

# RIC 2003

## Reactor Oversight Process, Session W5

### Past Insights and Future Challenges

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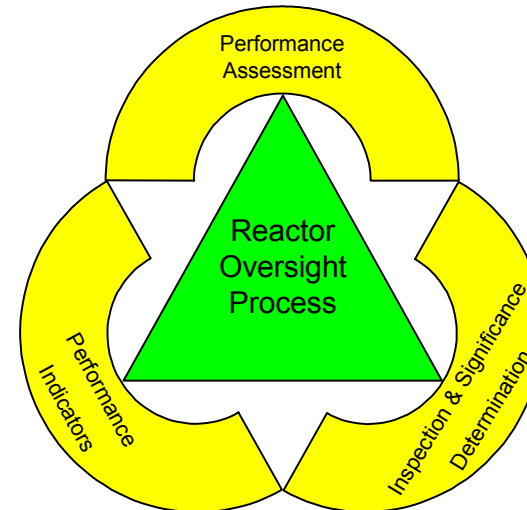
# United States Nuclear Regulatory Commission

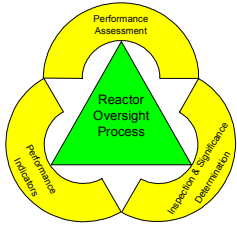
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## REACTOR OVERSIGHT PROCESS (ROP)

### Past Insights and Future Challenges

- Inspection
- Performance Indicators
- Performance Assessment
- Significance Determination Process





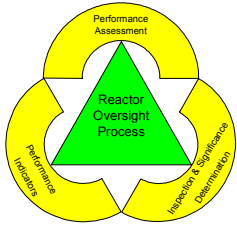
# ROP - Past Insights and Future Challenges

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## Performance Indicators (PI)

### Accomplishments

- Completion of Mitigating Systems Performance Index (MSPI) pilot with 11 licensees
- Continuing to develop thresholds for Industry Performance Indicators



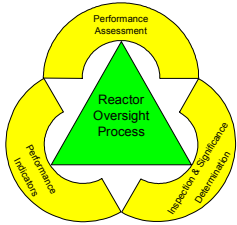
# ROP - Past Insights and Future Challenges

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## Performance Indicators

### Challenges

- Mitigating Systems Performance Index
- Concern over whether the PIs provide an adequate indication of declining safety
- Enhance current or develop new ROP Performance Indicators
  - Barrier Integrity
  - Safety System Unavailability
  - Reactor scram with loss of normal decay heat removal
- Industry Initiating Event Performance Indicator (IIEPI)



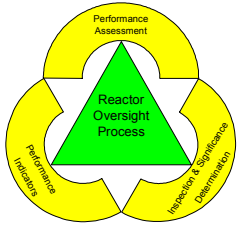
# ROP - Past Insights and Future Challenges

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## Inspection

### Accomplishments

- Issued IMC 0612, “Power Reactor Inspection Reports”
- Efficiency Focus Group
- Developed self-assessment performance metrics



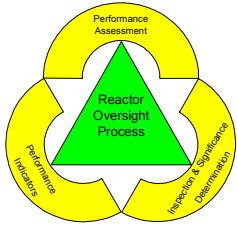
# ROP - Past Insights and Future Challenges

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## Inspection

## Challenges

- Credit for licensee self-assessment
- Regional Assessments
- Integrate and revise Physical Protection Cornerstone inspection area
- Resource challenges for completing baseline inspection program (CY02/CY03)



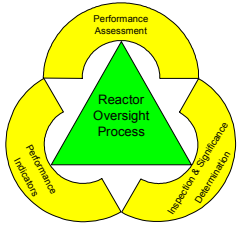
# ROP - Past Insights and Future Challenges

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## Significance Determination Process

### Accomplishments

- SDP Improvement Initiatives
- Revised existing SDPs
- Benchmarking of Phase 2 notebooks
- SDP active issues matrix
- SDP Task Group



# ROP - Past Insights and Future Challenges

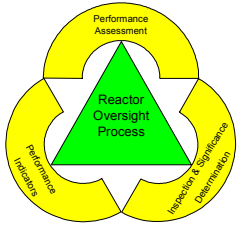
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## Significance Determination Process

### Challenges

- Implement SDP Task Group recommendations
- Improve existing or develop new SDP's
  - fire protection
  - shutdown risk
  - S/G tube integrity and containment
- Improve SDP timeliness (<90 days)





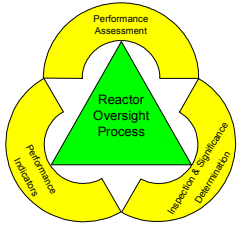
# ROP - Past Insights and Future Challenges

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## Assessment

### Accomplishments

- Clarification of old design issues
- Clarification of IMC 0305 for Multiple/Repetitive Degraded Cornerstone plants
- Thresholds for substantive cross-cutting issues



## ROP - Past Insights and Future Challenges

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### **Assessment**

### Challenges

- Evaluate treatment of substantive cross-cutting issues
- Enhance IMC 0350, Oversight of Shutdown Reactors with Performance Problems
- Enhance ability to detect declining performance in a timely manner (e.g., reactor vessel head degradation at Davis-Besse)