UNITED STATES NUCLEAR REGULATORY COMMISSION

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BRIEFING ON RESULTS OF AGENCY ACTION REVIEW MEETING

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TUESDAY

MAY 16, 2006

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The Commission met at 9:30 a.m., the Honorable Nils J. Diaz, Chairman, presiding.

NUCLEAR REGULATORY COMMISSION:

NILS J. DIAZ, CHAIRMAN

EDWARD MCGAFFIGAN, JR., COMMISSIONER

JEFFREY S. MERRIFIELD, COMMISSIONER

GREGORY B. JACZKO, COMMISSIONER

PETER B. LYONS, COMMISSIONER

PRESENT:

LUIS REYES, EDO

JACK STROSNIDER, DIRECTOR, NMSS

WILLIAM KANE, DEDR

JIM DYER, DIRECTOR, NRR

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DIVISION OF INSPECTION AND REGIONAL SUPPORT

P-R-0-C-E-E-D-I-N-G-S

9:30 a.m.

CHAIRMAN DIAZ: Good morning. The Commission is being briefed today on the results of the NRC's Agency Action Review Meeting, which I think most of the senior managers actively participate to give the Commission some key decisions regarding the performance of our operating reactors and fuel facilities.

The AARM is now many years old; six years old, something like that. It replaces a meeting that used to pack this room in here, called the "Senior Management Meeting". Commissioner McGaffigan and I used to get pretty excited about that meeting. And we are excited that you have been able to manage this process into a very disciplined and well-managed product.

The AARM in many ways enables the senior managers to review the agency's actions, look at licensee performance to ensure that those actions are well coordinated and implemented, and it also ensures that trends in the industry and licensee performances are recognized and are appropriately addressed as needed.

The briefing materials and industry trends status suggests that the nuclear industry's overall safety performance continues to be good. Additionally, the Commission looks forward to a fine discussion on the performance of facilities, given the special NRC management attention at the AARM and the action the agency is taking with regard to these facilities. Do any of my fellow Commissioners have any comments?

If not, Mr. Reyes, please proceed.

MR. REYES: Good morning, Chairman, Commissioners. This

morning, the staff is ready to brief the Commission on the results of the Agency Action Review Meeting. This meeting is held once a year per our Management Directive 8.14. That Management Directive delineates all the details of the new process that replaces the previous approach.

Slides 2 and 3 have a list of acronyms that we will be using this morning.

If we can go to slide 4, please.

This morning, we are going to have two panels. The first panel is going to address a materials-related discussion. The second panel will have the reactor-related discussion on the industry trends, the reactor oversight process, and those plants in column 4, the multiple repetitive degraded cornerstone column of the action matrix.

In the Materials Program, we will discuss licensee performance and industry trends. There are no material facilities to discuss this year. So the first speaker for the first panel is Jack Strosnider, the Director of the Office of Nuclear Material Safety and Safeguards. And with that, Jack?

MR. STROSNIDER: Luis, thank you. Chairman, Commissioners, good morning. I appreciate the opportunity be here today to brief you on the Materials and Waste Program performance for 2005.

I would like to start off this briefing by providing a little perspective on the world of materials.

As you are aware, we are dealing with a very large number of licensees; nearly, 22,000 -- 4500 NRC and a little over 17,000 State licensees. But more important than the number is the wide variety of applications and activities that these licensees perform, including industrial, medical, academic,

and fuel cycle applications.

In some cases, these applications include intentional exposure to radiation, such as diagnostic and therapeutic medical applications. These activities require people practicing careful, well-controlled handling of radioactive material.

When we discuss the number and trends of reportable events, it is important to keep in mind the number of activities conducted every year. As an example, one medical industry website estimates around 16 million diagnostic procedures per year. This does not include therapeutic treatments.

Over the past six years, we have averaged about 36 reportable medical events per year. So you can see that is a very small percentage of the number of actual activities that are conducted.

This has implications when we discuss trending. First of all, we want to recognize it is a very small number. Also the denominator, or the number of activities, is not all that well-known, it can change from year to year. We just know it's large. I in think it's important to keep that in mind when we start looking at data, lots of data.

I do want to emphasize that even though the number of events is very small, we take them very seriously. We review events on a daily basis and follow up through the Regions and the States when appropriate, to make sure licensees take appropriate actions to understand the events and prevent their recurrence.

In this regard, I believe one of the most important things we do with regard to trending is looking to identify commonalities in events. And we do that on a routine basis, and we take actions to address those.

If I could have slide 6.

The performance evaluation program consists of a systematic review of available information to identify significant operational performance trends, licensee performance issues, and NRC program issues or gaps. Industry data is collected, monitored, and evaluated on an ongoing periodic basis.

SECY-02-0216 defines the criteria to identify those issues and licensees that rise to the level of needing the discussion of the AARM.

These criteria target the most critical issues involving very serious events, those that trigger the strategic level measures, significant licensee performance or program issues that cannot be handled through the normal inspection and enforcement processes, NRC or Agreement States program gaps or failures.

It is important to note that the AARM review is part of a broader oversight process that includes licensing, inspections, and licensee performance reviews and enforcement.

If I could have slide 7.

This slide shows the goals and criteria that we monitor against. I want to emphasize the graded approach, starting from the higher level, which includes strategic and performance measures that are reported to Congress, and working to the lower level or what we sometimes refer to as our precursor monitoring.

This graded approach provides us the ability to focus management attention on the most significant issues, while providing an early indication of any programmatic issues, and allowing for early action on our part.

I'll now provide a summary relative to each one of these criteria.

Regarding strategic outcomes, all the goals were met. That means that there were no acute radiation releases resulting in fatalities, no releases of radioactive materials resulting in significant radiation exposure, and no releases or radioactive material that caused significant environmental impacts, and no criticality events.

Regarding performance measures, again, all the goals were met. In fact, in 2005, the numbers were less than 80 percent of the established metrics.

I also want to report in particular that there were no unrecovered lost or stolen risk-significant sources in 2005, as defined for the new performance goal that was established for 2005.

Slide 9.

This slide shows the number of abnormal occurrences over the past seven years. They're broken down by the type or the cause. 2005, nine abnormal occurrences were reported to Congress. All of these were medical events, seven were therapeutic, and two were diagnostic. If you look back through the past six or seven years on the chart, the medical abnormal occurrence reports dominate throughout the chart. Human error continues to be a primary contributor to the root cause of those. But again, I want to emphasize that it's a very small number when you in think about the number of procedures that are actually performed each year, which goes into the millions.

Slide 10.

This slide summarizes enforcement actions over the past five years.

I wanted to point out that all the other data I'm presenting covers both NRC and Agreement States combined. This chart just shows NRC enforcement actions. There were 40 escalated enforcement actions in 2005. Four

of these resulted in severity level 1 or 2 violations. This chart shows the number of severity level 1 and 2 violations by year since 2001. It is an important observation that there were no trends identified.

COMMISSIONER MERRIFIELD: Mr. Chairman, may I ask for clarification? On the abnormal occurrences, you've chosen to portray seven years dating back to 1999, whereas, in the significant enforcement actions, you only go back to 2000. Is there a reason for the variance in the dates you've chosen for those two charts?

MR. STROSNIDER: Not that I can give. I don't know if there is anyone from the staff who can answer that. But I don't have any -- Michele Burgess might be able to shed some light on this. She was the lead for pulling together the assessment.

COMMISSIONER MERRIFIELD: I might suggest, for the purposes of next year, you choose the same date range so there's no ambiguity that you would have to explain.

MS. BURGESS: The dates that were picked, the enforcement data is the data that the Office of Enforcement keeps. They keep a four-year rolling set, and that's what they provide. It's the standard set that they keep. We work off of their data so that it matches their annual report.

The abnormal occurrences, that's as far back as we could get back in data. So those were the two reasons that we picked for that. They were not tied together. We can try to put them together next year.

COMMISSIONER MERRIFIELD: We have all of our enforcement data going back ad infinitum. So they could bring that out.

COMMISSIONER JACZKO: The data are available, and we could

present it with a common reference.

MS. BURGESS: There was no particular reason we picked them for those two, other than just standard numbers used in those two areas.

CHAIRMAN DIAZ: We understand.

MR. STROSNIDER: Thank you, Michele.

Slide 10 again, just to conclude on that slide with regard to the enforcement actions, again, I want to point out that there were no trends identified in looking at the information.

Moving on to slide 11, this slide presents results of a trending analysis of data in the Nuclear Material Events Database. Staff reviewed 16 quarters of data from October 2001 to September 2005. There were a little over 2,000 events during that four-year period. No significant performance trends were identified.

The average breakdown by type of event shows that there were about 250 events per year that involved lost or stolen material. Most of these were small sources, not considered significant enough to be included in the performance measure that I mentioned earlier.

About 125 of the events per year are equipment problems, and the remaining 125 are fairly uniformly distributed between leaking sealed sources, transportation, medical and other events.

Slide 12.

With regard to licensee performance issues, for 2005, there were no nuclear waste materials or waste licensees or issues that met the significant issues criteria, as described in SECY-02-0216. This indicates that there were no issues in 2005 that were not able to be addressed during the normal inspection,

enforcement, or oversight process.

NMSS, the Office of State and Tribal Programs, and the Regions did use this as an opportunity to review the threshold criteria to ensure that they are still appropriate. We conclude that the criteria continued to appropriately identify those issues that need to be raised for discussion at the AARM.

This does not imply that events, issues, and licensee performance below these criteria are not of importance. The staff determined, however, that those items were being appropriately dealt with through other processes, as I mentioned earlier.

We're confident that our processes will allow us to identify licensees or candidates that meet the criteria and should be discussed at the AARM.

Slide 13 are just conclusions. All the strategic and performance goals were met in 2005. No adverse performance trends were identified, no licensee performance issues reached the AARM threshold, and NRC programs are providing effective oversight.

I did want to point out here that this is a very positive set of conclusions, but that does not mean that we are not committed to continuous improvement. And we continue to look at the programs to see where we can improve them.

Just a few examples. We're working with the Office of Research on some human reliability studies, particularly in the brachytherapy area, so that we can understand -- as I mentioned earlier, one of the main root causes, if you look at the abnormal occurrence events in the medical area, are human factors related, and it’s a very small number. But we're going to see what we can learn there that could help inform – we’ll share that with the industry through our generic

communications. We can also use that to inform our inspection program, and procedures.

We are looking at changing measures. This is something that has come up in prior discussions with the Commission in this area. We are challenging ourselves to make sure that we are measuring things appropriately. We are proposing tightening some of our goals. Some of the metrics have been tightened to make them more challenging, and some of the measures are being changed to provide a better focus, to make sure we are looking at the right things.

We are looking at changing the abnormal occurrence criteria, keeping that up-to-date. And, of course, with regard to Katrina, we have a lessons-learned report in which we are looking at our Materials Program to understand how we can best be prepared to respond to those events.

I think our response was good, but, as I said, we are always looking for how to improve and now to be pre-staged and ready to address those sorts of events.

So that concludes the nuclear materials briefing.

MR. REYES: Thanks, Jack. Now we are ready to answer questions on the materials panel.

CHAIRMAN DIAZ: Thank you, Jack and Luis. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Thank you very much, Mr. Chairman. During the course of last year's AARM, we did have three licensees, Honeywell, the Westinghouse Columbia facility, and the Baxter Pharmaceutical facility in Puerto Rico, which were part of the AARM for materials. Fortunately, all of those have moved off the chart this year.

During that meeting, I had mentioned my personal belief that I thought it was useful for managers, senior managers and those licensees to meet with the Commission and meet with our senior managers to get a sense of what was going on.

Not speaking for anyone else, but I did have the opportunity to speak and meet with representatives of all three companies and do appreciate their willingness to heed my call. I think that's in their good interest, and certainly in ours, as well.

Another issue that I raised in the AARM last year was the issue of how we interact with those licensees who fall not under our authority, but fall under the Agreement States program. And we went back and forth on some of those issues.

I guess the question I would have arising out of last year is, were there any activities within the Agreement States that would rise to a level that, were they to be in our program, would have caused them to come before the Commission in this AARM meeting?

MR. STROSNIDER: I believe the answer to that would be no. When we look through events and we apply the criteria, looking for significant licensee performance and issues, that includes events in the Agreement States. As I mentioned, the only thing -- all of my comments were addressed to Agreement States and NRC licensees, with the exception of the enforcement slide, which focused just on NRC enforcement.

COMMISSIONER MERRIFIELD: I'm sorry, I didn't appreciate that distinction, and I guess my comment on that would be, for the purpose of tracking our own performance vice that of the Agreement States, it would seem to me that

we ought to be thinking about dividing that information perhaps a bit more so we have more clarity on what is going on with the licensees that we directly regulate, verses what is going on with the licensees that are regulated in the Agreement States, so as to bring a greater degree of clarity about how we are performing, vis-à-vis the Agreement States Program. I would not expect that there would be gaps or differences in them. I don't mean to suggest that. But certainly, if we are going to be looking at trending data and try to evaluate if there are gaps, as you mentioned here on page 7, in terms of judging our strategic outcomes and looking at precursors, looking at program gaps, and looking at event data, to combine the outcomes of what is going on in the Agreement States and what we are doing within our own program, I think muddles that message. So I think we need to take a look at that one going forward.

On page 9, you noted that in FY 2005, we had a total of nine abnormal occurrences reported to Congress in 2005. Seven of those were therapeutic, and two of those were diagnostic. And you mentioned that, or at least I'm aware that one of those was involving an infant. Can you -- and you may need a member of your staff to go into a little bit more detail. Can you go into a little bit more detail about the diagnostic abnormal occurrences, particularly the one to the infant?

MR. STROSNIDER: I don't have that level of detail. I don't know if Michele or a staff member that can address it.

COMMISSIONER MERRIFIELD: I'll tell you what. While they are searching for that -- and it may require you to come back and review that information.

Let me ask a more general question, and this relates to slide 12.

How are you going about monitoring human performance and corrective action program data in this arena? I'm trying to get some sense of the indicators, what are the indicators telling us about licensee performance?

MR. STROSNIDER: Let me make sure I understand. You said human performance type issues?

COMMISSIONER MERRIFIELD: Human performance and corrective action programs.

MR. STROSNIDER: Okay. In general, when we see events, we go out to understand the root cause. And as I mentioned, we do find that with regard to the medical activities -- and actually with regard to other activities -- it involves some of the overexposure events, too -- that those are human factors related, usually from inattention to detail, inattention to what people are doing. But we look at the procedures. We make sure that they have procedures in place, and we look at those procedures to make sure they have the right things in them. That's part of our follow up.

We look at the training. We look at all those aspects that could influence human factors. And the conclusion we've reached here, when we look at, again, this relatively small number is that it's not usually -- well, I should say, typically, we have seen that the procedures are there, that they are generally appropriate, but what we find is that people just weren't following them or paying attention to them, and that they're distracted by other things. Those are the some of the main things.

COMMISSIONER MERRIFIELD: I guess I could have been a little more artful in my question. I'm just trying to get a sense of, you sort of placed things in this basket of human performance, and to what extent -- although there's

a limited subset of folks that we're taking a look at here, is there some trending within that human performance arena that we can judge? Rather than just saying, well, we have not seen adverse trends in human performance, are there any subcategories within this human performance or any subcategories within the corrective action program that we are taking a look at to get a better sense of that?

MR. STROSNIDER: I don't -- and I could be corrected by the staff, but I don't think we have looked in that level of detail. I'm not sure that there is really that much data in these events to allow that sort of trending. I think it is a small enough number.

COMMISSIONER MERRIFIELD: Okay.

MR. STROSNIDER: When we went back and we had done a special study in overexposures, and what I just addressed a minute ago was our conclusions from that. But, again, it's a fairly small number, and we looked at those things that it could affect. But to get a trend out of the data, I think there is really just not enough there.

MS. BURGESS: We do look at each of the events individually, and there were no specific common threads amongst the different human performance issues -- nothings we could pull out and fix in a generic sense or something we saw being repeated. So we were looking.

COMMISSIONER MERRIFIELD: Did you have any information on that one abnormal occurrence relative to the infant?

MS. BURGESS: The infant was a diagnostic, not a therapeutic. I don't have any further details other than that.

COMMISSIONER MERRIFIELD: Mr. Chairman.

CHAIRMAN DIAZ: Thank you. Commissioner Jaczko?

COMMISSIONER JACZKO: I would like to touch a little bit more on some of the human reliability issues. And you said you were working with the Office of Research. If you could just provide a little bit more in-depth information or detailed information about the kind of work that is going on and when you think that Research will be available to turn into some practical approaches to improving some of the human reliability performance?

MR. STROSNIDER: We have asked them to support us in looking at human reliability and human factors issues. And we looked through a number of possible areas that we could study, and the one that we choose to look at was brachytherapy activities, just looking at the sort of activities and experiences involved, we thought that might be a fruitful area to look at. We have a request with them to do that, and I have to say I'm not sure exactly what the schedule is. I think this is just getting underway. I don't know if the staff has any more detail on the schedule, but I'm guessing that it is probably a year or two away.

COMMISSIONER JACZKO: While the staff is coming in to shed more light on that -- is there anything that the industry is doing or that other parties are doing to try to address some of these issues as well, some of the human factors and human reliability issues, that you're aware of?

MR. STROSNIDER: I'm not aware of any specific studies of that nature, but obviously when they designed their equipment and their procedures, et cetera, they do take this into account in terms of how to provide the best reliability.

MS. WASTLER: Sandra Wastler, NMSS. I don't have the exact Research schedule, but it's very early in the process. They have done some preliminary data gathering on the human reliability, and they've developed a

training tool that they are actually going to meet with the staff on next week to actually try to use and to see where it might need improvement.

So we are meeting with a group of the medical staff to apply it. And the next day, we are going go get some feedback and, hopefully, by end of the year, have a similar training session with the Regions. But it's rather fluid right now. It's early in the process. So there is still more to develop as we go along on that.

COMMISSIONER JACZKO: Thank you. The next question I wanted to ask has to do with an issue I believe I raised last year dealing with the feasibility of developing facility-specific performance indicators. And I'm wondering if you can just update me again on where you are with -- getting the idea of wanting to try to develop something comparable to an ROP-like process or some subset of materials licensees.

MR. STROSNIDER: The Fuel Cycle Facilities Safety Division is working on that issue. We budgeted resources for it, and we're in the process of developing that. An important part of that will be interaction with the stakeholders, and I know we have some plans for that. I don't have the exact dates, and I think some interactions have occurred already. But I don't have the specifics.

The one comment I would make is that as we go through this arena, we are trying to take advantage of I would think of the ISA's and how that fits in, but we need to recognize, in terms of achieving something like an ROP, as I think we discussed before, that these facilities are very different. Each one has its unique processes and systems. So it may not lend itself to that type of approach as well as reactors do.

However, we do believe that there can be meaningful indicators

developed, obviously, for any organization and facility. So we are working on that.

COMMISSIONER JACZKO: The last question I just wanted to touch on was some information in the backup slides. Maybe you could just talk a little bit about some of the lost and stolen sources in a little bit more detail. It seems like we have a pretty good recovery rate. Looking at the chart, it seems like it is the iridium sources that we have not been able to recover generally.

MR. STROSNIDER: We have done a study going back to 1994, looking at lost and stolen sources and the number that were not recovered. I think there were 12 sources in that period that were not recovered.

As I mentioned earlier, in 2005, there were no significant sources that were not recovered. There was one that was lost off of a platform while they were transferring it to a boat in the Gulf, and it was lost in about 90 feet of water. They sent divers down and tried to recover it, but couldn't. And the way we defined the criteria, because of the location, we essentially know where it is: it's under 90 feet of water. But it didn't meet the threshold.

If you look back at the previous years, I think one of the most important things to look at is the safety significance of those sources at this point. Actually, I have a few numbers on that.

Ten of the sources that were lost prior to 2003 have decayed to a point where -- they were all iridium -- they decayed to the point where -- to the total of ten microcuries. And the one source that was lost in 2003 is less than category 5, as defined by the Code of Conduct. And the one source that I just mentioned that was dropped into the water in the Gulf is less than category 4 at this point in time, and by August will be less than category 5.

The other -- I had mentioned, from the NMED database and those

reviews, that there are lost sources of much less significance. Those are all less than category 3 by the IAEA Code of Conduct. I think that is sort of a summary of where that is at.

COMMISSIONER JACZKO: Thank you.

CHAIRMAN DIAZ: All right. Go back to the fuel facilities -- Oh, I'm sorry, you're so quiet.

(Laughter.)

COMMISSIONER LYONS: You were starting so positively, so I didn't want to discourage you.

CHAIRMAN DIAZ: I had my thoughts engaged, and I apologize.

COMMISSIONER LYONS: Well, I'm not sure my comments are going to be all that earthshaking on this. Mainly, Jack and Luis, certainly my compliments to you, your staff, and the staff of the Agreement States for the performance that is summarized on your slide 13. It's some very, very positive results for the last year.

I also appreciate that you have indicated in your discussion on that last slide that you're looking at ways to, perhaps, further tighten goals where that can be appropriate. And I appreciate that you mentioned some attention on lessons learned from Hurricane Katrina. On the one hand, the performance I still think was outstanding. The performance for the whole agency was outstanding on Hurricane Katrina, but there were some lessons to be learned, and I appreciate that you're doing that.

The only perhaps question or comment or suggestion I would make would be to follow up in the area that Commissioner Jaczko was already pursuing on human reliability, and to ask if, in the plans in that area, you are looking to

involve the Agreement States? I would think that whatever research is done and whatever training tools are developed, as they are tested, I would just encourage that we find ways to involve the Agreement States because, obviously, you've got 80 percent of the licensees.

MR. STROSNIDER: I think that is a good suggestion, and we will follow up on that. I'm not sure exactly what the plans are now, but my perspective is that when we get these results, we would certainly share them with the Agreement States. And not only that, but we have a newsletter that goes out to all our licensees, which is a very good way of informing really a lot of the stakeholders that are involved. We want to share this information as broadly as we can to help improve the programs. So I think that is a good suggestion. We will follow up on that.

COMMISSIONER LYONS: Mr. Chairman, that's the extent of my comments, and back to you.

CHAIRMAN DIAZ: See, I knew I could start early.

On the fuel facilities which data is not apparent, we have a couple of enforcement actions and issues. Are we seeing or do you expect that we will see that our integrated safety analysis implementation will help minimize the number of enforcement actions or potential problems on the fuel facilities?

MR. STROSNIDER: I think our real hope there -- and I don't want to predict how many enforcement actions there might be, but I would hope that the ISA would assure that enforcement actions that are taken are focused on issues that are important. And so in terms of informing, risk informing our inspection and our licensing and other programs, we think the ISA, Integrated Safety Assessments, are really going to play an important role there.

I would point out that we are still fairly early in that stage. We have one that's been approved; others are under review. So it is a little early to say exactly what impact it will have, but I believe it's certainly going to help us to risk inform.

MR. REYES: If I could add, the way I see it, I see it in a three-tiered priorities. The ISA allows the licensee to identify the most significant systems or components they have to put their attention in it. The second level is our inspection program follows that significance. And the, third, if you have an event or disruption of the system performance, then it helps us to try to identify the significance and therefore the enforcement. And that's kind of the approach, we take with the ISA.

MR. STROSNIDER: I might just expand on what Luis said with regard to the first step, notwithstanding the fact that we have not completed all our reviews, licensees have taken action based on their conducting reviews, and have made changes in facilities and procedures to address those things that were identified.

CHAIRMAN DIAZ: All that's part of the question. I know that we are beginning implementation, but I wanted to get, at least for us, an overview. Are we going to, when we get together next year, or you get together next year, have this issue folded in, in a manner that we can say yes, the ISA's are a contributing factor. Are they doing well -- because we've been talking about it for years, and we need to get to the point where we use them. And we are getting to that point right now. But like you said, the licensees are already going to their facilities.

Anything else you need to add?

MR. REYES: Just that even though they may not all be approved,

they are being used already. I don't want to get the formal approval confused with the licensees' activities and our inspection activities. We can use some of the insight from the ISA's already, even though they may not be fully approved.

CHAIRMAN DIAZ: Therefore, we should expect a beneficial effect. Okay.

Just one thing on the same issue of the State. It is possible that with this new dimension that we are adding for involving the States in security inspections, that that added, let's call it connectivity and additional work will offer ourselves a window in which to take observations and make human factor problems or issues better known across the board and better established so that the agency will have a better baseline or better look across what both our States and Agreement States can do.

MR. STROSNIDER: And I think some of the message I'm hearing from the Commission, going back to Commissioner Merrifield's comment, is that we want to look at the whole program – but we want to look at NRC, we want to look at States, and we want to make sure we mine the information as best we can to understand any differences, what's working well and where we can make improvements.

CHAIRMAN DIAZ: And I think there is an opportunity to do that in an enhanced manner with the new dimension of security, because that's an added type of inspections that the States will have to do. We will be doing it, and so it gives us a cross-correlation factor in there.

Commissioner McGaffigan?

COMMISSIONER MCGAFFIGAN: Thank you, Mr. Chairman. I will join you in noting that when we first came here, there were a lot more people in

the room, other than Regional Administrators, Office Directors, and others who were dragooned in from our own staff to watch us. I guess Jenny is here, so there is one representative of the media – there were, in the old days, a lot more. And we made news at these meetings, which I don't think we tend to do very often any more because the system is more transparent.

The first question I have goes to Luis, I think. The paper that we received on the Materials Program was marked sensitive internal information. You know what I think of that category of information. The equivalent papers on the reactor side -- I believe there are two -- are all unclassified. So not only unclassified, but they were open. Is there anything's really sensitive in this paper, that is, the materials paper? The main bulk of it is the NMED report that's public. We have been talking about the source stuff, and that should be public. Overexposure events is public. It's just a summary of the data, so it strikes me there is nothings sensitive in this paper.

MR. REYES: We will take a look at it. Typically, when we have Agreement States information, it creates a situation where we have to be careful with how we propagate that information. But let us take a look at that and make sure we're classifying that right.

COMMISSIONER MCGAFFIGAN: Could you explain that just briefly?

MR. REYES: Events are reported to us from the States. We are not allowed to make it public because under State laws, they have some issues with details they give us. So if we have any of those details that may be an issue.

COMMISSIONER MCGAFFIGAN: I would urge you to get most of this. If there's something that we have an agreement with the States – but most of

this paper should be public, and maybe if you would white out a few sections and make it public, that would be my suggestion, subject to the rest of the Commission.

MR. REYES: We could physically also separate our appendices. The particular appendices are not for public dissemination.

COMMISSIONER MCGAFFIGAN: The second area that I will go into is the NMED quarterly report. Commissioner Jaczko was talking to you about the significant sources -- our goal of zero unrecovered significant sources. NMED tends to use any source, and we have this annual number in the 200, 250 range.

Is there a way – again, this might be reflected in the agreement with the States, but is there any way we can sort of build this new performance indicator into the NMED quarterly so that every quarter we announce that there are zero unrecovered risk-significant sources? The database focuses on the large number of fairly small sources, non-risk-significant sources that are focused on.

So I think it's just a transitional issue, but you might want to look at the NMED paper and build that in.

MR. STROSNIDER: I think the answer has to be yes. Can we do it? Yes, of course. So we can take a look at that.

COMMISSIONER MCGAFFIGAN: Again, following up on Commissioner Jaczko's and your comments, I do want to emphasize to the public that during Chairman Diaz's ten years on the Commission, there have been zero unrecovered sources from every isotope other than iridium. And there is a lot of misinformation that is sometimes out there in the public because they seize on the 250 per year microcuries, that most millicurie-type sources that get lost, and not on the risk- significant sources.

We have a very tight ship when it comes to risk-significant sources in this country. That may not be true worldwide, but it is true in this country. And thankfully, the reason iridium-192 sources tend to be the ones that are lost are, they are very portable, they are used in radiography equipment.

MR. REYES: They are in a shiny truck.

COMMISSIONER MCGAFFIGAN: Yes, and various ways that make them more likely to run into events where they could be dropped into the Gulf of Mexico or into the Atlantic Ocean or something like that.

So as I say, I just want to emphasize to anybody listening that the staff does an absolutely outstanding job, both here and in the Agreement States, in following risk-significant sources, and making sure that if one is lost, that every effort is made to recover it. For far less than risk-significant sources nowadays the FBI and lots of other folks get involved. So we have a very tight ship, and that needs to be emphasized. Thank you very much.

CHAIRMAN DIAZ: Thank you. Any other comments from the Commission?

COMMISSIONER MERRIFIELD: Mr. Chairman, I don't want to delay it with more questions. There was one on an issue that I did want to raise, and I will put this as a takeaway for the staff.

On slide 11, Jack spoke to the fact that of the review of trending data, in terms of the breakdown of events, about 25 percent of the total number of events that we have result from a equipment problems. And that is a pretty -- equipment problems is sort of an all-encompassing word. So I would like to get a better understanding from the staff if there is any breakdown in terms of what that means.

MR. STROSNIDER: I'm not sure –

COMMISSIONER MERRIFIELD: You don't need to answer that now. What I'm really looking for is having you folks get back later on.

MR. STROSNIDER: I would make that, of course, we follow up on those and we make people aware of it through our generic communications and the licensee letter that I talked about to make sure that if there are equipment problems identified in one event, that it would stop it from happening someplace else. But we can get you a better breakdown.

COMMISSIONER MCGAFFIGAN: In particular, there is a distinction between those that are caused by the function of the way in which the device was manufactured or designed versus those that are related to maintenance or inattention to maintenance. And there is a distinction. Thank you Mr. Chairman.

CHAIRMAN DIAZ: Anybody else have any questions?

COMMISSIONER JACZKO: Just a very brief comment and, perhaps, a question, Jack, if you want to comment on it. Right now, we don't have any fuel cycle facilities that have shown up at this AARM, but certainly there have been some issues recently with some of the fuel cycle facilities. I just want to make that comment.

Perhaps you can just briefly comment on why we are not seeing those and when the cutoff date is for reporting of events?

MR. STROSNIDER: The main thing -- and you're right – we are following up on issues and events at some of the fuel cycle facilities.

As part of our normal inspection, and oversight, and licensing process, we do that. When you look at the threshold for coming to the AARM, there were not any events that exceeded that threshold in fiscal year 2005. So

that's why they didn't come here. But that's why I made the comment that that does not mean that there aren't things that we're looking at and that we're following it very closely.

We have had additional inspections. This year we have a number of the facilities on higher frequency licensee performance reviews. We've had a number of management meetings. That's part of our normal process, to follow up on those things, and we're doing that. That's not to say that next year, there might be events that would cross the threshold. And we would evaluate that and bring them to you at that time.

COMMISSIONER JACZKO: Thank you.

CHAIRMAN DIAZ: All right. Thank you very much. We will have the next panel.

MR. REYES: Okay. If we could have the next panel, please.

We will continue, with the reactor subject matter and turn over the meeting to Jim.

MR. DYER: Thank you, Luis.

As was explained earlier, we conducted the Agency Action Review Meeting in accordance with Management Directive 8.14. For the reactor program, this comes at the end of end of cycle meetings, and it's a look-back at how we performed over the past year. And there's really four objectives that we intend to address during that meeting.

One is to review industry trends and make sure that any actions are identified for follow up, to review annual ROP self-assessment and look for changes to our program, to allow the NRC senior managers to review agency actions taken for those plants with significant performance problems as

determined by the ROP action matrix, and identify any additional actions that may be appropriate, and ensure that we have a coordinated course of action, or develop for any licensees of concern.

We conducted that meeting, and I'll let -- with me at table are Jim Caldwell and Stuart Richards, who will address the results of the Agency Action Review Meeting. As noted earlier, we have all the Regional Administrators, and Roy Zimmerman, they're also in attendance to answer any of your question. So with that, let me turn the meeting over to Stu.

MR. RICHARDS: If we could have slide 15, I believe.

Good morning. I'm Stu Richards, the Deputy Director of the Division of Inspection and Regional Support in NRR. The first topic I'd like to talk about this morning is the Industry Trends Program.

This program looks at overall industry performance by tracking various industry performance indicators, combined with the results of the Accident Sequence Precursor Program.

The Industry Trends Program allows us to step back and look at the long-term performance of the industry in selected areas and to assess whether there are trends that warrant more staff attention.

The results of the program are posted on our public website and reported to the Commission in an annual Commission paper.

The public has ready access to this information, thereby contributing to the agency goal of being open to our stakeholders. The Industry Trends Program also complements the reactor oversight process and is an input to the agency performance goals, which are reported to Congress.

Next slide, please.

In fiscal year 2005, there were no statistically significant adverse trends in overall industry performance. On an industry-wide basis, the performance indicators that we trend remain significantly improved, compared to ten or fifteen years ago.

We also look at short-term trends. In fiscal year 2005, one indicator, the safety system actuation performance indicator, exceeded its short-term prediction limit. The staff reviewed the data associated with this performance indicator and did not identify any pattern or driving factors.

We will continue to monitor this PI for further indication of a trend or for a common root cause.

The accident sequence precursor program, which is implemented by the Office of Research, also did not exhibit any long-term trends. In some recent years, there have been increases in the ASP data that largely reflected the 2003 northeast blackout event and cracking in control rod drive mechanism housings. As you are aware, these issues are being addressed by the staff.

Next slide, please.

I would like to turn now to a discussion of the results of the staff's annual self-assessment of the reactor oversight process. Self-assessment is an opportunity for the staff to consider what we are doing well and where we can improve our performance. It is also an opportunity to assess whether the program is meeting the goals that have been set out.

One of the strengths of the self-assessment is the variety of inputs that go into it. We receive a lot of feedback from the inspection staff, and this year we also had the benefit of the external survey of our stakeholders' views of the reactor oversight process.

We also received feedback during our monthly public meetings with the industry and during the annual Regulatory Information Conference.

The Office of the Inspector General has completed several audits of the reactor oversight process during the last few years, and the Government Accountability Office is presently completing their audit of the reactor oversight process.

So as you can see from the list on the slide, we have a number of diverse inputs into the self-assessment.

Next slide, please.

Overall, the self-assessment concluded that the reactor oversight process has been effective in monitoring the performance of operating reactors and in focusing our inspection resources to those facilities with relatively weaker performance.

The program has successfully met most of its associated goals and has improved over time. We maintain a number of performance metrics for the program, and most of those metrics were met in 2005.

Based on the external survey results, the views of our external stakeholders about the ROP remain mixed, which is consistent with feedback from past years. Self-assessment did conclude that there are areas in which we can do better. I'll cover those areas in the next few slides.

Next slide, please.

Now turning to the Performance Indicator Program, in 2005, we spent a significant amount of time working with industry to implement the Mitigating Systems Performance Index, or MSPI, as it is more commonly called. I would like to note that the Regional offices and the Office of Research were major

participants in this effort.

The result is that MSPI was implemented on April 1st of this year. The first MSPI results will be posted shortly after the present calendar quarter ends, or about the third week in July.

It appears that the work with industry to implement MSPI also had the side benefit of the industry improving the quality of their site-specific PRA's in some cases and in increasing the focus of licensees on those safety components that PRA's indicate are most safety significant.

This past year, we implemented and improved process to address open issues with performance indicators, resulting in a significant reduction in the backlog of those types of issues.

We are also continuing to work with industry to improve the performance indicator that monitors plant scrams with complications and to improve the performance indicator on reactor coolant system leakage.

Three of seven ROP self-assessment metrics in the performance indicator area were not met in 2005. These were, first, achieving consistent results, given the same guidance, obtaining insights from the PI program to help ensure plant safety, and last, stakeholders receiving appropriate overlap PI's in the inspection program.

Next slide, please.

During calendar year 2006, we will complete implementation of MSPI. This will include additional training for our inspectors and inspections at each site to verify the proper initial implementation of MSPI. We will continue to work with our stakeholders to explore opportunities to enhance the effectiveness of the Performance Indicator Program, and as previously mentioned, we are

working to improve the performance indicator that monitors plant scrams with complications, and to improve performance indicators on reactor coolant system leakage.

Next slide please.

With regard to the inspection program, our assessment conclusions were generally positive. The inspection program was completed by all four regions in calendar year 2005, without significant support from headquarter's staff.

During the last year, we implemented a number of inspection procedure changes and follow-up to the Davis-Besse event and to the findings of the Office of the Inspector General audit of the baseline inspection program.

We also formed a working group with the four regional offices to consider the allocation of inspection hours within the program. This group reviewed the inspection results of the various inspection procedures and recommended some changes in the allocation of inspection hours.

In 2006, we intend to build on this initial effort to ensure that we are focusing our inspections in the most effective manner, as indicated by inspections and operating experience.

In 2005, we completed the pilot engineering inspections at four sites. This inspection is designed to enhance our oversight in the engineering area. Following Commission approval, we implemented the revised inspection as a routine part of the baseline inspection program. The revised engineering inspection will be completed at all sites nationwide by the end of calendar year 2007.

Finally, only one of 11 self-assessment metrics in this area were not met. This metric was the completion of temporary instructions within timeliness

goals.

Next slide, please.

In calendar year 2006, we will continue to work on better refining the process for allocating inspection resources within the reactor oversight process. As previously noted, we will implement the revised engineering procedure, and as directed by the Commission, we are working with the Office of Enforcement and with the four Regional offices to implement safety culture revisions to the inspection program, including inspection procedure revisions, program guidance, and inspector training. We intend to place these changes in effect on July 1st of this year.

Next, slide please.

Over the past year, we have made a number of changes to improve the timeliness and efficiency of the significant determination process. The process now includes a provision for the Regions to caucus with headquarters staff early on to map out a plan to complete a significance determination when the issue appears to be complex.

We have reiterated that significant determinations are to be completed in a timely manner using best available information. Extensive staff studies or research on any given issue for the purposes of directing inspection resources is not appropriate and is discouraged.

Issues that deserve such long-term consideration will be addressed via other agency programs. Our process invites licensees to provide input into our considerations. However, we expect that their input will be timely. We have continued to make improvements to individual process tools, including the development of pre-solved phase 2 tables. These tables will provide the regions

with significant results for a variety of scenarios in a table format.

Although we have made progress with the significance determination process, we did not meet our timeliness goal in 2005. The goal was to complete 85 percent within 90 days, and we achieved 68 percent. However, the average time taken to complete significance determinations improved considerably in 2005.

Our average time was 72 days, compared to 305 days in 2004. The second metric we did not meet was the perceived appropriateness and consistency in regulatory response yielded by the SDP across all ROP cornerstones. We met the other six metrics in this area.

Next slide, please.

We intend to issue the pre-solved tables to the Regions in July of this year. We will also continue to focus heavily on improving our significance determination process tools and our overall timeliness in this area, including providing guidance for NRC management review of issues involving large uncertainty.

Next slide, please.

Our conclusions regarding the program to assess and respond to licensee performance was generally positive. The identification of substantive cost-cutting issues is an area we focused more attention on in 2005. Additionally, this area will be significantly revised as part of the safety culture changes that are presently being made. We exercise the crosscutting aspect of the program only twice a year during the mid-cycle and end-of-cycle review meetings. After the revisions for safety culture implemented in July, we intend to minimize any further changes regarding crosscutting issues to allow some time to pass during which we

can assess the effectiveness of the current revisions.

We also revised our guidance for Inspection Manual Chapter 0350, which addresses plants in long-term shutdown. These changes were based on the experience learned from the Davis-Besse 0350 Panel. One of the 11 metrics in this area was not met. This metric failed based on the number of action matrix deviations, which increased in 2005 compared to the past few years.

Next slide, please.

As mentioned previously, we continue to focus on to the topic of crosscutting issues and the implementation of safety culture revisions to the reactor oversight process.

Next slide, please.

During 2005, we had four requests to deviate from the reactor oversight process, all of which were approved. In three of the four cases, the deviation increased the level of inspection or the level of Regional management oversight at the plant involved. At Davis-Besse, the deviation allowed additional oversight during the transition out of the Manual Chapter 0350 process. We have revised the program guidance in this area based on this experience.

At Salem/Hope Creek, the deviation was to increase inspection and oversight due to safety-conscious work environment issues. Program changes in this area are presently being made to enhance the reactor oversight process treatment of safety culture.

At Indian Point, a deviation was approved to allow inspectors to closely monitor the licensee's performance related to spent fuel pool leakage and to inspect reliability and availability issues associated with the alert and notification system.

This deviation was very site-specific, and no program changes resulted, although future related changes are possible as a result of the lessons learned task force effort on inadvertent releases of radioactive effluence.

The deviation was also approved to waive a follow-up inspection at Point Beach for an emergency preparedness finding in 2002. The resolution of this issue was delayed by investigations involving the Department of Justice and the Office of Investigations. During the delay, Point Beach received an inspection in accordance with Inspection Procedure 95-003 as a result of the plant being placed in the multiple-repetitive degraded cornerstone column of the action matrix.

The 95-003 inspection thoroughly covered the emergency preparedness area, thereby making further follow-up for the 2002 issue unnecessary. This deviation was viewed as site specific and did not result in program changes.

Next slide, please.

This last slide addresses inspection resources and resident inspector demographics. The inspection resources expended per operating site were up in 2005 and reflect, in part, the increase in resources provided to the Regions and the increased efforts in the EP and security areas.

Our staffing levels for senior resident and resident inspectors are good, with the turnover rate in 2005 at a reasonable level. The experience levels of our resident staff remain high, with an average of about 12 years of non-NRC experience, added to an average of six years of NRC experience for resident inspectors and an average of about nine years of non-NRC experience, combined with 11 years of NRC experience for senior resident inspectors.

This completes my presentation, and we will now go to Jim Caldwell

to discuss specific plants.

MR. CALDWELL: Thank you, Stu. Chairman, Commissioners, good morning. I'm Jim Caldwell, Regional Administrator from Region III. Today, I have three plants to discuss. Before I do that, I wanted to, again, as I have in the past, thank the headquarters offices, the program offices, and the other Regions for their support, having two column 4 plants and still doing oversight on Davis-Besse, plus other issues that requires help from each of the other Regions, as well as a lot of cooperation from NRR.

So I do appreciate -- Region III appreciates that help, plus I do appropriate all the efforts that the Region III staff put in. It is a lot of dedicated hard work to oversee these facilities.

I'll start with Davis-Besse. Davis-Besse is a single-unit, two-loop Babcock & Wilcox pressurized water reactor located in Oak Harbor, Ohio that is owned and operated by FirstEnergy Nuclear Operating Company, or FENOC.

This is the fifth time we have discussed Davis-Besse at the AARM Commission meeting. Davis-Besse is currently in the licensee response column, or column 1 of the ROP action matrix but was under the Inspection Manual Chapter 0350, Oversight Process, for the first two quarters of 2005. And that's the reason we are discussing them today.

We began discussing Davis-Besse in 2002 because of a discovery of a significant degradation of the vessel head and the subsequent placement of the restart decision and outage oversight under the Inspection Manual Chapter 0350 process.

The restart hold on Davis-Besse was listed in March of 2004. An order was issued with the restart authorization that required a mid-cycle outage

and independent assessment in four areas for the next five years.

Although the plant was allowed to restart, the Inspection Manual Chapter 0350 oversight process remained in place to provide oversight of the mid-cycle outage, the first set of independent assessments, and until all the performance indicators had enough run time to become valid again.

After successful completion of the necessary criteria, Davis-Besse transitioned from Inspection Manual Chapter 0350 oversight process back to the ROP process in July 2005.

In addition, the EDO approved a deviation to the ROP action matrix to allow inspections above the baseline to evaluate the next step of independent assessments.

Since the restart in 2004, Davis-Besse has operated safely, and performance has been good. Both the mid-cycle outage in 2005 and the recent refueling outage demonstrated the licensee's focus on taking the time necessary to ensure maintenance, and outage-related activities were performed completely and correctly.

The independent assessments – two sets have been completed so far and have demonstrated continued improvement in each of the areas assessed, with some areas for improvement, and additional good information is still being identified.

Going forward, we will continue to implement the ROP baseline inspection program, and we intend to request an extension to the deviation memo to allow additional inspections above baseline to evaluate the licensee's next set of independent assessments.

In summary, Davis-Besse continues to operate safely and

performance remains good. That concludes my remarks on Davis-Besse.

Next slide.

Next, I'll discuss Perry. Perry is a single-unit, General Electric, boiling water reactor 6, or BWR 6, located in Perry, Ohio, that is owned and operated again by FirstEnergy Nuclear Operating Company.

This is the second time we discussed Perry at an AARM Commission meeting, and Perry is being discussed because of a number of white findings identified resulting in the licensee meeting the criteria for moving from the degraded cornerstone column, or column 3, into the multiple repetitive degraded cornerstone, or column 4 of the ROP action matrix. They entered column 4 in August of 2004 and remain in column 4 today.

We completed the inspection procedure 95-003 in 2005, and based on the results the licensee modified their performance improvement initiative, or PII, to specifically address the issues identified by the inspection.

We issued a confirmatory action letter, or CAL, in September 2005, documenting our understanding of the licensee's commitments, as stated in their PII.

The CAL listed four area of concern: emergency preparedness, human performance, corrective action program, and inspection procedure 95-002 follow-up items.

Overall, Perry continues to operate safely, while showing some performance improvement in all areas of concern. Our oversight, CAL follow-up inspections, and their performance to date indicate that in the emergency preparedness area, the CAL can be closed, but the other three areas remain open.

In addition, both human performance and problem identification resolution and crosscutting issues have been identified and remain significant crosscutting areas.

The CAL follow-up inspections were designed to be conducted in three phases. The first phase was to evaluate the effectiveness of the PII. That inspection has been completed satisfactorily. The second phase was to inspect the implementation of the PII, and the third phase was to inspect the effectiveness of the PII, both in the areas identified by the CAL.

As previously discussed, the emergency preparedness inspections were satisfactorily completed, both in implementation and effectiveness. The implementation inspections were completed for the areas of the corrective action program and inspection procedure 95-002 follow-up items.

The next steps will be to complete the ROP baseline program and the remaining CAL follow-up inspections. The remaining CAL follow-up inspections include the implementation and effectiveness inspections of the human performance area in June and October of 2006 respectively, and the effectiveness inspections of the 95-002 follow-up items, and the corrective action program in July and November 2006 respectively.

All these inspection dates are predicated on the licensee's schedule to fully complete their improvement activities in those areas.

In summary, Perry continues to operate safely, while demonstrating some performance improvements in each of the CAL areas. Also, we have scheduled and resource loaded the necessary inspections to complete our CAL follow-up activities by the end of the calendar year, again, assuming that the licensee completes their actions.

This concludes my remarks on Perry.

Next slide, please.

The last of the three plants is Point Beach. Point Beach is a duel-unit, two-loop, Westinghouse Pressurized Water Reactor, located in Two Creeks, Wisconsin, and it is owned by Wisconsin Electric and operated by the Nuclear Management Company. This is the fourth time Point Beach has been discussed at the AARM Commission meeting.

Point Beach moved to the multiple repetitive degraded cornerstone column, or column 4 of the action matrix in April 2003, due to red findings associated with the aux feedwater system.

One of primary causes of the red findings involve weaknesses in engineering's understanding and focus on plant design requirements. Point Beach remains in column 4 today due to the continued concerns in the engineering area.

Overall, Point Beach continues to be operated safely, while improving performance in all areas discussed in the CAL. As a way of background, we issued the CAL in April 2004, following the completion of the inspection procedure 95-003 and the licensee's update of their excellence plan.

The CAL identified five areas of concern: emergency preparedness, operations/engineering interface, human performance, corrective action program, and engineering design.

The CAL follow-up inspections and the licensee performance to date indicate that four areas -- emergency preparedness, operations/engineering interface, human performance, and the corrective action program -- have demonstrated sustainable performance improvements and, therefore, can be

considered closed.

In addition, we closed the ROP crosscutting issues in human performance and problem identification resolution at the end of cycle.

As discussed above, issues remain in the engineering design area, and this item remains open. Additionally, the licensee committed in a letter to the NRC, dated February 10, 2006, to conduct assessments of both engineering and the corrective action program every six months for the next two years. This assessment will include alternating, independent, and self-assessment.

As a result of the licensee's performance, we issued a revised CAL dated April 14, 2006 to reflect the closure of the four areas discussed above, and it included the licensee's commitment to conduct assessments in engineering and the corrective action program. This changed the CAL's intended focus to licensee's improvement efforts in the area of engineering

Going forward, we will complete the ROP baseline inspection program and include additional inspections above baseline, primarily in the area of engineering. The inspections of interest include a review of the engineering independent assessment in June 2006, a review of the corrective action program independent assessment, with a focus on the engineering aspects, in July 2006, an augmented component design basis inspection, or CDBI, in September of 2006, and a problem identification resolution inspection in November 2006.

In summary, Point Beach continues to operate safely, while demonstrating performance improvements in each of the CAL areas. Also, we have scheduled inspections to assess their performance improvements in the area of engineering and their independent assessments through the end of the calendar year.

This concludes my remarks on Point Beach and each of the three plants.

MR. REYES: Thank you Jim. Can I have slide number 32, please?

In summary, the Agency Action Review Meeting is an important and effective tool in the oversight of both the materials and reactor oversight processes. It provides an opportunity to assess actions taken for licensees with performance problems to ensure we are doing the right things to ensure safety. It also gives the management team an opportunity to review the industry and licensee performance trends.

That concludes our formal remarks, and we are now ready for questions.

CHAIRMAN DIAZ: Thank you, Mr. Reyes. Thank you, members of the staff, for the presentations. Commissioner McGaffigan?

COMMISSIONER MCGAFFIGAN: I don't get the first --

CHAIRMAN DIAZ: I know. I'm just kidding.

(Laughter.)

COMMISSIONER MERRIFIELD: First you go left, then you go right. Okay.

COMMISSIONER JACZKO: Just don't forget about me.

CHAIRMAN DIAZ: I just decided to get you off track.

COMMISSIONER MERRIFIELD: Always something new. The first question I have is a general one. We have looked in times past and expressed concerns about the level of inspection resources we have. This has been a challenge, particularly in Region III, where we have had a manifestation of issues where we had to have greater insight on certain reactors or certain licensees, and

that has forced us to take folks from other sites or borrow resources from other Regions, and it has meant that we have basically met our baseline inspection programs, but we have had to, perhaps, not do as much as we had originally planned.

Do we have the resources at this point, and have we gotten back to the point where we are on an even keel?

MR. DYER: Yes, sir. After we had the real problems right around the Davis-Besse time frame, leading up to Davis-Besse, what we have done is, we are pretty steady that we usually have one problem plant in one of the four Regions, and one yellow in at least one or two of the Regions, and across – we just don't know where they are at.

So what we have done as a budgeting technique, we put resources, additional resources, in each of the Regions, with the understanding that the Regional Administrators are responsible for training those resources and responding to whichever Region has the problem.

COMMISSIONER MERRIFIELD: Well, I know folks always want us to be more efficient, and if our licensees can get us off the list, perhaps we can eliminate some of the those budget wedges.

As a general matter, I want to first start with Perry. No, I'm sorry; I first want to start with Davis-Besse. I take it from what you said, Jim, where we are right now, Davis-Besse appears to have made significant progress and transitioned to a column 1 plant, and our continued focus is on the safety culture and safety conscious work environment issues. And their appearance in today's meeting is principally driven by the lagging factors from their having been on the list in the early part of 2005.

MR. CALDWELL: The first two quarters.

COMMISSIONER MERRIFIELD: The first two quarters. In the absence -- assuming that their trend continues as it did going forward, so that they have the second -- the third and fourth quarter of this year and the first two quarters of -- I'm sorry; the last two quarters -- assuming it continues, would you expect that they would not be part of our list next year?

MR. CALDWELL: In fact, I was going to say that, but I decided to drop that. No, the expectation would be that we not discuss them next year.

MR. REYES: Can I add something? There is an issue that I think we need to reflect on as an extension of your comment, which is that we have this order for five years that imposes certain requirements. And Jim mentioned that we are going to have to deviate from the matrix every year to encompass that. At least one of those elements is being considered to be included now as part of the safety culture activities of the agency.

So as we move forward, I think we'll probably need to reflect on, is it appropriate to continue with the order the way it was, now that things have changed.

COMMISSIONER MERRIFIELD: That's a good point. As it relates to Perry, you mentioned issues with the human performance area, as well as the corrective action inspection findings. It looks as if the vast bulk of those findings -- and I sort of calculated somewhere in the neighborhood of 75, 80 percent of those -- were identified early in the assessment period, i.e., early in 2005. I'm wondering -- you said there has been "some performance improvement" in the subsequent time period, and I'm trying to get a sense of how far they have turned the corner and what you would look forward to for this time next year.

MR. CALDWELL: The bulk of the findings were as a result of the 95-003, which was in the beginning or early part of 2005, as well as we did a special inspection because of a couple of reactor scrams they had. So a lot of those issues came out in those two inspections. That's right at the beginning of it.

We have seen some improvement, as I indicated, in emergency preparedness. We believe we can go back to the baseline inspection there. We looked at the implementation of a couple of the programs, and although we have seen some effectiveness changes by the licensee in their implementation, I would say that what's different between this year and last year is that last year, I had a hard time saying anything other than they were status quo. This year, we have seen them turn the corner. I'm not yet ready to say that they are going to be effective by the end of the year, but we are planning for that.

So we see performance improvement, and we are planning to -- if it continues at a greater rate, then we will set our inspections up to be able to conclude this by the end of this calendar year.

COMMISSIONER MERRIFIELD: But given the lag time in the way that our process works, it sounds to me that even if everything went swimmingly from here on in, a la Davis-Besse this year, there would be an item on next year's –

MR. CALDWELL: Yes, we would be discussing Perry next year, regardless of their status by the end of the year.

COMMISSIONER MERRIFIELD: As it relates to Point Beach, obviously, it seems to me, I take away from your comments that the most significant remaining issue relates to engineering, and that is, in fact, an issue that has been a challenge for Point Beach for some time, dating back a number of

years. My takeaway from your comments is that progress has been made, but -- with a big “but” there. And I'm wondering what else we need to be doing to focus on engineering. Is the licensee doing the right things for their focus? Where are we going from here as it relates to engineering at Point Beach, from your perspective?

MR. CALDWELL: Well, I believe you would have to ask the licensee this, but I believe there is a clear understanding between us and the licensee of what needs to be done in engineering. And they have put together an engineering excellence plan to move in that direction. There are a number of things that they have to do.

It has to do with culture, attitude, and approach by the engineering folks -- not that they have bad engineers making bad decisions; it is the extra things, like the extent of the condition, the critical assessment, and that type of thing that's not being done as well. In fact, it has an impact on their own corrective action program, in that the root cause and apparent cause inputs from the engineering program is not meeting the standard that they would like for their corrective action program.

So it focuses on their changing their approach. They’ve changed management in their engineering area, and they are, as I said, they’ve indicated to us, they had not focused as much in that area in the past, and they are now focused on engineering.

COMMISSIONER MERRIFIELD: Here gain, just so there is some consistency, irrespective of whatever happens from here on in, because of where they are at this point, we would expect to see Point Beach at next year's AARM meeting, as well, I take it?

MR. CALDWELL: Yes.

MR. KANE: We have the engineering inspection coming up in September.

MR. CALDWELL: As I mentioned, the CDBI, the design inspection that changed the engineering inspection will be done. It's after their own independent engineering assessment, and then we will come in following that with our augmented CDBI.

COMMISSIONER MERRIFIELD: Well, I'm pleased that after a lot of struggles on our part and on their part, that Davis-Besse has graduated or is graduating from the AARM hopefully for next year. My hope would be that at this point next year, as we're having next year's meeting, we can look for similar progress from both Perry as well as Point Beach.

Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Commissioner Jaczko?

COMMISSIONER JACZKO: I've just got a couple of questions on Point Beach, and if we have time, some questions on the ROP.

When you closed down -- you said you closed down four of the five issues from the CAL. As I understand, there was a non-concurrence from NRR on the problem identification and resolution. Maybe either Jim can comment on that.

MR. DYER: I'll comment on that. Yes, we did have staff that non-concurred on the closeout process. Management and NRR reviewed it and decided it was acceptable, so we did -- NRR concurred with the approach on the overall in the office, and it was based largely on the fact that when you looked at the nature of the corrective action problems, they were all engineering. And so a better definition, in our minds, of what the problem was, was focused on the

engineering discipline.

COMMISSIONER JACZKO: I raise that because, I think, in looking at Point Beach, here is a plant that we have had in column 4 of the action matrix since 2002. We have had ACRS raise a lot of concerns in their recent letters on the license renewal issue, again going back to the corrective action program.

I think they in many ways perhaps pushed the envelope on what they should be commenting on in a license renewal issue when they were reviewed it, but I think they felt that it was an important enough issue that they raised it in that context nonetheless.

So we have a plant here that clearly is experiencing problems and continues to be in column 4 of the action matrix. And I wonder if you can comment on how you see this going forward? At what point do we have to take a look at doing something different to fix the problems that are going on there -- I don't think the intent of the ROP is to continue them in column 4 for the foreseeable future.

MR. DYER: I'll talk from a programmatic aspect and Stu may have some more, and Jim can talk to the details of Point Beach. The licensee has to come up with a plan, as Jim said. In our case, in accordance with the reactor oversight process, every quarter, when we issue the quarterly reports, Jim has to make a review as to whether or not the plant should be moved to column 5 and shut down.

So being in column 4 is very painful, I'm sure. I think some of the folks from Point Beach are here, and they would be willing to tell you that, too. There is a lot of inspection, a lot of effort on their part, a lot of management meetings, and it's not where they want to be. And Point Beach has struggled in

this area. As Commissioner Merrifield said, these problems with engineering actually go back to the late 90's, when they were first coming up.

I think that what it does say about the program is that when we created the reactor oversight process, we got out of managing from the SALP process, subjective assessment. We take a look at the four and are they operating safely. And in this case, like I said, Jim has to make the decision every quarter. I had to when I was in Region III. And at that point and early on in Point Beach, when we were in the discovery mode, we had to wrestle with some significant questions early on.

So I think we've seen progress with the performance of Point Beach, but it has been very slow.

COMMISSIONER JACZKO: My concerns ultimately come down to, we have a plant that's been in column 4 of the action matrix, and at the same time, we are making statements that they continue to operate safely. At some point, there has got to be some consistency in the message about what we're talking about. We have a recent incident now at Point Beach where the reactor vessel had dropped. There are continued issues at Point Beach.

And I guess maybe, Jim, you could comment a little bit more on what kind of factors you weigh and look at when you make the decision about keeping them in column 4 verses going into column 5.

MR. CALDWELL: Well, originally, the reason they went into column 4 is because of the red issue with the aux feedwater system. Since that time, we have not found any issues, any technical issues that were of high risk significance, although we've had a lot of questions.

We look at performance, whether it's improving or declining. We

look at our enforcement process to see what those things are telling us.

I can tell you that their performance has improved. It was pretty slow in the beginning, but it has improved steadily since. So they are much better today than they were when they originally went into column 4.

Obviously, you would like to see them move through column 4 quickly, but it's more important for them to get it right and build in the quality. And so I'm not as upset with them taking the necessary time to build it in. In human performance, there were a lot of issues. In fact, there were a number of situations where people's lives were in peril. And they have made significant progress in the human performance issues. We see very few of them now.

So they are making progress. They are getting the message, and it is being understood in the staff. They still have some work to do in engineering, but they are far better today than they were when they originally transitioned into column 4.

So I understand the dilemma of being in column 4 for a long period of time, but I would rather see them stay there and fix it right and establish the habits, than to go in and out of it – you know, quickly get out and then go back in again.

MR. REYES: Commissioner, the short answer to your question is, the program requires quarterly for us, the management team, to make an assessment of whether the plant should continue to operate. And that's by design. And that insight is based on the risk at the plant in terms of events or conditions. We do that assessment every quarter to make sure that, in fact, we are satisfied.

Now, disengaging from the column 4 down to a lower column, we

take a very proactive, very deliberate process, and it does take time. It just does take time.

COMMISSIONER JACZKO: Thank you.

CHAIRMAN DIAZ: Commissioner Lyons, I remembered.

COMMISSIONER LYONS: Yes, you remembered me.

Just in general, I think it is very important as an agency that we have this meeting annually to review our achievements and challenges in this critical focus area of safety for the agency. I compliment our three senior Commissioners and the staff in developing the format for this meeting over the past years.

I appreciated hearing the generally very strong performance from reactors that you have been describing. I think that is a tremendous tribute to the staff at headquarters, certainly the staff in the Regions, and I would like to comment especially, as I have in the past, on the quality of our resident inspectors.

As I continue to visit more of the plants, and last week, it was Braidwood and Fermi, we've just got outstanding individuals in those resident inspector slots. Their dedication and their experience is critical, and I'm very relieved to hear the comments today that we are continuing to find suitably trained and qualified people for those positions.

As I listened to Jim's comments on Davis-Besse, Perry, and Point Beach, it was interesting to note -- and several of the other Commissioners have noted -- that we were hearing improved performance to varying extents from all of those plants. Following on that – so we are generally seeing an increase in performance.

What we didn't hear was any plants that we see for which we have

significant concern that they are going to reach the level of discussion in the AARM next year.

And I'm just curious, based on now six years of experience with the ROP, whether staff is generally confident that through the ROP process, we would be detecting if other plants were decreasing in performance such that we need to be applying those extra resources in the future.

MR. DYER: The simple answer is, yes, sir, Commissioner, we do have a confidence in the program. And as we have said, this is the culmination of the end-of-cycle reviews. We don't talk about the plants that are in column 3, although those plants are discussed with me, along with any plants with crosscutting issues, and the Regional Administrators, as part of the workup to the Agency Action Review Meeting.

And that part also, just to make sure we've got our bases covered -- one of the things we have started doing is, if the Regions have a plant in column 3, we review any open items, any outstanding issues that could drive them to column 4, as the SDP process continues. And there were no -- we had no open issues as we transition the calendar year that would lead to column 4 performance.

So we feel comfortable that we've identified, as best we know right now, the truly plants with significant performance deficiencies, and those are what we discussed at the Agency Action Review Meeting.

So I think we have evolved very good.

MR. REYES: Let me just add to that, when we see a plant trending from the left to the right on the action matrix, our actions are very prescribed and transparent in terms of the action matrix. But we do use our experience and our

insights, and we have -- I can tell you, I have held very open, honest discussions with the chief nuclear officers about our concerns with their activities.

And as a short way to answer you question, we think we have the tools not only on the matrix itself, but the fact that the senior management team, Bill and I specifically, engage with senior management of the utilities to convey if we have any reservations or any concerns about any particular area. And it does cause reaction.

COMMISSIONER LYONS: I appreciate that response. And certainly our goal, I think, as an agency -- and I hope, as an industry also -- is that we don't have plants in column 4 for discussion at this meeting. But the reason I asked the question is that I think we ought to be sure that if we do get to the point of not having plants in column 4 to discuss at this meeting, it is because their performance has truly improved, not that we have any concerns on our threshold for identifying those plants. So I very much appreciate that answer. I hope we have another round, but I'll stop.

CHAIRMAN DIAZ: Thank you, Commissioner Lyons. Sometimes when one make as little mistake, like I did with Commissioner Lyons, I was immediately prompted to action. I decided that I needed to give my fellow Commissioners the opportunity to say that I made two mistakes in the ten years I been here. That's why I addressed Commissioner McGaffigan this way now. It is proven.

Let me think for a minute here about the correlation between what you have said and the idea of how plants trend. I believe that what we are seeing could have been trended some time ago in the engineering area, and that's why we went to a new engineering process.

I do believe that problems in engineering by themselves are really a good precursor of potential problems later on in plant operations and maintenance. It just follows through.

So my question is, are our new revised engineering inspections good enough to actually, you know, be used eventually as solid -- if not a performance indicator, as a precursor of plant problems?

I think we have seen now that in a couple of those, like in the case of Kewaunee in that we actually saw some significant problems. But when I last visited the Region, I keep hearing this background regarding the engineering.

Are we going to be able to do a good enough job with our present engineering inspections to say this is going to be a solid component of our ROP, and they are going to provide us with good insights on potential problems that the plants are going to have?

COMMISSIONER MERRIFIELD: Before you launch on that, I just want to make a note for the record on what the Chairman suggests here that in identifying the issues of a plant, that the root cause analysis really begins with the engineers.

CHAIRMAN DIAZ: And they end up in the lawyer's laps.

COMMISSIONER MERRIFIELD: Cleaning up problems is what we always try to do.

MR. DYER: Mr. Chairman, I'll start off and turn over to Stu, who has much more of the details. I believe, yes, in the short answer, it does give us some insights.

I think that the real benefit of the component design basis inspection, where we are looking at components with reduced margin, is that it gets us into

the significance determination process, and we are focusing -- we find bad engineering.

Too many times, you'll hear the complaints from the Regions, and the inspectors in particular, is they find bad engineering, but when it goes through the significance determination process, it is in the system that has a lot of margin, and their findings don't have pay dirt basically as far as the agency response.

The component design basis inspection is targeting those systems that have the smallest margin. So if you find a problem in that area, that is the area that increases the significance the most.

Stu, you're oversight of the program.

MR. RICHARDS: I think that we're positive on that inspection. It does draw in the risk information in a more direct way than we had in the past. I think that's very positive. We are going to do all the plants over the next two calendar years, and then we'll make an assessment of how well it is going and what it needs as far as our program overall.

There are two real challenges that come to mind. One is, the inspection procedure itself is important, but I think more important is the staff that carry out the inspections, getting the right people to go out and do the looking. We've brought contractors into this that have recent design and inspection experience.

We're trying to ensure that the Regions – that there are higher qualified, more experienced people involved in these teams, but that is a hard thing to do because there are a lot of other demands for those folks. So we have to try and keep the quality of the inspection team up if we are to accomplish what we set out to do on that.

The other thing, Mr. Chairman, that you mentioned is – is this a precursor of declining performance. One of the things with the ROP is that if you have a well-designed plant with a lot of margin, you can make a lot of mistakes. You can perform pretty poorly, and those mistakes will still come out green.

So sometimes we are looking at engineering errors, that we would say, you know, that's an error; you guys didn't do well, but because of the diverse and redundant requirements and the design of the plant, it comes out a green finding. Green is green.

MR. REYES: But I think -- I like to measure outcomes. And if you look at the outcomes of this new engineering inspection, even at the facilities where we don't find risk-significant findings, you leave the site and the licensee will write nine or ten corrective action tickets because they found a particular problem, which didn't have consequences because the plant is so robust and the system has so much margin, but the root causes are left there.

So when you leave the site, the licensee -- the outcome of that effort has improved the licensee's insight into their engineering activities, and a lot of good comes out of it. So I think you can look at the outcomes of the ones we have performed so far, they are very good.

MR. DYER: And licensees are starting to perform them for themselves.

MR. KANE: That's an important point, I think, in using the procedures that were developed. So it's been a forcing function for causing them to get out in front of us, and that's always good.

COMMISSIONER LYONS: Thank you.

CHAIRMAN DIAZ: Commissioner McGaffigan?

COMMISSIONER MCGAFFIGAN: Thank you, Mr. Chairman. Let me start with Luis. At a recent Commission meeting, we were talking about performance indicators going forward, and you said you would knock our socks off -- dazzle us.

MR. REYES: I remember. I meant what I said

COMMISSIONER MCGAFFIGAN: There is one area where I would like you to dazzle us, if possible, and that's on the site staffing metric of the resident inspectors. It strikes me that 90 percent is -- and if you're achieving 98 percent, 90 percent is not much of a stretch goal. And I really do believe -- I agree with Commissioner Lyons that the quality of our resident inspectors is very good, but as we made a transition a few years ago, back in 2003, we had some problems we talked about in terms of resident demographics and resident siting, and you were very frank.

I think Region II at the time was ahead of everybody else, and you said we will catch up next year, and you were a prophet. This is back when you were the Regional Administrator. And now we're on a good track, and I would like to keep it that way. So I just urge you to dazzle us with the performance metric for our site staffing.

That may not rise to the level of -- I mean, Stu is looking at you. This may not be an overall goal, but given the importance of our resident inspectors to the overall performance of this institution, you might want to raise the performance indicator's visibility as well.

MR. RICHARDS: Commissioner, I believe that's a relatively new metric that we just put in place, so I think this is the first year we -- we will learn from it.

MR. REYES: We agree with you.

COMMISSIONER MCGAFFIGAN: I love to be dazzled on the upside. Dazzle has a positive connotation to it.

MR. REYES: We'll give it a try.

COMMISSIONER MCGAFFIGAN: Stunned has, I guess, a negative connotation to it.

The second issue, Jim Caldwell. Davis-Besse is under this unique regime, and you talked about these deviations from the action matrix and your intention to extend the deviation that currently expires in June.

But they have this confirmatory order where there are four different areas that they get independent assessments in every year. To be honest with you, I never was wild about it because it sort of says that our own reactor oversight process maybe isn't up to snuff, and we've got two excellent resident inspectors there, and you've got a good Regional team focused on Davis-Besse.

But is there any chance of the licensee being relieved of some of these independent assessment requirements, particularly in areas that they seem to be doing very well in – organizational, operations, performance, engineering program effectiveness, in less than five years so that the deviation does not have to be as large and the resource requirements for NRC do not have to be as large, because they do seem to be on a pretty good pace.

MR. CALDWELL: I guess, two things. The first is, we are looking at the resources we are going to use, and they'll be a lot less this year than what we had to use last year for our oversight. We will be using some of the baseline and some additional resources.

The second is, the order allows for the Regional Administrator to

suspend all or part of the requirements for the independent assessments based on good cause. So there would be an expectation that, as we go through this process, the licensee would look at this and determine the value of these independent assessments, which I think add value to their program for a number of reasons.

And when they believe that they are not -- that they don't need to be adjusted or they no longer add value, they can come in and request using –

COMMISSIONER MCGAFFIGAN: I think the safety culture one clearly needs to continue a bit longer, given the depth of their problems there a few years ago. And the corrective action one may also need some longer time period. But I would urge -- Since this comes up in June, I would urge you and the EDO and the licensee to have a frank discussion as to how many of the four independent assessments have to continue going forward.

Last question in this round.

MR. KANE: We do intend to do that, Commissioner. We certainly at this point think it's premature. Engineering would be another one that I would add to the list, that we do a component design basis inspection, which I believe is next year. But they do need to be looked at -- the elements of the order and the decisions made.

COMMISSIONER MCGAFFIGAN: Let me just get in and try to get one last quick question this round. Bill Kane and I had a conversation recently about the SDP, and the fact that we talk about the reactor oversight process being risk-informed, but in some areas -- and the three that you cited to me were security, emergency preparedness, and public radiation protection – it is not really risk-informed because there are no PRA's in those areas, it is more performance

based. We set a performance level, performance expectation.

Do you want to elaborate at all about making sure we communicate that when we communicate findings in those areas?

MR. KANE: I do. We have tasked NRR with going back and looking at the program. I think the classic definition, for example, of a white finding is of low to moderate safety significance. I think, in those other three areas, you'd be hard pressed to use that definition and be able to justify it.

So that what we are doing is, we are looking at ways of -- better ways of communicating for greater than green findings -- the significance, from a regulatory standpoint, of those findings. So that is work that we are planning to do.

COMMISSIONER MCGAFFIGAN: Thank you.

CHAIRMAN DIAZ: Second round. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Mr. Chairman, I was listening to the comments made by Commissioner Jaczko about -- the concerns about Point Beach, and I appreciate those concerns. I think I share the issues. After four years, it is getting difficult to continue to sort of have to continue to go through this for any individual plant.

I think the struggle we have had in developing the ROP is that -- I would equate this to sort of a C student. You have a C student for a number of quarters, and you're frustrated by the fact that they are not getting better, but because they are not getting better, you don't sort of couple that together and say, well, you're not a C student any more. A C student is a C student, and I think the ROP has to continue to evaluate people on what they are doing.

The frustration I think you were expressing is one I share. And that

is, is there something a bit more that we can do? And in the ROP, one of the elements in the ROP is what you talked about Luis, where you, in your role as EDO, engage with those licensees to let the CNOs know that there is concern there, and that's part of what you do.

One of things that the ROP – in other iterations, when you get into column 5, for example, you get more attention by the Commission. Now, speaking only for myself, I've long sort of been frustrated with the degree to which the ROP insulates licensees from directly engaging with the Commission until it gets real bad. And what I might suggest or what we may need to think about is, maybe we need to think about tweaking the ROP to the extent that if a licensee is in, for example, column 4 for four years, maybe that is a point where simply having this engagement by the EDO is insufficient, and that when you to a certain point of having been languishing in column 4, that that would be the point at which the licensee, namely, the CEO or other folks, would have to come in and appear before the Commission and explain what they are doing relative to resolving their unit from being in column 4.

So I would posit and suggest to my fellow Commissioners, coming out of this Commission meeting, that we would should consider whether that would be meritorious. If you have a licensee that remains in column 4 for an extended period of time, maybe at some point we need to say it's no longer sufficient to say that there needs to be an EDO/CNO discussion. But that should be -- because of the length, that should be elevated to having the licensee directly interact with the Commission and receive the Commission's comments about those issues.

Thank you, Mr. Chairman.

COMMISSIONER JACZKO: I appreciate Commissioner Merrifield's comments. I certainly think it's a good suggestion, and there may be other things that we can look at, too, in the context of this SRM or in another forum.

But I did want to touch on another issue which I think had been alluded to a little bit. I think, Stu, you talked about it with the ROP. One of things that I'd say I have been very impressed with, agreeing with Commissioner Lyons, is the quality of the resident inspectors, but I think, in general, the quality of our inspectors is very good. I'm continually impressed by the things that they're finding that are very good, safety significant findings that they are identifying, which, of course, leads me then to the issue of performance indicators.

One of the longstanding issues – or not longstanding, but I think one of the issue that I have seen the staff identify itself as a problem with the performance indicators is that they are not necessarily giving us the kind of information about degraded performance or identifying potential trends in degraded performance.

I think if you go back and look at all these plants where we have had findings, those findings have generally been in inspection findings, and very seldom do we find anything other than green in the performance indicators.

So maybe you can just touch a little bit on how -- or what the staff is doing to try to address those kinds of issue with performance indicators, to make sure that they are leading indicators really of plant performance?

MR. RICHARDS: Commissioner, that is the challenge, to come up with a leading indicator. We really haven't been very successful in doing that. We share information with international programs in other countries, and we will steal whatever we can find. But so far, nobody has come up with the Holy Grail of

performance indicators. But we continue to work with the industry, and it is a collaborative effort. We meet with them on a monthly basis. We've asked them the same question: what should we be doing to try to be more predictive of future performance.

We did implement MSPI. As mentioned before, we are working on a couple of other performance indicators. We had a discussion with the industry in January about this topic, and they said they are open to exploring other options. So it is something we probably will be doing down the road, but it's a long path to get there. And quite frankly, I don't have an answer, but I'm just telling you, we are going to keep trying.

COMMISSIONER JACZKO: It's something of importance, so I appreciate the fact that the staff is working on it. The one we talked about before was reactor coolant activity indicator, and I think, as I understand it, the staff looked at a WANO indicator, which did not necessarily have any better --

MR. RICHARDS: We asked WANO and they said they were having trouble with it, and we put that on the back burner because of all the other things going on, particularly MSPI..

COMMISSIONER JACZKO: Thank you.

COMMISSIONER LYONS: I would also agree with Commissioner Merrifield's suggestion about providing engraved invitations to certain individuals to future meetings.

I wanted to ask a little bit about the trend that is observed in the ROP self-assessment towards increasing inspection resources. And it's noted that over the last three years, there has been a consistent increase. It was noted that last year, I think it was a 5.4 percent increase in inspection resources. I can imagine

all kinds of questions relative to that continuous trend. I would be curious for a discussion of what are some of the drivers, and are we convinced that those drivers and the increased resources are deriving truly positive benefits from the agency's goals.

I'm curious whether you see these trends continuing, or do you see a need for them to continue. And I'm also curious as to whether, as we continue to make more effective use of risk-informed and PRA approaches, whether we should perhaps be more emphasizing redistributing our emphasis, as opposed to continually ratcheting up the overall inspection resources.

So I would appreciate a discussion on that general point.

MR. DYER: I'll start, and Stu may have some details. But from my perspective, all the changes that we've made to the reactor oversight process inspection program have paid benefits. As Stu said, we've put in a lot of the Davis-Besse lessons-learned, inspection techniques were revised and changed this past year, on the force-on-force inspection activities on the security side, enhanced emergency preparedness, the component design basis inspection. Those were all good changes.

What I think we need to focus on is to look at what is not delivering benefits. A lot of inspection programs have not identified any significant issues, and those areas are the ones we have to go back and scale back the number of samples or take a look at revising the program.

And what we have done is, we've focused on looking for problems, as opposed to not cutting back in some of the areas where we have not been finding areas, because maybe the industry is out ahead of us in that area and has done sufficiently. So that's some of the -- part of the efforts I think we need to

undertake.

MR. RICHARDS: Commissioner, there is kind of a high level view. There are two things that have happened. We did give the Regions 14 or 15 FTEs a couple of years ago, and they hired up to that staffing level. So I think that's reflected in the numbers. And then, particularly in the last 12 months or the last calendar year, actually, when you go back and look at the numbers, almost all of the increase was in EP and security activities. And we won't go into any detail in that, but I don't think that should come as a surprise.

What Jim mentioned is something we have been tasked to do by senior management, which is to go back and look at the program holistically to see if there are areas we can cut back in. In 2005, we did have a working group with the Regions that looked at the allocation of resources between the inspection procedures, but it was a zero sum game kind of exercise.

The next step might be to take that step saying well are there places where we can just reduce effort. So that's, I'm sure, something we will be doing this year and probably set up as a routine process.

MR. REYES: The reason it is 5.4% is that we take a hard look at it. We study and take a hard look at resources we are spending. So I think that's the first thing that I'm going to make a point on.

The second is that we, because of environmental factors and others, have added inspections, increased frequency on force-on-force, emergency preparedness, et cetera. What I think we need to make sure of is that all the inspections that we have in this catalogue of inspections that we conduct are still the right things to do. There may be some that, either by time, technology, or where we are, that we can back off or reduce certain efforts there and put it where

there's more risk and where there is more bang for the buck. That's what we need to do next.

COMMISSIONER LYONS: I appreciate that you are focusing on that overall metric. Obviously, it's a critical one. I don't mean by my question to indicate a strong feeling that it should or shouldn't be increasing. If there is a reason to be increasing, great. But I appreciate the focus you are putting on it. Thank you.

MR. DYER: Earlier, Commissioner, some of the data, particularly after 9/11, where we suspended a lot of the inspections and really just focused on the minimal amount necessary for the first year afterward, and then we were playing catch up. We were seeing a lot of inspection efforts that were fluctuating, and we couldn't really get a good trend. But I think, in the past two years, we've stabilized, and it is pretty clear that we do have the increasing trend issue.

CHAIRMAN DIAZ: Thank you. Let me see. Let me go back to a very good comment by Commissioner Jaczko and some things I remember. Always in these meetings, when the plant continues to operate, we make the statement, the plant continues to operate safely.

If it were not, it would be shut down. That goes back to a meeting that was chaired by Chairman Jackson in here. And I remember clearly, even one of the few times that we all practically voted in here, if we get to that point, it will be shut down. And that is a clear unambiguous statement. And that is what makes it tough for plants to be in column 4. I think that we have had a good comment on it.

But I just want to make sure, for anybody that's watching, that when this process was put in place, it was clearly the purpose of this Commission that if a plant slipped, it will be shut down. There will be no plant that is not operating

within the safety envelope.

I think I have time. The timeliness of the significance determination process, improvements have been made. However, I think we all still struggle with the fact that there are times in which we seem to be working in the fifth significance figure instead of the first significance figure, or the second. And I don't know how we are going to get out of that. But the reality is that there is a time to fish or cut bait, and I think I would rather be fishing with the right bait.

I believe that the Commission has been asking the staff, and I think the staff owes the Commission, in a reasonable period of time, to come with a process or change that says, I have done enough, and I'm going to terminate this thing. Yes, I know I can learn some more, but let's stop it right here. If I am inconclusive, I'll put it in whatever. I'll make it green, and if it happens again, I'll make it white. I don't know.

But there has to be what I call a discrimination process that we need to use to finish these things in a more timely manner and get something that is usable.

Also, it might be the timing in which we might want to look, and when do we bring the licensee in because, really, the process ends up in this interaction. So it is an important issue. We need to close it out, but Bill is jumping.

MR. KANE: I'll let Jim go first. I'll tell you that the process does have the ability to do just what you're saying.

MR. DYER: Mr. Chairman, last year, after we had even worse results at some of the -- they were really pretty old. One of the things we did is, we took at look at what were some of our problem. And what it was, was that things were sitting with the staff without getting elevated to the right level.

So in the past year, one of the efforts that Stu and his folks have done is publish on NRR's website, and Bill and I, with the Regional Administrators, go through the status of all open items that are in the significance determination process, and that gets a review monthly. And so now it's on our plate. So it's getting to the Regional Administrators, the deputy EDO's, and the office directors' desks, and we'll make a decision.

I think, if we have disputing staffs, and it time as you said, we don't need to keep analyzing the problem. This is oversight. And in doing so, one of the things we recognize is, if new information becomes available before we have done the inspection, we can change our mind, and we are willing to do that. So we've gone forward with that, but Bill has also taken us to task.

MR. KANE: I think, in this case, I'll have Jim talk about one here. There is a provision to elevate to senior management the point where you need to make a decision, and Jim has exercised that recently in one case.

I think the other things that we are doing is looking across the Regions. And as Luis has asked me to do, to make sure that we continue to use best practices. So we are looking across all the Regions to make sure that we learn the best way of achieving that timeliness goal, and we've got some work going on there. But it clearly needs help, and it's got our attention.

CHAIRMAN DIAZ: Well, I don't want to take any more time, but I know all of these things have happened, but it still needs to get to the point of making the decision and let it go.

Commissioner McGaffigan?

COMMISSIONER MCGAFFIGAN: Thank you, Mr. Chairman. On the point that Commissioner Merrifield raised, I have no problem with having

column 4 plant folks here. I'm not sure that we'd want to have them late in their tenure in column 4, as opposed to early in their tenure in column 4. And I know that as a result of a June 30, 2005 SRM, next year, if there are any plants discussed, which is the equivalent of column 4 in the materials side, not quite as disciplined, they are going to be here. So it strikes me that the only nuance is, if we are doing to have column 4 plants represented here next year, maybe it needs to be all of them, rather than the ones who have been there for more than one year, because it is oftentimes the first year that the Commission can have the most effect.

The second item is a question for Stu. Our inspection sample sizes, are they the minimum sample size, or are they the nominal sample size that we are now using for baseline inspections? This is something that came up in an IG report a couple of years go.

MR. RICHARDS: I'll have to turn around for some support on that. But I believe the answer is, it's nominal.

COMMISSIONER MCGAFFIGAN: You're now back to nominal sample sizes?

MR. RICHARDS: Right. We went to minimal because of the resource challenges.

MR. REYES: The people behind us tell you that.

COMMISSIONER MCGAFFIGAN: That's a good thing. That's what I wanted to hear, and presumably that's what the IG would have wanted to hear if they were here.

The third item: I announced to the public -- which I guess means Jenny -- that there were no near misses last year. Greenpeace put out something

recently that took our precursor data -- and a precursor is a one in one million conditional core damage probability event. One in a million.

Now, most human beings do not regard one in a million events as near misses, and I think this sort of mining of our data that Greenpeace did in that instance is an outrageous abuse of our data. It's almost obscene, what they do. They do it simply for the goal of raising unnecessary public fear, which is what their main goal in life is they debate their former chairman, who has come over from the dark side to the light and seen the usefulness of nuclear power going forward.

So that's a statement. None of my colleagues need to associate themselves with it. It is something I do every now and then to just vent and to make sure that the public understands that there were no near misses last year. There was not even -- and during the Chairman's ten years here, and my ten years, there's been one significant precursor, one in a thousand additional chances of core damage frequency, which is still not a near miss in any layman's mind. And that was the Davis-Besse event. The Wolf Creek event predated us during 1996. So one event in ten years that is a significant precursor; again, not a near miss, in my mind, using proper English is a pretty darned good record for the industry and for the staff.

The last things I'm going to do Mr. Chairman -- and this may embarrass you because it sort of starts the long goodbye of the Chairman. And that's to recognize you. I think this is our last meeting in this room during your tenure. I think the NRC is enormously better off -- in this room. This isn't your last meeting because we have a public meeting to give awards, we have a public meeting -- an all-hands meeting, and we have a security meeting, and other

meeting. But it's the last scheduled meeting in this room.

So I start the long goodbye by saying, I think, as I said at the Reg Info Conference, that this institution is much better off for having your ten years of service. The Nation is much better off for that ten years of service. You are the Nation's Chief Nuclear Watchdog. There are a lot of people out there who would like to call themselves nuclear watchdogs, but you are the nation's chief nuclear watchdog.

You're absolutely dedicated to the safety and security of our reactors and our materials facilities. You have demonstrated that for ten years, and I appreciate your service. I'm sure the staff does and my fellow Commissioners do. And I may not be getting the last word because I suspect I'll be piled on here. But the only thing I would say about the mistakes that you have made, I count more than two, because I think you have differed with me on votes on more than two occasions. And I'll leave it at that.

(Laughter.)

COMMISSIONER MCGAFFIGAN: But I appreciate your service, and the Nation appreciates your service. Thank you.

COMMISSIONER MERRIFIELD: Mr. Chairman, I would -- Most times, I take an opportunity to correct what I think are some of Commissioner McGaffigan's remarks where I disagree with him, but in this particular regard –

CHAIRMAN DIAZ: The mistakes part.

(Laughter.)

COMMISSIONER MERRIFIELD: Yes. In this particular case, I will simply concur in his remarks.

I would also like to concur -- and there's going to be a series of these

-- both Commissioner Lyons and Commissioner Jaczko made some comments about our inspectors, and I would concur in those comments as well. I think we have got as smart, tough, and fair group of inspectors as we've ever had. And that is a good thing for us and for our Nation.

The last thing I would concur in, to make it unanimous, is your comment, Mr. Chairman, because I was around when we adopted this ROP. It's good to remind ourselves and remind the public of the things that we take for granted. The thing that we, I think, take for granted on this side of the table is, if we were presented with the evidence that we had a reactor that was not operating safely, I would, like you, have no hesitation to shutting it down. And it's good sometimes to repeat that in public. So I appreciate that. Thank you, Mr. Chairman.

COMMISSIONER JACZKO: I certainly want to concur with the concurrences --

(Laughter.)

COMMISSIONER JACZKO: -- and just, again, express my appreciation for the Chairman and certainly the work that he has done to lead this Commission and, as Commissioner McGaffigan said, to be the Nation's chief nuclear watchdog. And I've certainly seen him bare his teeth, and sometimes he does it in a very gentlemanly way so that always know he's doing it. But he does have them, and I certainly appreciate his service to the country and the work that he has done to help me gain an appreciation for this job and for my role as a Commissioner.

COMMISSIONER LYONS: By now, I can only second all the concurrences, and I will look forward to more opportunities to thank Nils

appropriately.

CHAIRMAN DIAZ: Thank you very much. I was not expecting this. I was surprised, and the staff knows that I don't like to be surprised.

MR. REYES: I didn't do it.

COMMISSIONER MERRIFIELD: Mr. Chairman, the Commission has demonstrated a terrific and efficient concurrence process today that, hopefully, our staff will at some time emulate.

CHAIRMAN DIAZ: And in the same timely manner.

Well, I thank my fellow Commissioners for their kind words. I would lie to you if I would not say that I have enjoyed being here. I am here because I wanted to be here, and I have enjoyed being here, and I hope it shows sometimes.

I think you did a great job. I just want to say that, as I look back at the senior management meetings and the way things have evolved, the Commission and the staff have done a great job, in putting in tools that have served this country better. It better informs the public, it better informs the licensee, it better informs the agency, it better informs the Commission. We are still working on it. There are issues, and we know that. But we recognize them.

I think this has been a great step forward, and I think even for the rest of the world and maybe all the regulatory processes, what we have done is transcend it in a great way. It is putting safety first, but being able then to assess it and look at performance in a comprehensive manner, not just a point here or a point there. Like Stu said, if there is margin, we work with the margin. When the margin goes down, we then take appropriate actions.

So I want to thank everybody for their work, all of the staff that is not

here that have contributed to it. This has been a pleasure being with you today.

Thank you. We are adjourned.

(Whereupon, at 12:00 p.m., the meeting was adjourned.)