UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BRIEFING ON RESULTS OF AGENCY ACTION REVIEW MEETING

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ROCKVILLE, MARYLAND

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THURSDAY,

MAY 15, 2003

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The Commission met in open session at 9:30 a.m., at the Nuclear Regulatory Commission, One White Flint North, Rockville, Maryland, the Honorable Nils Diaz, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

NILS DIAZ	Chairman of the Commission
GRETA J. DICUS	Member of the Commission
EDWARD McGAFFIGAN	Member of the Commission
JEFFREY S. MERRIFIELD	Member of the Commission

(This transcript produced from electronic caption media and audio and video media provided by the Nuclear Regulatory Commission.)

STAFF AND PRESENTERS:

WILLIAM TRAVERS, EDO

RICHARD WILLIAM BORCHARDT, Acting Deputy Director, NRR

WILLIAM KANE, DEDO

THOMAS BOYCE, NRR

CYNTHIA CARPENTER, NRR

MARGARET FEDERLINE, NMSS

JIM DYER, NRC Region III Administrator

JOHN McGAHA, President, Entergy Operations, Inc.

JAMES RICCIO, GreenPeace

HUBERT J. MILLER, NRC Region I Administrator

LUIS A. REYES, NRC Region II Administrator

ELLIS W. MERSCHOFF, NRC Region IV Administrator

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

(10:24 a.m.)

CHAIRMAN DIAZ: Good morning. You should notice that the microphone is very close to me, and it's for a very good reason. I am going to rely on my fellow Commissioners today to give you all a very hard time, and I will sit and enjoy it from this side.

Anyhow, as you know, we're meeting to look at the Agency Review Meeting. We hold this every year to evaluate how the agency is doing, how the processes are moving forward, how do we measure success, how do we deal with deficiencies.

We will also be hearing from external stakeholders, and we appreciate that.

The Agency Review Meeting is one of the tools we use to measure and to improve regulatory effectiveness. I believe that the reactor oversight process, which the NRC started just a short few years ago, provides part of the foundation for a risk-informed and performance-based regulatory program.

Risk-informed regulation can, and should, contribute to all of the things the agency does during oversight, all of the things we do in many, many areas, and I think that we're slowly doing that. But I am satisfied that the progress is sound and is a good basis.

Some of these processes that we have put in place, including reactor oversight, will continue progressively to lead to more safety-focused regulation, which after all is what we want to do. And it will enable greater focus in the operation and maintenance of nuclear power plants.

The review meeting is part of the oversight process. Like I

said, it's one of the many tools that we use to assess the performance of our licensees, and also to assess, how good are we doing our regulatory processes?

And unless my fellow Commissioners have any comments, I'd like to stop trying to talk and pass it to Mr. Travers.

DR. TRAVERS: Thank you, Chairman. Good morning to you and the Commission.

Just a few weeks ago, the NRC senior staff held our Third Annual Agency Action Review Meeting in Annapolis, and the AARM, as you know, is an integral part of our reactor oversight process. The meeting itself is conducted to achieve the objectives outlined in Management Directive 8.14, which include, but are not limited to, reviewing agency actions that have been taken for plants with significant performance problems, confirming that the ROP is meetings its goals and objectives through annual self-assessment, and to ensure that any industry trends are appropriately identified and acted upon.

And as you know, we conduct the AARM to review the performance of specific nuclear power plants and to assess whether or not the activities that we have developed in response to that performance is appropriate.

The ability to make a reaffirmation of our current direction at the AARM is possible because the new reactor oversight process, we believe, is a more predictable and open continuum of reactor assessment over the course of any given year. Performance indicators and inspection findings are posted quarterly on the web, and assessment letters that describe the staff response to plant performance, based on the action matrix, are issued when

the conclusions are reached.

We still allow, however, for the possibility to change the staff's current or planned actions based on our discussions at the AARM.

Today's briefing will include a discussion of the results of the power reactor industry trends program described to you in SECY 03-0057 and the ROP self-assessment described to the Commission in SECY 03-0062, both of which were issued last month.

Although the AARM is a venue to discuss the performance issues at all facilities, it includes fuel cycle and other materials. None of the fuel cycle or materials facilities met the criteria for discussion at our 2003 AARM.

We have, however, today prepared a brief presentation regarding the new and improved performance review process for materials licensees. This being only the third AARM, the process is still relatively new, but we believe that the ROP has allowed the agency to better focus our resources and to identify significant performance problems at plants.

That is not to say that unforseen issues won't or can't arise. Certainly, an example are the events associated with Davis-Besse. However, the agency response to this issue, I believe, demonstrates the inherent flexibility in the reactor oversight process to address emerging issues. Of course, the staff plans to enhance the ROP based on the lessons learned, and we've discussed our plans with the Commission.

Finally, I should note that stakeholder involvement, both internally and externally, continues to be strong, and we intend to utilize that involvement to continuously improve the reactor oversight program moving

forward.

Now let me introduce the people at the table. In addition to Bill Kane, my Deputy for Reactor Programs, Bill Borchardt is the Acting Deputy Director of the Office of Nuclear Reactor Regulation. Tom Boyce is a Senior Project Manager in the Inspection Program Branch in NRR and is here today to discuss the industry trends program.

Cindy Carpenter is the Deputy Director of the Division of Inspection Program Management, and she is here to present the annual ROP self-assessment results. Margaret Federline is here as the Deputy Director of the Office of Nuclear Materials Safety and Safeguards and will briefly discuss the process improvements for assessing materials facilities.

Jim Dyer is the Regional Administrator, Region III, and he's going to provide a brief update on Davis-Besse issues. Mr. Dyer will return to the table this afternoon in our session to discuss specific plant performance issues in Region III that meet the discussion criteria for the AARM.

Davis-Besse is being discussed this morning and separately, because it is under the manual chapter 0350 process and outside of the auspices of the action matrix.

Mr. Dyer this afternoon will be joined by his Regional Administrator counterparts who will discuss specific plants in their respective regions.

And with that introduction, let me turn to Bill Borchardt.

MR. BORCHARDT: Good morning. Slide 3, please. Dr. Travers covered most of the information on this slide already. I'll just point out that the four discussion plants for discussion this afternoon were those plants

that were in the multiple repetitive degraded cornerstone column at any time during the assessment year, which was calendar year 2002. Those four plants are Indian Point 2, Oconee 1, Point Beach 1 and 2, and Cooper.

Tom Boyce, following my presentation, will give an overview of the industry trends program, and then Cindy Carpenter will be discussing the ROP self-assessment, and then Margaret Federline to discuss the materials facilities.

Next slide.

The activities leading up to the conduct of the Agency Action Review Meeting began with the end-of-cycle meeting in which each and every plant that is addressed under the Reactor Oversight Program is addressed. The end-of-cycle meetings are chaired by the Regional Administrator, with participants from the program offices.

The end-of-cycle summary meetings are meetings of specific plants based upon the ROP action matrix column. These are chaired by the Regional Administrator and NRR and are plants that are in the multiple repetitive degraded cornerstone column, in the degraded cornerstone column, or those plants that have substantive cross-cutting issues.

That resulted in 19 plants being discussed as part of the end-of-cycle summary meeting. Following those meetings, annual assessment letters are issued to each licensee. Those meetings -- those letters, I'm sorry, document the planned inspection activities for the next year as well as the results of the end-of-cycle assessments.

Annual public meetings are held with each licensee following the issuance of the annual assessment letter. This year, because of security

concerns and the national threat status, a number of those meetings had to be rescheduled, because those that were held commonly in the visitor's center type of buildings were closed because of the threat condition that the nation was under. But they have all been rescheduled and conducted by this time.

All of the preceding activities result in the conduct of the Agency Action Review Meeting, with the four plants that were discussed as well as the status of Davis-Besse.

I will now turn it over to Tom Boyce for a discussion of industry trends.

MR. BOYCE: Good morning, Commissioners. As Bill mentioned, I'm Tom Boyce of the Inspection Program Branch of NRR, and I'm presenting the industry trends portion of this briefing. I'll provide background and an overview of the industry trends program, results for fiscal year 2002, and discuss where we're going with the program.

Next slide, please.

As background, improving industry trends contributed to the NRC's decision to revise the reactor oversight process in 1999 and early 2000. And about the same time frame the NRC established a new measure for the performance goal of maintain safety as part of the NRC's strategic plan. That measure was no statistically significant adverse industry trends in safety performance.

The NRC reports the results for this measure to Congress annually as part of the NRC's Performance and Accountability Report. The staff currently uses a set of indicators developed by the former Office of AEOD for this reporting.

In early 2001, NRR initiated a formal program to monitor industry trends, and has provided its third annual report on the industry trends program to the Commission last month in SECY 03-0057.

Next slide, please.

The industry trends program, which we have termed the ITP, has two purposes. The first is to provide a means to confirm that the nuclear industry is maintaining the safety performance of operating power reactors. The second is by clearly demonstrating that safety performance to enhance stakeholder confidence and the efficacies of the NRC's processes.

The NRC provides oversight of individual plants using the reactor oversight process. The role of the ITP is to complement the ROP by providing the big picture of industry-level performance. When viewing this big picture, should any adverse trends be identified, the staff will address the issues as appropriate using existing NRC processes for addressing generic issues.

These are the generic communications process in the Office of NRR, and, for issues that require longer term analysis, the generic safety issues process in the Office of Research.

Next slide, please.

For fiscal year 2002, no statistically significant adverse industry trends in safety performance were identified using the current set of indicators. As discussed in previous reports to the Commission, the staff is currently collecting data for new indicators for each cornerstone of safety. These indicators are derived by aggregating the plant-level data submitted by licensees for the 18 performance indicators in the reactor oversight process.

However, since the ROP was implemented in April 2000, there is not yet sufficient data from the ROP to provide long-term trending information. Nonetheless, based on a review of the data submitted to date, the staff did not identify any significant short-term issues using the ROP indicators.

For one of the existing indicators -- accident sequence precursors -- although the long-term trend is improving, the staff has identified a short-term increase in the total number of precursor events and conditions since 1997.

As the initial reviews of the individual ASP events are completed in 2003, the staff will investigate the apparent increase in accordance with its industry trends process.

In general, this process involves an analysis of the supporting data to determine the factors and causes contributing to the increase in the indicator and an assessment of the safety significance of any issues that are revealed from the analysis. We will then formulate the appropriate agency response based on the safety significance of the issues.

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In general, the NRC and industry seek to prevent significant events and conditions from occurring. The NRC uses its industry trends program to monitor conditions with this goal in mind. Nonetheless, events such as those revealed by the Davis-Besse vessel head degradation remind us of the limitations of the indicators in the industry trends program.

We are working to develop the ITP to help address those limitations to the extent possible. We are working to incorporate additional operating experience information from several sources. We are participating

in a group forum to address deficiencies in handling operating experience information identified by the Davis-Besse lessons learned task force. Research is updating information for equipment reliability studies, and we are considering how to monitor and apply foreign operating experience.

The staff is developing additional indicators of performance. I had previously mentioned the development of additional indicators based on the plant-level indicators in the ROP. In addition, NRR and Research are jointly developing an overall indicator for the initiating events cornerstone based on the most risk-significant initiating events.

For this indicator, we just briefed the ACRS earlier this month on the concept in our plans, and no significant issues have been identified.

Next slide, please.

Some of the indicators appear to show that the industry could be reaching an asymptote of performance. To help establish a threshold for performance, the Commission provided guidance to the staff in an SRM in August 2001 to develop risk-informed thresholds for indicators as soon as practicable.

NRR is continuing to develop these thresholds, although resources for risk development have been focused on the new initiating events indicator and the mitigating systems performance index for the ROP, rather than on developing thresholds for the current indicators of initiating events and mitigating systems.

COMMISSIONER MERRIFIELD: Mr. Boyce, just a clarifying question. For the average person on the street who might be reviewing this on video streaming, what do you mean by an "asymptote of performance"? I know

what that means, by the way, but put that into plain English, please.

MR. BOYCE: Well, I'll try an analogy, and I hope it works. If you have a graph that slowly declines in performance but appears to level out, that would be an asymptote. The analogy would be something like the Allegheny Mountains washing towards the Piedmont Region, where you just have a gradual leveling out of the land.

COMMISSIONER MERRIFIELD: Very good.

MR. BOYCE: The staff is seeking -- I'm on the second bullet of the last slide in my presentation. The staff is seeking improvements in data collection and reporting by industry.

For example, Research coordinated with NRR to save the agency nearly $500,000 per year by consolidating coding of licensee event reports, and the staff is working with industry to develop a consistent set of data reporting standards for reliability and unavailability that would encompass the needs of the NRC, INPO, and common PRA practices.

Finally, in previous Commission papers on the ITP, we have discussed the development of an overall indicator for plant performance. This indicator is in SECY 03-0057 and shows the number of plants in each column of the NRC's action matrix over time.

The staff is developing a new performance measure based on the number of plants in the multiple repetitive degraded cornerstone column or above. This measure would be implemented as part of the NRC's budget and performance plan, more commonly known as the blue and green books.

This concludes my portion of the brief. I will now turn it over to Cindy Carpenter for the self-assessment of the ROP.

MS. CARPENTER: Thank you, Tom.

I'd like to address the results of the self-assessment of the third year of the reactor oversight process.

This self-assessment was reviewed at the Agency Action Review Meeting to affirm that the reactor oversight process is supporting the NRC's performance goals, and also that it was effective in meeting its program goals of being objective, risk-informed, understandable, and predictable.

The ROP self-assessment was performed in accordance with inspection manual chapter 0307, and that is the reactor oversight process self-assessment program. The data for this self-assessment was obtained from a number of diverse sources, to ensure that we had a comprehensive, integral best assessment.

The data sources included the 68 self-assessment performance metrics that are included in the manual chapter, and also included recommendations from special task groups such as the Davis-Besse Lessons Learned Task Force, and the Significance Determination Task Group.

Also, the Office of Inspector General -- there was an audit of the SDP it includes from that, and also the Advisory Committee on Reactor Safeguards. It also included comments from external stakeholders, and two of those are with us today and will be on the next panel. It also included respondents from internal surveys. There were 236 responses to an internal web-based survey.

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Overall, the reactor oversight process supported the NRC's performance goals. It also met its overall program goals, and it was effective

and appropriately focusing resources on significant performance issues in calendar year 2002.

Therefore, we believe the plants receive the appropriate level of oversight commensurate with their performance. And as a result of feedback and lessons learned, we continue to improve various aspects of the reactor oversight process.

In the 68 performance metrics that were reviewed as part of the self-assessment of the program, the majority were met. However, we noted that nine of those metrics were not met, and we are aggressively pursuing improvements in each of these areas.

Although the responses to the internal and external surveys were generally favorable, some of the stakeholders believe that the ROP should have identified the vessel head degradation at Davis-Besse, and that the significance determination process has not been effective in that it was complex and it is not timely.

This mixed message is a change from previous years where the responses were more positive. Although we considered the ROP to be effective, the staff did not anticipate the aggressiveness of the corrosion process at Davis-Besse. Therefore, the 51 recommendations in the Davis-Besse lessons learned report have been reviewed and will be incorporated into a number of our processes.

And also, the recommendations from the SDP task group are being integrated into the SDP improvement initiative.

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Self-assessments were performed in each of the four

program areas of the reactor oversight process, and, that is, performance indicators, the inspection program, the significance determination process, and assessments.

In the performance indicator program, we continue to work closely with our stakeholders to improve the performance indicator program, and our own Research devoted significant resources to an intensive effort with stakeholders to develop and pilot risk-informed replacements for the safety system unavailability indicators.

This is called the mitigating system performance index, and it's referred to as the MSPI. It was piloted by 11 licensees last fall, and it ended in March. The pilot, however, identified a number of technical and implementation challenges, and these will be reviewed before deciding on implementation.

We also continue to work with stakeholders to improve the scrams of loss of normal heat removal performance indicator. Survey responses in this area indicated that the performance indicator program is viewed as providing objective and useful information regarding licensee performance, but it also provided the perception that the indicators are lagging and that they may not be effective in identifying significant performance problems.

This negative perception comes from one of the performance ROP self-assessment metrics in the PI area, performance indicator area, not to be met.

Going forward, we will continue to improve the performance indicators by reviewing the results of the mitigating system performance index

pilot in determining whether it should be implemented, and also work on focused initiatives for other indicators, including the initiating event cornerstone and the barrier integrity performance indicators as indicated by Davis-Besse lessons learned.

Next slide.

We continued to improve the inspection program during the third year of the ROP. For example, to address concerns regarding the consistency and the adequacy of documenting inspection findings. We issued a revision to inspection manual chapter 0612, which is the power reactor inspection reports. Overall, we've received positive feedback in this area.

Most importantly in the inspection area, though, we completed the baseline inspection program in all plants in calendar year 2002, but we did experience some resource challenges last year, and these resource challenges did persist into this calendar year.

We also performed a review of each baseline inspection procedure to identify if changes were needed to individual procedures, and all of our self-assessment metrics are met in this area.

Although we don't believe that fundamental changes are needed to the inspection program, the Davis-Besse lessons learned recommendation showed us the need to enhance the inspection program to allow for better follow up of long-standing issues, review generic communications, integrate operating experience, and the development of specific guidance to inspect boric acid control programs.

We have initiated development of these program changes to address these areas.

Another area that we recognize that we need to address is better integration of the physical protection cornerstone as a result of the changes in the safeguards area. We need to revisit and revise the inspection procedures, the performance indicators, and a significance determination process in this area, and we will be working with the Office of Nuclear Security and Incident Response in the next fiscal year to revise these to reflect the new requirements.

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We also continue to make progress on improving the significance determination process. To address the concerns from the previous ROP cycle and self-assessment, including timeliness and the complexity of the SDP, we developed and issued an SDP improvement initiative and task action plan. This was a management tool to identify and track needed improvements to the SDP program.

We also continue to benchmark the Phase II notebooks. Approximately 60 of those notebooks are now complete, and the remaining notebooks will be completed by the end of this fiscal year.

In calendar year 2002, and continuing into this calendar year, we have developed and issued enhancements to the SDPs, and this includes the add power SDP, the emergency preparedness significance determination process, occupation radiation safety, and the public radiation safety SDPs.

We are also continuing work on existing SDPs, such as fire protection, shutdown, and containment, and the development of new SDPs for steam generator tube integrity and spent fuel storage.

In response to concerns that were raised by internal

stakeholders about the complexity of the Phase II process, and the audit by the Office of the Inspector General in this area, the SDP -- an SDP task group was formed to conduct an independent review of the SDP.

Although the task group concluded that the SDP succeeded in meeting the reactor oversight process objectives, they identified a number of recommendations to improve the overall effectiveness of the process. We have accepted all of their recommendations and have integrated them into the SDP task action plan for action.

The results of the self-assessment survey in this area indicate continuing mixed concerns about the effectiveness of the SDP. The SDP metrics and feedback from internal and external stakeholders have indicated a continuing challenge to improve the overall efficiency of the SDP, and the complexity of the Phase II notebooks.

Four of the self-assessment metrics in this area did not meet their established goals, including timeliness and complexity. And as a result, we're going to continue to implement the SDP improvement initiative and task action plan, which now incorporates all of the recommendations from the task group and also addresses the OIG audit recommendations.

It includes completing the bench marking of the Phase II notebooks, developing the recommended plant-specific pre-solved tables, developing the recommended -- continuing to issue and revise SDPs for fire protection, containment, and shutdown. And we also intend to work aggressively to improve SDP timeliness and understandability.

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Assessment. We continued to make improvements to the

ROP assessment program during the calendar year based upon lessons learned from the first two and a half years of the ROP. These are reflected in the latest revision that was issued to inspection manual chapter 0305, which is the operating reactor assessment program.

Some of the significant accomplishments in this area include adding criteria for exiting the multiple repetitive degraded cornerstone, clarifying guidance on the criteria and processing of old design issues, and clarifying the thresholds for identifying substantial cross-cutting issues.

All of the self-assessment metrics in this area were met, and the feedback from internal/external stakeholders were generally positive. So going forward, we intend to continue to evaluate and incorporate lessons learned.

For example, we are evaluating adjusting the public meeting frequency for plants that were in the licensee response column of the action matrix for the entire assessment period. We also intend to evaluate the treatment of substantial cross-cutting issues and enhancing our oversight of shutdown reactors with performance problems based upon lessons learned.

Next slide.

As I mentioned earlier, the ROP self-assessment was prescribed in inspection manual chapter 0307, the reactor oversight process self-assessment program. This process was formalized in December to improve the efficiency and effectiveness of the ROP self-assessment program.

There are 19 overall ROP performance metrics. Four of these 19 also did not meet their established criteria. This was generally due to the negative perceptions on the part of some stakeholders regarding the

inability of the ROP to detect declining performance at Davis-Besse and the concerns that I noted in the SDP area. So we intend to continue to work on these with our public stakeholders.

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The total staff effort expended for the ROP in fiscal year 2002 continued the downward trend that we saw during the first two years of implementation of the reactor oversight process. A comparison of fiscal year 2002 to 2001 showed a reduction of nearly 10 percent in the total staff hours expended for the ROP. Most of these reductions occurred in the baseline inspection activities.

Although some of these reductions may have reflected efficiency gains, there were a number of events during the calendar year inspection cycle that diverted inspection resources and challenged the staff to complete the required baseline inspections.

Some of the challenges were due to a diversion of inspection resources to unforeseen emerging events and external demands, such as the inspection effort required to address Davis-Besse issues, continued public outreach in a number of facilities, and emerging issues in the safeguards area.

To accomplish the baseline program, the regions implemented a number of coping strategies to address these challenges, such as performing a minimum procedure sample size, providing additional contractor support, and inspection assistance from NRR.

These challenges do continue into this calendar year, and we are aggressively working with the regions to support the programs. We have implemented a number of short-term and long-term improvement strategies to

address the challenges, such as the use of double encumbering the resident inspector position and to enhance knowledge transfer, and we have updated future budget models, based upon experience from the previous inspection cycles.

With respect to resident inspector demographics, the 2002 demographics show a stable or improving trend in nearly all of the resident inspector and senior resident inspector statistics. However, as I mentioned, some challenges were identified, including how to minimize the less than full staffing of resident inspector site coverage caused by resident inspector transfers.

Last slide, please.

Overall, we believe that the reactor oversight process is meeting the agency's four strategic goals. The program is also meeting the objectives established by the reactor oversight process program by being more objective, risk-informed, understandable, and predictable than the previous program.

The self-assessment demonstrates that through the reactor oversight process plants are receiving the appropriate level of oversight commensurate with their performance. However, the vessel head degradation discovered at Davis-Besse has raised some significant concerns with the staff and some external stakeholders.

And as a result of this, we intend to continue to make appropriate changes to the ROP based on implementation of the Davis-Besse lessons learned recommendations. We also recognize that a top priority for the ROP is the continued need to improve the significance determination process,

and we intend to continue to implement the SDP improvement initiative and the recommendations from the SDP task group.

That concludes my presentation. Thank you.

I'll turn it over to Margaret Federline.

MS. FEDERLINE: Thank you, Cindy.

Good morning. Although no facilities met the threshold for discussion in today's meeting, I wanted to briefly discuss the evolution of our performance review process in NMSS. I wanted to start with just a little background to show you the evolution of our performance process.

SECY 98-078 responded to the Commission's direction in the SRM of June 1997 about development of a more formal process for reviewing the performance of fuel cycle facilities and higher-risk materials facilities in preparation for senior management meetings.

Now, as part of this process, staff considered the Arthur Andersen study, which recommended a more objective analysis for reactors in preparation for senior management meetings. Now, this study didn't specifically address the senior management process for fuel cycle facilities and materials, but there were many insights from this study that we felt we could benefit from, including using a more structured and objective assessment process for identifying licensees to be discussed at the senior management meeting.

For fuel cycle facilities and material licensees, the senior management meeting at that time was more informational, and it was not a major contributor for determining action steps to address poorly performing licensees. Performance changes were generally recognized through routine

inspections or special inspections, which were conducted following events.

However, NMSS believed it was necessary to establish a more formalized and systematic senior management screening process which built on the results of our existing processes. The NMSS directorate this time held screening meetings with each regional administrator to review the performance of fuel cycle facilities and materials licensees.

A screening information package was prepared for each facility using standardized performance evaluation templates for fuel and materials licensees. The template guided the staff and explored root causes of poor performance, operational performance, human performance, facility conditions, and engineering design.

However, a major drawback was the fact that this package did not contain screening criteria.

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The Commission issued an SRM in June of 2002 and really has provided good urging and challenging us to improve our processes continually. One item of the SRM directed the staff to propose a process of providing the Commission with annual updates on significant nuclear materials issues, such as overexposures or medical misadministrations or loss of sources, and what the impact of these events were on licensee performance.

Information could be provided in conjunction with the AARM and Commission meeting or through other mechanisms. The Commission also asked us to provide final criteria that we would use to determine which material licensees would be brought to the Agency Action Review Meeting.

Now, candidate criteria were developed based on existing

processes for assessing licensee performance. These included the measures related to the strategic goals and the performance goals, the abnormal occurrence criteria, severity level one and level two violations, and also our inspection program results and technical staff insights on the performance of various licensees.

Now, the final selection criteria were applied by the Director of NMSS in conjunction with the regional administrators, and the final selection criteria consider whether the strategic and performance goals are exceeded, whether action beyond normal inspection and enforcement processes are necessary, or whether other offices would benefit from an exchange of information on the root causes of our licensee problems.

So staff's process really has two major components. One is looking at the performance of licensees or licensee groups, and the second is looking at industry performance trends or major issues that might affect one of our industry groups.

Staff's evaluations are based on aggregated information on performance and operating experience associated with reportable events and generic issues affecting the industry. Licensees who do not meet the criteria that I've just discussed or were not selected are included in an annual report to the Commission.

The annual report to the Commission on performance in the materials and waste arena is prepared in parallel with the AARM, and, in fact, you've just recently received a copy of the report. It includes an elaboration of the strategic plan performance measurement data, our operating experience data, and generic studies.

Now, we believe that this performance program needs to continue to evolve over time. One thing that we would like to do is use risk insights more in evaluating the performance of our facilities, and we plan to do that.

We also want to incorporate inspection findings more directly into our performance assessment process, and we are finding a real value of this process is looking at the facilities from an integrated standpoint and working more closely with the regional administrators, drawing their observations into the process.

This completes my presentation. I'll turn it over to Jim Dyer for a Davis-Besse update.

MR. DYER: Thank you, Margaret.

Good morning, Chairman, Commissioners. At the Agency Action Review Meeting, we discussed the status of the NRC oversight activities at the Davis-Besse facility. As Dr. Travers said, this was a separate briefing from the other plant discussions that we will summarize this afternoon.

Davis-Besse is shut down receiving enhanced oversight outside of the reactor oversight process action matrix, in accordance with -- as directed by a special panel, in accordance with NRC manual chapter 0350.

We briefed the Commission on January 14th of this year on the status of the oversight activities, and my summary of our discussions today builds on this earlier presentation.

On February 24th of this year, the NRC issued a preliminary determination that the reactor vessel head wastage had a high or red safety significance. This determination was made after significant analysis and

discussion with the Office of Nuclear Reactor Regulation and Office of Research concerning the remaining safety margin and potential consequences of the degraded condition.

Although significant uncertainty existed with our analysis regarding the margins remaining, we considered it appropriate to issue a preliminary red significance determination. The performance deficiency resulted in an increase in the risk of reactor core damage to a loss of coolant accident caused either by a rupture of the exposed cladding in the cavity -- in the vessel cavity or a control rod drive mechanism nozzle ejection due to a circumferential crack.

On April 24th of this year, First Energy responded to our preliminary assessment, agreeing with the overall determination and provided specific comments on our risk assessment. We are currently in the process of developing and issuing a final determination.

The manual chapter 0350 panel developed a restart checklist that is a living document used to manage the regulatory oversight activities necessary for Davis-Besse restart. It incorporated the items from the initial confirmatory action letter with the licensee and NRC inspection findings and root cause analysis, extent of condition reviews, and proposed corrective actions, to form a single manageable list. Several emergent issues have been added to the restart checklist as a result of licensee and NRC activities.

To date, a significant amount of work has been accomplished and a significant amount of regulatory oversight work remains until the checklist is complete. When completed, the restart checklist will form a basis by which the NRC oversight panel will make a recommendation to me, the Regional

Administrator, concerning restart authorization.

In accordance with manual chapter 0350, the NRC decision to authorize restart rests with the Regional Administrator, after consultation with the Director of the Office of Nuclear Reactor Regulation and the Deputy EDO for Reactor Programs. That decision will not be made until we are all satisfied that the plant can be restarted and operated safely.

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Should restart be authorized, our enhanced oversight will not stop. Around the clock inspections of restart preparations and startup will occur. Continued manual chapter 0350 panel oversight and direction of an increased inspection program will continue until we are convinced that a more routine oversight is acceptable from a safety perspective.

We expect this enhanced oversight to continue for an extended period and have recently increased the resident inspector budget at the Davis-Besse site to three, or N plus two, for a period of at least two years.

Throughout the Davis-Besse recovery process, we have made a significant effort to actively our stakeholders and public in the manual chapter 0350 oversight process. NRC has conducted over 40 public meetings, mostly near the site, utilizing video, audio conferencing, and transcription to provide as much access and information as we can to as wide an audience as possible.

The meeting information as well as inspection reports and correspondence are also made available at an NRC special web page for Davis-Besse. We have conducted over 20 briefings of federal, state, and local officials, and, as you know from the Regulatory Information Conference and the

earlier Commission meeting on Davis-Besse, Ottawa County has been very active in the restart oversight process.

The State of Ohio has also participated in our inspections and provided valuable input to the oversight process. This level of oversight and stakeholder support has come at a significant cost to both Region III and NRC headquarters offices. In the region, an SES manager, branch chief, and three inspectors are dedicated to Davis-Besse in addition to the resident inspectors.

Within NRR, headquarters managers and staff assigned to the manual chapter 0350 panel spend a significant amount of their time focusing solely on Davis-Besse activities. Additionally, the increased number of inspections, license amendments, technical and risk assessments, allegations, 2.206 petitions, and Freedom of Information Act requests have necessitated a significant reprogramming of NRC resources.

On a short-term basis, we have used coping strategies, including contractor support, reprogramming through the add/shed process, and deferring activities to meet demands. We have obtained support from all areas of the NRC. On a longer term basis, in the FY '04/'05 budget process, we have allocated additional resources to the inspection and assessment planned accomplishment to better account and provide potential support for challenges in the future.

This concludes my presentation. I'll turn it back over to Dr. Travers.

DR. TRAVERS: Thanks, Jim.

Mr. Chairman, that completes our presentation. I'd like to just make one closing comment, make sure that we have clearly articulated one

point. And that is our staff view that our adoption of the new reactor oversight program, in our view, did not contribute to our inability to find the Davis-Besse degradation issues earlier.

Certainly, we have learned lessons, and we are incorporating them into the ROP. But if you've heard some discussion of some views on this subject, you will have heard some views that suggest that the new ROP itself contributed to our not finding these issues earlier. We don't believe that's the case.

CHAIRMAN DIAZ: Thank you, Mr. Travers. In this case, I happen to agree with you, sir.

Now I turn it to Mr. Merrifield. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman. I first want to make a comment, separate and apart from this. I have had the privilege over the course of the last week to lead -- as the lead Commissioner on the TOPOFF exercise that we've been undergoing with other members of the federal family.

And I just wanted to make a brief mention. I think the agency staff who have been involved with this have done an outstanding job. This is something that is not always transparent to the individuals who look at our agency and many of our stakeholders, but I think one of the things that this agency is noted for is the incredible amount of time and effort that go into -- that we take and care we take in making sure that we can do the very best in emergency exercises.

And I would want to recognize a significant amount of staff work to make that a very positive exercise so far.

CHAIRMAN DIAZ: I personally want to thank Commissioner Merrifield for taking care of it. He did a great job.

COMMISSIONER MERRIFIELD: Thank you. Thank you very much, Mr. Chairman.

I've got some questions. I want to go over -- I know we've got a lot of ground to cover today, so I want to cover it quickly. I would ask given that I've got a variety of things that the staff be disciplined, efficient, succinct in its responses.

I'm going to skip the first one as most of that was covered by the last statement that Dr. Travers made. I would agree with the Chairman in my view that the new reactor oversight process is an objective, predictable, and risk-informed approach. And while we had challenges with Davis-Besse, that should not be viewed as a notion to throw out that program, because I think it is a success.

The first question I've got goes to the issue of challenges that we have in meeting the goals of the ROP, and that goes to inspection. One of the concerns that has surfaced and was discussed somewhat today was the concern that many of the evolving issues, whether it's Davis-Besse or Indian Point, have challenged the availability of deployable assets in the regions and in the headquarters to meet the requirements of the ROP. And certainly it does raise a question whether we may have shaved a little bit too close in our efficiencies.

With the challenges of meeting the FY2002 baseline inspection program, and the deferral of some of the inspections from last year to this year, do we have enough deployable assets to meet this year's baseline

inspection program given those factors?

MS. CARPENTER: The answer to that is yes. Right now, what we're doing is we've maximized the use of contractors, and the contractor dollars have been available to us as we've asked for them. So we're using good contractors to assist the regions in this.

The other regions and headquarters are assisting right now in completing the baseline. We have a number of inspectors who are qualified to headquarters -- who have moved to headquarters, and they are still qualified inspectors, and we are using those also.

So we feel at this point in time that we will indeed meet the baseline this calendar year, and with quality and with good inspectors that we have or either available with the contractors. And in the future, though, we've also recognized that there are those challenges out there, and we have also increased the budget in the subsequent years, so that the regions can overhire.

And we've given them other things that they can use also, other tools such as double -- we call it double encumbering, allowing a site, allowing the regions to -- allow an inspector to go out to a site while there's still another inspector out there to take his place. There's a knowledge transfer there, and that will also help us plan better.

So the regions are aggressively managing this. They understand where there's maybe less than full staffing. They understand where they're at with the program. And we feel we will meet the baseline this calendar year also.

MR. KANE: I think in trying to exercise discipline I'll try to keep this brief, but it is a factor going forward in future budget preparation.

We're now in the middle of 2005 budget preparation, and we are accounting for some of the lessons that we've learned.

But I think one of the things that's very important -- it does indicate the importance of the transition of regional inspection staff experience to headquarters, which we believe is very important and supportable. And so that has put us in a position where we were able to compensate, and compensate I think very effectively, for what occurred.

COMMISSIONER MERRIFIELD: I think that's positive. One of the things I think you may wish to consider -- we have tremendous capabilities within headquarters of individuals who have previously been residents and who have previously conducted inspections.

As part of our attempt to capture the knowledge base of our -- of the staff, one of the things we may wish to consider is maintaining those skills through training, so that while they may be working on different programs, they may be working on rulemaking, maybe there's an ability for them for a couple of weeks a year to go out and conduct inspections. So if we do need that surge capability in the event of some challenges, we do have it there.

There have been a variety of folks and some public interest groups who have asserted that the reactor oversight process performance indicators are lagging and have become ineffective at identifying significant performance problems.

In addition, in SECY 03-0062, the staff has indicated that the responses to the internal ROP survey demonstrate that while the ROP performance indicator problem provides useful information, a majority of the respondents do not have confidence that the program is effective at identifying

declining performance or that it enhances public confidence. And I was wondering if you could share with me your views on those and what we are doing to address them.

MS. CARPENTER: We think that the performance indicator program does provide us with good information. The performance indicators provide us with trends. There is something that the staff -- you know, each time there's a scram, there is a trend, and it provides us with information where we can see what's happening with the plant and as they accumulate and as they -- if they trip the threshold.

So we feel that the performance indicator program is contributing to improvements in the industry, and we've seen a couple of the indicators where over the years -- the first year of the ROP there were quite a few performance indicators that went from the green/white threshold. Last year we saw that there were only nine of those that went across the threshold.

So we feel that the industry is doing better in that particular area, and it's one way that -- you know, it's one way that we are monitoring the industry. We also recognize, though, that there are improvements that are needed. Examples of that include the scrams of loss of normal heat removal, where there's a number of frequently asked questions, and we think those numbers of frequently asked questions from the industry contributes to some of this perception that perhaps they're ineffective. And we're addressing that right now.

And then, the barrier integrity performance indicators -- that is one of the action plans from Davis-Besse, and that's one that we intend to aggressively pursue.

COMMISSIONER MERRIFIELD: Just so it's clear, my asking that question -- I personally do believe the performance indicators are a very useful tool, but like any carpenter it is a tool, it has a purpose, and it's not the only tool in your toolbox.

MS. CARPENTER: Exactly.

COMMISSIONER MERRIFIELD: And I think there needs to be a recognition of that.

One of the challenges that has come up in the past year, there has been some concerns raised. We sent -- we invest significant resources in reaching out to the public who live and work at the sites that we regulate. I think that it's critically important that we do that.

One of the challenges, however, is that as a result of the way in which we have created our process for public meetings we may have some circumstances where there may be a multiplicity of meetings with the NRC in a relatively short period of time that might lead some to believe that there's more going on at the plant than perhaps is, in fact, the case.

And I'm wondering if the staff believes it has enough flexibility in scheduling meetings with the public in order to avoid that kind of compounding problem.

MR. BORCHARDT: Yes. I think we clearly have the flexibility. We're sensitive to the issue as well. We're also sensitive to the resource demands on having end-of-cycle meetings for each and every client, even those that are in the licensee response column. So we have under evaluation a number of proposals to try to address that. That's one of the factors that you raised.

I think the staff has the flexibility to change the program and come up with the best overall approach. And we intend to do that over the next cycle.

MR. KANE: This is an attempt to try to balance the public confidence that goes along with those meetings. And as you properly point out, the fact that these are all occurring at about the same time, the annual meetings. And often the meetings will entail a much larger agenda than just simply the performance of the plant.

It will typically go into other areas that we want to make sure that we have people there that can best represent us to answer any questions that the public may have, and that's the challenge that we're trying to deal with. And we would expect to have something coming up to the Commission to point out how we would deal with this in the future.

COMMISSIONER MERRIFIELD: I look forward to hearing from the staff on that. I do think, while maintaining our high level of engagement with the public, obviously we need to have some flexibility in terms of deploying those resources on a yearly basis, so we've got the right balance. And I do -- I look forward to the staff's thoughts on that.

The timeliness of the final significance determination continues to be a challenge. In addition, I note from the survey that we've had of internal stakeholders the results indicate that the staff continues to express skepticism regarding their proficiency in completing the Phase II SDP evaluations. I know we've got efforts underway to address this issue. What's the current status of those efforts?

And I know we've been -- I mean, at least I and I know others

have expressed some eagerness to get this behind us, and I know there's been a lot of desire to do so. Are we there yet? Are we close? Because certainly from my standpoint we really ought to get this resolved.

MS. CARPENTER: It's a complex issue, but we do see so far -- last year the timeliness was about 56 percent -- 56 percent on time, which is 90 days from the date that these are put into the inspection report and discussed with the licensee.

This year, this fiscal year, so far we're around 80 percent. Now we know that that will fluctuate depending upon how long some of these take. We are seeing an improvement. We've issued an SDP active issues matrix.

It's a master listing of all of the issues that are under consideration for the significance determination process, and it's a way of focusing the regions and the program office on which issues need to be moved along.

We have also just issued a revision to the inspection manual chapter to allow the use of greater than green. We have actually used that one time now, and the purpose of that was to when the staff is -- has a lot of uncertainty it is to serve timeliness to put it out into the public domain and say, "Let's talk about it." So we have greater than green, which is also one.

We also recognize that the tools need to be better, and staff is working on these tools -- the containment, the shutdown, the fire protection. Some of these issues have been what has caused us to take so long on some of these. So we are working on that. They're moving along. And like I said, the highest priority is these three SDPs to issue these. So we're seeing

improvement, but we still need to do a better job at it.

And then the complexity, that was part of the survey, and it was very, very low, and we recognize that. And the SDP task group took a look at that, and these pre-solved tables are one of the things that we're looking for to help improve the complexity -- to decrease the complexity in the SDP process, particularly Phase II.

And we've hired some really great SRAs, which they're in the training pipeline right now, which also will help us.

COMMISSIONER MERRIFIELD: It would be my hope that at this time next year we can talk about the successes of the changes that you've made rather than asking more questions about, are we going to get a resolution?

MS. CARPENTER: They're working very aggressively in this area, and it is a top priority for the program.

COMMISSIONER MERRIFIELD: Great. Thank you.

Mr. Chairman?

CHAIRMAN DIAZ: Thank you, Mr. Merrifield.

On a follow up to that question -- I'm not as bad as I sound. I just sound bad. Do you believe that you have taken the necessary actions to have the technical staff that will have the capability to resolve the timeliness and the quality issues on the SDPs?

MS. CARPENTER: I think we do. They've hired the -- each of the regions have their senior reactor analyst, the SRA, the staff here in headquarters has hired several of those also, and so has the Inspection Program Branch. And the training that they provide them is good training.

We have very good people that are in that pipeline; they are very conscientious. And we need to continue with the training, though, of all the inspectors in the field. So I think we do have the tools that we need.

CHAIRMAN DIAZ: Please keep us informed on that issue.

MS. CARPENTER: Okay.

CHAIRMAN DIAZ: I'd just make a comment before I run out of voice. You know, asymptotes are not bad things.

(Laughter.)

There are good asymptotes, and there are some bad asymptotes. The beauty of the asymptotes is that any changes in the slope you can really notice, not little things but the change in slope. The good thing about good asymptotes is that you know you are as good as you can be. You cannot be any better than that.

And with that remark, I am saving my voice. Relying on defense in depth and self-preservation -- I turn it over to Commissioner Dicus.

COMMISSIONER DICUS: Thank you, Mr. Chairman.

I want to talk -- I have a couple of questions on the materials and waste arena. One of them can be answered probably yes or no. The AO report on materials and waste -- I think there are nine events that may be in that AO report. It's supposed to be completed by the second quarter, which is now, by the end of June. Is it on track to be completed?

MS. FEDERLINE: It's my understanding that it is. If it's not, we'll get back to you.

COMMISSIONER DICUS: Okay. I would like to know that. The second thing I want to bring up has to do with the Schlumberger problem

that occurred with an overexposure. And one of the issues with that -- there was a great deal of uncertainty, just how much of an overexposure there was.

And so some cytogenetic testing was done to try to help determine that. And given the fact that cytogenetic testing is certainly a useful tool, it also has to be -- one has to be careful in interpretation of the data that you get. But one of the problems is, depending upon who did the cytogenetic testing, we were getting numbers all over the place.

And in your report of -- in 0060, you say there is a need to have more than one facility available to the NRC for cytogenetic testing within the U.S. We were sending samples outside the country. And that you are working for the additional capability, so that testing results can be compared and verified if discrepancies arise.

So what are we doing with that? Where are we looking to try to increase our capabilities within the U.S.?

MS. FEDERLINE: We're actually looking at some of the universities through our network through the Health Physics Society.

COMMISSIONER DICUS: Okay.

MS. FEDERLINE: You know, we're trying to formulate -- one of the concerns is maintaining an expertise costs money.

COMMISSIONER DICUS: Yes.

MS. FEDERLINE: If you don't need it very often, then it's problematic. So it would be advantageous if we could find an organization that needs to do this for other purposes, and that we're an add-on. So we're trying to go through the network that we have and identify sources. We have other options open to us, I mean -- to do this, and we're exploring all of the avenues.

COMMISSIONER DICUS: Any possibility of when this might be completed, or is it just you're not there yet to be able to say that?

MS. FEDERLINE: We're just not there yet.

COMMISSIONER DICUS: That's fair enough.

Okay. One of the lessons learned from Davis-Besse highlighted issues with incorporating operating experience. And some of the information that's been provided to the Commission discusses bringing operating experience more fully into the ROP and the industry trends program.

So can you tell me a little bit about how that might happen and what is the impediment to moving faster on bringing operating experience into the system that we have before us, or impediments, or are there any, and what do we do?

MR. BORCHARDT: Commissioner, I don't really think there are any impediments. We're moving aggressively on that. We've established an interoffice task force that is studying this. It's headed by Charlie Ader from the Office of Research. It has a Steering Committee made up of myself, Jack Strosnider from Research, and Jim Caldwell from Region III.

And what they are doing is coming up with the attributes and objectives of an operating experience and program, and looking at all of the various interfaces and feedback mechanisms within both the NRC and externally in order to make the most efficient and effective use of operating experience.

And so that's going to go -- they're going to complete their work this summer, and we will make -- implement those changes after that.

Even aside from that, we're doing some things within NRR to

help our efficiency, and we are looking at relocating the operating experience function into the same division that has the inspection program, so that we can make sure that there is very effective and frequent interaction between those two groups, because that's clearly one of the lessons learned, that we didn't have as close a linkage as there could have been. And so we're going to address that even without waiting for the task force.

COMMISSIONER DICUS: Okay.

MR. BOYCE: If I could just add to that. You said how it might be done. In the industry trends program, and in our inspections, what we're trying to get to as a goal is news you can use for an inspector. The hard part is you can overwhelm an inspector with operating experience information, so it's got to be tailored -- a tailored product. That's the goal, and it's part of what Charlie Ader is working on.

COMMISSIONER DICUS: Okay. Thank you.

The next question addresses how well our external and our internal stakeholders are accepting this ROP and being comfortable with it. I think very early on we did have some issues with that. And what is the current status? Is everyone pretty well on board now, or do we still have problems that we need to address?

MS. CARPENTER: I think that external stakeholders, when we looked at the external survey -- and I mentioned that -- that we do see fewer positive responses than we did the last time. And, again, it is the continuing challenges with the vessel head degradation and with the significance determination process.

So we did see a more negative perception that way. One of

the ways we're going to try and address that is the possibility of a workshop this summer to understand concerns and to address these with all of our stakeholders.

Internal stakeholders -- I think there is more widespread acceptance but we won't say that it's across the board. There is still some concern -- can I follow my nose? But when you talk to other inspectors they say that they can -- that within the program they can indeed ferret out when they have issues. So I think there is more widespread acceptance, but there are still some inspectors who still prefer the old program. And we're still working with that.

COMMISSIONER DICUS: Continue to work with that.

MS. CARPENTER: Yes.

COMMISSIONER DICUS: And a final question. I'm only doing -- it's really going to be more of a statement. I think I'll leave it to Commissioner McGaffigan to maybe go into a little bit more detail on his and my concern, and it's N plus one. It keeps surfacing. It surfaced in these papers, and on some of the -- on one slide in particular you say we have challenges with our resources, and then the last bullet says, "But everything is getting better."

I somehow don't see those two bullets as in step with one another. I think you are terribly challenged. Without the N plus one, you're robbing Peter to pay Paul. We're snatching, you know, inspectors from another region and getting the program done.

I noticed you were very careful when you said, "We made our baseline inspections," but you never used the term "with fully qualified

inspectors." Were all of them done with fully qualified inspectors?

MS. CARPENTER: I may need help.

COMMISSIONER DICUS: Or were they almost fully qualified?

MR. BORCHARDT: Well, let me just say the inspections are done by inspectors qualified for the task. They may not be fully qualified. They may be provisionally qualified to do a certain inspection procedure, but we didn't have unqualified people doing inspections.

MS. CARPENTER: When they made a change to the inspection manual chapter 1245 on inspector qualifications, one of the things that they allowed was basic qualifications. And there were certain minimum -- there were certain classes that they wanted the inspectors to take, and then some reading they wanted them to do.

But the purpose of doing that was the people that we're hiring into the program today, we see in the resident inspector demographic in many cases are more experienced than the inspectors that we had eight years ago. In some regions we see twice the experience. They are coming out of the industry. We hire people with SRO licenses from the industry.

And the purpose of making those changes is to use that valuable experience earlier on, but it also says that these individuals are under the close supervision of a qualified inspector, so we don't just let them go out there.

So we feel our challenge is: was the baseline completed with all qualified inspectors? I think that there were basic qualified inspectors also that were out there. But some of this experience that we've been -- the regions

have been hiring is very valuable experience for us, and it was using that also.

COMMISSIONER MERRIFIELD: This is just to clear up an ambiguity, because I'm confused by the answer. Were the inspectors qualified for the tasks for which they were inspecting? I got the answer is yes, but --

MS. CARPENTER: Yes.

COMMISSIONER MERRIFIELD: So it's sort of the equivalent -- like the Army. You have someone that's qualified as a marksman. If you're using him as a marksman you're fine. If they're not fully qualified through basic training, you're not necessarily going to use them for other tasks for which they're not qualified. These folks were qualified for the task --

MS. CARPENTER: Yes.

COMMISSIONER MERRIFIELD: -- for which they were trained.

MS. CARPENTER: Yes.

DR. TRAVERS: But you're quite right. I mean, we have a challenge here, and it's taking quite a lot of management attention to carry out the program and carry it out effectively with the resources we have. And as Cindy mentioned, we're using a number of techniques, and I suspect almost -- I'm sure we're going to have to continue a lot of focus and attention on this area.

MR. KANE: And I would submit that -- and Cindy can go into some more detail here, but I would submit that N plus one shifts the challenge to the Division of Reactor Safety in the regions, which is really going to be the organization, because in a zero sum game you have to get the inspectors from somewhere. And that choice for the most part is going to be from Division of

Reactor Safety in the region.

You also have to look at the issue of operational experience and what headquarters, what NRR is going to do with putting operational experience together. A lot of that would then have to be carried out by the specialist in the Division of Reactor Safety. So the issue is: what is the best way to accomplish this balance? And if we make a big move to N plus one, then we've shifted the problem, I believe.

MS. CARPENTER: And we see that, you know, the -- we feel that we should not go back to N plus one, that as long as we have -- we do have sufficient resources within the program to accomplish the program. So, and as we go forward, we are also very aware of that and have done that.

This is more of the regions are aware of this. It's just a little more of an awareness now, and the regions recognize where they need to be more aggressive in the hiring and in the qualifications of staff. And not only that, but we do allow N plus one with -- when there are exceptions. When a region comes in -- and we have two of those cases right now, at Nine Mile Point and at Davis-Besse, there's a two-year exception out there.

So if the region feels that that flexibility is needed, then it is allowed and granted to them under certain conditions. So we think that the N policy is the right policy for the program. The regions just need to stay with the aggressive hiring practices.

Some of the things that we've put into place now, such as the double encumbering, we feel will really help that, and we just need to, you know, be aware of this and to manage this.

COMMISSIONER DICUS: Okay. Well, I appreciate your

responses. I obviously still remain concerned about the issue. The thought that came to mind is you're trying to saddle a galloping horse, and you can't do that. You've got to stop the horse first, and then saddle it.

Thank you.

CHAIRMAN DIAZ: Thank you, Commissioner Dicus.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Commissioner Dicus did read my mind, so I'll -- this may be more a soliloquy than a question, but I'm just sort of going through some of the information that's here. And the good thing about this agency is that we are transparent, even in our faults.

And I'm not so sure it's N plus one to N, but when we went from N plus one to N several of us did express concerns about whether we were going to actually manage the N. And we haven't. You know, the Davis-Besse site -- I wrote something in late 1999. It wasn't fully captured in the SRM, but I was opposed to the -- going from N plus one to N, because I saw the N plus one as our surge tank. But that wasn't the majority of the Commission.

But I said if we're going to have an N, it should be a quality N, and it should be a hard N, and that there should be senior attention given to this, that people -- I said, "Thus, I would expect N minus one levels for more than a couple of days to be rare, with periods of greater than a week not to be tolerated. Therefore, the staff should provide heightened management attention. This might include a regional weekly or monthly reporting requirement to the EDO on all sites where there are fewer than N inspectors, N qualified inspectors, on the job." That wasn't done, and so this thing sort of

creeps up on us.

I mean, it's particularly embarrassing at a place like Davis-Besse, where for 20 months we had only one qualified inspector. For 11 months, we had only one inspector, and then we had for nine additional months somebody there who was not fully qualified who was a former -- certainly, a very fine person, but a former uranium recovery expert, you know, so he had inspected in-situ leach facilities presumably prior to that, but they are a little different from reactors.

So my sense is that you all have tolerated having one qualified person there. I hope we always have at least one qualified person at the site, but I'm not even sure of that. And for very extended periods of time the data indicate that. The demographic data indicate that, and I don't think we have any data about how often -- for Davis-Besse we happen to have it, but how often we have less than, you know, one or zero qualified inspectors at a site, and how long that's tolerated.

One of the things about Davis-Besse -- you know, that there was a rotation back to the Commission, and it didn't show up in our data. But there was another period at Davis-Besse of two months where there was only one qualified inspector there, because I know he was physically here at headquarters during that two-month period.

So I just find it -- it was predictable that there was going to be a problem. We were told there was going to be a regional surge tank. The regional surge tanks don't exist, as best I can tell. And looking at Region I's data, there were 103 total qualified staff in DRS in April of 2000. In May of 2003, there's 83. We dip to -- the low is 79 in February of 2003.

So, you know, but it was predictable that we were going to overshoot on the down side. I mean, all of these things discussed in Attachment 7, you know, were absolutely predictable it was going to happen.

And we end up -- you know, you look at the -- I think it's toward the end of Attachment 7 -- I don't remember approving a 10 percent reduction in inspection resources per site as part of the FY2002 budget, but that's what we did. We went from 5,531 hours per site in FY2001 to 5,003 hours per site in FY2002. And I don't know what we're going to do in FY2003.

So I'm frustrated that this -- this was coming. We had all talked about demographics. We had talked about the fact that we're going to have a bunch of people retiring. We do know we steal people from regions to headquarters. The surge tank now has become headquarters. You know, we ask people to give up their July vacations to go off and cover a site. And I'm glad we're doing that, but it sounds like it -- you know, it's sort of a fifth best way to have gotten on top of this.

So I just wonder why we didn't -- I mean, the SRM didn't say exactly what I said, but it did say that we should have increased management attention, whatever that means, at sites where we have inspectors.

The staff should provide heightened management oversight on staffing for sites for the number of resident inspectors assigned to them. And apparently, enhanced management attention means watching as the number of qualified inspectors goes to one or zero.

MR. DYER: I guess I'd like to address that, Commissioner. You know, at that particular time in 1999, it was -- you know, Region III was under duress. That's when I showed up in Region III.

And I would say yes, you know, we'd like to be -- I mean, Davis-Besse is at N -- now it's at N plus two.

COMMISSIONER McGAFFIGAN: I know. We always over --

MR. DYER: No. But Davis-Besse has always been an N plus one plant. I mean, the problem is that --

COMMISSIONER McGAFFIGAN: Well, it's N plus one because it's a single-unit site --

MR. DYER: Right.

COMMISSIONER McGAFFIGAN: -- is supposed to have two people, because that's another part of our policy is that there are supposed to be two people at every site.

MR. DYER: But the problem is -- you're right in the problem. The problem is our recruiting pipeline and our increased demand being placed on resident inspectors and our turnovers in that. And a lot of it was retirement, but a lot of it also was we've had some emergent losses with folks coming to headquarters and the turnover. That was one of the topics -- the key topics we talked about at the agency senior management meeting.

Our goal in trying to -- the regional administrators, I think something Bill Kane just said is -- the way we budget inspections, it's a zero sum game. So whether it's -- you have resident inspectors or regional inspectors, the total in the reactor program remains the same.

So what we would be talking about is moving inspectors under the current method of -- what we would be talking about is moving inspectors from the regional office to the sites, in which case then we would be

bringing them back to the regional office to form up teams, or trying to manage a team inspection with people deployed at the sites.

And when we went through and assessed it, our closer alignment was to go to N, which it corresponds to the expected resident inspector at the multi-unit sites -- it's a little bit more than --

COMMISSIONER McGAFFIGAN: N at a multi-unit site. Two at the single-unit sites.

MR. DYER: Right. Two at single-unit sites, and it's slightly a bit more. But you can cover that increase with support from the regional office as opposed to trying to manage the specialist inspections that you would need from the resident inspector. So we were trying to manage that.

And the other comment that I would have is in looking at the FY '02 data, September 11th had a significant impact on our inspection resources. You know, we were in around-the-clock coverage, and not performing necessarily as much inspection as we were providing security oversight and working on that.

So after September 11th, in the beginning of fiscal year 2002, we were in a -- in not the normal routine inspection, and I think our inspection resources dropped off significantly just because of our September 11th response.

MS. CARPENTER: I was trying to address that on -- Jim is right. In the fiscal year 2002, it wasn't that we reduced any inspection resources. Those inspection resources were -- they came out of the baseline, so there's about a 10 percent reduction that you see in the baseline, but that was because inspection resources were devoted -- diverted to other efforts,

such as Davis-Besse, such as the public outreaching of our facilities.

We also saw that some of that reduction was out of the major change that we made to the inspection manual chapter on documenting inspection reports. We think there's a lot of that there also. And just overall experience with the ROP as we move -- that was the third year of the ROP -- as we continue to move forward.

I expect to see some reduction in the resources that way. That's just some of the efficiencies that we see. But the budget itself was not reduced.

COMMISSIONER McGAFFIGAN: Okay. So the budget wasn't reduced, we've got fewer inspection hours per site because of people working-- were working in -- on September 11th.

MS. CARPENTER: And part of it was also due to coping strategies that the regions sought. And some of those were mentioned, such as moving some of the team inspections, the biennial and triennial inspections from the last calendar year into this calendar year.

So as we saw that, or we saw that the regions went down to the minimum inspection sample size, that's where some of those -- it's not a representative year, but some of those reductions came because of some of the coping strategies that the regions sought in order to meet the baseline inspection program.

MR. KANE: I would submit that we did manage it -- we did a lot to manage the program in a very difficult year, and --

COMMISSIONER McGAFFIGAN: But you're managing a program in a difficult year, but you're also doing it with fewer resources. You're

doing -- somehow you allowed the resource wave to overcome you. I mean, the Region I data -- I don't have data for the other regions -- Region I's is on their website, internal website.

But to go from, in May 2001, 93 total qualified people, to 87 in January 2002, to 79 in February of 2003, so that probably is no fault of Hub Miller. You're probably just stealing all of his people here at headquarters.

MR. KANE: Right. And I would agree with that, but I -- you know, and that's why it was a unique year. We were ramping up in staffing levels here in headquarters, and, you know, as always the regions are a prime area for recruiting.

But the regions -- the regional administrators manage this through over hiring strategies, through the use of overtime, and I would submit they did manage it. And we had NRR and headquarters that we had to bring to bear in this unique situation, and we did apply that.

And so we did it with an overall agency response as well as some of the things the regional administrators did themselves to compensate.

COMMISSIONER McGAFFIGAN: Well, I don't want to beat a dead horse. I'll go to another dead horse. You're going to give us a paper soon about going to semiannual -- biannual rather than annual meetings. Count me as voting against it before I receive it.

I just think that part of what we sold when the ROP was put together in 2000 was we're going to show up once a year and talk to the local folks. And, you know, I think it's important that we do that.

And it was also said if you're in column one you'd have resident inspectors do it. Now I hear we have to augment the resident

inspector with various experts, because other issues might come up. I think we should go back to using -- I don't think we've ever used a resident inspector for one of these meetings. We also use regional branch chiefs, or whatever, but we should push this down, this responsibility to talk to the local folks.

I personally think we always get good publicity. When a resident actually gets invited to the Rotary Club to talk about what he does, we always get very good publicity about that. Or she, yes. And these are competent folks. You know, a lot of them don't have public communication skills, but these are not particularly stressing meetings outside the northeast and the midwest where Riccio can show up.

But so I think you can -- it would be good experience for these folks to trust them, to conduct the meeting, to talk about their site. They're the expert of the agency about that site. They've been there for the year, hopefully.

MR. BORCHARDT: Commissioner, we have the utmost trust in the inspectors, especially to talk about their individual facility. The issue that we're trying to evaluate -- and we discussed it regarding Commissioner Merrifield's question -- is the most efficient utilization of those resources.

And we just got done talking about inspection hours. If the expectation is that that resident inspector will only address issues on his site, they're all capable of doing that with little or no preparation, because that's their daily job.

If we want a resident inspector to be able to talk about Yucca Mountain licensing and other issues that are of interest to the public, that will take resources. They are capable of doing that, but do we divert those

inspection hours that they would be providing in order to prepare for the wide range of issues that the general public around power plants are concerned about? And that's the issue that we're trying to resolve and to come up with the best proposals for Commission consideration.

COMMISSIONER McGAFFIGAN: The annual meeting, as originally suggested, was an annual meeting to discuss the performance of the plant. It isn't an annual meeting to discuss Yucca Mountain or transportation of Yucca Mountain or the security of spent fuel, or whatever. It --

MR. BORCHARDT: Not every stakeholder is willing to live by those rules --

(Laughter.)

-- and will show up. And that's the situation.

COMMISSIONER McGAFFIGAN: But then I think you just have to tell the stakeholder that this is a meeting about this subject. There are other meetings the agency has about the other subjects. I am here to tell you that the performance of this plant last year was XYZ, and that's the purpose of this meeting.

If we allow -- it strikes me -- we're our own worst enemy in expending resources if to prepare for those meetings we prepare for -- as if this -- this meeting were an open house, you know, and the good people in the audience could ask us questions on any subject.

I mean, if every meeting is a potential meeting on everything, then I can see why it would be an enormous expenditure of resources. If the meeting is -- if the purpose of the meeting is to discuss the performance of that plant this past year, then I don't know why it has to be enormously intensive.

And I don't think you lose public confidence when you say, "Sorry, I am not the person to tell you about Yucca Mountain. I'm the resident inspector at this site. I am the expert about this site, and I will answer any question that you have that pertains to the performance of this site in the past year."

That strikes me as how you -- if I were conducting the meeting, I would certainly try to get away with that. And if I didn't get away with it, I would just refuse to answer the questions about Yucca Mountain.

COMMISSIONER MERRIFIELD: In defense of the staff, I understand where you're coming from. Frankly, I don't have the same sense of realism of that meeting that you do. I think when a member of the public goes to the one opportunity they have during the year to talk to the agency, and they've got a concern about a transport cask going through their town, I don't think the answer -- I'm only going to focus on the plant -- and otherwise go to www.nrc.gov -- is going to be satisfying to that member of the public. I don't think that's realistic to expect of our staff.

CHAIRMAN DIAZ: If I may, this is obviously a fascinating issue, and we're not going to resolve it in here. But if I may summarize, I do believe the Commission is concerned, and so am I, with the use of resources to conduct the best possible oversight program that we can.

And that's a clear message to the staff, that I think all of us believe that there has been deficiencies, and you're addressing them, but the Commission really wants to know that this is -- this train is not only moving in the right direction, but it will arrive with its cargo at the appropriate time. And I think that's --

COMMISSIONER McGAFFIGAN: And I'll just conclude, Mr. Chairman, my questions or remarks by saying, you know, a year ago the staff proposed in this paper that they end the discussion of resident demographics to precisely at the time when the crisis was about to hit us in the face. You know, and so I'm glad we have all the data we have this year about resident demographics, some trends of which are very -- it's very concerning. I'll have the regional administrators here this afternoon. I can ask them directly some of them.

And, you know, it's -- the Commission didn't allow you last year to drop that discussion. I'm glad we didn't.

COMMISSIONER MERRIFIELD: Mr. Chairman, I know you desire to move on, but I do have a -- I do want to make one additional comment for the sake of, I believe, balance. I was in the majority that supported the elimination of the N plus one program, and I do have to quibble with the characterization that there was some crystal ball that we knew that this was going to happen.

When we were voting on that, it is my recollection it was the expectation of all of us was that through a change in the program we would still be able to meet the requirements for the inspections that were necessary.

Now I think the staff had a whole lot of things thrown at them. One of the things perhaps we over whittled away on was our expectation of the challenges that would emerge as they were going along. I think we got a lot more things out there like Davis-Besse and other challenges that perhaps we weren't expecting. Perhaps we were too optimistic in performance, and we can sort of -- we can do some lessons learned on things that we're doing.

I personally do not believe that the view is, you know, we need to turn the clock back. I think the issue is making sure that we have sufficient resources capable to meet the requirements, and we need to focus on that.

You know, maybe one of the things we need to think about is some more discipline on the part of our headquarters in taking those folks out of the regions. Maybe we need to think about that a little bit. But I do quibble with the notion that it was easily identifiable we were going to have a problem.

That was not the sense during the context of that conversation, as I recollect it. And I assure you it was not my intention to whittle away at our ability to meet our goals. It was to give the staff more flexibility in the ability to deploy forces, and I still believe that was the right choice.

Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield. And I rejoice in our democratic processes.

(Laughter.)

And unless any of my fellow Commissioners have anything to add, we want to thank you for a very informative meeting. You do have some things to do. Don't run out the door; you can walk. But we do expect to see some resolution on these issues.

And I think the Commission is rightly concerned, and you'll know exactly what we mean with the next panel.

Thank you.

We want to have a five-minute -- yes, let's just have a five-minute recess, please.

(Whereupon, the proceedings in the foregoing matter went off the record at 11:59 a.m. and went back on the record at 12:07 p.m.)

CHAIRMAN DIAZ: First I would like to thank Mr. McGaha and Mr. Riccio for joining us this morning. As you saw, it was a very entertaining morning. Actually, it was very informational. We appreciate you joining us today and would like you to share your thoughts. And without any further thought, I think Mr. McGaha, please.

MR. McGAHA: Thank you, Mr. Chairman.

I appreciate the opportunity to speak today. I think, for the most part, I am speaking not only on behalf of Entergy, but I am also speaking on behalf of the industry. And I think my comments will be pretty consistent with the industry's comments as well as with the written letters of our comments that you have received, both from Entergy and from the Nuclear Energy Institute.

Put the first slide, please. It is our conclusion that the regulatory oversight process is a vast improvement over SALP or the old SALP process. This is for four reasons. One, it has allowed us to focus on safety-significant issues.

Two, it has also allowed the NRC to focus on safety-significant issues.

Three, it provides more information to the public in a more timely manner.

And, fourth, the degree of public interaction has allowed the process to evolve well and effectively address emerging questions and unforeseen concerns in a timely manner.

Is it perfect? No, no process is perfect. Is it the right direction? We feel that the answer to that is a resounding yes. Do we need to continue to improve the process, as obviously being discussed in this meeting today? Absolutely yes. Like any process, we learn as we implement it. And I think that there's still room for improvement in the ROP process.

I understand that there has been some internal NRC criticism that the performance indicator results are nearly all green and that this is a problem. I would disagree with that thought that that is a problem for basically two reasons.

First, from a statistical standpoint, the inspection findings and the performance indicators complement and supplement each other. And that's exactly what we would want them to do.

Recent experience indicates that the proportion of indicators and findings that are non-green are roughly equivalent. Approximately one percent of the indicators and four percent of the findings are non-green. That means from just a pure statistical standpoint, there is some correlation with what we're seeing both in findings and in the indicators. You would expect that there would be some alignment in those statistics.

Secondly, and probably more importantly, what we have here is a true success story. We think that what we are seeing is just what performance-based regulation is about and it should be about. We have clearly identified the expectations for performance and a system to measure

them.

The industry for the most part is performing at a higher level than in the past. I think the NRC's indicators and records show that. INPO's indicators, et cetera, show that. And so if the industry overall is generally continuing to improve, you would not expect to see a horrendous amount or increasing amount, a real positive trend in colored findings or indicators. And I believe the previous panel sort of reinforced that same topic.

Even so, there were 37 greater than green inspection findings and 12 greater than green performance indicators in the last calendar year. And I believe if you look at the last four quarters, you will see similar numbers, similar percentages.

This provides an appropriate focus on the areas of safety significance. And that's what we're trying to accomplish, to focus our resources on the things and the performance operating conditions, et cetera, that mean the most from a safety standpoint and not be redirecting resources to those areas that do not have the appropriate safety significance.

This is what performance-based regulation is all about. In fact, the NRC and the industry have set clear expectations for performance. And we now have a system established to measure that performance.

Do you remember the old adage of what gets measured gets improved? This is not to say you have managed to your measurements but what you measure if you're focusing on the things that contribute to those measures than you are focusing on opportunities for improvement.

As I stated earlier, performance has improved. In fact, performance is continuing to improve. Performance is not only improving, the

industry is better at recognizing risk significance as a result of this process. The overwhelming numbers of green safety results are showing us that some longstanding design basis requirements are, in fact, not risk-significant.

Why? Well, because a lot of longstanding design requirements were based more on deterministic programs and deterministic regulations, to which we were now applying risk-informed evaluation processes.

What we do need to do, though, is move forward to make the regulations and processes more risk-informed so that our inspection efforts, your inspection efforts and focus more effectively on safety issues at the outset and not focus on an inspection issue that in the grand finale demonstrates it wasn't really a risk-significant area, which means you could have been spending those same resources on something that was risk-significant.

With all of that being said, there are some areas for improvement. Next slide, please. I'll call these challenges or maybe opportunities. It can be a struggle at times to reach a consensus on the risk significance of particular findings.

Now, there are various reasons for this. One I think is related to the process, the process itself, and lack of communications as we use the process to make our risk determinations, as we make our risk determinations in parallel with the NRC independently making their risk determinations.

The time devoted to determining the SDP colors at times becomes excessive depending on the nature of the particular issue. In my opinion and the industry's opinion, the NRC and the industry really need to spend less time analyzing the color of findings and move forward to resolve the technical issues, especially in those cases where we're spending six months

or more trying to figure out what the color of a finding is. And by the time we figure out what the color is, hopefully we have already taken all the actions that need to be taken to rectify that situation.

In fact, the purpose of the ROP is to identify issues that need to be fixed and for the NRC to appropriate resources to those issues. And once the issue is fixed, the argument about the color once again becomes pointless.

Another thing related to this is that sometimes licensees resist white findings or tend to challenge some of the white or greater color findings, especially when it's a preliminary white or preliminary other color and we're taking months and months to figure out what the real color is.

For the most part, they do this, obviously because it only takes two whites to degrade a cornerstone. So once you have one white, then you're on the edge of degrading cornerstones. And you're on that edge for a whole year. So it's no wonder that some people are somewhat resistant to receiving at least one white.

Now, I think in the early part of the development of the program and the way we see it today, especially for those indicators that are still somewhat deterministic, like emergency preparedness and security, for example, there are some ways to alleviate this situation to some extent. One would be to change the degraded cornerstone maybe to three whites findings, which was the original concept under the action matrix that was first developed.

Another way to do it might be to reduce the number of quarters that you carry the finding forward. I think if you look at the statistical data, most of the time by the time the second quarter is over, whatever the

finding was has already been addressed, corrective actions are already in place, and we ought to be moving on.

And there might be a third way. I don't know. I don't know if that's being investigated as one of those pilot processes. If we take each of the green findings that might be contributing to a white finding and have a way to look at those in the aggregate, look at the linkage between those. And if there is a way to apply the significance determination process to two findings in the aggregate, that might be another way to help with that.

Kind of related to this topic is the bench marking of the SPAR models that is going on within the Commission and trying to match those up with the plant PRAs. I think this has taken place as part of the mitigating system performance indicator pilot.

The initial results from this indicate that alignment between the NRC tools and the industry tools can be achieved at a pretty reasonable cost. And I'm being told numbers like 10 to 20 thousand dollars per reactor.

If this is the case, we would strongly encourage that we continue to pursue that as a way to shorten life cycle for making these risk determinations and for communicating with each other and making sure that we are on the same page.

Another area I would like to touch on as an opportunity for improvement is the oversight, the overall oversight, of the ROP process. Our company, in particular, because I'm telling you this from my experience, has experienced what we thought were some unpredictable outcomes, especially in areas such as emergency preparedness and fire protection.

It seems that a plant's approved licensing basis is sometimes

reexamined. And the stations are being evaluated to a new standard of regulatory performance as a result of using the ROP process. This gets back to what was initially established, maybe in a deterministic world, is now being evaluated using a risk assessment world.

Findings regarding the use of manual actions, for example, for appendix R responses have been identified at several licensees, not just Entergy. And when we find that kind of thing, we really need to be going after the base regulation and figuring out how to change the regulation and getting that word out to the whole industry to fix the issue with the regulation and not necessarily use the ROP process and colored findings to drive changes at the different plants or to drive interpretations of the regulations under the risk assessment hat at the plants.

We also believe that several performance indicators can be improved. I think we heard some of that in the last session. We support these efforts. Likewise, the industry is working with the NRC to improve the mitigating system performance indicator and, as we heard earlier, the scram with loss of normal heat removal indicator.

With respect to the mitigating system indicator pilot program, we feel the pilot program shows great promise. And we support what you're doing there.

While implementation will require additional technical review and careful change, management to ensure success, the issues are being openly discussed and resolved as we go along.

The new indicator that will result from that we feel has several advantages and benefits. The replacement indicator will reduce the burden of

reporting under WANO, ROP maintenance rule systems, and that kind of thing. So that helps us streamline our resource utilization.

It will also be more risk-informed in its treatment of unreliability. Thresholds of performance will be better risk-aligned with the inspection findings as a result of that. And thresholds will be oriented towards individual plant risk in a better manner.

I mentioned the changes to the scrams with loss of normal heat removal. That's another area that we highly encourage continued work there. That should help resolve the confusion in the industry that we now have over what it is intended to measure.

I know every time I have seen a scram at one of our plants and this became an issue, our staff struggles with, "How does everything line up? And how do you really interpret when that indicator applies and what the risk really is?"

So we believe a more risk-informed indicator can be developed, possibly following the concepts that are currently being developed by the NRC research for the industry integrated initiating event performance indicator.

In that light, we, the industry, plan to continue to work cooperatively with the NRC to improve other performance indicators as well, as we heard earlier today, because, as I said earlier, no process is perfect. Although we are heading definitely in the right direction, we need to continue to check and adjust and improve these performance indicators.

As you know, the security radiation protection and emergency preparedness SDPs use aggregation to increase significance. Now, this

practice, as we know, is not necessarily risk-informed and does not support the spirit or the intent of the ROP process.

Each finding in our opinion should be evaluated independently and related to an appropriate color. Arbitrarily assessing a white for two green findings does not necessarily reflect significance.

Now, I know the NRC is at various stages of reviewing and revising these indicators and SDPs. And I encourage you to continue to improve the process and strive for consistency among all the plants and all the regions in how we implement these particular indicators. And we have seen a few differences here and there over time, as you might expect to see.

We also want to see you continue to improve the action matrix process. In that light, I think we have a good bit of work yet to do in those particular areas that don't lend themselves readily to the risk assessment process.

Last slide. In conclusion, we believe that the ROP is a significant improvement over the previous process. The ROP has resulted in safety performance improvement, that the results are more timely and visible to the public. The ROP helps to focus the industry and the NRC resources on risk-significant issues, but the process can be further improved.

We continue to believe that the ROP with its safety results orientation provides a strong system for identifying and correcting declining performance.

Is it perfect? No. Will it address or identify all problems at all plants all the time, especially those where there might be some latent problems in cross-cutting areas? No. But an indicator system cannot by itself

do that. However, it is much better, much better than the old deterministic approach. And when you couple it with insights and oversights and the other things that we do, the inspection process, I think we have a much better product.

CHAIRMAN DIAZ: Thank you, sir.

Mr. Riccio?

MR. RICCIO: Good morning, Chairman Diaz, Commissioners Dicus, McGaffigan, and Merrifield.

Greenpeace welcomes this opportunity to present its views to the Commission on the results of the agency action review meeting and the NRC's reactor oversight process.

Admittedly, I have never been a big fan of the reactor oversight process. I understand the industry likes the new process. They should. They wrote it.

The new oversight process does not regulate the industry. It regulates the agency. It circumscribes what actions the NRC may take based upon a candy color-coded ranking of performance indicators that at times can be so meaningless as to be irrelevant.

It handcuffs the regional inspectors unless reactor operation is so atrocious that it trips the line from green to white. However, at times that is next to impossible because the industry and the agency have set thresholds so high they would rarely, if ever, trip for an indicator.

Unfortunately, little has changed in the three years since the implementation of the new oversight process. The NRC continues to lurch from one crisis to the next. And the process has undermined public confidence in

the Commission, the NRC's senior management, and ultimately the industry.

NRC's senior management has continued to place economics ahead of safety. Apparently NRC's managers had deluded themselves into believing that the strategic performance goals of reducing unnecessary regulatory burden somehow trumps or takes precedence over the NRC's statutory responsibility to protect the public health and safety. It does not.

Since the implementation of the new oversight process, NRC management has continued to scuttle efforts of its own staff to regulate the industry, has allowed reactors to operate to the point of breakdown. A pattern has singularly developed that has gone unnoticed by this Commission.

NRC's staff attempts to enforce regulations and potentially shut down a reactor. NRC's senior management intervenes to prevent the unnecessary regulatory burden of actually complying with regulations. The NRC then allows the reactor to continue to operate until it is forced to shut down by incident or accident.

The debacle at Davis-Besse is not an anomaly. It's merely business as usual. I must admit that I am somewhat at a loss to understand the cavalier attitude taken by some on this Commission to the revelations at Davis-Besse. I can only come to the conclusion that it is perhaps because you have not been privy to the same information that I have in preparation for this meeting.

I have taken the liberty of producing for the Commission the deleted portions of the Davis-Besse lessons learned task force report that I received through my Freedom of Information Act request.

I would be happy also to provide you with the ADAMS

accession number so that you can read for yourselves the uncensored version of the entire Davis-Besse lessons learned task force report. There are marked disparities between what the NRC staff originally wrote and what has been publicly released.

To give you some sort of a tenor of the draft, these are the headers for the draft report. The NRC failed to adequately address/assess symptoms of RCS leakage. NRC failed to follow up on generic communications. NRC failed to understand the implications of boric acid corrosion.

COMMISSIONER MERRIFIELD: I'm sorry. If I could --

MR. RICCIO: That's not there.

COMMISSIONER MERRIFIELD: -- interrupt, where are you quoting from?

MR. RICCIO: I am quoting from the -- that's in the entire report. These are just the headers that were taken from the lessons learned task force.

COMMISSIONER MERRIFIELD: What were you quoting from?

MR. RICCIO: The draft version of the Davis-Besse lessons learned task force report, which, as far as I can tell from my Freedom of Information Act, that never made its way up to the Commission. It is scathing in its content.

What I have provided you just now are five pages of recommendations that were deleted from the Davis-Besse lessons learned task force report. 3.4 does not appear in your report at all. I'm told that some of the

things have been incorporated, but my cursory overview of it leads me to believe that a lot of the information has not been translated into other parts of either this document or in other agency correspondence, including what was prepared for today's meeting.

In a discussion last week with a member of the NRC staff, I was told that the deleted portions of the report were supposedly beyond the scope of the task force. I failed to see how significant insights into the failures of the NRC's reactor oversight process, Davis-Besse, that somehow went beyond the scope of the Davis-Besse lessons learned task force.

That question is better answered by the NRC's Inspector General. And I'll be asking both the IG and Congress to document the disparities between what NRC has written and what they have publicly released.

In my written testimony, I have provided the Commission with the one paragraph that I had come across while I was preparing my testimony. NRC failed to provide adequate reactor oversight process guidance.

Since submitting my testimony, I have continued to dig through my files of FOIA documents and came across the pages that I have presented to you now. Those pages had recommendations not only for the NRC but also for the industry that never appeared in the final report. Just a few of the significant insights that have never made it in.

The lessons learned task force found that the staff was having difficulty characterizing the significance of the Davis-Besse event. This difficulty appeared to stem from the techno limitations of risk assessments and SDPs. And the pressure boundary integrity does not appear to be treated

explicitly in PRAs.

I raised that question at the Regulatory Information Conference and asked the staff whether they intended to basically incorporate what they had learned in light of Davis-Besse into the PRAs. And all I got was a long bureaucratic no.

More deletions. The elements of NRC's reactor oversight process and other programs, e.g., allegations, have not been, nor would they be, fully effective in assessing the significance of the safety culture deficiencies in the absence of a significant underlying performance issue, such as a whole new reactor head.

Again, your inspectors can't inspect unless these guys trip the wire from green to white. You're handcuffing them. And then these current tools are extremely limited in scope and have no regulatory teeth. These are all things that are deleted from the report.

These and other glaring omissions from the Davis-Besse lessons learned task force report are only made worse by the fact that the PRAs the agency places so much faith in are not worth the paper they're printed on. In fact, for risk-significant events covered by the accident sequence precursor program, the current PRAs are no better than flipping a coin.

In another draft document that has been publicly released through FOIA and there is another version that is available on the Commission's ADAMS program, it says approximately 48 percent of the cumulative conditional core damage probability from the ASP events are not modeled in current PRAs.

Events with higher CCDP are much less likely to be present

in the current PRAs. Only about 5.4 percent for events with the E to the fifth CCDP range, only 38 percent in E to the four, while over 58 percent in E to the 3 range are not represented in the current PRAs.

So if you look at the list that is at the back of that ASP document, for at least the two most significant events that you have looked at over the last 7 years, you're almost 60 percent likely to miss it in your PRAs.

In this document, the Office of Research went on to find that as a consequence, inspectors and reviewers must continue to address events or conditions which (1) reduce defense-in-depth, (2) manifest previously unrecognized common mode failure mechanisms or system interactions, (3) invalidate the assumptions of current PRAs, and (4) are not included in current PRAs.

Fortunately, that made it into the document, at least into the ASP document. What didn't make it into the ASP document was this. It is sometimes difficult to identify risk-significant events or conditions, even if they are included in a typical PRA.

It is much more difficult to identify risk-significant events or conditions if they are not included in the oversight guidance or in the plant's PRA. Consequently, important precursors will be missed under the oversight program. Events or conditions will continue to occur that are not included in PRAs. Given that about half the cumulative CCDP of actual events or conditions is not included in PRAs should spark debate over how to focus the reactor oversight process.

I hope that my testimony here today will mark the beginning of that debate. It's long overdue. The NRC cannot effectively regulate the

nuclear industry when you're half-blinded by the very tools you use.

In conclusion, by any objective measure, including the NRC's own performance goals, the revised reactor oversight process is a failure. The oversight process failed to maintain safety. It failed to ensure that reactors were operated safely.

The oversight process failed to enhance public confidence and by failing to increase the predictability, consistency, and objectivity of the NRC. And it also failed to provide timely and understandable information.

The SDP I'm sorry is a black box into which you throw an event, get ex post facto justification for why it wasn't as significant as you previously believed.

The Commission may have reduced the regulatory burden on the industry, but to do so you have handcuffed your own inspectors based upon risk insights that may have no basis in reality.

Unless the NRC is honest about its own shortcomings in regard to the reactor oversight process, it will be impossible to improve that process. Declining reactor performance will continue to result in accidents, incidents, and surprises for the NRC and the industry.

I thank the Commission for your time in consideration of my comments. I would be happy to try to address any questions you might have.

CHAIRMAN DIAZ: Thank you, Mr. Riccio.

I wish I had a voice to get into an argument with you. I might have to do that at a later time, but I will offer you the opportunity to come to my office. I would love to argue with you --

MR. RICCIO: I will follow up with all of your --

CHAIRMAN DIAZ: -- in some of the points. In fact, I might even argue in the true democratic process, I asked Mr. Lochbaum to argue with you in some of these points. He might have a different --

MR. RICCIO: Last year Mr. Lochbaum was sitting where I am sitting. You asked him whether he thought it was an improvement. And while he thought it was, he couldn't point to anything to indicate that it actually was. He and I debate this back and forth.

CHAIRMAN DIAZ: Yes. Well --

MR. RICCIO: I think the timeliness in terms of getting the information out is an improvement. However, that's about the only one.

CHAIRMAN DIAZ: I disagree.

MR. RICCIO: I would also like to say I am very appreciative of the fact that you are reestablishing AEOD. I previously bemoaned the fact that -- or the intent to reestablish AEOD.

COMMISSIONER MERRIFIELD: I don't know.

MR. RICCIO: It has not? Okay. Because in the past I have bemoaned the loss. And in some of the documents I have unearthed, the AEOD went 80 FTE down to 2.5.

The staff in the past has told you that they have maintained that function. If you have seen what I have seen, I don't believe you can come to that conclusion.

CHAIRMAN DIAZ: Okay. Let me just start again. I really think that I have some disagreement with you. I would love to have the opportunity to sit in my office and go through not only the conclusions but some of the premises because I believe I am so far apart from where you are that it

really is not even funny.

So you don't perceive that the reactor oversight process is an improvement over the old SALP? You are saying the --

MR. RICCIO: I see very little improvement. I mean, the SALP was very subjective in terms. At times, it could be subjective. However, I think what you have done in this instance is you are walking into events the same way you walked into them in the past. So I fail to see how it has been an improvement.

CHAIRMAN DIAZ: But don't you believe let's look at the information, how it is presented. Is the information regarding plant oversight more of a level to the public now so the public can actually be more informed about what has happened?

MR. RICCIO: The information is more readily available. However, you continue to game your indicators. I actually find it extremely disingenuous to call your indicators AEOD indicators when, in fact, the document that governs them is written by NEI. NEI 99-02 is the document that governs your performance indicators.

CHAIRMAN DIAZ: No, no, no. It does not govern it.

MR. RICCIO: Well, it explains it to the industry. And I ask the division, actually, or the staff to write their own document for the industry. That just didn't happen.

CHAIRMAN DIAZ: Again, going back to the information, do you think that the matrices are sufficiently clear so that people can actually gather conclusions from the matrix?

MR. RICCIO: I think they're clear. I disagree with where the

thresholds are set. I disagree with some of the decision-making process that allows for the industry, for instance, to basically try to talk you out of giving them a white finding.

CHAIRMAN DIAZ: I am going to ask some of the questions to Mr. McGaha also. If there is something that you could improve, what would you consider as the first thing that you should be improved in this process, just to make it work, not to criticize it, but to make it work.

MR. RICCIO: I would attempt to basically attempt to free up your regional inspectors. If you read the documents I have read -- and there has been a lot excised that the Commission is not privy to -- that insights from your own staff about how the new process handcuffs them and it's repeated over and over and over again throughout these documents.

CHAIRMAN DIAZ: I'm sure what you're referring to, that they're documents in which, actually, the staff goes through carefully and selects what are those types of issues that need to have decision-making or policy. And that's normal in our organization, and I have complete trust by the way that our staff is making the right selection, but I will look at it.

John, I don't think we have given you an opportunity to reply to any of these comments. Would you like to comment on is there improvement over the old SALP? Is the public involvement better, the matrix especially clear to make decisions that are risk-informed?

MR. McGAHA: I think it's a definite improvement over the old process. As I said, the old process had a lot more subjectivity to it. But guess what? The new process has subjectivity in it as well.

I don't see the inspectors as being blindly tied to something

that is constraining their activities. We get just as many hard questions and intrusive looks at tangential issues and trying to get a flavor for is management making the right decisions and do we have the right safety culture. We still have all of that.

And I contend that under the old process or the new process and any future process, we're still periodically going to find an area like we found at Davis-Besse where, for whatever reason, we missed it.

CHAIRMAN DIAZ: Call them random failures, but they're not as random, maybe because they were indications.

MR. McGAHA: I'll call it random misses.

CHAIRMAN DIAZ: Yes. It's not a random.

MR. McGAHA: In my opinion, the new process is healthy. As you heard earlier today, you did a root cause investigation. What was it, 41 findings or issues came out of that. You're rolling those into the process so that we continue to build on our lessons learned.

So I see the new process as having a much better foundation for measuring where we are, communicating the performance of the plants to the industry, and getting our resources focused on those areas that need to be focused.

CHAIRMAN DIAZ: Commissioner Dicus?

COMMISSIONER DICUS: Okay. Thank you.

In deference of time, I am going to be extremely brief, but I would like to add my comments that I do disagree with the bulk, if not all, of your conclusions and, again, on the premises on which they're based.

I would also like to say I think it is very obvious that I would

disagree with you that we are not aware that the ROP is an evolving issue. And it's something that has some problems, and we are working on those. To say that we are not simply is not accurate in my view.

MR. RICCIO: That's not what I said, but --

COMMISSIONER DICUS: Well, that is what I heard.

MR. RICCIO: I said I am afraid that a lot of the information that I am privy to through my Freedom of Information Act request has not filtered its way up into the Commission.

COMMISSIONER DICUS: Well, that was a different issue, then. But you did make a comment that we are not working to fix problems, and we are working to fix problems.

And I had a question for you. But then later on in your comments, you answered it. So you're off the hook, John.

CHAIRMAN DIAZ: Thank you, Commissioner Dicus.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Mr. McGaha, I'm going to start with you just to comment that I do think that there is some merit in the issue that you raise about threshold for getting into degraded cornerstone.

I think that the original thought -- and Mr. Lochbaum was part of the conversation -- the original thought was that there be three white findings. And that way you wouldn't fight about the first one because you would still have margin.

You might fight about the second one, but you wouldn't fight about the first one. But now we have created -- I think the thought was we were seeing so few white inspection findings in the pilot program that we said,

"Gosh, let's move the threshold down."

And the gaming result is that people fight about the first white finding. And resources are expended, both licensee and staff resources, on things that they really shouldn't be expended on.

So I personally don't know where the staff stands in terms of thinking about changing the action matrix threshold for numbers of white findings, but I think it would be useful to go to three. So I take that point.

I'll give Mr. Riccio a chance to comment if he wants on that, but --

MR. RICCIO: Just that if you can avoid negotiation with the industry, it is going to give a better perception of this agency.

COMMISSIONER McGAFFIGAN: Well, I don't think it's a negotiation. I think we work with these folks. Let me get to you, Mr. Riccio, sure.

Yes?

MR. McGAHA: Can I say one thing about that? There are two human elements involved here. One, if I were an inspector, I would be --

COMMISSIONER McGAFFIGAN: I want to find white findings.

MR. McGAHA: I want to look for white findings because if I'm not finding some --

COMMISSIONER McGAFFIGAN: Or yellow or red, even better.

MR. McGAHA: My job is not as meaningful as it was.

COMMISSIONER McGAFFIGAN: Right.

MR. McGAHA: On the other hand, if I am the licensee, I don't want any white findings. And I am not saying what the right answer is. I'm just saying that if you look at how we came up with two, I don't know what the right answer is, but I think it's an area that is worthy for us to really delve into.

COMMISSIONER McGAFFIGAN: All I am saying is I agree. I agree that I think that there are perverse incentives that have been set up to fight particularly hard about things that are the least risk-significant that bother me.

CHAIRMAN DIAZ: I'm sorry. This (in audible) issue becomes a real problem, correct?

COMMISSIONER McGAFFIGAN: Correct. Now, Mr. Riccio, I appreciate your testimony. It was entertaining and I think heartfelt, but let me ask a couple of questions. You say that Davis-Besse is not an anomaly. It's that there are lots of others to follow. Can you give me other non-anomalies that have occurred in the last two years? I am trying to identify them so I can get on top of them.

MR. RICCIO: Well, granted, I took some time off in 2001, as you well know. So I'm looking back, actually, at 2000 with the Indian Point event, where, again, basically management intervened to allow the plant to continue to operate. And it resulted in a steam generator tube rupture.

I would look to your ASP numbers. If you look at your ASP numbers, you are having an increase in ASP events since you have implemented the ROP. That isn't I think the trend you want.

COMMISSIONER McGAFFIGAN: The trend is going from .06 per reactor per year to .13 or .16, which is where the industry once was.

There is no statistical significance to it yet.

MR. RICCIO: Yet.

COMMISSIONER McGAFFIGAN: I mean, if it goes to .25 next year and to .37 the following year, obviously we've got some real issues.

MR. RICCIO: Well, given the limited resources that the Commission acknowledges and given the fact that I don't feel that ROP is adequately focused or appropriately focused, I think you are going to run into more events. And that has been the conclusion not only of me but of your staff, at least staff, not senior management but mid-level staff, that has written the report that I have seen.

COMMISSIONER McGAFFIGAN: Well, if there really is as much dissent in lower-level staff that we are not hearing, I would strongly encourage those staffers to submit some DPVs and DPOs and let's get the process working because I welcome the debate within the staff. I think it is one of the strengths of the agency. But I hate you knowing more, if you do, about dissent within the staff than I do or perhaps the EDO does.

You go to this issue of the current reactor oversight process is not very good in your view. Would you admit that it is better with regard to people placing themselves in the column of the action matrix, as opposed to senior managers going off and twice annually sitting in a room and placing people on a watch list?

MR. RICCIO: Obviously we had some --

COMMISSIONER McGAFFIGAN: Isn't that a better process?

MR. RICCIO: Obviously we had some real problems with the previous process. Senior management would get together, discuss plants,

then decide not to place them on the watch list.

COMMISSIONER McGAFFIGAN: So the issue -- go ahead.

MR. RICCIO: I think the new process, you have merely replaced the senior management meeting with this SDP. You know, it's like the senior management will decide what to put in, what not to put in.

Now, the SDP is where you have lost your transparency I guess is what I am saying. You know, the transparency was lost in the original process because senior management would go behind closed doors and make decisions that the public wasn't privy to.

Now I cannot believe that the SDP is transparent.

COMMISSIONER McGAFFIGAN: The SDP I don't think can be transparent because to some degree, the hard cases end up getting analyzed using lots of proprietary information and PRAs that are proprietary, et cetera.

But I can tell you that I believe the staff is very energetic in pursuing those matters. In fact, there is one case that the staff well knows where I think they were a little too energetic in pushing a particular licensee on a particular finding that went from red to eventually white, I guess, right?

But the staff pushes these things. The staff thinks about these things. The staff has debates about these things. Those debates are not entirely transparent to us, but if it's an important issue, I think they get very high-level attention.

And so I think there is just an enormous improvement when you're arguing about whether this event was risk-significant and whether the sum total of indicators and inspection findings puts this plant, they basically put

1 themselves in columns 1, 2, 3, 4, or 5. I think that's a much better process than
2 we had previously. You're comparing perfection to the ROP.
3 Let me ask you this. The old process, the senior
4 management meeting in darkness with SALPs written subjectively with no
5 performance indicators, although we had them --
6 MR. RICCIO: We had them.
7 COMMISSIONER McGAFFIGAN: Well, we had them. We
8 just didn't particularly follow them. We had one plant that would have been on
9 the watch list for 12 consecutive years and never was on the watch list if we
10 had simply followed performance indicators.
11 But isn't this new process better than the old one? I mean,
12 if I just take that metric, just try to --
13 MR. RICCIO: In some regards. But quite honestly, using
14 your old metrics, I was able to determine that certain plants warranted
15 regulatory attention prior to the agency. And it's because senior management
16 kept on quashing those plants and making them not appear on the watch list.
17 Now, those senior managers are off working for the industry
18 now. And that's fine and good. So there is some slight improvement. If I was
19 able to figure out with the old process which plants needed regulatory attention,
20 why couldn't the agency?
21 Under this new process, I'm not sure anyone can figure out
22 what plants need additional regulatory attention. Cooper has been on the list
23 for ten years.
24 COMMISSIONER McGAFFIGAN: Cooper is a success story
25 of the new process in that it fairly quickly put itself into -- it was off the watch

list. It had been on the watch list once in the early '90s. It went off the watch list. And it fairly promptly put itself back on the watch list through performance indicators and inspection findings.

MR. RICCIO: Cooper was discussed at ten straight senior management meetings.

COMMISSIONER McGAFFIGAN: Yes.

MR. RICCIO: It's been on your radar screen for a decade. If that plant still hasn't improved its performance, I don't --

COMMISSIONER McGAFFIGAN: It is improving its performance. We'll hear this afternoon, I think, that we believe now that it is improving its performance, although it still has a ways to go.

This new process has brought significant attention -- we're going to discuss four plants this afternoon plus a fifth this morning, Davis-Besse, which de facto is in column 4. And so we have at the moment what is a total of six plants in column 4, both Point Beach units. We don't have them now. It's sometime in the calendar year 2002.

I correct myself. There were a total of six plants in column 4 -- is it column 3 or column 4? -- six plants in column 4.

MR. RICCIO: It is encouraging that some of those plants garnered your attention without there being an incident or an accident.

COMMISSIONER McGAFFIGAN: Aside from Davis-Besse, I think all of them garnered our attention without there being an incident or an accident of any significance. Well, whatever.

Like Commissioner Diaz, I welcome you to come talk at great length about these things.

MR. RICCIO: I would love to. And what I would like to do is I will give your technical assistants my ML number for my Freedom of Information Act requests. Once they have waded through at least what I have been able to wade through, I will gladly take you up on your offer.

CHAIRMAN DIAZ: Okay. Commissioner Merrifield?

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

Mr. McGaha, the first question I had goes to your slide on challenges or, as you put it, opportunities. On the second bullet you noted that we ought to make an effort to resolve the NRC SPAR versus the PSA of the licensees and try to get some sort of alignment there.

One of the tensions in that -- and I think we have this very same tension in our efforts to risk-inform our regulations -- is having some degree of transparency between the individual licensee and our staff at the NRC on that PSA and understanding it better, having really gone through the methodologies and having the confidence in the peer review.

So in order to sort of get to one, you've got to deal with the other. How are we moving forward on getting that dialogue so that we can really build more confidence within the agency of the PSA efforts undertaken by individual licensees?

MR. McGAHA: I think that is happening to a certain extent through these pilots that are ongoing right now. I am not saying that the industry PSA and the tool that the NRC uses need to be one and the same, but, in fact, it would probably be better to some extent if there was some independence.

We need to understand how your tool works. You need to

understand how our tool works. And when we both in parallel are calculating risk and trying to determine how significant something is, I'm being told that the pilot is showing that we're in a factor of two of each other when we establish this alignment, which is better than being a factor of 10^2 difference.

When we end up with that kind of gap, then we're all sitting there wringing our hands and we're getting into a debate about, "Well, what did you use? What did we use?" And sometimes we don't communicate that real well.

I know there are some tools that you're using. And they're growing and evolving as you use them. And you're reluctant just to put those out there because they haven't been officially issued yet.

So my point is if we can get them more aligned so that, doggone it, if this thing is risk-significant, let's nail it. Let's change the color of the window. Let's all circle the wagons and industry needs to figure out what they're going to do about it and not have it like we have seen in some examples in the past, where six months later, we are still trying to figure out what is the risk significance of this particular event.

COMMISSIONER MERRIFIELD: I recognize that. And I have spent the last couple of days dealing with circumstances with people debating over relative models. So I hear you on that.

The point I want to leave you with, however, is as we come more reliant on these tools, one subjects oneself to the argument, valid or not, that you've got a black box I don't understand, let me understand that better.

And I think we collectively have got to do a better job of getting access to those tools so we can collectively understand them and

enhance our ability to disseminate that to a great degree.

MR. McGAHA: I would also add one last comment, too, that we can have the best tools in the world in the end, Ellis Merschoff and I have had discussions about this from time to time, in the end, the senior, experienced people that have the background and the scars on their body from all of the things that they have dealt with in the past, you need to stand back and say, "Does this pass the giggle test?"

Sometimes you come up with something that the numbers say it's not risk-significant but somewhere in your gut, you say, you know, "This needs additional attention" and vice versa.

COMMISSIONER MERRIFIELD: Right. I agree with that. One can come to rely on those.

The second bullet you had talked about the oversight new standards and talked a little bit about the performance indicators and some of the things that came out as a result of that. I think it was the fourth bullet.

You mentioned appendix R, the fire protection issues and emergency preparedness. I think to a certain extent, that is a glass is half full, glass is half empty.

I recognize and appreciate your comments that the degree to which we have focused more on those issues may reflect on a need to go back and look at those. Do we have the right process? Is there a better way of aligning our regulatory methodology to more accurately reflect the true safety significance?

I won't quibble with that argument. I will say, however, when one talks about the successes of the new revised oversight process, I have

gone out, and I would use as an argument that this is, in fact, a success area.

The degree to which we have had more focus on fire protection and more focus on emergency preparedness as a result of the revised oversight process has really shined the light on weaknesses the licensees have had in those areas. And there are some instances where licensees honestly did not put as much time and effort into maintaining their emergency preparedness programs as they should have.

So I think it's both. I think it is a glass half full, glass half empty.

MR. McGAHA: I agree with you. Being the good nuclear-trained person that I am, I tend to look at things as being half empty.

And you're right. This new process has put focus on some of these areas. And sometimes you almost get run over by a car. And then you realize that, gee, there is something that we need to take a look at. The good news is we didn't get run over by the car.

COMMISSIONER MERRIFIELD: I don't know if it's the lawyer in me because I don't think that's it, but certainly I am more of an optimist in the half empty, half full.

I'll ask one other question of you. There were some comments that NEI has had in their third year comments on the ROP related to the need for no additional PIs or SDPs in cross-cutting areas. And the quote was, "There's a belief by NEI that the ROP system of performance indicators and inspection findings is a true measure of the licensee's safety culture as a measure of safety outcome."

Given the issues that we have had recently with Davis-Besse

as it relates to safety culture and what was a perceived prior belief that they were a good performer, I do question that view and how you are now looking again at the cross-cutting issues. I think that is a debate we certainly are having here within the agency.

MR. McGAHA: I concur with what NEI has to say in that. In fact, we as an industry have looked for years and years for how to come up with some performance indicators to look at things like safety conscience work, environment or safety culture, human performance, and corrective action.

And nobody has come up with a good answer yet. The fact is that those cross-cutting areas -- I'll call it cross-cutting areas because they're the areas that if you are having a problem in a particular cornerstone or in a particular area, those are potential root cause focuses, where you need to go look to see why am I having problems in these areas. And maybe one of those three cross-cutting areas is contributing to it.

I know, as we speak, INPO is taking a hard look at the safety culture aspect of it. They've got this industry committee looking at this for about the third time to figure out if there is a way they can come up with a way to measure and monitor safety culture.

In my opinion, you can't come up with a good performance indicator to monitor safety culture, for example, or even human performance. There are so many facets.

If you look at the model that has been developed for good human performance, all the contributors to it, you would have to monitor all the same things and plus some that you're looking at in the cornerstone and the other areas that you are monitoring.

So maybe some day we will be able to come up with ways to monitor and trim that, but I have been doing this for 30 years, and I pride myself as being probably one of the more intrusive people on the safety culture and the human performance areas, in particular, and I haven't seen the light yet for a good way to do that.

COMMISSIONER MERRIFIELD: Well, there is a need. There is a remaining need. And whether we have a performance indicator or some other methodology, some of it comes down to sort of the gut instinct that you talked to earlier. And the question is, how do you capture that gut instinct because I think in some cases, there are incidents where you do get that. That is an ongoing dialogue that I think we need to be having.

Mr. Riccio, you provided to us previously some testimony that I didn't have a chance to review. And I know subsequently you have identified some material, some of which you gave the Commission and some of which you were referencing that we don't have.

You raised a lot of issues I think we would have to consider and take a look at. So I am not in a position to dialogue with you or ask informed questions relative to those.

In terms of a couple of things I would want to say, I think you made some mention about the Davis-Besse lessons learned report and you had seen some drafts of that.

I think in any instance when you have individuals on a task force coming up with a report, I don't know this for certain, but my guess is each of the individual members may have taken responsibility for drafting portions of that report.

When you have a group that is trying to get together to have a uniform decision, the individual reflections of any one member of that task force may not reflect the divisions of that as a whole.

The example is the Commission. Each of us has our vote on a given issue. And that is not the view of the Commission. It's the view of that Commissioner. Any two Commissioners, as you have seen today, may have very strong differences of opinion on that.

So I am very hesitant to put too much credence in a draft report which may only be the views of one individual. And I don't --

MR. RICCIO: May I respond to that? I wish I could come to that conclusion. I really wish I could come to that conclusion. And when your assistants have gone through the documents I have, I really do want to sit down with you because I also feel that in certain instances, they have been candy color coating their information that flows up to the Commission.

COMMISSIONER MERRIFIELD: We'll take a look at that. If you've got specific documentation you want us to look at, that is fine, too. In the absence of actually having had a chance to look at it, I am not going to characterize it either way.

I think I would quibble with the issue of Davis-Besse being business as usual, but I am going to leave that one aside.

As you know, you have been a frequent visitor in my office and are welcome to do so. You have today done an admirable job. In this respect, I would say you are the representative of Greenpeace, which is validly an anti- nuclear group and as a very good counsel, as any attorney would, you used each and every possible argument that you could in the Commission

today, outlined the views that would articulate the outcome of the organization which you represent. And so I tip my hat to your having put that out there.

As many of the Commissioners have said, we don't agree with in some cases the conclusions that you have drawn, nor the evidence that you have provided, but you have been an articulate spokesman of a very definitive point of view on the part of Greenpeace.

I have one last comment. In the written statement that you provided, in the fourth paragraph, you stated, "The NRC has always had the information necessary to make the correct assessments of problem nuclear plants. NRC managers either lacked the will or the integrity to act upon the data that they had in hand."

Now, I know it's obviously your position given the stance of Greenpeace to be a strong spokesperson for your view. I strongly object to the notion of challenging the integrity of the staff of the Nuclear Regulatory Commission

This is, and I have served in government since 1986, this is the most qualified, most thoughtful, and strongest organization of this government. And to challenge the integrity of the managers of this agency I think is a disservice to your organization. And I think it takes away from what you have, which may be very valid arguments about things we have and haven't done. And so I would object to that.

Thank you, Mr. Chairman.

MR. RICCIO: I appreciate your objection, Commissioner Merrifield. I was referring to your previous senior management, that if you go back and look at --

COMMISSIONER MERRIFIELD: I think challenges to the integrity of individuals is a slap. And, Mr. Chairman, I will take the floor here. I do not want to have a dialogue about that. I think the challenges to the integrity of the staff of the NRC go beyond the line.

Thank you, Mr. Chairman.

MR. RICCIO: I would recommend you look at your own IG reports.

CHAIRMAN DIAZ: Mr. Riccio, thank you so very much. You have done all of us a service who have been here. We appreciate it. We disagree with many of your points. And I think that it is wonderful, like I said many times, in this country to be able to disagree and continue. We encourage you to continue to inform us of things that are of value. And we will continue to consider.

Mr. McGaha, again thank you. Unless my fellow commissioners have another comment, we will reconvene in 12:45. Thank you.

(Whereupon, at 12:11 p.m., the foregoing matter was recessed for lunch, to reconvene at 1:45 p.m. the same day.)

CHAIRMAN DIAZ: Welcome to the afternoon meeting. I have not recovered my voice. You're still -- you know lucky. So I'll rely on my fellow Commissioners to give you the appropriate hard time.

I think it was an interesting session this morning. I don't know how you're going to, you know, do better than that. We will look forward with eagerness to your upstaging the morning session.

Mr. Travers?

DR. TRAVERS: Thank you, Chairman. This afternoon we

will be briefing the Commission on those plants that were specifically in the multiple repetitive degraded cornerstone action matrix during calendar year 2002.

First, Hub Miller is going to talk about, from his Region I Administrator position, about the Indian Point 2 facility. Luis Reyes, Regional Administrator from Region II, is going to talk about Oconee. Jim Dyer from Region III will brief the Commission about Point Beach, and Ellis Merschoff, Regional Administrator, Region IV, will discuss the Cooper facility.

And with that, I will turn it right over to Hub.

MR. MILLER: Thank you, Bill.

Good afternoon, Chairman, Commissioners. Over the past assessment period, Indian Point operated in a manner that preserved public health and safety and moved from the multiple to the single-degraded cornerstone column of the action matrix.

Multiple degraded cornerstones, you will recall, were associated principally with performance problems revealed by a complicated reactor trip in August of 1999 and a February 2000 steam generator tube failure. The latter event led to issuance of a red corrective action finding and multiple white findings in the area of emergency preparedness.

An NRC 95003 team inspection in early 2001 identified underlying problems in design control, human and equipment performance, and corrective actions. Many of these were long-standing and were the result of inconsistent enforcement of management standards, weak training, and shortfalls in resources allocated to the plant.

A station performance improvement plan was established by

Consolidated Edison Company, which owned and operated the plant through September 2001. And building on NRC reviews and its own self-assessment, the current owner -- Entergy -- developed an enhanced improvement program when it assumed ownership. Entergy committed significant additional resources to implementing this program.

Over the past year, we continued the heightened oversight of Indian Point consistent with the action matrix. This included close monitoring of Entergy's performance improvement program through periodic management meetings and site visits where we focused on measurable performance results -- a detailed set of quantitative performance metrics established in the improvement program.

We conducted supplemental team inspections that looked at operator training, following up on requalification program failures and an associated yellow finding issued last year, and looking at progress in correcting problems underlying the red finding that we issued after the steam generator tube failure.

On several occasions, special inspection teams were deployed to the site in response to emergent or emerging plant issues, such as concerns raised over the past several months about the security program and a degraded control room firewall, which led to issuance of a white finding last year.

With region-based specialists providing onsite assistance to resident inspectors on discreet technical issues and during periods of high activity such as outages, the total effort of inspection this past year continued to be well above baseline.

All of these activities have been guided by a regional senior executive and branch chief who have been dedicated to the project, and the Indian Point 2 technical coordination team comprised of managers, inspectors, and senior staff from the numerous NRC branches and offices involved was also key in integrating these many efforts.

Moving now to our assessments, let me start with the big picture. While still somewhat uneven, performance continued to improve overall at Indian Point during this assessment period. Management continued to raise standards and focus station efforts on priority work. As a result, progress was made on a number of important metrics.

Last August, following the expanded corrective action team inspection that I referred to a moment ago, we concluded sufficient progress had been made to clear the red finding that had been open for more than two years, nine quarters to be exact. While we have noted this progress overall, a number of performance issues still exist, indicating continued improvement efforts are needed.

Speaking now more specifically about several key areas, let me first say that while there have been some inconsistencies, we have seen overall continued improvement in human performance. Operator response to plant events, for example, has been good. Operators performed well in shutting down and restarting the plant following the fall 2002 outage.

We kept open, however, a substantive cross-cutting issue in this area as we observed a number of problems with operator knowledge and work execution. Plant configuration control and system alignment problems occurred during the fall outage -- which occurred during the fall outage indicate

additional improvements are needed in this area.

The corrective action program continues to have a low threshold for problem identification, and items are effectively prioritized. Problem report evaluations are more timely. Progress has been made in correcting a number of important equipment problems, such as control room deficiencies.

However, the total backlog of open problem reports remains relatively high, and a number of corrective action issues continue to surface. For example, a weak corrective action led to the white finding for the degraded control room firewall that I talked a moment ago about.

Entergy has made process improvements and increased management attention to station work planning, which is very important to effective corrective actions. But improved implementation of work management processes remains a site challenge. While there has been improvement, we continue to carry an open substantive cross-cutting issue in the corrective action area.

Licensed operator requalification training was reviewed closely during the period to assess corrective actions for previous crew examination failures in the fall of 2001 that resulted in a yellow finding that, again, I mentioned a moment ago.

Entergy completed a program of high-intensity training following these failures, which led to improved test results. All operating crews successfully completed the requalification training cycle in the fall of 2002.

We did not close out the yellow finding at that time, however, because we considered it important to observe Entergy efforts to address

broader operator training issues at the site. We assessed results of these efforts through initial licensing examinations administered earlier this year, and in a recent training inspection which was conducted in April.

I'll say at this point that the results of those were positive, and on the basis of that just yesterday we signed out an inspection report which documented our findings and closed out the yellow finding that had existed on the -- for the requalification program failures.

In the area of engineering, Entergy has continued to implement an important design basis improvement initiative. Although aspects of this program have been slowed somewhat by emerging equipment issues in the restructuring and consolidation associated with the integration of Unit 2 and Unit 3 programs, Entergy has dedicated significant resources to this multi-year effort.

This design program is important as configuration control problems figure prominently in the significant events that occurred over the past several years.

Our security inspections have confirmed that interim compensatory measures required by NRC's February 2002 order are being implemented adequately. Physical barriers, security equipment, and response strategies have been strengthened, and the total number of security responders at Indian Point is significantly higher than exists at a typical single or dual unit plant.

Although significant security enhancements have been made, a number of concerns have been raised by security officers, and other problems involving inattentive security officers and inappropriate handling of

weapons also arose. Significant NRC inspection effort was expended earlier this year to address these issues.

Security guard concerns, particularly involving overtime and performance issues, warranted continued Entergy attention and close NRC oversight.

Let me speak briefly about public interaction, which has been a significant -- which has presented a significant challenge and opportunity for us in the region. Significant staff effort and management attention was directed again this year to addressing public and external stakeholder interest and concerns which at times have been intense.

The concerns have most often related to offsite emergency preparedness and site security in the post September 11 environment. We conducted numerous meetings with the licensee in open forum, all in open forum. Consistent with the action matrix, these included regulatory performance meetings and the annual assessment meeting held in the area of the plant with senior agency involvement.

We frequently briefed government and elected officials at all levels -- federal, state, and local levels -- to keep them informed of our activities, receive input, and address concerns. Most concerns have related to issues raised in a report on Indian Point emergency preparedness prepared for New York State -- for the New York State Governor by former FEMA Director James Lee Witt.

At this point, FEMA is working with New York State and local county officials responsible for implementing emergency plans to address these and other issues raised during recent exercises. We are monitoring the

situation closely, providing, where necessary and appropriate, support to FEMA and other parties in the process.

Similar to how we have coordinated technical and safety issues, we will continue to use an interoffice Indian Point communications coordination team to help in handling this extremely challenging aspect of our activities.

Oversight of Indian Point will remain above baseline throughout this year. Over the past year, Energy has proceeded to integrate Unit 2 and 3 programs. While having a positive benefit through increased sharing of resources and operating experience across the site, this has posed a challenge to the site.

Significant effort has been required to modify procedures and processes of both units to achieve consistency and effective integration of plant operations, maintenance, and engineering activities. These efforts have had, and will continue to have, an impact on the station, both positive as well as present challenges, and so as such we will continue to monitor them closely.

As a minor deviation from the action matrix, we intend to continue periodic management meetings to focus on metrics and results of improvement initiatives. We will conduct special inspections of Entergy's engineering control activities during the -- including the important design basis improvement initiative and corrective actions for the degraded control room firewall.

We will conduct a corrective action so-called problem identification and resolution inspection late in the year. Additionally, the staff will continue to monitor and inspect security programs closely and will work also

closely with FEMA to address issues pertaining to offsite emergency preparedness.

At the Agency Action Review Meeting, in summary, senior managers were briefed on NRC actions and licensee performance. Senior managers concluded that actions taken and those planned are appropriate, consistent with the reactor oversight process guidance, and that no additional actions are warranted at this time.

Thank you, Mr. Chairman.

Luis?

MR. REYES: Okay. Thanks, Hub.

Commissioners, Mr. Chairman, I'm going to be addressing the Oconee station.

Can I have the next slide, please?

As background, during the Agency Action Review Meeting we discussed the Oconee Unit 1 station. The Oconee station, as a matter of background, has three pressurized water reactors. Only one unit was in the multiple degraded cornerstone during calendar year 2002, and that was the only unit we discussed.

And the reason we discussed that is, in 2001, Oconee Unit 1 had some old design issues that resulted in white findings. And that, in coincidence with performance issues, were also white -- led to the station being in a multiple degraded cornerstone.

At the time we processed the old design issue at Oconee, the revised oversight program did not provide for dealing with old design issues. In fact, the Oconee finding is the one that led us to realize we needed to

improve the program.

We decided that since that item was already processed to keep it the way it was. We conducted the inspection -- the supplemental inspections that are required by the action matrix. We conducted a supplemental inspection; we labeled it 95001 and 95002.

Now, typically when a plant has multiple degraded cornerstone, we will conduct the third level of inspection, 95003. In this particular case, because of the unique circumstances, we requested a one-time deviation from the action matrix from the Executive Director of Operations. And, in fact, it was granted.

So with the follow up of those inspections, we closed the items, and the unit is currently in the licensee response column. So this is a particular case where we have exercised all of the processes of the revised oversight program, and the performance of the facility has returned to the licensee response column.

In terms of public interface, we conducted an end-of-cycle meeting. We conducted the meeting in the evening in a local facility. I participated in the meeting. There was some limited interest from the public and the media, but we offered that opportunity.

In terms of the next steps, we have notified the licensee that we're going to increase the frequency of the problem identification and resolution inspection. It typically gets conducted every two years. But based on performance in 2001 and some of 2002, we have communicated with the licensee, and we will be conducting that inspection at a higher frequency than normal.

That is the only additional inspection we'll be conducting in addition to the baseline, because both Oconee Unit 1 and Oconee Unit 2 are in the licensee response column. Only Unit 3 is in the regulatory response column. That's all I have.

DR. TRAVERS: Thanks, Luis.

Jim?

MR. DYER: Good afternoon, Chairman, Commissioners. While continuing to operate in the manner that assured public health and safety, the recent observed performance at the Point Beach Nuclear Power Station declined significantly.

Last month Point Beach Units 1 and 2 were placed in the multiple repetitive degraded cornerstone column, or column 4, of the reactor oversight process action matrix due to a red finding associated with the auxiliary feedwater system common to both units. As a result, the performance of both units at the Point Beach Nuclear Power station, which is operated by the Nuclear Management Company, was discussed at the Agency Action Review Meeting.

As background, during ROP cycle 2 or calendar year 2001, Point Beach -- both units at Point Beach were in the regulatory response column, or column 2, due to white performance indicators in the initiating event cornerstone. Unit 1 had a white performance indicator for the number of scrams with loss of heat sink, and Unit 2 had a white performance indicator for the number of scrams.

The inspection procedure 95001 inspections were successfully completed on both of these issues, and performance in this

cornerstone was improving. In November of 2001, during a voluntary effort to upgrade their probabilistic risk assessment of the plants, the licensee identified a significant vulnerability where a loss of instrument air could result in a common mode failure of the auxiliary feedwater systems for both units.

Loss of instrument air would cause the recirculation valves to fail close and could subject the aux feed pumps -- auxiliary feedwater pumps to operate against a shutoff head undetected by the operators. If this occurred, the pumps would be damaged and unavailable after a very short period of time.

This was a very good finding by a licensee as the result of an integrated look at the system design, the operating procedures, training, and available plant indications. Upon discovery, the licensee took prompt actions to revise their procedures in training to address the design vulnerability and initiated a modification to provide an independent backup air supply to the auxiliary feedwater system recirculation valves.

As a result of our inspection activities, and after a regulatory conference during calendar year 2002, we concluded that the auxiliary feedwater system instrument air vulnerability would have a high or red safety significance. However, the licensee requested that we consider this issue for old design issue credit in accordance with the recent revision to NRC manual chapter 0305, as Luis spoke of.

In September of 2002, we conducted a follow up inspection to determine whether old design issue credit was warranted. But before the report was issued, a second similar vulnerability with the auxiliary feedwater system recirculation line was identified during post-modification testing for a new flow orifice.

Over a period of about a year, the licensee had been replacing the auxiliary feedwater system recirculation line performances with a different design to reduce flow vibrations. During the post-modification testing of the last of the four pumps, it was identified that a new design -- that the new design was very susceptible to clogging should the backup safety-related source of water from the essential service water system be used to supply the pumps.

This could result in the same loss of recirculation flow and operation of the pumps that shut off head that would go undetected before pump damage.

In summary, at the same time the licensee was correcting the auxiliary feedwater system vulnerability for a loss of instrument air, they modified the flow orifices to correct a separate vibration problem, and created a new vulnerability for loss of recirculation flow due to clogging.

In response, the licensee initiated a comprehensive root cause assessment and made quick management changes to enhance its oversight of the Point Beach Nuclear Power Station. In February of 2002, we also identified a white finding on both units concerning the adequacy of emergency preparedness drill critiques.

The licensee notified us that the corrective actions were completed in June of that year, but we found a second similar occurrence during the August 2002 exercise. This finding is still under evaluation, but could be a second white finding in the emergency preparedness area and is indicative of poor corrective actions.

Unit 2 also had a white finding for a failed high pressure

injection pump due to inadequate corrective actions which led to air binding and pump failure. There are also several other green findings during calendar year 2002 or ROP cycle 3 concerning the adequacy of the licensee's problem identification program.

In summary, at the end of ROP cycle 3, Point Beach Units 1 and 2 were in the regulatory response column of the ROP action matrix with an outstanding question of an old design issue -- of old design issue credit for a final red finding, an open item on a second auxiliary feedwater system vulnerability, and an open issue for a second emergency preparedness drill critique finding.

We also identified a substantive cross-cutting issue weakness with the problem identification and resolution cost-cutting issue. This was the status of our assessment reflected in the end-of-cycle letter of March 4, 2003.

On April 2, 2003, we issued an inspection report that determined the first red finding did not qualify for old design issue credit, and preliminarily determined the more recent auxiliary feedwater system flow orifice vulnerability to be a second red finding.

A regulatory conference has been scheduled in early June to discuss this second issue. We also informed Point Beach that because of the final red finding they were in the multiple repetitive degraded cornerstone and would be discussed at the Agency Action Review Meeting.

On April 7th, we also conducted a public end-of-cycle meeting with the licensee in the vicinity of the plant and presented our assessment of Point Beach performance, including the insights from the end-of-cycle assessment as well as the final red significance determination.

Because of the recent change in status to multiple repetitive degraded cornerstone, we increased the management presence at the public meeting -- and I attended the meeting with Jeff Grant, the Region III Division Director for Reactor Projects. Bill Borchardt also attended as an observer. Bill is the Acting Deputy Director of NRR.

At this meeting, we informed the licensee and the public of the expected actions as the result of Point Beach performance. This included discussion of the plant at the Agency Action Review Meeting, meetings with senior NRC management, conduct of an inspection procedure 95003 inspection, review of their root cause analysis and corrective action plan for identified issues, and close oversight of their corrective action implementation.

We made it clear that Point Beach was safe to operate, but had very little regulatory margin left before entering the unacceptable performance column, or column 5, of the reactor oversight process action matrix, where they would be shut down.

They must find and fix problems before the problems find them, either as a result of an event or an NRC finding. At the end-of-cycle meeting, the licensee provided the status of the root cause assessment and identified additional actions that they were taking.

Our next steps include conducting the regulatory conference for the second preliminary red finding associated with the auxiliary feedwater system, and meeting with the licensee to better understand the results of their self-assessment. We plan to merge all of the issues together and conduct one inspection, 95003 -- inspection procedure 95003 inspection, focusing on the reactor safety area.

Within Region III, we plan to follow the actions taken last year by Region IV for the Cooper Nuclear Station. We have reorganized our Division of Reactor Projects to dedicate a branch solely to the Point Beach oversight. The Branch Chief will be the team leader for the inspection procedure 95003 inspection, and responsible for putting together the subsequent NRC oversight plan for the licensee's corrective actions.

We plan to fully implement the activities prescribed in the reactor oversight process action matrix for a multiple repetitive degraded cornerstone plant, increase our public meetings in the vicinity of the site, and our interactions with local stakeholders including government officials.

At the Agency Action Review Meeting, senior managers were briefed on the licensee performance and the NRC actions planned and completed. The NRC senior managers concluded that actions taken and planned are appropriate and consistent with the reactor oversight process guidance.

After the Agency Action Review Meeting, we updated the end-of-cycle assessment letter to add the inspection procedure 95003 inspection to the schedule and to formally notify the licensee of the additional actions that occur with the plant whose performance is in the multiple repetitive degraded cornerstone plan.

This concludes my presentation.

DR. TRAVERS: Thanks, Jim.

Lastly, Ellis on Cooper.

MR. MERSCHOFF: Thank you. Chairman Diaz, Commissioners, Cooper Nuclear Station, as you know, is a BWR 4 located on

the Missouri River in southeastern Nebraska. It's the only nuclear power plant owned and operated by the Nebraska Public Power District, NPPD, and employs a total of about 800 employees, most of whom are located at the site.

Over the past three years, while operating in a manner that preserved public health and safety, Cooper Nuclear Station's performance has steadily declined from the licensee response column to the regulatory response column to the degraded cornerstone column to its current assessment of performance of repetitive degraded cornerstone.

This decline through the first four columns of the action matrix occurred as the result of four white findings in the emergency preparedness cornerstone. The first in the fourth quarter of 2000 was a result of failing to recognize a degraded core during an emergency exercise and missing this failure during the critique. This white finding moved Cooper from the licensee to the regulatory response column.

In the second quarter of 2001, during the inspection and response to that first white finding, we noted that effective corrective action had not been taken, and the same problem recurred. This second white finding moved Cooper to the degraded cornerstone column of the action matrix.

In the third quarter of 2001, Cooper declared an alert in response to a fire in a potential transformer located on the startup transformer. During this alert, Cooper failed to make timely offsite notifications, and failed to staff the emergency response facilities within the required time.

This resulted in two additional white findings which would cause Cooper to remain in the degraded cornerstone column for more than four consecutive quarters, thus causing them to be advanced to the fourth

column, repetitive degraded cornerstone in April 1, 2002.

At this meeting last year we described Cooper's performance within the context of the past 10 years. We highlighted that they had been discussed at every senior management meeting since 1993 and declined from columns 1 to 4 in the first four years of the revised oversight process.

They have been sanctioned with 12 severity Level 3 escalated enforcement actions totaling $860,000 in civil penalties, two confirmatory action letters, and five white findings, and had experienced a significantly high turnover rate of senior managers creating strong organizational challenges relative to process consistency, accountability, and continuity of key initiatives.

Upon entry into the multiple repetitive degraded cornerstone column of the action matrix, NPPD developed a plan to improve performance at Cooper Nuclear Station. On June 10, 2002, NPPD submitted Revision 1 of this plan, the strategic improvement plan, to the NRC.

On August 22, 2002, the NRC completed a supplemental inspection using inspection procedure 95003 inspection for repetitive degraded cornerstone. The inspection found that a number of long-standing performance problems existed at Cooper Nuclear Station. Of greatest concern was the failure of Cooper Nuclear Station to correct recurring performance issues.

For example, the improvement plan did not include actions to correct recurring equipment problems and was not comprehensive in addressing problems with the corrective action program.

NPPD had been unsuccessful in previous efforts to improve performance with focused improvement plans. The inability to effectively

correct problems resulted in recurring problems with reliability of safety systems, personnel errors, implementation of the emergency plan, and the quality of engineering, training, and maintenance activities.

Dr. Travers and I met with the NPPD Board of Directors in August 2002 to discuss the results of this inspection and overall performance at Cooper Nuclear Station. Following the completion of this supplemental inspection and the meeting with the Board of Directors, NPPD revised their improvement plan and submitted Revision 2 of the plan on November 25, 2002.

On January 30, 2003, NRC issued a confirmatory action letter to NPPD. The purpose of this confirmatory action letter was to confirm the commitments made by NPPD regarding completion of those actions in their improvement plan which would address regulatory performance issues.

The actions included in the confirmation of action letter are long-standing performance issues in the areas of emergency preparedness, human performance, material condition and equipment reliability, plant modification and configuration control, corrective action program, and engineering program.

The NRC will conduct periodic inspections to verify completion of these actions and the effectiveness of these actions in addressing the specific performance issues. The white findings that originally caused Cooper Nuclear Station to be placed in the multiple repetitive degraded cornerstone column of the action matrix will remain open, and Cooper will remain in that column of the action matrix until satisfactory completion of the actions listed in the confirmatory action letter are verified by the NRC.

Cooper Nuclear Station has made substantial progress since

this time last year. They've established a foundation upon which improvement can be built and a framework within which to build and measure improved safety performance.

We have concluded their improvement plan is well founded, comprehensive, has appropriate measures, and, if implemented, is likely to achieve its purpose. The confirmation of action letter captures the key aspects of the improvement plan as formal commitments, and the adequacy of NPPD's progress will be inspected, assessed, and discussed in public meetings held quarterly.

The first of these assessments has been completed and has revealed acceptable implementation of the improvement plan to date. Although substantive cross-cutting issues in problem identification and resolution and human performance were identified in 2001, and have not yet been fully addressed, there have been no new findings with a significance greater than green in 2002.

Consequently, we believe that NPPD has arrested the decline in performance of their Cooper Station and have laid the groundwork necessary to realize measurable improvement in their safety performance.

Our next quarterly inspection of Cooper's improvement plan implementation process is scheduled for June and will include a public meeting to discuss the findings. At the Agency Action Review Meeting, senior managers were briefed on NRC actions and licensee performance. The senior managers concluded that actions taken and those planned are appropriate, are consistent with the reactor oversight program guidance, and that no additional actions are required at this time.

That concludes my prepared remarks.

DR. TRAVERS: Mr. Chairman, that completes our staff briefing on those plants that were in the multiple or -- and/or repetitive degraded cornerstone.

CHAIRMAN DIAZ: Thank you, Mr. Travers. It's always a pleasure to have our four regional administrators in here at one time, so we can question them.

And having said that, Commissioner Dicus, take the floor.

COMMISSIONER DICUS: Thank you, Mr. Chairman.

One, possibly two, questions. This morning, if I heard correctly, one of the concerns raised was the length of time it sometimes takes from an inspection to a finding to a color. I would like to hear from you if you think that is an issue, and is it part of our learning to do the ROP? And can we get better at it? If it is an issue.

MR. MILLER: Maybe I could take a start or a first crack at that, because I recently went through a process --

COMMISSIONER DICUS: It could be the licensee's fault in some cases.

MR. MILLER: Well, you know what it is? Often it is just inherently in the questions surrounding the application of the model, and it has to do with the assumptions.

We find to some extent there may be issues over the model used, but more frequently it's a question over, when did the diesel fail? And it's less an issue of -- for the PRA expert, at least in the instances that I've been involved in, and more a question for the technical people to decide. And in

those instances, there often is uncertainty, and there is a range.

And so people acting in good faith on both sides, it can take some time to pin down, you know, what did the oil analysis tell you? You know, tracking down the different clues that will indicate when the diesel failed, what the fault exposure time is. So we're all working hard to make this as efficient a process as possible, but there's a certain irreducible time in certain instances that have to do with the technical questions surrounding the assumptions in the models.

DR. TRAVERS: But I think there's an important side comment I'd make. At the same time this issue of the correct color is being pursued, there's a dual path, and that is the correction inherent in the issues, and that's pursued immediately and pursued vigorously.

So I think it shouldn't be confused with the efforts that are ongoing that sometimes take some period of time to define the color. At the same time, in most instances much more quickly is the actions necessary to redress the issue.

MR. REYES: If I could add, you heard some numbers this morning. And I think if you look at the issues that are taking longer than we would desire, the 90-day goal, you know, we've been dealing with mitigating systems since 1975 with WASH-1400. So we're pretty good at that.

But then you get into other areas, such as fire protection, shutdown conditions, that we're pushing the envelope on trying to come up with a number. And those are more difficult, and we have not been as successful as we would like to be.

We have worked closely with the program office in making

changes to the SDP for fire protection, for example. So those changes are ongoing. I believe we've improved on what we've done in the past, even though there may be some more work.

MR. MERSCHOFF: The good news in all of this, and I believe Commissioner Merrifield brought it up, is the new ROP gets us to these problems. The triennial fire protection inspection is focusing our attention on nothing new. These situations have existed for a long time but are ultimately being resolved, but they're difficult and it's taking a while to work through them.

MR. DYER: I think from my perspective, Commissioner, it is still too slow, but we're getting better. And I think some of the efforts on the SDP, you know, improvement initiatives and that are going to even make it better going forward.

MR. BORCHARDT: You know, from the program office perspective, clearly, it's an issue. There's no doubt. Jim mentioned the SDP task force. But even with those problems it's not interfering with correction of the problem at the site, and it's not interfering with the ability of the agency to have the proper regulatory response in a timely manner.

The ultimate resolution of what color it is is taking way too long. We're trying to fix that, but --

COMMISSIONER DICUS: Okay. Well, that's good. You heard this morning -- I'll give you a chance to gripe at me. You heard me this morning bring up my issues with N versus N plus one. I don't know if Commissioner McGaffigan wants to bring his issues up on that with you.

But I'll give you the opportunity to respond, if you want to, to the concerns that I raised.

MR. MERSCHOFF: I would like to. The price is too high in Region IV. It would cost me 20 percent of my region-based specialist inspectors to staff the six additional N plus one positions. The region-based inspectors are a desperately important part of the inspection program. They provide balance, and so I think with case-by-case exceptions where N plus one is appropriate, we're better served with a fully staffed region-based inspection program that supplements the resident inspections.

MR. REYES: If I could add, nobody is more interested in making sure we have the right oversight of these facilities than the four regional administrators. I mean, day and night that's what we are accountable for. That's our job.

But I think you need to reflect on the transition, and somebody talked this morning about, did we manage this well? Well, I don't believe I did, and let me tell you why.

In Region II, the transition from N plus one to N was a slow process. The Commission gave us direction and said, "Don't make it overnight. Don't force people to move. The clock is always running as the situation arises. We don't want to harm our employees to force them to have a relocation of their family mandated." And we did that.

And what that led to, in my case, was a slow change and didn't realize what the unintended consequences were. There is an environmental factor that I overlooked, and it is the fact that we have a very experienced workforce, but they are retiring. And something that is happening which is very, very good for the agency is that the field experience from these individuals is highly sought out. And they have opportunities to get promotions

basically in the program office.

Now, I didn't prepare my bench strength as much as I should have. I did not anticipate that Bill was going to have so many high-graded positions open because of all his retirements. So there's a dynamic here which -- where I failed to recognize. We have really reacted quickly to this. We have support from the EDO. The field policy manual has been changed to allow us to have overlap and better transition.

I think if you look at the staffing of all four regions we are in what we call an overhire situation. We're training the individuals, getting very well qualified and experienced people. So I think the answer is we didn't manage it as well as we should have, but we think we have our hands around it, and it's going to be resolved in the very near future.

COMMISSIONER DICUS: And you've said at least part of your problems were Bill's fault.

(Laughter.)

MR. REYES: Yes.

MR. BORCHARDT: They're all my fault.

(Laughter.)

MR. REYES: But it brings a point on our succession planning, which is that we do have a very --

COMMISSIONER DICUS: And it's an important point.

MR. REYES: -- experienced and capable workforce. But there are some dynamics that go beyond one unit. In this case, it was among the program office and us. And we need to work that better, anticipate that better. I think the changes we made -- the changes proposed to the fiscal year

'05 budget all are going to assist us in managing this better.

MR. MILLER: Where we have needed it, we have not hesitated to seek the approval -- for example, at Nine Mile -- to put the N plus one in place. There are two different boilers. There are, you know, two different control rooms, two different organizations. It was clear to us in the region that we needed that N plus one inspector.

The other thing that I would say is that while it's very challenging to manage coverage of the sites, and while it's very challenging to assure that the amount of inspection that is done at each site is a function of the program, not a function of how many people you have assigned to the site, that's a challenging thing, but it's manageable. It can be managed, and I think we are managing it.

One of the other things that I would -- there was some discussion this morning about Region I and where we are in terms of fully qualified inspectors. We do track a lot of statistics, and one of them is that. If you look at that alone you can be deceived, however.

There was discussion this morning about the role that inspectors or individuals who are hired, come into the inspection force, become interim qualified in short order, they are making a significant contribution. And let me give you an example in Region I.

We had the good fortune of hiring an individual who is a system engineer for the reactor coolant system at a plant, had extensive experience in doing head inspections, and the like. I hired this person several years ago, and within a matter of a month or two this individual was making a significant impact on our ability to inspect in that very critical area following

Davis-Besse.

Now this is just one example. I think it might appear on the surface as if, depending upon a lot of people with interim qualifications, might lead to a situation where we have people who are not able to contribute at a higher level, that there's a lot of bandaiding and, you know, piecing things together.

In many respects, these individuals are making very significant contributions. I'm not sure if it's the job market or what, but I think my colleagues have had the same experience we've had of for the experienced people we've been able to attract very top talent. So I think it's many things. I would urge you to, as you look at some of these statistics, understand that it's many, many factors together. It's not just the one factor of the number of fully certified inspectors at any one time.

The last thing I'll mention is that all of us know that we are in many respects the training grounds for people who ultimately migrate to headquarters, and we see those as success stories as individuals assume those senior positions. And so a part of the strategy is over hiring. Some of it is covered by the budget, but much of it is over hiring that we do knowing that this attrition will take place.

In my region, for example, in the reactor program alone right now I think I have some eight overhires last time I checked. So there are many factors to this. It's challenging, but it's manageable.

MR. DYER: Commissioner, from my perspective, N versus N plus one, I think I'd have still been at the same kind of a problem. It's just where my vacancies would have been located. The problem was we didn't get

out ahead of the turnover, and the other thing is that the recruiting process and the training process are well over a two-year lead time to get a qualified -- fully qualified resident inspector or fully qualified regional inspector through the process.

COMMISSIONER DICUS: And in the training process, the maturing of a person that comes in that has to have that training in order to be a qualified inspector, what kind of demands does that put on the existing staff doing the training, or are there any demands on -- I mean, does that draw away?

MR. DYER: Yes. Yes, there are demands in that. We got together, and one of the things we did when the regional administrators got together was talked about what kind of budget impact is hiring the entry-level hires and being essentially in Hub's -- essentially the farm team for a lot of the growth in headquarters.

And one of the things we realized is that it -- we can handle about five interns a year, or five entry-level hires, in addition to our normal turnover. And so we went in for budgeting in the 2004/2005 budget to get that. But if you get much above that, it becomes a real drain on the organization. And so it is a challenge.

COMMISSIONER DICUS: Okay. Well, I thank all of you for responding to that. I was sort of hoping I could get at least one vote from that side of the table, but I guess not.

(Laughter.)

Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Dicus.

Commissioner McGaffigan?

COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman.

Before I return to resident inspectors --

(Laughter.)

-- which I will, let me ask a couple other questions. I've had -- I met with the SRAs recently from the regions, and one of the issues that they raised with me was the problem of having perverse incentives in our reactor oversight process for people not to have high quality PRAs.

They also said it came up in our licensing process. You know, if you have a high quality PRA, you know some things. And if you know those things, they can come and bite you, either in the SDP process or in a licensing process.

And I said, gosh, you know, I mean, this was a big insight I got sitting with these guys for -- and gals for half an hour. Cindy was in the room, and the rest of you guys weren't. But do you have any thoughts as to how to remove perverse incentives or disincentives to having a high quality PRA from the reactor oversight process and from our licensing process?

MR. BORCHARDT: From the program perspective, I think this is an example of the double-edged sword. If we have a high quality PRA, I think we all agree that the plant will operate more safely.

COMMISSIONER McGAFFIGAN: Right.

MR. BORCHARDT: If you have a high quality PRA, it allows the staff to evaluate the safety significance of any failure. Some issues using that PRA will be judged to be of higher significance than they would have without the PRA. That's the unintended consequence that's mentioned in some

circles.

It also allows some components that have failed to be judged to be lower than you might otherwise, and both lead to the proper answer. And it would be inappropriate from my perspective to only give them the mitigating factors and reduce the consequences.

COMMISSIONER McGAFFIGAN: But do you end up with -- the thing that -- as I said, these folks -- I'm not the expert in this, your staff is the expert, the SRAs are the expert, but you end up with this situation where you have a positive disincentive to getting a good quality PRA, because if I -- you know, that guy over there at Plant A is stupid enough to have a high quality PRA and he just got a yellow finding. I'm never going to get a yellow finding because I don't know that. It may be true.

MR. REYES: We know better.

(Laughter.)

MR. MERSCHOFF: If I can comment on that, that's a good question. And the answer I would have or the tool we have to blunt that disincentive is to remind ourselves periodically that we're risk-informed and not risk-based. That we have an independent tool in the SPAR, and we are really good at deterministic arguments.

And if a licensee is not willing to invest in a good risk tool, then we only are informed to the level that it warrants based on its quality.

MR. REYES: And, Commissioner, you heard this morning that there is perhaps too much of an extended time and dialogue in terms of coming up with the risk significance, thereby the color, in some issues. And part of -- or in some cases what it is is that remember those SRAs work for us,

and they tell us the same thing.

So when we deal with the licensee, that the PRA is not too good, but we know -- we know that the number may be too low in that situation because the model -- not because they're realistic -- we'll use our numbers, and there ensues the dialogue with the licensee and the difference that you hear sometimes. And we are very hard to convince once we make up our mind, and then that allows for the delay. So we don't ignore the significant issues because a PRA may not be of the highest quality.

COMMISSIONER MERRIFIELD: Can I ask an associated question? Just as a quick follow up. One of the things that has been postulated by some -- and I'm not saying whether I agree with this or not -- is that as we move towards a more risk-informed framework that the cost of that ought to be having a high quality PRA, that you can't -- you know, unless you've got that high quality PRA you can't take advantage of this different set of requirements. I'm just wondering if that's --

COMMISSIONER McGAFFIGAN: That was what led to my question. I just said something to that effect, that, you know, we -- the Commission recently said we would like to, at least as a price of entry for some of these more reaching -- far-reaching risk-informed initiatives, we are going to have high quality PRAs. And they said, "Wait one second." You know, there are disincentives, you know, particularly in your region. I mean, you have some of the worst PRAs in Region I.

MR. MILLER: And all those who do know how -- know that I know that they're not as strong as they need to be and have heard from me.

COMMISSIONER McGAFFIGAN: But is your SPAR model

that much better? I mean, this is a simplified plant model that we've put together on the cheap, and it strikes me that it's a tool to --

COMMISSIONER MERRIFIELD: I don't know if the staff would want to characterize it as putting it together on the cheap.

COMMISSIONER McGAFFIGAN: Well, compared to what a full -- what we guesstimate a high quality, up-to-date, you know, PRA costs a licensee, we didn't spend that much per plant.

MR. MERSCHOFF: The beauty of the SPAR is that it's different. Even a high quality PRA is an approximation. It's terribly precise, but not particularly accurate. And so having two different systems is better --

CHAIRMAN DIAZ: I'm going to need an explanation on that.

MR. MERSCHOFF: Let me just finish my thought -- having two approaches that are different in their basis, that understand both were approximations, if they get you close together you have a lot more confidence if you're further apart than you have a basis to discuss it.

COMMISSIONER McGAFFIGAN: Okay. Let me ask the precise but not accurate thing. That reminded me of another issue.

MR. MERSCHOFF: Nine-digit accuracy.

COMMISSIONER McGAFFIGAN: Right. That's what Commissioner Diaz is always -- he's always bothered when somebody calculates the delta CDF to be 4.273.

(Laughter.)

You know, times 10^{-4}. But he isn't sure whether it's 10^{-4} or 10^{-3}, but that gets to this issue in the SDP process. You guys -- I've seen a couple of these now, unfortunately, and, you know, you all argue with the licensee and

the licensee argues back, and you end up with a delta CDF of, you know, 9.8 times 10^{-5}, and that's different from, you know, 1.02 times 10^{-4} in terms of SDP space.

You know, I don't believe any of those numbers. I mean, you know, so do we -- are we -- you talked about the uncertainty. And in driving -- you know, one of the staff said our SDP process is a little like, you know, trying to forecast a hurricane approaching the Louisiana coast.

You know, the National Weather Service says it's going to fall somewhere between 50 miles and, you know, between Baton Rouge and somewhere else. And our SDP process sort of forces you to get to the point that it's going to come in, which was impossible. It's going to come in between Joe's Garage and Mary's Salon in, you know, this little town on this exact spot. You know, you're within 10 meters.

But are we kidding ourselves? I mean, should we be making different -- you derive these numbers in the SDP process. You get to a number, you pretend that .98 times 10^{-5} is different from two times 10^{-5}. Does that make any sense?

MR. MILLER: Commissioner, I probably sounded negative and almost fatalistic in my first response on this SDP. One of the concerns that I've always had is that people have gotten the notion that this is a simple process that leads you to some unique answer that, you know, while not intending to oversell this that it has been oversold in terms of how easy or hard it is to do this process. There is still an element of judgment, and what I --

COMMISSIONER McGAFFIGAN: Somebody said earlier that we're getting systems -- you know, that we have 30 years of --

MR. MILLER: There's still an element of judgment, and I've talked about these issues, for example -- and I used the example of a diesel generator, a real live issue in my region, took a long time to come to how long the Seabrook diesel generator was out of service.

I would say that -- echo something Ellis said, and that is that when it comes to, you know, this -- when it comes to the model, we do factor in how much the models can explicitly take into account certain factors, and at some sites you can more explicitly treat issues than you can at other sites.

And that's part of the judgment that ultimately gets made when you weigh that range of potential answers and you come -- it could be red, it could be green, or it could be yellow, could be green, and it looks like on balance, taking everything, it's white.

Now I'm not saying it's all subjective because it's not. There are a lot of quantitative things that you can lean on, but in the end there is a quantitative -- there is a qualitative factor to this technical judgment. It is risk-informed.

CHAIRMAN DIAZ: An expertise factor.

MR. MILLER: Yes.

COMMISSIONER McGAFFIGAN: And I appreciate that. I mean, I think there has to be, because you've got one of these things, you've got this range. In all honesty, it's probably a factor of 10 range, if you're being honest with each other. You know, one of these things I looked at, the human error reliability or un-reliability was .14. It wasn't, you know, .08 or .25. It was assumed to be .14, and I'm sure that number comes from some research somewhere. But I -- you know, it's just a number.

MR. MERSCHOFF: When the SRAs do their work, they don't give us a number; they give us a range. It's at least this, and likely not more than this. And the licensee will use their different basis, their PSA, and give us a range as well. And if those ranges overlap, that's pretty good accuracy.

Mr. McGaha talked about being within a factor of two. That's success if you're within a factor of two, because we're risk-informed. We talk about it and consider it and make a decision. We're not driven by a point calculation.

MR. REYES: And the actions to solve the safety issue at hand are being dealt with aggressively by the licensee and monitored closely by us. So I don't want people to lose sight of we're putting the energy on safety. We're doing the calculation on the side, but the -- our job is safety, so we're following what the licensee is doing to correct the issue.

And by the way, we are also calculating how risk significant it was, because it determines other actions we take. But you need to reinforce those.

MR. KANE: I think that's an important point you also need to touch on, because we're trying to make -- take that same information and make decisions quickly on what level of response we're going to take to an event, whether it be a special inspection or a routine follow up or an AIT, for example. And it's begun very quickly, and there has to be judgment applied in making those decisions. And these folks make those day in and day out.

COMMISSIONER McGAFFIGAN: I'm going to run out of time to raise my resident inspector issue, but I will -- I do want to ask the two Region III and Region IV -- your qualified current site time for your residents in Regions

III and IV, if I'm reading the chart right, is about six months at the moment.

And, you know, in Region II, give Luis the gold star here, he is a hell of a lot higher. He's up at almost four years current qualified site time for resident inspectors. And it looks like there's a lot more churning in some regions than in others.

And, you know, the idea of having resident inspectors there is that they really become expert on the site. This is the median time. I mean, obviously there are some people above the median, but half of your inspectors have been there less than six months as qualified site time.

MR. MERSCHOFF: It's a function of time, Commissioner. If you went back a year, you would see that I was in Luis' position.

COMMISSIONER McGAFFIGAN: Luis a year ago was at three and a half years, and you were at one year. I mean, you've gone down six months, but Luis is -- now Luis is probably facing an about wave. He's taking advantage of the seven-year thing, and then he's going to -- he's probably --

MR. REYES: Next year I'm losing my gold star.

MR. MERSCHOFF: The cliff Luis is approaching is just higher than the one I approached. And things happen, advancement opportunities arise in headquarters within the region, and you go through --

COMMISSIONER McGAFFIGAN: But I look at this medium qualified current site time with your resident inspectors, with a seven-year period I'd expect, you know, years. In region -- I'm looking, let's see, Region III, so I go back over here to Mr. Dyer.

He briefly got above one year in 2001, but for the -- from

1994 -- for the years that we have data, '94, '97, '99, 2000, 2001, 2002 -- in only one year -- namely, 2001 -- have you been above your median time, the qualified time at the site, that's been above a year. Whereas Luis has been above, you know, a year, you know, every year practically.

CHAIRMAN DIAZ: Yes. They are temperature related.

COMMISSIONER MERRIFIELD: I think there's a clear piece of evidence you can take from this statistic, and apparently our staff seems to prefer to live in the south. So they are more likely to move from our northern offices to our southern offices.

COMMISSIONER McGAFFIGAN: No. But Region IV is in the south the last time I checked, a lot of it. I mean, they've got Columbia Generating Station up there, but it's got a bunch of relatively comfortable places, California, relatively comfortable place, you know, if you can take the politics. And, you know, yet you have as much turnover as Mr. Dyer does.

MR. MERSCHOFF: It's a good and serious question, but I honestly believe I have the best group of inspectors out in the field today that I've had in my experience. The folks we're hiring are good people. We have a good mix of entry level and experienced folks. And while their time on the site at this point in time might be a little low, they are competent and they're capable, they're completing the inspection program, and they're finding real problems.

DR. TRAVERS: In fact, there's a graph in that package I think that has a trend of applicable NRC experience for the people who we're bringing in the program. If you look, it's been rising over time fairly significantly. So the point --

COMMISSIONER McGAFFIGAN: But the question is in terms of -- my question is, in terms of managing this workforce, and you face a lot of difficulties, do you want to -- is there a goal to sort of have people there for a while when you send them out to a site? Or is it the goal that you're going to move them on to the next site and move them on to the region and move them on to headquarters and have a fair amount of training?

Is it a military-style system where everybody -- the officer core stays in no job longer than a year or two before they move on, or is it a place where you're really trying to develop real expertise?

MR. MILLER: I think we have to be careful. You cannot take very ambitious and highly competent senior resident inspectors and --

COMMISSIONER McGAFFIGAN: These are residents. These are resident inspectors.

MR. MILLER: Yes. But, you know, there's a domino effect that occurs here, and I think the thing -- when we went back and looked at the data, for every move that occurs you can expect three, five, sometimes seven moves behind it. It's just in the process and that often involves resident inspectors fleeting up. So I --

DR. TRAVERS: But there's a good policy question here, and we tried to address it somewhat a few years ago when we increased the number of steps for resident inspectors, so there would be an incentive to develop that sort of expertise and continue to have them available onsite.

I think we had a period of a few years where that hasn't worked as well as it was envisioned, and there have been opportunities, or at least there have been factors and dynamics that have worked in just the

opposite way to provide incentive for those people to leave to either go to region or to come to headquarters for higher pay.

MR. KANE: And there is a fact of life one step different -- one grade differential between the regions and headquarters. And when -- as we talked about this morning, when the headquarters is hiring, that's --

DR. TRAVERS: But I think what we've heard is even in the face of that , not only are we carrying out the program, the outcomes of the program I think are succeeding. Yes, we had Davis-Besse. I'll admit that. But I don't think we've found a direct tie between Davis-Besse and the number or the lever of expertise, although we've suggested that training and other factors might be of assistance.

I think the outcomes of what we've been achieving in the program have been very high. And so what we've demonstrated I think is in the face of this dynamic a management flexibility to overcome it and still succeed in our inspection program.

COMMISSIONER McGAFFIGAN: I'll tell you, I've always said this, I'll say it one last time here. I think our grade structure may not be right. I said it in my vote on the N plus one paper a couple of years ago.

I honestly think you should have some 15s who are resident inspectors. And I don't -- I think it's one of the more important jobs in this whole agency, to be out there on the spot watching that reactor, and to -- the notion that pushing paper here at headquarters, which is not what we all do here at headquarters, but that pushing a piece of paper towards the Commission is more important than being the eyes and ears of the Commission at a site, and that those people that are 13s and 14s, and the person here who is a 15, I think

we may have our grade structure wrong. I really do.

I've got one last question, which you can answer for the record. I'd like to know as of today how many sites have less than two qualified inspectors at the site.

Thank you.

CHAIRMAN DIAZ: Thank you, Commissioner McGaffigan.

Commissioner Merrifield?

COMMISSIONER MERRIFIELD: I agree with the Chairman. I think we are well served by a diversity of views on the Commission.

CHAIRMAN DIAZ: Absolutely.

COMMISSIONER MERRIFIELD: And in that spirit --

COMMISSIONER McGAFFIGAN: You get the last word.

COMMISSIONER MERRIFIELD: In that spirit ---

CHAIRMAN DIAZ: I get the last word. I get the last word.

COMMISSIONER MERRIFIELD: I get the last audible word.

(Laughter.)

Sorry. No, I don't mean to make light of it, Mr. Chairman. But I bid him quick recovery to his full ability to articulate well and loudly.

Anyway, I wanted to -- before I get back to Commissioner McGaffigan's point, which indeed I will, I did want to make a note at the outset. I think, and I may stand corrected, but I think this is the last time that Ellis Merschoff will be appearing before the Commission in his current capacity.

CHAIRMAN DIAZ: Not really.

COMMISSIONER MERRIFIELD: In his current capacity. And I've had the opportunity to go see lots of things with Ellis. I will miss the fact

that he's moving on to the CIO where we can't go out and kick the tires at various sites. But I do want to reflect on the fact that I think Ellis has done a very good job.

I think the results of the Inspector General's survey on what our staff thinks, which is reflective of Region IV having the highest level of overall satisfaction, I think is very reflective of the progress that Ellis has made in his term as a regional administrator. And I look forward to seeing that same level of progress in his new job as our CIO where I'm sure he will excel as well.

DR. TRAVERS: Even if you can't go out and kick the tires with him, he's closer, you can just reach out and kick him.

(Laughter.)

COMMISSIONER MERRIFIELD: Well, Ellis may be doing some kicking of his own, but nonetheless it was positive.

MR. MERSCHOFF: Thank you.

COMMISSIONER MERRIFIELD: Getting back to the issue of the inspectors, I'm going to start by saying I agree with Commissioner McGaffigan relating to something he said this morning. One of the things that came out of our review at Davis-Besse was we did have a gap in terms of having sufficient staff there.

Now, it's understandable looking at it retrospectively it was at a time when we thought Davis-Besse was doing a lot better than it obviously was.

So 20/20 hindsight, obviously it's easier for us to look at it now, but I do think the goal really ought to be along the lines of what Commissioner McGaffigan said, and that is to minimize the amount of time

where you have an open slot in a resident inspector position. Even if that means on a temporary basis sending someone from the region, or, where appropriate, from the headquarters to fill that slot until we can get someone there on a more permanent basis.

I think it's important to do that, and I would agree with Commissioner McGaffigan on that score.

I do think -- I mean, I recognize the comments that Commissioner McGaffigan has made about the importance of resident inspectors. And having met most of them in my visits, I have to agree with the notion that it is a very highly capable group. And I think one of the important things -- and I reflect on what Ellis has said.

The folks that I have been out there meeting, particularly a lot of the residents, not the -- I mean, they're all great, but, I mean, we've got a lot of young people coming in who have been hired recently who are energetic, well educated, real strivers, and I think we have done ourselves well by building for the future. And I think that is a very positive thing going on down the line.

I think we are enhancing the quality level as we go forward. But I think it's going to be human nature. You know, when you go out to the sites, you know, and everybody wants to live somewhere differently. And my idea of the perfect place to live is different than my next-door neighbor, but there are some sites we have that are very desirable to some people, and there are some sites that we have that are not as desirable to some people. Everybody's preference is different.

And I think human nature being what it is, people, whether we

like it or not, are going to gravitate from being one of two or three people at an isolated site to want to go to a region, and to go from a region to go to headquarters. If you want to move up in an organization, that's the way it's going to happen.

It happens here, it happens in the Pentagon, happens in every federal agency. It happens in any business organization. You want to move to the headquarters, because you want to be -- if you're an aggressive, smart person, and you want to move up, you want to be close to where the decisionmakers are.

And I think we could make all our resident inspectors 15s, and I think we'd still have that same problem. I think people would make a cost-benefit calculation and say, "I'm going to take the hit for a couple of years, so that I have an opportunity to sit next to the regional administrator and get that delayed satisfaction."

So, I mean, I appreciate the point that you make, Ed, but I think the struggle -- it's worthy talking about, and I think it's worthy of continuing to have a dialogue.

Okay. Let me ask some quick questions. And given the fact we are challenged for time, I'll try to make -- we'll try to move them quickly.

Hub, you talked about the progress that Indian Point has progressed from where it was to where it was now. And I guess I want to focus on a couple of things. Are you satisfied with the rate of improvement? You talk about improvement. Are you satisfied with the rate of improvement?

Do you believe that Entergy's fundamental improvement program has helped move that? Are you satisfied with that? And, thirdly, how

is that affected at all by the integration between the two units, Units 2 and 3, which obviously came from different organizations?

MR. MILLER: The rate I think is okay. I think the -- it is the combination of the improvement program that was put in place. The management team -- there's a great deal of turnover in the management ranks. As you know, we're not in the business of assessing managers, but management drives the thing as much or more than the process. And the resource commitment has been strong.

I pointed out in my remarks, however, that one of the things that is adding challenge to the station, at the same time that it offers opportunity, is the meshing of the two units. If you have to speculate -- and it is a speculative question to -- you know, to try to imagine whether it would be faster if there were just one site and they would be without the challenge of merging the two units at the same time that they're trying to improve equipment and human performance, and the like.

It's hard to answer that question, because we've seen both the positive as well as we have seen just the extra workload that's associated with having to revamp all of the programs for maintenance process, corrective action, and the like, between the two units.

Overall, we are satisfied, and I think -- I neglected to say it, but with the closure yesterday of the yellow finding, the plant stands today in the regulatory response band, not in the degraded cornerstone column. So you see in that the progress.

Now, we feel -- and I talked about the deviation. We feel it would be imprudent to not continue at some level the close monitoring of this

improvement program throughout the rest of this year, and so we will do that to assure ourselves that this is long lasting.

COMMISSIONER MERRIFIELD: Jim, as it relates to Point Beach, obviously you focused on some concerns that they were for some period of time not going in the right direction. I want to get some sense -- you know, we have talked a little bit about staffing. Do you believe at this point you're getting the staffing necessary to do the oversight you need to do at Point Beach, given your challenges with Davis-Besse? I guess that's my first one.

MR. DYER: Yes. I think, Commissioner, looking at it overall Davis-Besse has been a challenge. I think I talked about we rolled over 11 team inspections from last year to this year, and that the response through NRR and the Inspection Branch and that has been really outstanding.

So far I think this year we have received 50 inspector weeks of support from other parts of the region, my fellow regions, regional administrators and headquarters, over $300,000 in contractor support for our inspection efforts in that.

So going into -- we had a very sound game plan to accomplish what we thought we needed for Davis-Besse restart and complete the baseline program. We now have the 95003 inspection at Point Beach on the -- on our plates, and, again, this month we went back to NRR and said that right now the region can staff the branch chief and the project inspector to support this dedicated branch.

But we're going to have to get the resources to really execute and accomplish the 95003 inspection. So right now we're looking. It's still an open question, but we are -- I was surprised by the response going in so far

this year.

COMMISSIONER MERRIFIELD: Okay. And a specific question -- there was some background information in the materials that you gave us regarding some cross-cutting issues on problem identification and resolution. Are you satisfied that the licensee has taken the -- is going in the appropriate vector and taking appropriate action to resolve this?

MR. DYER: We've had several discussions with the licensee. I know that right now it's an open question, because right now what they've done is gone in and overhauled their problem identification and resolution program, corrective action program. They named -- I think they call it a corrective action program czar for the site, and elevated it to get higher visibility and more scrutiny on the closeout of the issues.

Again, this is going to be part of the presentation that we're going to hear about as a result of their self-assessment, and then it's going to be a key factor in our 95003 inspection.

And a point, if I may elaborate, at the end-of-cycle meeting in that that we really needed to focus on was -- is given the Point Beach issue -- I mean, that was a very good finding, really an integrated great finding. And they didn't handle it well on the corrective action side.

I don't -- didn't want to send the message that they shouldn't find problems. That's what my biggest concern was is to convey that I would send the message to the staff that you can't find any problems. You know, I hope if they go out and they find more problems that's good. We need to evaluate them, but that's -- I didn't want to have a chilling effect, if you would, on them.

COMMISSIONER MERRIFIELD: Ellis, as it relates to Cooper, in January of this year, we did issue, as you mentioned, a CAL, a confirmatory action letter to them to address what I think is a rather large list of issues -- emergency preparedness, human performance, material condition, equipment reliability, plant modification and configuration control, corrective action program, and engineering.

Can you talk a little bit about the licensee's improvement plan and if you're comfortable with the actions that are taken to address the deficiencies and the vector, the direction that they're going in that regard?

MR. MERSCHOFF: Yes. As I stated in my presentation, the first revision of the improvement plan we were not happy with. The second revision we are. We believe that it's a comprehensive plan that has appropriate milestones and measures that if implemented would likely result in improvement.

The problem is Cooper and NPPD as an organization has a long history of developing plans that look pretty good that are not implemented. Thus, the confirmatory action letter went through each of the key areas -- that's why there were so many that were determined to have regulatory significance, deficient regulatory performance, and to capture those aspects of their improvement plan that we believe needed to be accomplished to demonstrate consistent improved performance and thus move them out of the multiple degraded cornerstone.

So the answer to your question is, yes, I believe their plan is well founded, that the confirmation of action letter, although complex, captures as commitments the important parts, and we will inspect their progress against

those commitments every quarter, have a public meeting to discuss that progress, and will know promptly if they fail to make acceptable progress on it.

COMMISSIONER MERRIFIELD: I do want to -- I appreciate that. I want to reflect on a couple of things. One is -- and this is a licensee for whom -- they are managed by an elected board of officials that run for office and run that plant and the utility.

I know in terms of the engagement that we have had, you, along with Bill Travers, traveled out to a more remote part of Nebraska, and dialogued with them. I think it was probably about this time, maybe a little later, last year, to make that message very clear that there had been a lot of real good plans, but the follow through hadn't occurred, and there was a need for the Board to engage on that.

Similarly, to their credit, that Board -- or some of the representatives of that Board have come to the Commission and have met with the Commission, and I know the message I have was probably consistent among all of us that -- the very same thing. You know, you had good plans in the past, but it's follow through. And there's an obligation on the part of the management of that entity and the Board that oversees it to make sure that that happens.

So I do think in this particular case there have been I think valid concerns raised about how Cooper has been sort of going along for some time, but I think there's a consistency among the senior staff and the Commissioners that, in fact, that is the expectation we have, that they're going to follow through on that this time.

You're welcome to comment if you want, but -- or, Bill, I don't

know if you want to say anything, but that was my sense.

DR. TRAVERS: I think you've covered it very well.

COMMISSIONER MERRIFIELD: Last question real quick, again taking advantage of the fact that we have all of the regional administrators here, I had asked a question in the first panel this morning seeking some better understanding of the need for a higher degree of flexibility in some of the end-of-cycle meetings, given the fact that we've had some examples where we've had multiple meetings with the public in a relatively short amount of time.

And that may give the public some -- you know, while we want to be open about these things, the multiple meetings may give some misimpression of the status of an individual unit, and I didn't know if any of the regional administrators wanted to -- had more pointed examples or wanted to reflect on that issue.

MR. REYES: Yes. Let me address that, because I personally would like to have a little more flexibility, and the issue is like this. And maybe it was more pronounced in Region II lately.

We have a lot of plants going through license renewal, and what that means, that every time we have one of those inspections we also have a public meeting. So with the guidance we have right now of the end-of-cycle meeting, to complete all of the end-of-cycle public meetings in a particular window, you end up overlapping or sequencing several public meetings.

Now, regardless of what the subject of the meeting is about, today you're going to discuss three things -- plant performance, security, and transportation of waste. I don't care what you advertise the meeting to be;

1 those three topics will be there.

2 So when you end up having meetings back to back, putting
3 out press releases, there is a lot of traffic that could be misinterpreted as
4 negative reflection on the facility. So I think we need to be smart enough to do
5 have a lot of contact with the public and offer the information and the
6 accessibility of the staff.

7 But how we sequence them, I think we need to get smart
8 about that. And we've been working with the program office about how quickly
9 after the end-of-cycle meeting to go and hold these meetings if you already had
10 a public meeting a week or two ago. It may be on another subject matter, but
11 it doesn't mean you don't have the end-of-cycle meeting, but when you have
12 the end-of-cycle meeting. And we have given that feedback to the program
13 office.

14 COMMISSIONER McGAFFIGAN: Can I ask a clarifying
15 question? Why do we allow people to, if the subject of the meeting is the
16 performance of the plant, to talk about transportation of spent fuel and
17 security? Security being sensitive information that, you know, shouldn't be in
18 the public domain.

19 MR. REYES: When a member of the public stands up in any
20 forum and they want to speak, we don't turn off the mikes and walk away. You
21 have to let them --

22 COMMISSIONER McGAFFIGAN: Thank you very much for
23 your speech. That's not the subject of today's meeting, and let me -- does
24 anybody actually have a question on the performance of the plant?

25 MR. REYES: But the media is there, and you are the only

game in town in terms of --

COMMISSIONER McGAFFIGAN: But see, that diverts our resources. I mean, it strikes me that we end up having -- if every meeting we have has to have somebody there who's an expert on transportation of fuel, an expert about security, then NSIR will never get its work done and Spent Fuel Projects Office will never get its work done because they'll always have to be supporting some meeting, or your technical specialists will have to be supporting that meeting.

CHAIRMAN DIAZ: Well, it may very well be that there's an issue that we can, you know, discuss.

COMMISSIONER McGAFFIGAN: Having Jim Riccio present -- I guess some credit he did not raise transportation of spent fuel or -- what's the other one?

COMMISSIONER MERRIFIELD: Mr. Chairman, I know -- I'm going to make this quick. I know you want to move on.

CHAIRMAN DIAZ: Let's just finish. Yes, go ahead.

COMMISSIONER MERRIFIELD: I would postulate to Commissioner McGaffigan -- and this is a real world example -- if we went up in front of the House Commerce Committee on security, was in a hearing on security, and an individual member wanted to get into some safety issues at a nuclear power plant in his or her state, your answer wouldn't be, "This is an issue on security. We can get back to you at some other point on the safety issue."

COMMISSIONER McGAFFIGAN: But we're the Commission. We're capable of answering those questions. An individual staffer who --

ideally, a resident inspector or a branch chief, shouldn't be expected to answer those questions.

CHAIRMAN DIAZ: But it might very well be that if that's an issue that happens every time that the Commission needs to address it, maybe we need, you know, a traveling expert that will --

DR. TRAVERS: I may have an out for you. We actually owe you a paper on this subject, so I -- and I think it's encompassing of this particular issue.

CHAIRMAN DIAZ: Okay. All right.

DR. TRAVERS: And I think it's relatively near term. I can't give you the date that it's due.

CHAIRMAN DIAZ: Good.

DR. TRAVERS: But we're working on it.

CHAIRMAN DIAZ: Okay.

COMMISSIONER MERRIFIELD: Were there any other regional administrators that wanted to weigh in on the issue of end-of-cycle meetings?

MR. MERSCHOFF: I'll weigh in, Commissioner. If I can broaden the answer a little bit to just meetings, I think the real rub comes when there is a white finding or a yellow finding. Now, when that occurs, we'll have a regulatory conference that often has a press release associated with it.

We'll then issue the finding, and that has a press release. We'll have a performance meeting with the licensee on the site that may have a press release, and we'll have the annual end-of-cycle meeting that has a press release. And about that point often times the public can become

confused and think those guys did it again.

And that -- I've heard that from the senior managers, the licensee managers, and that's a fair comment that we need to look at.

COMMISSIONER MERRIFIELD: I think the Commission would be well disposed to considering the same -- in the same topic.

MR. MILLER: Someone once said that all politics are local and that very much applies here. And one site -- we were going four hours the other night, and we ended up having to move on because the hall we had rented had to close. In other meetings it's much shorter than that.

I think that my sense is that we have a great deal of flexibility as it stands right now to do the right thing with respect to how we combine these meetings or how we handle them. They are resource-intensive, and I would just say they had to others -- it is difficult to tell people that they can't ask a question when it relates to the business of nuclear power.

It ends up being highly counterproductive -- it's just my experience -- and creating an impression that is really counter to what we're attempting to do in the outreach in the first place.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

CHAIRMAN DIAZ: Thank you, Commissioner Merrifield.

Let me see if I have some voice left in here to finish this meeting. First, I think I can speak for my fellow Commissioners that we enjoy having the regional administrators in here. Maybe we should do it more often.

MR. MERSCHOFF: I vote for that, Mr. Chairman.

(Laughter.)

COMMISSIONER MERRIFIELD; I think that goes as well for

the office of the CIO. We can do that as well.

CHAIRMAN DIAZ: Let me see. About six years ago we were having a meeting that was similar to this in here, and I remember clearly saying that the thing that, you know, bothered me more about the NRC and the oversight processes was how event-driven it was. It was practically totally event-driven.

I mean, you got an event, and, you know, we sent 37 inspectors, and then followed by 74 and three regional administrators -- that was about the number at the time -- exaggerated a little bit.

As we became more risk-informed and there were less events, we were less event-driven. I am not sure which was the real cause, whether it was risk-informed or less event. I notice now that, you know, we're still not event-driven but maybe event-informed is the right word. That is, events really keep us right on track. But I hope we don't miss them. Okay?

I hope we still try to not have events. When we get into risk information and we get into the oversight process, there is always this argument between deterministic and probabilistic. And people get lost in the uncertainty, and the uncertainty is really not the issue, because uncertainty is you have to be able to manage in either one of those processes. The issue is, what does the model contain? Deterministic models have as much uncertainty as probabilistic models. You just handle them differently.

The issue with the probabilistic model is that they are integral models. They are much more complete, and the completeness they might have more variation. The deterministic models are single, non-parameters, probably mostly differential models, and, therefore, sometimes they give you

a very acute sense of when something is wrong, but they don't give you the entire picture.

The issue, I think as Mr. Travers was saying, is to make sure they get together, because it is in the different -- you know, tools that we actually get a much better feeling of what is happening. There's not one tool that we have that does it all, and I think what I've been hearing from you is that you use all of these tools all the time. Is that correct? You don't rely on any single --

All right. Now I have one question. When we place a plant in the multiple repetitive cornerstone, there is always a clear criteria we know how to do that. Do we know how to do as well when we want to take them out of the multiple repetitive cornerstone? Is the criteria clear?

MR. BORCHARDT: Yes, it's -- I think it's perfectly clear, because it's the same criteria for getting --

CHAIRMAN DIAZ: I'm going to hold you to that.

(Laughter.)

You know, I mean, perfectly clear is approaching perfection, and I --

MR. BORCHARDT: It's approaching it.

(Laughter.)

CHAIRMAN DIAZ: I would like to have a curve on that.

(Laughter.)

You're fairly confident that we have the criteria?

MR. BORCHARDT: Yes, because the criteria for entering into the column of the action matrix is the same for whatever direction you're

going.

CHAIRMAN DIAZ: Okay.

MR. BORCHARDT: But to go from multiple repetitive degraded to degraded cornerstone, the criteria are clear as shown on the action matrix.

CHAIRMAN DIAZ: Okay.

DR. TRAVERS: And we also have the flexibility, as Hub mentioned in connection with Indian Point, even if a plant is moving back down towards the regulatory response, to keep in place for some period of time as appropriate a heightened level of regulatory oversight activities, if we think that's appropriate.

CHAIRMAN DIAZ: Good. And one last comment, just with the little voice that I have left. Of course, the EDO just gave us a new way of dealing with human resources in headquarters. You said we kicked them, is that what you said? We'll remember that.

But let me end with a question to Dr. Travers. It goes back to the little comment I made that we have multiple tools, and I think the real question is, do you feel that these tools are balanced to actually achieve what the Commission wants to achieve in the oversight programs?

DR. TRAVERS: I think they are, but I have to say, as with most things, we're still feeling our way through this relatively new process of using the new ROP standard and -- or program, and we are searching for ways in our self-assessment processes to further that, make it even better balanced and effective and efficient.

CHAIRMAN DIAZ: If you are not there, are you vectored at

the right speed --

DR. TRAVERS: I think we're vectored in the right direction, and I think we've had some challenges going forward, but I think we're vectored in the right direction.

CHAIRMAN DIAZ: Okay. Do any of my fellow Commissioners have anything? Then, this meeting is adjourned.

Thank you.

(Whereupon, at 3:45 p.m., the proceedings in the foregoing matter were concluded.)