

February 21, 2001

MEMORANDUM TO: Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

FROM: Loren R. Plisco, Chairman **/RA/ John Monninger for**
Initial Implementation Evaluation Panel

SUBJECT: SUMMARY OF THE INITIAL IMPLEMENTATION EVALUATION PANEL
MEETING OF JANUARY 22-23, 2001

The Reactor Oversight Process (ROP) Initial Implementation Evaluation Panel (IIEP) met for its third meeting on January 22-23, 2001 at the Four Points by Sheraton Bethesda Hotel in Bethesda, Maryland. The IIEP was formed in response to Commission direction in the Staff Requirements Memorandum from SECY-00-049, "Results of the Revised Reactor Oversight Process Pilot Program." The IIEP functions as a cross-disciplinary oversight group to independently monitor and evaluate the results of the first year of initial implementation of the ROP. The meeting was open to the public and was transcribed. A copy of the meeting agenda is provided as Attachment 1. The list of attendees for each day of the meeting is provided as Attachments 2 and 3. All IIEP panel members attended both days of the meeting. In addition to the panel members, approximately 13 NRC staff and 7 external stakeholders attended each day of the meeting.

For background information, the following documents were provided to the panel members and public in attendance:

- December 11-12, 2000 IIEP meeting summary (ADAMS ML010090359)
- January 12, 2001 Update to the ROP Performance Metrics (ADAMS ML010320516)
- January 10, 2001 Solicitation of Comments on the First Year of the Initial Implementation of the Reactor Oversight Process (ADAMS ML010120385)
- December 11, 2000 Letter from Dr. Jill Lipoti of the New Jersey Department of Environmental Protection (ADAMS ML010080231)

The meeting focused on the following three areas: (1) initial prioritization of issues identified through the IIEP, (2) briefings by the NRC staff on the ROP Self-Assessment process, current ROP initiatives, and status of recommendations and issues identified in the Pilot Program Evaluation Panel Report and the Commission Staff Requirements Memorandum approving initial implementation of the ROP, and (3) identifying additional issues, both positive and negative, associated with the ROP from multiple sources including the State of New Jersey, a group of NRC Senior Reactor Analysts, and a group of NRC Senior Resident Inspectors.

During the previous IIEP meetings, the panel identified numerous issues, both positive and negative, associated with the ROP from various sources including the individual IIEP panel members, representatives from State governments, and feedback from the ROP Regional Public Meetings. Although the issues came from diverse sources, many of the issues were

similar in nature, which facilitated a categorization and binning process. The panel was provided with a composite table of the issues, which were sorted according to this categorization and binning process. The panel discussed and agreed upon a prioritization scheme for the issues as follows: Priority 1 - Issue that should receive high priority, and Priority 2 - Issue for consideration. Using this prioritization scheme, the panel initially prioritized the issues associated with the Significance Determination Process and the Assessment Process. Attachment 4 provides the table of issues, along with the prioritization that was completed during this meeting. The panel members agreed to a "homework" assignment to complete prioritization of the issues in the table and submit their prioritization results prior to the next IIEP meeting, such that an updated table could be developed for the February 2001 IIEP meeting.

The NRR staff briefed the IIEP on the ROP Self-Assessment Program including an update (ADAMS ML010320516) to the ROP performance metrics and the data collected for the first 2 quarters from implementation of the program. As only 2 data points (2 quarters) exist for many measures and none for others, there was not a sufficient amount of information for the IIEP to draw any type of insights or conclusions regarding the appropriateness of the measures and metrics, or the implementation of the program. The staff also briefed the panel on ongoing and planned initiatives associated with the ROP and the status of disposition of items from the Pilot Program Evaluation Panel Report and the Commission Staff Requirements Memorandum approving initial implementation of the ROP. The information presented by the staff is provided as Attachment 5. In addition, the staff discussed the upcoming ROP Lessons Learned Workshop and provided copies of the Federal Register Notice (ADAMS ML010120385) soliciting comments on the first year of initial implementation.

On the second day of the meeting, Dr. Jill Lipoti of the New Jersey Department of Environmental Protection briefed the panel on issues they identified with the ROP. In support of her briefing, she submitted written comments to the NRC in a letter dated December 11, 2000 (ADAMS ML010080231). Following Dr. Lipoti, a panel of NRC Senior Reactor Analysts (SRA) briefed the panel on their views of the strengths and weaknesses associated with the Significance Determination Process. The SRA slides are provided as Attachment 6. Subsequently, a panel of NRC Senior Resident Inspectors briefed the panel on their views associated with the ROP. The IIEP will consider the issues presented by these stakeholders in a similar manner as those presented by other stakeholders in previous meetings. That is to say, the panel will continue to build upon and refine its "table of issues" and prioritize them according to their established criteria.

In a previous IIEP meeting, panel members were asked to continue to identify any unintended positive aspects and/or critical attributes of the program that should not be lost in further efforts to revise and refine the ROP. In this regard, Panel member Mr. Rod Krich of Exelon Corporation provided the panel with those attributes he viewed as important as indicated in Attachment 7 (ADAMS ML010460495).

Time was allotted at the end of the meeting for others members of the public to address the panel; however, no comments were received. As previously stated, the two day IIEP meeting was transcribed and a copy of the transcripts is provided as Attachments 8 (ADAMS ML010520546) and 9 (ADAMS ML010520561).

The panel scheduled their fourth meeting for February 26-27, 2001 in Rockville, Maryland. The panel was interested in hearing presentations on issues and concerns by: public interest groups (such as Union of Concerned Scientists and Public Citizen), the Nuclear Energy Institute, the State of Pennsylvania, representatives of the press and/or media, and representatives of Congressional staff. The panel tentatively scheduled their fifth meeting for April 2-3, 2001.

Attachments:

- 1 - Agenda for January 22-23, 2001
- 2 - Attendees on January 22, 2001
- 3 - Attendees on January 23, 2001
- 4 - Summary Table of IIEP Issues
- 5 - Reactor Oversight Process Status and Self-Assessment
- 6 - Significance Determination Process
- 7 - Krich Table of Positive Unintended Consequences and Critical Program Attributes (ADAMS ML010460495)
- 8 - Transcript from January 22, 2001 (ADAMS ML010520546)
- 9 - Transcript from January 23, 2001 (ADAMS ML010520561)

The panel scheduled their fourth meeting for February 26-27, 2001 in Rockville, Maryland. The panel was interested in hearing presentations on issues and concerns by: public interest groups (such as Union of Concerned Scientists and Public Citizen), the Nuclear Energy Institute, the State of Pennsylvania, representatives of the press and/or media, and representatives of Congressional staff. The panel tentatively scheduled their fifth meeting for April 2-3, 2001.

Attachments:

- 1 - Agenda for January 22-23, 2001
- 2 - Attendees on January 22, 2001
- 3 - Attendees on January 23, 2001
- 4 - Summary Table of IIEP Issues
- 5 - Reactor Oversight Process Status and Self-Assessment
- 6 - Significance Determination Process
- 7 - Krich Table of Positive Unintended Consequences and Critical Program Attributes (ADAMS ML010460495)
- 8 - Transcript from January 22, 2001 (ADAMS ML010520546)
- 9 - Transcript from January 23, 2001 (ADAMS ML010520561)

DISTRIBUTION:

JShea, PUBLIC, IIEP Members via email, WDean, BBoger, JJohnson, WBates

Package Accession # ADAMS ML010530104

Memo Accession # ADAMS ML010530101

Template NRC-001

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFC:	NRR/ADIP		Region II		
NAME:	JMonninger		LPlisco via email		
DATE:	02/16/01		02/20/01		

OFFICIAL RECORD COPY

REACTOR OVERSIGHT PROCESS INITIAL IMPLEMENTATION EVALUATION PANEL MEETING

Date & Time:

Monday, January 22, 2001
Tuesday, January 23, 2001

Location:

Four Points by Sheraton Bethesda Hotel
8400 Wisconsin Avenue
Ambassador II Conference Room
Bethesda, MD 20814
(301)654-1000

Agenda:

Monday, January 22, 2001	
8:00-8:30	- Introduction / Meeting Objectives and Goals - Review of Meeting Minutes and Items from December 11-12, 2000 Meeting
8:30-12:00	Initial Prioritization of Issues Identified Through the Panel
12:00-1:00	Lunch
1:00-5:00	NRC Staff Presentation on: - Reactor Oversight Process Self-Assessment Data and Insights - Current Reactor Oversight Process Initiatives and Status - Status of Recommendations and Issues Identified in the Pilot Program Evaluation Panel Report and Commission Staff Requirements Memorandum
5:00	Adjourn

Tuesday, January 23, 2001	
8:00-8:30	- Recap of Previous Day's Meeting - Meeting Objectives and Goals
8:30-12:00	Issues and Views Presented by Invited Stakeholders: - New Jersey Department of Environmental Protection - Pennsylvania Department of Environmental Protection - NRC Senior Reactor Analysts - NRC Inspectors
12:00-1:00	Lunch
1:00-3:00	Initial Prioritization of Issues Identified Through the Panel (continued)
3:00-4:00	Agenda Planning Session
4:00-5:00	Public Comments/General Discussion
5:00	Adjourn

REACTOR OVERSIGHT PROCESS INITIAL IMPLEMENTATION PANEL
MEETING ATTENDEES

Monday, January 22, 2001

IIEP MEMBERS

Randy Blough
Bill Borchart
Ken Brockman
Mary Ferdig
Steve Floyd
Dave Garchow
Richard Hill
Rod Krich
Robert Laurie
Jim Moorman
Loren Plisco
Steve Reynolds
Ed Scherer
Jim Setser
Ray Shadis
Jim Trapp

AFFILIATION

NRC/Region I
NRC/OE
NRC/Region IV
Ferdig, Inc. & Benedictine University
Nuclear Energy Institute
Public Service Electric & Gas
Southern Nuclear Operating Company
Exelon Corporation
California Energy Commission
NRC/Region IV
NRC/Region II
NRC/Region III
Southern California Edison
Georgia Department of Natural Resources
New England Coalition on Nuclear Pollution
NRC/Region I

OTHER ATTENDEES

Tom Boyce
Chip Cameron
Doug Coe
Bill Dean
David Graves
Don Hickman
Tom Houghton
Roger Huston
Jeff Jacobson
Rich Janati
Peter Koltay
Jill Lipoti
Alan Madison
Alex Marion
John Monninger
Bob Pascarelli
Josie Piccone
Deann Raleigh
August Spector
Steve Stein
Marvin Sykes
Susan Yim
Dennis Zannoni

AFFILIATION

NRC/NRR
NRC/OGC
NRC/NRR
NRC/NRR
NRC/OCM
NRC/NRR
Nuclear Energy Institute
Licensing Support Services
NRC/NRR
Penn. Dept. of Environmental Protection
NRC/NRR
New Jersey Dept. of Environmental Protection
NRC/NRR
Nuclear Energy Institute
NRC/NRR
NRC/NRR
NRC/EDO
LIS, Scientech
NRC/NRR
NRC/NRR
NRC/NRR
Winston & Strawn
New Jersey Dept. of Environmental Protection

REACTOR OVERSIGHT PROCESS INITIAL IMPLEMENTATION PANEL
MEETING ATTENDEES

Tuesday, January 23, 2001

IIEP MEMBERS

Randy Blough
Bill Borchart
Ken Brockman
Mary Ferdig
Steve Floyd
Dave Garchow
Richard Hill
Rod Krich
Robert Laurie
Jim Moorman
Loren Plisco
Steve Reynolds
Ed Scherer
Jim Setser
Ray Shadis
Jim Trapp

AFFILIATION

NRC/Region I
NRC/OE
NRC/Region IV
Ferdig, Inc. & Benedictine University
Nuclear Energy Institute
Public Service Electric & Gas
Southern Nuclear Operating Company
Commonwealth Edison Company
California Energy Commission
NRC/Region IV
NRC/Region II
NRC/Region III
Southern California Edison
Georgia Department of Natural Resources
New England Coalition on Nuclear Pollution
NRC/Region I

OTHER ATTENDEES

Joe Brady
Sonia Burgess
Steve Campbell
Chip Cameron
Jeff Clark
Bill Dean
David Graves
Tom Houghton
Steve Jones
William Jones
Jill Lipoti
Alan Madison
John Monninger
Deann Raleigh
Jenny Weil
Susan Yim
Dennis Zannoni

AFFILIATION

NRC/Region II
NRC/Region III
NRC/Region III
NRC/OGC
NRC/Region IV
NRC/NRR
NRC/OCM
Nuclear Energy Institute
NRC/Region I
NRC/Region IV
New Jersey Dept. of Environmental Protection
NRC/NRR
NRC/NRR
LIS, Scientech
McGraw-Hill
Winston & Strawn
New Jersey Dept. of Environmental Protection

Summary Table of IIEP Issues

January 22, 2001

Attachment 4

Prioritization Criteria:

1. Issue that should receive high priority
2. Issue for consideration

Reactor Oversight Process Goals:

- MS - Maintain safety
- EE - Increase effectiveness and efficiency
- PC - Increase public confidence
- RB - Reduce unnecessary regulatory burden
- OB - Objective
- RI - Risk informed
- PR - Predictable
- UN - Understandable

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
O-1 Need for multiple avenues for all stakeholders to provide feedback and accumulation of lessons learned and a infrastructure to make timely program changes									
O-2 Need for public access to ROP information									
O-3 Need for process to evaluate long term program effectiveness and to test program assumptions									
O-4 Identification and disposition of cross cutting issues									
O-5 Need for timely and clear public communications									

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
P-1 Need to identify and evaluate unintended consequences of performance indicators									
P-2 Initiating events cornerstone									
P-3 New performance indicators									
P-4 Need to recognize difference in perception regarding green/white PI threshold between stakeholders									
P-5 Need for risk-informed performance indicators									
P-6 Safety system unavailability performance indicator needs revision									
P-7 Need for frequently asked questions									
P-8 Need to clarify public communication of PI information									
P-9 Credit for operator action									
P-10 Public radiation safety cornerstone									
P-11 Physical protection cornerstone									

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
I-1 Increased level of inspection in baseline program									
I-2 Is current inspection report documentation threshold sufficient?									
I-3 Improve public access to inspection information									
I-4 Handling of cross cutting issues									
I-5 Handling of multiple findings									
I-6 Physical protection inspection									
I-7 Clarify event response guidance									
I-8 Revise problem identification and resolution inspection									
I-9 Use of licensee self-assessments to meet inspection requirements									

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
S-1 Clarify process for evaluating and communicating SDP issues	2 Overall 1 EE 1 UN								
S-2 Reevaluate the fire protection SDP	1 Overall PC, EE, UN								
S-3 Issue and validate revised SDP phase 2 worksheets	1 Overall EE, RB								
S-4 Develop frequently asked questions for SDPs	2 Overall								
S-5 Improve the timeliness of dispositioning greater than green issues	1 Overall EE, PC Consider under S-1								
S-6 PRA quality & consistency	1 Overall PC, EE, MS, OB, UN								
S-7 Reevaluate the physical security SDP	1 Overall								
S-8 Clarify definition of a performance issue	2 Overall								
S-9 Need for SDPs for other areas	1 Overall								

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
S-10 Need for Process to Identify Improvements in SDPs	2 Overall								
S-11 Reevaluate the ALARA SDP	1 Overall								
S-12 Need for Formal Process to Review for False Negatives	1 Overall								

Issue	Initial Priority	MS	EE	P C	RB	OB	RI	PR	UN
A-1 Criteria for deviation from the action matrix must be clearly communicated up-front	2?								
A-2 Reevaluate the criteria for an inspection finding being included in the action matrix	1								
A-3 Clarify the purpose of the regulatory conference	2								
A-4 Extension of PI enforcement discretion	revisit in Feb								
A-5 Use of no color findings	1								
A-6 Use of traditional enforcement	Delete								

Overall	
Issue	Initial Priority and Area
<p>O-1 Need for multiple avenues for all stakeholders to provide feedback and accumulation of lessons learned and a infrastructure to make timely program changes</p> <ul style="list-style-type: none"> - There is a need for sharing of information/findings/feedback/lessons learned across Regional boundaries - Consideration of experience and lessons learned from outside sources (foreign experience, other agencies, military) - Processes and tools need to be put in place to allow for program feedback, comments, and questions - The Frequently Asked Question (FAQ) process appears to have been a positive mechanism to resolve licensee and inspector issues relating to the Performance Indicators. The FAQ process provides for the open exchange of information and the establishment of uniform, consistent guidance. The other elements of the Reactor Oversight Process (such as the SDPs), might benefit from a similar FAQ process. Should the FAQ process be expanded to include all elements of the Revised Oversight Process? - What is the process for getting issues onto the “frequently asked questions” list? How does the general public get information on past questions and answers? - We should make sure the infrastructure remains in place to promptly process inspection procedure changes. Several inspectors have commented that the level of detail in some of the inspection procedures could be strengthened, and that best practices information included in previous procedures have not been included in the baseline procedures. Each region has developed internal processes to capture some of this information to pass on to inspectors. A nationwide process should be considered to ensure regional consistency. 	
<p>O-2 Need for public access to ROP information</p> <ul style="list-style-type: none"> - Need for access to PRA data by all stakeholders - Access to information (snap shot okay web-site), but then we have ADAMS - People who are not computer enabled (and many who are) do not appear to have the same degree of confidence in the authenticity or completeness of information posted on a web site as they do in hard copy “documents on file” at an official local repository. To supplement electronic reporting and thereby enhance public confidence, NRC should consider issuing hard copy ROP reports to all identified stakeholders - NRC outreach could be improved with the addition, on its web site, of a weekly, annotated document accession list for each plant. Each item would have an active link directly to the document -An additional improvement would be the addition of a status board posting the status and progress of individual licensee action items, enforcement actions, inspections, licensing proceedings, etc. 	

Overall	
Issue	Initial Priority and Area
<p>0-3 Need for process to evaluate long term program effectiveness and to test program assumptions</p> <ul style="list-style-type: none"> - The NRC should prove that the system of performance indicators and inspection findings identifies the real plants with poor performance. - Set up robust and permanent process to identify and address unintended consequences - Do we need a more robust and permanent process to help eliminate the potential for false negatives, as well as to minimize the number of false positives? - What positive incentives does the program currently provide for superior performance? (only bad ones - no white at any cost, delay shutdown, change thresholds ALARA, stacking maintenance) - Examine the disparate way in which nearly similar incidents have been handled under the ROP and the way in which NRC spokesmen have characterized them - There are limits to what may be learned from a one-year test. Does the NRR program evaluation properly recognize and account for those limits? Examples of these limits include: (A) the efficiency and effectiveness of inspections will be suboptimal for more than a year as the staff and industry progresses along a learning curve with ROP; and (B) the initial implementation phase is garnering very little experience with issues of high risk significance and with the regulatory actions for licensees whose performance falls below the regulatory response band, yet the effectiveness of ROP in those cases is crucial to the NRC objectives of being risk-informed and maintaining safety ---- what is being (or should be done) to compensate for the limited testing of the program in this area. - Are there elements of the reactor oversight process that may have unnecessarily increased burden on licensees? - What measures are available to evaluate the accuracy of assessments under ROP? - Is it possible for performance to degrade without performance indicators degrading? Determine whether PI system identifies poor performers. - Evaluating green findings in an integrated manner could provide a useful feedback mechanism to assess the effectiveness of the baseline inspection program and support a more refined understanding of performance on a licensee and industry level. 	
<p>0-4 Identification and disposition of cross cutting issues</p> <ul style="list-style-type: none"> - Need for criteria, thresholds, and definition of cross cutting issues - What is the NRC's action if the corrective action program was determined to be deficient? 	

Overall	
Issue	Initial Priority and Area
<p>O-5 Need for timely and clear public communications</p> <ul style="list-style-type: none"> - Most people don't realize that 85% of the program is inspection and not performance indicators - Much remains to be done to make the ROP and its results fully understandable and accessible to external stakeholders - Special accommodation must be made for public input, plant by plant, on a regular basis - Public knowledge is not sufficiently developed to serve the program's long-term needs. An investment in an open process will reap long-term gain. - There appears to be a need to improve the public understanding of the scope of the Reactor Oversight Process. It appears much of the public perceives the new Reactor Oversight Process as solely the "Performance Indicators" and there is less awareness of the revised Inspection Process, Significance Determination Process, Action Matrix, and Enforcement Policy. Questions have been raised to the effect that if most licensees are "all GREEN" then the process isn't working. Should consideration be given to the format and content of the NRC Website in this regard? - Timeliness of dissemination of information and timeliness of response is also essential to building public confidence - The ROP public meetings did not enhance public confidence in the regulatory program - Timeliness is important. More than two months elapsed before NRC made a determination of significance of the Millstone auxiliary feedwater pump failure. The Summer determination was changed (downgraded) almost three months after the fact. - The information provided to the public in the inspection reports and over the NRC web site intentionally lean toward recovery to green. Statements are provided to explain areas with non-green results. Often statements are made such as "this white is expected to be green by the 4th quarter." There is a presumption of effective future performance. Should the NRC be making these types of presumptions on behalf of their licensees? Is that an appropriate regulatory stance? 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-1 Need to identify and evaluate unintended consequences of performance indicators</p> <ul style="list-style-type: none"> - Absolute avoidance of white PI, pressure on operating staff (white is unacceptable) - Potential to take the wrong action to keep indicator green - Unplanned power change performance indicator causing wrong decisions. A utility may delay repairs for 72 hours to avoid counting a power reduction. However, plants that are proactive in conducting repairs in a well planned manner, yet in less than 72 hours from the discovery of the off-normal condition, would be categorized in the PI as a poor performer. In other words, 72 hours inappropriately represents a time frame that defines adequate planning. - Changing surveillance periods to avoid fault exposure times - Some plants have said that they will not have a white Performance Indicator window under any circumstances. Even if avoiding a white PI results in the deferment of necessary maintenance of safety related equipment. - Developing Culture which tries to avoid white findings at all cost. This undermines the design of the process by reducing occurrences of NRC validation of licensee actions - The staff has noted a number of licensees that have altered operating practices solely to minimize their performance indicator hits. In extreme cases where the licensee is apparently trying to manipulate the performance data and taking less safe actions, should the NRC consider responding by using additional inspection resources to collect performance data? 	
<p>P-2 Initiating events cornerstone</p> <ul style="list-style-type: none"> - Evaluate the effectiveness of the Unplanned Power Change PI in providing value-added insights in light of the current PI definitions and thresholds, industry performance, and NRC inspection experience. Current ROP/NEI 99-02 definition and guidance for Unplanned Power Change PI are perceived by Industry as having significant unintended consequences (impact on on-line maintenance). 	
<p>P-3 New performance indicators</p> <ul style="list-style-type: none"> - Evaluate possible corrective action performance indicator and steam generator performance indicator - Steam generator PI (% tubes plugged, leak rate primary to secondary) 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-4 Need to recognize difference in perception regarding green/white PI threshold between stakeholders</p> <ul style="list-style-type: none"> - 95/5 is a perception issue, communications issue - The GREEN/WHITE threshold for Performance Indicators was set basically at the 95% performance level - most performance indicators are green (may need to review thresholds) - Green/white threshold compared to inspection finding threshold - Difference between NRC expectation and licensee regarding color of finding (white, yellow, red) and findings/perceptions from outside stakeholders 95/5 vs risk informed thresholds - It is difficult to communicate to external stakeholders that a white performance indicator is not necessarily the same risk-significance as a white inspection finding. - There is a significant perception difference between the NRC and the licensees regarding the impact and importance of white issues, and this has resulted in some of the debate about thresholds. - The other thresholds (including the GREEN/WHITE thresholds for assessing Inspection findings using the SDPs) were set based on risk. Having an inconsistent logic for the bases for setting the thresholds creates confusion and uncertainty. Should the NRC revisit the bases for the GREEN/WHITE threshold for the Performance Indicators? - What are the practical implications regarding the underlying philosophy and assumptions of 95/5 model for communicating differentiated plant performance? Is there an expectation that the definitions of performance thresholds change as all plants move into and sustain a level of performance in the green band? What does that say about the objectives of the program? - Is the NRC ready to accept all GREEN Performance Indicators? 	
<p>P-5 Need for risk-informed performance indicators</p> <ul style="list-style-type: none"> - The program would be significantly enhanced by the use of risk-informed performance indicators and thresholds. - Performance indicators must be risk-informed to make the process consistent. So far, the performance indicators themselves, as well as, the corresponding thresholds do not correlate with risk. This calls into question the value of performance indicators as a way to assess performance. The current NRC Science and Research effort to develop risk-based performance indicators should be expedited. 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-6 Safety system unavailability performance indicator needs revision</p> <ul style="list-style-type: none"> - The inclusion of fault exposure hours in the Safety System Unavailability PIs does not properly assess the risk condition of equipment failures and therefore ineffectively utilizes NRC and plant resources in response to the action matrix requirements. - The ROP definition of equipment unavailability is different than other programs that monitor or consider unavailability of safety equipment. These programs are also different among themselves in the determination of equipment unavailability. Particularly in the combination of considerations for allowed operator actions and cascading of support systems. The referenced programs are PRA implementation, Maintenance Rule program, NRC PI program, and WANO. - Limiting the exemption from reporting planned overhaul maintenance hours to only situations where a quantitative risk assessment has been performed creates a disadvantage in the safety system unavailability PI for those plants that by design must conduct on-line maintenance and can not demonstrate "low risk" (e. g. shared diesel generators). In this case, the plants still meet the NRC endorsed NUMARC 93-01 guidance for mitigating risk which is acceptable by the NRC for conducting on-line maintenance. But the qualitative assessment portion of the process is considered inadequate for PI consideration. - The current requirements in ROP/NEI 99-02 concerning reporting of fault exposure hours result in a masking of system performance issues and potential NRC and licensee reaction to individual events - Thresholds in the unavailability PIs, where they are more restrictive than maintenance rule performance criteria, can create unintended pressure to perform less maintenance than what may be needed to balance availability and reliability. - Too many definitions of unavailability (MR, WANO, PI, PRA) overly complicates data keeping requirements - As the number of exceptions increase, such as excluding equipment overhauls, the indicator is no longer a true unavailability indicator. - Fault exposure time reporting is not risk informed; results in inappropriate reporting of unavailability with three inappropriate results: 1) followup SDP shows these to be false positives, 2) the large number of hours can mask additional poor performance, 3) licensee and NRC reaction to minor events 	
<p>P-7 Need for frequently asked questions</p> <ul style="list-style-type: none"> - Good and bad, data overload - Make FAQs more generic - The inspectors have noted some licensees taking the answers to frequently asked questions out of context when applying it to their specific situation. 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-8 Need to clarify public communication of PI information</p> <ul style="list-style-type: none"> - Performance indicator definitions should incorporate the word “significance” for the level - News accounts relating to the Summer emergency feedwater system being inoperable characterized the issue as “substantial importance to safety” yellow, while the Millstone auxiliary feedwater system issue was characterized as “low to moderate safety” white - Web site overall focus on performance indicators gives wrong impression, need to more clearly highlight inspection findings - Performance Indicator Definitions: It is imperative that we establish a common understanding of the definitions for the performance indicators. The long-term effort to get all of the stakeholders using a common set of words and definitions should address many of the other concerns identified in this area. - The NRC should anticipate and use simple explanations to forestall public surprise/outrage over unfamiliar concepts (e.g. nuclear power plants are legally permitted to release radioactivity, nuclear power plants report their own emissions, nuclear power plants report their own performance indicators). Surprised people ignore the indicators themselves. - The NRC should survey the public to determine whether their confidence in the NRC as a regulatory agency is enhanced by performance indicator data. Trust might be increased by clearly pointing out positive and negative implications of the data, reasons for uncertainty in the data, how data were collected and confirmed (if there is a QA process for the data) and how the public might confirm the data through independent sources. 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-9 Credit for operator action</p> <ul style="list-style-type: none"> - Credit for operator action should be allowed for equipment performance indicators - Operator credit is allowed within SDP but not Performance Indicators - Interpretation of WANO performance indicators allows for any reasonable operator actions to be taken to restore a system to available status. This may be from either inside or outside the control room. Currently NEI 99-02 allows for operator actions associated with testing, or for malfunctions or operating errors that can be restored from the control room. The NRC interpretation for allowed operator actions has been limited to "testing". The NRC has continued in public meetings to request a revision to NEI 99-02 for the removal of credit for control room operator actions for malfunctions or operating errors. The impact of the NRC's interpretation for limiting credit for operator actions is emphasized by a NRC position associated with maintenance on a diesel generator fuel oil storage tank at the Salem/Hope Creek site. During the maintenance activity the affected diesel generator could start, load and operate for up to three days on the remaining storage tank that was in service. Although the unavailable tank would not be required for three days and contingency planning would restore the storage tank within one day, the NRC position was the maintenance time should be considered as system unavailable time. - NEI 99-02 currently lacks criteria for crediting operator action in determining system unavailability for non-test situations - Monitored systems may be "operable" but may be counted as "unavailability" for the NRC PI based on NEI 99-02 treatment of operator/compensatory actions to restore support systems to available status prior to the support system being required for the monitored system to perform its intended safety function. - SSU currently lacks risk-informed criteria for crediting operator actions in determining system unavailability for non-test situations. 	
<p>P-10 Public radiation safety cornerstone</p> <ul style="list-style-type: none"> - Evaluate the need for a RETS/ODCM PI by considering value-added insights that this PI provides in light of the current PI definition and thresholds, industry performance, and NRC inspection experience. 	

Performance Indicators	
Issue	Initial Priority and Area
<p>P-11 Physical protection cornerstone</p> <ul style="list-style-type: none"> - Evaluate effectiveness of the three existing PIs in providing value-added insights in light of the current PI definitions and thresholds, industry performance, and NRC inspection experience. (Particularly Personnel Screening Program and FFD PIs). 	
Inspection Program	
Issue	Initial Priority and Area
<p>I-1 Increased level of inspection in baseline program</p> <ul style="list-style-type: none"> - Increased level of inspection effort between baseline and core program - Resources higher charges for NRC inspections - Resource expenditures for the same procedure vary widely - Several inspections have allocated actual NRC inspection resources that are above the levels indicated by the Inspection Procedure. In addition, the inspection schedule has been extended. (Examples: Triennial Fire Protection, OSRE and PI&R Inspections) - Exact definition of “baseline” inspection program is needed. Is it the de minimus? - unexpected inflexibility in baseline inspection hours (pressure not to exceed inspection hours) - It appears that inspection resources in occupational exposure area can be reduced. - Need to review the frequency of inspections which require major asset allocation but do not result in any new insights or significant findings (candidates would be PI&R, design engineering ...) 	

Inspection Program	
Issue	Initial Priority and Area
<p>I-2 Is current inspection report documentation threshold sufficient?</p> <ul style="list-style-type: none"> - Inspection report format, does it include enough information for the public, no long discussion on low level issues - Thresholds for documenting issues within inspection reports - Inspector process used to document issues Group 1/2/3 questions - Communications between inspectors and licensees (some problems don't get documented, but licensees want the feedback) - With the significantly reduced level of detail in the inspection reports, the public may actually have less performance information available than in the previous program - Many of the findings that were documented in the reports under the old oversight are no longer considered "significant". Now, the inspections are focussed on risk-significant issues. But some good insights could be lost by not documenting less risky issues. These findings may only be communicated verbally during the inspection or at the inspection exit interview, but not in writing, thus not making the information available to the public. This is also an area where there seems to be different understanding by the inspectors and at the managers. Is there a threshold for what gets into the report? 	
<p>I-3 Improve public access to inspection information</p> <ul style="list-style-type: none"> - Open routine inspection exit meetings to the public? - Inspection findings need to be much more visible on the web - Misleading information regarding inspections is posted on the web site. For example, at the Hope Creek plant, the planned Problem Identification inspection was originally planned for October and November 2000 and this was shown on the web site. However, the Hope Creek inspection was combined with the Salem inspection and rescheduled for February 2001. This represented a significant reduction in inspection hours at Hope Creek during 2000. - It may enhance public confidence to publicize how much time the regulator is inspecting the nuclear power plants. This information could be posted on the NRC web page and might present a very easily understood benchmark for the public. - Changes to the NRC Inspection Program are not posted on the Web site in a timely manner. (ie. 0610*) 	

Inspection Program	
Issue	Initial Priority and Area
<p>I-4 Handling of cross cutting issues</p> <ul style="list-style-type: none"> - How do you identify and document adverse trends? What is the criteria for determining a trend? If you identify an adverse trend, then what do you do? - The threshold for raising and documenting issues related to the assessment of corrective action programs by the resident staff is not commensurate with the overall program assumption that a healthy corrective action program exists at each facility. 	
<p>I-5 Handling of multiple findings</p> <ul style="list-style-type: none"> - How should the agency group multiple, related inspection findings? Would it be appropriate to characterize an inspection that identifies five related issues (3 green, 1 white, 1 yellow) as one finding or five separate findings? If the findings are grouped together, would the total issue assume the significance of the most significant finding? 	
<p>I-6 Physical protection inspection</p> <ul style="list-style-type: none"> - IP 71130.03 (Response to Contingency Events) should be reevaluated and revised to consider Industry self-assessment initiatives. - Need new inspection approach for force on force. 	

Inspection Program	
Issue	Initial Priority and Area
<p>I-7 Clarify event response guidance</p> <ul style="list-style-type: none"> - Event response MD 8.3 needs to clarify type of response to event, how to apply risk, thresholds, difference in responding to condition as opposed to events, time for review of PRAs to allow for appropriate response - Event response vs CCDP/ risk perspective vs risk number / risk expertise needs - The agency's response to plant events, like the Indian Point-2 tube leak, occurs prior to the SDP characterization of the issue. What are the expectations that the action matrix will be used to guide agency involvement in plant issues that are time sensitive? - Although there was some effort to revise the NRC's incident response procedure with risk insights, the previous narrative criteria were retained. This process needs to be revised to be consistent with the rest of the program. The current process has retained some of the subjectivity from the previous process. In addition, an updated Management Directive has not yet been issued. 	
<p>I-8 Revise problem identification and resolution inspection</p> <ul style="list-style-type: none"> - The results of the PI&R inspections have been mixed. It is not clear that the broad-based inspection approach (covering all cornerstone areas) is the most effective and efficient approach. Other approaches should be considered. 	
<p>I-9 Use of licensee self-assessments to meet inspection requirements</p> <ul style="list-style-type: none"> - In the previous program, there were cases where the NRC did not conduct certain inspections if the licensee had conducted a rigorous self-assessment of the same area. This flexibility has not been provided in the new program. The ROP baseline inspection program has decoupled plant performance from inspection resource expenditures. 	

Significance Determination Process	
Issue	Initial Priority and Area
<p>S-1 Clarify process for evaluating and communicating SDP issues</p> <ul style="list-style-type: none"> - SDP communication between licensee and NRC during phase 2, when does the clock start, what happens after inspectors leave the site, is the door closed - An opportunity exists to rethink the appropriate agenda topics and attendance for regulatory conferences to ensure that these meetings are effective and efficient. - The program does not have an appeal process for licensees to dispute the risk characterization of green findings. Since licensees have demonstrated that the motivation to dispute such findings does exist, should the process be revised to accommodate such requests? - Should information received by licensees to support the risk characterization of inspection findings be subject to controls and restrictions similar to those used during the licensing process. That is, should the NRC base decisions only on information received from the licensee that is docketed. - The accurate characterization of the performance deficiency has been identified as a reoccurring issue with the execution of the SDP. How should the SDP be applied to issues involving equipment performance and/or personnel performance issues? - It does appear that when the significance of a finding is being debated, negotiations can take place in an environment where limited persons understand the significance determination process. - It appears that excessive time is spent in resolving disagreements and appeals of low-level SDP results and inspection findings. This is neither risk-informed nor efficient. - External stakeholder perception that negotiations occur between NRC and licensees. 	<p>1 EE 1 UN 2 Overall</p>
<p>S-2 Reevaluate the fire protection SDP</p> <ul style="list-style-type: none"> - FP SDP too complex, needs to be simplified, better definitions needed, differences between risk analysts and FP engineers - The Fire Protection SDP is too subjective in addressing circuit analysis (i. e. hot short) issues for risk assessment - IMC 0609, App. F guidance for evaluating Fire Protection Findings, including but not limited to fire protection degradation risk significance, modeling of fires, and assignment of degradation factors to barrier and suppression degradation should be reevaluated and revised to reflect the results of Industry/NRC lessons learned - Need improved and simplified SDP worksheets for fire protection, e.g., fire frequency. 	<p>1 Overall PC EE UN</p>

Significance Determination Process	
Issue	Initial Priority and Area
<p>S-3 Issue and validate revised SDP phase 2 worksheets</p> <ul style="list-style-type: none"> - Current SDP Phase 2 worksheets not final - Rx SDP doesn't reflect site PRAs, causes a lot of additional effort by NRC and licensees - The site specific SDP worksheets are not yet available in final form. - The effectiveness of the SDP process has been hampered by the lack of adequate Phase 2 worksheets for each plant. This has resulted in the need to perform Phase 3 evaluations for most issues that appear to be non-green. Reactor Safety Phase 2 worksheets have not been re-issued to reflect the results of site visits conducted in early 2000. This situation has resulted in additional licensee and NRC resources being required to effectively evaluate the significance of potential Findings. - The lack of the plant specific worksheets for the reactor SDP are limiting the effectiveness of the reactor SDP in providing timely and efficient phase 2 assessments 	<p>1 Overall EE RB</p>
<p>S-4 Develop frequently asked questions for SDPs</p>	<p>2 Overall</p>
<p>S-5 Improve the timeliness of dispositioning greater than green issues (white, yellow, red)</p> <ul style="list-style-type: none"> - The time and resource commitment to process individual ROP cases appears to have increased. The development of NRC performance measures for individual steps in the process may be warranted to ensure that process problems are understood and agency actions are timely. - There needs to be better communication between the NRC and the licensee early in the evaluation process to ensure a common understanding of the assumptions (between Phase 2 and Phase 3). 	<p>? Consider under S-1 1 Overall EE PC</p>
<p>S-6 PRA quality & consistency</p> <ul style="list-style-type: none"> - The ROP depends on the quality and consistency of the probabilistic tools utilized by the NRC as a basis for its decisions. Currently, the NRC relies heavily on the individual plant probabilistic risk assessments (PRAs) developed by licensees. The content of these PRAs vary. These variations could lead to similar plants ending up with different significance outcomes for identical findings. Are actions needed to address this area? 	<p>1 PC EE MS OB UN</p>

Significance Determination Process	
Issue	Initial Priority and Area
<p>S-7 Reevaluate the physical security SDP</p> <ul style="list-style-type: none"> - The Security SDP alignment to the reactor safety SDP is an inappropriate application for risk assessment - IMC 0609, App E guidance for evaluating Physical Protection degradation should be reevaluated based on Security/OSRE inspection lessons learned. Example: interface between the Physical Protection SDP and Reactor SDP. - Guidance for evaluating physical protection degradation should be reevaluated based on security/OSRE inspection lessons learned. - The physical protection SDP needs to be rewritten to accommodate both physical security requirements and the actual potential risk to the reactor, which is appropriately assessed in the reactor SDP. 	1 - Overall Is a SDP needed?
<p>S-8 Clarify definition of a performance issue</p> <ul style="list-style-type: none"> - Early in the implementation of the ROP, the staff developed guidance that required the inspector to demonstrate a licensee performance deficiency before entry into the SDP. This has caused some concern among the inspectors because in some cases it appears we are not dispositioning significant safety issues because a clear performance deficiency was not established. 	2- Overall
<p>S-9 Need for SDPs for other areas</p> <ul style="list-style-type: none"> - Phase 2 SDPs are needed in the areas of shutdown, containment, and external events. 	1 - Overall
<p>S-10 Need for Process to Identify Improvements in SDPs</p> <ul style="list-style-type: none"> - Systematic, periodic review - Closed loop learning process based on experience that effects change 	2 - Overall
<p>S-11 Reevaluate the ALARA SDP</p> <ul style="list-style-type: none"> - Problems with job description - Revising dose estimates - Unrealistic high thresholds to avoid tripping - Potential for unintended consequences counter to safety by setting dose estimates that are too high 	1 - Overall

Significance Determination Process	
Issue	Initial Priority and Area
S-12 Need for Formal Process to Review for False Negatives - Periodically review SDPs to evaluate for underestimation of significance	1 - Overall
Assessment and Enforcement	
Issue	Initial Priority and Area
A-1 Criteria for deviation from the action matrix must be clearly communicated up-front	
A-2 Reevaluate the time period for an inspection finding being included in the action matrix - Should there be a graded time for different colors instead of the fixed one year? - The Action Matrix uses inspection findings for a one-year period from the inspection. Therefore, a non-GREEN inspection finding is used in the Action Matrix for a year, while the PI is recalculated quarterly. Considering the risk significances of the various findings, it might be beneficial to establish a “graded reset” of the inspection finding window.	
A-3 Clarify the purpose of the regulatory conference - Participation of enforcement staff and technical staff shift the focus of the conference to enforcement and corrective actions, rather than the risk significance.	
A-4 Extension of PI enforcement discretion - Consideration should be given to extending Enforcement Discretion for performance indicators which will be involved in Pilot Programs or where there are significant process/guidance changes planned for 2001.	

Assessment and Enforcement	
Issue	Initial Priority and Area
<p>A-5 Use of no color findings</p> <ul style="list-style-type: none"> - The ROP has proceduralized the concept of the non-color finding/violation. This category addresses issues that are more than minor but do not match any of the Group II questions for entry into the SDP. Therefore, the process appears to have created a third classification of finding. Does the existence of non-color findings impact the effectiveness of the ROP? - No color findings are too numerous. It appears that they are being used to attempt to build a case for “apparent trends” or “cross-cutting issues”. Upon review, many of these issues do not appear to warrant inclusion in inspection reports. - Those issues that are determined to be more than minor violations, but cannot be evaluated by the current SDPs are problematic in the new process. In most cases, these issues were documented as “No Color” in inspection reports, causing some confusion to stakeholders. - Some Inspection Reports have reported “No Color” Findings in individual Cornerstones (i.e., Mitigating Systems). - Some Inspection Reports have reported “No Color” Findings in Cross-Cutting Issues where there does not appear to be an appropriate linkage between the individual issues, each of which individually is characterized as being of low risk significance 	
<p>A-6 Use of traditional enforcement</p> <p>- Violations involving actual safety consequences, willfulness, and impacting the regulatory process (10 CFR 50.59, 50.72, 50.73, etc.) are characterized using severity levels (SL) and are subject to civil penalties under the traditional enforcement approach. The use of traditional enforcement raises interesting questions. Would the NRC issue a white finding for a SL III violation of 10 CFR 50.59, which results from a condition of low to moderate risk significance? Would it be considered double jeopardy if the NRC issued a civil penalty and a white finding for the same underlying issue? Would the NRC perform follow-up inspection if a white finding is not issued and the action matrix is not entered? In cases of willfulness, the enforcement policy allows a violation to be considered more significant than the underlying technical issue noncompliance. How would this translate back into the ROP?</p>	

INITIAL IMPLEMENTATION EVALUATION PANEL

BRIEFING ON THE

REACTOR OVERSIGHT PROCESS STATUS

AND

SELF-ASSESSMENT

William Dean
Doug Coe
Thomas Boyce
Alan Madison
Don Hickman
Steven Stein
Jeff Jacobsen
Peter Koltay
Marvin Sykes
Robert Pascarelli
August Spector

TOPICS

- **ROP Self-Assessment Process**
 - **Metrics**
 - **Initial Data**
- **ROP Status and Initiatives**
- **Status of PPEP and Commission SRM Recommendations**

ROP SELF-ASSESSMENT ACTIVITIES

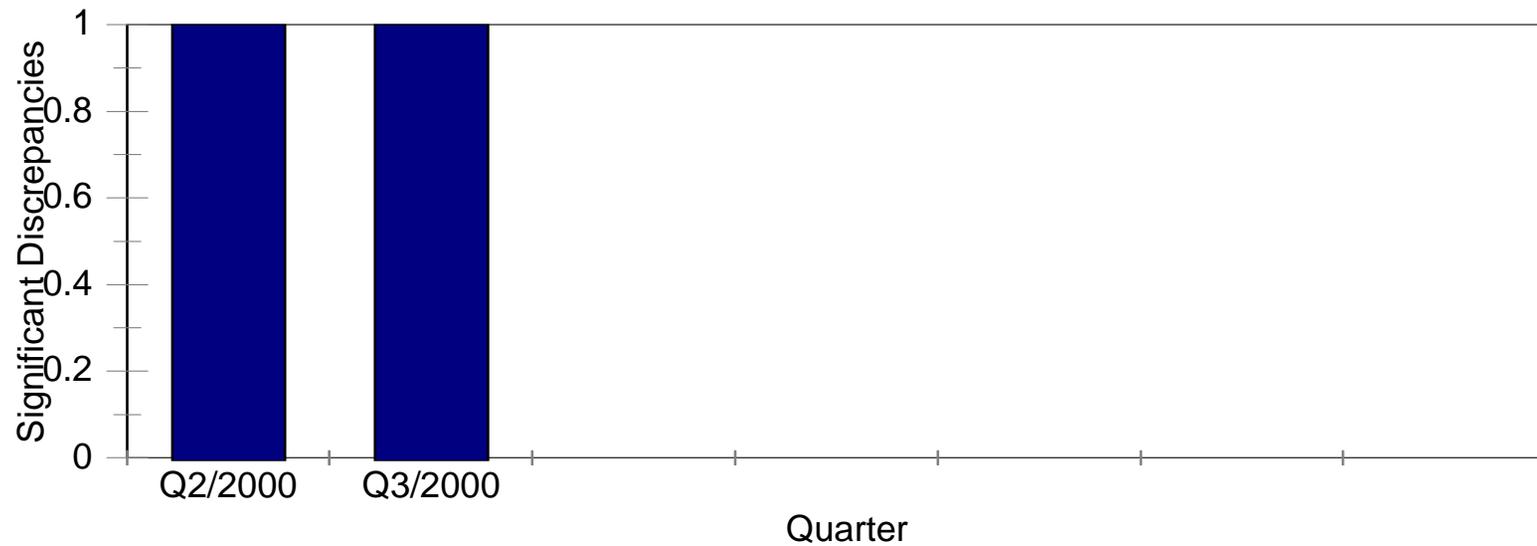
- **Collected First Regional Data Set**
- **Metric Descriptions Revised to Reflect Comments**
- **Overall Metrics**
- **SPSB, IOLB & RES Establishing Audit Protocol**
- **FRN Issued**
- **Internal Survey**
- **Conducted IIPB Site/Regional Visits**
- **Held regional Public Forum Meetings**

ROP INITIATIVES/STATUS

- **Performance Indicators**
 - **Piloting Two New Initiating Event PIs**
 - **Developing Proposals to Revise:**
 - **Unavailability**
 - **Unplanned Power Changes**
 - **Safeguards Equipment Index**
 - **Evaluating Barrier Integrity PIs**
 - **Developing Revision to Update NEI 99-02**
 - **New IMC 608, “Performance Indicator Program”**
 - **PI/Inspection Overlap**

SELF ASSESSMENT METRICS

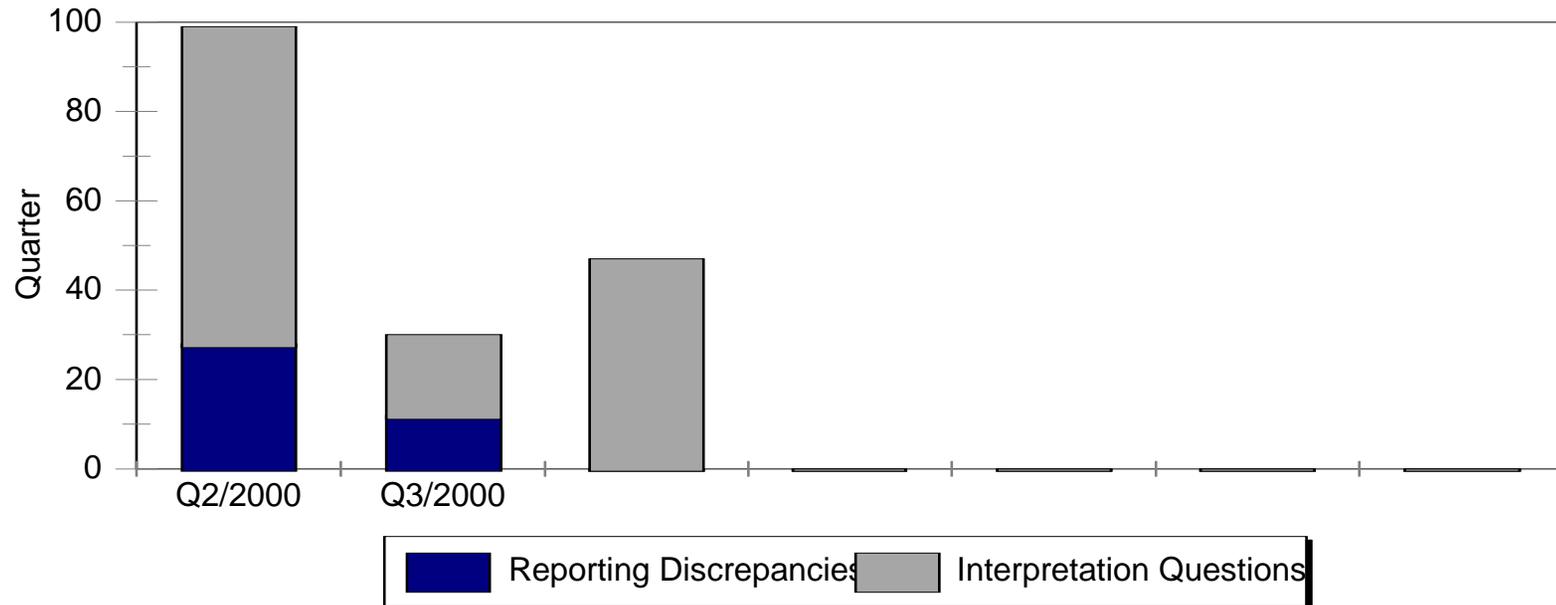
Performance Indicators



Number of Significant Deficiencies that Cross Thresholds

SELF ASSESSMENT METRICS

Performance Indicators



Reporting Discrepancies plus Interpretation Questions

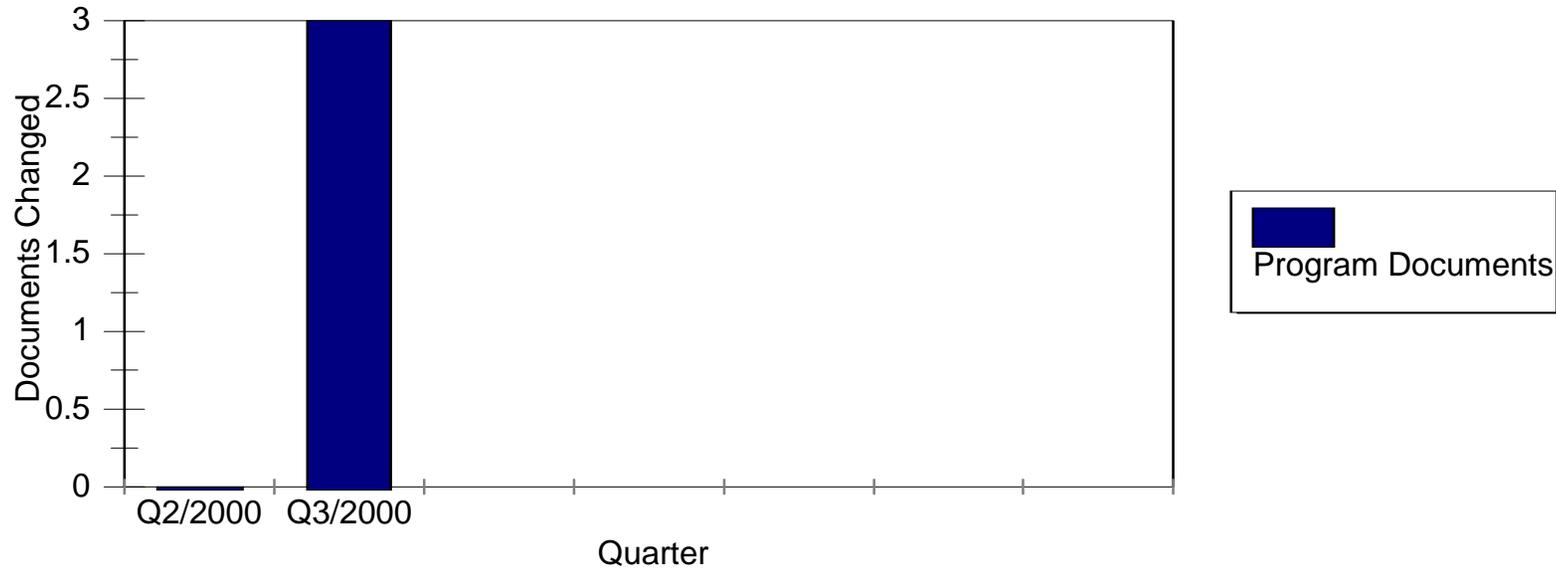
ROP INITIATIVES/STATUS

- **Inspection Program**

- **Revised IMC 0610***
 - **inspection report audit plan**
 - **higher threshold for documentation issues**
 - **focus group**
- **Revised Maintenance Rule Baseline IP 71111.13**
 - **significant feedback**
 - **focus group**
- **Role of No-Color Findings Being Reviewed**
- **Cross-cutting Issues Working Group Underway**

SELF ASSESSMENT METRICS

Inspection Program

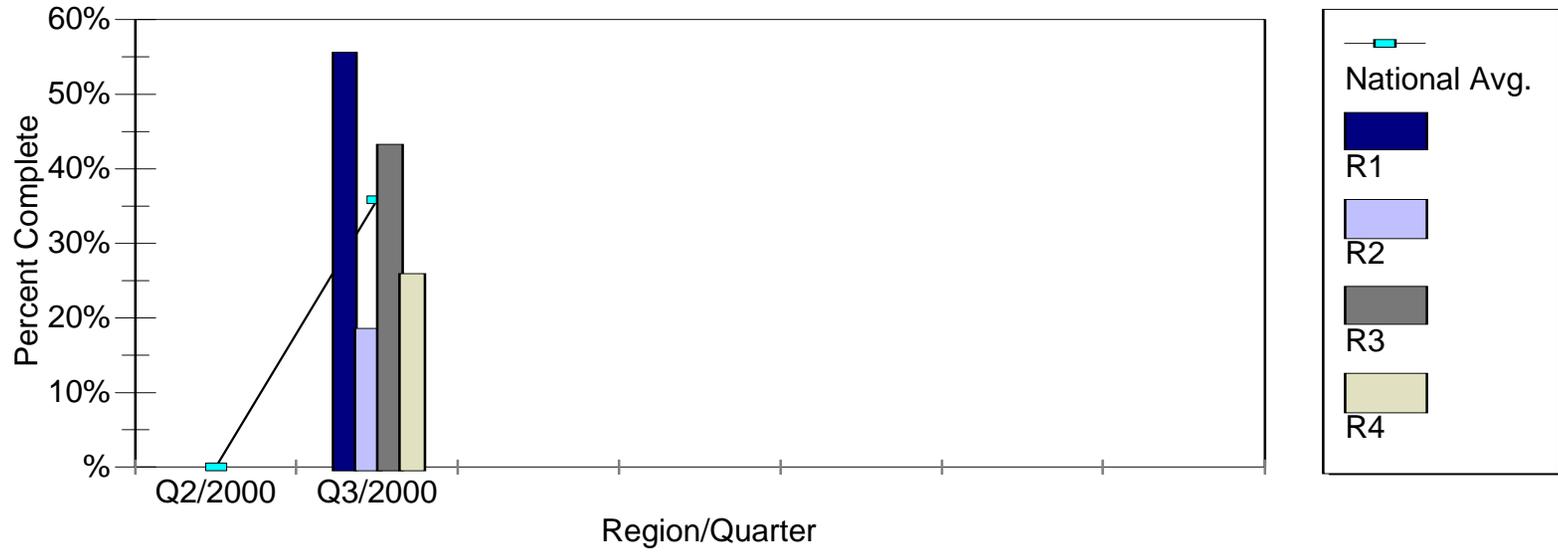


Number of Program Documents Changed Affecting
Risk-Informed Aspect of Program

SELF ASSESSMENT METRICS

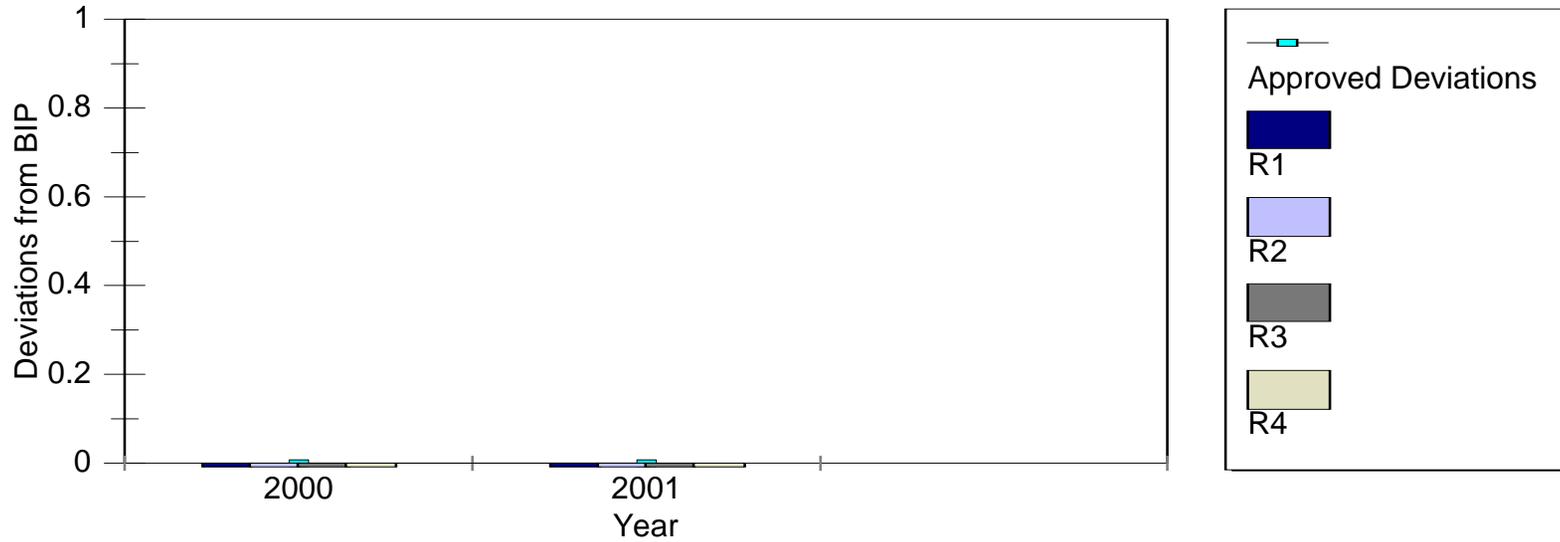
Inspection Program

Percent Baseline Inspection Procedure Completion



SELF ASSESSMENT METRICS

Inspection Program



Number of Approved Deviations from Baseline Program
by Region

Crosscutting Issues Workgroup

- **Fundamental ROP assumption - problems in the cross cutting areas (including PI & R) will be detected through the PIs or the baseline inspection program**
- **Cross cutting issues workgroup formed to assess this fundamental assumption**
- **Workgroup focused on identifying whether the ROP provides sufficient information in the cross cutting areas and whether there are other cross cutting areas that warrant additional consideration**

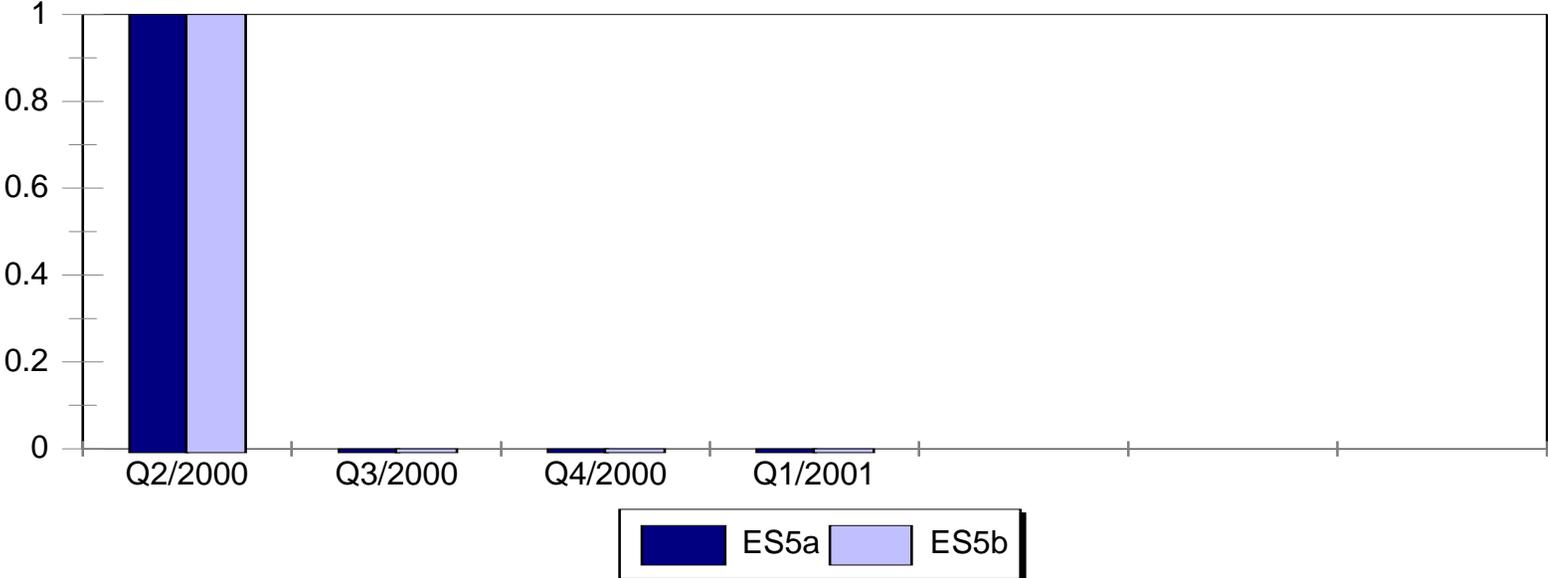
Problem Identification and Resolution Major Issues Under Consideration

- **Frequency of annual inspection**
- **Where and how should we assess safety conscious work environment**
- **Should we allow for quantitative PI & R assessments in baseline inspection reports other than the annual PI & R assessment**

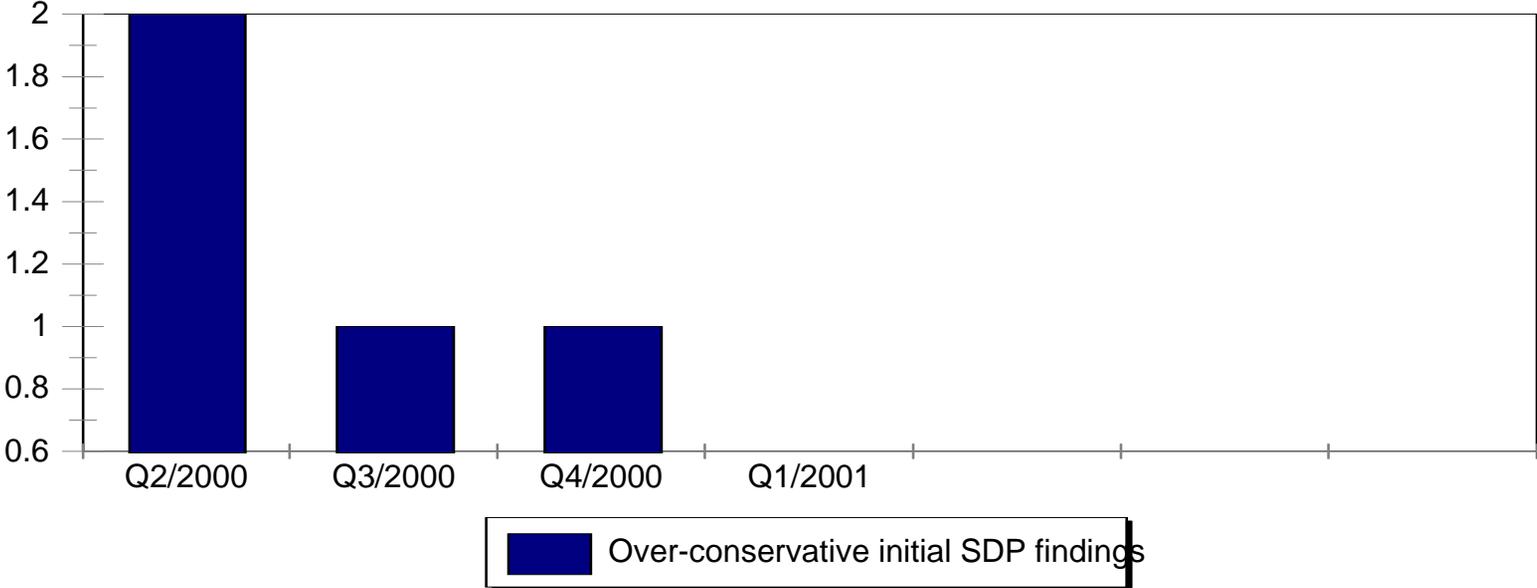
ROP INITIATIVES/STATUS

- **Significance Determination Process**
 - **Stakeholder Feedback on SDP Impact Generally Positive**
 - **Phase 2 Notebooks Being Issued**
 - **Revisions to Safeguards SDP for OSRE Findings**
 - **Operator Requal SDP Issued**
 - **Developing Improvements to Fire Protection SDP**
 - **ALARA SDP**
 - **Enhancing regional Risk Analysis Expertise**

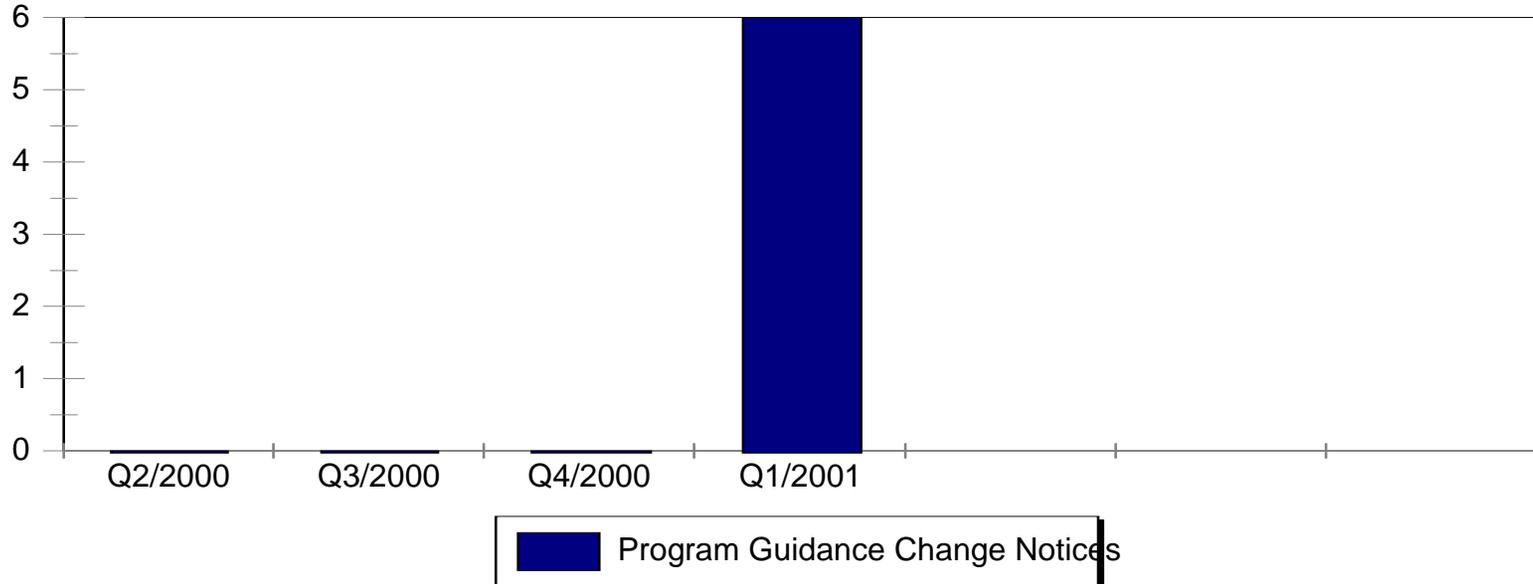
Licensee Accepts SDP Results



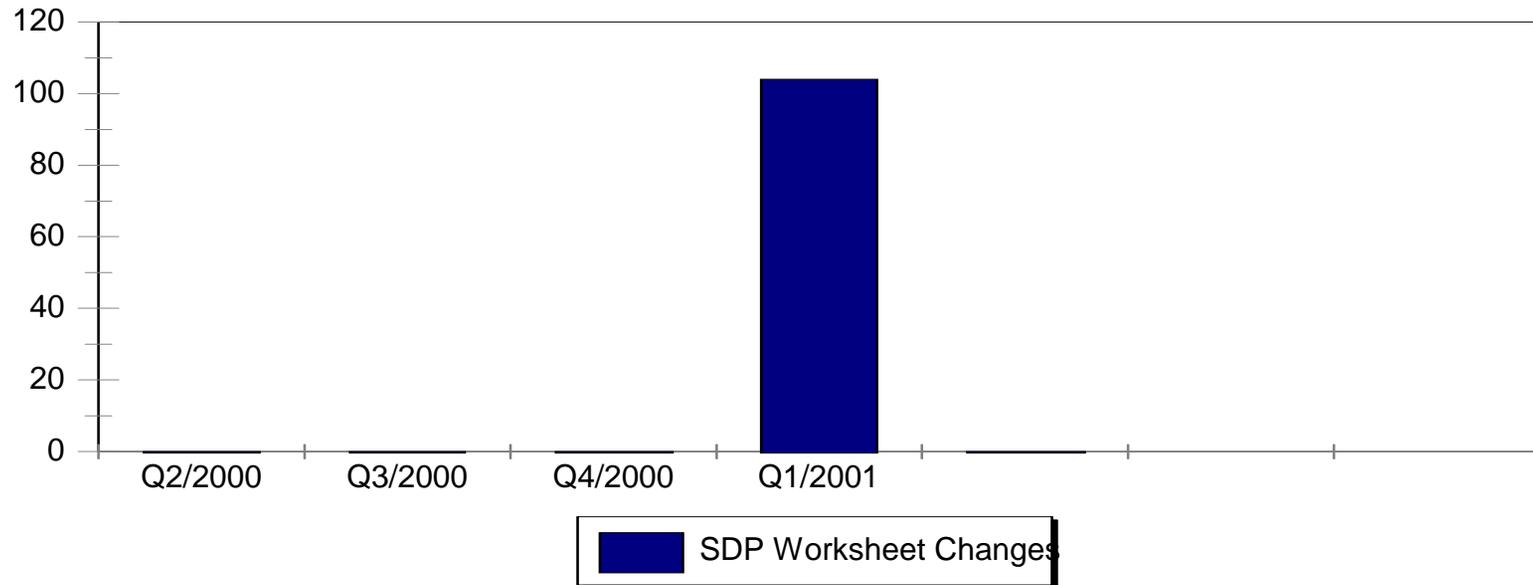
SDP Focuses NRC and Licensee Attention on Safety-Significant Issues



Standards and Processes Remain Stable Over Time



Standards and Processes Remain Stable Over Time

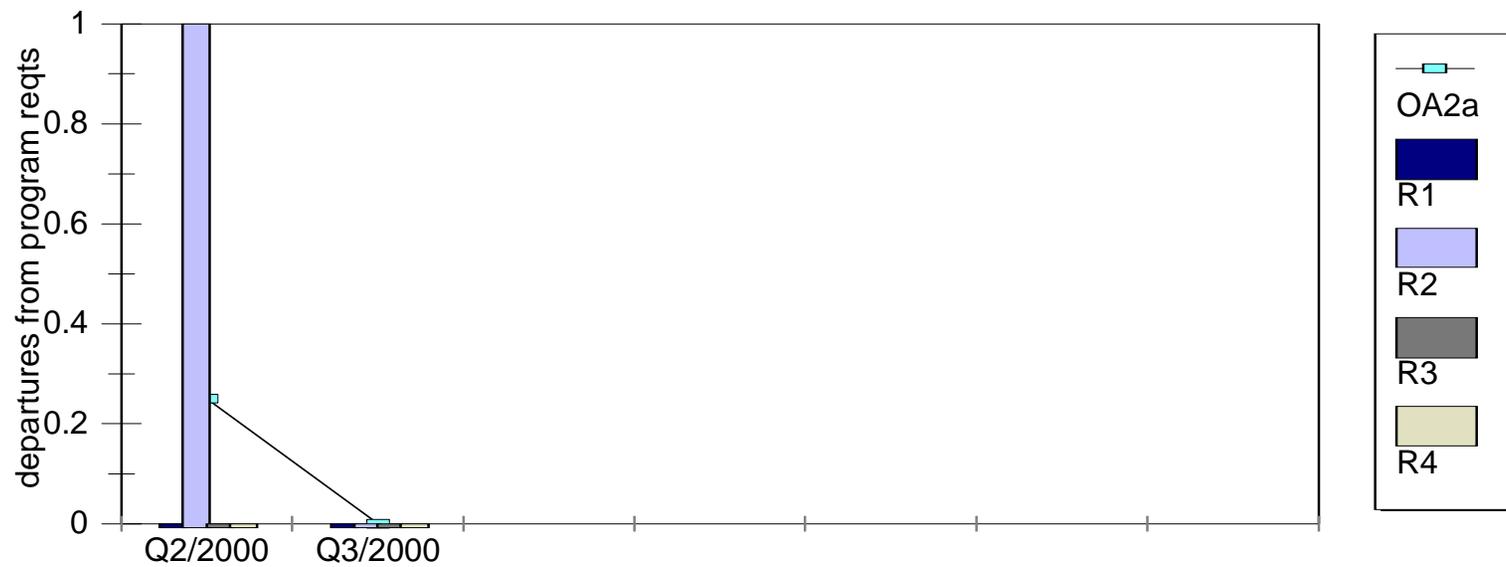


ROP INITIATIVES/STATUS

- **Assessment/Enforcement**

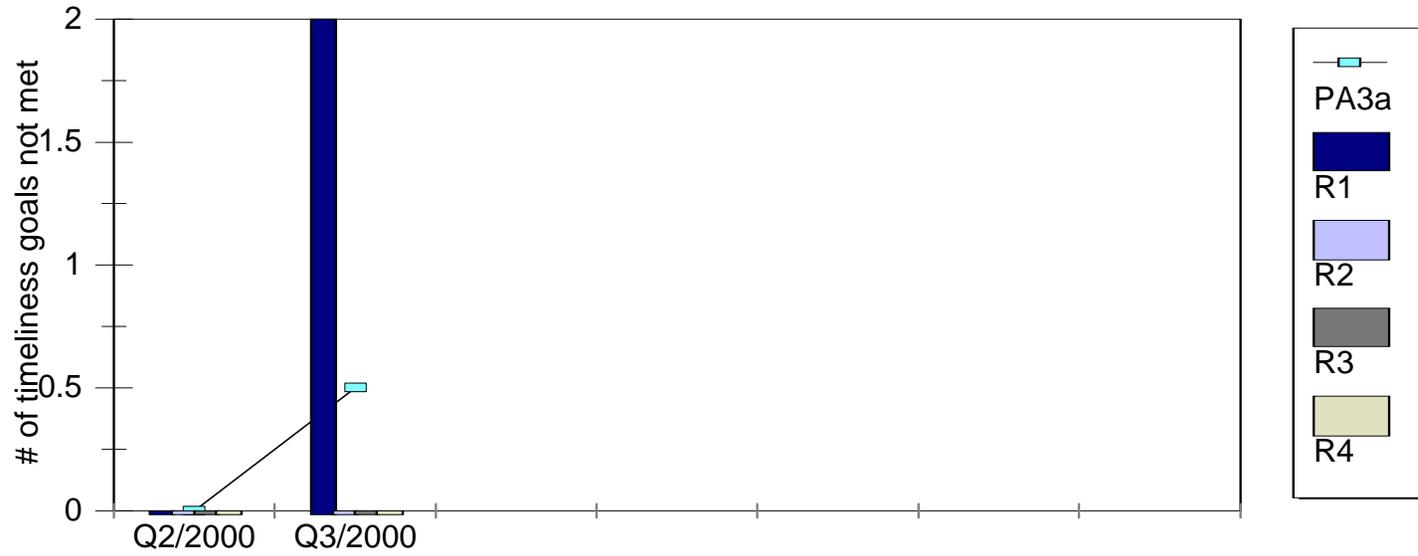
- **Mid-cycle Assessment For All Plants Completed Early November 2000**
- **Considering Shifting to Calendar Year Assessment/Inspection Planning Cycle**
- **Revising IMC 0305, “Assessment Program”**
- **Developing MD For Conduct of AARM**
- **OE Coordination Issues**

Self-Assessment Metrics Assessment Program



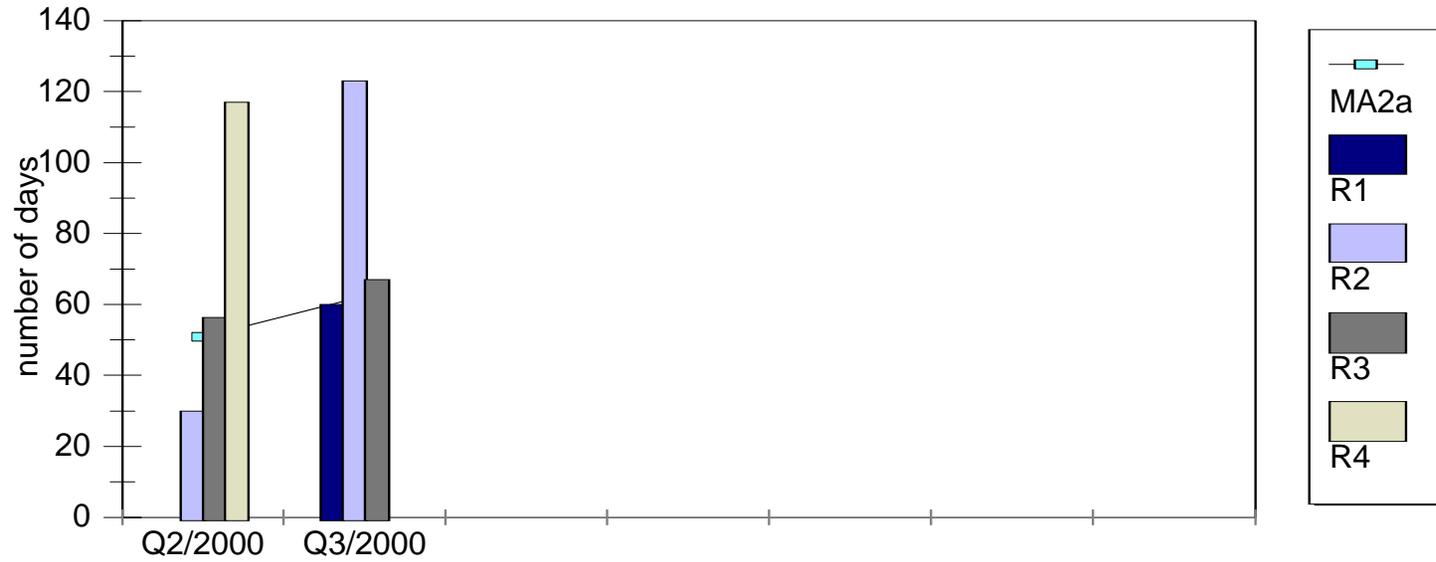
Departures from Requirements of Assessment Program Guidance

Self-Assessment Metrics Assessment Program



Assessment Program Timeliness Goals

Self-Assessment Metrics Assessment Program



Timeliness in Inspecting a Risk-Significant Issue

Plant Performance by Action Matrix column after CY 3Q/2000				
Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
All others	Calvert Cliffs 1	Farley 2	Indian Point 2	None
	Fitzpatrick	Kewaunee		
	Ginna	Quad Cities 1		
	Peach Bottom 2 and 3	Millstone 2		
	Salem 1 and 2			
	Crystal River 3			
	Farley 1			
	Shearon Harris			
	Oconee 1			
	Palisades			
	Quad Cities 2			
	Palo Verde 3			

	Plant Performance by Region				
	Licensee Response Column	Regulatory Response Column	Degraded Cornerstone Column	Multiple/Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
RI	17/26 (65%)	7/26 (27%)	1/26 (4%)	1/26 (4%)	0/26
RII	27/32 (84%)	4/32 (13%)	1/32 (3%)	0/32	0/32
RIII	19/23 (83%)	2/23 (9%)	2/23 (9%)	0/23	0/23
RIV	19/20 (95%)	1/20(5%)	0/20	0/20	0/20
Total	82/101 (82%)	14/101 (14%)	4/101 (3%)	1/101 (1%)	0/101

* This chart does not include DC Cook units 1 and 2.

ROP INITIATIVES/STATUS

- **Industry Trending and Risk-Based Pls**
 - **Strategic Plan Goal of No “Statistically Significant Adverse Trends” in Industry Safety Performance**
 - **Continuing ex-AEOD Pls**
 - **Accident Sequence Precursors**
 - **Trending ROP Pls and Inspection Findings**
 - **NRR/RES Examining Feasibility of Risk-Based Pls**

ROP INITIATIVES/STATUS

- **Commission Paper Key Milestones**

- **Ongoing Communication Efforts**
- **Public Comment FRN Issued - December 2000**
- **Internal Stakeholder Survey - January 2001**
- **Internal Lessons Learned Review - January to March 2001**
 - **focus groups**
- **External Lessons Learned Workshop - March 26-28, 2001**
- **End of Cycle Reviews - Early May 2001**
- **Agency Action Review Meeting - May 29-31, 2001**
- **Commission Paper - June 29, 2001**
- **Commission Briefing - July 2001**

FOCUS GROUPS

- **Unavailability PI**
- **Fire Protection**
- **Maintenance Effectiveness**
- **PI&R Approach**
- **Safety System Design Inspection Approach**
- **Occupational Radiation Safety Cornerstone Issues**
- **Physical Protection Cornerstone Issues**
- **Communicating Inspection Results**
- **Assessment**
- **Inspection Program Flexibility/Resources**
- **Cross-Cutting Issues**

PPEP RECOMMENDATIONS

- **“Prior to Initial Implementation” Items Completed/Addressed by SECY 00-49**

- **Develop process for handling PI reporting inaccuracies**
- **Develop SDPs for remaining reactor issues**
- **Develop procedure for deviations from Action Matrix**
- **Improve process for providing data to public**
- **Update NUREG-1649**

PPEP RECOMMENDATIONS (Cont'd)

- **“After Initial Implementation” Items Completed or Underway**
 - **Conduct Required PI Verification Inspections**
 - **Resolve Issues with Selected PIs:**
 - **Emergency Preparedness**
 - **Security Equipment Performance Index**
 - **Containment Integrity**
 - **Siren Notification Systems**
 - **Ensure Program Effectiveness not Measured by Resource Utilization Alone**

PPEP RECOMMENDATIONS (Cont'd)

- **Significant Events Should be Evaluated for Program Effectiveness Insights**
- **ROP Basis Document**
- **Process for Ongoing Confirmation of Program Assumptions**

SRM RECOMMENDATIONS

- **Convene FACA Panel for Initial Implementation**
- **Minimize Deviations from Action Matrix**
- **Solicit and Address Staff Concerns**
- **Communicate the Importance of the Licensee's CAP**

SRM ISSUES OF NOTE

- **Cross Cutting Issues & Programmatic Breakdowns**
 - **Threshold for Documenting Observations**
 - **Strong Link to Significant Inspection findings or Degraded PIs**
 - **Report Every Case of Enhanced NRC Action**

- **Performance Issues Outside Licensing and Design Basis**
 - **Continue to Work with Industry**
 - **Discuss in Future Commission Report**

SIGNIFICANCE DETERMINATION PROCESS

Successes/Stengths

- Clearly articulates significance of inspection findings
- Provides a repeatable process
- Phase 1 is a simple screening tool
- Limited number of phase 2 & 3
- Focuses inspection hours on risk significant system

Areas for Improvement/Weakness

- Phase 2 worksheets have not been provided
- Quality of licensee/NRC PRAs tools vary
- Containment/Shutdown SDPs lack guidance
- Fire SDP is difficult to apply
- Phase 3 evaluations are time consuming
- Public availability of information