more intrusiveness. But I would say when we left that meeting, we had general agreement in proceeding down a path, which we'll talk about as Option G. So it was a fairly successful meeting. And, as you know, the devil's always in the details. We got

general agreement on a conceptual approach and we have -- which I'll describe, and we have a meeting next Thursday to talk about the next level of detail.

MEMBER APOSTOLAKIS: Why is it "G?" Is there an "A," "B," "C" and "D"?

MR. COBEY: Those -- where the approach is coming into the meeting, A through F, and "G" just happened to be the next letter in the loop. Hopefully, we stop at "G" and move forward and not end up at "M," "N" and "O."

MEMBER JOHNSON: Just also very quickly, if I can add, one of the things that I think maybe fields some of the discussion, the differences in perspectives was, we found that there isn't really, there wasn't really a good understanding on anybody's part, I think, or on a lot of folks' part, with respect to what is currently being done related to safety culture. So it was very productive for us to talk about how the ROP currently -- how the ROP currently treats things that have a bearing on safety culture, what the industry's done with respect to safety culture since Davis-Besse. I think that helped everyone have a better understanding with respect to where we are, and

formed a basis for us better understanding where we are to go.

MEMBER APOSTOLAKIS: You can actually go beyond the ROP. I mean when we visited the region and we got several letters that you guys could send to --

MEMBER JOHNSON: The spec letters?

MEMBER APOSTOLAKIS: They were pretty interesting. I mean, they really went beyond what I expected.

MEMBER JOHNSON: Right.

MR. COBEY: And when we talked about this in the public meeting, we talked about the ROP, but we also talked about other processes that the NRC uses to regulate reactor facilities. So we did specifically talk about, for example, the allegation process. And you'll see that in my presentation a little bit further on.

MEMBER APOSTOLAKIS: Very good.

MR. COBEY: One thing that we did decide as a result of that meeting is that before we had the planned December 15th meeting, that we were going to talk about details. We needed to have another meeting to talk about what's important to safety culture to come closer in alignment because

you need to decide what's important about safety culture before you decide how you're going to address those things, and that meeting was held yesterday. So after I get done talking about Option G, I'll briefly cover that meeting from yesterday.

Option G. When we talk about the options, we like to talk about it using a 4-element framework because each of these elements is important and you can't specifically talk about one without talking about the others to you get an understanding holistically of how you're going to address a safety culture. And those elements are information sources, how you document, how you assess and what follow-up actions you take.

So in the area of information sources, Option G would leave our plant status activities performed by our resident inspectors unchanged. It would leave the baseline inspection procedures largely unchanged. There is one significant exception, and that is Inspection Procedure 71152, which is the Problem Identification And Resolution Inspection. We would enhance our Special Inspection Procedures, and these are the event follow-up procedures, such as Special Team Inspections or AIT. The NRC Inspection Investigations of Allegations

would remain unchanged, and this is important. This is how we would have traditionally, and how we would continue to address concerns brought to us about chilling effect or discrimination retaliation, and those sorts of things. We would also leave the fact that inspectors would identify cost-cutting aspects of findings unchanged.

You'll notice a piece that is an information source. It's not on my list and that's the ROP does include a PI Program, but we -- currently there's not any concept of incorporating a revision to PI's or bringing that into our discussion about safety cultures. So, we won't -- we tend not to discuss that.

Documentation. Currently when we interface with utilities, we do so via docketed correspondence. Inspection Reports, letters, joint effect letters, those sorts of things. We would expect that that would remain unchanged. We would not introduce a new vehicle for communicating with the licensee or member of the public.

MEMBER APOSTOLAKIS: I'd like to understand the sub-bullet that says, "Inspectors identify those aspects."

MR. COBEY: Okay.

MEMBER APOSTOLAKIS: Is that consistent with the earlier statement that we will train inspectors? Do they know already what to look for?

MR. COBEY: Let me try and answer that question this way. Currently, what we do, an inspector goes in the field and performs an inspection procedure. He identifies a performance deficiency. Part of his characterization of that performance deficiency, if it's more than a minor deficiency, would be, one, to determine whether there is a driver of that performance deficiency that has a relationship or an axis with one of the cross-cutting issues, which are human performance, problem identification resolution, or safety conscious work environment. If there is, then the documentation of that in the Inspection Report, the inspector, part of his documentation -- his or her documentation would be to articulate that the inspection finding had a cross-cutting aspect in the area of, say, human performance. Say, it was a failure to follow procedure type of violation that was more than minor. You would say that the inspectors determined that there was a crosscutting aspect in the area of human performance because the non-licensed operator failed to follow this

procedure, which was determined to be a personal error. All right?

And then in the assessment process, there's a framework by which a review of those findings which have been previously determined to have an aspect in that crosscutting area, are evaluated to determine whether a substantive cross-cutting issue exists. Okay.

What we're articulating here is that process would remain unchanged. Now, your point about whether the inspectors would need to be trained to know how to do that, the answer is yes and no. We don't have to train them on the framework because they're already doing it. Yes, we will likely have to train them if we modify the crosscutting areas that -- and the definitions and what's assumed with them then, which I'll get to in a minute.

So the answer is, yes, we'll have to train them, but not on how they do it.

MEMBER BONACA: But just on the same subject, you know, for example, one of the things that the ROP doesn't do is to count repeat events. For example, what I mean is that the ROP evaluates an event for what it is.

MR. COBEY: That's correct.

MEMBER BONACA: It's performance-based and makes a judgment. It's significant, it's not significant, and dispositions that. Now, you know, we have raised before the issue of because of this lack of what happens when you have a repeat event, which means this is not in a low-learning organization. I mean, simply low learning from your mistakes. That's a typical, I would characterize, as a safety culture issue. Are they -- do they have procedures to -- to identify that? Do you keep a count of those? Do you look at the similarities between events that happen?

MR. COBEY: Let me try and describe a case. Say, the facility event occurs due to INC technicians skipping a step in a calibration that results in a reactor spraying. Potentially, a risk significant event. Say, it's determined to be a green finding for failing to follow procedure, has a crosscutting aspect in the area of human performance. Three months later, they're performing that activity again. They perform this, they make the same mistake, they have a subsequent trip. During the -- and all things are essentially the same. In that case, likely, you -- the inspector

would determine that there was a finding against Criterion 16 of Appendix B for corrective action.

MEMBER BONACA: Okay.

MR. COBEY: And then he would determine that the -- that it had a crosscutting aspect not only in human performance, but also in problem identification resolution because they didn't correct the problem. So the emphasis on that problem would be corrective action.

Now in terms of --

MEMBER BONACA: You need to give me an example for, one, the results are already green. What if it's not a green? I mean, it's simply that there's nothing significant and, yet, it gets repeated again and again because the culture in the organization is lax.

MR. COBEY: Okay. In the case of -- for the finding I gave you just a second ago, we don't count those in terms of, you know, if you get five of those, that it would become -- instead of being a green issue, it would become a white issue. We don't aggregate them that way. But what we do have is we have a process that says if you have a sufficient number of findings that are more than minor that have a common causal relationship, and

the NRC has a concern with their addressing the problem or the progress in addressing the problem, then we can identify a substantive crosscutting issue. So there's that process. But it's not based on a strict count.

Now with regard to minor, as you mentioned, currently the process says if a problem is identified as minor, okay, when there's certain criteria for that, that it does not get documented. It does not get incorporated into the assessment process. Hence, a recurring minor problem would stay below the threshold for NRC engagement and we would expect the utility to address it. What's important here is, one, the criteria for minor is even if it occurred repetitively, it wouldn't create or could not create a more safety significant concern. If it could, then it would not, by definition, be minor.

MEMBER BONACA: I know. I'm more worried about the trait that characterizes the organization as being lax and saying, yeah, this is not important. So, therefore -- and, you know, that kind of mentality allows then the degradation of more important things. I would point out a concern there because many of these things, again, are below

the detection, the way there were at Davis-Besse.

MR. COBEY: I think the philosophy that Option G continues to operate under is the one that exists within the ROP and that is if there's an underlying performance problem that's resulting in minor issues or issues of very low significance, that the licensees would be expected to identify and correct those. And if they don't, then they result -- they will ultimately result in more significant issues, at which point we would engage in a graded approach as the significance increased in a more aggressive fashion to hopefully bring them back to a point where their performance was being good.

CHAIRMAN WALLIS: I have a question for you. Mike mentioned Davis-Besse as being a watershed. You're leaving an awful lot unchanged. You're enhancing a few things. Is there any indication that what you're doing would have helped diagnose the Davis-Besse situation, if it would have been in place at the time?

MEMBER JOHNSON: I think that's a good question. That's -- I tried to indicate earlier, I think one of the things that we have to do at the end of this is to go back, particularly on this area, for example, of documentation where we said

we're going to leave unchanged our treatment of minor violations. If we look at all of the changes that we're going to propose and we go back and we look at Davis-Besse, would we have gotten to a point where we would have been more concerned?

CHAIRMAN WALLIS: That's something -- that's where the fix is needed.

MEMBER JOHNSON: Right. And we're going to look at that. I will tell you that my gut is just based, based on conversations that I've had with folks like Art Howell and Jim Dyer is, that we will find that there are things that should have been -- would have been above threshold, should have been documented, would have -- should have been captured, could have been captured, that would have resulted -- but that's the test. That's the -- the proof is in the tasting.

MR. COBEY: We need to recognize, too, that when I say "unchanged," I'm talking about unchanged post to Davis-Besse improvements that have already been made. All right. There's been a number of enhancements to the existing inspection procedures and the ROP assessment process to address the issues, which were identified by the Davis-Besse Lessons Learned Task Force. But I'm talking about

unchanged after that as opposed to pre-that. But Mike is right. We have plans to do a -- for lack of a better way of describing it -- a test program to evaluate using historical plants, the proposed option.

MR. COBEY: So in the assessment piece, this is where we start talking about the meat and potatoes of --

CHAIRMAN WALLIS: The interesting thing about Davis-Besse, is that there must have been an awful lot of employees that knew what was going on, but somehow the inspectors didn't. And everybody knew. Everybody knew, but didn't do anything. Well, okay. You were going to check that out anyway.

MEMBER JOHNSON: Well, yeah. The Agency is working on it and continues to work on aspects of what was known and not known in Davis-Besse, and it's sort of separate from what we'll talk about here, but -- let me just leave it at that, if I can.

MR. COBEY: The NRC's assessment process is described in Manual Chapter 0305 and our intention in Option G would be to leave the framework largely unchanged. There are some minor changes. We think that they're relatively minor and

incremental. And the notable ones are we would adjust the crosscutting issues to more closely align with what's important to safety culture. And what we mean there is currently, we have three crosscutting areas: human performance, problem identification/resolution, and safety conscious work environment. Underneath problem identification and resolution, there are three bins: they are identification evaluation/corrective action, and then under human performance, it's resources, personnel and organization. And there's a definition for those. But given our study of safety culture that's ongone by the working group for the past year and a half, we've identified approximately 15 to 16 items, which are important to safety culture. Some of those things fit within our construct of cross-cutting issues nicely and they more -- if we were to revise the cross-cutting area definitions, they would more closely align with what's important to safety culture, So, for example, you might see problem identification and resolution. Instead of it being -- the make-up of that being identification/evaluation resolution, you might see something along the lines of operating experience, self-assessment, corrective action

program, as being the three things about problem identification/resolution that are important, et cetera.

The details of this is yet to be finalized. We have a meeting next week to talk about it. But that's what we mean by making an adjustment to the crosscutting issues.

MEMBER APOSTOLAKIS: You mentioned resources and this comes back to the issue of intrusiveness.

MR. COBEY: Right.

MEMBER APOSTOLAKIS: As you know, starting with the IEA's report of whatever years ago, they raised the issue of safety culture. There have been numerous papers and reports that talk about safety culture and so on, what's important, and resource, of course, is always one important thing. And I'm not saying that it's not, but isn't the business of the regulator already to look at resources?

MR. COBEY: It depends on how you look at it. If -- I don't think there would be an intention on the NRC's part to go review licensee's business plan and the decisions they make in the financial arena. Okay. But what we do look at, is

if you look at the way the communities define what resources means?

MEMBER APOSTOLAKIS: Yeah.

MR. COBEY: There are outputs. Are their training processes adequate? Are they providing them? Are they providing adequate program and procedures? Basically, are they providing the means for the organization to be successful? I mean there is an eloquent definition of it. One of the areas where we might look at it is when you're looking at performing inspections, and you find that the operators performed a task, and there was an adverse consequence. You pull the thread and you find out, well, the procedure was inadequate. They followed the procedure, but it told them to do something incorrect. Well, when you're asked the question, "Well, why was the procedure inadequate?" you find out it's been in the procedure backlog for five years to be corrected, and there's a very large number of procedure revs. And the utility hasn't addressed that. Okay, they've just let this problem linger. Well, that would be an outcome that we would be interested in and we could identify as the cause -- or an important aspect of what's -- of this inadequate procedure violation.

MEMBER APOSTOLAKIS: But it's not necessarily an issue of resources. We don't care why it was five years in the backlog. We care about the fact that it was there for five years. Whether they didn't have adequate resources to move it up or whether somebody was negligent is none of our business, is it? It's really performance-based again, but with a broader definition of performance.

MR. COBEY: Right.

MEMBER APOSTOLAKIS: I think it is. I don't think we should get into these --

MEMBER JOHNSON: I think it is performance -- I think it is performance-based, and in those instances where we find that at the root of this thing, this procedure having been in the backlog for five years, at the root of this -- the fact that training wasn't done and because that training wasn't done, people couldn't perform their -- it points to resources. That's what we're talking about in terms of looking at it from a performance-based perspective as opposed to going out, reviewing our business plan, looking at how they plan to make capital investments and those kinds of things.

MEMBER APOSTOLAKIS: But why would you

want to use the word "resources?

You are looking at something specific that is tangible and performance-based, so why it happened -- this has been the major problem with safety culture, you know, over the years. That people are very reluctant to get into why did this person act this way. I mean, it's none of our business. The fact that he or she acted that way is our business if it's safety related. So, I wouldn't use the word "resources."

MEMBER JOHNSON: That's fair. I will point out that we certainly want the licensees in their self-assessments, we know that the industry in terms of what IMPO does in their evaluations, for example, looks at resources. If --

MEMBER APOSTOLAKIS: Sure.

MEMBER JOHNSON: And so, to the extent there's a performance problem, and the licensee does a root cause and points to resources, we want to -- we need to be able to understand that in the context of what it means with respect to safety culture. We have -- but I take your point with regard to the term "resources."

MEMBER APOSTOLAKIS: Are you going to talk about what you expect the licensees to do?

MR. COBEY: Yes.

MEMBER JOHNSON: Yes.

MEMBER APOSTOLAKIS: Okay. Because one question there -- maybe later, we'll discuss it -- is how much of the findings do you want to know?

MEMBER JOHNSON: Okay.

MR. COBEY: The second envisioned change to the framework would be to include the outputs of the allegation and traditional enforcement processes as inputs into the assessment process. Right now, for example, an allegation output might be a chilling effect letter to a facility. And there's a direct relationship with cross-cutting areas and what we do within the ROP, yet the two processes aren't tied together as well as they could be. So, there's an envisioned improvement in the reactor oversight process to better link those.

In terms -- and this, hopefully, will get to -- Gary, I think you're interested in -- George, and that is follow-up. You know, right now what we do in the area of crosscutting issues, if we have a recurring substantive crosscutting issue, that means a substantive cross-cutting issue at a facility has been identified in two or more consecutive assessment cycles. So that would be a

mid-cycle and end-cycle or an end-cycle and mid-cycle. The process allows the NRS to request that the facility provide corrective actions and/or to meet with us in a public meeting to discuss their actions to remedy their problem. One additional option, where Option G would allow us, the NRC, to request, in these cases, the licensees to have an assessment safety culture performed.

CHAIRMAN WALLIS: By whom, and how do you do it? By whom, and how do you do it? I mean, how do you assess safety culture? Is the NRC going to do it? Or a consultant in safety culture, or what?

MR. COBEY: The details of this, really, the subject of the December 15th meeting, the envision here is it would either be done by the licensee or be done by an independent party --

CHAIRMAN WALLIS: INPO already does this, right?

MR. COBEY: Yes, they do. They do it within the context of their process.

MEMBER JOHNSON: But this would be a specific follow-up assessment, outside of the regularly scheduled IMPO evaluation, for example, if they chose to use IMPO. This would be the licensee,

us requesting the licensee, you either look at your safety culture, do an assessment, or find someone else to do it for you.

CHAIRMAN WALLIS: But IMPO already does that, don't they? But that's not available to you? Their assessments are not available to you, is that right? I thought IMPO regularly assesses safety cultures.

MR. COBEY: They do.

MEMBER JOHNSON: IMPO does evaluations and they built into those evaluations an assessment of safety culture. They're done at a regular frequency of plants, and we do have access to them. The residents can read them on site. We can go to IMPO Headquarters and read them. We don't document those -- we document our review of those. We don't follow-up on corrective actions identified by those. But this situation is -- could be where a plant is here. We've identified that there's a substantive crosscutting issue in two cycles and let's suppose that there hasn't been an IMPO evaluation, or there isn't one planned. What we want to make sure of is that because this issue has existed for a couple of cycles, that they do one. So that's really what we're going after. They can use IMPO. They can use

whatever they would choose.

MEMBER APOSTOLAKIS: Well, I don't know about that. I mean, there is a question here whether the assessment process is found adequate by you. I mean just because somebody goes and does an assessment on safety culture, they may come back with very good results or they may come back with very poor results. Like if they distribute a questionnaire to their people and say, "Do you put safety first?" What do you think the guys are going to say? So, 99 percent say, "Yeah, we put it first." Okay. We have a good safety culture. On the other hand, there have been, you know, some people who have studied this more seriously and they have questions and all that. Shouldn't you say --

MR. COBEY: Actually, the current process allows the NRC, when we ask them to provide us their corrective action, right now, the way in which we would follow up on those is DSR Inspection Procedure for Problem Identification/Resolution, 71152. So we would envision that that framework would remain unchanged, that when they got done with their assessment, whether they did it themselves or they requested a third-party contract organization or IMPO to do it, we would anticipate that we would

review the results of that self-assessment for reasonableness. First, the details about what constitutes an adequate assessment, self-assessment. You know, those are good questions and they haven't been worked through yet. That's part of December 15th's meeting and subsequent meetings. And you'll see as we move on and we get into a situation where we move across the Action Matrix and we get into a more graded approach, that issue is going to arise repeatedly. So it is an issue that we have to address.

MEMBER APOSTOLAKIS: Right. But also, I think, it was raised a little earlier -- okay. Suppose they have an assessment process that you like. Another important question is, what should they tell you? I mean, I don't think we should demand that we should know everything they find.

MEMBER JOHNSON: Well, let me just say, to the extent we've issued a letter that says we believe you've got a substantive cross-cutting issue and that issue hasn't been addressed, hasn't gone away, and they do a self-assessment, we are, as Gene indicated -- we've got a letter on the docket. We need to close that letter out, do some follow-up.

MEMBER APOSTOLAKIS: Okay. So it

specifically --

MEMBER JOHNSON: So we're going to look specifically at what they find and we're going to satisfy ourselves before we finish.

MEMBER APOSTOLAKIS: That cleared it up a little. That's a reasonable thing to do. Because if you -- you have to make sure to them -- certain to them that you don't want to know everything they find because then, of course, you know, that's the Heisenberg effect.

MEMBER JOHNSON: Right.

MR. COBEY: One of the big challenges here is when you look at, whether a safety conscious work environment or safety culture, you have to be careful how you communicate in a public arena the results of the findings because you certainly don't want the public nature of the findings to create an adverse effect. So that is a challenge before us. We've had to cross that bridge before with specific facilities.

MR. POWERS: I guess I don't understand then. If you found out that things were an absolute disaster, you wouldn't want the public to know about that?

MR. COBEY: No, the case that I'm

talking about is the case, for example, where you found out in a certain organization on the plant -- within the plant that there was an unwillingness to raise issues because of whatever reason. The relationship with the supervisor has deteriorated and he's made statements and taken action, which has created a chilling effect. You have to be careful how you articulate that because what you don't want to do is then create an environment where those individuals feel like they've been labeled and then are reluctant to even speak to the NRC. So where the consequence of the action doesn't specifically identify individuals that labels them and creates a chilling effect in and of itself. So it's a difficult balance that the NRC walks when they speak about these issues. Because, you're right. We have to articulate that the problem exists, but we have to do it in a way that it doesn't adversely affect the individuals and create a problem in and of itself.

Okay. So the next -- as plant performance deteriorates, it is anticipated that it would move from left to right and across the Action Matrix. The first column over would be for a white finding. The Regulatory Response column or the

Action Matrix. We envision only a minimal change in this follow-up action and that would be to enhance the current supplemental inspection to validate when the licensee does its root cause, that it addresses what's important about safety culture. And if it determines that those were drivers to the performance problem, that it has appropriate corrective actions in place. We do that already. We would just amplify the existing guidance to ensure that it makes clear what's important to safety culture.

As the facility moves across to the next column, the Degraded Cornerstone column or the Action Matrix, this would be, say, where there's two white findings in the same cornerstone. We would perform an Inspection Procedure 95002. There, we look at the performance drivers for each of the performance issues, as well as cumulatively. Here, we would enhance the procedure to determine if safety culture attributes were a driver. And the conceptual approach would be if the NRC identifies, and the licensee did not, that the safety culture attributes were a driver, we would then request the licensee have an independent assessment of safety culture performed.

MR. KRESS: What form would that request take?

MR. COBEY: Currently, the framework is if we identify, in our 95002, that the root cause evaluation was inadequate, we articulate the reasons why it's inadequate and maintain that finding open until they address the inadequacies. So when our cover letter documenting the results in the 95002, we would articulate why we found the root cause to be inadequate and request that they have an independent assessment of safety culture performed. The reason is because we would not want it to be a self-assessment would be we have some concerns inherent in their ability to assess their performance, given the data on the table, which was they didn't do a good job the first time. So that's why we would request the assessment be independent.

MR. POWERS: I guess I don't know how you do this mechanically. First of all, it seems to me like they have an independent assessment of safety culture at any time you would request one. I would just say, oh, I've already done that. Here's my IMPO assessment. Why isn't that adequate?

MR. COBEY: The INPO's assessments are not done more often than every two years. We would

have to look at it in terms of context to relationship of time and what was addressed. If, for example, the performance deficiency in question occurred in January, we came in to do the supplemental inspection in May, and they had an IMPO assessment done in April that addressed the problem, I don't -- we would not be requesting them to do another one. We would just evaluate the one that was done. And if it addressed the problem, and was adequate, we would move on.

Now --

MR. POWERS: But suppose they don't -- suppose they had it done in July the previous year, and so you said, "Gee, we want you to do an independent assessment." Again, I'm troubled about the -- what exactly constitutes independence here. If I call up my buddy, Tom Kress, and I say, "Tom, come and check my safety culture, and oh, by the way, Tom, when you're checking it, remember if you get in trouble with this, I'm going to get to come inspect you." Does that constitute an independent safety culture?

MEMBER JOHNSON: Let me -- I know where you're going. I would say that's not been our experience. We've had a lot of successes in Agency

with independent safety assessment, safety culture assessment, or safety conscious work environment assessments. But we do have to make a case-by-case determination about what are the most recent independent assessments that the licensee will be trying to get credit for. Did it -- could it have captured the issues that we think have bearing, current bearing, if you will, on safety culture? We have to make that decision in terms of deciding whether or not -- what the independent assessment that they would be supposing to do and where doing another independent assessment would be sufficient to us. We've got to decide that based on the specific circumstances. But in general, we think independent assessment is often more valuable -- we need to rely on the independent assessment because, as Gene indicated, we've gone from situations where they had all greens perhaps and just a substantive cross-cutting issue to a point now where they've had a number of -- at least two performance issues that are -- one that's particularly risk significant, and so whatever self-assessment they would have done, we have to be a little bit skeptical about, I think, because they didn't -- whatever they looked at didn't capture the problems perhaps as they would

have related to safety culture.

MEMBER SIEBER: I take it that the IMPO plant evaluation, at least from my experience, is not a safety culture assessment?

MS. SCHOENFELD: Part of it is. They now --

MEMBER SIEBER: There are some aspects that typically --

MS. SCHOENFELD: -- to safety cultures.

MEMBER SIEBER: Even now, it does not?

MS. SCHOENFELD: Yes. Yes, it is. Now the plant evaluation includes safety culture as part of the evaluation. It's one of their areas in the performance objectives and criteria --

MEMBER SIEBER: Since Davis-Besse?

MS. SCHOENFELD: Yes. Tony Harris from NEI is here.

MR. HARRIS: Yes, my name is Tony Harris. I'm a loanee to NEI from the STARS Alliance and I have been on IMPO evaluations and also a couple of industry-driven -- I don't know if you're familiar with the Utility Service Alliance Strategy for performing the safety culture assessments. I've done a couple of those and been the recipient at my station of one of those. IMPO has made the industry

work together to look at Davis-Besse. In post Davis-Besse, we identified 16 changes specific to how we assess and address safety culture through the evaluation processes, the training processes, the assistance and even the operating experience. All the four cornerstones of INPO were looked at and addressed.

Specific to evaluation, there are principles and attributes that INPO and the industry developed and during the -- every INPO evaluation, those principles and attributes are assessed. So it is specifically one of the -- through the Organizational Effectiveness Team and the team lead, that particular safety culture is assessed at every site. In addition, in the area of performance summary where you actually discuss what you found in every area, like organizational effectiveness, there is information put in there with respect to safety culture for every plant. So, yes, I would say that they are --

Let me -- I have one thing, while I'm here. As you know, the industry and INPO published an SOER, Significant Operating Experience Report, 024, and every licensee was, you know, an INPO recommendation. And those are more than

recommendations. You just do them. Every licensee performed a safety culture assessment. And in addition, that recommendation is what is considered to be an ongoing recommendation. So on a periodic basis,

Licensees, again, do evaluate safety culture and INPO does look at those evaluations as a part of its every 2-year at the most evaluation.

And other plants, you know, it's just like a performance approach here. Plants -- the evaluation duration or interval for INPO is based on performance of plant. So there are some plants that are receiving them more often than two years. So there is a significant amount of work done here.

And one thing, you know, when you look at the problem identification/resolution, I believe that's one thing that -- that is fundamental to all of this. If you do not have good problem identification and resolution, as was the case at Davis-Besse -- I mean, frankly, the indicators were there. They did not put it together, and I understand what they had. They were pushing things out. The changes that were made there are already significant in that area and we believe will be further enhanced by what we're working with the NRC

staff to do.

CHAIRMAN WALLIS: Thank you.

MEMBER APOSTOLAKIS: Well, we have another Subcommittee Meeting in January, as Mario said. Can we talk about some of these attributes that you expect to see in the self-assessment process? I mean, we keep talking about a higher level management, but I would like to understand a little better what these attributes that INPO is using are and --

MEMBER JOHNSON: Can we do that in January, is that what you're suggesting?

MEMBER APOSTOLAKIS: Yes, that's what I'm asking.

MEMBER JOHNSON: Yes, absolutely.

MEMBER APOSTOLAKIS: Okay.

MR. COBEY: As the facility moves over to the Multiple Repetitive Degraded Cornerstone Column of the Action Matrix, this is in the event that they -- you know, they've had multiple repetitive degraded cornerstones, either -- or red findings, for example. In this case, if a licensee were to find themselves in

This situation, they would perform a fairly comprehensive assessment. They would develop a

detailed performance improvement plan, and they would provide that to us. We would issue a confirmatory action letter and then following that, we would come in and perform a fairly comprehensive supplemental section, 95003, to look broadly at the facility's performance.

MEMBER APOSTOLAKIS: So there seems to be every time you have a problem, you're asking them to do a self-assessment. Is that --

MR. COBEY: Not entirely. This -- in this case, we would not ask for the self-assessment based on them not identifying their problems that we did. In this case, we would ask them to do it regardless. And then in the Inspection Procedure 95003, as part of that inspection procedure, we would, in fact, evaluate what's important to safety culture to determine whether or not their assessment, their performance improvement plan, and their corrective actions were adequate to address the problem.

The way this is structured, as performance degrades and you move to the left, you become more and more intrusive as the regulator. So in the area of safety culture, we would become more and more intrusive. For example, in 95001, it would

be, did they include what's important to safety culture? Did they identify appropriate corrective actions, et cetera? In 95002, we would actually be looking at what's important to safety culture and making a determination, do any of these aspects of what's important to safety culture, were they drivers? And did the utility identify them? If they did not, then we would request an intrusive look at safety culture. As performance degrades further, we would request they do it regardless and then we would come in and independently validate the results.

MEMBER JOHNSON: Just one addition to that. I just -- because there's a -- I just wanted to go to something that came up in your question, George. In today's ROP, we do 95001, 95002 and 95003 each -- successively more comprehensive, as Gene has indicated. The timing of those is that we always wait for licensees to have looked at what the problem was, looked at extended condition, and looked at corrective actions. So even today, when we do a 95001, we time it so that we're looking at what the licensee has already done in terms of trying to figure out what the problem was and what corrective actions they put in place. That's --

philosophically, that's how we approach those inspections. So we're just adding safety culture as a part of that role.

MEMBER BONACA: The other question I have -- and I appreciate that you have a plan here. And every time you say we'll assess safety culture. Now, I haven't heard yet on how you define "safety culture" and that's important. Now, I know you have developed some -- you know, a table with attributes and elements, if I remember, and now that, I guess, is being reworked after a review you had the first time or --

MR. COBEY: Actually, that's a good transition. That's what I was going to talk about. Yesterday, we had a public meeting with our external stakeholders to discuss what's important about safety culture. We have an understanding. We have -- I like to use the word "consensus" that our proposal would be to use the inside core definition of "safety culture." And then what makes up, or what's important about safety culture, we refer to as "components" or "subcomponents." And we have reached a consensus that our list of those subcomponents is comprehensive and includes everything that's important about safety culture.

Now --

MEMBER BONACA: I thought the industry disagreed with that.

MS. SCHOENFELD: Pardon?

MEMBER BONACA: I thought the industry had disagreed with that.

MS. SCHOENFELD: No. In fact, what we determined at yesterday's meeting is that whatever we have in terms of our components and subcomponents is covered by INPO.

MEMBER BONACA: Okay.

MS. SCHOENFELD: And so, there is a great overlap in these areas.

MEMBER APOSTOLAKIS: There are two issues here, it seems to me. One is the general definition of "safety culture," Insight did a good job. But equally important is, you know, how we view our role in that context and when Insight talks about questioning attributes, I'm not sure that it's our business to worry about that. We worry about some subset of that that is really performance-based, where performance now is broadened to go beyond those items being out of order and so on.

MEMBER JOHNSON: Let me suggest that in January when we talk about --

MEMBER APOSTOLAKIS: Good.

MEMBER JOHNSON: -- the attributes, we'll talk about the definition and the components and subcomponents because we will have had a chance, as Gene said, we got fairly well in alignment yesterday. We'll make revisions to that. We'll get comments on that. In January, we'll have a good set that we can show you and talk to you in terms of both of those aspects.

MR. COBEY: Actually, that was essentially what I was going to say next. That's okay. You said it well.

So the next action is to take the results of yesterday's meeting, all right, and take those attributes that are important about safety culture, incorporate them into the conceptual approach, and come up with the mechanisms of how we're going to do those things. And we have a public meeting next Thursday to work with the stakeholders to discuss our proposals on actually performing those conceptual activities.

MEMBER APOSTOLAKIS: So these guys are willing to come to Washington every week to meet with you?

MR. COBEY: So far. Even when it snows,

it turns out.

MEMBER APOSTOLAKIS: And all these days are being selected to conflict with ACRS meetings?

MR. COBEY: Well, not exactly.

(LAUGHTER.)

MR. COBEY: That was never our intent, George.

The last --

MEMBER APOSTOLAKIS: That's performance-based -- I don't question your intent.

MR. COBEY: So I did just want to end on a point that is, we do believe that we're on a path to make enhancements to the ROP that are consistent with the Commission's direction. We think it is possible to be more intrusive as performance starts to degrade. We think it's possible to, in terms of the framework that we already have with respect to crosscutting issues, to be more attuned to things that potentially bubble up, even though thresholds haven't been crossed. And so we're going to strengthen that. And I think when you put that together, we're going to be better able to ensure that we have an opportunity to diagnose these problems earlier. We've still got a lot of work to do. We've got to complete development of the plan

revision through the meetings that we've been talking about, and additional meetings that we haven't even scheduled. We'll need to conduct Just In Time Training for inspectors to make sure that they know how to implement this, and their managers, to make sure that they know how to implement the inspections and the assessments.

We'll need to test the plan revision against previous plant ROP experience, and those are the points -- that goes to the point that we talked about a couple of times. Whatever we come up with has got to go back and look at Davis-Besse and say, does this put us in a better place with respect to having an opportunity to diagnose those problems, if we had had this process in place.

And then finally, we are still driven by a Commission schedule, which is get ready, be ready to implement these revisions by March of 2006. As we've said, as Isabelle pointed out, we do have a notation vote. We are getting -- there is a draft SRM. We will expect to see --

MEMBER APOSTOLAKIS: Do you expect to see what these notations will be?

MEMBER SIEBER: It's the Commission -- we sent up a Commission paper. The Commission is

voting on that paper. And that guidance that we get in the SRM. We expect the Commission to say, "Staff, here's what we think with respect to the current direction and schedule." And so, we'll make sure that you're aware, certainly that John is aware, of what comes out because that could potentially give us additional guidance.

MEMBER APOSTOLAKIS: So are we going to get the comments on this, Mario, on the product of March? Is the ACRS going to write a letter on this?

MEMBER BONACA: I think there was. If there is a product presented to us, yes, for sure.

MR. POWERS: Tell him no. At best, the Committee gets it and he doesn't.

MEMBER APOSTOLAKIS: All right.

So we should schedule then a meeting, at the March meeting?

MR. FLACK: Yes, I think we should talk about this at the B&B coming up, following -- this is John Flack, ACRS Staff -- following the Subcommittee Meeting and the Retreat, and what our role -- the Committee's role will be in safety culture in the future as well. I think we need to talk about that as a proactive --

MEMBER APOSTOLAKIS: Well, this seems to

me -- yeah, I agree we should discuss this. But, I mean, this is an important paper and the Committee should write something about it. I think the staff is off on a good posture. So we'll have to get on to more detail here to see what's happening.

MEMBER BONACA: We want to thank you for coming. I know you had -- you were pressed really for time, but we appreciate your -- your bringing the information to the ACRS.

MEMBER APOSTOLAKIS: And one minute early.

MEMBER BONACA: Yes.

MEMBER APOSTOLAKIS: It can't be an important subject if we finish early, George.

CHAIRMAN WALLIS: George, we're going to finish early if you stop talking. Are there any questions?

MEMBER RANSOM: I have one comment. In my experience, it seems like the biggest impact on the culture of an organization has been management changes and that doesn't matter -- it has happened -- in my experience, it has happened both because of evolutionary internal changes if they happen too frequently, but also as an organization is sold or a new contractor comes in and takes over, that there's

a real disruption in trust in an organization. I'm wondering if you have a way of -- or have you looked at that or has that been noticed?

MR. COBEY: If you look at what's important about -- if you look at what's important about safety culture that we'll talk about in January, one of the pieces to that, one of the subcomponents is organizational change management. All right, this is, I think, exactly what you're talking about. And the staff has recognized that that is important. It's a driver to safety culture. What is still in the works is for that particular aspect, how we would, within the construct -- I just talked about Option G, to look at that. That has the potential to be one of the things that we look at only in the supplemental type of inspections as we move across in the Action Matrix, it doesn't seem to, on the surface, fit nicely in the existing crosscutting issue framework. So those are details that we have yet to work through, but I'm agreeing with you, it is a driver and it is very important to safety culture.

MEMBER RANSOM: I know with plants being sold and new management coming in, while you might think that this would be a factor.

MEMBER APOSTOLAKIS: But this is not our business.

MR. COBEY: It's what?

MEMBER APOSTOLAKIS: It's none of our business to ask why you did this. I mean, it's the fact that you did it.

MR. COBEY: Right.

MEMBER APOSTOLAKIS: Whether it is the result of some other company taking over or not, I don't think it's any of our business.

MEMBER RANSOM: It's like raising a red flag, though, I would think, to look carefully at what's going on.

MEMBER APOSTOLAKIS: I think this is going to be one very important Subcommittee Meeting.

CHAIRMAN WALLIS: You're going to follow-up on this in the Subcommittee Meeting.

MEMBER APOSTOLAKIS: Yes.

CHAIRMAN WALLIS: I'd like to finish this session, if I may.

MEMBER APOSTOLAKIS: Okay.

CHAIRMAN WALLIS: Does anyone object if I bang the gavel now?

(NO RESPONSE.)

CHAIRMAN WALLIS: So we'll have a break

until 10:15 a.m. and then we'll consider the PMP Report. Thank you very much.

(Whereupon, the above-entitled matter went off the record at 10:05 a.m.)