UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

+ + + + +

BRIEFING ON
RESULTS OF THE AGENCY ACTION REVIEW MEETING
(REACTORS)

+ + + + +

THURSDAY, JULY 19, 2001

+ + + + +

ROCKVILLE, MARYLAND

+ + + + +

The Commission met at the Nuclear Regulatory Commission, One White Flint North, Room 1F14, 11555 Rockville Pike, Rockville, Maryland, at 9:30 a.m., Richard A. Meserve, Chairman, presiding.
PRESENT:
RICHARD A. MESERVE, Chairman
GRETA JOY DICUS, Commissioner
EDWARD McGAFFIGAN, JR., Commissioner
JEFFREY S. MERRIFIELD, Commissioner

P R O C E E D I N G S

9:26 p.m.

CHAIRMAN MESERVE: On behalf of the Commission, I'd like to welcome everyone for today's briefing on the results of the Agency Action Review Meeting for Reactors. As I think everyone knows, we proceeded with the initial implementation of the revised oversight process in April of 2000. This is an extraordinarily important activity because the inspect of our reactors is crucial to the fulfillment of the Agency's mission. And the revised oversight process reflected very significant change in the way in which the Commission was undertaking its business.

The Agency Action Review Meeting is one of the final stages of each year's evaluation of the process and involves the staff's wrap up of its evaluation of how the fleet is performing and that is then to be followed by this Commission meeting at which the results of that activity are to be reported to the Commission. So this is a very important meeting. It's one that is really our initial opportunity for us to survey the process as it is proceeded. We will have a Commission meeting tomorrow in which the evaluation of the initial implementation will be discussed, but in a certain sense the proof is in the pudding, so that this is a meeting, I'm sure that will touch to some extent on issues that we probably also will be discussing tomorrow.

With that, unless one of my colleagues has a comment, why don't we proceed?

Dr. Travers?

DR. TRAVERS: Thank you, Mr. Chairman, good morning to you and the Commission. We are glad to be here to discuss with you and brief you on the results of the first Agency Action Review Meeting. We've got a great new acronym, AARM, or something like that, I guess we'll call it AARM which was just held in Region 2 in Atlanta just a few weeks ago.

As you know, the AARM or AARM is an integral part of the new revised reactor oversight process and it is conducted to achieve a number of objectives that are defined in a new draft NRC management directive. They include, are not limited to, they include reviewing the Agency actions that have been taken for plants with significant performance problems, basically to ensure that the coordinated courses of action that have been developed and which are being implemented for licensees of concern are appropriate, to confirm that the ROP is meeting the NRC's strategic goals, to ensure, as you indicated, Mr. Chairman, that the trends in the industry and licensee performance are recognized and addressed and some others that we'll probably get into the discussion today.

This annual meeting essentially replaces the Senior Management Meeting process conducted under our former reactor oversight program, but it has a number of important differences from that initial process that we'll discuss this morning.

One difference I'd like to highlight though in opening this meeting is that while we conduct this meeting certainly 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, much like we did in the senior management meeting, our expectation going into the AARM meeting is that it's very unlikely that we would identify significant differences in our assessment of performance or for that matter significant differences in the approach that we've already decided to take and in fact, in most cases are implementing. This is fundamentally 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. Things like performance indicators quarterly posted on the web, things like letters that describe where in the action matrix any particular plant is, which are issued, when those conclusions are reached, we think and our ability to discuss internally the actions that are being taken in response to performance problems along the course of the year, we think all add to this notion of a continuum of assessment and activities that make the meeting that we have to reaffirm where we're at, are much more likely to be a reaffirmation than a significant change in approach. So that's what I think as a significant difference between the senior management meeting process that we had for years where, in fact, we made critical decisions about changing classification or in some cases our regulatory actions. So it is a fundamental point I'd like to highlight.

I'd also like to point out that a wide range of topics were reviewed and discussed during the AARM not the least of which were lessons learned from the first year of implementing the reactor oversight process. We have, as you point out, a separate meeting to discuss that tomorrow and we'll provide some detailed discussions of our own assessment of that first year of initial implementation.

Additionally, I should point out that we took the opportunity having the senior managers gathered to talk about a number of wide ranging management topics that are currently before us within the Agency. During today's briefing, however, we will focus mainly on specific plant performance reviews and our new power reactor industry trending program. The Trends Program is described in detail in SECY-010111 which was issued late last month and with that I'll introduce the folks who are joining me here at the table.

Mike Johnson is the Chief of the Reactor Inspection Program. Jon Johnson is Deputy Director of the Office of Nuclear Reactor Regulation. Of course, Bill Kane is my Deputy for Reactor Programs. Jim Dyer and Hub Miller are the Regional Administrators of Region III and I, respectively. So with that, I'd like to begin the meeting by turning it over to Jon Johnson.

MR. JON JOHNSON: Thank you, Bill. Good morning, Chairman, Commissioners. As you're aware and has been indicated the staff recently completed the first year of the initial implementation of the new reactor oversight process.

As an integral part of that process the senior managers met in our Region II Office in late June and completed the first Agency Action Review Meeting. This meeting essentially replaces the Senior Management Meeting of the old process which was last conducted in May of 2000. In addition to elimination of the Senior Management Meeting, the SALP process and Plant Performance Reviews have been replaced by the new Reactor Oversight Process Assessment Program. We believe this is more integrated, objective, risk informed and predictable.

The purpose of today's briefing is to inform the Commission of the results of this Agency Action Review Meeting, but first I'd like to provide some background on the assessment process and some key events that have occurred prior to meeting today.

May I have slide 2, please?

(Slide change.)

MR. JON JOHNSON: The assessment process is described in detail in Inspection Manual Chapter 0305. Each Regional Office conducted end-of-cycle reviews using the most recent performance indicators and inspection findings for the past 12 months. These assessments were conducted to analyze licensee performance from inspection reports and performance indicators, to confirm NRC actions and to allocate resources.

In addition to these end-of-cycle reviews, mid-cycle reviews were completed in November of 2000 and quarterly reviews were conducted at periods of time between then when indicators or inspections crossed thresholds. Supplemental inspections were scheduled to evaluate these performance issues that caused the PIs or inspection findings to be greater than green and therefore had at least low safety significance.

End-of-cycle summary meetings were conducted at conclusion with the Director of NRR for those plants whose performance over the past annual assessment cycle was in a degraded cornerstone or a multiple repetitive degraded cornerstone column.

The regional staff also presented the results for those plants that were considered to have substantial cross cutting issues. Based on the results of these meetings, annual assessment letters were issued to all plants at the end of May. Those letters contained a discussion of the plant performance for a 12-month period, focusing on risk significant performance indicators or inspection findings, substantial cross cutting issues and as well, included a summary of the Agency actions and the licensee actions. They also included detailed inspection plans.

In addition, public meetings have been held or will be shortly over the next few days with each licensee to discuss the results of this assessment. These meetings were conducted on site or in the vicinity of the site so they were accessible to members of the public.

Lastly, the first Agency Action Review Meeting was held from June 26th through 28th in our Region II offices in Atlanta. As described in Manual Chapter 0305 this meeting is an integral part of the evaluative process used by the Agency to ensure operational safety performance. This meeting was chaired by the Executive Director for Operations, Dr. Travers and was attended by the NRC senior managers.

The remainder of this morning's presentation will focus on the conduct and results of that meeting. Could I have slide 3, please?

(Slide change.)

MR. JON JOHNSON: The inaugural June 2001 Agency Action Review Meeting was conducted in accordance with Draft Management Directive 8.14. The staff is also currently developing lessons learned from this process, but the initial feedback has been positive.

This directive describes the meeting has having four distinct purposes. The first three are related to reactor oversight

process. The first is to review Agency actions resulting from the performance reviews for those individual plants that had significant performance problems. The second part is to review the industry trends analysis and the third part is to review the staff's self-assessment of the reactor oversight process.

Plant performance was reviewed at stages leading up to the Agency Action Review Meeting, but those discussions at the meeting were limited to those plants that places them in either the multiple/repetitive degraded cornerstone column or the unacceptable performance column.

The second piece of the reactor oversight process is to discuss industry trends. This is a joint program between NRR and the Office of Research and as the EDO indicated, the description of this process was described in a Commission paper recently issued. The NRC uses selected indicators to monitor trends in industry performance as a measure of success of the Agency's efforts to meet the performance goal of maintaining safety.

Mr. Michael Johnson will discuss the industry trends program and the results after the Regional Administrators have completed their plant performance discussions.

The last piece of the ROP related portion is the staff's self-assessment of the oversight process. These results were also discussed at the Agency Action Review Meeting. We do not plan to go over that in detail as we indicated. We have a meeting set up tomorrow to do that in detail. However, I would like to note that the Agency Managers concluded that the ROP was successful in enabling the Agency to oversee the performance of reactor licensees including bringing forward those plants whose performance warranted increased attention.

In addition to the ROP topics, the AARM provides a forum for senior managers to discuss emerging technical and policy issues. These discussions were held on the second day of the 3-day meeting. A suggestion that came out of the meeting was to consider separating these non-ROP related topics and to consider having a separate designated meeting.

Slide 4, please.

(Slide change.)

MR. JON JOHNSON: Two plants were discussed during this first Agency Action Review Meeting, Indian Point in Region 1 was discussed because it met the criteria of being in the multiple, repetitive degraded cornerstone column. In a few moments, Mr. Hub Miller, the Regional Administrator will discuss plant performance, including the NRC and licensee actions that have been taken to address the performance concerns.

For a different reason, D.C. Cook, Units 1 and 2 and Region III were also discussed due to their unique transition into the ROP process. Mr. Jim Dyer, the Regional Administrator will provide a status briefing shortly.

Finally, I'd like to remind us that as part of the ROP assessment process in Manual Chapter 0305, all other operating reactors were reviewed during the end-of-cycle meetings and actions were taken in accordance with the action matrix. The staff's reviews of those reactors were documented in the assessment letter sent to the licensees the last week of May.

Under the ROP which was implemented industry-wide in April 2000, the level of oversight and actions taken were determined by the action matrix as the problems were identified. We don't wait until the Agency Action Review Meeting to take the necessary actions. The purpose of the AARM was to confirm the staff actions as opposed to deciding what action should have been taken or ranking the plants.

With that, Mr. Hub Miller will now discuss the performance of Indian Point II.

MR. MILLER: Good morning, Mr. Chairman, Commissioners. Over the past year while operating in a manner that preserved public health and safety, Indian Point II has been in the multiple integrated cornerstone column of the reactor oversight action matrix. The degraded cornerstones are associated principally with performance problems revealed by an August 1999 reactor trip with electrical system complications and a February 2000 steam generator tube failure.

The plant was shut down much of the assessment period to replace steam generators. It was restarted in late December of last year and reached full power in late January. A number of equipment problems and personnel errors impacted on operations during this period. This included, for example, a turbine trip with complications that occurred shortly after restart. However, since that time, the plant has operated continuously on line.

Over the assessment period, we conducted a variety of inspection and oversight activities consistent with the action matrix and program guidance. During the extended shutdown and restart phases, numerous inspections were performed to ensure steam generator replacement and associated testing activities were performed adequately to assure that plant and station personnel were ready for plant restart.

In addition to baseline inspections, a number of special inspections were performed to assess emergent issues and events such as design control issues that surface before restart and the turbine trip shortly after start up.

Following the action matrix, an extensive supplemental team inspection was performed to independently assess the breadth, depth and root causes of performance deficiencies at the facility. Using inspection procedure 95003, the 14-member team spent 3 weeks on-site in the January-February time frame evaluating licensee corrective action processes and assessing further whether acceptable margins of safety exist.

The 95003 team concluded that the facility was being operated safely. However, it found a number of problems that are similar to those identified during previous inspections and events. These included issues in the areas of design control, human and equipment performance, problem identification and resolution and emergency preparedness. The team noted that while progress was being made, it was slow and limited in some areas.

Importantly, in one area of improvement relates to better alignment between ConEd's business and performance improvement plans. ConEd's response to the inspection captures well the nature of the performance problems that exist and in broad outline describes actions needed to address them.

In order to verify effectiveness of corrective actions, particularly given past problems in following through on improvement plans, several focused inspections and special oversight activities are planned through the end of the year beyond the baseline. Regulatory performance meetings have been held throughout the last year to monitor licensee performance improvement efforts and we will continue these meetings and be sensitive to the effect any license transfer will have on the business plan and related supporting initiatives.

We expect that by end of the year through these planned inspections and other oversight activities to be able to judge whether the station has substantially addressed identified performance weaknesses.

Significant staff effort and management attention was aimed over the past year at addressing public and external stakeholder interest and concerns. It has been extensive and very intense at times. We conducted numerous public meetings and meetings with the licensee in open forum. There were 13 meetings this past year, 9 of which were held locally in the vicinity of the site.

Consistent with the action matrix, these included regulatory performance meetings that I convened and the annual end of cycle meeting held recently on site which was led personally by Dr. Travers. Very significant too is Chairman Meserve's tour of the site after the 95003 inspection in April. 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 employed an inter-office communications coordination group to help in handling this extremely challenging aspect of our activities and this worked quite well.

We will continue these special communication efforts.

Finally, 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, that they are consistent with the reactor oversight program guidance and that no additional actions are warranted at this time.

MR. JON JOHNSON: Thank you, Hub. Before turning the discussion over to Mr. Jim Dyer, I'd like to remind everyone that D.C. Cook was not under the revised -- the reactor oversight process during this first year due to its extended shutdown.

Jim?

MR. DYER: Thank you, Jon. As Jon just stated during the recent Agency Action Review Meeting the transition of D.C. Cook to units 1 and 2 to the reactor oversight program was discussed. The implementation of the reactor oversight program at D.C. Cook was delayed because in April 2000 both units were shut down with manual chapter 0350 oversight of the restart activities.

Subsequently, Unit 2 started up in June of 2000 and has operated well. Unit 1 started up in December 2000 after steam generators were replaced and shortly after start-up of Unit 1, Unit 1 experienced some problems that caused power transience and the licensee-initiated corrected actions to reduce those challenges.

After the start up of each unit, the reactor oversight program guidance was used for NRC inspection activities under the oversight and direction of the Manual Chapter 0350 Panel and the licensee began accumulating performance indicator data.

In May of 2001, D.C. Cook Units 1 and 2 performance was evaluated with the other Region III plants during the end-of-cycle reviews. Performance indicator data submitted by the licensee in April revealed a white performance indicator for unplanned power changes on Unit 1 and incomplete data for five performance indicators on both units.

Inspection findings were in the licensee response column, however, issues with corrective action backlogs and maintenance rule implementation were of some concern.

A supplemental inspection under Inspection Procedure 95001 has been performed to address the white performance indicator on Unit 1 and augmented inspection hours are being applied to the baseline inspections for the areas covered by the incomplete performance indicators.

Additionally, NRR Region III and the licensee are developing appropriate methods to report the incomplete performance indicator data.

After reviewing the post-start up operational performance of both units, the success of the licensee's improvement programs and the results of the end-of-cycle review, the Manual Chapter 0350 Panel concluded that enhanced oversight was no longer needed for D.C. Cook and recommended that the oversight activities be terminated. After consultation with the Deputy Executive Director for Reactor Programs, and the Director of Office of Nuclear Reactor Regulation, I closed out the Manual Chapter 0350 oversight of D.C. Cook on June 7th, 2001.

At the Agency Action Review Meeting, we confirmed that the transition activities for D.C. Cook to the reactor oversight program were appropriate.

This concludes my presentation.

MR. JON JOHNSON: Thank you, Jim. That concludes our discussion of individual plant performance. I'd now like to turn the briefing over to Michael Johnson, Branch Chief from the Inspection Program Branch for discussion on industry-wide trends and results to date.

MR. JOHNSON: Thank you, John. Good morning, Chairman, Commissioners. May I have the next slide, please?

(Slide change.)

MR. MICHAEL JOHNSON: As mentioned earlier and in addition to providing a discussion of the plan's multiple repetitive degraded

cornerstone column of the action matrix and the unacceptable column of the action matrix, the Agency Action Review Meeting also includes a review of industry trends and any actions planned or taken based on those trends.

The trending process that we developed and the results to date are documented, as was mentioned earlier in SECY 01-01-0111 and were reviewed at the Agency Action Review Meeting.

In future briefings on the Agency Action Review Meetings we'll focus primarily on reviewing the results from the previous year. However, for this briefing, I think it's appropriate for us also to describer the process including the background, how we plan to communicate the results and plan future enhancements to the process.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: Before I describe the process, let me just say that the staff recognizes that monitoring industry trends can provide valuable insights. The Agency has historically monitored trends and the results have been reported annually to Congress in the Performance and Accountability Report and in the Budget Estimate and Performance Plan Report to OMB.

In reaching previous determinations regarding industry trends, the staff has indicated from the ex-office of AEOD and the ASP Programs, those trend graphs have been published under various NUREGs including the Information Digest and the ASP results have been provided in various Commission papers and also in various NUREGs.

Although we've monitored and reported on those trends and we've taken actions based on the insights from those trends, the use of industry trends until now has not been part of an integrated and structured process.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: And so in conjunction with revising the reactor oversight process and getting to first year of initial implementation, we developed a more systematic means for monitoring industry performance in order to enable us to confirm their reactor safety performance is being maintained. As the slide points out, the industry trends program is not intended to supplant the ROP or other processes such as generic issues process that enable the Agency to oversee safety performance of plants and to take actions to address plant-specific or generic concerns, rather, the trending process is intended to complement those various processes.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: Briefly stated, the objectives of the program are to monitor selected indicators that provide insights regarding

industry-wide safety performance, to assess the results, to provide for implementation of appropriate action based on the trends that we identify and to communicate the results along with actions to our stakeholders.

Next slide.

(Slide change.)

MR. MICHAEL JOHNSON: In developing the program, we looked first at existing sources of information to provide an initial set of indicators with the expectation that the trends program will continue to evolve. We started with the XAEOD performance indicators and the ASP results. We will add the ROP PIs. We'll add other indicators as I'll discuss in a little bit. But as we add those indicators, they'll be qualified for use in the program.

Secondly, we look for indicators that are based on quantitative industry-wide data and that relate to safety performance. I should point out that the indicators chosen are not intended to be all inclusive. There are many, many things that can be trended, in fact, that are being trended by us and by other folks. The indicators that we've chosen for the program, we believe, however, are indicative or reflective, I should say, of current performance trends in the industry.

We also wanted the program to be focused on the identification of long-term trends to minimize the impact of short-term variations due to things such as the operating cycle and seasonable variations and random fluctuations.

And so although we'll keep track of those short-term trends and we'll look to see if they tell us anything, we'll use long-term trend data to make a determination regarding trends.

Finally, we believe that determination of whether there is a statistically significant adverse trend should be objective and transparent and once we've determined that we have a statistically significant adverse trend we ought to evaluate and take actions as appropriate to address those trends and you'll see that that is reflected in the process.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: I'm going to briefly describe the process. There are three primary activities associated with the process. They involve identifying the trend, evaluating its significance and determining and implementing Agency response to those trends. First, to determine the trend, the program uses common statistical techniques to fit a trend line to each of the indicators. And we recalculate that trend line each year. And an improving or flat trend line indicators, obviously, no adverse trend. A degrading trend line would be considered a statistically significant adverse trend. We would evaluate the causes of that as I'll talk about in a minute, but also we would report that statistically significant adverse trend to Congress and to our other stakeholders.

We built in an added feature to the process to enable us to react to a single point that potentially represents performance that is an abrupt change from previous performance. Based on historical performance, we computed the limits, the upper limits that should contain future values within a 95 percent confidence level. We talk about a 95 percent prediction limit associated with those graphs in the Commission paper and

so in addition to evaluating long-term trends, we will look for a single point that falls outside of that prediction limit and we will investigate that single point as it occurs.

Furthermore, if obvious trends emerge during the year, we would not wait until the end of the year, but we'll take action on a real time basis to understand what is causing those trends.

Once we determine that we have a statistically significant adverse trend, we will evaluate it. We'll conduct an initial analysis to determine if the duty is being unduly influenced by a small number of outliers. If it is being unduly influenced by a small number of outliers, our determination would be that that is not indicative of an industry-wide trend and we would focus our actions on those specific outliers.

If the trend is not being unduly influenced by a small number of outliers, that is, if the trend truly is a broad, widespread industry trend, we would conduct a broader review of data such as -- data from the LERs, date from inspection results to determine the extent of the issue and any potential root causes.

Finally, the staff will determine the appropriate action in response to the industry trends using the Agency's processes for dealing with generic issue. That would include assigning the issue to an appropriate branch, to the appropriate branch. It would involve engaging senior managers. It would involve initiating interaction with the industry, all intended to help us determine what the appropriate actions are to address that particular trend.

Trends could result in us requesting industry groups or owners' groups to provide utility information. It could result in industry initiatives. It may also result in generic correspondence or general safety inspections to address the trend.

In addition, depending on the issue the trend may also be addressed as part of the generic issue process by the Office of Research.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: With respect to communication the results of the trending program, we plan to publish the trend graphs on the external web as they are developed each quarter. We will report the results annually in support of the Agency Action Review Meeting and brief you on those trends in our planned actions in these meetings as they occur each year.

Finally, we'll continue to provide the results in the NRC performance and accountability report and in the budget estimate and performance plan.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: We're happy to report that based on the trend process that we have, we have not found, that is, there are no statistically adverse trends in industry performance identified based on that process, either based on the AEOD indicators or the ASP indicators. In fact, using the ASP program, there were no significant precursors and there were declining trends in the frequency and the significance of precursors from 1993 to 1999 and although we have insufficient data using just the ROP indicators and the insights from the ROP, we did not in looking at the ROP identify issues that would indicate to us that we have a statistically significant adverse trend.

Next slide, please.

(Slide change.)

MR. MICHAEL JOHNSON: I indicated that we anticipate that the trending program will continue to evolve. We already know of several sources of data that when updated, will enhance the trends program. For example, Research is updating the initiating events data. That is the data that was in the old NUREG 5750 and they're updating data for reliability studies and we believe those will provide valuable additions to our trending program.

In addition, the staff may find other indicators and if we do, we'll add them to the trending program in a structured and considered way.

Finally, we look for ways to make the process more risk-informed, more objective and predictable. Just as the ROP has clear thresholds and pre-established ranges of action, we will work with Research's Operating Experience and Risk Analysis Branch to develop risk-informed thresholds for industry trends and more clearly defined actions for us to take based on thresholds being crossed with respect to those industry trends.

Thank you.

DR. TRAVERS: Mr. Chairman, that concludes our presentation. One of the things that will be pointed out somewhat in this briefing and we'll discuss again tomorrow with you is there is continued assessment in the ROP is going to include an assessment of this meeting and its make up and how it ought to proceed and so having conducted the first one, we're already beginning some thought and discussion on how it ought to be configured the next time.

As a function of timing I think the next one actually occurs in March of next year, so it will be in line with the briefing of the purpose of the report.

That's all we have. Thank you.

CHAIRMAN MESERVE: I'd like to thank you for a very helpful discussion.

Commissioner McGaffigan, would you like to proceed with any questions?

COMMISSIONER McGAFFIGAN: Let me just start where we finished on these statistically significant adverse trends. In the paper, SECY-01-0111, I'm a little concerned and I took just enough statistics and advanced statistics to be dangerous and what I needed to do to be a physicist, probably the Chairman had the same experience and you fitted a bunch of exponential curves here, indicating exponential curves and if the industry and that reflects this tremendous improvement in safety performance over the last decade,but the way you've set the industry up, if they flatten out, rather than continue to decay exponentially, they

will have a statistically significant adverse trend even under your definition, even though all they will have done is flatten out at truly excellent level, but they won't continue to proceed to zero.

Is that a flaw in the statistics or would you fit a curve? If I faced this, curves can be exponential a point and then it doesn't have to be a single function. You can have a flat line function. You could reevaluate the curve, but there is a little bit, I look at these curves in the appendix here and you know everything has been nicely decaying exponentially to zero, but if they flatten out -- if, for example, in significant events per plant year they bop up to where they were in 1997, you guys would be raising red flags and saying oh my gosh they are way outside their 95 percent confidence band, even though they would be doing historically pretty darn well. They just wouldn't have continued to decay exponentially, so as I say, is there a definitional issue there?

MR. MICHAEL JOHNSON: Let me just try to answer that and then I'll get help from folks who perhaps have more of a statistical background than I do.

We actually talked about this issue at the Agency Action Review Meeting a little bit. And it is important, as you say, to fit the right curve, the function to the data that we're trying to analyze. We recognize that there is, as we go further, an inherent flaw with respect to the approach that we're taking and that's why in that last line when I talked about future development, we think really the salvation for this process in the long run is to identify risk-informed thresholds so that we're not talking about focusing in on trends and what the curve and what the data is doing, but we're talking about thresholds that we would look to be crossed for the Agency to take action. That's the long-term solution.

We are, in fact, looking at the data. We've been, in fact, carefully fitting the curves to make sure that as the functions shift over, if it's no longer exponential, if it's a linear function that we do that in a way that --

COMMISSIONER McGAFFIGAN: Just watch that because it looks like you've been trending exponential to K curves so far.

The other issue in this paper, I just want to bring up, you talked about the ASP program results through 1999. In 2000, it looks like we had four events from figure 2 on page 20; four events, at least preliminarily, between 1 and 9.9 x E-4 range which is high compared to previous years and if I'm reading the table right, so do you have any comment on whether we in 2000, we were doing pretty well in the 1993 to 1999 time period, but is there any significance to this one blip up where we seem to have four events?

MR. MICHAEL JOHNSON: Unfortunately, Commissioner, I'm probably not the best person to answer that question. The way we developed this input to the industry trends process is we take this directly from the analysis that the Office of Research does and those are the results that we are presenting. And in fact, in a report just issued by the Office of Research where they considered that particular year, their analysis of that data was that there weren't any statistical --

COMMISSIONER McGAFFIGAN: Somebody has popped up to the microphone, so perhaps --

DR. BARANOWKSI: Dr. Baranowski, Chief of the Operating Experience and Risk Analysis Branch and we do the accident sequence precursor program and we've looked at the preliminary data and although it's up a little bit and we looked at the statistical significance and it doesn't come above the 95 percent line, nor does it change the trend line at this point, but we haven't completed the data either. And the issue that you raised earlier about the exponential fit is correctly described by Commissioner McGaffigan. We are looking at developing pure thresholds as opposed to fitting exponential curves out into the future when things do flatten out into the tails.

COMMISSIONER McGAFFIGAN: Okay. Let me switch to a different line of questioning and Luis may need to head to the microphone. I'm a little concerned about the Farley Unit 2 situation. We sent a letter in June and to the licensee saying that we made a preliminary determination of a yellow finding in the OSRE conducted has September. And that is still preliminary, but if it turns out to be sustained through the process that you'll go through in the next month, they will have had for several quarters during this past assessment period multiple degraded cornerstones and be a Column 4 plant.

I'm a little concerned about the speed with which we -- on what is a pretty important SDP finding. I know that's a generic issue we'll talk about tomorrow, the lack of speed in getting there. And just a delay oftentimes is justice denied, but as I understand the process, next year Farley is firmly in Column 1 at the moment. In the latest quarter, if I click on the webpage, Farley is a Column 1 plant. That will not change perhaps this year. They have another OSRE in September. If they do well on that, they may well remain a Column 1 plant all the way through the three quarters of this assessment period and next year never be discussed. And it's a very peculiar situation we're in where they could have for several quarters last -- I guess the first, second and third quarters of this past assessment period, we're doing -- the second, third and fourth quarters of this past assessment period, they may have belonged and either multiple degraded or single degraded cornerstone situation, so what do we -- what do we do with Farley? I know you had a meeting with them.

MR. REYES: Luis Reyes, Regional Administrator for the NRC Center in Atlanta.

Commissioner, let me try to answer it first from a programmatic point of view and then go back to a specific example.

The Revised Oversight Program requires us to analyze and assign a risk value to any finding that the staff may have on any subject matter, so the program, as presently structured, if you have a finding and you assign a risk value to it that gets to the white, yellow or red, then requires to go back to when it existed, so you could have a situation on a plant, any plant and you have a finding today. It may have been risk

significance and it goes back in history several years. It's the time it existed. If you're in that period of time the plant had other issues which would put that plant in a multiple or a degraded cornerstone, then it will get into a situation, it could get into a situation you're talking about which it puts it in the fourth column.

We're taking a hard look at the ROP on how to address that because it may be, it may not be the best way to do, four or five years later, go and do all the actions that the matrix require when all the issues, all the previous issues have been resolved to the satisfaction, to the staff and you only have one remaining issue.

COMMISSIONER McGAFFIGAN: In the case of Farley, they had some white indicators and a mitigating systems column. They got them into that degraded cornerstone. Those have turned green.

MR. REYES: Correct.

COMMISSIONER McGAFFIGAN: So that's largely behind you. They have this OSRE from last September where they have a preliminary yellow, may be final yellow and there's another OSRE plan for September, but under the Action Matrix, some time this fall, long after they were in the multiple degraded area, we will do a 95003 inspection unless we deviate from the Action Matrix and that may not make a lot of sense or it may make sense, depending on what your judgment is to what the situation at Farley really is.

MR. REYES: Yes. The key thing is that when -- first of all, immediately when a situation comes up in this case, the safeguards issue, we look into making sure they're taken care and the licensee has been in the process of doing that. The resolution in this case is in OSRE because it happens to be the kind of finding and we scheduled that way ahead of time. That's in process.

Now the question is when we finish assigning the risk to that finding in the next few weeks, if indeed it gets you into the fourth column, then we have a decision to make. If we don't follow the matrix verbatim, we will have to go to the program office and the EDO and recommend a deviation for the particular situation you have and we haven't got to that point, but those are the options under the program and in the next few weeks we'll finalize a meeting with the licensee. We'll finalize the risk assignment to the finding and we'll come to that cross in the road where we either do what's required by the Action Matrix or we'll have to come to the EDO and explain why we think something else makes sense.

COMMISSIONER McGAFFIGAN: So the EDO seems -- well?

DR. TRAVERS: You are exactly right. There's a temporal disconnection between the actual classification and the actions that may be either underway already or completed already, including our actions to oversee from our perspective what we think needs to be done.

So the process has a little issue within it that we're looking at, but it also has, we think, the flexibility for us to address it in a way that we can come to you and say it makes sense.

COMMISSIONER McGAFFIGAN: Do we need the timeliness goal for SDP determinations? If I'm in NRR and Mr. Johnson is the Deputy Director, I've got timeliness goals for licensing actions. I've got timeliness goals for enforcement actions in which I have to concur. Timeliness goals here, timeliness goals there. And rulemakings, the Commission is demanding rulemaking X or rulemaking Y, get placed before it in a finite period of time. And I used to work for Senator Bingaman. The thing he wasn't monitoring is probably this thing I didn't do, so if -- we honestly knew that this was a likely yellow finding, I believe last October, under the revised SDP for the system protection area, but it took us from October of last year when I was told this orally to June or July before -- June, I guess, before we hit them with a letter and I understand that that group of people who worked on security have been writing security papers to us, preparing rule makings, doing all sorts of things, so I'm not -- I think they had more to say grace over than probably any other part of this Agency. They also have KI and other interesting issues to work on.

So but I wonder whether we shouldn't have something that drives, especially an SDP that could move somebody in the Action Matrix two columns to the right or something, whether we shouldn't have a timeliness goal in that area.

MR. JON JOHNSON: We agree. We can do a lot better in timeliness and we have a lot of actions that were taken to improve the timeliness, including training inspectors and how to implement the SDP evaluation process, but we agree, we can do much better.

We also have nonsecurity issues. We have some difficult fire protection issues that we're struggling with that are getting old and we need to get on those and resolve them from a risk standpoint and they're very difficult. We agree we need some timeliness goals. We do track timeliness from enforcement. If we're taking enforcement actions, we have some specific timeliness goals for those. We are considering a tracking system, but we agree. We need to track the timeliness and what Luis did say is in our program this could happen even with an item that is not untimely. We could identify an old design issue of some kind that was in existence in the previous year or years before and we have to go back and look and say what would we have done differently and what Luis described is in our program and the decision would have to be made. Do we want to do a large team inspection or not and if not, and we didn't want to implement the Action Matrix. We would have to go back to the EDO.

COMMISSIONER McGAFFIGAN: That's not unique to this program, of course. That's always been a --

MR. MICHAEL JOHNSON: And if I could just add --

MR. KANE: I don't it inhibits us from doing the right thing, but I agree that we do need to establish these timeliness goals and certainly as we said, the program is one we're just into. We're learning some of the nuances about it and that's obviously one of them.

MR. MICHAEL JOHNSON: I was just going to add, again, not to say for the third time what's already been said, we have timeliness goals and we need to do a better job at meeting those and we're going to talk more tomorrow about the complications with respect to the SDP and

some of the challenges ahead for us to meet those goals. Notwithstanding that, I did want to leave you with the prospective that even if we had an SDP, to get to a very timely result, we're always going to have this temporal disconnect, if you will, between -- that's going to cause us to go back and relook at the actions that we took, for example, with respect to performance indicators, if we get a resubmitted performance indicator result as does happen on occasion. We have to go back and look at what actions we took and readjust those. You're always going to be looking back at the previous quarter with what you thought you know and the findings that you had to make sure you ended up in the right place.

We think it's important that the program not have us react to preliminary findings. We really do want to make sure that we've reached the final determination with respect to our significance before we take action, but we recognize that we need to do that in a timely way so that we're not looking at these extended periods where we've had this issue linger.

COMMISSIONER McGAFFIGAN: Thank you, Mr. Chairman.

DR. TRAVERS: If I could just add 30 seconds. I just want to add that we don't, in this process, we think it's flexible enough it doesn't constrain us, even though everything that everyone here has said is operative and that is we ought to have timeliness goals and we're certainly learning through doing, but it's also noteworthy, I think, to suggest that where we were at Farley is in a position to take the actions that we thought were deemed appropriate and we didn't feel constrained within the process that would in the action matrix cause us to look at some additional special inspections.

CHAIRMAN MESERVE: Commissioner Merrifield.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman. In the July 17th memo on page 1, you reiterated that plants, only the plants with significant performance problems discussed in the AARM, and you define those as whose performance has resulted from them being placed in either the multiple/repetitive degraded cornerstone or in the unacceptable performance columns, Columns 4 and 5.

Now Commissioner McGaffigan has gone into this in some detail, but I'm wondering are there any other, having gone through this process in the AARM, do we have sufficient focus on Column 3, those in which we have a degraded cornerstone column and obviously that wasn't discussed in the AARM. Do you think it should have been and are you comfortable that it wasn't? Are we looking in the right places in that grouping?

DR. TRAVERS: I think we're still rolling up experience, but I think our view is that we had the right focus for the AARM. When we talk about discussion plants we sort of focused on the ones in that column. We don't necessarily feel constrained to discuss amongst ourselves other issues as we've indicated. It turns out that at this meeting we didn't get into a discussion of Column 3 plants, but in the main that's because we have had discussions previous at end-of-cycle meetings and roll-ups between the Regional Administrators and the Office of New Director Regulation and Research. And so we were comfortable going into this meeting that where we were was the appropriate focus.

COMMISSIONER MERRIFIELD: So there were other opportunities, it's not as if it's a one shot deal. There are other opportunities to discuss not only Column 3, but also obviously other plants, in Column 1 and Column 2 --

DR. TRAVERS: You're exactly right. I call them opportunities and you're correct to use that word. But if you look at the process, in fact, there's a required point along the course of any given year where plants that have performance issues are discussed among senior management. We think that's a good --

MR. MILLER: If you look at Millstone Unit 2, for example, as a degraded cornerstone, we followed the process, did a 95002 inspection which is a level above the baseline and there was the end-of-cycle discussions within the region and then at the end of that there's a discussion with Sam and Jon and others at NRR of selected plants like that and so it has worked quite well in terms of focusing on plants that have something that's beyond the base line and so I think we can say that we have had appropriate focus and discussion.

COMMISSIONER MERRIFIELD: I think it's important to put that in context only because one might take from the discussions that the AARM is really, on the outside that's the only time in a year we're going to be taking a look at where these plants stand and in fact, what you're doing in the AARM is you're looking, obviously, at those which would have the greatest degree of significance, but there are other period -- there is other periodicity through the year in which we're reviewing all the plants in our satisfaction or dissatisfaction of their performance.

MR. DYER: Commissioner, I think also and to sort of address Commissioner McGaffigan's order of concern too, at the end of cycle roll-up meeting where the Regional Administrator discusses with Sam and certainly in the case of Region 3, we talked about the degraded cornerstone plants and was there any work in progress or any indication that by the time we got to the Agency Action Review Meeting or downstream, that we may be in the Column 4, Column 5 areas. Do we have any work in progress? So we briefed him on those plants as well as the other.

COMMISSIONER MERRIFIELD: But just for information sake, those roll-up meetings, in fact, discuss all of the plants in your region, when you meet with Sam and Jon. It's an opportunity.

MR. DYER: It's an opportunity, yes sir.

COMMISSIONER MERRIFIELD: In the memo, in the narrative relative to Indian Point 2, it states that the senior managers discussed the means to ensure that established licensee performance improvement plants would be continued following a potential, underline, potential operating license transfer to Entergy.

Could you share a little bit more about the outcome of that discussion and in fact, are comfortable with the direction in which things are going right now?

DR. TRAVERS: We did discuss that and I'll let Hub address your question, Commissioner.

MR. MILLER: This is a question that has come up a lot at public meetings and other places and we've been pretty consistent in our answer and that is that our process, it does us focus on the performance issues independent of who the owner is. Having said that, it is significant that a number of the issues that ConEd has identified and a number of the initiatives in improvement programs are going to span out over several years and the area of design, for example, and so it does become a concern about what the future owner would do. And so for that reason we have identified this as something we would meet with Entergy on. If there's a transfer following the transfer, we have already had Entergy at regulatory performance meetings, one in April, for example, on design. Remarked that they are committed to addressing those issues. We do not expect Entergy to have the same processes exactly that ConEd has, but in terms of fundamentally are the programs designed to address the broad issues. We will continue through the periodic management meetings that I talked about, through our inspections, to determine whether or not there is a significant change and so we will -- I think the bottom line is we -- I think the program is structured such that we will through our inspections and oversight activities have a good handle on the direction.

COMMISSIONER MERRIFIELD: I know and appreciate that Tom and that you and I have discussed in a variety of circumstances the situation in Indian Point 2. And although I have not visited there, I was there in the last Fiscal Year. What is the -- let me ask the question here. Do you think the Commission as a whole is providing you and your staff with the resources necessary to do the type of oversight you think is appropriate at Indian Point 2?

MR. MILLER: Yes. It's been tight this past year. We've gotten help from the other regions. I think we've learned a lot. We fed that back to Jon, Mike Johnson and others on what to expect if there is a multiple degraded cornerstone. A plant like Indian Point -- Indian Point was unique also in that we had the steam generator replacement project placed on top of it and we have this intense public interest that existed which had a very large impact on us from a management point of view. And so the short answer is yes. We got the help we needed. We had to defer one inspection at one other plant. That was the only casualty of it. So I would say we were able to do it and we're going to learn from this and factor it into future budgeting and the like.

COMMISSIONER MERRIFIELD: In the June 22nd paper to the Commission on development of an industry trends program, you indicate on page 6 that the staff is mindful that trends, individual indicators may be considered in the larger context of their overall risk significance. And then it goes on to provide on page 7 a hypothetical example in which there may be an increase in automatic scrams, but an overall risk may decline because of an improved performance in other areas such as safety system availability. I've got sort of two reactions to that and I'm interested in any comments you may have. First one is when we make that kind of comparison, we say well, an increase in scrams may be okay because there's other mitigating factors that may be of lesser risk significance and that gets us into that sort of trade off between where we are risk-informed and we are risk-based in our thinking. We don't worry about scrams because we did a risk comparison and it's not so concerning. That's issue number one.

Issue number two is I think for me where we see a trend, I think we've got an obligation because of our public confidence concerns to engage with the industry to communicate with our stakeholders and then make it transparent that where we see a trend, we're going to share it with people in that regard.

I didn't know if you had any reaction to those two particular thoughts.

MR. MICHAEL JOHNSON: Those are good points, Commissioner. I really don't. In fact, the way that we built the process today is to say we're going to call it a statistically significant adverse trend if we see that increase in scrams, for example. It's just that in the evaluation of what we're going to do, what actions that we may take, we'll look in the broader context to be risk-informed, to make our decision about is this something that we -- at what level should we engage and how shall we engage to correct that particular problem.

This is another example of why we think it's important for us to develop risk-informed thresholds to the extent we're able to agree to the individual indicators to get out of that uncomfortable situation that you point out.

COMMISSIONER MERRIFIELD: Okay, thank you. Last question in this regard, there were a variety of other issues that were discussed at the Senior Managers meeting, one of which on the list was the SES candidate report on communication. I know this is an issue that the EDO had tasked our SES candidates to conduct. I'm wondering if you could comment at all on the report. I know you're going to be making some more formalized comments on that, but perhaps share the flavor of the discussions about that particular, those particular recommendations.

DR. TRAVERS: I'd be glad to, thanks for the question. In fact, the whole team recognizes going forward the importance, continuing importance of internal communications. At the outset, I'd have to say that the effort that the candidates put in is probably the hallmark, from my standpoint, of maybe sets the standard for future SES candidate classes because of the scope and depth of what they did and the insights that in my view transcend the specific recommendations that you can glean from this report. Just a few days ago I participated with Mike Johnson and the rest of his class in a roll-out of this report and its recommendations to the entire NRC staff. It was broadcast to all the regions, to all the sites, Technical Training Center, and so forth. And what I told the group assembled about our consideration of the recommendations and report going forward is that fundamentally we certainly accept the spirit in which all of these recommendations and the insights were gathered. The management team, in fact, is in the process of seeing what more we can do. We think we're doing more than we have been in the past in the area of internal communications and some of the discussion we had at AARM was a recap of some of what we're doing today

and perhaps have instituted relatively recently, but things we're doing and some ideas that we have for going forward.

I explained my own view to the staff that I think we're doing a lot, but that we can do more. And frankly, we're reviewing the report to see both in the near term and perhaps in the longer term what we can do to enhance our internal communications.

Specific to some of the recommendations, whether or not you develop a champion for the Agency or whether you distribute that function among the management team, we'll have to see because there are implications for budget and resources and so forth that are attendant to some of the recommendations in there, but generally, the report and the insights you can glean from the report, I think, put us in a much better place, puts the management team in a much better place for understanding and reacting appropriately to what is a legitimate continuing concern of our staff regarding internal communications.

I did emphasize in my discourse with the staff something the candidates emphasize and that is the shared responsibility that we all have, staff and the management team, for internal communications, to make it work in a way that optimizes the situation internally.

So we are looking, as I said, in the short-term and I expect to come out with something that would propose some near term actions that we can do. I personally am looking to be doing some things that I'm not doing today and so I expect to announce some of those. But in the longer term, we'll work in to some further discussions with the senior management team and certainly the Commission as to what we ought to do.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

CHAIRMAN MESERVE: Thank you, Bob. I have a few questions for Hub Miller about Indian Point 2. Both in your annual assessment letter and then in your briefing this morning, you indicated that from your perspective that progress had been slow. I think we all have to live with the circumstances that have existed in the past and obviously we hope that they had not occurred and we would have to learn from them, but perhaps for me the most troubling aspect of what you said was that you're not seeing the improvement occurring at the rate at which you would hope to see it.

I wonder if you'd share with us your views on whether, in fact, things are getting better, whether the rate of improvement is getting better or not, what the causes of the difficulty are.

MR. MILLER: We did not say that it was not at the level that we would want to see it. I say that because in some respects it's almost predictable that given the nature of the issues that existed at the site, and given what was on the plate of the licensee last year regarding steam generator replacement which was something that was undertaken on very, very short notice, that there would be slow progress.

Now it depends upon what time frame you're looking at. If I look back over the last several years, I would say it isn't and has not been what it should have been. If I look back over the last year, I would say it's slow. That's just telling it the way it is. Somewhat understandable, given the challenges that have been placed on the plant.

I think one of the significant things and I highlighted this in my remarks, was the alignment with the business plan and what that means is is that not only are these plans on paper, but there's funding associated with it and I think that gets to one of the past significant problems at the station. It led to what I think was the failure to follow through in a number of the performance efforts, because if you look at the issues that exist, that were documented in the 9503 report, look at the issues as they were described here two years ago, they're very, very similar. I think that commitment to funding these things, putting them on a solid foundation, you can track it to the budget, has made a big impact.

So we'll see. One of the areas where the progress was very limited was in the area of design. And dealing with design related issues, the company laid out in a meeting, it was the first meeting that we asked for following the 9503 inspection. The company laid out a quite comprehensive program of reconstituting a number of calculations, developing road maps for the designers to use to calculations. So I hope that answers your question. I mean I think it's been slow, but much of at least the last year or so is somewhat understandable, given what they've been addressing.

CHAIRMAN MESERVE: Is it your expectation that with the alignment of the business plan with need for action that that removes the barrier that has caused the difficulty in having corrective actions to proceed efficiently?

MR. MILLER: It removed one of the major barriers. One of the other things that was talked about in the 9503 inspection was the importance of the plans that underlie the broad things talked about in the business plan.

The company has set priorities. I mean they have identified a number of things that we really simply must do first and put less emphasis on other things that need to be done, but not immediately. The implementing plans are very important. In our end-of-cycle meeting we talked about or end-of-cycle letter we focused on that, in fact, in the 9503 inspection report as well, as an important area for us to be focused on in our inspections and in these meetings that I talked about.

I'll give you an example. Again, in the area of design control, I mentioned targeted inspections. We've got two inspections that we are conducting, an initial inspection that is looking at the scoping in detail of what they plan in that area and that's something that is, I believe, happening some time within the month and one later in the year where we will have looked at actual implementation in detail of the efforts in that area.

CHAIRMAN MESERVE: Good. Thank you. This is a question for Mr. Dyer. I know that you're performing supplemental inspections in certain areas where you're unable to do the performance indicators yet and I'm curious as to when you expect that you will be able to move to the full performance indicator suite for D.C. Cook.

MR. DYER: Chairman, there was five performance indicators which we were doing this for. One of the performance indicators at the next quarter will be for the emergency plan drilling and that will be fully reported. So there's four in the area of mitigating systems and they actually require 12 quarters of historical data. So if we fully time out, it will be quite a while. One of the things I alluded to in my presentation was that we're looking, working with the licensee to figure out how do we recapture that time. Conceivably we could go all the way back when they were operating prior to 1997 or is it more appropriate to capture and reduce the -- we have a minimal amount of time for the 12 quarters to review it, so that's currently in progress right now. I'm -- we should have an answer as to where it's going to happen by the next quarter's data reports.

CHAIRMAN MESERVE: Are you learning things from our augmented inspections because you don't have performance indicators to rely on that you would not have learned from the performance indicator?

MR. DYER: No. I believe, well, we are having findings. They've all been green findings in that we refer to the licensee. The insights -- it's a level of assurance. We're doing increased walk downs of systems. We don't have reliability information on the safety systems, so the inspection program is complementing the performance indicators, the missing performance indicators data. We're just looking at ensuring on a greater frequency that the systems are operating the way they should be.

CHAIRMAN MESERVE: This is a question for Mike Johnson. I think you ended with a slide that would suggest that the performance trend data is on the web, but I think you indicated when you talk that you plan to put it on the web.

MR. MICHAEL JOHNSON: That's correct.

CHAIRMAN MESERVE: When do you expect to be able to do that? I think this is the kind of information in which there will be great public interest and this ought to be sped along and I'm curious as to where we are in that.

MR. MICHAEL JOHNSON: We are near ready. We anticipate putting them on the external web in August. We wanted to wait until the Commission paper had gotten up and the fact that we had this briefing on the process to put that up. So in August, we will be putting a quarterly trend, the industry trend information on the external web.

CHAIRMAN MESERVE: Let me just make a comment that -- take whatever value it has. I've been struck on visiting some plants to see that at least some of the licensees have huge number of things that they're trending and evaluating that far exceed anything that we're doing. And some of it is for their internal purposes and we ought to be encouraged. But it does seem to me that there may be some value in probing into the industry and things that for their reasons, they're trending that might be of value to us as well and that's another source of information on trend information that may have thought of some things that we haven't thought of and there may be some, there may be a source of data there or a source of ideas that we maybe should be universally trending that we might learn from.

MR. MICHAEL JOHNSON: Thank you. We are working at and continue to work very closely with the industry as a part of the NRC OP working, industry working group. And we have briefed them on the process and gotten their insights. We've looked at the INPO WANO indicators, for example, in picking the suite of indicators that we've chosen. We did the same thing for the ROP indicators. But your point is well taken and we'll continue to work on that.

CHAIRMAN MESERVE: Thank you. Commissioner Dicus?

COMMISSIONER DICUS: Thank you. Some of the questions seems like they'd be more appropriate to ask tomorrow when we get into talking about the ROP, but these two are so linked, let me get into a couple of things.

As I understand what we're doing with industry trends, we're fundamentally dealing with if I can use the term averaging. We're looking at -- our plants, our fleet of plants and we're looking at things that we're considering important with it, as I understand the trending.

But have we considered whether and do we consider and you can educate me on this point, that our trending should be design specific or should we separate BWRs from PWRs and are we doing that? Are our trends more fleet-wide in averaging?

MR. JON JOHNSON: Well, I think your point is a good one. One of the things that we trend industry, we want to trend industry performance for is to not just look at an individual plant's performance, but also look at our programs. As an example, the grid stability or losses of off-site power, if an individual plant is still in a low risk situation that would be fine, but if we stand back and look at a large number of these, do we need to do something different? Do we need to make some rule making or something like that?

On a plant-specific basis, one area where we have taken into account some plant-specific information is on the radiation exposure data, recognizing that some of the boiling water reactors have a larger challenge, let's say, and so in the assessment of their performance we've taken that into account. But we continue to look at these indicators and we're not done and we don't feel like we have the perfect set yet, so we need to continue to look at that.

COMMISSIONER DICUS: So it's a work in progress.

MR. JON JOHNSON: Yes.

COMMISSIONER DICUS: Fair enough. Just reassure me on a point. When we talk about statistically significant adverse trend, by definition we're saying something that does have regulatory concern or significance. Do we get into a trend that we may have identified, we may be calling it this, but fundamentally doesn't have a safety or significant regulatory impact?

MR. JON JOHNSON: I might be able to answer some of that detail, but we don't want to trend things unless they really relate to safety in the first place. There are, like the Chairman indicated, the utilities trend many things, economics and so forth and we want to focus on things that are safety significant.

COMMISSIONER DICUS: That's the reassurance that I wanted from it.

On trending, are we basing it more on indicative findings, rather than predictive findings? Do we have any trending that would be predictive?

MR. JON JOHNSON: We haven't been able to come up with very good predictive indicators. We've been looking at indicators for a number of years and we're very good at looking at the past, I guess, and coming up with some and we continue to look for those, but as the ones we have now are still looking at the past.

I know that we have some requests into the Office of Research to help us look at the possibility of more risk-based indicators and they're still evaluating that. We want to get some indicators for some areas. We don't have them such as shutdown operations, containment, but we would like to get some predictive indicators, but I don't think we've really been really successful in doing that yet.

COMMISSIONER DICUS: But you are looking at it?

MR. MICHAEL JOHNSON: And if I can add to that, just to remind us, one of the things that when we start the ROP and we're trying to figure out what indicators we would use, we came across a couple of indicators, one was safety system functional failures in today's ROP PIs and the transience performance indicators and when we did the benchmarking back, compared them to the plants that we actually put on the watch list and the industry agreed to those as plants that had performance issues, those two indicators tended to have a good correlation with those. And so, Jon is right, we don't have, we don't really have a suite of indicators that we would point to as being predictive, but those seem to have a strong correlation to if you had a plant that was having problems with respect to those indicators, you had a plant that you needed to look at and that's why we captured those in the ROP PIs and they exist.

COMMISSIONER DICUS: One final question. Obviously, our trending is for our industry and the people that we have the responsibility to regulate. Have you looked at international trending and international programs and made any comparisons?

MR. JON JOHNSON: We have requested that information. We specifically -- we have a lot of interface with international programs on specific component problems. As an example, the recent concerns we have with control rod drive cracking, we've been working with our international folks, especially the French to see their experience with that cracking.

We have had some initial discussions about grid. When we meet with them we ask questions about that, but I think we can do a lot more in that area.

COMMISSIONER DICUS: Thank you.

CHAIRMAN MESERVE: Commissioner Merrifield has just indicated to me he has a quick question.

COMMISSIONER MERRIFIELD: Yes. Thank you, Mr. Chairman. I just wanted to get an answer for the record.

In public meetings I've had over the course over the last six months I've been frequently asked the impact of the situation in California relative to the San Onofre and Diablo Canyon plants and while I knew that wasn't specifically an issue for the Agency Action Review Meeting, my yes or no question is and this is directed to Dr. Travers, are we comfortable with the activities undertaken by the licensees at those two facilities, that they are doing what is necessary to maintain the safety of those reactors?

DR. TRAVERS: The short answer is yes, we are and we've been taking a number of additional opportunities to scrutinize the level of performance at those facilities, including efforts by Ellis and other senior management.

COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman.

CHAIRMAN MESERVE: Good. I'd like to thank the staff very much for a very helpful presentation. The inspection activities, as I indicated, at the outside are central to the Agency. This is a very important meeting as sort of the culmination of what I know reflects an enormous amount of work and very important work by the staff.

I'd like to thank you very much. With that, we're adjourned.

(Whereupon, at 10:46 a.m., the meeting was concluded.)