UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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BRIEFING ON RESULTS OF AGENCY
ACTION REVIEW MTG. - REACTORS

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NUCLEAR REGULATORY COMMISSION

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ROCKVILLE, MARYLAND

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WEDNESDAY, MAY 01, 2002

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The Commission met in open session, pursuant to notice, at 9:00 a.m., the Honorable RICHARD A. MESERVE, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

RICHARD A. MESERVE, Chaiman

GRETA J. DICUS, Member

NILS J. DIAZ, Member

EDWARD McGAFFIGAN, JR., Member

JEFFREY S. MERRIFIELD, Member

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STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

(PANEL 1)

DR. WILLIAM TRAVERS

MR. SAMUEL COLLINS

MR. HUB MILLER

MR. ELLIS MERSCHOFF

MR. TOM BOYCE

MR. MARK SATORIOUS

MR. WILLIAM KANE

(PANEL 2)

MR. TOM HOUGHTON

MR. JEFF BENJAMIN

MR. DAVID LOCHBAUM

MR. RICHARD JANATI

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CHAIRMAN RICHARD MESERVE: Good morning. On behalf of the Commission, I would like to welcome you to today's briefing on the results of the Agency Action Review Meeting. We are approaching two years since the new oversight process was implemented on an industry-wide basis. Overall, the oversight process has continued to meet its goals in providing more objective and understandable assessments of plant performance, while focusing on aspects of operation that are most safety significant. The feedback that we received, both from licensees and from members of the public is, in general, positive.

The success can be attributed in part to the dedication of the NRC staff, your headquarters, the regions, and resident inspectors. The program also depends on the cooperation of the industry in working with the Agency and being responsive to inquiries during the Significance Determination Process. Effort has benefited as well from insights provided by many other involved stakeholders.

Efforts associated ROP implementation involve all areas of the NRC, and culminated last month when NRC senior managers met to conduct the Agency Action Review

Meeting. It is the results of that meeting that we will hear about this morning.

First we will hear from the staff. Dr. Travers, you may proceed.

DR. WILLIAM TRAVERS: Thank you, Chairman, and good morning. As you indicated, it's the Second Annual Agency Action Review Meeting, which was held just a few weeks ago in Annapolis. And the AARM, as you know, is an integral part of our Reactor Oversight Process. And the meeting is conducted to achieve the objectives outlined in Draft Management Directive 8.14, which include but are not limited, reviewing Agency actions that have been taken for plants with significant performance problems to ensure that coordinated courses of actions that have been developed and which are being implemented for licenses of concern are appropriate; also to confirm that the ROP is meeting NRC's strategic goals; and to ensure that the trends in the industry and licensee performance are recognized and addressed.

This annual meeting essentially replaces the senior management meeting process conducted under our former reactor oversight program. And there is one fundamental difference that I would like to point out just briefly. While 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 those performance issues are appropriate, our expectation going into this AARM is that it's unlikely that we would identify significant differences in our assessment of performance or in the approach that we've already decided to take and, in most cases, are implementing.

In the previous senior management meeting process, we made crucial decisions about changing classification or, in some cases, our regulatory actions. The ability to make a reaffirmation of our current direction at the AARM can be done because of the fact that the new Reactor Oversight Process is viewed as a more predictable and open continuum of reactor assessment over the course of any given year.

Performance indicators posted quarterly on the web letters that describe where, in the Action Matrix, any particular plant is located, which are issued when those conclusions are reached. And our ability to discuss internally the actions being taken in response to performance problems along the course of the year, we believe, all add to this notion of a continuum of assessment in activities that make up the AARM and make

that process at the AARM very unlikely to change the direction that we're in. We allow for that possibility, however, I should point out.

The AARM is also a venue to discuss the performance issues at fuel cycle and other material facilities. Although, at this year's 2002 AARM, none of those facilities were discussed.

This being only the second AARM, the process is still relatively new, but we believe that the ROP has demonstrated that the use of risk information allows the Agency to better focus resources and to identify significant performance problems at plants.

That is not to say that unforeseen issues won't or can't arise. An example is, of course, the recent events associated with Davis-Besse. However, the Agency response for this issue, we believe, demonstrates the inherent flexibility in the reactor oversight program to address emergent issues.

Finally, we continue to have strong stakeholder involvement, both internally and externally, to improve the reactor oversight program going forward.

Additionally, I should point out that once again we took the opportunity to have the senior managers discuss a number of management topics after we

closed the AARM. During today's briefing, however, we will focus on the specific plant performance reviews as well as the assessment of the power reactor industry training program, described to you in SECY-02-0058 and the ARP self-assessment described in SECY-02-0062, both of which were issued last month.

Now, let me very briefly introduce the people at the table. First, Sam Collins is here, Director of the Office of Nuclear Reactor Regulation. Mark Satorious is the Chief of the Program Assessment Section of the Inspection Program Branch in NRR. Tom Boyce is the Senior Project Manager in the Inspection Program Manager at NRR. To my right, of course, is Bill Kane, my Deputy for Reactor Programs. Hub Miller and Ellis Merschoff are there, Regional Administrators from I and IV respectively.

And with that, let me turn the meeting over to Sam.

MR. SAMUEL COLLINS: Thank you, Bill.

Good morning.

CHAIRMAN RICHARD MESERVE: Good morning.

MR. SAMUEL COLLINS: It's important, I believe, at this point, just to take a few moments to review the process itself as well as how did we get to

the point of discussing the plants, the two topics today. The ROP chronology includes recent products going back to 1999. If you will recall, we revised the oversight process in two SECY papers, 007 and 007A in 1999. We had the pilot program that went from March to November of 1999 with eight plants.

In the first cycle, the first year was April 2000 to April 2001. That resulted in the SECY paper 011114, which were the results of the initial implementation. We had a similar meeting. That meeting, of course, was broken into two parts because of the cycle we were on for the review of the revised oversight process. And that cycle was separable, at that point, from the plant review.

This is the first meeting where we have the combined review, which is the intent of the draft menial chapter. And today you will hear an encapsulated version of the results of the second full cycle. The second full cycle was truncated somewhat, because of the need to go to an annual cycle for plant reviews for budget and planning purposes and to align our program with those of inspection planning. That was at the suggestion of the regional administrators. We believe that was an improvement to the process.

The second year is April 2001 to December of 2001. And going forward to the third complete year of the revised oversight process, we'll be working on a January '02 to a December '02 cycle. And that will be the standard from here on out.

The products coming out of the second full cycle are in fact two SECY papers, SECY-02-0062, which is the Calendar Year 2001 Reactor Oversight Process Self-assessment, that was issued April 3rd; as well as SECY-02-0058, which is issued April 1st, the date was kind of arbitrary, I guess, Results of Industry Trends Programmed for Operating Reactors; and the third product is the results of the AARM meeting which took place in April, as Bill mentioned. So there are really three considerations for the meeting here today.

The review of the AARM will be discussing plant performance. That's a review of the Agency actions for plants and the multiple repetitive degraded cornerstone or unacceptable performance column of the Action Matrix. We'll be talking about industry trends, that's a review of the performance trends to assess those statistically significant adverse trends in industry safety performance and discuss any appropriate Agency actions as a result of that. And thirdly, the

oversight process self-assessment, which is to review the metrics analysis, lessons learned, and recommended policy adjustments.

And there have been many stakeholders who have an input, not only externally but internally. We rely on the Office of Research, our partners there to help support these reviews, as well as to do technical analyses of plant issues to support the SDP. So NOR is at the table here, but clearly, this is an Agency process.

We have challenges that remain. And we'll hear talk about some of those in the revised oversight process self-assessment. They cover four broad areas. And I know each of the commissioners are sensitive to these. And they result in challenges in the inspection program itself. And we'll be talking about those in detail. Challenges to the performance indicator program, we'll be talking about those. SDP challenges have been of note, both timeliness, quality, and support of the region, and licensees making timely decisions to support Agency actions.

And lastly, the assessment process will be spoken to. And other stakeholders that are present today that will be giving presentations will give their

views. And those inputs are welcome, and we believe some of those will be constructive with helping us to move forward.

So as we move forward in how did we get here, on slide three, the End-of-Cycle meetings have been conducted for all plants. And the End-of-Cycle summary meetings for plants with performance issues, those were completed by the end of February. The annual assessment letters for all plants were issued by mid March. And the annual public meetings for all plants were completed by the end of April.

Those lead up to the Agency Action Review Meeting where we discussed the plants. And that results, again as Bill mentioned, per the management directive in the Commission briefing here today.

Slide 4 talks about the elements of the Action Review Meeting. I won't go into these in detail. They have been discussed previously. But I do want to acknowledge that the regional administrators are primary stakeholders in this process. The program office's role is to provide them a policy and the resources that allow them to accomplish their goals in conjunction with the revised oversight process.

Now, the revised oversight process does have

stated success criteria in the early papers, the 007 and the 007A paper. We aligned the revised oversight process with the four performance goals. That feeds into the strategic plan. We had measures that the regional administrators are accountable for in the performance of the revised oversight process. And in the way that we gather comments and disposition those comments and define the process, we align with those four performance goals.

More importantly, as Bill mentioned, this process is a follow-through to previous processes including the soft process, the inspection program, and the annual meeting to discuss plans for the senior management meeting. Some of those characteristics are the process being objective, scrutable, and risk informed. Those criteria are used in order to assess the processes, and we're reporting out on those today.

We have other performance criteria, which includes within the budget and the inspection hours and the timeliness goals at a lower level. At a strategic level we track the four performance goals and that high level criteria.

With that background, I would like to introduce the first speaker to discuss the plants that

resulted in discussion at the annual meeting. The first plant to be discussed is Indian Point 2. That discussion will be lead by Hub Miller, Regional Administrator for Region I.

MR. HUB MILLER: Thank you, Sam.

Good morning, Chairman and Commissioners. Over the past year, while operating in a manner that assured public health and safety, Indian Point 2 continued in the multiple degraded cornerstone column of the reactor oversight program action matrix. The graded cornerstones are associated principally with performance problems revealed by an August 1999 reactor trip with electrical systems complications and a February 2000 steam generator tube failure.

In accordance with the Action Matrix, an extensive supplemental inspection, a so-called 95003 inspection, was performed in early 2001 to examine these performance issues in-depth and assess steps being taken by Consolidated Edison, the plant owner at the time, to address these issues.

A 95003 inspection identified problems in the areas of human performance, equipment reliability, design control, emergency preparedness, and corrective actions. We described the program of inspections and

other reviews that we undertook to follow up on these issues at last year's reactor oversight program briefing. During this assessment period, the plant operated most of the time at full power. And the exceptions included a few down powers in the reactor trip which resulted from equipment problems. Some progress was made in addressing performance issues. But it was slow overall, uneven in some areas.

On the positive side, the licensee effectively addressed a number of long standing issues in the emergency preparedness area. Following successful exercise performance last June, we cleared multiple inspection findings that had degraded the EP cornerstone.

On the other hand, a number of plant events and inspections indicated sufficient progress had not been made to clear degraded initiating event and mitigating systems cornerstones. We identified on-going substantive cross-cutting issues in the human performance and the problem identification and resolution areas.

For example, an August overpower event and a boron dilution event in December reveal on-going operator skill and knowledge deficiencies. Weak

operator performance and associated high failure rates during annual requalification examinations last fall reveal weaknesses in training and inconsistent enforcement of operating crew performance standards. In exercising the Significance Determination Process, these findings were collectively categorized or classified as a yellow finding. Untimely or ineffective corrective actions contributed to a number of these events.

Ownership of the plant transferred from Con Ed to Entergy on September 6th of last year. Immediately upon assuming ownership, Entergy requested rescheduling of several inspections that we planned to evaluate status of degraded cornerstone issues. This request was made to permit Entergy to promptly undertake a number of improvement initiatives, including a mid-cycle outage to address several equipment problems that had been challenging operators and a comprehensive self-assessment.

While we granted the request, we proceeded with a number of focused supplemental inspections and monitoring efforts to keep abreast of important plant developments.

For example, in response to the operator requalification examine failures, we instituted

augmented control room coverage over an extended period, during which we closely monitored all operating shifts. Furthermore, regional staff conducted operations evaluations of individuals who failed the examination.

Entergy's self examination, which was performed at the end of last year, was comprehensive. A team of 28 industry professionals participated in this three week effort. The assessment indicated that while some progress was being made, it was limited. The assessment confirmed the underlying problems that were previously identified by us and others.

In response, Entergy developed a revised Indian Point 2 improvement plan. It documented in January of this year what it calls its Fundamental Improvement's Plan for the station. In order to verify effectiveness of corrective actions, particularly given past problems and following through on improvement plans at the plant, several supplemental inspections and special oversight activities are planned beyond the base line.

These are essentially the inspections that we postponed last year. Regulatory performance meetings with the licensee have been held throughout the past year in open forum to monitor licensee performance

improvement efforts. We will continue these meetings. Our assessments will include review of a set of key performance indicators that Entergy has established in their improvement plan to measure effectiveness of various initiatives and to emphasize accountability for results.

Important to our oversight efforts to assuring that we are tracking the numerous issues that have presented themselves at the station in an effective and efficient manner, has been an interoffice technical coordination team. We expect that by late summer, through planned inspections and the other oversight activities guided by this team, to be able to judge whether the plant has substantially addressed performance weaknesses and thus whether degraded cornerstones can be cleared.

Significant staff effort and management attention was aimed, over the past year, at addressing extensive public and external stakeholder interest and concerns that have arisen around Indian Point. At times this has been very intense.

We conducted numerous meetings with the licensee in open forum. Consistent with the Action Matrix, these included regulatory performance meetings

convened by me and other regional senior managers and the annual assessment meeting held recently in the area of the plant which was lead by Bill Kane.

We frequently briefed government and elected officials at all levels, federal, state, and local, to keep stakeholders informed of our activities and to receive input. Similar to how we coordinated technical and safety issues, we have continued use of an interoffice communications coordination team to help in handling this extremely challenging aspect of our activities.

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

MR. SAMUEL COLLINS: That completes discussion of Indian Point 2. We now move to discussion of the Cooper facility by Region IV Region Administrator, Ellis Merschoff.

MR. ELLIS MERSCHOFF: Thank you, Sam.

Good Morning, Chairman, Commissioners.

Cooper Nuclear Station, as you know, is

located on the Missouri River in Southeastern Nebraska. It's the only nuclear plant owned and operated by the Nebraska Public Power District, and employees 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 assured 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 a result of four white findings in the emergency preparedness cornerstone. The first, in the fourth quarter of 2000, was the 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 Response to the Regulatory Response Column.

In the second quarter of 2001, during the inspection in response to this first white finding, we noted that effective corrective action had not been taken, and the same problem with recognizing a degraded

core condition reoccurred. 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 start-up transformer. During this alert, Cooper failed to make timely off-site 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, on April 1, 2002.

Cooper Nuclear Station's current performance can be best understood from the perspective of their performance over the past ten years. Cooper was discussed at every senior management meeting held from 1993 until the last senior management meeting in 1998. During this period Cooper received three trend letters and a diagnostic expression.

When last discussed in 1998, just prior to the transition for the revised oversight process with Cooper as a pilot plant, we were generally satisfied that

Cooper was making progress, albeit slow, in improving their performance.

From the regulatory perspective, performance during this ten year period was characterized by twelve severity level 3 escalated enforcement actions, totally $860,000 in civil penalties, two confirmation of action letters, and five white bindings.

While Cooper worked to improve performance during this ten year period, there's been a significantly high rate of change of senior managers. Specifically -- and again this is over the ten year period -- there have been two chief nuclear officers, six site vice-presidents, five plant managers, and seven engineering managers. This management turnover has created organizational challenges relative to process consistency, accountability, and continuity of key initiatives.

During the same ten year period, Cooper has initiated or supported twelve major assessments, each of which identified significant problems. Of these twelve major assessments, seven were MPPD initiatives, and five were either done or caused to be done by the NRC. Of those five, it was a 1994 diagnostic self-assessment team, which was comprised of 17 experts, all of whom

were independent of Cooper. And also in 1994, a ten person NRC safety evaluation team whose role was to oversee this diagnostic self-assessment and independently assess the results.

In 1998 an engineering excellence plan was developed by the Nebraska Power District in response to NRC findings in the areas of engineering effectiveness and corrective action. In 1998 a common cause analysis was done by a combined NRR and Region IV team. And now in 2002, the TIP, the Strategic Improvement Plan, has been developed in response to the competitive degraded cornerstone assessment. Each of these assessments, prior to the 2002, prior to the most recent, have been reviewed and considered to be well done assessments. The Strategic Improvement Plan, the current one, is in development and will be evaluated as part of our 95003 assessment.

Many of these assessments that were done included experts independent of Nebraska Public Power District, and most identified and ineffective corrective action program, inadequate or unclear standards and expectations established by management, and a weak engineering organization as the underlying causes of Cooper's performance problems.

We believe these assessments have been effective in identifying the full set of significant problem types at Cooper Nuclear Station. The problem has been Cooper's inability to follow through on a comprehensive corrective action program in response to these findings. The repetitive degraded cornerstone of the Action Matrix requires the licensee to establish an improvement plan with NRC oversight. MPPD has begun this project and recently issued Revision Zero of their Strategic Improvement Plan.

Our 95003 inspection will test this plan against the problems identified in the assessments conducted over the past decade to assure, if not already addressed, a careful review of the extent of the condition in a comprehensive treatment of the problem resolution is included, along with meaningful metrics to assess progress and implementation of the Strategic Plan against established milestones.

The 95003 inspection is scheduled for June. Upon completion of this inspection and the likely revision of the licensee's strategic plan, we will capture the plan within the regulatory framework with a confirmation of action letter or an order consistent with revised oversight process guidance. Additionally,

we'll conduct quarterly public meetings with the Nebraska Power District to assess problems against the plant and hold the licensee accountable for making successful progress in implementing the plan.

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. Thank you.

MR. SAMUEL COLLINS: Thank you. At this time that completes the first objective of Management Directive 814, which is to review the Agency actions resulting from the performance of nuclear reactor licensees for those plans for significance performance problems as determined by the Reactor Oversight Process Action Matrix. As a result of the Agency Action Review Meeting, there are no additional actions that are being proposed for the plans that were discussed. And the process is designed to come to that result.

At this time I would like to proceed with the next objective which is to review the industry performance trends. Tom Boyce will lead that

discussion.

MR. TOM BOYCE: Good morning.

As Sam mentioned earlier, I'm Tom Boyce with the Inspection Program Branch of NRR, and I'll be presenting the Industry Trends portion of this briefing. I'll be covering some background of the Industry Trends program, how results of program are communicated to our stakeholders, the process for identifying and addressing adverse trends, the results for fiscal year 2001, and where we're going with the program.

Next slide, please. As background, one of the measures in the NRC's Strategic Plan for the performance goal of maintaining safety is that there should be no statistically significant adverse industry trends in safety performance.

In November 2000, the responsibility for this performance measure was transferred from the Office of Research to NRR, and NRR subsequently initiated a program to monitor industry trends. NRR provided its first report on the industry trends program to the Commission in June of last year in SECY-01-0111. NRR provided the second report early last month in SECY-02-0058.

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 in the efficacy of 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. I'll discuss this a bit more later on in the presentation.

Next slide, please.

The results of the ITP are communicated to NRC stakeholders in several ways. The industry indicators are published on the NRC's website. The staff provides an annual report to the Commission on the results and status of development of the ITP. The NRC reports the results of the performance goal measure to Congress as part of the agency's Annual Performance and Accountability Report. And the staff uses the

indicators in various conferences in industry. The most recent example of this was at the Regulatory Information Conference this past March.

Next slide, please. The slide describes the process the staff has established to address any adverse trends in the industry indicators. The first step is to identify them. This is accomplished by using statistical techniques to apply a trend line to each of the indicators. If the trend line is flat or improving, the staff need not take any additional action. If the trend line shows a decline in performance, the trend is considered adverse.

In addition to using trend lines to monitor long-term trends, the staff monitors year-to-year changes in the indicators to detect emerging issues before they manifest themselves as adverse trends. To accomplish this the staff uses a statistical technique called "Prediction Limits." It's important to note that prediction limits are determined to be a staff tool for early detection of potential issues. And the indicators that proceed prediction limits are not considered adverse trends for purposes of reporting to Congress.

The staff will investigate adverse trends to determine the contributing factors and apparent causes

that underlie in the indicator data and will assess the safety significance of any issues that are identified. Should this investigation reveal issues that have generic safety significance, the staff will follow the NRC's process for generic communications to address them.

Depending on the issues, this process could include early engagement with industry to gather information and to discuss various approaches for investigation. The staff may also conduct generic safety inspections as follow up. Longer term issues may also be addressed as part of the generic safety issue's process by the Office of Research. Any adverse trends and the actions taken in response are reviewed annually by NRC'S senior managers as part of the Agency Action Review Meeting.

Next slide, please. The results of the ITP for fiscal year 2001 are shown on this slide. The primary result is that the performance goal measure was met. As discussed in its first report to the Commission, the staff is currently developing indicators for assessing industry-level performance within each cornerstone of safety. These indicators are derived by aggregating the plant level data used in the Reactor

Oversight Process. However, recognizing that the ROP was implementing just over two years ago, there was not yet sufficient data from the ROP to provide long-term trending information. Nonetheless, based on the review of the data submitted to date, the staff did not identify any significant short-term issues.

Two indicators exceeded their prediction limits by small amounts. These were the indicators for automatic scrams while critical and collective radiation exposure. To evaluate these indicators, the staff followed the process for investigating adverse trends, and the results are described in SECY-02-0058. The staff's investigation did not identify any significant safety issues requiring Agency response.

Next slide, please. A problem that the staff identified in it's first report was in assessing the relative safety significance of indicator data. Stated in plain English, it is possible that industry performance has improved to the point where some of the indicator data is down in the grass. If this were the case, even if a short-term adverse trend were identified, it may or may not represent a significant safety issue, warranting a generic response by the NRC. The problem is knowing where the level of the grass is.

To help address this problem, the Commission provided guidance to the staff in an SRM late last year to develop risk informed thresholds for indicators as soon as practical. NRR has requested research support in developing these risk informed thresholds, and intends to seek inputs from stakeholders, including the ACRS and industry, while developing the thresholds over the next one to two years.

The first briefing of the ACRS is scheduled for May 30th. The development of thresholds may permit enhancement of the current performance goal measure, which currently only looks at trends in the indicator data. For example, the thresholds can be used to establish the relative significance of the indicators for reporting purposes, and can be used to establish a predictable Agency additional response based on the these levels.

The staff is developing additional indicators that may provide further insights into the cornerstones of safety, for example, research updated operating experience data for indicators of initiating events. And these are shown in SECY-02-0058.

NOR has requested that research update other operating experience studies to enhance the ITP,

including system and component reliability studies for the mitigating systems cornerstone.

Finally, the staff is seeking improvements and data collection reporting by industry. For example, the staff is currently working with industry to develop a consistent set of data reporting standards for reliability and unavailability that would encompass the needs of all stakeholders, including the NRC, INFO, and common PRA practices.

Lastly, senior managers' of the NRC review of the ITP at the Agency Action Review Meeting in April included that the actions taken have been appropriate. This concludes my portion of the brief.

MR. SAMUEL COLLINS: Thank you. That completes our second objective.

The third objective will be lead by Mark Satorious. It includes a discussion of the review of the revised oversight process for effectiveness.

MR. MARK SATORIOUS: Thank you, Sam.

Chairman, Commissioners, I'm the chief of the Performance Assessment Section within the Inspection Program Branch. And our branch is tasked with performing the annual self-assessment of the ROP.

If I could have slide 12, please. I'm going

to speak today about providing some background to elaborate somewhat on some of the things that Sam has already spoken on as well as give some overall results, some specifics on what self-assessment activities we are engaged in. Then I'll lay out, through the four program areas, successes and challenges that we have before us.

I'll finish up then with some general program issues, and then conclusions, and next steps.

Next slide, please. As way of background, just a little over two years ago, we had completed the pilot on the plan for the ROP and received permission from the Commission to begin initial implementation. That was completed approximately April the 1st in 2001. And we provided the results of that initial implementation of the oversight process to the Commission in a paper in June, and then subsequently briefed the Commission in July from the results of that first year of initial implementation.

We finished our second ROP cycle, or ROP 2 as we often refer to it, in December 31st of this year. And as it was pointed out earlier, that was a shortened year to align ourselves with the calendar. As a result of that shortened year, we did not perform a mid-cycle review. The normal process would call for us to perform

quarterly reviews within the region, and then a mid-cycle, and end-of-cycle. We did not do a mid-cycle. It just didn't make sense because of the shortened year. And the results of that shortened year, ROP 2, were documented in a paper that came out early last month, that's SECY-02-0058.

Slide 14, please. Sam has touched upon the overall results of our self-assessment. But I would like to elaborate somewhat on them. First, I would say that we've gained greater confidence in the program and in the program's ability to meet the NRC performance goals. Its been effective in monitoring plant activities and specifically, we believe, in identifying significant performance issues and ensuring that licensees take appropriate actions in a timely fashion.

The program is meeting the agency's performance goal. We've made progress in addressing previously identified issues. For example, we have addressed an issue concerning the use of manual scrams in the performance indicators. We've made improvements to the safety system on availability performance indicators. We've refined the inspection effort to provide revisions to the budget model on inspection resources. We've revised the Cholera STP. And there

are other issues that we've addressed that I'll talk to more specifically as we go through the various program areas. Not withstanding what we view to be a number of successes, we acknowledge the fact that we have challenges that remain. And I'll talk to those challenges as we go through the various program areas.

Next slide, please. Some of the activities that the staff undertakes in performing its self-assessment includes developing metrics. Metrics uses audits that we perform of inspection reports that the regions produce as well as audits that are performed by both the Office of Research and other branches in NRR to determine if our Significance Determination Process is producing accurate and consistent results with other risk tools that are available to industry and the Agency. It also uses input from the reactor program system data that is fed automatically into our metrics and provides feedback.

In addition, we interface with our internal stakeholders on many different matters, the first being through various counterpart meetings. That's both inspector counterpart meetings that are held periodically within the regions, as well as we meet regularly with the DRP and DRS regional division

directors to discuss ROP initiatives and to get feedback from those managers as to changes that can be made to the process.

We hold biweekly ROP conference calls with the regions where issues are discussed and information is exchanged, as well as we have a number of focus groups that we have enpaneled to focus on various issues within the ROP. And we gather feedback on that mechanism also.

One activity we did not perform this year, and it was planned in the past, or at least in the first year of the ROPs implementation, we had conducted an internal survey to gather information from our internal stakeholders and to feed back in to our lessons learned process. In the shortened year it just frankly didn't make sense and couldn't be justified financially to do it again. We intend, at least right now, to do an internal survey during the third cycle of the ROP. However, with other surveys being performed, one by the Office of the Inspector General, we'll need to consider that and see whether that survey might also be helpful in providing feedback and may not make our own survey necessary.

Interfaces with external stakeholders include monthly ROP public meetings with the NRC Industry

Working Group. We also solicited feedback from stakeholders using a federal register notice that was issued late in the year. And that information was gathered, and it was provided as input for the SECY paper. In addition to that, we gathered information through other industry forums, such as the reg info conference and various industry workshops.

Slide 16, please. I'll now start with a review of the first of the four program areas. And all of these reviews are laid out fairly similarly with accomplishments and then planned actions.

Within the inspection area, we've completed a comprehensive review of all of the inspection procedures during ROP Cycle 2. Major changes were made to the maintenance rule inspection procedure which was revised to emphasize overall effectiveness of maintenance. Changes to the proper identification and resolution inspection procedure, that changed from an annual inspection to a biannual inspection with additional inspection hours available for issue specific reviews. We modified the procedure and clarified the criteria for entering findings. And probably one of our more significant changes was a review and modification of Inspection Manual Chapter 1245, which is the guidance

for inspector qualifications. That was a large project with a lot of participation from the regions so that we could get that right. And we believe we have a good product that's going to help our customers, the inspectors, as they go through their inspector qualification processes.

We also made a revision to the resource estimates to reflect actual experience. When we began the ROP, we used best judgment based on the former process to develop what we believed would be a reasonable budget model for inspection activities. With two years of run time now, we're able to more accurately reflect what the program is actually doing and make a better model.

Planned actions include issuing an inspection report guidance which has been issued just this week. This, we believe, will go a long way in increasing the consistency of inspection reports as they're issued from the various region. And it was a fairly large effort by the staff to perform this inspection report or this inspection guidance.

Also we'll plan to revise the physical protection inspection. This was an issue that was identified from last year's self-assessment. But as a

result of the events of 9-11, this will be taken a look at more carefully in the staff's top to bottom review of security issues. We'll be working with the new office of Homeland Security in revising this inspection procedure.

Slide 17, please, the Significance Determination Process. Before I go into any accomplishments, I think I need to just acknowledge up front that we realize that we have challenges ahead of us with respect to time limits and consistency with the SDP. We realize that. We've put into place an SDP Improvement Plan which we believe tackles these issues and will lead us to a process that will improve both the timeliness and consistency of the SDP.

In addition to that, we have revised the Radiation Safety SDP, we've met with public and industry to address these issues, we've implemented training that's in place right now for the newly revised reactor safety SDP. This is relatively innovative training that involves a computer aided and computer based training process. It's interactive, and it's designed for all inspectors that perform inspections with reactor licensees. We have accelerated the benchmarking process for the reactor safety SDP Phase II Notebooks.

Next slide, please. Planned actions include implementation of the improvement plan. And this could include improving the timeliness and consistency of the SDP, providing early resolution of technical issues, which also plays directly to timeliness, continuing to improve the SDP process and tools by providing training and guidance on how the significance, determination, and enforcement review panels are performed, improve the clarity of risk informed ROP decision guidance, and clarify expectations for accidents, sequence precursor, and SDP process coordination.

Slide 19, please, Performance Indicators. The accomplishments include staff, working with industry, developed a revision to the NEI guidance on PI reporting. And significant changes there include improving the existing safety system on availability performance indicators and providing guidance on the treatment of fault exposure hours. Other improvements, other revisions include providing expectations on engineering evaluations that are oftentimes necessary for licensees to perform before they can make a determination as to level of availability of the monitored systems. These changes were all rolled out to the regions with training, either in person or via video

teleconferencing. And we provided a desktop guide to all inspectors that lays out the changes in the new revision to 99-02.

Planned actions include conducting a pilot program to test unavailability and new unreliability performance indicators. This is a process we've been working closely on industry with, to develop unreliability performance indicators which, to this point for the monitored systems, we have not had. And this is a process that we've been working since last summer with the schedule to have us begin a pilot program in July of this year.

In addition to that, we are planning to develop improved physical protection performance indicators that also would match up with our work in the SDP, and also working with the Office of Research in developing barrier integrity PI's.

Slide 20, please. Within the assessment program area, significant accomplishments include providing guidance for the treatment of old design issues. This was primarily a guidance such that we would not be providing a disincentive for licensees to go out and launch large programs to ferret out deep-seated old design problems.

We've provided additional information on the role of the Commission, as far as assessment is concerned, essentially by adding an additional row to the Action Matrix that would have the Commission engage licensee senior managers in a public meeting for those licensees that find themselves in the unsatisfactory column of the Action Matrix. We've eliminated no color findings. We've provided guidance for cross-cutting issues.

Planned actions include making a revision to the approval level for Action Matrix deviation. In the first two cycles of the ROP, there have been no deviations from the Action Matrix. We've received some guidance from the Commisssion that we should be extremely cautious in approving any deviations from the Action Matrix and that deviations should be approved by the EDO for public confidence and consistency perspective.

We believe that it's more consistent, if you look at the Action Matrix, that for those licensees that would find themselves in the regulatory response column or the degraded cornerstone column, that the approval for deviation from the Action Matrix is more appropriate at the regional administrator level. And that was an

issue that we provided in the paper and we would look for Commission feedback on.

The last bullet is to clarify expectations for exiting multiple repetitive degraded cornerstones. And that's a lessons learned directly from IP2. And Mr. Miller had earlier discussed the challenges of at what point in time do we clear inspection findings that result in reds, when are we satisfied that sufficient progress has been made.

Next slide, please. Discuss three general program areas that we looked as closely in our self-assessment. The first is the ROP feedback process. This is a process that we put into place at the beginning of initial implementation. It was a mechanism to gather feedback from the regions and our inspectors on how the ROP was performing, whether it involved changes to inspection procedures or unintended consequences that inspectors had identified while they were performing the various inspections.

In March of last year, a survey indicated that we were not timely nor effective. And we took steps to take improvements. We reduced the backlog, we established an expectation for closures, we enhanced the webpage such that the information is provided on the

webpage for inspectors to review. And as a result, 84% of the feedback issues that were open in June of 2001 have been closed as of March of this year.

The next issue would be Resident Inspector Demographics. Just briefly on demographics, the 35 multi-unit sites that we regulate, we are now at the point where there are only five that are still at N + 1.

We currently have, and indicated as such in the paper, that we have no recommendations for policy changes regarding inspector demographics. And also, rather than report inspector demographics, be it a separate paper, the staff is proposing that it would be part of the annual ROP self-assessment in the future.

Lastly, to talk about resources, as we had expected we are beginning to see somewhat of a downward trend in resources within the program in order to complete the program, which are not unexpected. We expected to gain efficiencies as the staff became more experienced with the program and how it's performed. I mentioned earlier that we revised the budget model more accurately to indicate how the budget should be formulated for the future and what the budget model should look like.

In addition, we've enpaneled an efficiency focus group who has been chartered to look specifically at issues that we can gain efficiencies in at reporting the program. Bearing in mind also that we must be cautious, and that there's an issue regarding balancing the inspection efficiencies and the public confidence with a possible perception of a reduction of NRC's presence.

Slide 12, please, conclusions, the Program's Successes. The program supports the Agency's four performance goals. It's successful in monitoring plant activities and identifying significant performance issues and ensuring that appropriate corrective actions are taken in adequate time to protect public health and safety. The program is effectively communicating assessment results to the public.

Next slide, please. Next steps include implementing the improvement actions that were as a result of the self-assessment, which includes, primarily, the focus on improvements to the SDP; continued self-assessment and feedback activities, and improve upon the feedback; consider whether an internal survey is necessary for this year; increased focus on the consistency of the program and its implementation

through both audits an oversight activities; and continued internal and external stakeholder outreach through public meetings, federal register notice, and meetings with industry. And that completes my presentation.

DR. WILLIAM TRAVERS: Mr. Chairman, that completes the third and final element of the staff's presentation this morning. Thank you.

CHAIRMAN RICHARD MESERVE: I would like to thank the staff for a very comprehensive and helpful briefing. Commissioner McGaffigan?

COMMISSIONER EDWARD MCGAFFIGAN: Thank you, Mr. Chairman. I'm going to go through and try to get you to give me short answers if it's possible. One of the things that I noticed when I looked at the IP2 and Cooper materials is that there were an awful lot of green inspection findings for those plants. And I don't know whether -- you know, in one cornerstone I think they were in the 30's at one of the plants.

I know we're not supposed to aggregate greens, but it was talked about early in the process that, you know, having lots and lots of things could be an indication that there's something more coming. Has anybody looked at whether, you know, lots of greens is

an indicator we should be looking at and is a hint of things to come or not?

MR. MARK SATORIOUS: Can I try that?

First, relative to Cooper, Cooper has two cross-cutting issues indicated; corrective actions and human performance. As expected with cross-cutting issues, you see significant problems in some cornerstones. In this case they emerged in EP and some in mitigating systems. But the bulk of the greens you see are those broad cross-cutting issues emerging at important, but not highly significant -- green is not good.

COMMISSIONER EDWARD MCGAFFIGAN: No, green is not good.

MR. MARK SATORIOUS: And I think the sea of green does tell you that there may be cross-cutting issues involved.

COMMISSIONER EDWARD MCGAFFIGAN: That's exactly what I thought I might be tumbling to. As I said, In Cooper I think there was like 30 in one of the cornerstones. And on Indian Point there was 17 or 18. And I just haven't looked at the other 101 plants to see if it's unusual to have massive numbers of green inspection findings or not.

MR. SAMUEL COLLINS: Commissioner, McGaffigan, we rely on the regional administrators and their teams to really look at the findings through the pin. If you were to go back behind the findings themselves and look at the issues in the planned issue matrix, those issues helped develop the cross-cutting issues. And that's what Ellis was talking about. Cooper is probably the model for that, as far as the progressive escalation of involvement. Beyond that, we have no plans to aggregate greens.

COMMISSIONER EDWARD MCGAFFIGAN: The question is, should we be looking at it as part of our ROP assessment process? We're supposed to be trying to figure out how to make this better. We have the embarrassment that Davis-Besse was all green on all of its performance indicators before this thing. But Cooper, Mr. David Lochbaum is going to suggest later that we look at that and see if there was something that would have hinted that that was coming.

But in this case, we have a couple of plants that are in Column IV that seem to have a large number of green findings. I don't know whether there's any plant in Column I that has a similar number of green findings.

MR. HUB MILLER: There is a balance here. And from the beginning we talked about cross-cutting issues as being important to the program. One of the things that happened this past period is better guidance on what constitutes a cross-cutting issue. We used that very extensively as we reviewed all of the plants this time. Indian Point 2 had cross-cutting issues in human performance and corrective action as well.

Answering your question, on Indian Point 2, of course, we're at the very much later stages of bringing to light the performance issues that exist at that plant, so it's hard to answer your question from this year's results.

COMMISSIONER EDWARD MCGAFFIGAN: I have plenty of other things.

MR. MARK SATORIOUS: Commissioner McGaffigan, I think one of the ways that we use greens is, like the regional administrators had said, for cross-cutting issues. And what we use those cross-cutting issues for is to focus the PI and R inspections to go back to the facilities and look. And they use these cross-cutting issues that we've identified, either in mid-cycle letters or end-of-cycle letters to schedule in, to be specific issues that we look at within the facility when

we do the PI and R.

COMMISSIONER EDWARD MCGAFFIGAN: You do the additional inspections? You get more greens? You don't quite tumble to a white or a yellow or a red? They stay in green space? You know, I don't know whether our stomachs should be turning at that point or not, but that's an issue we need just to think about.

MR. SAMUEL COLLINS: Not based on risk significance.

COMMISSIONER EDWARD MCGAFFIGAN: Not based on risk significance? But if there are cross-cutting issues, these cross-cutting issues are horrid. Your assumption is that they're going to pop up in the process in something bad, but maybe that assumption, that we've talked about since the beginning of this program, is incorrect.

With Cooper, you're not planning to have the EDO meeting with the licensee until November, whereas Indian Point, I assume the EDO meeting with the licensee meeting will be fairly soon. Is that because they didn't pop over into Column IV until after April 1st?

Prior to the Action Matrix there is supposed to be an EDO meeting with the licensee for plans in Column IV. And one, I would assume, is soon. And the

other, I understand, is going to be in November.

DR. WILLIAM TRAVERS: What we have planned currently is to have such a meeting in connection with the follow on to the inspection that we're planning to conduct. Actually it's sooner, and it's in September, I believe. Isn't that right, Ellis?

MR. ELLIS MERSCHOFF: Yes, sir.

DR. WILLIAM TRAVERS: Actually, I envision two meetings. And one of them, referenced here, is the annual public meeting. That, as you rightfully stated, would be in the April time frame, but my engagement will occur sooner than that. And the opportunity seems ripest following our inspection and the assessment of what the findings are.

Prior to that, Ellis is meeting with the licensee in the column described as regulatory performance meeting. And that's going to be as they officially transition into the multiple degraded cornerstone column.

MR. ELLIS MERSCHOFF: There's a meeting that is held upon completion of the inspections for the white findings that brought them to the multiple degraded cornerstone. That meeting with me will occur either the end of this month or the beginning of June.

MR. HUB MILLER: And at Indian Point, Bill Travers met last year with the company. And then this year Bill Kane at the EDO level, as I mentioned in my remarks, was part of the annual meeting.

MR. ELLIS MERSCHOFF: So we're actually pulling it forward. The program would have the EDO meet with senior managers in April of '03, and we're pulling it forward to the first opportunity following completion of the inspection in August.

DR. WILLIAM TRAVERS: I should emphasize that if we felt we didn't have the attention of the company to these issues, we would even be doing it a little differently.

MR. SAMUEL COLLINS: Bill Kane and myself have both been to the Cooper site also.

COMMISSIONER EDWARD MCGAFFIGAN: Okay. So they're getting the message. The issue of old design issues, as I understand the policy and old design issues, you are basically taking them out of the Action Matrix. Now, you can get a red on an old design issue and you won't get into Column IV, is that correct?

MR. MARK SATORIOUS: Well, what you will get is you will get the inspection activity, which for a red would be a 95003. You will get that inspection

activity. The issue will be identified if it meets the criteria for being an inspection finding. There will be a preliminary color that will be issued. There will be a regulatory conference. The final color will be issued. Based on that final color, it will put you into a column of the Action Matrix. And that supplemental inspection that corresponds with that column of the action matrix will be performed.

It's during that supplemental inspection that you will determine whether you meet all the criteria to be considered an old design issue.

COMMISSIONER EDWARD MCGAFFIGAN: So to take the example that's active at the moment, if Point Beach's red stays red, then they will get a big inspection. And they will be in Column IV at that point? Or they will not be in Column IV?

MR. MARK SATORIOUS: The next step, if it qualifies as an old design issue, then they get the inspection. But it would not count toward aggregating further inspection findings into moving them in the Action Matrix. So conceivably you could have a licensee that would be in the licensee response column of the Action Matrix that has a red finding that has undergone a 95003 inspection.

MR. WILLIAM KANE: I think this is to encourage the work to develop old design issues if they exist.

COMMISSIONER EDWARD MCGAFFIGAN: Mr. David Lochbaum will later point out that we sent 50504F letters in 1996. It's been six years. He's talking in a different context, but some of his remarks may or may not be aimed at whether, you know, we should continue to have grace for this. Maybe we should. There was a change in licensee at that particular place, or a change in management. And obviously, we don't want to discourage finding old design issues, but after this many years, it could be argued that they should have been found by now. But whatever. We'll get to that.

One of the papers we have in front of us goes through the accident sequence precursor events for 1999 and 2000. And I looked at the IP events, the IP2 events for 1999 and 2000. One is estimated at 2.8 x 10-6, and the other, the steam generator at 8 x 10-5. So neither are rated important precursors, which are greater than 10-4, nor are they significant precursors.

I've said before, when we have an event, and since last year we first had a chance to call the event under INEZ. And Davis-Besse is the first one we have

called significantly. We did that reasonably promptly. We said it was a 3. Then we get a chance to call it under SDP, and then we get a chance to call it under ASP. And it strikes me that there's a different. We said the Indian Point had red inspection findings, yet the ASP program is finding these relatively nonsignificant events and risk space and conditional core damage probability. So I'm just wondering.

Mr. Lochbaum is going to refer to the red at Indian Point and use that as a base line for why some other things are not where they should be in his view. But did we miscall the Indian Point red?

MR. HUB MILLER: We're still working with the Office of Research. I don't think those ASP findings are final. There are a number of issues. So at this point, I would say that there's not a conflict.

COMMISSIONER EDWARD MCGAFFIGAN: The Indian Point 2 for 1999, 8-31-1999, Loss of Offsight Power, is not characterized as preliminary. And it has the 2.8 x 10-6.

MR. HUB MILLER: We're still working with the Office of Research.

COMMISSIONER EDWARD MCGAFFIGAN: The other one is characterized as preliminary. Well, some day it

would be reasonable to have these things line up a little bit better.

MR. SAMUEL COLLINS: Commissioner, you have an excellent point. It's one of public confidence as well as one that reflects back into our technical programs. These processes were built at different times. They have different assumptions. We report downtown, to our congressional stakeholders, on the ASP process. And It has a tendency to drive our performance goals as well as our strategic plan. So we may well be coming at a future time to the commission to try to align these processes and be sure that there's linkage or at least a basic understanding of what those processes are used for.

COMMISSIONER EDWARD MCGAFFIGAN: I'm just going to make two statements rather than ask questions. On the issue of regional administrators approving deviations to the Action Matrix for Columns II and III, I'm probably opposed to that. And on the issue of resident inspector demographics not being reported to us in the next few years, I'm opposed to that as well. You're going to collect the demographics, the paper says, but you're not going to present them to the Commission unless there's an adverse trend. If you've

collected them, you might as well give them to us. But on both of those issues that are raised in the paper, I just make my point of view clear. Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Commissioner Merrifield?

COMMISSIONER JEFFREY MERRIFIELD: Thank you very much, Mr. Chairman. First I would like to start off with some comments and then I'll go to the questions. Just the opposite of Commissioner McGaffigan.

The first one I want to direct toward Hub Miller. I was struck during the course of the presentation in your discussion about Indian Point 2. The issues you have been grappling with at that unit, you and your staff I should say, have been significant and have been a tremendous time and resource burden. And I just want to recognize, I think, the significant effort that you and your staff have undertaken there, similarly, given the questioning attitude of the region in which you preside. Since I'm from New England, I think I can say that with some certainty. And the other challenges that you have had at other plants and facilities in your region, I just want to compliment you

for the significant and hard work you've done on behalf of our Agency.

The other thing that struck me in the presentation, I know our chairman just returned, as did Sam Collins, from the Nuclear Safety Conference over in Vienna, where our programs as well as those of our international counterparts was reviewed. And one of the issues that was discussed was in fact the issue of our new Reactor Oversight Program. And questions raised by our four counterparts about our performance indicators and a questioning on their part as to whether we rely on them too much, I think some of that -- and the Chairman, I think, went into some detail, and I think we all need to have more work in this area. But explaining that in fact our program isn't run by performance indicators, that is just one level of a multi-faceted program including the intensive section of program, that gives us a good insight on where the programs are. But a key factor to that for me, and this was brought out by Ellis Merschoff's comments, was the degree of ownership that our regional administrators and their staff and our resident inspectors have on reviewing where these reactors are and where they're going.

And given all of the visits that I've had

internationally and the discussions I think we have all had, I would say that our regional administrators and our staff, including most notably, our resident inspectors, have as good if not better an understanding of the performance of the plants that we regulate as any of our national counterparts. And it is for that reason that I think our program is superior of the nations which we cooperate.

I most want to note the issues associated with Cooper. I have regulated discussions with Ellis. The issues with Cooper and the concerns of Cooper that Ellis has shared with me date back well over two years. And to think that our concern or our views of Cooper merely fall on whether the indicators are green or otherwise, I think, is misleading. And Ellis is no exception to that. That is uniformly the case within all four of our regions, the degree to which the regional administrators do really care about and really do understand and have a feeling for where the plants are. And I think that should be certainly recognized here as well.

Going to the issue of Cooper, you know, we talk a lot about the various cornerstones and their importance. From the standpoint of the public, I think, the confidence that the public has in us as a regulatory

body and the confidence that the public has in the utility's ability to respond to a plant is directly and proportionally associated with emergency preparedness. Because at the end of the day, in the defense indepth philosophy that we have, it is emergency preparedness that the public depends on to make sure that, if there's an accident, that we're ready to respond and evacuate or do what is necessary to protect the public. And the degree to which this particular issue had so many problems at Cooper is, for me, a greater concerns.

I think Cooper and all utilities and NEI should remain highly cognizant of focusing on this, because this is something that we need to be concerned about and the public is concerned about. If there is a problem, we need to be able to demonstrate that we can do what is necessary to protect the public. And that, in terms of emergency preparedness, is the last line of defense.

The last comment I would make, and this relates to a comment made by Mr. Boyce. You made a comment, and I understand it, relative to the issue of being in the grass relative to performance indicators. And it struck me, if for no other reason, I mowed my lawn last night. And having been away for a long period

of time, my lawn is relatively deep. And while I appreciate the issue of things being, performance indicators being in the grass, there's a sensitivity to that. And that is how deep is your grass, and how long do you let it grow. And if we don't maintain our level appropriately, in terms of that degree of scrutiny, we mow that lawn and you realize that there are some things that you missed. And I have small children, so you can imagine what that may be.

But I caution, in your review of making sure that we're not too deep in the grass, that we don't let that grass grow too high for the sake of missing things that might be under view in that regard.

Okay. Questions. And I'll make these brief, because I've been using up a fair amount of our time.

Mr. David Lochbaum, in his comments, with all due regard, they were submitted early so they weren't reflective of the fact that we have issued a 0350 relative to Davis-Besse. Do we feel the process to enter 0350 is clear? And are there improvements that we can make in order to insure consistency in that regard?

MR. MARK SATORIOUS: I'll answer your second question first. We do think that there probably improvements that can be made in the process. We think

that the guidance provides sufficient clarity to get us into 0350, in this case, where we believe it is warranted. But in looking carefully at the process, we've identified some clarifications that we think would improvement guidance within 0350 for getting to where we need to be.

MR. SAMUEL COLLINS: One of the areas that is a lessons learned -- and we worked with Hub quite extensively on the Indian Point decision and looking at Davis-Besse -- is the type of event, the type of significant event if you will, lacking a red finding, which takes time to come to that conclusion that would move you toward the 0350 process.

Given the intent of the process to monitor plant performance during an extended shut down, we have no performance indicators. So I believe there are lessons learned from the Indian Point experience that we came to a conclusion on, and we will still buy in and live with that, that move toward Davis-Besse, that we believe we made an earlier decision based on that event which is a better process for Davis-Besse.

COMMISSIONER JEFFREY MERRIFIELD: I think, you know, despite some comments recently to the contrary, I think the staff and the commission have been very

engaged on the issues associated with the seriousness of the Davis-Besse event and are prepared to move forward and do as necessary to make sure we, going forward, we're doing the right things.

That having been said, relative to 0350, I was aware of discussions weeks ago about the proffer that staff was probably going to go in that direction. And that, at the time seemed to be probably the right thing to do. It took us some time to get there. That wasn't necessarily telegraphed. And in the intervening time period, we've gotten various comments from stakeholders about the way we've gone about doing that process. And perhaps it's sent some wrong signals about the degree to which we're treating that. So I think that's a lesson learned you may want to think about as well.

MR. SAMUEL COLLINS: The region proposed this earlier, Jim Dyer. And we've been working through the process. So the issue is not the region's issue. It's the program office's issue of what it takes to make it happen.

MR. WILLIAM KANE: We went through that discussion. If you just look very narrowly at the guidance, it would not necessarily, you know, make up completely. But we looked at it from the standpoint of

whether it's the right thing to do for the situation that we have, and made a decision on that basis. There may be some need to go back and take a look at the procedure. And we appreciate the comment.

COMMISSIONER JEFFREY MERRIFIELD: Finally, this is sort of a two part question. In his letter of April 18th, Mr. Lochbaum raised six issues on the adequacy of the Reactor Oversight Process. I was wondering if you could touch on the degree to which those are being addressed in the self-assessment program.

And also, the second part of that is, he also with his slides mentioned that notion of considering a 90 day turnaround for the SDP process. And I was wondering in you wanted opine on that as well.

MR. MARK SATORIOUS: I'm sorry, Commissioner. That latter question, could you repeat that sir?

COMMISSIONER JEFFREY MERRIFIELD: Yes. In his slides for his presentation later this morning Mr. Lochbaum has suggested a 90 day turnaround for the SDP process. And I'm wondering if the staff has any reaction to that.

MR. MARK SATORIOUS: I'll answer that first. That's a direct line item in our SDP improvement program

which came up as an attachment to the paper. And we believe that that needs to be as hard and firm a goal as we can make it. There are always going to be issues that are going to go beyond 90 days. I think the Commission appreciates that. But we need to, to the extent that is practical, we need to hold a hard line on holding that 90 days.

We've put in practices an procedures where we have management reviews that we are going to track this for early resolution of issues and staff disagreements so that the 90 day is as hard and fast a goal as we believe we can physically make it, understanding that there are going to be certain issues that make take longer than 90 days.

MR. HUB MILLER: Could I just add to that? Having gone through several this past year, especially cases where a licensee chooses to argue or contest our initial conclusions, it often will take you into very detailed technical discussions on the underlying assumptions, the fault exposure time, for example, on a diesel generator. We're most challenged in those situations. The shorter the time, the more conservative the answer will tend to be. So I think there has to be some recognition, especially in those cases where

there's, you know, an appropriate contesting by licensee, or where they feel it's appropriate to contest, it may take longer.

MR. ELLIS MERSCHOFF: Can I add a thought on that as well? It also balances against unnecessary regulatory burden.

I'm currently pushing very hard with a licensee to have a regulatory performance meeting to meet that timeliness goal. The licensee rightfully brings up that they're busy, there's an outage, there's exercises, and other effects. But nonetheless, that timeliness goal is important, and we're pushing hard to ensure that we meet it.

MR. SAMUEL COLLINS: Thank you. If we have the list, I believe, we've reviewed Mr. Lochbaum's letter. We believe it has some constructive areas in there for consideration. The context of the six items on Page 7 of the letter is against the backdrop of Commissioner McGaffigan's issue of the all green performance indicators at Davis-Besse. We do have a lessons learned formed for Davis-Besse. We should have a charter for that group by the end of this week. We'll have some independence associated with that. There's been a suggestion also, from UCS, on independent review.

We'll take those into consideration as a separate decision, but we agree of the need for that.

We would consider these six areas in the chapter as appropriate for our lessons learned. Some of those may not be appropriate because they're individual performance issues. Clearly, the thrust of those issues is not that different from the types of questions that we need to ask ourselves as an organization as a result of Davis-Besse and the all green context of that plant.

COMMISSIONER JEFFREY MERRIFIELD: Okay. That's a helpful answer. I understand what the staff is struggling with in terms of getting back to the SDP issue and trying to be fair, trying to be timely. There is, I think -- and this is the reason for Mr. Lochbaum's suggestion -- there's also the issue of public confidence. Obviously, we want to be fair to licensees, but in a greater balance to achieve the sweet spot, we need to recognize that as that drags further and further out, there's more of an attitude as far as the public of what's going on in our agencies.

Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Thank you.

I guess I have a question I would like to ask about Cooper. The main thrust of your presentation was

obviously that there have been an abundance of indications of problems there and analyses of those problems over the years, but for whatever reasons, a failure of a licensee to actually resolve the issues. What confidence do you have that we're going to get attention this time? I mean, how are we going to make sure that these issues are addressed finally?

MR. ELLIS MERSCHOFF: The new program gives us some tools that the old program doesn't have. The new program is relentless. They've gone, as you can see, from Column I, to II, to III, to IV. Under the old system, with a complete change in upper-level management, we would typically give that management team some time to engage and to show improvement. In the case of Cooper, those new management teams didn't effect change, but there was always another management team in place to give a little time to and a little room to show improvement.

The new program doesn't allow for that. The new management team has all of the issues and all of the problems to deal with within a fixed time frame that the old problem does. In 1998, where we believe Cooper's performance about peaked, we were meeting with them quarterly and holding them accountable for making

progress in their engineering excellence plan. We intend to replicate with that approach has Hub did with Indian Point.

When they have their new Strategic Improvement Plan to the point that we're satisfied with it, we will do independent inspections to assure that we're satisfied with those areas they believe are complete. We'll have quarterly public meetings to hold them accountable for that schedule. And there will be matrix that we've agreed to on both quality and quantity that will make it plain to all of our stakeholders whether they're making progress.

CHAIRMAN RICHARD MESERVE: Well, obviously, we're counting on you to be effective in that process. We'll back you up if you need it.

MR. SAMUEL COLLINS: Chairman, I would note that, of the people you have here, I've been involved in that process, improvements with Cooper. Jim Dyer has been involved with process improvements. And I think Ellis is the right guy!

CHAIRMAN RICHARD MESERVE: It's rather striking to me, and Cooper may be anomalous, but it's striking to me to have a presentation about details of a plant where there's a problem in the PI and R area, at

least in our part of the area, and then in another part of presentation to hear that's an area where we're backing off our inspection activities. Now, I recognize that Cooper may be an outlier. But maybe you ought to address the apparent inconsistency in what we heard this morning.

MR. WILLIAM KANE: I would start off on that. I think that's one of the areas, as Sam noted we are putting together a group to take a look at Davis-Besse and lessons learned. Certainly, one of those areas would be to take a hard look at the PI and R process and how often that's conducted. So that would be at least one of the focal points of that look back. And in terms of looking at that plant, we would look even more broadly at the question. But it's something that we have to address as part of that process.

MR. HUB MILLER: I think, Chairman, also there's a perception issue here. We've got from an annual to a biannual PIR to have it be more continuous. And I think that's a significant improvement. It has the appearance of backing off, but what we've gotten, we've gotten those hours that were previously going to be a yearly sort of thing. And those hours are given to the resident inspectors to follow up on things more in

real-time. In my view there's a much better result from this approach then the other. We shouldn't go away from the periodic large inspection, but in those instances, you're trying to collect up a number of problems that have occurred over the past year, and some of them get a little stale.

The new approach, which gives much more flexibility and freedom for inspectors to be pursuing issues in real-time, I think it's a significant improvement, has the appearance of backing off, but in reality I think it's strengthening our PIR approach.

MR. MARK SATORIOUS: And, Chairman, the other thing that it does too is, by having the PI and R team approach performed annually, what we found was that we would exit on that and then eight months later we would be preparing to do another one. And a lot of times, for licensees to enact long-term corrective actions, we really weren't getting a chance to go away and then come back and take a look and they've had an opportunity to make changes and have results, and at the same time, do exactly what Hub has said, provide those hours to the inspectors so that they can use them to follow more closely corrective action type problems that occur on site.

CHAIRMAN RICHARD MESERVE: Let me turn to a slightly different area. And I recognize the question I'm going to ask is outside the scope of what you've been evaluating. But obviously, Davis-Besse is very much on our minds. I know there have been generic communications about concern about boric acid corrosion that occurred. And similarly at Point Beach there have been generic communications on instrument air that occurred. And yet nonetheless, despite the generic communications, we've encountered difficulties with those licensees.

Are we doing enough follow up with our licensees on our generic communications to make sure that they're dealing with them appropriately? And are we inspecting enough to ensure that appropriate actions have been taken?

MR. WILLIAM KANE: It's a good question, Chairman. And I hate to give you the same answer, but I think it is something that we have to take a serious look at in terms of the Davis-Besse look back because in fact it was a generic issue. There were a number of information notices on that starting in the mid '80's and continuing on to 1988.

COMMISSIONER EDWARD MCGAFFIGAN: Mr. Chairman,

you can probably add Cooper and BWR Vessel Internal Project to that list.

CHAIRMAN RICHARD MESERVE: You mentioned twice in the presentation a resource issue, that you've developed the model and that you were maybe seeing this in the budget. I get the impression that you're seeing some efficiencies that effect the inspection effort. Can you give us some sense of where you're headed in that?

MR. MARK SATORIOUS: I can give you some examples of where we've discovered efficiencies. One that comes to mind is Prep and Doc, preparation and documentation of inspection findings.

When we went into the first year of initial implementation, we had estimated preparation and documentation at about a .1, in other words, for every hour of inspection you do, it requires an hour of preparation and documentation. That was more than what we had seen in the previous program, but it was an estimate based on having a new program and feedback that we got from our inspectors. And we saw that gradually improve throughout the year. We would look on an annual basis, but we would also take quarterly and semiannual snippets. So we would see that preparation

documentation figure improve such that the current model has that .75. And we fully expect that there will be greater efficiencies in that particular area.

CHAIRMAN RICHARD MESERVE: Overall, do you anticipate, as this goes on, that we will see significant efficiencies, or are we sort of nibbling at the margins?

MR. MARK SATORIOUS: I think we're doing a little bit of both. I mentioned that we had an efficiency focus group that we've enpaneled. And that efficiency focus group, which is made up of regional personnel and headquarters staff, has come up with a number of recommendations that we think are short term, intermediate term, and long-term, that we think play great benefits in accomplishing more resource gains.

MR. ELLIS MERSCHOFF: Chairman, if I can add a thought to that, this has been an unusual year with the budget impact of 9-11. The inspection staff took heroic efforts to complete the inspection program with what was left after the time after 9-11. So we have to be very careful in separating really efficiencies, and there are some, from simply a pace that could not be sustained to meet the program.

CHAIRMAN RICHARD MESERVE: This was, in many

respects, an exceptional year.

MR. SAMUEL COLLINS: Chairman, there was a start off cost to defer cycle that we believe resulted in a trend of overall increase in inspection hours beyond the 35,000 total that we had seen with the base line program. As a result of the second cycle, we're back very close to the original 35,000.

The core base line is the bigger number, in the aggregate from the original program. And the plant specific number is less. And the assessment number is about the same.

We have efficiencies that we have challenged ourselves and the regions with in 2004. That will be coming to you in the proposed budget which assumes less inspection effort as a result of effectiveness reviews and the review that Mark has mentioned.

CHAIRMAN RICHARD MESERVE: Good. Thank you. Commissioner Dicus?

COMMISSIONER GRETA DICUS: Thank you. Let's go to slide four, please. And try to bear with my voice. The pollen count is down, but I'm still having problems with my allergies, I guess.

I don't want to detract from the importance of our concerns with our commercial power plants and

perhaps RND reactors as well. Clearly, from a public image and other reasons, and certainly with the licensees themselves, it's a major issue. But at the same time, that doesn't mean we don't have problems with our materials licensees.

Would somebody here at the table care to talk about some of the incidences with materials licensees?

MR. SAMUEL COLLINS: I would, but I'm not smart enough.

COMMISSIONER GRETA DICUS: I bring the issue up because I think it is an issue that we're not addressing.

MR. WILLIAM KANE: I can tell you about our process. And I was part of this process for some time. NMSS takes a look at really all of their materials, licensees, and in fact all of their licensees, materials, and waste arena. And we look at whether any of those licensees should be discussed at the AARM based on their performance. And the decision this year was that there weren't any licensees that met that test.

That process is one in which the office director engages with the regional administrators and goes over plant performance for all of the licensees to make that decision, if that's responsive to your

question.

COMMISSIONER GRETA DICUS: Okay. Refresh my memory on what's the time frame on when you go to what used to be the senior management meeting, the time frame that you look at of incidence. Is it like April 1 to March 31? I mean, what is the time frame?

MR. WILLIAM KANE: Well, it's on the same cycle. It's a calendar year cycle.

COMMISSIONER GRETA DICUS: So the radiographer that got -- was it 70 REM whole body, a few months ago, wouldn't have been discussed?

MR. SAMUEL COLLINS: Jim Dyer and Louis, for example, are prepared to talk about the materials, challenges, in their regions if you would like just an indication.

COMMISSIONER GRETA DICUS: Well, I really want to make notice of the fact that we do have materials issues. And that's where we're getting our overexposures, for the most part. And with the calendar year, it didn't fall into it. We have a radiographer, I think, with 70 REM whole body. I consider that significant. Several hundred REM to the hands. We will probably have health effects there.

We have misadministrations in our medical

facilities, and we have lots of gauges that seem to fall out of the back of pick up trucks. So I want you to realize that is extremely important on public health and safety and environmental issues. I just bring it up because that wasn't discussed.

MR WILLIAM KANE: Commissioner, this may be stating the obvious, and I'm sure my counterparts feel the same way. I lose sleep at night about reactors. I lose a lot of sleep at night about the potential for the kinds of overexposures that you're talking about. I think we all are very concerned about the potential. We know that there's the potential. These events have occurred.

DR. WILLIAM TRAVERS: In fact, it's how we start our day each day. Just to give you a sense, today we heard of another potential overexposure. In my staff meeting, and I shared with the Chairman -- you may not have been aware of it, but it dates back two years ago. We've had an indication that in Illinois another radiographic small outfit had at least the potential for significant --.

The good news is that we have other opportunities for dialoging with the Commission. And we have planned, as you suggest, to take advantage of those

and keep you fully informed, and hopefully ourselves appropriately engaged on the seriousness of these.

COMMISSIONER GRETA DICUS: Okay. Let me go to slide 21 where you were talking about, and I share Commissioner McGaffigan's concern here as well, on the resident inspectors and the demographics, and the fact that, apparently at our multi-unit sites, there are only five now that have the N + 1. And that doesn't seem to be a problem. What would the resident inspectors agree with that?

MR. SAMUEL COLLINS: Let me just speak for the program, and I'll let Ellis speak individually. We allow exceptions to the N + 1 policy as proposed by the regional administrators. We have under advisement now from Hub from IMA on two different types of technologies and unique challenges.

I'll let the region administrators describe the process for themselves.

MR. ELLIS MERSCHOFF: I think it would depend on the resident inspector. Understand it's zero sum game. And the resident inspectors recognize that. If you have an N + 1 inspector at a site, there's one less region based inspector NDRS specialist to help them out. I believe that the bulk of the residents would recognize

that they can do the work in a revised oversight process on a good or average performing plant.

When a plant begins to have problems particularly on a dual unit site, that becomes a real challenge. And those residents would probably tell you that N + 1 is needed there.

MR. HUB MILLER: The flexibility is there. And as Sam said, we're proposing to use that on nine mile, which is a plant that has two different kinds of reactors. It is a very situation dependent thing. One of things that is a challenge for us is, rather it's N + 1 or not, making sure that the inspection program is driven by the guidance in the program, not by where you have people located.

If you consider you have one single site, that's two inspectors, that's N + 1 in a sense. So one of the management challenges is to make sure that you deploy inspectors where they're needed according to the program and not have the number of hours been driven by, you know, the number of resident inspectors that you have. Sounds like a simple thing, but it's a challenging thing to manage.

MR. SAMUEL COLLINS: We track those matrix as a part of the regional operating plans, as far as the

ability to get the program done, the timeliness, the types of findings, the amount of inspection hours. So there was a management oversight of the programs at each sight that should be able to give regional administrators and their program office input of when we're in a stressful situation. The real challenge is when you have different types of technologies and you're trying to cover a multi-unit site that has different types of technologies.

COMMISSIONER GRETA DICUS: From time to time I've discussed this, I think with all of you, whether or not our resident inspectors and even our regional inspectors are really comfortable with the ROP. And I've bought into it, and obviously some probably haven't. But again, this is my annual update, the assessment of how our resident inspectors and our regional inspectors feel.

MR. MARK SATORIOUS: I think that we may have addressed that in the paper. The last time we did an internal survey, about a year ago. And the results were that by and large -- well, I would say that the inspectors have embraced the program, they are confident that it's providing the appropriate oversight, that it's permitting the Agency to respond appropriately to those

performers that need to be responded to. So I would say, based on a program perspective, that we do believe that the inspectors are comfortable with the program. Now, I think maybe the regional administrators may have something.

MR. WILLIAM KANE: Let me try to speak for the regional administrators. My feedback has been continued increasing appreciation for the program over time. The regional administrators, I think, started out, you know, being questioning, accepting, but willing to try to understand the program, how it was going to work, and entered it with some confidence, some good confidence I would say. And that has increased over time. And I'll let them add individual comments.

MR. ELLIS MERSCHOFF: We hire these inspectors for their skepticism and questioning attitude. And we've done a good job. They are skeptical and questioning. They are the closest to the problems. They feel the burden the heaviest, I would say, although we all feel it very heavily. And they are often frustrated that they can't get to issues that they think they a ought to get to. Nonetheless, I think that each time we make the decision to find a way to get to an important problem within the context of the new

problems, we convince this important group a little further that it's a good process.

I think Cooper has gone a long way toward winning over my region that problems can be addressed with ever escalating degrees of involvement to achieve change.

MR. HUB MILLER: I would simply add that the survey is going to tell us. We think we know the answer. My sense is that, as people have gotten into implementing it, a lot of the understandable reservations starting out about the concept have evaporated. But I wouldn't say that they're all gone. And I think this feedback process that Mark and these his folks have is an important part of getting that acceptance and proving that over time.

COMMISSIONER GRETA DICUS: I just wanted to be sure. I've heard people say, for example, that previously, so to speak, if you had an itch, you could go out and scratch it. If something really bothered you, you would go out and look at it. And maybe that's not as available now because you've got to check off boxes. And I just want to be sure that the inspectors feel that that's something that they could do. And it really goes to being predictive on seeing something on

the front.

MR. HUB MILLER: You're putting your finger on one of the biggest reservations. And the thing that we talk to people about is that you're no longer ruled by your in basket, where everyday you decide what you're going to work and looking at the events that happened last evening and following up on those items. Rather, this program gives you a much more disciplined approach. It's much more risk informed. And it's the outcome of it that will prove for people that it is effective.

COMMISSIONER GRETA DICUS: And it should be more risk informed. You know, I want our inspectors to look at what is the most important thing that they should be doing. But if they have a concern, they need to look at that also as we deal with predictive itches.

MR. ELLIS MERSCHOFF: But not all itches need to be scratched. And that's where the regional management comes into play for consistency to make sure that we're really looking at the things that matter. And in the past there was a lot of unnecessary scratching going on.

COMMISSIONER GRETA DICUS: Okay. I'm not going there. But do you feel, as regional administrators, that we, if an inspector really feels

that they're something I need to look at, that they've got the freedom to come to you or their line of management and say, look, it's not on my box here, but, I have a concern? Are we comfortable that that's where they are?

MR. ELLIS MERSCHOFF: I am. And I believe my inspectors know that, if they think it's important, all they need to do is convince their boss, and we'll find a way, with the program office, to get to it.

MR. SAMUEL COLLINS: You've asked the right question. Let's not forget how we got to the revised oversight process. And the goals; predicability, regulatory stability, clarity, consistency, are all goals outlined in the 007, 007A paper that caused us to transition from the previous SALP senior management meeting inspection program to where we have here today with the revised process. So there are checks and balances that are built into the program to provide for meeting those goals. They are additional management systems, if you will, that the regional administrators have available to them to assure that the programs are applied consistently.

Regional inspectors and residents have good instincts. We need to control those instincts and use

those constructively into the process consistently so that those decisions are made at the right level to achieve the goals of program.

MR. HUB MILLER: If I could just add one last thing. It picks up on what Sam just said. And I'm sure my counterparts did the same thing, continually stress to the folks in the region that they've got to be trying to keep the big picture in mind.

The program gives us very good guidance. It exercises or it forces a discipline on us stronger than before, which is good. But we have to have our folks still stepping back. And I think it's a little bit of what Commissioner Merrifield was talking about earlier in his visits to the sites.

The residents inspectors will tell you a story about performance. And that's the thing that we're continuing to exercise that they do. We've not backed off at all on that point. It's a crucial point.

COMMISSIONER GRETA DICUS: I think we've gone enough into rashes, so we'll stop at this point. Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Mr. Diaz?

COMMISSIONER NILS DIAZ: Thank you, Mr. Chairman. Every time I here the words SALP and

senior management meeting, I have fibrillations, so I'm very pleased to be here at this stage. Having suffered through those systems, I think that we all, or at least I do personally believe that the ROP is a great improvement over where we were. And I think that everybody deserves, you know, good doing, including the Commission, by the way, which I think we have sometimes forget the fact that we also got involved on this.

The honeymoon is probably just about over though. You guys are realizing that. And people are going to be demanding that the little nuisances and innuendoes get to disappear as time goes on. I think we're entering that difficult stage where people are going to question whether what we're doing has a firm basis to continue, you know, with this program for the foreseeable future. And that means that all those questions on the size, including the ones Commissioner Dicus, you know, just posed are very important questions we need to look at.

Having said that, I think there is an important thing that we all need to realize, that although we continue to have high expectations of improvements, they have to be realistic expectations. I really believe that there is absolutely no way that a

reactor oversight program that was created by the human mind can avoid random events, can avoid the occasional steam generator tube rupture, or the corrosion of any one place because you're just not going to be able to avoid it. It's just not possible. Random events will take place.

The issue that the ROP should be extremely good for is to avoid or eliminate or reduce the frequency of deterministic events, those that have been set up and developed. You cannot determine when a tube that is perfectly good on the previous cycle is going to rupture, or when corrosion that has not taken place will actually accelerate because we're not in control of those things. And so I think it's very important to know the difference. The difference, you know, I think when we get into the next panel we'll have a little chance to go into some of those issues.

I think it's clearly important that we realize that when events happen, we actually have tremendous amount of information or somewhere we go into and get all of those things. And some of that information becomes valid and it feeds into the programs. But, it might not be possible to say, oh, now that this happened, I'm going to prevent the next random event.

You're just not going to. It's impossible. We need to be able to deal with the randomness of the events and the fact that they're going to take place. I'm not sure that any of these programs can do that, because they're not designed to do that.

Now, however, like somebody has said, the amount of data that is going to be collected eventually will provide a statistical basis to better be able to minimize those who actually can appear as statistical and show some value some place to be able to predict it. But that's going to take some time.

Now that I gave my philosophy of statistics and random events, let me turn and try to understand Indian Point and Cooper a little better. Mr. Miller, if we have not had those two nonsafety significant events of 1999 and 2000 on the Indian Point, would Indian Point be still qualified for the attention that it is getting?

MR. HUB MILLER: The ROP wouldn't bring us there, but two things. First of all, the plant has been safe throughout all of this period. You know, like SALP, but if you look back at the SALP and if you look at what we were bringing to light before SALP prior to the new program, those issues were on the table. The ROP made it emphatic. It gave us the tool to, without

question, bring the site to a level of significant agency-wide focus.

I'm not sure if that answers you question. We saw issues at the plant that were bringing those to light. We were pursuing those before the ROP. The ROP gave us the additional leverage.

COMMISSIONER NILS DIAZ: Let me make it easy for you. My point is that the 1999 electrical event and the steam generator tubes happened, but they might not have happened. There is as much of a probability that they would not have happened as there is that they would have happened.

MR. HUB MILLER: That was not a random event. If you go back to the underlying performance issue, It was not random in the sense that there were issues with the generator. The whole reason for the red performance issue was that the company had not picked up on indications in the previous outage.

COMMISSIONER NILS DIAZ: I disagree. I think that fundamentally, they could have happened but they could not have happened. That makes them random. In other words, the fact that they actually ruptured was not predictable. You cannot predict that you're going to have the eruption, nor can you predict that you have

the electrical problem. It's not predictable. You cannot predict it by any means.

Now, you can go and look at the root course analysis and say, there were indications, they didn't do the steam generator inspections the right way, they didn't draw the right conclusions. But the fact that it broke is totally random.

The fact that there were indications that the program was not good, that should play into the actual, you know, ROP, whatever you do. But the fact that the event took place, those particular events which I have looked at carefully, those particular events, you cannot say that they would have happened. There's no way, no way that anybody could have.

MR. HUB MILLER: Well, in that sense I agree with you. I mean, if we had known they were impending events, we would have obviously done something to intervene. But perhaps it's a semantics issue. I'm not arguing with your point.

COMMISSIONER NILS DIAZ: No, you cannot predict that.

MR. HUB MILLER: If we had known and could predict, we would have obviously have intervened.

MR. SAMUEL COLLINS: Mr. Diaz I'm going to

maybe add to the discussion, maybe not, but I'm going to try. The staff really is in a position to think that the steam generator inspection programs are improving. There's no doubt about that. However, it's not unlikely to assume that about once every five years we're going to have some breach of the steam generator tubes. Just go back and look at the history, and that in fact takes place. So the issue is, how does the process handle that.

In the past at Ginna -- I think Wally Zimmerman was at Ginna when that happened -- they have been looked at as a phenomena which is analyzed, which results in very little if any release, no challenge to the core, it's an economic impact. And there's a recovery, and we try to understand the root cause, and we move on. It's not in a risk sense.

The Indian point event was really one of the first opportunities we had with the ROP to look at risk and look at the contributor of what we would call program failures or performance failures on the licensee's part.

And we looked at ourselves too. As you know, we did a self-assessment of the Agency in that portion to say is there a contributor to this. Even though we

expect it, and maybe it's a phenomena that's analyzed for, is there a contributor, based on the licensees program, that causes it to happen more than just randomly? And in this case, Hub's team found that there was. And that's why the finding was moved to the red.

COMMISSIONER NILS DIAZ: But the actual happening is still random.

MR. SAMUEL COLLINS: I understand that.

COMMISSIONER NILS DIAZ: That could be contributors to it, obviously. There's no doubt about it. But the actual event, so it could have not happened.

MR. SAMUEL COLLINS: Well, I think we're kind of dancing around unexpected versus random.

COMMISSIONER NILS DIAZ: In that I am certain. There is no doubt about it. It could not have happened. And that is the issue. It was, can we be able to pick up the deficiencies in steam generator programs and other things.

So the question was, if we have not had the focus that was caused by the two events, will Indian Point still be, by the pressing program and all that we have known about it from before, still in degraded performance condition?

MR. HUB MILLER: I'm honestly not certain how to answer your question. I mean, it is where it is because we followed the process. The process led us to where we are, of multiple upgraded cornerstone. The issue for us has been, have they made substantial progress to address, not just those specific issues but the underlying performance issues which cut across those events. And they were common. I think everybody knows.

And I think that in my remarks I said that we had a plan last year. The progress was slow, uneven in some areas last year. The company has come in and has done a very comprehensive self-assessment, and they've concluded as well that progress was limited under the previous owner. They've invested significant resources. We see a lot of activity to improve.

The proof will be in the inspections that we do and the on-going monitoring of the performance indicators that they've set out in their own improvement plan, the matrix if you will, that will gauge whether or not these activities, of which we see many, are resulting in positive improvement. So we'll know the answer to the question this summer after we've completed these things.

DR. WILLIAM TRAVERS: But I think you said at

the outset, Hub, and I agree, without the event we wouldn't be in this place.

MR. SAMUEL COLLINS: In the ROP.

DR. WILLIAM TRAVERS: I'm going to enter the second premise.

And without the ROP, would we still have the mechanisms in engage on the issues that, absent the event, were at issue. I think the answer is yes, but I don't think it would have been as structured and as predictable and as obvious a process as we're using today. If you look at what Hub and the program office has done in reacting within the framework of the ROP, I think what we've evidenced is just what we intended when we set up this process.

We put in place a process that is predictive, that provides the public with many opportunities to see just where we are in our sense and in our response to the issues at hand. And it's worked well.

I want to comment, just philosophically, on your initial comment. I think what's happened at Indian Point and at Davis-Besse reinforces one thing, in my way of thinking, that has always been important to the Commission. And that is defense in depth. Regardless of how you look at the issues that have occurred as

random or associated with failures of program, what the Commission has always embraced, in its long history, has been this notion of the possibility of these things happening and the need for a regulatory framework that provides the sort of defense in-depth that was at work in both instances, both at Indian Point and at Davis-Besse to protect public health and safety.

COMMISSIONER NILS DIAZ: Thank you, Bill. That's what I wrote when I was going to get into the next panel, the fact that none of these issues are really one barrier, not physical, not regulatory, because there is a multiple layer of things. I understand that.

I am not getting much further with Mr. Miller. Let me just turn to Mr. Merschoff here. And now let's get to the other side of the coin. No steam generator event, no major safety system failures, no nothing that have really made it into the problems that Mr. Miller had to deal with every other week. And yet, Cooper ends up in the same place. And that was why the question was raised.

See, here we have actually one event focusing this into this area. And one where there were really no events. And still we have comparable results. And the

question is, is that a strength of the program?

MR. ELLIS MERSCHOFF: Let me speak to Cooper by way of answering that. Something changed at Cooper in 1999. When we implemented the new revised oversight process for the first year and Cooper was chosen as a pilot plant, they stopped doing the things that were resulting in improvement. They stopped doing the significant self-assessments for example. They stopped following their engineering excellence program. We stopped having the periodic meeting with them as an independent conscious to assure that progress was being made. And that was consistent with the program. And as a result, by a number of objective measures, including other organizations that assess performance, that performance consistently declined from 1999 on.

And so I would say clearly Coopers performance warrants its placement in that multiple degraded cornerstone and that this is a real success for the ROP, for a plant without a significant event driving it there, for the program to be able to bring the resources to bear that need to be brought.

COMMISSIONER NILS DIAZ: And now you see the reason for my questions?

MR. HUB MILLER: I never doubted the question.

COMMISSIONER NILS DIAZ: You know, I do believe this program is disciplined. And I think everybody should realize that it's relentless because it's periodic. If you don't do it one time, it's going to come and hit you again, hit you again. And in the frequency with which it comes, you can not get away from it. And therefore to me it's much tougher than what it was.

But, you know, this is a very important thing. There's two differences in here. And I think, that they're very well said. One, we're driven by events. And that created the focus of whether all of the elements were there. And the other one was not driven by events, and still the problem was able to reach conclusions that I am sure are the correct ones.

All right. I'm finished. We'll really running too late. I do have some questions on the industry trends. And I don't think I can avoid to put them out.

I look at the figures, the industry trends, and I look at the way the curves are and the two slightly above the automatic scrams that occurred in the collective radiation portion of these figures, B-1 and B-2. I am glad you said there's no significance of

these things. These things have no significance whatsoever. Because all of these figures are approaching an asymptotic behavior. And when you do the fit in, all you have to do is change the weighed in.

If you weighed in directly proportional to the magnitude, you will see that you will be weighed in the higher magnitude, which have more safety significance. And therefore, a small variation at the end where the values are small have no impact whatsoever on what the curves are. In fact, I can get you five different things and will give you five different results. There's absolutely no significance. But I do caution that whoever does this curve, they should look carefully at the weight in outcomes. You should not weigh in equally the same because the lower values have less significance than the higher values. So the weight is extremely important in how you do these things.

And again, any small numbers of events at the end will show, oh, there's a trend. And there's no trend. There is, again, random variation. And there will be random variations. You will have a year with Davis-Besse or three steam generator replacements, and we jump up. And that is not a trend. It is just the way that it is.

MR. MARK SATORIOUS: We would agree with you. And in fact the one on collective radiation exposure had explanations exactly like that. There were, I think, 10% more outages in 2001 than in 2000. Plus we're doing a lot of vessel head inspections and were picking up dose that way.

COMMISSIONER NILS DIAZ: However, when you put these curves out and the members of the public that are not statisticians see it, they might see that the curve is going on, that you have a rise. There is no reason to have one dotted line. You should actually, at the very most, have a broad band that shows where the variation should be. And that variation depends on the weight in of the function. You have to weight in each one differently. You cannot make a little line, because people will say, oh, we're going higher.

MR. MARK SATORIOUS: I understand.

COMMISSIONER NILS DIAZ: Thank you. Regarding the self-assessment, of course, I could spend a few more minutes on this. But there's something that I still get a little bit concerned on regarding how we're going to proceed to deal with the manual scram PI that, you know, the pilot set. The one that was proposed was not adequate. It was going to miss 15%. And I think, you

know, this is still an issue that, I believe, deals with human factors. And as you have seen, human factors is a main contributor to many of the problems that we're seeing. So I don't know where you are in taking another look at this issue.

MR. MARK SATORIOUS: We've remained open to this issue, Commissioner. Following the issuance of the regulatory information summary that concluded that we would not adopt replacement scram indicators, we took to our monthly working group meeting that issue of whether we need to readdress a replacement scram indicator at some point in the future or at what point in the future. And that was in the March Meeting. At that time we were in the midst of, as we are today in the midst of trying to formalize our pilot for the replacement for the performance indicators on safety system unavailability and unreliability.

So in March, in the March time frame, industry said, we'll take that away and we'll dialogue with our various colleagues. And we had agreed that we would place it back on the agenda for our May meeting, which is at the end of this month. And at that time, we will engage our stakeholders there and determine as to whether there is something that they have been able to

develop, or they just want to put a place holder and we move it to some point after we're pilotting the safety system on availability of PI's. But it still is squarely in front of us, and we understand that.

COMMISSIONER NILS DIAZ: Thank you, Mr. Chairman. I could go on for another three hours. Maybe next year.

CHAIRMAN RICHARD MESERVE: I would like to thank the panel for their presentations. We do have another panel. We've been going for well over two hours. Let me suggest we take a five minute break.

(Whereupon, the briefing went into a brief recess.)

CHAIRMAN RICHARD MESERVE: Why don't we get underway. Our second panel is a variety of stakeholders who have been actively involved in the ROP. They are Tom Houghton from the Nuclear Energy Institute, and Jeff Benjamin who's Vice-president for Licensing and Regulatory Affairs for Exelon Nuclear. And I understand, Mr. Benjamin, that you do have to leave, so we'll put you on early. David Lochbaum, Nuclear Safety Engineer for the Union of Concerned Scientists, and Richard Janati, Chief of the Division of Nuclear Safety for the Bureau of Radiation Protection of the

Commonwealth of Pennsylvania. Welcome to all of you.

MR. JEFF BENJAMIN: Actually, Chairman, I have changed our flight arrangements. So I'm here at the pleasure of the Commission at this point.

CHAIRMAN RICHARD MESERVE: We appreciate you adapting to us. Thank you very much.

Why don't we go underway. Mr. Houghton, do you want to start?

MR. TOM HOUGHTON: Yes, Mr. Chairman, Commissioners. My remarks are going to fall in the areas of performance indicators, licensee self-assessments, the assessment process, and the Significance Determination Process.

First, on the performance indicators, we believe that the performance indicator guidelines, the process for running that, and the process for frequently asked questions, which has been developed with the staff, has enabled us to have an on-going dialogue and a better understanding and an identification of where problem areas are in the performance indicators.

Secondly, the industry very much supports the NRC's 0608 change process by which the staff determines whether there is a problem with a performance indicator, looks at what are the potentials for changing that

performance indicator, and has a formalized way of doing a pilot with success criteria. And we think that process has worked well thus far.

We are going into, now, a pilot to revise the unavailability indicators. We feel that this is probably a most important area for us to look right now. The reasons being that the amount of work effort that goes so into this indicator is enormous at the plants. And a key problem is a common definition between what PR experts use, maintenance rule people use, the ROP uses, and WANO uses. And this confusion, when a plant officer asks, well, what's the unavailability, it's which answer do you want for which system. So we need to solve this problem.

There were some weaknesses in the indicator which have been touched upon. Primarily, the indicator uses false exposure as a surrogate for unreliability. And it's not a very good surrogate. So part of our effort is to bring unreliability demand rate failures into the indicator using risk techniques. And that's where the staff and our efforts have been focusing very hard lately.

The indicator also uses generic thresholds, which are inconsistent, perhaps, with plant specific

risk insights. So we want to try and move this indicator more from generic thresholds into more plant specific risk insights. And to make it consistent, as much as possible, with the maintenance rule action level. So we want people acting under the same rules with the same types of information.

We're looking to start the pilot this summer. We have a potential stumbling block which really is a principle of the program. That principle is that if we have a performance indicator -- and in this case we would have an unreliability indicator that measures demand rates -- that there should not then also be an NRC Significance Determination Process conducted on that demand failure. If the demand failure rate is in the green of the licensee response band, we feel NRC should follow up with corrective action, should inspect using the base line inspection program, but that conducting the Significance Determination Process is additional burden on the Agency and the licensees and it is a resource, a waste, for going at it twice, if we agree that the performance indicator is valid. That's obviously the first step in what we would discover from the pilot program. Those are my remarks on performance indicators.

On licensee self-assessment, what this means is that in certain areas, could or should licensee's indepth self-assessments take the place of some team NRC inspections? This is not a new concept. This concept was embedded in the old inspection program with an inspection module 40501, I believe it was. It fact it was tested in Region IV and was used at that time.

When we started the new program, it was agreed that it was a new program and it wasn't the time to go this next step at looking at licensee self-assessment. However, we believe that the time is right to pilot that, not to implement it wholesale, but to pilot that. And we believe that some of the industry initiatives that we have, such as we have a Fire Protection self-assessment Program that NEI has put together. And the CE owners group, in particular, have been doing self-assessments. These self-assessments include teams from other utilities. And these CE initiatives in the engineering area have been going on for two years, so we have some background in doing these types of assessments. The IIEP, the Initial Year's Evaluation Program, recommended looking at this approach. And we believe a proposed approach of getting together, working out some success criteria for a pilot, looking at what

the industry would be required to do, what NRC oversight would be done, for instance, looking at the team composition, looking at the scope of the inspection, to be sure that it covers the inspection module, involvement of NRC in observing probably the exit would be a good place, or other places. And then, of course, the licensee would provide the results of that assessment to the NRC. So it would be in the public domain.

We are hoping to be able to try and pilot this in the second half of this year, if we can move ahead on that. So that's the licensee self-assessment discussion. We think that's a good way to save resources and a good way to improve safety in that the licensee can bring some similar plant people, experts in to look at that licensee's program including business improvements, beyond just the safety improvements.

The third slide, assessment Process. We believe the ROP does provide stability and consistency to the regulatory environment. It isn't relentless. It does get at the issues. It provides a consistency, so everyone knows what's going to happen. There's not doubt and wonderment at the last minute.

The second point, we concur with the staff

conclusion on cross-cutting issues. That's in the SECY that you have. We believe that the program will identify cross-cutting issues and that it will identify them in a timely manner so that action can be taken as we move through the stages of the Action Matrix.

Graded reset of inspection findings. The performance indicators work on a rolling process. For instance, the safety system on availability is a three year rolling average. And as your performance improves or decreases, you can cross thresholds and have different levels of supplemental expression. However, as that program rolls along, you then can move out from the white into a green area. And we feel that the inspection process of findings and the way they're treated in the Action Matrix could be treated similarly in that they would roll out instead of all over year those of lesser significance, for instance a white finding, if corrected to the staff's satisfaction could be removed from the Action Matrix say in two quarters, and the yellow in three quarters, and the red, of course, four quarters. And of course all of them would stay longer if they're not corrected.

Finally, an issue of verification of old design issues. We heard some discussion of that this

morning. Our feeling is that this is a good addition to the 0305 Assessment Program. However, in it's first test case, it's still clear that there isn't full understanding of what is meant by an old design issue and how one would perform an assessment to determine whether it was an old design issue or not. By that what I'm saying is that one moves to the multiple degraded column of the Action Matrix with a red. But you don't go there if it's an old design issue, if you determine it is an old design issue. That column requires a 95003 inspection which involves three to five weeks of effort and over 2000 man hours.

It's our belief that one ought to determine whether it is an old design issue prior to performing an inspection. We think that that determination can be made without having to institute a 95003 inspection. In fact, if it's determined that it's not, that it is an old design issue, you're not in that column and you would not perform that inspection. So to perform it, to find out whether you need to perform it, doesn't seem to us to be an appropriate choice for inspection resources.

Significance Determination Process, we believe it's a very good process for focusing us on the risk issues. And the discussions focus on risk rather than

compliance or some issues in the past which have taken us away from working on the condition. We believe that Phase II ought to be retained and the it can be improved. Phase II removes most of the issues away from having to do a detailed Phase 3 assessment. So we feel that it has value. We think it can be enhanced by licensee involvement earlier in the process. And I noted that the SDP Improvement Plan has some items in it about looking at how licensee input can be received earlier in the process.

We also think that a workshop on Significance Determination Process lessons learned would be very helpful for licensees to know what things to do to help the staff in making its determination in a shorter period of time.

Let me just add though, that the determination of the SDP in no way effects the speed with which the licensee goes after correcting the problem, looking at the extent of condition, and approving its program. So while there is delay in the SDP process, we feel that safety is being improved while that's going on.

Then potentially greater than green, that, again was looked at by the IIEP as an item that, by announcing a potential while, yellow, or red, we believe

that the public can be confused if the SDP changes color. And so what we would suggest is that one call them potentially greater than green rather than a potential white, yellow, or red, and then have to change the color later on. I think that would enhance public safety.

In conclusion, we feel the process is a tremendous improvement. We see the safety focus changed. And Jeff, I think, will talk about senior management and its look at inspection findings and performance indicators. And we're mindful of the backlog of enhancements that need to be made to make the program better. Thank you.

CHAIRMAN RICHARD MESERVE: Thank you. Mr. Benjamin?

MR. JEFF BENJAMIN: Mr. Chairman, Commissioners, thank you for the opportunity to speak here today. We as a licensee also agree with the overall conclusions that we likewise have gained confidence in this program and also feel that it's fulfilling the objectives we set out for them to fulfill. The comments I offer today are really in the areas of an overall perspective, followed up by some observations, and then some specific recommendations.

Our experience with this process has been that it has been successful in focusing our resources for more risk significant items. Just last week I sat in on a root cause review on some problems we're having with an auxiliary feed water pump at Braidwood. And I can tell you the major driver for the amount of senior level attention that that issue received, up to and including our chief nuclear officer, was partly driven by the oversight process and the unavailability numbers that were produced due to the issues that we incurred on that feed pump. Likewise, our experience at the sites is that we're spending less time on nonconsequential issues, that as we're able to dispatch an issue and understand it's significance, there's less churning related to those issues, and we're able to disposition those in a more timely manner.

I listened to your remarks earlier about inspectors following up on issues. I guess, a little bit of a dual perspective on that. First, our experience is that I think they are showing the proper amount of interest on emerging issues. But the results of engagement, I think, have changed a little bit in that now it's clear to us that the burden and onus is on us to get that issue into the corrective action program

and to effectively evaluate it and fix it. And we know that the oversight process is intended to follow our progress in that regard to make sure we've actually resolved the issue. I think that is a recognition that has grown over the past couple of years, and I think a maturity that's building into our organization as we continue working with this process.

As far as performance indicators, we do support risk informing them. And we believe they add value. I think the realistic reflection of risk is an important aspect to have, and I think a consequence of that, may be unintend or intended, is that that's also driven us to make sure that the quality of our risk models is good. And I know we've been doing a lot of work to make sure that they are as good as they can be so that we have outcomes and perspectives that are as accurate as we think they can be.

We look forward to the pilot in July of the unavailability and unreliability indicators. And as I'll close up my remarks here a little bit later on, Tom's point about the number of indicators that currently exist in this area and the confusion, not to mention the data collection effort that goes with that with the system engineers, is clearly an area that we

would like to see cleared up.

We would hope that the obstacles that are currently out there in getting this pilot rolled out get resolved. And we would like to see a July date stuck to as far as initiating that pilot.

The Significance Determination Process, I've had a chance to read the entirety of the self-assessment report, and by the way, I think the staff did a good job on that. I think it largely was accurate in its capturing of the issues that require attention. And one of the issues that I think does require additional management attention and continuing management attention is the area of the this area of Significance Determination Process.

A number of those topics have been spoken to earlier today. I do think it is important that we push to get no and existing flaws with the various STPs fixed and that we end up with outcomes that are commensurate with one another across the cornerstones so that the significance of a wide outcome for safety system on availability is largely consistent with what you might see in security, or fire protection, or otherwise. And, again, I think there's some recognition of some of those inconsistencies. And we're anxious to see that work go

forward and get those resolved.

As far as observations, SDP requires significant resources on low-risk issues. Some outcomes are inconsistent. I think some of that is a by product of what I just spoke to. I largely view these in two categories. One is where we do end up with an initial cut on the risk significance. We've had cases where the additional effort is really to remove some of the conservatism from some of the initial numbers. I really don't have as much heart ache with that, as long as we're not striving for perfection. I know we've had some instances within our own engineering shops where we need to get some good, rationale, basis for the endpoint that we're striving for.

But the other area, maybe a little bit more disconcerting to me, where I think we spend a lot of time in these areas, are in the non-risk based SDP's and dealing with what we feel might be interpretation or application issues that have required a number of resources to either try to interact with the inspectors or to try to get perspectives or additional data on the table. We had an issue with our quad city's white ALARA finding, where we had gone in and found our source term had significantly elevated, unbeknownst to us, due to

some chemistry issues, which, I think, are well documented. And as a result, we had a white finding for ALARA. And we had a lot of back and forth with the staff. And in the end, we accounted for well over 500 hours of effort from the time we initiated a look at the issue through to the final inspection. And those are hours that, only a fraction of which are really focused on the self-assessment and corrective actions to really clear up the issues. So that's one, I think, as we clear up some of these issues I spoke to earlier, we'll see less of that on an on-going basis.

I did want to say something about PI data collection. I know during the pilot there were some issues PI data collection, but for us as a licensee, and having spoken to other licensees, we recognize the importance of this, the foundation this provides to the program. And we apply a very rigorous and highly pedigreed process for collecting and reviewing our data. And I think that's worth continuing to underscore. And as we move forward to hopefully getting consolidated data entry, we had proposed similar treatment with the other data we collect as well. That is something that does require ongoing management attention. And we need to make sure we don't dilute our focus on that.

Tom mentioned self-assessment. The only other comment I would mention on self-assessment is that I believe we as an industry have matured significantly over the past several years. And part of that also, I think, has been our ability to effectively self assess our own performance. And we would suggest that, for the plants that do not have significance performance difficulties, that we be allowed to use self-assessments in lieu of some of the base line inspections. So we likewise would encourage that effort going forward.

I want to comment a moment on end-of-cycle meetings. We think they add value. The one caution is that the communications that are a part of the ROP process should not serve as a shield for other effective communications.

We've learned that through some difficult communications, or maybe poor communications on our part. So we also are focusing on the additional timely and effective communication with both the regions and NRR and are cautious to not use this as a shield for not communicating.

I would like to note our Three Mile Island meeting with had for end-of-cycle meeting. That did not go well a year ago. But this past year, this past

meeting that we had about six weeks ago, Hub Miller presided the meeting and we had a pretty active input from the public. They might not have liked all of the answers that they heard, but I think in terms of the content of the discussion as well as the focus on providing a forum for their views to be heard, we got some pretty good feedback at the end as far as that dynamic being much better this year than it was a year before. And at least in the area of confidence, we think that was a good step forward. We like wise learned, relative to our own participation in that meeting.

As far as some recommendations, we would like to recommend that some table-tops, pilots, and training for any proposed SDP changes be a deliberate part of the process, and really with the focus on testing to failure here, making sure that we really understand the bounds of application here and that what we gain as insight through this process is also included in the guidance. So there is, hopefully, some of that learning incorporated up front and we're not learning it after the fact.

Considering the amount of data collection for new PI's. I happen to be the chairman for the

industry's consolidated data entry collection effort being run through IMPO. And it was very eye opening to me to see the number of data elements that we currently collect through the number of performance indicator systems that we report into. And it was pretty amazing to me how simple it was, in a number of cases, to close the gap and rely on single data elements to possibly support several different reports.

However, one thing that I also observed was that the process that we had undertaken at the time for considering new PI's did not explicitly look at the changed management associated with the new performance indicators in terms of new data elements that might need to be collected. I'm happy to say that new unavailability and unreliability has now looked at that, and I think the gap has closed significantly. But I would argue that, if we look at this as a resource in changed management issue across the industry, this is an important one to consider as we consider new performance indicators. And where it might suffice to have simple substitutions that still give us good outcomes, that we should in fact focus on that.

Tom mentioned the alignment of the indicators. We do think that's very important. And as much as we'll

talk to you about it, we commit to also have the same discussions with IMPO and WANO as well as others. So we recognize that's in more than one court than the NRC's.

The changes to the Phase 2 notebooks. The self-assessment rightfully pointed that out as an issue. One comment I would make is, right now, the benchmarking trips to identify differences goes out to the end of 2003. And I would really urge for something a little bit more urgent than that. I think as we gain confidence in the accuracy of these notebooks, we can also gain confidence in what we're doing in the Phase II work.

And finally, again, as an endorsement of what is in the self-assessment, let's implement the strategy as indicated in the action plan at the end of the self-assessment report. Again, I think they've largely captured the issues that have been the topic of many discussions and many interchanges. And we're looking forward to execution per the schedule and the implementation of that strategy. With that, that concludes my remarks.

CHAIRMAN RICHARD MESERVE: Mr. Lochbaum?

MR. DAVID LOCHBAUM: Good morning.

I wanted to highlight four comments we had

from a written statement. Those were comments on the industry trends program, on the SDP timeliness issue, on the design basis, design issues area, and on the predicability of events like Davis-Besse.

Slide three please. Talking about industry trends program, I think it's a good program. We're proposing two supplements to the program. One would be an annual characterization of the causes for NRC sending out team inspections, rather they're special inspection teams, augmented inspection teams, or incident inspection teams, kind of like what's currently being done now for LERs, whether the cost code is human performance or equipment failure or what not.

We think some insights into what are the emerging issues, what's causing NRC to send out these teams, might be useful and might provide some complementary information to what is currently in the industry trends program. Likewise, we think it's important to have some incidences into safety during refueling outages.

In the paper we proposed LERs, the number of LERs that come from a licensee during refueling outages versus nonfueling outage times. That may not be the best tool out there, but we think something needs to be

developed. Particularly, as licensees go to shorter and shorter outages, there is a public concern that safety may be cut. And I think something out there to hopefully show that that's not the case, or if it is that it's fixed, whatever, but we think those insights are important.

On Slide 4 please, the Significance Determination Process timeliness. What we propose is a hard and fast 90 limit, not a goal, not everybody's strong desire, but a real hard and fast goal. We understand that there are times when information just can't be answer that quickly, but the NRC currently imposes deadlines on licensees and always has. I worked in the industry for years and we had to get LERs in within 30 days. We had to make Part 21 determinations within 60 days. Sometimes it took longer, but at the end of the period you went with the best information you had, and you made a call. You might have to later revise it, and we did. But it's too important an issue to not have a hard and fast deadline. There's are too many reasons for it not. Your public confidence is one, as Commissioner Merrifield pointed out. But I don't think it's a hard problem. I think once you establish the hard and fast deadline, some of the enhancements

that are being proposed to accelerate the process would be expedited.

Slide five. On the design issues concern, I guess it's not as important, whether it's a new design issue or an old design issue or a middle aged design issue. The effect on the plan is pretty much the same. If you're going to a risk informed regulation, that really doesn't matter, the age of the design issue. If something won't work, if a compound or a system won't work because it's broken or designed wrong, the effect on risk is pretty much the same.

As Commissioner McGaffigan pointed out, the industry has had a number of opportunities over the years to flush out these problems. And many plant owners to their credit, even before the 5054F letter of 1996 spent a lot of money to do that, to design reconstitution programs and what not. We feel that this process basically is unfair to the people who spent the money to flush out their old design problems and make their plants safe and rewards those who have only given lip service to those efforts over the years. And there are people out there who have done that. And we think this process is unfair to the public, it's unfair to the licensees who spent the money and spent the resources

and really backed up this Safety First slogan with actions rather than words.

So we think it's very important, if you're going to have a risk informed regulation, that you don't give get out of jail free cards to the design issues.

Slide six. Commissioner McGaffigan, in his questions to the previous panel, talked about our call for some part of the process, looking at what events like this teach us about the Reactor Oversight Process. I want to emphasize that I'm not suggesting that there is anything wrong with the ROP and that the Davis-Besse proves that. I think there's an opportunity to be learned there. If that former review process shows that the ROP is fine, that's good. That's good data too. If it shows that there's something, a weakness or an area that could be enhanced to reduce the likelihood, then that's great too. But that information, either way, I think is a valuable complement to all of the good feedback that is currently built into the ROP information until the ROP, in terms of the surveys and the feedbacks both internally and externally.

I understand that when an incident inspection team goes out, that's a formal process, to look at the event versus the ROP. But not everything rises to that

level. We would like to lower that threshold down to the AIT and SIT level. It wouldn't necessarily have to be the AIT team members themselves that would do that, but those folks that are fact finding, bring the information back to the staff, perhaps do it in the program office or the regional office or whatever. But I think that feedback should be formalized, and I think it would be valuable input.

If that effort or that review identifies potential enhancements to the program, we're not suggesting that it be made automatically. We were suggesting that it would go into the 0608 process or the existing change process to be evaluated and implementing if it was a good idea.

Slide seven, please. In wrap up, we do continue to believe that the Reactor Oversight Process is vastly superior to what was before, SALP and the other things. Unfortunately, we're not able to point to anything to prove that, which makes it a little difficult to sell to our colleagues. I haven't been able to sell it or rent it or give it way to any of our colleagues. I think it's because I can't point to anything. If you look at all the charts in industry trends in the SECY paper, they're all trending downward

from 1987 onward. It almost looks like, whether you had an ROP or nothing, there's something else driving that trend. So whether you changed ROP in 1999 or 2000 or just got away with it altogether and didn't do anything, it looks like those trends would have continued.

I'm not advocating getting rid of the ROP. Actually I'm looking for something. I think Mr. Merschoff may have provided something, even though I won't use the R word, that is a difference that wasn't there in the old program. But again, it's hard to point to a process and convince people that it's something better. It's better if you had a change in a curve that you could say, it's better because of this. And I lack that right now. If anybody has that, I would like to see it and understand that.

The last thing that wasn't on the presentation, I would like to address a point that the Chairman asked the first panel. And that was on the issue of generic communications follow up. We submitted a letter to the Commission, I think it was dated January 28, 1997, on this issue. It dealt with 10C45071 Paragraph E, which was prumelgated in May of 1980. It requires plant owners to revise the updated safety analysis reports to include modifications to the plant

and also responses to NRC generic communications.

We've never found a plant that's done that. And basically, we like compliance with regulations, but we think that noncompliance of this regulation over the years is a contributing factor to some of these problems. Because had plant owners followed that regulation, incorporated it into the FSR, when 5059 reviews are done for revisions to inspection programs and other operating procedures, there's greater awareness and less likelihood that perhaps some of the miscues and oversights that Davis-Besse and others have fallen into would have occurred. So I guess we'll point to that letter as one more reinforcement that that's an issue that needs to be resolved. Thank you.

CHAIRMAN RICHARD MESERVE: Thank you. Mr. Janati?

MR. RICHARD JANATI: First let me thank you for the opportunity to provide our views and perspectives on the new Reactor Oversight Process. Our comments are based on our participation in the NRC workshops and public meetings, interactions with the NRC staff, particularly the NRC resident inspectors and regional staff, and communications with the interested members of the public in Pennsylvania, particularly

those who live near a power plant.

First, I would like to provide you with a summary of NRC inspection findings at our power plants for the next two years. NRC has issued a total of 137 findings. The number of green finds are about 130, and the number of white findings are about 7. And we recently had a potential yellow finding at one or more facilities. Also, there are three white findings related to the performance indicators for the same period of time.

With respect to the Commission's goal of maintaining safety, there are no signs of declining plant safety at any of the nuclear power plants in Pennsylvania since the implementation of new reactor oversight process. There have not been any significant events, and we have not experienced any unintended safety consequences of the ROP at nuclear power plants.

However, we recommend that NRC continue to assess a long term effectiveness of the ROP and validate the ROP assumptions, particularly as it relates to cross-cutting issues. One of the ROP assumptions, as you know, is that problems or adverse trends in cross-cutting issues would manifest themselves in the degradation of other performance indicators. The ROP

does not directly measure cross-cutting issues. And NRC usually gets involved if these issues are contributing factors to relatively significant findings, white findings or greater. Therefore, we believe that additional time and data is needed to validate this particular assumption.

With respect to the goal of maintaining safety, the public is concerned that the reduction in the number of NRC resident inspectors and base line inspection hours, combined with the recent industry and staff reduction, could adversely affect plant safety.

I'll give you an example. This is a recent article, a copy of a local media article, concerning a high profile facility in Pennsylvania that talks about low morale because of staffing deductions at our facility. This concern has been reinforced by the fact that some of our power plants have received inspection findings that are caused by lack of supervision or lack of adequate staff level.

However, the good news is that the Reactor Oversight Process has identified some of these weaknesses and problems. And that needs to be communicated effectively to the general public by the NRC staff.

The second goal is to enhance public confidence. The ROP provides a more scrutable, objective, and predictable process for evaluating individual plan performance. And this should help improve public confidence in the process. Although this is going to be probably the most difficult goal to achieve. NRC has been actively seeking stakeholders input to further improve the ROP, but the level of participation by the general public has been very low.

It is recommended that the NRC develop and implement an effective mechanism to receive public input continuously and on a plant specific basis. NRC resident inspectors should play a proactive role in the agency's public involvement activities within the local community. Now, overall the NRC's PII program, Public Involvement and Information Acts, has improved in the recent years. However, it has not been very effective at the local level. We believe that the NRC resident inspectors should be more available and accessible to local community and the local media.

The mechanism for an effective public involvement process involving the resident inspectors will have to be worked out. I think one of the issues is that the resident inspectors are trained to do

inspections, to monitor plant activities, and they're doing a fine job. But in our view, they're not getting the training that's needed to be able to deal with the media, the local media, with the interested members of the public. I think by doing that, they could certainly enhance the public confidence in the process.

The posting of plant specific performance indicators and assessment information on the NRC website can improve public confidence in the process and should be continued. The public is particularly interested in plant specific information.

Unnecessary changes to the Reactor Oversight Process may reduce public confidence in the process. We understand that the new ROP is an evolving process, and changes would have to be made to improve its effectiveness. However, if these changes cannot be adequately justified, then it could damage the credibility of the process. In our view, if you make too many changes or you make some changes, a few changes that cannot be just justified, it could damage the credibility of the process.

The third goal is to improve efficiency and effectiveness of the process. The ROP focuses NRC inspections and licensee resources on areas that are

most important, safety. And in our view it is a most efficient process; however, additional time is needed to assess its overall effectiveness.

The integration of the performance indicator's into the process is a positive aspect of the new ROP. PIs can and have held licenses and focused their attention on areas of programs that may need improvements. For instance, we have seen improvements in the area of emergency planning. Some of our facilities, actually the majority of our facilities, would notice that because of the performance indicators.

As you know, EP is an area of importance to states and local communities. So that's a positive aspect of the process. Development risk based performance indicators should help improve the ROP effectiveness. One of the weaknesses of the process is that not all performance indicators are respaced. Respaced performance indicators will provide a more consistent risk based approach for evaluating their licensees performance. And therefore they can improve the effectiveness of the process.

Unfortunately, and I repeat what has been said here before several times today, the NRC response time for some inspection findings are slow and has hindered

the effectiveness of the Significance Determine Process. In our view, the SDP plays a very important role in the new Reactor Oversight Process. It has improved communications between NRC and licensee staff on issues that are risk significant, and that's good.

Unfortunately, at times the process is slow. And in some cases involving Pennsylvania plants, it has taken several months for NRC to characterize the risk significance of the finding, generally a white finding or greater than a white finding, which questions the effectiveness of the process.

And finally, in our view, additional time and data is needed to assess the ability or effectiveness of the ROP to detect, in a timely matter, adverse trends in the cost cutting areas.

With respect to Goal 4, reduce unnecessary regulatory burden, based on our observations, licensees are spending less time responding to issues of low safety significance, mainly nonsited violations. And this has reduced the regulatory burden significantly.

On the other hand, the SDP process is a resource intensive process. The lack of a standardized risk assessment tools has complicated the process. This statement is obviously based on our observations and

also the feedback that we've received from some of our utilities.

Finally, considering that the states are not directly effected by the new process, we recommend that the NRC conduct periodic surveys of selected regional staff and licensees to determine whether the ROP is making progress toward achieving this goal.

Before I conclude my presentation, there's one additional issue that I would like to discuss very briefly. As a result of the tragic events of September 11, security of nuclear power plants is an issue of concern to the general public and the states, particularly states with nuclear power plants. Two more articles, very recently. One is related to the recent orders, NRC orders. The other one is a letter to a specific plant, another high-profile plant in Pennsylvania involving security. So the public is very much concerned.

COMMISSIONER JEFFREY MERRIFIELD: Mr. Chairman, I'm sorry to interrupt. Just for the sake of the public record, if we could get a copy of those to the secretaries so that those could be included in the record for the sake of the transcript and the fullness of the testimony.

MR. RICHARD JANATI: NRC recently had a public workshop to inform the public about security issues and additional measures actions that the Agency has taken to enhance security at nuclear facilities. We request that NRC have a similar workshop for government representatives only to share information, including safeguards information with the states concerning a general follow up to NRC threat advisories, some of the audits that were recently conducted by the Nuclear Regulatory Commission, reviews of plant security and design basis threat, the changes that NRC is considering to make to the security requirements and specifically DBT, security events or threats at a specified nuclear power plant, as lessons learned. We'll be happy to share similar information with NRC and other states.

And finally, status of NRC performance based evaluations and the future of the office. Let me mention that so far we've had access to safeguards information. We've received the recent NRC orders, the NRC threat advisories, and we do appreciate the cooperation that we're getting from the NRC headquarters staff. And that concludes my presentation.

CHAIRMAN RICHARD MESERVE: I would like to thank the panel for their very helpful presentations.

Commissioner Merrifield?

COMMISSIONER JEFFREY MERRIFIELD: Thank you very much, Mr. Chairman. I'll try to move through this quickly. The first question I have goes to Mr. Houghton. Turning to Page 4 of your slides, one of the things that you talked about on your third bullet was a graded reset of inspection findings, particularly for those licensees who have otherwise been doing okay, as long as they make the actions necessary to correct that. It strikes me that one of things that we had intended, or whether we intended or not, has been an outcome of the performance indicator program, was to provide an incentivized tool such that licensees would not want to put themselves in a position of having those findings. To the extent that those are corrected and quickly get on to that list, it seems to me that it would weaken that particular incentive. And so I would like to hear a little bit more of an explanation of how we as an Agency and the public could benefit from that particular change.

MR. JEFF BENJAMIN: You said quickly. There's a supplemental inspection, which isn't held until the licensee has done its root cause and done its analysis, which takes a significant period of time. The NRC comes

in, does its 95001 inspection, looks hard at whether the corrective actions are appropriate. And if that's taken place, it seems to me that that item, rather than being held for four quarters when it's no longer indicative of the performance in that area, we would want to remove it from the matrix.

My point being that the matrix, as I understand it, is to display the current performance of the licensee. And if that item has been fully corrected -- and I'm saying family corrected -- that it no longer represents the licensee's performance in that area.

COMMISSIONER JEFFREY MERRIFIELD: Okay. I'm not certain that -- I don't know. We'll have to take a look at that, and I'll certainly want to hear from our staff about the on-going usefulness. Its part of our decisions in that. But it strikes me that it's not necessarily just the mere snapshot of where you are right now, but also it does provide the public an opportunity to have some historic understanding of where the reactor has been as well.

Mr. Benjamin, turning to your slide three, you talked about -- and again, this is in the third bullet, self-assessment can be effectively used to offset some base line inspections. And I know it has been a long

standing concern on the part of NEI and its members to go to that extent of having more self-assessment. And I know arguments are made that, if you have a good performer, we ought to provide greater benefit for that.

Well, we haven't done our full recause analysis or introspective look at the Davis-Besse event. That is pointed out as a situation in which the performance indicators in the history would lead you to believe that everything was fine, yet when you start scratching the surface, it's the events that led up to that event that, perhaps there should have been a greater scrutiny on the part of the licensee to determine that they actually had a problem, the build up of material on the hepafilters, I think, probably being the most notable one.

That seems to counteract what you're suggesting. I mean, how do you square your suggestion with where we seem to be right now, at least preliminarily, with Davis-Besse?

MR. JEFF BENJAMIN: First of all, the focus of that would be for what we believe has been established as an effective track record of good self-assessments in areas that would complement the base line inspection program where you would be looking for areas of

deteriorating or degraded performance, is where we would look to offset the efforts.

Obviously, the issues of Davis-Besse, being another utility and all, looking at it from where I look at it quite simplistically, I'm not sure any PI scheme that we would put together could really predict or detect that type of issue. I would tend to look at one of the other inputs to the processes, largely the inspection program, to see where those types of precursors or those types of issues might have been previously detected. So I put that comment on the table pretty much as an aside.

I guess, in my mind, the issues of Davis-Besse really don't detract from that recommendation in light of what my understanding of what the intent is behind the base line inspection program in an ongoing sense. And it's really within that regard that we offer that forward, that again, for the plants without significant operational difficulties, come in and look at our self-assessment program to satisfy that it is, in fact, suitably rigorous. I know that inspectors of several of our plants review our quarterly results. We can use that to offset Agency resources that we do that. And I don't see that as running counter to the public

confidence issue or some of the results that may come out of the inspection as a result of Davis-Besse.

COMMISSIONER JEFFREY MERRIFIELD: Mr. Lochbaum, on Page 6 of your April 18th letter to the Commission, you talked about, and you went into it in your testimony today, about the design issues and giving credit to -- it's unfair for leaders of the NRC to continue to give laggards a free ride as it relates to those design issues. It's unfair to the public to give either leaders or laggards a free ride.

Now, in the various management training I've had in my life, you always talked about the balance between the carrot and the stick in providing appropriate incentives for people to do things. And it strikes me that one could make an acquisition that, by this paragraph you're asking us to ignore the carrot and simply use a heavy club.

How do you respond to what has been suggested, that we should have an on-going incentive for licensees to continue to question design issues, despite the fact that we have asked them previously to question those design issues?

MR. DAVID LOCHBAUM: Well, I fully appreciate the carrot as only an incentive if it's in the right

orophous. The difference here is that we shouldn't throw out or treat issues based on the their age, because that's not the right measure. If we want to treat design issues differently, then we should look at how they were discovered. If the licensee has undertaken a design reconstitution program or something over and above the minimums, what's required, and finds on of these things, than that should be a factor in treating it differently. If it's identified through something else, then it should not get that treatment.

Our concern is, right now, how we determine something is an old design issue is too subjective and allows virtually everything to be considered that way. And given all of the history and the factors and that fact that NRC assumes that plants are completely in compliance with design bases when it issues a license renewal, if that's the assumption, than any time somebody finds something that's not you're undermining a whole lot of regulatory space there. And that undermining shouldn't be just disregarded or treated lightly. So I guess that's the concern that we have right now. There's too much credit being proposed or has already been changed for design issues that should have been flushed out a long time ago.

We're also concerned that there's been some information from industry that this Reactor Oversight Program is supposed to look at current performance and not performance a long time ago. We would maintain that any time you make a modification to the system, something like that, there's an opportunity to find a design error. And if you haven't found it now, that is not just an indication of older performance, but its also an indication of current performance. So I think that's being divorced too quickly for the wrong reasons.

And I guess lastly, from a risk stand point, it doesn't really matter why the thing doesn't work. You're constantly telling the public that you're going to risk informed regulation, and yet things like this suggest that you're not. And that makes it real easy for my job. I can go around and undermine public confidence pretty easily, but I don't think that's what you want.

COMMISSIONER JEFFREY MERRIFIELD: I hear what you're saying. It's perfectly logical to me. But I know at the same time, in discussions that I've had, in presentations I've given at plants, where I say I think it's better for licensees to find problems than merely to rely on NRC inspectors to find it for them. I mean,

I think we need to encourage and incentivize our licensees to be very, very self-critical.

There's no result that we're going to come to at the table here today, but it strikes me that there ought to be some balance between recognizing the concerns that you have, at the same time making sure that we are giving that carrot and stick.

MR. DAVID LOCHBAUM: The other thing we thought about, but we haven't come up with the right equation yet is, whether than T over 2 in terms of fault exposure time, maybe treat the denominator differently depending on how old the issue is or how innovative or aggressive the licensee was. So that would alter the time which is a big factor in determining the overall significance and the color. That hasn't matured far enough for me to propose what that is, but we're looking at that as an alternative that might better serve everybody's purpose.

Absent that, I don't think we have enough data now to make that change. I think we were premature, or the Agency was, not us, in making what changes there have been so far.

MR. TOM HOUGHTON: I think the issue that the issue is going to be categorized by its risk. If it's a

red issue, it's a red issue. Rather it's old or not, I agree, is not particularly material. But the question is rather the licensee could discover it, if it was something that couldn't be tested, or if it's something that does under its own initiative. So I think that's the reason for allowing the deviation from the Action Matrix. Thank you.

COMMISSIONER JEFFREY MERRIFIELD: Mr. Janati, on Page 8 of your slides, the bullet where you said NRC needs to develop and implement an effective mechanism to receive public input continuously and on a plant specific basis, do you have any specific recommendations about how we might go about improving our process in that report?

MR. RICHARD JANATI: Mainly, I think the role of resident inspectors needs to be revisited, the function of resident inspectors, their responsibilities. I think that, due to the fact that the resident inspectors are there, they're there everyday, most of them are in the area, and I think that they need to pay more attention and spend more time dealing with the public and establish communications with the local community, local community leaders and interested members of the public. I think that would be very

effective in enhancing public confidence in the process.

COMMISSIONER JEFFREY MERRIFIELD: That's an excellent suggestion. I know that's one that the regional administrators have talked to as well previously, so I appreciate that. And also thank you for a very good presentation.

MR. RICHARD JANATI: Thank you.

COMMISSIONER JEFFREY MERRIFIELD: Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Thank you.

I'll be very fast in light of the limited time that we have. I just wanted to pursue one issue that both Mr. Houghton and Mr. Benjamin raised, which is the licensee self-assessment.

We have some experience from the security area recently where we proposed, as a pilot, to have greater licensee engagement and were heavily criticized for that. How do we do this in a way that we don't undermine public confidence that we're backing off our inspection activities and allowing the sort of self-regulation by licensees?

MR. JEFF BENJAMIN: Again, I think an underlying premise here, is that this is a major part of our operations today. And it has significantly evolved

over the past several years. I'm not sure how much that has been made transparent to the public. What we're suggesting would not be to eliminate the NRC from the process but perhaps redefine the role to one more of oversight where, through some smart sampling, that you're assuring that we're being adequately self-critical and effectively identifying and resolving issues.

In terms of the public involvement, relative to that, I'm not sure that we have been effective to date in painting the first part of the picture that I presented in terms of really how important that is to us as licensees.

I heard the comment a few minutes ago about allowing NRC to raise issues. That might have been our mindset ten or fifteen years ago, but we know and understand that really the primary responsibility for identifying fixed issues is ours. And we drive that to our entire staff. And we now look at the NRC involvement in our activities as further opportunities for improvement.

And I think a lot more progress can be made on the public front in further highlighting that our own self-assessment programs have been an important part of

our performance improvement over the past several years.

MR. TOM HOUGHTON: I would just add that we're really in a self-assessment mode now anyway. If one looks at the number of corrective action items that are discovered by the licensee vis-a-vis the NRC, it's hundreds or thousands in a greater mode.

And a second point, very briefly, is I think that encouraging self-assessment encourages self learning by the licensee. That's where he learns. It's not from being told by an inspector that there's a problem. It's by learning how to learn and learning how to find things themselves.

CHAIRMAN RICHARD MESERVE: Mr. Lochbaum, do you have any views on this that you would like to share with us? I don't want to put you on the spot, if you don't.

MR. DAVID LOCHBAUM: I do, briefly. I agree with Mr. Benjamin. I think part of the problem has been the communication with the public about the role of self-assessments in the past. And the track record is a problem. And that would be deterrent, although I don't think it's a show-stopper, for expanded use of that. You know, our own experience more recently was at Indian Point 2 where Entergy did a self-assessment with it.

And I talked both NRC and Entergy. And the team that was assembled was more experienced and more capable than the NRC team that would have gone in. Nothing against the NRC team, its just that it was larger and more experienced. But none of the results from that self-assessment were made public. So the greatest and excellent inspector team with no public information gets essentially no credit on the outside.

As self-assessments go, there needs to be a comparable amount of information available to the public to see the scope and depth and some of the findings from something. I was saying to Mr Houghton earlier. We don't advocate that all of the critical points that are made during the inspection need to be made public, because there are certain things that go beyond regulatory requirements that teams like that provide. We're not asking that those be put in the public forum. But the equivalent to the type of information that would be available from NRC inspection needs to be available following a self-assessment.

CHAIRMAN RICHARD MESERVE: Thank you. Commissioner Dicus?

COMMISSIONER GRETA DICUS: Okay. I have one question which you can all take a stab at and we'll go

on. In the conclusions that the staff, the NRC staff had, among those program successes was that we are effectively communicating our assessment results to the public. Do you agree or disagree? We can start one end to the other and in the middle.

MR. TOM HOUGHTON: I think the information is being transmitted. But part of the problem is whether people are interested in receiving that information. If they have a particular interest, I think they hear it, and I think it's understandable. It's logical. If they are perfectly content and feel that they don't need to devote their attention to that nuclear power plant down the road, than it's not effective.

MR. JEFF BENJAMIN: I have maybe a different way of answering that. For a member of the public who has an interest, who has a desire to get the information, it's there. Now, we have had instances, and again the self-assessment pointed that out, relative to the accuracy of some of the information posted relative to Significance Determination Process findings. That notwithstanding, I think the staff is taking some good action to fix that. The information is out there.

Again, going back to that Three Mile Island public meeting, they were well educated on the issues

from the plant.

It's greater reinforced in the delivery from the region as well as our response to those issues. And I think there was a good exchange about what the topical issues were that needed continued management attention for that plant for the members of the public who have the expressed interest.

MR. DAVID LOCHBAUM: I guess our answer to that would be that there's quite a bit of information available on the new Reactor Oversight Process that allows people to do that. I guess we're concerned about the packaging right now. We're kind of compared to a jigsaw puzzle where there's 1,000 pieces on the table and it's really left up to the public to put together those pieces to see what the big picture is. We think it could be packaged a little bit easier so that the public didn't have to assemble the puzzle first.

When reporters or people living near plants call and I refer them to that, that's a very daunting bank of information on the NRC's website. It's very difficult to navigate through. And I think that turns off a lot of people, except for the people who do this either because they're paid to or they have an obsessed hobby. Other than that, it's very daunting. And I

think that needs to be made a little easier.

MR. RICHARD JANATI: I think the information is available for the public to scrutinize. I'll give you an example from the NRC website. As you can see here for performance indicators, we have all green. That's from one of our power plants which indicates that there are no problems with any of the performance indicators.

And then for Significance Determination Process, you also notice that there are some green findings. At times, the public doesn't distinguish or understand the difference between the two.

So I think, you know, this should do a better job providing some background information, some explanation, as to what it means if you have a green for SDP findings or green for performance indicators.

And then there are a number of other boxes here, no findings this quarter. If you click on one of these boxes, you get more of a description of inspection findings that are, again, green findings for those boxes that indicate there are no findings. So some improvements will have to be made to the NRC website.

And just and one other thing. There are certain aspects of the program that are very difficult

to communicate; the SDP results, the risk characterization of the significance determination finding. I know that Region I is really trying very hard to do a good job in inspection efforts. But again, the information is really not there to restructure the process and recognize the significance of the process at times. So it is a very difficult task, particularly when it comes to communicating risks, degree of risk, and risk significance of the issue.

And based on our experience, the public is not really interested or understands risk assessment. The public understands and is interested in risk management. So that's one area that we really need to focus on. If the public knows what the risks are and how it can go about managing the risks, having monitoring systems, for example, in place, having emergency response programs in place, then the public understands it. But risk assessment, not really.

COMMISSIONER GRETA DICUS: Thank you. Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Commissioner Diaz?

COMMISSIONER NILS DIAZ: Thank you, Mr. Chairman. I guess my fellow Commissioners had a lot of the good questions. So I will do something for

Mr. David Lochbaum and try to shorten my time here. It says, "As can be expected, the reactor oversight program has some flaws that need to be corrected, some aspects that are adequate which can be approved, and some parts that are working great." The majority of my comments will fall into two categories. I would say the same thing with regard to your comments. The majority of your comments are great, so I'm not going to talk about it. Those that are adequate, I'm not going to talk about it. I'm just going to concentrate on the ones that are not so good.

Due to the hour, I think that most of the issues have been dealt with. I do want to go back to Mr. Lochbaum. First, I want to thank you for your very insightful report. I happened to be in an airplane trying to land in BWI with bad weather, so I had four hours to read about it. That means that you and I are going to need to meet on some of the issues in here.

I do want to make a comment. And I invite your comments. You said that you really cannot see or prove that there's any benefits or bad impacts from the ROP. I would disagree with that, and I'll tell you why. If you look at all of these curves, they're all reaching an asymptote. Because they're reaching an asymptote, it

is very difficult to change the slope when you've reached an asymptote. The fact that the slope has not changed is actually of great significance, because if you were to change your slope, even to make it below where the normal level is, you would be artificially creating a level of performance that might not be responsive to what the system capabilities are.

All of these curves, whether they are inverted S's or right S's, they're all approaching an asymptote. And the main driving function is not the inspection programs or any of these things. It was the combination of industry and some of the regulations that actually forced the industry. And it has a tremendous power, and you cannot bend it. You really cannot bend it. And if there were higher on the other part of the slope, you could. But once they reach this asymptotic behavior, it is very difficult to affect it. And only major, major changes in the parameters or in the performance would actually rezone the fact in the analysis that mentioned when they say, you know, if you weigh these functions a little differently. So I think you have significant, maybe dubious, impact from the ROP in that it really did not change the slope. And that, to me, is of significant value.

Comments?

MR. DAVID LOCHBAUM: We're getting credit for doing nothing?

COMMISSIONER NILS DIAZ: No. Getting credit for not slowing down or changing, or accelerating when maybe it should not be accelerated, the actual slope of improvements that the industry had established in terms of reaching the asymptotic behavior.

MR. DAVID LOCHBAUM: But to turn around the question you posed to Mr. Miller on the first panel, had it not been for the change to the ROP, wouldn't those curves have been the same? That's the Indian Point 2 question rephrased.

COMMISSIONER NILS DIAZ: I have no idea. Nobody has done the analysis. It could very well be that, because of the rigorous program, that we would have seen more changes to the slope on the wrong way. But nobody can prove or disapprove that. That is just that kind of thing.

Now, the questions I was asking Mr. Miller goes to the other part of your questions here on Davis-Besse and, of course, what is random, what is not random. And of course Davis-Besse has less randomness than Indian Point 2 in the sense that, you know, there

is a progressive issue, you know, there were indications, whether there were the iron in the screens, all of those things. So it is not possible for any of these programs to single out the event.

MR. DAVID LOCHBAUM: I guess we view those, both Indian Point and Davis-Besse, as playing with loaded dice. Even loaded dice doesn't guarantee that you'll win, but it increases the odds that certain numbers come up. So that was our concern about Indian Point and Davis-Besse, that there was loaded dice.

COMMISSIONER NILS DIAZ: I do agree that the indications are what are important. You know, whether the hole being a tenth of an inch or six inches, that is just particular to Davis-Besse. It's not being replicated in any other plant. So there is much less randomness. The size of the hole is probably, you know, has some variation according to the plant.

What is important -- and the same thing applies to risk informed regulation -- it is that the performance of the plant and those everyday parameters that people obtain, whether there is the amount of iron on the screen or the indications of boric acid, that is what is really needed to be elevated now to a much higher level to avoid having to reach an event.

And it's not possible, to me, it's not possible to get any of these programs to prevent that. It is possible to have the program increase the awareness of the operators so that they'll be able to start tracking and integrating data to obtain the daily obtained results. And that is the lessons. I don't know whether you have any comments.

MR. DAVID LOCHBAUM: I agree with that fully. I think that one of the things that we like about the program but can't prove that it's a tangible benefit is what the other panel has said, it focuses resources the right way. So not every indication of scaling or filing is elevated up. You need to ensure that the right ones get up to senior management. Otherwise, you're wasting resources and attention. So I agree with that fully.

COMMISSIONER NILS DIAZ: Maybe you and I need to get together, because we're running out of time. Thank you, Mr. Chairman.

CHAIRMAN RICHARD MESERVE: Commissioner McGaffigan?

COMMISSIONER EDWARD MCGAFFIGAN: I may make more statements than ask questions in order to keep the time moving here.

Mr Janati, with regard to your suggestion

about a security meeting with state officials, that could well be a useful thing. One of the problems that we face is that much of the information that you really want to talk about sounds like it is above the safeguards level, for instance, the DPT safeguards the rationale for you. Why you have the DPT is oftentimes secret or whatever. Vulnerability analysis are at the secret level.

I know the Office of Homeland Security is trying to get a limited number of state officials security clearances so they can engage in these sorts of issues, not only with regard to our plants but with regard to other critical infrastructure. And your department probably would be involved with chemical plants and other things as well. But there could be an issue of classification that makes it difficult to have the discussions. And I just mention that to you.

The SDP Phase II Notebooks, several of you have suggested that we need to get on with getting them up to date. I think it's been one of the critical problems in the timeliness. You're asking the folks to be timely. You're not giving the tools with which to be timely. I'm not sure we'll ultimately be timely until we have the SPRA models, the Simplified Plant Risk

Analysis Models, all in place. And that's going to take some time. And I do think, and the Commission has been working on this for some time and budget space for at least a year now, we've been trying to speed up the Phase II Notebook and the SPRA process.

And I think the answer we're oftentimes getting back is that is that it's limited, not by dollars, but the limited number of people with the expertise to do it. And thus far, we can't clone them, and I don't think we ever will. So I just mention that in passing.

I did sense, Mr. Lochbaum, there might possibly be an agreement between you and NEI on something, so I always pounce on this. So this is my first question. In terms of getting out of jail free cards, it sounds like you were not alternatively opposed to getting out of jail free cards for design issues. But your criteria for getting out of jail free was, did the licensee do something extraordinary, above and beyond, funded itself, or wasn't self-reveling? I mean, they did something finally. It may have been late, but they did it, as opposed to the age. And Mr. Houghton suggested that we don't need to do 95003 inspections if somebody gets a finding, if he's in the same category

you're talking about where they themselves did something extraordinary already and are on top of it. So do you agree that, if the criteria for getting out of jail free were the degree to which the licensee had done a good job, discovered it himself, not self-discovery but had done something well, that we wouldn't necessarily have to do a 95003 inspection to give him the get out of jail free card?

MR. DAVID LOCHBAUM: Yes, I would agree with that.

COMMISSIONER EDWARD MCGAFFIGAN: Okay. Good. Now, you two actually have to persuade the staff who are trying to split the difference between you and have a totally different approach. But I look forward to that.

MR. DAVID LOCHBAUM: I'll confuse them.

COMMISSIONER EDWARD MCGAFFIGAN: Whatever. Whenever we can do that, it's probably a good thing.

Do you have any comment, Mr. Lochbaum, about this issue? I counted the number of green findings at Cooper and Indian Point. And I didn't give the numbers earlier, but in the mitigating systems cornerstone in the plan issues matrix at the moment, by my count, there's 49 at the moment for Indian Point and 44 for Cooper. You would expect more from Indian Point. They

got a lot more attention in the last several years. Cooper's emerging, so in some ways Cooper's worst. They got 44, and all they've had basically is the base line inspection with a couple augmented inspections and emergency planning. But are you monitoring numbers of greens, and do you see any trend that we should be looking for cumulative effects? Or as you, a part of the designer of this whole thing, does this raise some concerns in your mind about whether these cross-cutting issues are going to become self-revealing soon enough?

MR. DAVID LOCHBAUM: We are looking at the number of greens. One of the things we recommended early on in 1999 and 2000 was that PI's are pretty much you can compare them apples and apples. The numbers of green findings can't because the number of inspection hours varies widely. I think the low end is about 2,000 or just under 2,000. Indian Point is up around 11,000 or 11,500. So we had proposed finding per 1,000 inspection hours or some unit of time. And if you do that, there's still more at Indian Point, but it's closer. The gap narrows.

COMMISSIONER EDWARD MCGAFFIGAN: It would actually be vastly more Cooper, in terms of findings per 1,000 inspection hours, Cooper would be an outlier.

MR. DAVID LOCHBAUM: But I still think, even having done that calculus, we're still against aggregating them. I still think you look at what is that telling you. That fact that there are more means that you've got a better sample, you've got more insights, but you still haven't found anything that raises above the grain. So even though there are more, you have less certainty because you've done more inspections and you've looked further. So I guess we would still stay where we are on that one.

COMMISSIONER EDWARD MCGAFFIGAN: Unless someone else wants to comment, Mr. Chairman, I'm finished. There's lots of other questions we could ask, but given the hour, I think we better stop.

CHAIRMAN RICHARD MESERVE: Thank you very much. I would like to express, on behalf of the Commission, the appreciation for the staff for this panel. I think the amount of time that we have spent on this issue, and we easily could have spent more, reflects the importance of this program. It also reflects the fact that, although we think that we think that the Revised Oversight Process is a great improvement over what there was before, that this is still a work in progress and that there are more

improvements to be made. So thank you all very much.

And with that, we're adjourned.

(Whereupon, the briefing concluded at 12:40.)