UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BRIEFING ON RESULTS OF THE AGENCY

ACTION REVIEW MEETING

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COMMISSION MEETING

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WEDNESDAY

MAY 25, 2005

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ROCKVILLE, MARYLAND

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The Commission met in the Commissioners' Conference Room, One White Flint North, 11555 Rockville Pike, at 9:30 a.m., Nils J. Diaz, Chairman, presiding.

MEMBERS PRESENT:

NILS J. DIAZ	Chairman
EDWARD McGAFFIGAN, JR.	Commissioner
JEFFREY S. MERRIFIELD	Commissioner
GREGORY B. JACZKO	Commissioner

PANEL 1

JAMES CALDWELL, Regional Administrator, Region III

JAMES DYER, Director, NRR

WILLIAM KANE, DED for Reactor and Preparedness Programs

BRUCE MALLETT, Regional Administrator, Region IV

LUIS REYES, Executive Director for Operations

STUART RICHARDS, Chief, Inspection Program Branch, NRR

PANEL 2:

SAM COLLINS, Regional Administrator, Region I

LUIS REYES, Executive Director for Operations

JACK STROSNIDER, Director, NMSS

BILL TRAVERS, Regional Administrator, Region II

MARTIN J. VIRGILIO, DED for Materials, Research, State and Compliance Programs

P R O 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 fifth Agency Action Review Meeting (AARM). I guess we must be getting old because I remember when this was being formed and talking about how in the world we were going to restructure the Senior Management Meeting. Well, you are still seniors, but now we have a different type of management meeting. The AARM, of course, is an integral part of the oversight process the NRC uses to ensure the operational safety performance for nuclear reactors, fuel cycle facilities, and materials licenses. The AARM enables senior reactor managers to review the agency actions with respect to licensees with performance problems and identify additional actions, as appropriate, and to ensure that these actions are well coordinated and implemented. The AARM also ensures that trends in industry and licensee performance are recognized and appropriately addressed.

It is, of course, of tremendous value to the Commission, as the Commission receives the input from the senior managers after their many, many weeks and months of deliberations. The briefing materials that have been presented and industry trends suggest that the nuclear industry overall safety performance continues to be good.

Additionally, the Commission looks forward to a frank discussion on the performance of facilities, even special NRC

management attention including Point Beach, Cooper, Perry, Davis-Besse, the Westinghouse Columbia Fuel Plant, Honeywell International, and Baxter Healthcare Corporation. And the actions the agency is taking with regard to these facilities.

I'll ask now if my fellow Commissioners have any comments.

COMMISSIONER MERRIFIELD: Mr. Chairman, yes, I do have an initial comment I'd like to make.

Last week I had the opportunity to visit the Canadian Nuclear Safety Commission and sit in on a four-hour meeting that they were conducting with one of their licensees. It included testimony both from their staff, the CNSC staff as well as the licensee. At separate tables but both at the same time.

Having watched that interaction and detailed opportunity that the CNSC Commission had to question these issues, I was left with the impression that that was a pretty good process. And as I reviewed the materials today, I really, to a certain degree, believe that this AARM review would be improved by having an opportunity for the Commission to directly ask our licensees what they're doing about some of these issues.

Now I recognize that our staff, to their credit, has already undertaken much of this on our behalf. But I think there is some great value in having direct interaction between the Commission and the

licensees for whom we have the greatest concern, which is what this AAR meeting is about.

That having been said, I know in the past, and I'm speaking for myself at this point, I have had discussions with a variety of utility executives about some of the issues that we'll be discussing today. And I understand the seriousness with which they hold those issues.

I think, in my personal view, I have an expectation that senior licensee managers should engage the Commission directly to explain the commitment that they are making to improve the operations which we are reviewing and of which we have concern.

In the cases of the material licensees, with the exception of a meeting I requested with Nance Dicciani of Honeywell, the senior manager responsible for the division of which the facility is within, we have not -- to my knowledge, I have not had meetings with managers from either Baxter or Westinghouse regarding the issues associated with the events that we'll be discussing today.

I think that is unfortunate. And I hope that the representatives or consultants of those companies will tell their senior managers that at least from my perspective, I'd like to hear directly from those managers about these issues.

In the case of Baxter, we had two individuals who came close to nearly being killed as the result of inappropriate activities.

In the case of Honeywell, we had the first evacuations since Three Mile Island.

In the case of Westinghouse, we had not only the possibility of accidental criticality with an incinerator that our staff will be discussing this morning, but a series of activities which frankly are unacceptable.

So I look forward to hearing from our staff this morning to explain how they've engaged with these licensees. I'd like to hear from the licensees, too.

Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield.

And with that, Mr. Reyes?

MR. REYES: Good morning gentleman and Commissioners, the staff is here today to brief the Commission on the results of the Agency Action Review Meeting. Can I have Slide No. 3 please?

This morning we're going to have two panels. The first panel is going to address the reactor-related discussions. The second panel will have the materials-related discussions.

We're going to cover this morning industry trends, the Reactor Oversight Process. We're going to specifically talk about those plants in Column 4 of the action matrix of the Revised Oversight Program. And then we're going to talk about significant nuclear material issues and licensee trends.

The first speaker will be Stu Richards, who will start the discussion this morning. Stu?

MR. RICHARDS: Okay, if we can go to Slide 5 please.

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

This program looks at the overall industry performance by tracking seven industry performance indicators combined with input from 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 Commissioner 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 2004, there were no statistically significant adverse trends in overall industry performance. On an industry-wide basis, the performance indicators that we trend remained significantly improved compared to 10 or 15 years ago.

We also look at short-term trends. In contract to fiscal year 2003 when three indicators exceeded the short-term trend prediction

limits, during fiscal year 2004 all of the industry-wide performance indicator data were within our prediction limits.

Next slide please. I'd like to now turn to a discussion of the results of the staff's annual self-assessment of the Reactor Oversight Process. The 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.

This year we also had the benefit of both an internal and external survey of our stakeholders' views of the Reactor Oversight Process. We also receive feedback during our monthly public meetings with the industry and during the annual Regulatory Information Conference.

Additionally, the Office of the Inspector General completed their audit of the Baseline Inspection Program in 2004.

So as you can see from the list on the slide, we have a number of diverse inputs into our 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 2004.

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.

The 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. Turning now to the Performance Indicator Program, in 2004 we spent a significant amount of time working with industry to implement the Mitigating Systems Performance Index or MSPI as it more commonly called.

In September, the staff sent a letter to the Nuclear Energy Institute stating our commitment to go forward with MSPI. Based on the results of a joint industry/NRC working group, we reached agreement with industry on a path forward with a target implementation date of the first quarter of 2006.

The implementation date is largely driven by actions that the industry must complete. Although issues remain to be resolved, the staff is confident that MSPI is going forward.

We are also continuing to work with industry to improve the performance indicator that monitors plants' scrams with complications. And to improve the performance indicator on reactor coolant system

leakage. The latter issue is the result of a Davis-Besse lesson learned task force action item. One self-assessment metric related to the backlog of frequently asked questions was not met.

Next slide please. Although the Performance Indicator Program has successful directed licensee attention in a number of important areas and has arguably contributed to improved licensee performance in those areas, our self-assessment concluded that the Performance Indicator Program can be more effective and efficient.

One of the primary purposes of the Performance Indicator Program is to direct our inspection resources. If we can't consistently resolve performance indicator questions in a timely way, then the program is not accomplishing that purpose.

Additionally, our assessment concluded that the Performance Indicator Program should contribute more to the identification of poorer performing plants.

The program is a voluntary program for the industry in that there are no regulatory requirements compelling industry participation. Issues with the program are addressed via a joint industry/NRC working group. To improve in this area, the staff intends to engage industry at a senior management level.

As noted on the previous slide, implementation of MSPI is an action also planned for the next 12 months.

Next slide please. Regarding the inspection program, our assessment conclusions were generally positive. The program was

completed by all four regions in calendar year 2004 without significant support from headquarter's staff. This reflects the addition of FTE to the regions to provide them the resources necessary to accomplish the program nationwide while still carrying out supplemental inspections for those plants outside of the licensee response column of the action matrix.

During the last year, we implemented a number of inspection procedure changes related to the Davis-Besse event and we commenced the pilot engineering inspections which were designed to enhance our oversight in the engineering area.

Four pilot inspections were completed in 2005. We are now assessing the results and intend to provide the Commission our conclusions and recommendations in a Commission paper later this year. And finally, all our self-assessment metrics in this area were met.

Next slide please. Going forward this year, in partnership with the regional offices, we intend to take a hard look at the inspection program results for the first five years of the program and then adjust our existing resources within the program based on that review.

As previously mentioned, we will put forward our recommendations regarding the pilot engineering inspections.

The staff is also carrying out the Commission direction to enhance the Reactor Oversight Process in the area of safety culture with the Office of Enforcement taking the lead on this task.

Next slide please. Although we have made some headway with the significance determination process, it remains a

challenge for the staff. Just as with the performance indicators, the staff needs to complete the significance determination process in a timely way in order to achieve the purpose of informing our allocation of inspection resources.

We have had some success in closing out old issues in the backlog and have lowered the number of days on average that we take to complete the process. However, we did not meet our timeliness goal in 2004. We also continue to improve the significance determination process tools which should help us with the timeliness.

Next slide please. We have drafted changes to the process and have recently received written industry input on this issue. In the next several months, we plan to provide the Commission the staff's plans to further improve our timeliness. In particular, we remain challenged to assess some fire protection findings in a timely and efficient way. The staff is continuing in our efforts to simplify the Phase 2 process by the development of pre-solved tables. And we are also working to finalize additional process tools.

Next slide please. Our conclusions regarding our program to assess and respond to licensee performance was also generally positive. The identification of substantive crosscutting issues is an area in which the regions have requested additional guidance. More recently, the industry has also questioned our guidance in this area.

We revised the guidance on two separate occasions during 2004. And following the recently completed end-of-cycle

performance assessments, we felt that the treatment of crosscutting issues was more consistent between the regions than before.

Nevertheless, based on regional and industry feedback, we will further revise the guidance prior to the mid-cycle assessments coming up in August, in particular to better define how to link individual inspection findings to the larger crosscutting issues.

Regarding plants exiting from the multiple repetitive degraded cornerstone column of the action matrix, we revised our guidance to provide increased inspection and regional management oversight during the period following the plant's exit from that column.

We are also making the same revision to the guidance for inspection manual, Chapter 0350, which addresses plants in long-term shutdown.

Next slide please. As mentioned previously, we will continue to focus on the topics of crosscutting issues and we will enhance our program guidance for plants in a long-term shutdown condition based on lessons learned from Davis-Besse.

Next slide please. During 2004, we had three requests to deviate from the Reactor Oversight Process which were all approved. In each case, the deviation increased the level of inspection or the level of regional management oversight at the plant involved.

At Indian Point and Cooper, the deviations were to increase inspection and oversight for units exiting from the multiple degraded cornerstone column. As previously mentioned, we have

revised our guidance to address this situation and thereby preclude deviations for similar situations in the future.

At Salem/Hope Creek, the deviation was to increase inspection and oversight due to safety-conscious work environment issues.

Program changes for this issue will follow the work the staff is doing to enhance the Reactor Oversight Process treatment of safety culture.

Next slide please. The last slide addresses inspection resources and resident inspector demographics. Inspection resources expended per operating site were up in 2004 and reflect, in part, the increase in FTE provided to the regions. However, the resources expended remain within the range allotted to complete the program.

The resources expended continue to be about 30 percent below that in 1995, reflecting an increase in efficiency in the Reactor Oversight Process compared to the prior program.

Our staffing levels for senior resident and resident inspectors is good with the turnover rate in 2004 much reduced from that experienced in 2003. We had six new senior resident inspectors in 2004 compared to 20 new senior resident inspectors in 2003. There were 14 new resident inspectors in 2004 compared to 27 in 2003.

The experience levels of our resident inspection staff remain high with an average of about ten years of non-NRC experience added to an average of five years of NRC experience for resident

inspectors and 12 years of NRC experience for senior resident inspectors.

This completes my presentation.

Bruce Mallett will discuss the Cooper plant next.

MR. MALLETT: Good morning, Chairman Diaz, Commissioners McGaffigan, Merrifield, Jaczko.

For the next few minutes, I'll discuss the performance of the nuclear plant at the Cooper Station which is a BWR-4 design, Mark I containment unit.

The facility is owned by the Nebraska Public Power Corporation, a district with a contract for daily operation by Entergy.

The performance of this facility has been discussed with you since 2002. The licensee's performance, if you recall, was originally discussed due to repetitive problems they had in the emergency preparedness cornerstone.

When we inspected this area, we also found performance deficiencies in multiple other areas of their performance. And so on January 30th, 2003, we confirmed the licensee's plan to correct these multiple deficiencies in a Confirmatory Action Letter.

During our last meeting in 2004, I summarized the licensee's performance as improving in the areas that were confirmed in the Confirmatory Action Letter but not to the point where the NRC oversight should be reduced to the normal or the baseline program.

The licensee had not completely addressed all aspects of the identified performance problems in at least five of the six areas in the confirmatory action letter. As I indicated, they had addressed the problems identified in emergency preparedness, which was the sixth item.

Although the licensee had operated the nuclear plant sufficient to protect public health and safety, there were multiple plant problems that were caused and stemming from these performance deficiencies. That was the picture I painted last year.

Now let's go since last year. Since the last time we met, our inspection and assessment has determined that the licensee's performance has improved significantly. And why is that?

It's improved because they addressed the root causes of the problems that we identified in the Confirmatory Action Letter in 2003. They put programs in place to address the sustained performance in those areas. And they improved their performance such that we closed the Confirmatory Action Letter on January 28th of this year, 2005.

At the same time, we discontinued our deviation in the Reactor Oversight Process and resumed our normal Baseline Inspection Program at the facility.

The licensee's performance also improved in that they had very few plant reductions and no plant trips during 2004. But we still felt that their performance had not improved sufficient to close two crosscutting issues in the areas of human performance and problem

identification and resolution. We continue to monitor these in our inspection program.

We did convey the results of this assessment to the licensee in a January 25 meeting of this year.

Currently the licensee's performances in the licensee response column of our Reactor Oversight Program, the facility operation is ensuring that the public health and safety is adequately protected. We are monitoring their performance through our Baseline Program with the focused oversight in two crosscutting areas that I mentioned earlier and focusing our sampling to ensure that this improved performance we've noted is sustained.

We discussed this facility, as Mr. Reyes said, in our agency action review meeting on May 4th and concluded that the actions taken or planned are appropriate and consistent with those in our Reactor Oversight Process.

With that, I'd be glad to answer any remarks that you might have and questions later.

And I'll turn the podium over to Jim Caldwell who is going to talk about Point Beach.

MR. CALDWELL: Thanks, Bruce.

Good morning, Chairman, Commissioner McGaffigan, Commissioner Merrifield, Commissioner Jaczko.

I will be discussing three plants today, Point Beach and Perry, both in the multiple repetitive degraded cornerstone, or Column 4

of the Reactor Oversight Process Action Matrix. And Davis-Besse whose oversight is not under the Reactor Oversight Process but under Manual Chapter 0350.

Before I start, as you can see with three plants in Region III and the challenges we have, we've gotten a lot of help from the other three regions and NRR. So I'd like to thank them for the help and also Region III staff are standing up to the plate for all the challenges we have in Region III.

The first plant I will discuss today is Point Beach. This is the third time the performance of Point Beach has been discussed at the AARM Commission meeting. Point Beach, as I said, is under the multiple repetitive degraded cornerstone column of the Reactor Oversight Process. And was placed there in April 2003.

An inspection procedure, 95003, was completed in December 2003. And a Confirmatory Action Letter, or CAL, was issued in April 2004. The Confirmatory Action Letter focused on performance issues and licensee commitments in five areas: corrective action program, emergency preparedness, operation/engineering interface, and engineering design, and human performance.

Currently Point Beach Unit 1 is operating at full power and Unit 2 is in a refueling outage. Based on our inspections to date and our assessment of their overall performance, the licensee continues to demonstrate the ability to operate the plant safety while addressing their

performance issues through their excellence plan and the CAL commitments.

Although the licensee has not fully addressed all their performance improvement commitments, our assessment has shown positive progress in all five areas listed in our CAL. And the licensee has a plan and schedule for addressing the rest of the issues.

Based on the licensee's schedule, the region has scheduled in resource loaded inspections to independently verify the licensee's progress and sustainability of their improvement initiative commitments.

In summary, Point Beach continues to operate the plant safety, has shown improvement in all five areas of concern, and is making progress towards completion of their commitments.

Region III will continue to monitor Point Beach operational performance and their progress towards their completion of their commitments.

This concludes my remarks regarding Point Beach.

I will next discuss Perry.

The Perry plant is being discussed for the first time at an AARM Commission meeting. The reason for the discussion is because Perry is currently, as I said before, in the multiple repetitive degraded cornerstone column, or Column 4, of the Reactor Oversight Process Action Matrix.

Perry entered the regulatory response column, or Column 2 of the Action Matrix, in 2003. The resulting inspection in the mitigating systems cornerstone associated with the high pressure core spray system, the inspection procedure 95001, had to be repeated due to the licensee's incomplete identification of extended condition of the issue.

In March 2004, Perry entered the degraded cornerstone column, or Column 3, of the Action Matrix due to white findings in the mitigating systems cornerstone associated with high pressure core spray, low-pressure core spray, heat removal system, and emergency service water system.

The resulting inspection procedure, Inspection Procedure 95002, was also unsuccessful due to ineffective corrective actions. As a result, Perry entered the multiple repetitive degraded cornerstone column of the Action Matrix in August 2004 due to at least two white findings being present for greater than four quarters and would be subject to an Inspection Procedure 95003.

The Inspection Procedure 95003 was initiated in three phases. The first phase focused on the licensee's corrective action root cause programs and was completed in January of this year. Also in January as the result of a scram in December and a scram in January that were related, Region III conducted a special inspection and the results of that inspection supported the 95003 result.

The second phase focused on outage-related activities which was completed in March. And the final phase focused on various

things: engineering design, configuration, control, human performance, corrective action program implementation, emergency preparedness, and the licensee's performance improvement plan.

That inspection was just recently completed. The three teams identified green findings in all areas inspected but they were predominantly in the areas of corrective actions and human performance with a strong causal factor of procedural adherence.

In addition, the staff is reviewing the results of a recent emergency preparedness accountability exercise.

The Region III staff will conduct a public meeting on all three phases of the 95003 tomorrow night in the vicinity of the plant.

Currently Perry is operating at full power following a 73-day refueling outage. Their performance at this time would be best characterized as being in the discovery phase. And that issues are still being identified by both NRC and the licensee.

Although the inspection teams, resident inspectors, and licensee have and continue to identify issues, our assessment of their overall performance still indicates the licensee can operate the plant safely while they continue to identify and fix their problems.

Following the exit meeting tomorrow, we will request the licensee to provide a plan and list of commitments to address the 95003 findings. Once we receive and achieve a common understanding of their commitments, we plan to codify them in a Confirmatory Action Letter.

We will then establish an inspection plan and schedule, which is resource loaded based on the licensee's schedule for completion of their improvement initiative commitments.

In summary, Perry continues to operate safely while addressing their problems. And Region III will continue to monitor their performance, both operationally and against their performance improvement commitments.

That concludes my remarks associated with Perry Plant. And I will then move to Davis-Besse.

For the last three Commission meetings or for the fourth time, Davis-Besse has been discussed. And it has been discussed because it was removed from the Reactor Oversight Process and placed under Manual Chapter 0350 primarily due to the identification of a significant vessel head degradation and to establish a structured process for making a restart decision.

At the last AARM Commission meeting, I discussed the removal of the NRC restriction on restart, the issuance of an order requiring the inspection of the vessel top and bottom head for leakage during a mid-cycle outage, and independent assessments in the areas of operations, engineering, corrective action program, and their safety culture, safety conscious work environment for the next five years as well as I discussed the subsequent restart of Davis-Besse.

Today I'll briefly describe the status and performance of the plant and our actions going forward. As I indicated, Davis-Besse

started up and reached full power in April 2004. The plant operated safely with overall good performance until shutting down for the mid-cycle outage in January 2005.

The outage was well planned, conducted in a controlled manner, and successfully accomplished the ordered required activities.

The licensee conducted a controlled, uneventful restart. And has been operating well since. In addition, based on Region III's independent review, the licensee satisfactorily completed the first set of order required independent assessments.

As a result of all the performance indicators becoming valid in December, the satisfactory completion of the first set of independent assessments, the satisfactorily-conducted mid-cycle outage, and the overall safe operation of the facility for almost a year, the Manual Chapter 0350 Oversight Panel made a recommendation to myself and Jim Dyer to return the oversight of Davis-Besse to the Reactor Oversight Process.

On May 13th, 2005, I conferred with the Director of NRR and the Deputy Director for Reactor and Preparedness Programs and we agreed with the recommendation of the 0350 Oversight Panel.

Additionally, the 0350 Panel recommended that a deviation to the ROP be approved to allow additional inspections above the baseline to inspect the licensee's activities associated with the order required independent assessments and to perform an additional problem identification resolution inspection.

The EDO approved the deviation to the ROP on May 18th, 2005. We notified the licensee on May 20th. And conducted a public meeting last night to discuss the transition process. And I understand --

COMMISSIONER McGAFFIGAN: Mr. Chairman, can I just ask a clarifying question? Mr. Richards said that we have a new procedure in place so that when plants leave Column 4 down to Column 2 or wherever they're going, we put an asterisk on them and then we give them some extra attention.

This would seem to fit that. Is that because the two are passing each other?

MR. REYES: We fix both.

MR. CALDWELL: They're in the process of fixing the 0350 --

COMMISSIONER McGAFFIGAN: So meanwhile, you still have to do deviation matrices, right?

MR. CALDWELL: Yes, in order to be in compliance, we had to do a deviation. Eventually the deviation will --

MR. DYER: When we made the change, we didn't think about 0350.

COMMISSIONER McGAFFIGAN: All right.

MR. CALDWELL: But we have been discussing it. But it takes some time for them to get it done.

MR. CALDWELL: Another lessons learned.

We notified the licensee on May 20th and conducted a public meeting, as I said, last night. As I understand, there was a luncheon meeting with the county commissioners and the public meeting had 80 to 100 individuals last night and it went well. There was only positive comments from the public. It was mostly licensee people but the county commissioners were there. They were very pleased and complimentary of the NRC.

In summary, Davis-Besse has been operating safely with good performance since restart last year. All of the PIs are now valid. The licensee satisfactorily completed the order requirements for mid-cycle outage and first set of independent assessments.

And the agency is in the process of transitioning from 0350 oversight to an augmented Reactor Oversight Process.

That concludes my remarks.

MR. REYES: Chairman, if the Secretary turns off the timing clock, the first panel will be ready to answer questions on reactor matters.

CHAIRMAN DIAZ: Let's go ahead.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman.

Obviously this is an area that is absolutely central to the Commission and to the staff and one that we're going to get help from GAO on apparently. And we had help from our IG last year.

So let me ask a couple questions starting with the IG stuff last year. They wrote a very thoughtful report. You wrote an answer. The part that I didn't agree with in the IG report was below green.

But the issue that they raised about whether our sample sizes were adequate, whether we should be working towards a greater than minimal inspection program here, I'd like to just ask you about.

And I'm sympathetic to their point of view, especially when resources have declined as much since 1995. There may be efficiencies and we clearly have increased in the last couple of years since Davis-Besse. But it could also be that we don't have yet adequate resources in this area to do -- I mean according to the IG, there was disagreement between various folks as to what the optimum sample sizes were -- regional folks and whatever. So --

MR. RICHARDS: I can provide a little information on that, Commissioner. I think what they recognized is because of Davis-Besse and I think we had some challenges at Indian Point, that in the past years, we had to augment the regions significantly from headquarters in order to ensure that the baseline program was complete. And the regions, in order to complete the program, in some cases they did the low end of the band as far as number of samples chosen.

So the Inspector General's Office challenged us on one, using those coping measures, and two, making it clear to the inspection staff what the expectation is. Is it okay if everybody does the lowest end

of the band? Or should everybody be aiming for the middle or the high end? So we agree. We're going to clarify the guidance on that. And we also --

COMMISSIONER McGAFFIGAN: But which direction is it going to be clarified? To the middle of the band?

MR. RICHARDS: Well, the middle of the band is where we want to be. We want it to be nominal. But --

COMMISSIONER McGAFFIGAN: Do you have the resources for that in 2006?

MR. RICHARDS: I believe we do. We provided the regions with 15 additional FTE. That's reflected in the increase in inspection that resulted in 2004. It allowed the regions to, I think, carry out their inspections without calling on headquarters for support. But it is something that we'll continue to monitor.

COMMISSIONER McGAFFIGAN: Okay.

MR. REYES: Yes, let me follow because we're doing a self-assessment after five years that Stu talked about. And the next dimension of the question is are we aligning the resources the right way? Are we putting too much resources inspecting an area that should really be another area?

So -- I mean it is a three dimension answer. We gave the resources. We're going to clear the guidance. And we're going to do a self-assessment to make sure we're putting the resources where the issues are.

COMMISSIONER McGAFFIGAN: Are we sure that an SDP in one cornerstone is -- I mean a white in one cornerstone is more or less equal to a white in another cornerstone? Some of the things people get whites for in some of the non-mitigating systems cornerstones don't sound all that -- inspection space don't sound all that dire to a Commissioner.

Some of the stuff that happens in mitigating systems sounds sometimes pretty dire.

And not to use your name in vain --

(Laughter.)

COMMISSIONER McGAFFIGAN: -- D-I-R-E -- so is that a fair issue for the ROP at its fifth anniversary to sort of try to normalize better across these things?

MR. DYER: Commissioner, we've continually evolved in this overall area. And I think when we take a look at this, recognizing the defense in depth that the ROP, Reactor Oversight Process, prevails, we look at the relative significance to that various cornerstone. And we're continually looking at benchmarking and adjusting our tools, if you would, to create that equivalency across cornerstones.

But a lot of it has to do with focusing on what's the relative worth to that cornerstone, recognizing that emergency preparedness, mitigating systems, initiating events are all critical defense in depth parts of the program.

COMMISSIONER McGAFFIGAN: Okay. In PI space, we've been criticized by some stakeholders that our expectations that were articulated by some of you or your predecessors back in `99 and 2000 in the pilot program about the percentage of PIs that might be other than green has proven to be low. And there's been suggestions that we renormalize the green/white threshold for some of these PIs that are always green.

And I don't know what the right answer there is. But I think compared to the expectation, the performance indicators, some of them have been -- the threshold is so high that the chance of somebody getting in there isn't very good.

How do you respond to that? I mean I'm just repeating the criticism I've read.

MR. DYER: Well, I think we need to consider it, Commissioner. And take a look at it. What are the contributors to the thresholds for the performance indicator? And as you read in the paper, we were kind of disappointed in the progress we've made in performance indicators during the past year. We had a number of issues we'd hoped to get through but quite frankly we didn't get as far along as we had hoped.

And I think we need to take a look at improving those performance indicators to look at what the threshold is. And be able to put it in its proper safety perspective, decide whether it's worth tracking

that particular indicator. Is there a better indicator that we could use for that particular cornerstone?

And so it's a tradeoff. I don't want to go to we're just going to grade on a curve and, you know --

COMMISSIONER McGAFFIGAN: And I don't either. And we talked at the time we created this program that we don't want to be constantly ratcheting. But we also created some expectations at the outset of it. And we probably should try to adjust in some areas.

And as I say, you get a lot of external oversight from people other than us. And I think these are all hard questions that you have to, as part of this fifth-year review, you have to look at real hard.

MR. REYES: We will. But let me add a dimension to the answer. We underestimated the safety improvements the industry has made. I don't think when we started four or five years ago we could have predicted the kind of safety performance we have today. It is very, very good. So you need to put --

COMMISSIONER McGAFFIGAN: I'm not entirely sure because I think it has actually been -- the indicator is sort of flat.

MR. REYES: All right. You need to put into context what we did four or five years ago. The issue you're bring about is the expectation on how many indicators would have crossed the threshold. We did that four or five years ago.

I suggest that four or five years ago, we did not predict the good performance we have today, as good as it is today.

COMMISSIONER McGAFFIGAN: Okay.

MR. REYES: I just want to add that element there.

COMMISSIONER McGAFFIGAN: I'm not as entirely sure because we do continue to get a lot of inspection findings that are white and occasionally yellow and red. So our inspectors are finding stuff out there. And some of it is quite concerning.

One of my frustrations, and it probably can't be fixed because we follow processes around here, is the news that you give us today, perhaps with the exception of the materials area that Mr. Merrifield talked about, Commissioner Merrifield talked about, is sort of old news.

And I'm sure you are worried about current performance. And there are some plants that may soon get to Columns 3 and 4 based on their performance. And I can mention some of them. I was a little surprised to hear Mr. Caldwell say Point Beach was in good shape when I'm not sure -- has the crane issue been resolved?

MR. CALDWELL: That issue is still outstanding.

COMMISSIONER McGAFFIGAN: That was an outstanding finding by the resident inspector --

MR. CALDWELL: Yes.

COMMISSIONER McGAFFIGAN: -- some sort of exigent amendment so that they can put their head back on -- their new head back on is currently in consideration. That was not exactly a shining day for Point Beach.

MR. CALDWELL: If you're asking me to lean forward and say that their performance improvements are sustainable, that I can't say. I'm just telling you what we've seen to date is they've shown improvement in all areas.

COMMISSIONER McGAFFIGAN: But yet to date is as of December 31st, 2004. And here we are in late May. And some of these folks have done things that are not so hot.

MR. DYER: And, Commissioner, that is a legacy issue. I mean it was originally raised in 1982. So we're pursuing that issue. It's very much in play both, you know, correcting the licensing basis as well as looking into the root cause as to why that occurred.

COMMISSIONER McGAFFIGAN: One of these -- I'm running out of time -- I have about a minute? Is that right? One of the issues that came up recently was there is a frequently asked question that finally got answered about PIs.

And as I understand it, there is a plant that had three white PIs last year, which I think normally in the action matrix would push you -- the same indicator would make you degraded cornerstone at least if not -- I'm not sure what the threshold is for repetitive degraded. And I forget the name of the plant now which is probably just as well for them.

But that's public information. That came out of a meeting you all had with NEI was it last week? You finally answered this question and tripped a bunch of people into white space on that PI.

Is that plant, you know, what you've sent to us says we're going to follow the process. I assume the process now means we give that cornerstone some extra attention.

MR. RICHARDS: Sir, what we did is we put in place -- we told you this last year but we actually exercised a process where if the industry representatives and the staff representatives disagree on a frequently asked question, previously we had no way to break the deadlock, if you will. So we agreed we'd raise it up to my boss and he'd make a decision. And that would be the end of it.

So we had a number of outstanding questions on -- all of them having to do with scrams, loss of normal heat removal. Those were all resolved in the last week or two. And, you know, the results will be posted on the web, publicly made, and inspections carried out appropriately.

MR. REYES: Commissioner, but the short answer is we follow the action matrix. The action matrix is very precise, very predictable. For every finding that is other than green or for every performance indicator, we have a very prescribed process.

COMMISSIONER McGAFFIGAN: But we also get ahead of it, it strikes me, and that's a compliment to you. And I think that you would do better to communicate the aggressiveness with which you pursue some of these matters that aren't currently all the I's dotted and T's crossed rather than just give us a snapshot of last December 31st because -- that's just me -- and I know you do it. I know you do it but it

can come across to the member of the public that you are passive. And you're absolutely not.

I can guarantee you the day that that Point Beach resident inspector finding came in, you guys were all over it. And I can think of other examples.

CHAIRMAN DIAZ: The Commission always needs to be looking aggressively at what else we can do.

And with that, thank you, Commission McGaffigan. Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Yes, I'd like to turn to Cooper. I was reading through the letter that we sent out to the licensee in March. And I appreciate the comments and the improvements that have been made at Cooper. But on page 3, I'm quoting here.

"In the area of problem identification resolution, there were a number of findings involving failures to promptly identify and correct safety-related and important safety-related equipment problems and failures including instances in which corrective actions were not adequate to prevent recurrence. Additionally, in a few instances, NRC involvement was necessary to ensure that adverse conditions were appropriately identified and placed in the Corrective Action Program which indicates the Corrective Action Program is not consistently implemented throughout the CNS organization."

I'm going to skip to the next paragraph and read one sentence. "Human performance deficiencies and inconsistent

implementation of the Corrective Action Program have also been identified as areas for improvement by NPPD self-assessments and the NRC CAL inspections throughout the assessment period."

So we've got continuing concerns of problem identification resolution and human performance. Those are pretty significant issues. Can you talk a little bit about those?

MR. MALLETT: Yes, Commissioner Merrifield, that letter, I think, characterized where we believe the performance at Cooper is. And if you recall in my remarks about the assessment of that station, I said that we closed the Confirmatory Action Letter which also included two areas: human performance and problem identification and resolution.

Those parts of that Confirmatory Action Letter, though, as a tool were used to look at the licensee at that point in time didn't have a program in place and they didn't have people using the process all the way down through the organization.

At this point where we believe we are is they now have their programs in place. People are using it throughout the organization. But we felt it was not sufficient enough to not continue our oversight of them because we're still seeing, as you pointed out, some problems with -- although maybe not across the board, but in some parts of their program where people are not entering things into the Corrective Action Program, people are not doing adequate root cause follow ups. But those are significantly less than the year before.

And I would point out in that letter, that same letter, the next paragraph indicates that were it says -- you read the first sentence, "Human performance deficiencies and inconsistency implementation of the Corrective Action Program," that's what we were trying to emphasize. It's the implementation process.

Where they were before was they didn't have a program in place. And weren't following that program.

It also says we recognize they have made improvements in this area but we still are finding problems and, as Commissioner McGaffigan said, aggressive and relentless, as Ellis Merschoff used to say, and that we're not going to let up in this area until we see some of these findings go by the wayside.

COMMISSIONER MERRIFIELD: Well, I think this goes -- it would appear to me that this goes to the issue of sustainability and as we've talked about in years past, in the case of Cooper -- and this is no different than the other reactors of which we're reviewing today.

There are improvements and then there is a decline. And I appreciate the staff focus on these areas. But these are -- human performance and problem identification and resolution are critical aspects of licensee operation of these units. And hopefully -- and we'll certainly at some point hear, I hope, from the licensees' direct perspective but a commitment to sustainability and having the people, processes, and resources there to make that happen is really ultimately what this is about irrespective of where they are here on the AARM.

In regards to Perry, I don't have the most recent annual assessment letter here but you obviously pointed out the issues with the high pressure core spray, emergency service water, low pressure core spray. I look at materials that show we've had a bump up in terms of allegations at the site of no small magnitude.

Are we having the same -- would you state or would you -- what's your view, Jim, in terms of the same issues at Perry? Human performance, problem identification resolution and how those are being addressed?

MR. CALDWELL: Well, as I mentioned in my discussion, those are really the two focal points of the results of the 95003, which was an ineffective Corrective Action Program. Actually, the program is good. It's the implementation of the program that was ineffective. And a number of human performance issues particularly with procedural adherence.

So both those issues will be key elements for their commitments and in any regulatory tool we use, it will likely be a CAL.

COMMISSIONER MERRIFIELD: Okay. I know you've got a meeting on the 95003 tomorrow night.

MR. CALDWELL: Right.

COMMISSIONER MERRIFIELD: And you're probably hesitant to go into too great a detail on that, which I understand. I think probably a lesson for next year is if we are in a similar -- if we were to be in a similar situation, hopefully we could have the 95003 meeting before

the Commission AARM meeting. That way we can get into a little bit greater detail.

Following through on the same vein, Point Beach, human performance, problem identification resolution, Corrective Action Program. That same vein comes through. Again, are we in a situation where the program seems to be okay that they put in place but the implementation was the problem? Or would you say it is somewhat different in that case?

MR. CALDWELL: Well, in the case of Point Beach, it was a program and an implementation issue with the Corrective Action Program which they've made improvements in as probably of the five areas, that and engineering are the two that lag. But we have seem improvements in those programs.

We've seen quite a bit of improvement in human performance. They had a couple of blips recently but the numbers of human performance issues have gone down based on the activities that they put in place.

But you are right. Both those things are key to a plant improving.

COMMISSIONER MERRIFIELD: Mr. Chairman, I think my time is up. I have an additional question I'd like to ask if we have another round here.

CHAIRMAN DIAZ: All right. Thank you.

Commissioner Jaczko?

COMMISSIONER JACZKO: I wanted to follow up a little bit on some of the things that Commissioner McGaffigan talked about with the Reactor Oversight Program in particular with performance indicators. Commissioner McGaffigan asked about green/white thresholds and where we are with, you know, whether we're having enough things that are -- or I should say -- in the sense that whether we properly -- we have the threshold set at the right level.

I want to look at it from a slightly different perspective and that is performance indicators, as I understand them, are really intended to be a leading indicator. That, and Luis you mentioned something that is still going on in the inspection program is are we still putting inspections in the right areas.

And one of the things that I understood is that that is one of the things that the performance indicators should do is tell us where are those areas we need to take a closer look at. So I would almost ask that questions that Commissioner McGaffigan asked in a slightly different way. Are the performance indicators right now acting as a good leading indicator for us to identify areas where we should be doing additional inspection?

MR. DYER: Commissioner, I'll let Stu give you the details. My sense is some of them are. And some of them aren't. And we need to focus on those performance indicators that are not.

And my thoughts are the pursuit that we need to get to with the complicated scrams, I think that's a leading indicator. I think

some of the MSPI could be a leading indicator if it is properly implemented. And as we go forward with it, if it looks at long-term material -- safety system equipment unavailability and unreliability.

And so those are things that will give us those kinds of trends. I think there is a couple of others that are pretty good. But there are some that we're not getting much value out of.

COMMISSIONER JACZKO: Which are the ones, if you could just list them for me, that we're not -- Jim or Stu, whichever.

MR. RICHARDS: That are not providing us much information?

COMMISSIONER JACZKO: Yes.

MR. RICHARDS: Well, we had eight PIs in 2004 that actually crossed the green/white threshold. Five of them were in the initiating events cornerstone. That's either scrams, scram or loss of normal heat removal, or unplanned power change greater than 20 percent.

We had one PI in the mitigating systems. One in area integrity. And one in EP. But given that there are 103 units and there's 18 performance indicators, you can kind of do the math and see that eight out of that population is not a lot.

As we discussed in the paper, one of our concerns is that when you go back over the last five years and you look at plants who have gone to Column 4 or gone to the 0350 process and then you look to see if the performance indicators have provided us or have contributed to

that plant going to that location in the action matrix, our conclusion was that it didn't provide the input we had hoped.

So that kind of brings us back to Commissioner McGaffigan's question are the PIs accomplishing what we hoped they would for the program?

COMMISSIONER JACZKO: And I just want to -- and I think that is a good point. As you discuss that in the paper and in particular several of the plants we talked about today, Cooper, Point Beach, and Perry, all three of those, as the staff indicates in the paper, Cooper was all green prior to going into Column 4.

Point Beach had two PIs, two white PIs in the two years prior to entering Column 4 but those white PIs were not in the areas that led to Point Beach going into Column 4.

And then Perry, same thing, had two white PIs in the three years before entering Column 4 but the white PIs didn't contribute to entering Column 4.

So, you know, I think that this is an area certainly I think it is important, in particular as we look at resources and working to get those PIs to do the right thing.

And I also think, as Commissioner McGaffigan said, I don't necessarily know what the answer is in terms of if it is changing the thresholds or it is somehow changing the PIs so that we'll have indicators that -- I mean one example that -- and again the staff talks about it is the reactor coolant system activity.

And that's one that, I guess -- I understand we're looking at using a WANO indicator for -- that is something more on the fuel-cladding integrity to give us a better indication of -- it seems with that PI, the intent was to measure fuel cladding. But it's really more an indicator of what is activity level at the site boundary.

It's almost you work your way back. And so it's not necessarily indicating what fuel-cladding integrity is.

MR. MALLETT: Mr. Jaczko, I'd like to add something though before we leave that subject. I want to leave you with the impression we do use those indicators more than just when they cross thresholds. The unplanned scrams, as Stu mentioned for example, we look at those early to see if there are trends. And then we pick up our sampling process to focus in those areas to see what is causing that.

COMMISSIONER JACZKO: Do you do that with all performance indicators? Or is that one --

MR. MALLETT: We do it with the ones that we think that we can follow. There are some that the trend is just not as easily discernable. And that speaks to what Jim Dyer said. We need to look at some of those and see if they're really giving us the answer we need.

But I didn't want you to leave with the impression that we don't use those just because they don't cross over thresholds.

COMMISSIONER JACZKO: No, and I mean I think the Reactor Oversight Program, I think it is a good program. And I think that, you know, these are areas where -- these are areas that I think are

further improvements. And I don't want to leave the impression that I think that it is a broken system. I don't.

But I think that these are some good areas to really get a good forward-looking handle on where plant safety is going.

MR. DYER: Commissioner, I think also early on when we created the performance indicators, they had a therapeutic effect on some licensees, particularly, I think, in the security area and the emergency preparedness. When the performance indicators were decided upon and looked at, things like training, things like downtime for some of the security areas back prior to 9/11 were areas flagged for -- because they were performance indicators, started to receive additional attention.

It's the old adage what gets measured gets managed. And once we started measuring these areas, it increased their import throughout the licensees. And security systems and emergency preparedness training, I think, were two areas where the industry stepped up and improved performance in those areas.

COMMISSIONER McGAFFIGAN: Mr. Chairman, I just want to compliment Mr. Jaczko for the line of questioning he just gave. And all three of us are sitting here smiling. And through probing you find out what the staff actually does. And I commend you for that. And for, you know, if they just bragged a little bit more, we might get attacked a little bit less.

But whatever.

(Laughter.)

CHAIRMAN DIAZ: All right. Thank you, Commissioner Jaczko.

Let me see. I think in hearing some of the things that have been said and something that Luis said and, this five years seems like have gone by, and we sometimes ask ourselves are we where we should be.

The reality is that this program took place at a very special time in the history of nuclear power plant operation and regulation. It was at a time that things had improved significantly. And were continuing to improve.

That actually enabled this program to be formed. Without that, we would not be here. And like Luis said that trend continued. And it makes it a little difficult to trend but all things, you know, take a little bit of time.

I do believe that the issue of performance indicators needs additional attention. And I think that is obvious from the result. But the program continues to do good things. And I think fundamentally -- I don't like sometimes to brag too much about it, but I think we done good.

And I think it also has forced the licensees to look carefully at every one of these regions and like Jim Dyer said, there are some diagnostic effects and there are therapeutic effects. And the combination of these two things is very important.

We need to improve sometimes the diagnostic. But even without a diagnostic, the therapeutic effects are there. And I think those are good.

Having said that, let me just go ahead and ask a question that I asked last year when we were leaving this. Oh, yes, I know. I did ask when we come next year to this meeting, what would be the best thing that you could do to improve the program.

And some of you came out and say well, we need to make sure that we improve our assessments. And assessments is a big word. So my question is what have you done this last year to improve your assessments? And that takes 30 seconds or less to answer.

MR. DYER: Okay, Mr. Chairman, I think the real advancements I think are in the end-of-cycle assessments. As we have prepared these things, the meetings they're much more crisp. They're focused. I think some of the efforts that we went forward with in the crosscutting issues, which are still ongoing and evolving, are two of the areas that are particularly important.

It was also good that the inspection findings, the presentations that I received, and I receive the end-of-cycle summary meetings, were led by the regional administrators and as I said, they were very crisp and focused, right to the point. And there was -- the subjectivity continues to be removed and improved.

MR. REYES: I think all assessments have improved from the everyday meeting in the regional office to discuss the events of

the previous night, which we now have review and as part of our fleet best practices have institutionalized for the regions to meet the same goals, to the midyear cycle assessments, to what Jim talked about, which is a culmination.

And for the people who don't know, I just wanted to make the point that we do daily assessments. There are assessments going all the time with different thresholds and different scope.

CHAIRMAN DIAZ: And are we managing them well to get to the right results?

MR. REYES: We are working on that. It will never be perfect. We'll always be here and there will always be some work to be done.

CHAIRMAN DIAZ: Sure.

MR. REYES: But I think Jim has pointed it right. I think we have made a lot of improvement.

CHAIRMAN DIAZ: Okay. Going back again on Memory Lane, that shows you I am really getting old, six years ago we were discussing this issue, you know, the ROP and then we keep really going back to the fact that the importance of the Corrective Action Program to actually having an ROP was paramount. Its importance really could not be overemphasized.

And we keep seeing problems with the Corrective Action Program, and crosscutting issues, they keep coming up.

Are we telling the licensees or are they really paying the attention that the Corrective Action Program deserves?

Or have we failed to send that message that this is a key, unique, continuous, demanding responsibility? That that program needs to be managed, it needs to be these positions, and things need to be done on time. And they need to be transparent to them and to us.

MR. DYER: Chairman, I was trying to think quickly, I don't know that we've ever gone out publicly said you need to manage your Corrective Action Program. But if you take a look at the -- when you hear problem identification, resolution, crosscutting issue concerns come up, it's all these plants. The four plants that are here being discussed are either here, as in Perry's case, because their Corrective Action Program failed and they couldn't close simple findings. The same with Cooper.

Or it is, as you go in and in the case of Davis-Besse where it failed and it was detected with a significant event, or significant issue too late, and then when we go in and do our diagnostic, additional issues come out. And in the case of Davis-Besse, they're shut down for an extended time.

So I think the message indirectly certainly is that the Corrective Action Program is absolutely critical for sustained, acceptable performance.

MR. REYES: I think the message has gotten out about having a good program. If you listen to what Bruce Mallett and Jim

Caldwell talked to you about the plants they discussed, they said early on these utilities didn't have a good program in terms of corrective action.

And now it is more a daily execution issue. So my view is that overall, most utilities have good programs. And what you're getting into is the daily execution of that program.

For example, there are some programs that have a lot of could or should versus will and shall. And then how you do that day-to-day decision-making has a lot to do with the outcome.

CHAIRMAN DIAZ: I wonder if at the five-year point whether we need to provide an emphatic statement regarding how critical the program is and how important it is. And maybe it is a matter of just getting that message across the fleet in a very, very clear manner.

MR. MALLETT: Mr. Chairman, I want to -- oh, I'm sorry. Go ahead, Bill.

MR. KANE: An important aspect of that is -- that program is being able to identify root causes. And the extent to which we're exercising that kind of a program and getting to proximate causes is often a failing of that system. And perhaps the regional administrators could comment on that.

But that's a very important point, I think, from our perspective to get to the root cause. And then you've got a solution that will be effective.

MR. CALDWELL: Let me add, I think the program has changed also to be more probing in this area on our part. As Bill said, to

look at the different pieces of the program like root causes and identifying problems.

But you should know we do meet -- I know in Region IV, I've met several times with the utility managers, plant managers, and regulatory affairs managers. And we emphasize problems people have had in the problem identification resolution area. And why they don't want to get into that trouble as an early indicator.

CHAIRMAN DIAZ: Okay. Thank you.

MR. RICHARDS: One other comment. Just programmatically, I think it is the second largest inspection we do is the PI inspection. So --

CHAIRMAN DIAZ: Yes, right. I'm just wondering whether the clear message is across the fleet in a systematic, strong -- like we said kind of raising to the level of the pain in the neck-type message. Okay? Commissioner?

COMMISSIONER McGAFFIGAN: I endorse everything you just said about the importance of corrective action. I think the Commission has done that as a whole repeatedly. I won't speak for Commissioner Merrifield but a way that we have discussed in the past and I hope is reviewed in the five-year review of doing that, is these crosscutting issues that Commissioner Jaczko pointed out seem to be a bit of leading indicator at some of these places where the PIs aren't.

Maybe we need to revise the framework to have the crosscutting issues as a column that gets graded. And people, you know,

with corrective action at the top of it, human reliability, and engineering, isn't that where that falls, too?

But that's -- I agree entirely. Until it becomes something that gets handled this way, I am personally very pleased with how aggressively the staff deals with crosscutting issues. It just doesn't leap up. And the industry complained to you guys at the Reg Info Conference but I believe your actions are entirely appropriate.

COMMISSIONER MERRIFIELD: Mr. Chairman, that's actually an issue I'd like to explore a little bit if we have a second round because I might have a slightly different take on it.

CHAIRMAN DIAZ: We are already on the second round.

COMMISSIONER MERRIFIELD: Are we?

(Laughter.)

COMMISSIONER MERRIFIELD: I didn't realize I was trying to cheat there. Engineering inspections. We did the four pilots. We apparently got some pretty good findings at a couple of the plants, Kewaunee and whatever. Why aren't we -- is it a resource issue that you guys didn't rush a paper to us and say -- I'm asking the Chairman's question here -- as to why you didn't say let's do more of this?

MR. RICHARDS: It's simply the last report wasn't issued -- and I think the last inspection didn't end until February. We get the report out in 45 days. So our process was to get the people from the regions in to talk about it. They did that.

COMMISSIONER MERRIFIELD: It's in the concurrence chain.

MR. RICHARDS: The individual responsible has drafted the paper and it is sitting on my desk. So it's not a dream. It's on its way.

COMMISSIONER McGAFFIGAN: And what is the recommendation for the frequency of these inspections in the future?

(Laughter.)

MR. REYES: It will be in the paper.

MR. RICHARDS: We haven't gotten that far.

COMMISSIONER McGAFFIGAN: Okay. Well I'm glad to provoke laughter here.

COMMISSIONER JACZKO: What was your recommendation?

(Laughter.)

COMMISSIONER McGAFFIGAN: Well, I think based on what I know, which is a lot less than what you guys know, we need to be doing these. And we need to be doing them with some frequency. And we need to resource it. So, you know, I hope that it was dealt with in the budget process. The danger is --

MR. REYES: We are doing the budget as we speak. It's not to the Commission yet for `07. And we are assuming the Commission's position on that particular issue. So we are leaning forward to resource load what we think is going to be the right thing to do.

COMMISSIONER McGAFFIGAN: I hate my time to be used up by the Chairman's issues.

(Laughter.)

COMMISSIONER MERRIFIELD: You asked the question.

COMMISSIONER McGAFFIGAN: I know. I know.

COMMISSIONER MERRIFIELD: You have nobody else to blame but yourself.

COMMISSIONER McGAFFIGAN: Yes, I know. But it is important.

INPO. I assume, and I'm sure the assumption is accurate, that you all know exactly what the Column 3 and 4 plants and INPO space is, at least all the regional administrators and senior folks.

Is there an opportunity for you as a group, but it didn't seem to be on the agenda at the AARM meeting, to talk about what is INPO know that we don't know with their three and four plants. Is that -- because I would -- I got asked and Chairman Diaz got asked that question by Senator Lieberman at our first confirmation hearing in 1996. And I've carried it with me through my career here.

And INPO sometimes -- I mean INPO comes in and they tell us where plants are. And some of them are not, you know, as Commissioner Jaczko pointed out, summarily flying along in green space for the most part. And yet INPO is concerned about them.

So I know we can't talk about it in public, that's part of the deal, but do you guys talk about it?

MR. REYES: We have a memoranda of agreement with INPO. All the reports that are prepared are accessible to the staff. And our instructions specifically require that the senior resident inspector and line management in the region read those reports in detail.

If there is a matter that is under the NRC purview, we will take that issue, we will document it in a report, and follow it through. So the short answer is we are aware of all the INPO findings and issues in the report. Not all of them are under our purview. So we have that knowledge.

And that knowledge, when there are discussions of plants and all that, is part of the regional administrator's presentation and discussion with Jim and with the EDO. So we do --

COMMISSIONER McGAFFIGAN: But the plant discussions at your meetings seem to be on the plants that are in our space, they're in Column 4. And INPO findings may or may not support that. But it's the plants that are in their Column 4 or 3 that I honestly -- maybe we could have a closed meeting on this. I don't know whether it is allowed by MOU for the Commission to have a closed meeting with you all about --

MR. REYES: We talk to the regions everyday.

COMMISSIONER McGAFFIGAN: Okay.

MR. REYES: We talked today about the AARM, which is a one-day meeting, to discuss 365 days of plants that were at one time in the fourth column. That is only a small part of what we do.

COMMISSIONER McGAFFIGAN: Okay.

MR. REYES: I mean the remaining of the fleet, every day we talk to the regions. Everyday there is an inspector out there reading an INPO report. I mean that is an everyday activity we do.

COMMISSIONER McGAFFIGAN: All right. Thank you.

CHAIRMAN DIAZ: Commissioner Merrifield?

COMMISSIONER MERRIFIELD: On that quick note, you know, I think when we first went into this program, we recognized that there are a whole variety of tools that we use in our regulatory toolbox and I appreciate some of the comments today on the performance indicators. And I would agree we ought to endeavor to improve those where we can.

But that is just one tool in our toolbox. And I've heard the comments before about how we didn't have an indicator relative to Davis-Besse. Our problem with Davis-Besse was an inspection problem. It wasn't a PI problem. We had inspectors there who didn't pick up what they should have picked up on.

And our resident inspectors, our region-based inspectors, our headquarters-based inspectors who do thousands of hours of inspections on these plants on a yearly basis are really the most

important part. The performance indicators are another important part and one tool.

But I just want to make sure that we remember, you know, it's not like a carpenter with just a hammer. The carpenter has a whole bunch of tools that they use to make quality furniture as we do with our programs.

Now in terms of another area I want to talk to very quickly and that's the issue of crosscutting issues. And I, having read what the staff provided and having read what was provided by NEI, I'm confused. And my confusion is not going to be settled today. And it's going to require the staff to come up and brief me.

But having read the information from the staff, it seems to indicate that there isn't a big variation over the last four or five years in the number of sites that have substantive crosscutting issues. And I note the word sites.

According to NEI, the number of the issues in that same time period has gone from 59 up to 392. And we don't have a similar increase in the number of plants we have concerns about. As Stu mentioned today, things are going along at a level we feel pretty comfortable with.

So there's a bit of a disjunct between some of the information provided by the staff and some of the information provided by NEI. And we won't get to the bottom of it today. But I certainly have some other questions.

I think that crosscutting issues are valid. I mean I think that is an important criterion for us to look at. I think we need to do it in a way that is transparent, that is predictable, that is timely, and is something that is consistent across the regions.

And at least in terms of the information we've got in front of us today, I can't make a determination one way or the other in that respect.

CHAIRMAN DIAZ: I think the staff has some answer for that. So you want to take a minute?

MR. REYES: I want Bruce to answer this one because I want the Commissioner to really understand that we have changed and clarified definitions. And the issue that is confusing is a very low-level issue in terms of when you have a single finding what do you do with it.

COMMISSIONER MERRIFIELD: All right.

MR. MALLETT: Okay. Let me try to make this succinct. The industry has told us for the last few years we haven't had guidance to people in the area of crosscutting issues. So we put out guidance. I believe we are consistent when we issue the crosscutting substantive issue in our end-of-cycle letters. We worked hard on that. We define them in those letters. On that piece we are consistent.

We've benchmarked each other. And there are some areas where we believe we should have made it in one region that we didn't make it a crosscutting issue in another. But we're working on that.

The area of contention is a different one. And that is when you try to put out guidance to people, we started out with how do you identify that it is a potential for a crosscutting issue in your findings?

And so early on this year, we put for a single finding when you tag the words on there that it has an aspect of a crosscutting issue, it doesn't mean it is a crosscutting issue. It means you put it in a bin for consideration during the mid-cycle or the end-of-cycle reviews.

And so yes, the numbers did increase. That's clear in the tagging the aspect of a crosscutting issue to a finding from years ago to where we are today, we didn't have guidance in this area before. We've now told inspectors here's how you tag it as having a crosscutting issue. Here's what bin you put it in.

The key, though, that I think is left out of the NEI document is that does not make it a crosscutting issue. That means that it goes in a bin that we consider. And at that point in our end of cycle, there's another criteria. And the crosscutting criteria says that that issue has to be across multiple cornerstones, has to have a common cause problem to it before you make it a crosscutting issue.

COMMISSIONER MERRIFIELD: Well, that having been said, I mean I appreciate the explanation. I think the memorandum that the staff gave the Commission in order to explain that didn't quite capture that flavor. And I think in terms of the detail of how that breaks out by region and by the number of issues selected and by those that are meaningful, I mean I think that's something that I'd like to get into further.

CHAIRMAN DIAZ: It was not well explained. I just happened to have the benefit that I met yesterday afternoon with Bruce. And it was explained to me. And I was able -- but I did want you to hear.

Commissioner Jaczko?

COMMISSIONER JACZKO: I seem to be focused on performance indicators today. One of the real strengths, I think, with the Reactor Oversight Program is the objectivity and transparency. It's not clear to me how those really strong characteristics will be carried forward in the mitigating systems performance indicator. Can you briefly tell me how that is going to be a transparent indicator given the high reliance on PRA in developing that?

MR. RICHARDS: It will be difficult. I can say that the guidance for implementing all the performance indicators is a public document. It's NEI Document 99-02.

So when we do implement MSPI, that information will be available to the public. Our monthly MSPI meetings and our monthly meetings on the reactor oversight process with the industry are open to the public so people can come and ask questions. And, you know, we can try and explain it to them.

That being said, though, MSPI is a complicated performance indicator. The draft guidance right now to explain how to do it that will go into NEI 99-02 is 63 pages long. And there is additional information outside of that that you really need to put the pieces together.

On top of that, it requires data from the licensee PRAs and because of physical security reasons, we don't make that data available.

So some members of the public would say without the PRA information, we can't calculate the results that you're going to get. And that's true. But that's one of the tradeoffs for physical security and the desire of the agency to move forward with a risk-informed indicator.

To be risk informed, we have to use PRA data. But if we're going to withhold PRA data from the public for security reasons, that breaks the chain.

COMMISSIONER JACZKO: I would just encourage you to -- I mean it sounds like you are aware of it but to continue to keep that in mind as we move forward with this. To continue to make that that is transparent.

CHAIRMAN DIAZ: Okay. Well, thank you very much. Thank you, Panel.

We can move to the next panel.

MR. REYES: Okay. I'm going to get my next panel here.

The staff is ready. The Agency Action Review Meeting has a lot of discussions about reactors but it has the same substance and time dedicated in the materials program. And the Commission has given us feedback on that in the past. And I feel comfortable now that we do

have a balanced approach through the Agency Action Review Meeting between the two programs.

With that, I'll just turn it over to Jack Strosnider.

MR. STROSNIDER: Okay. Thank you, Luis.

Good morning, Commissioners.

So we're making a transition now from the reactor world to the materials world. And as we do that, I want to provide some perspectives that I think are important when we assess events that material licensees -- when we assess those and when we discuss them.

We start off with recognition that we're dealing with over 21,000 licensees, which I think everyone recognizes. But I think just as important is that there is a wide variety of applications and activities associated with those licensees. They include industrial, medical, academic, and fuel cycle applications.

In many cases, these applications include intentional exposure to radiation such as in diagnostic and therapeutic medical applications. And these activities require people practicing careful, well-controlled handling of these materials.

When we discuss the number and trends of reportable events, it is important to keep in mind the number of activities conducted every year. One medical industry website estimates around 16 million diagnostic procedures per year. This doesn't include therapeutic treatments.

And this is an example for the medical area. Over the past eight years, we've had an average of 36 reportable medical events per year. So this represents a very small percentage of the procedures conducted and a small number of events per licensee.

This has implications when we discuss trending. We need to recognize first of all that we're dealing with a very small number in terms of statistics. Furthermore, the denominator is uncertain in that the number of procedures or activities conducted per year is not well known.

So it is important to keep that in mind when we start looking at plots that show two or three or even half a dozen or so difference in events that we don't know how much of that is being driven by the number of procedures that are conducted, et cetera. So I just want to make sure that we keep those things in perspective.

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

In this regard, I believe one of the most important things we do with regard to trending and review of the events is identifying commonalities. And I'd like to give a brief example of that.

In 2003, the staff noticed the number of events reported involving a particular manufacturer's brachytherapy devices, the staff

when they saw this in their reviews, they worked with the Advisory Committee on Medical Uses of Isotopes, ACMUI, to evaluate the events.

And based on that assessment, they met with the manufacturer. The manufacturer agreed to modify their instructions to implement additional quality assurance and change their procedures to address some of what we had been seeing.

And I think that is a good example of what the staff is doing on a routine basis to look -- again, if you just look at numbers, in the small numbers we're looking at, we can do statistical significance tests but that really doesn't tell you as much as the day-to-day looking at these events and looking for those commonalities. And I thought that was a good example of how the staff does that.

So with that background, I'll briefly describe the program and the fiscal year 2004 results. Slide 2 lists the purposes of the program, which are to identify significant issues and performance trends, confirm adequacy of programs and actions being taken, and identify candidate material licensees for discussion at the Agency Action Review Meeting.

COMMISSIONER MERRIFIELD: Just as a point of clarification. On the slides that we have --

MR. STROSNIDER: Oh, I'm sorry. It's Slide 24. Sorry.

So if we could go to Slide 25, this slide shows the goals and criteria that we monitor against. And I want to emphasize that there is a graded approach used here starting with the strategic outcomes and

going down in significance to performance measures, abnormal occurrence criteria, and then reporting requirements and precursor metrics, some of which were developed in working with the Commission a few years ago and are laid out in SECY-02-0216.

Some of those precursor metrics and requirements, they include things like escalated enforcement data, data that is in the Nuclear Materials Events database, and results of some special studies. And we believe that that graded approach provides us an early indicator of any programmatic issues and allows for early action on our part.

We'll go then to Slide 26. As indicated in the slide, all the strategic and performance goals were met for the materials and waste area in FY 2004. And, in fact, have been met since 1997. And there were identified -- no significant adverse trends were identified in our reviews.

And again, I just want to come back to the comment I made earlier, that I believe the proper perspective there is that the number of reportable events has remained very small relative to the number of activities. And our review did not identify any common causes when we look at the sort of events that we're seeing.

So with that brief summary then I want to -- we want to move on to discussions of the specific facility events. And first Bill Travers will discuss activities related to events at the Honeywell International Conversion Facility and then the Westinghouse Columbia Fuel Facility.

And Sam Collins will discuss activities related to the Baxter Healthcare Irradiator and some aspects of experience with the Safety Light Facility.

With that I'll turn it over to Bill.

MR. TRAVERS: Thanks, Jack.

Good morning. As the Commission knows, in Region II we have responsibility for carrying out the inspection program for all of the United States fuel cycle facilities. We do that in close coordination with the Program Office, NMSS.

At the AARM, as a function of two abnormal occurrences, one at each of two facilities, and as a result of a number of safety performance issues that were identified at each of two facilities, we discussed two fuel cycle facilities at the AARM. The first is Honeywell. And the second one I'll discuss in a moment is the Westinghouse Columbia Fuel Plant.

The Honeywell International Uranium Hexafluoride Plant in Metropolis, Illinois is the sole U.S. supplier of uranium hexafluoride. It inadvertently released approximately 70 pounds of uranium hexafluoride in December of 2003. This was classified as an abnormal occurrence.

As a function of that, 75 members of the public were evacuated. In retrospect, the release did not result in the exposure of workers or members of the public to concentrations of uranium or hydrochloric acid above regulatory limits.

But as Commissioner Merrifield pointed out, it was a dramatic moment in nuclear history because it was only really the second time members of the public had been evacuated in response to a nuclear event.

For its part, Honeywell shut down all of its chemical processing beginning immediately following that accident. They investigated the event and reviewed the facility safety and management controls. They completed a number of significant corrective actions and implemented some longer-term improvement activities as well.

They actually restarted the uranium hexafluoride processing in late March, early April of 2004. So it was shut down for about four months.

For our part, we issued a number of -- we carried out a number of activities. We issued a Confirmatory Action Letter in response to their having shut the facility down. We conducted an Augmented Inspection Team. We implemented a restart oversight plan, Manual Chapter 0350, and we issued two severity level 3 violations.

Honeywell is currently implementing a longer-range plan to improve safety performance with emphasis on procedures, training, plant material condition, and emergency preparedness.

The current performance of the Honeywell facility was reviewed and documented in our recent licensee performance review. It did identify that we believe the facility is being operated safely. It did, however, note some areas where we believe there are some

performance improvements that should be carried out. And we believe those to be important ones.

They include procedural adequacy and adherence, control room conduct of operation, radiation protection program practices, implementation of emergency plan activities, and implementation of a Corrective Action Program.

In addition, there have been operator attentiveness issues that have been relatively recently identified. They are being evaluated by the agency. But for Honeywell's part, they have taken a number of steps to effect corrective action including the fact that several members of the site management team have been replaced.

They have instituted an enhanced corporate management oversight of the activities at Honeywell. We have had a number of interactions at the management level with that corporation to make sure that we understand and emphasize our own view of the need to take corrective actions. And I think our view is that while we believe Honeywell is making progress in this area, we need to see a demonstration of additional progress in the future.

As a result of that, we are continuing our heightened inspection oversight activities at Honeywell. We are focusing on the areas that I just mentioned to make sure that we are as effective as we can be in applying our inspection resources.

We are going to continue a 12-month, as opposed to a nominal 24-month licensee cycle review for the Honeywell facility.

And as of just yesterday, we participated in an emergency exercise. Commissioner Jaczko was the emergency team leader and we haven't documented the results of that but I certainly had, from my experience, some sense of very constructive improvements in their ability to react in the case of an event at Honeywell.

If I may, I'd like to turn to Westinghouse now and discuss that. Westinghouse Columbia Fuel Cycle Plant is a Category 3 commercial nuclear fuel fabrication facility. And as I mentioned, an abnormal occurrence also occurred at that facility and it occurred in March of 2004 when Westinghouse identified an unanticipated and unanalyzed build up of uranium in an incinerator in the secondary combustion chamber of their off-gas components.

This was contrary to their own criticality assessment. And the NRC determined that there was, in fact, sufficient material contained in that combustion chamber such that if there were fairly low likelihood events, including water introduction in that, that there could have been a criticality.

There was not a criticality but the assessment included the estimation of the possibility that there could have been.

As the result of this determination, Westinghouse investigated the cause and extent of condition of the issue. They had an independent review of the Nuclear Criticality Safety Program undertaken. They initiated a review of all criticality safety evaluations at the plant to determine if they needed improvement.

They added resources in the Nuclear Criticality Department and safety organization. And they implemented a Human Performance Improvement Program.

They have maintained that incinerator shutdown since that event until they can effect all of these improvements and changes. Currently I believe it is expected to resume operation sometime in the fall.

CHAIRMAN DIAZ: Bill, could I ask a clarifying question –

MR. TRAVERS: Sure.

CHAIRMAN DIAZ: -- on the issue of the criticality and the incinerator. You said that a criticality could have occurred if -- the if is a big --

MR. TRAVERS: It's a big if. There were several things that would have had to occur including movement of some of that material into an area of the chamber where the geometry would have been more -- would have supported a criticality. It's sort of a negative.

CHAIRMAN DIAZ: Right. And also you probably needed some either moderator --

MR. TRAVERS: That's exactly right.

CHAIRMAN DIAZ: -- so there was a series of things. I mean the seriousness of the issue is the fact that fissile material has been accumulated in a quantity in a geometry that was not foreseen or according to procedures or --

MR. TRAVERS: That's exactly it. A good way to put it, Chairman.

CHAIRMAN DIAZ: All right. Rather than -- because, you know, criticality seems to be -- and it was not –

MR. TRAVERS: It was not.

CHAIRMAN DIAZ: -- even close to criticality.

MR. TRAVERS: It was not.

CHAIRMAN DIAZ: Okay. All right.

MR. TRAVERS: Okay. With regard to current performance, the April 2005 licensee performance review concluded that the plant was being operated safely. However, it did identify, again, some areas that we feel are important and need improvement. They include oversight of the Criticality Safety Program to assure adequate implementation of the Nuclear Criticality Safety Program.

I mentioned the one abnormal occurrence, Chairman, but in addition to that, Westinghouse has reported a number of other instances of even less significance.

But nevertheless, failures of their own criticality safety controls over the last eight months or so. In fact, one was just identified yesterday. So there are a number of steps that they need to take -- they are taking to deal with this issue. But we think we need to see even more demonstration of progress in their handling of these matters.

Westinghouse's current focus is on prevention of errors, including reduction of some administrative controls that have been relied upon at this facility. I think the last time we met as a management group, they told us they are looking at 60 steps in their process that currently rely

on human performance and human administrative prevention. And they're going to try to eliminate those in favor of engineered safety features that would make it less problematic that a human performance issue could develop.

The last thing I wanted to mention is that while we believe Westinghouse is making progress in addressing these identified issues, the NRC is continuing to carry out a heightened inspection program at Westinghouse. We're going to continue to do that.

Similar to what we're doing at Honeywell, we're going to keep the license performance review cycle at 12 months instead of the nominal 24 months. And we're going to continue to have periodic meetings with Westinghouse management to assure that we're on track to effect these changes.

At the AARM, the senior managers affirmed the current regulatory strategy we have for both Honeywell and Westinghouse.

Thank you.

CHAIRMAN DIAZ: Thank you.

MR. REYES: Sam?

MR. COLLINS: Thank you.

Good morning, Chairman, Commissioners. I feel a little bit like Michael Jordan having to take a three-point shot here.

(Laughter.)

CHAIRMAN DIAZ: You know what happens if it goes right, don't you?

(Laughter.)

MR. COLLINS: I can make this as quickly as you'd like.

MR. REYES: You can use some of the time that the Chairman used for clarifying.

(Laughter.)

CHAIRMAN DIAZ: I'm not so sure.

MR. COLLINS: Let me proceed with the discussion of Baxter. Baxter facility was discussed at the annual review meeting because the event occurred under conditions that could exist at similar irradiators. And clearly within the triad of safety, security, and preparedness, this event is a significant safety issue having to do with the potential for overexposure.

The Baxter Healthcare facility is located in Puerto Rico. It's a wet source irradiator. It's licensed to contain up to five million curies of cobalt 60. Currently it possesses around four million curies.

And the event itself, which I believe the Commission is well familiar with, involved a series of poor practices including inadequate procedures, procedure adherence, troubleshooting procedures, complacency having to do with switch malfunctions, and lack of attention to potential dose exposures, including some aspects of wilfulness in which our Office of Investigation has pursued that issue and came to a conclusion.

The Baxter event itself was reported by the licensee on April 21st. They immediately shut down the facility and obtained the

assistance of the contractor, which is the manufacturer of the facility and the technology -- Nordion is the name of that group, to investigate the event.

On our part, we issued two confirmatory action letters, April 22nd and 27th. We issued a notice of violation. We conducted two inspections, an AIT and a follow-up inspection which was the compliance-based inspection.

We issued an Information Notice to ensure that the rest of the community, as far as the irradiators were concerned, were aware of the potential for this event. We also completed an internal lessons learned in the region as far as the inspection program and our conduct of the inspection program.

We issued a temporary instruction to the Program Office to ensure that similar issues do not exist as the result of our review of the event and moving that forward in the space of operating experience.

We performed alternate dispute resolution as the result of the enforcement in this case. And I believe that worked well under the pilot. I can get into details under questioning is you would like.

And Baxter themselves have promulgated extensive corrective actions that we are continuing to follow as the result of our heightened inspection program and oversight. That includes external reviews and other commitments which we confirm by confirmatory order as the result of the alternate dispute resolution process.

I'll move on to the next facility if that's appropriate at this time. That concludes my remarks on Baxter.

I'd like to briefly describe Safety Light Corporation. At the May 4th Annual Assessment Meeting, this facility was discussed due to some unique considerations having to do with national defense and security issues that came to light during the staff's decision-making process having to do with an application for license renewal by Safety Light. And a proposed enforcement action by the NRC.

This issue, although it came up in the context of Safety Light Corporation, may not be specific to Safety Light Corporation. So it is potentially a broader policy issue.

As I mentioned, this issue arose under the context of the Safety Light Corporation license renewal hearing. This issue right now is in front of the Atomic Safety and Licensing Board so we have limits on the detail of which we can discuss specific aspects of that proceeding.

However, in general, on January 24th, 2005, the Atomic Safety and Licensing Board denied Safety Light's motion to set aside the immediate effectiveness of our proposed enforcement action and directed the staff to investigate claims by the licensee of national defense impacts of the staff's decision. And that decision was an immediately effective order to not renew the license for Safety Light based on their wilful noncompliance with contributions to the decommissioning fund.

On February 24th, the Commission, as appropriate, exercised its supervisory role over the staff and suspended the immediate

effectiveness of the order based on the customer's claims of the impacts on national defense and security.

Currently, we've been granted motions by the ASLB to extend our process and hold the hearing in abeyance while the parties pursue settlement discussions. And we're in the final aspects of those. Of course, the Commission will play a role in those final settlement terms.

We have limited experience in the integration of national defense and security issues into health and safety decision-making process although we do have one or two examples that have come to light, most -- probably as the result of the defense posture of the country at this time.

Given the manufacturing products of this licensee and their uniqueness, there are claims by defense contractors and others that these products are necessary in order to continue the war effort and support some other aspects of the defense industry.

The staff currently has these under consideration. And we will be engaging the Commission on this potential policy issue in the future.

That concludes my remarks. Back to Jack.

MR. REYES: I think we exceeded our time allotted. So we're going to stop here for any questions from the materials group.

CHAIRMAN DIAZ: All right. Thank you.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman.

One of the slides said that you had met your performance goals since FY `97. And we have had discussions in the past and we'll probably have discussions -- my colleagues may have discussions this summer about whether those performance goals are tight enough. I know we've done some modest tightening on a few of them.

But, you know, as somebody who once wanted to be a university professor, I might be accused of grade inflation if you get an A every year. But I don't want to have that discussion today. There will be opportunities down the road.

These performance indicators tend to be negotiated with the Agreement States. Right? I mean aren't some of these measures negotiated with the Agreement States?

MR. VIRGILIO: Not necessarily.

COMMISSIONER McGAFFIGAN: Okay. Whatever.

MR. VIRGILIO: I think they are more of a senior management team initiative and interaction with the Commission. We do discuss them with the Agreement States. But negotiation is --

COMMISSIONER McGAFFIGAN: Okay. I don't mean negotiation. There is a vigorous discussion.

Agreement States -- all the folks discussed today are NRC licensees. Do the Agreement States have any program themselves to evaluate their materials licensees? Do we have a good sense of

whether there are some Agreement State licensees equivalent to Safety Light that -- you know if Pennsylvania were an Agreement State, would be licensed by Pennsylvania?

The others weren't. The others are fuel cycle facilities that at our sole discretion. But I don't want the public to understand that this covers all 20,000 or so materials licensees nationwide. This covers the NRC subset, right?

Your discussion today -- if Texas had a licensee that was really doing badly, the rules of the game at the moment are that's their issue from a safety perspective?

MR. VIRGILIO: The statistics that you're seeing are nationwide statistics. The reports that we get every day include both the NRC and the Agreement States.

When it is an Agreement State licensee that has an issue, we follow up to ensure that the Agreement State is taking the appropriate action. At times, we actually participate on the team reviews that go out and evaluate the events.

Agreement States are following up. And we know that through our IMPEP evaluation process as well as through the daily review of events that take place.

COMMISSIONER McGAFFIGAN: But there is no equivalent in most states -- most of the 33 Agreement States of some regulatory staff talking to the Commissioners and public about who their -- the ones that meet a threshold as to what their concerns are.

MR. VIRGILIO: We haven't had that issue come up as part of the process we've had.

COMMISSIONER McGAFFIGAN: Okay.

MR. VIRGILIO: But I think if we had an Agreement State licensee like the Baxter event, we would be discussing it.

COMMISSIONER McGAFFIGAN: You would be discussing it?

MR. VIRGILIO: I would foresee that we would. We've not crossed that bridge yet. But I say that it would come up.

MR. REYES: They typically -- if they get into a difficult situation, they typically seek our participation and cooperation. And we actively participate with them.

COMMISSIONER McGAFFIGAN: But if you were to get to an Agreement State licensee in the same case as Baxter or whatever, Safety Light -- you would bring them to -- you'd bring the Agreement State official here presumably to tell us about it, right? They're the regulatory authority for safety.

MR. VIRGILIO: We haven't faced that.

COMMISSIONER McGAFFIGAN: You haven't faced that, okay.

COMMISSIONER MERRIFIELD: Commissioner McGaffigan, I think this is an excellent question because at the end of the day, if, for example, there were a licensee in a Agreement State and if, for example, a fatality were to occur –

COMMISSIONER McGAFFIGAN: Right.

COMMISSIONER MERRIFIELD: -- despite the Agreement State program, I think there would be an expectation in Congress that we would know what was going on and have some appropriate involvement with the states in that regard.

So I think we need to think about a process such that if there were issues in the states that were equivalent to what we are discussing here at the AARM, that the Commission could in some way be notified.

CHAIRMAN DIAZ: I think it is an excellent question. I think part of it goes -- if there is an event --

COMMISSIONER McGAFFIGAN: Our lawyer may have a point of view on this. I didn't know I was going to be, you know, pulling up a big rock here.

CHAIRMAN DIAZ: Karen, do you want --

MS. CYR: I mean when we enter an agreement with an Agreement State, they are responsible for the safety of the program. We have an overall IMPEP review to see whether they, in a sense -- which in some ways is equivalent to what we're looking at in the licensees, do they have a program which appropriately deals with this situation? And that's the way our IMPEP Program looks at these things.

COMMISSIONER MERRIFIELD: Right.

MS. CYR: We're not in there, in a sense, you know, on a day-to-day basis, handling those licensing actions or how they are

conducting the review or the Corrective Action Program. That's not to say that we don't consult with them, we don't discuss these issues just as sort of fellow regulators about how are you approaching these kinds of activities.

I'm not -- you know, you'd have to talk to them. But I'm not sure that -- the purpose by which they might come and talk to you about this would be a different purpose than if the way -- if that was something the Commission wanted to pursue, it seems to me it would be different than the nature of what you are doing here.

And the Commission's role, I think, would also be different in terms of handling -- because you would be looking at the overall -- and the way the program is set up, you would be looking at how the state is approaching handling that in terms of their review of this, not at the Commission's decision about the individual licensing --

COMMISSIONER McGAFFIGAN: I understand.

MS. CYR: -- performance of the individual licensee.

COMMISSIONER MERRIFIELD: I don't think that those points are inconsistent. And I think -- my perspective and I think where Commissioner McGaffigan was going was that notwithstanding the fact that the Agreement States are responsible for the oversight of that licensee, it is still appropriate for the Commission to be aware of those instances which would equate to what we are requiring for the AARM so we would be informed.

Because as I would put it, in the end if there was a problem, I don't think that the folks up in Congress would necessary be assuaged with our statement that well, that's just merely an Agreement State issue. I think we need to at least be aware of it, recognizing that they are responsible for oversight of that licensee under the Agreement State Program.

CHAIRMAN DIAZ: I believe, if there is an event like Baxter happens in an Agreement State, we will be informed and we will have that information available. I think that's one point that remains. We will be immediately informed. And the staff will be engaged. And we will follow it up.

COMMISSIONER MERRIFIELD: I think, perhaps, in following -- this is Commissioner McGaffigan's question but it would perhaps be useful as part of the AARM process to have, as an attachment for the Commission, those events in Agreement States that would equate to that. Not that that would be the focus of the AARM, but it would provide a yearly context for us to at least assess that.

COMMISSIONER JACZKO: Can I say -- on the Abnormal Occurrence Report, does that include -- that includes Agreement State licensees as well?

MR. REYES: So the short answer is, an event happens. We know about it. The Commission gets briefed. If it is significant enough, it meets the abnormal occurrence and it will make it to Congress through our report.

We're going to give Commissioner McGaffigan one extra minute.

(Laughter.)

MR. REYES: If the Commission wants, we can continue to dialogue on this. But if not --

CHAIRMAN DIAZ: No, I think we got it.

MR. COLLINS: Commissioner, there is a direct answer to your question on Baxter. And Betsy Ullrich is here. She's the Senior Health Physicist from Region I and the AIT Team Leader. She's going to help me with this area.

We issue the TI and the lessons learned May 5th I believe it was. We're formulating a letter through Paul Lohaus, State Programs. The TI will go to the Agreement States. The letter will emphasize the importance of its implementation.

However, we do not control its implementation. We will follow that up on the IMPEP. And if a licensee chooses not to implement the PI, then we can deal that with IMPEP.

The flavor of this is there are 50 of these panoramic irradiators in the United States. Only ten of those are under the NRC jurisdiction. So 80 percent of those facilities are in Agreement States.

CHAIRMAN DIAZ: Okay. Paul?

MR. LOHAUS: Thank you very much, Chairman. Paul Lohaus, State and Tribal Programs.

A couple of background comments I'd like to answer. Then I'll answer a couple of the specific questions. But first we've worked very hard with the states over the past four or five years.

And they have been very responsive in terms of doing several things -- both reporting to the operations center when they have significant events, as you noted, Chairman, and also providing the routine 30-day and 60-day reports to the Nuclear Materials Events Database so we have a record of the complete set of events across the nation.

What we also do is we identify any of those that meet the abnormal occurrence criteria and those are included in our Abnormal Occurrence Report to Congress. And as a part of the AARM process, we work very closely with Jack and his staff in the regions and do look at the Agreement State events.

And if there are events that meet the threshold criteria, they would be addressed as a part of the AARM process. And I think the comment that was offered earlier, I think we would probably look to the program director or one of the program director's staff that has the responsibility in this area to participate with us in that process.

But we've tried to fold them into that process but the states themselves do not have the same type of process, if you will, that we have in terms of meeting and looking at the events.

But they have a, you know, rigorous program of looking at the events themselves, doing their own evaluation, looking at root cause, and we continue to focus on that and bring that up during our

IMPEP reviews, also during the periodic meetings, and also on individual events. As Marty noted, we engage in the individual events as well.

But there is certainly more we can do. And on Baxter Healthcare, Sam the letter went out yesterday to the states. And we have requested that they take similar action to what we identified in the TI and report back to us. And really incorporate that into their irradiator inspection program over the next two years.

CHAIRMAN DIAZ: Okay. Thank you, Paul.

COMMISSIONER McGAFFIGAN: Mr. Chairman, that was a nine-minute question. But I'm glad to have all the -- I just said I didn't know I was going to provoke that.

The only other question I have, the process for discussing plants that were previously discussed, I don't know whether Mallinckrodt was formally discussed here some years ago when they had some employees who had significant doses.

But Bill is remembering -- in the other process, we have a process for sort of folks moving off of things. And I assume since they weren't discussed today, things really have -- and I know they made a dedication to it at Mallinckrodt to improving things, but how does that work?

I mean is Mallinckrodt in good shape today? I guess that would actually be Jim Caldwell.

MR. CALDWELL: Yes, their performance is significantly better –

COMMISSIONER McGAFFIGAN: Okay.

MR. CALDWELL: But they do continue to have some issues.

COMMISSIONER McGAFFIGAN: No, it's a very complex facility that they have there. But I just want you to think about on the material side some sort of mechanism for remembering the past and telling us, as you do on some of these other facilities like Cooper, whether we have, you know, how well they're doing or whatever.

And Mallinckrodt comes to mind because it was a significant -- I'll shut up.

CHAIRMAN DIAZ: Very good. Thank you so very, very much.

(Laughter.)

COMMISSIONER McGAFFIGAN: Especially for shutting up.

(Laughter.)

CHAIRMAN DIAZ: Commissioner Merrifield? It just came out naturally.

(Laughter.)

COMMISSIONER MERRIFIELD: I have one question. It's going to be ten minutes.

(Laughter.)

COMMISSIONER MERRIFIELD: I'm not going to -- you know since we talked to the issue of Honeywell previously, I think that one

has been fairly well digested. And given the sensitivities, I'm not going to go into detail on Safety Light.

I do want to talk about the other two facilities, however. We focused a little bit in the questioning on the incinerator issues and recognizing there are a lot of things that would have to have occurred for there to be an accidental criticality, I think we always need to think contextually, historically that in terms -- and this predates the NRC -- it really goes back to the AEC, but the one instance of an individual worker being killed in a facility was, in fact, in a fuel cycle facility, United Nuclear Corporation, in Charleston, Rhode Island back in, I believe it was 1963. So these things really do happen.

In the briefing materials it spoke not only of the issue of the incinerator but six events involving loss of criticality safety controls, four events between June and August of `04 regarding loss of criticality, safety controls and failure to follow procedures. In February 2005, an additional three criticality control events.

So there's a pattern here. And it is a concern and it underscores my -- the issue I raised earlier in that is not having a degree of comfort -- and I appreciate the comments that you all made -- about not having a degree comfort that the licensee is focusing on these issues in a determined way from senior management to make sure that these issues are addressed in the long term and making sure that they aren't repeated.

MR. TRAVERS: Yes, it is a very good question. And the most recent example of our own coordination and focus on this would be a meeting that we had after the most recent event was identified, the one, Commissioner, that you just made mention of.

Marty Virgilio headed that meeting. We talked about the facility and particularly about criticality safety controls and their inability to bring together a program that has been fully effective in assuring those controls.

You are absolutely right. These are areas that are of principle importance in the safety sense at a fuel cycle facility like Westinghouse. So we are getting from Westinghouse management a commitment to up the ante on their own involvement and oversight in these areas.

We think they are beginning to do that effectively. But results are the bottom line. And we need to be focused in our inspection activities on directing our resources in the direction of putting eyes on those activities and ensuring that they are being carried out effectively.

MR. STROSNIDER: If I could, I'd just like to add to that. We did -- in looking at operating experience, we were also looking at things that were going on at the hematite facility with some criticality concerns there in their clean up. And as a consequence of that, one of the meetings that we've had is with corporate level Westinghouse, asking them from the corporate level what they're doing to influence management at the sites.

And so we had that meeting here at headquarters. And we had corporate level management come in to discuss that. So we looked at that from a broader perspective.

And they came in and they presented their program. And they presented the actions they were taking. And I think as Bill has summarized, the thing now is to see if it really translates into the kind of results that we would expect.

COMMISSIONER MERRIFIELD: Okay. I appreciate that.

Going to Baxter, I think it's -- and we don't need to go into detail. I see that there was a successful ADR mediation. I've been a long-standing -- a very strong supporter and sponsored that here at the agency. I'd be interested at a later time to get more detail about how that worked as part of my own interest on ADR.

MR. COLLINS: Yes, we've also performed it in the reactor area twice. So we can update you on that also.

COMMISSIONER MERRIFIELD: Good, good. I think the issue here goes to the very bottom line issue, workers utilizing unwritten procedures to defeat safety interlocks, allowing access. Had they not been stopped, if one of them, I guess, hadn't been wearing the appropriate alarming equipment, could have each had exposures of 450 rad, which may have been lethal. I mean it doesn't get any more serious than that.

And at the end of the day, it is very fortunate that those workers did not have -- did not encounter that issue. And were ultimately not -- did not suffer that fate.

But, again, we could, you know, the Commission -- those of us on this side of the table could have been up in front of a Congressional committee explaining the processes and procedures that we have as a Commission to avoid these kinds of things from happening. And if hadn't been prevented, we would have had to explain why they hadn't been prevented.

So I appreciate again the comments of the commitment of the licensee that has been made to our staff. I have to say as an individual member of this Commission, that is ultimately responsible for answering to Congress about the activities of our licensees, I do not feel sufficiently informed by these licensees and others, by the senior management and their commitment.

If I got called up to Capitol Hill, I don't feel at this point I would be in a position to answer those questions the way I should. And I think it is the responsibility of those licensees to engage more directly with the Commission in that regard.

Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield.

Commission Jaczko?

COMMISSIONER JACZKO: I agree with a lot of the sentiments of Commissioner Merrifield. And one of the things that seems

almost a common theme through a lot of these incidences, if we were looking at these if these were reactor or power facilities, these would be things that would fall into the crosscutting areas. That aspect would be the -- right, under the Reactor Oversight Program, these are the human performance issues. They are safety culture issues.

So my question is what do we do on the materials side to start, you know, are there things in the inspection program that we specifically look for? Inspectors look for human performance problems? For safety culture problems? For these kinds of things?

Or is that infrastructure not there right now?

MR. TRAVERS: Well, we definitely have an infrastructure in inspecting -- I'll speak for fuel cycle facilities, we have inspection procedures that actually have been informed by ROP. We don't have an ROP in place at the moment. Our licensees early on were rather enthusiastic about moving in that direction.

But given a number of other activities like the integrated assessment, they asked if we could postpone moving in that direction and slow the pace of the evolution of our program in the direction of an ROP-like process for fuel cycle facilities.

Having said that, however, we do have an infrastructure established and an inspection program that is rather specific as to what we look at. Of course, it can be adapted depending upon the issues that are identified at any particular point in time.

COMMISSIONER JACZKO: Do you specifically look at -- I mean is there a part of it that looks at some of these human performance and safety culture issues?

MS. ULLRICH: I'm Betsy Ullrich. I'm a Senior Health Physicist in Region I. Good morning.

The materials program does have inspection procedures. And my personal feeling is they are heavily weighted towards looking at human factors because that's the bulk of how materials actions take place. Most of it is not widgets and items that have engineering characteristics to it. So a good deal of our inspection is based on looking at human factors.

COMMISSIONER JACZKO: Thanks. I mean I guess just to follow up, and maybe briefly if you can answer this, what do we need to do then to get the licensees to improve on those areas of human performance?

You know I mean I think, Bill, you said one of the things they're doing at Westinghouse, they relied on some 61 or 81 -- the number you said -- human performance steps to prevent this criticality problem.

And now they're going to move to some more engineered solutions.

So what do we need to do, you know, over all of these things to get these licensees to maybe think more about the safety culture and focus on that more?

MR. TRAVERS: Well, I'll say a few words and maybe then Sam would like to add to it.

I think what we're doing is exactly the right thing to do. And that is engaging management when these issues arise, laying out our own expectations, the importance of these areas to be corrected.

And what they have been doing, in fairness, is enhancing their oversight from a corporate level and a management level. And laying out for us in meetings exactly what they intend to do in some detail. We've had opportunities to do that on several occasions.

Now having said that, the proof is in the accomplishment. And we're in a stage, at least in the fuel cycle facilities that I've addressed, in confirming the effectiveness of those actions and intentions. I think we've got a very good view of how comprehensive they intend to be in their actions. The proof is in carrying out the inspections that evidence that.

MR. COLLINS: Yes. That's an excellent question. In the case of Baxter, I believe we have at least three tools that focus us not only outward towards our licensees in Agreement States but inward towards providing access for the staff to be successful in this area.

Inwardly, we're looking at enhancing training and in enhancing the procedures that our inspectors use. And that's our role as managers to provide those expectations.

Outwardly, we have the Information Notice, and we can provide these documents, that is dated October 26th, 2004, that goes

through the AIT lessons learned and the expectations for the industry in this area as well as the Temporary Instruction, which is being implemented in a practical sense, as you will.

The licensees have access to this information. It's public information. But we'll verify their response to these issues in concert with the TI.

The lessons learned report, which we initiated in Region I, was meant to look both at ourselves and at licensee performance. That also links to these other two documents.

I can tell you coming in to the materials area, that it is not quite as sophisticated. Perhaps we would know that. We would expect that as the reactor programs. And it is much more fragmented as far as the industry is concerned. So there is no one point of contact like NEI, for example, where we could initiate these types of activities. So it takes piece by piece.

I think Paul's group in State Programs has a large role here dealing with the Organization of Agreement States, for example, as well as looking to the states themselves to be accountable for the implementation of these actions.

COMMISSIONER JACZKO: Thanks.

COMMISSIONER McGAFFIGAN: Mr. Chairman, could I ask one question for the record? I don't want an answer but could you tell us for the record the inspection frequency at some of these facilities? Large irradiators, manufacturers, and distributors, fuel cycle –

MR. REYES: We have very precise procedures, very prescribed –

COMMISSIONER McGAFFIGAN: et cetera. Because I'd like to -- and whether we meet our goals.

And as Sam said, we have a very large number of Agreement States that have responsibility for the safety at these facilities. And what their goal -- IMPEP probably looks at this. But there probably isn't a fixed number.

And I know in some cases, states get behind on inspections. Hopefully they don't -- it doesn't get -- it's risk informed in the sense that people don't fall behind on their large cobalt irradiator inspections. If they're going to fall behind somewhere, it is somebody that doesn't have any sort of risk significance to it.

MR. REYES: We will get you the frequency. It is risk informed, and every region gets an IMPEP, remember that. And in the operating plan and in the IMPEP, the frequency of the inspections, to make sure they are being done on time, is probably the measure of success.

MR. COLLINS: Yes, Commissioner, I'm prepared for that. The irradiators are every two years if I remember that right, Betsy. However, in the case of Baxter, it was much more frequent because Region II, who had the program before they were consolidated in Region I, inspected that facility at every reload of the sources. So it was at least every year. So it's not a matter of --

COMMISSIONER McGAFFIGAN: That was because of previous problems?

MR. COLLINS: Yes.

COMMISSIONER McGAFFIGAN: Okay.

CHAIRMAN DIAZ: I see Paul edging towards the microphone.

MR. LOHAUS: Thank you, Chairman.

With respect to the states, Commissioner, we use the same frequencies that NRC uses that are set out in our manual chapter Risk Criteria. We expect the states to meet that.

CHAIRMAN DIAZ: Okay.

MR. LOHAUS: What we find in many cases is that the states actually conduct more frequent inspections than NRC does. But that's their preference. But we do hold them to our standard, if you will.

COMMISSIONER McGAFFIGAN: Okay. Thank you.

CHAIRMAN DIAZ: But I think the corollary of this is have we lately reviewed in a risk-informed manner whether the frequency is appropriate.

MR. COLLINS: And content of the inspection.

CHAIRMAN DIAZ: That's right.

MR. COLLINS: It's not just being there. It's asking the right questions.

COMMISSIONER McGAFFIGAN: It's being there and asking the right questions, right.

CHAIRMAN DIAZ: All right. Thank you, Commissioner Jaczko.

I just think I'm going to do one thing in here because we've already covered most of the issues. Let me go back to fissile material and criticality. One of my favorite issues.

Really the bottom line is that in all of these facilities, the key issue is fissile material control and accountability. So we do not even approach any of these issues of criticality.

We put the issue of criticality at a very high threshold. You know so fundamentally the message to our licensees is that fissile material control in our country, that every step of the process, which is a one-track issue, needs to be at the very top of the list so we don't even have to talk about criticality. I mean it just really makes me nervous even talking about it.

If you take the same issue and then put it into Baxter, it goes down to the human factor on the issue of control and accountability applied toward human factors that are going there.

I mean this industry for many years, okay, -- and I'm really thinking back when I was a child, you know. People did not take interlocks very seriously.

Those times are over, okay? And so double interlocks, interlocking interlocks, okay? So you can't, you know, you cannot really go through the door. Those are the kinds of things that for the high-risk areas, like, you know, million curies of Cobalt 60 are issues.

And I think that, you know, our inspections need eventually to go to the point of are we really, you know, having the right level of control and accountability. Whether it is the materials arena or whether it is the fissile arena.

And with that, I am going to, you know, see if my fellow Commissioners have a final comment? And if not, I want to thank the staff. I think, you know, really I blame myself. I would like to have done this for two sessions and really had a better opportunity to castigate the staff --

(Laughter.)

CHAIRMAN DIAZ: -- I mean to actually discuss with the staff.

MR. REYES: We'll plan accordingly for next time. I think it is a good idea. We have plenty more information to discuss with you and the time is limiting it. So I think it is a good idea to think about the structure.

CHAIRMAN DIAZ: I want to thank the staff and all that support the senior managers to get you here. I know there is a tremendous amount of work that is not seen but actually comes slowly and surely together. We do appreciate the efforts.

And with that, we're adjourned.

(Whereupon, the above-entitled meeting was concluded at 11:45 a.m.)

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