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Institute of Nuclear Power Operations


Operator Performance: INPO Perspectives

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Subjects:


- **Licensed Operator - Requal**
 - Insights from Accreditation and Assistance Activities
- **Focus on Operator Fundamentals**
 - Crew Performance Evaluations
 - Training initiatives Focused on Fundamentals
 - Results



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Licensed Operator Requal:

- **Accreditation Team Visits**
 - Evaluate LOR program construct, oversight, and execution
 - Exam author peers on targeted OPS ATVs
 - Review requal to criteria of:
 - ACAD 07-001, "Guidelines for Continuing Training of Licensed Personnel" and
 - ACAD 07-002, "Guidelines for Simulator Training"
 - Also evaluate shift manager and shift technical advisor training



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Licensed Operator Requal:

- **Accreditation Team Visit insights:**
 - Seeing overall improvement over past several years in written exam question quality
 - Most written exam question gaps identified are with direct look-up and cognitive level
 - Increasing training “volume” pressure
 - Better application and more innovations in use of just-in-time training



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Operator Fundamentals



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What are Operator Fundamentals?

- Closely monitoring plant conditions
- Precisely controlling plant evolutions
- Having a bias toward conservatism
- Working effectively as a team
- Having a solid understanding of plant design and theory



IER 11-3, Weaknesses in Operator Fundamentals

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Event Trends:

- **INPO tracks events associated with operator fundamentals**
 - A rising trend in 2009-2010 led to Industry Event Report (IER) Level 1 issued in 2011
 - Resulted in changes to INPO and industry approach to operator fundamentals in the line and in training



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Industry/INPO Actions – INPO IER 11-3

- **Operations - Evaluation Cornerstone:**
 - Improved Crew Performance Evaluation, more Realistic, Drive Deeper, Get Broader Sampling
 - Improved Industry Performance Monitoring
- **Training – Accreditation Cornerstone:**
 - Training Focus on Operator Fundamentals
 - Improved Training and Evaluation Techniques



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Event Trends:

- **Since implementing a renewed focus on operator fundamentals, early results are encouraging:**
 - Event occurrence rates reduced by about 40 percent in 2012 for transients and reactor trips associated with operator fundamentals
 - Significant events occurrence rates were reduced to 0 in 2012



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