

COMMISSION BRIEFING SLIDES

**BRIEFING ON RESULTS OF REACTOR
OVERSIGHT PROCESS INITIAL IMPLEMENTATION**

JULY 20, 2001

Results of Initial Implementation Reactor Oversight Process



**Commission Briefing
July 20, 2001**

Introduction

- **Background**
- **Feedback and self-assessment activities**
- **Results**
- **Lessons learned**
- **Resources**
- **N+1**
- **Conclusions**

Background

- **August 1998**
 - **Concept Development began**
- **November 1999**
 - **Six Month Pilot completed**
- **April 2000**
 - **ROP Initial Implementation began**
- **July 2001**
 - **Provided results of ROP Initial Implementation (SECY-01-0114)**

Feedback and Self-assessment Activities

- **Internal and External Feedback Activities**
- **Self-assessment Activities**
- **Oversight Activities**
 - *IIEP*
 - *ACRS*

Overall Results

- **Exercised the process**
- **Improvement over previous process**
- **Has achieved Commission goals**
- **Consolidate gains and move forward**

Overall Results

Inspection Findings

April 2000 to March 2001

22 Findings (White or Greater) processed by SERP

<u>Cornerstone</u>	<u>White</u>	<u>Yellow</u>	<u>Red</u>
Initiating Event			1
Mitigating Systems	6	3	
Barrier Integrity			
Emergency Preparedness	5		
Public Radiation Safety	1		
Occupational Radiation Safety	5		
Physical Protection	1		

Overall Results

Performance Indicators

January 2000 to March 2001

<u>Cornerstone</u>	<u>White Threshold Crossed</u>	<u>Yellow Threshold Crossed</u>
Initiating Events	7	-
Mitigating Systems	21	1
Emergency Preparedness	6	1
Barrier Integrity	2	1
Occupational Radiation Safety	1	-
Public Radiation Safety	-	-
Physical Protection	4	1

Overall Results
Plant Performance Summary
April 2000 to March 2001

<u>Action Matrix Column</u>	<u>Number of units</u>
Licensee Response	67
Regulatory Response	28
Degraded Cornerstone	5
Multiple/Repetitive Degraded Cornerstones	1
Unacceptable Performance	None

FEEDBACK

Internal Stakeholders

- **Generally positive**
 - Provides assurance plants are operated safely
 - Objective and risk informed
 - Improvement over previous process
- **Progress compared to 1999 survey**
- **Areas Warranting Continued Attention**
 - Ease of use of SDP
 - Timely handling of feedback

FEEDBACK

External Stakeholders

- **Majority generally positive**
 - Increased predictability of agency actions
 - More objective and understandable
- **Areas warranting attention:**
 - Performance Indicator refinement
 - SDP slow, complex, burdensome
- **Diverse Perspectives**
 - ROP step backward, poorly focused
 - ROP will not identify declining performers

Self-Assessment Metrics

- **Process:**
 - Provide systematic approach to evaluating key aspects of ROP
 - Uses input from feedback, RPS, Audits
 - Results provided in quarterly updates & annual report
- **Results:**
 - More objective, risk-informed, understandable and predictable
 - More data/time required to assess remaining criteria
 - Current results were factored into ROP self-assessment
 - Process refinement is likely

Lessons Learned:

Inspection Program

- **Successes:**
 - **Identifies significant safety issues**
 - **Greater focus on risk important areas**
 - **Near 100% completion of the program**
- **Improvement Areas**
 - **Documenting basis for significance of findings**
 - **Significant changes to some inspection procedures (IPs)**
 - frequency, scope, level of effort
 - **Dealing with inspections/findings unrelated to risk**

Lessons Learned: *Inspection Program*

- **Actions:**
 - Inspection Reports (IMC 0610*)
 - Continue evaluating and revising
 - Examples
 - Significant changes to some IPs
 - ISI, PI&R, MR
 - Physical Protection
 - ALARA
 - Evaluate the potential use of licensee self-assessments

Lessons Learned:

Performance Indicators

- **Successes:**
 - Improved performance
 - Meaningful insights on performance
 - Fewer accuracy concerns than anticipated
- **Improvement Areas**
 - SCRAM and unplanned power changes
 - Safety System Unavailability

Lessons Learned:

Performance Indicators

- **Actions:**
 - **Piloted replacement PI for SCRAM**
 - **Potential replacement for Unplanned Transients PI**
 - **Standard definition for SSU**

Lessons Learned:

Significance Determination Process

- **Successes:**
 - Improved inspector awareness of plant specific risk
 - Focus agency and licensee resources
 - SRA program provided risk analysis support
- **Improvement Areas**
 - More timely assessment for findings greater than **Green**

Lessons Learned:

Significance Determination Process

- **Improvement Areas (continued):**
 - **Complexity of SDP**
 - fire protection
 - reactor safety
 - safeguards
 - shutdown risk
 - containment SDP
 - **Benchmarking SDP Phase 2 Worksheets**

Lessons Learned:

Significance Determination Process

- **Actions:**
 - **Timeliness**
 - Fewer Phase 3 evaluations because of Phase 2 notebooks
 - Improve the Significance and Enforcement Review Panel (SERP) process
 - More realistic goals where applicable
 - **Complexity**
 - BNL developing Phase 2 for shutdown
 - New safeguards SDP
 - Improving tools for assessing fire scenarios
 - SDP instructional aids
 - **Benchmarking**
 - Continue to upgrade Phase 2 notebooks

Lessons Learned:

Enforcement

- **Successes:**
 - Actions more predictable
 - Actions not driving assessment
- **Improvement Areas:**
 - Timeliness and communicating results of SDP and enforcement process
 - Maintenance Rule issues
- **Actions:**
 - Make SDP more timely
 - Suspend MR panels

Lessons Learned: *Assessment*

- **Successes:**
 - NRC actions more predictable
 - Improved objectivity
 - Assessment meetings improve efficiency
- **Improvement Areas:**
 - Historical findings
 - No color findings
 - Dwell time for inspection findings

Lessons Learned: *Assessment*

- **Actions:**

- Improve guidance regarding treatment of historical issues
- Evaluate graded reset for inspection findings
- Develop program modifications to address no color findings

Resources

Overall Results

- **Actual expenditures compare favorably with estimates**
- **Expenditures slightly greater than prior to initial implementation**
 - Actual expenditures for 52 weeks following start of initial implementation were slightly greater than 52 weeks prior
 - Comparisons are problematic

Resources

Conclusions

- **Premature to implement further reductions**
- **Areas targeted for future efficiencies**
 - elimination of start-up costs
 - implementation of quarterly inspection reports
 - SDP savings
 - identification of direct inspection activities that warrant reduced inspection
- **Additional factors exist that may impact resource needs**
 - institutional inefficiencies in implementing “N”
 - inefficiencies due to increases in vacancies filled at entry level
 - potential areas warranting additional resources (ISFSI)

Transition from “N+1” to “N”

- **Agency has essentially transitioned to “N”**
 - Assistance provided to complete baseline inspections at multi-unit sites @ “N”
 - Potential challenges for unique sites
 - Overall impact on resident inspection program not fully known
 - Maintaining site coverage
 - Reduced opportunities for training and professional development

Transition from “N+1” to “N”

- **Actions:**

- Consider allocation of additional regional resources for unique multi-unit sites
- Develop metrics to measure resident inspection program quality attributes

Conclusions

- **ROP has met goals established by the Commission**
- **Continue to address lessons learned from initial implementation**
- **Continue periodic self-assessments to identify areas for improvement**
- **Identify additional resource efficiencies**



Industry Views on the Reactor Oversight Process

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IIEP Process

- Effective vehicle for addressing divergent views and reaching consensus
- Constructive dialogue provided for sound recommendations
- Industry agrees with overall recommendations and conclusions



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Key Areas for Improvement

- Need for periodic assessment of program effectiveness
- Parity of significance of thresholds in PIs and SDPs
- Resolve inconsistencies among unavailability definitions
- Graded approach for resetting inspection findings in Action Matrix



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Key Areas for Improvement

- Consideration of licensee self assessments in inspection planning and scope of inspections
- Refine following SDPs
 - Fire Protection
 - Security
 - ALARA



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Conclusions

- First year of implementation exceeded expectations
- Program meets agency objectives
- Industry committed to making process work:
 - corrective action
 - self assessment
- Well defined process for further enhancements to program

