



**USNRC**  
United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

## **Licensed Operator Performance and Regualification Issues**

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U.S. Nuclear Regulatory Commission

Regulatory Information Conference  
March 15, 2012

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### **Overall Assessment**

- **Industry-wide Operator Performance good**
  - Dual Unit scrams
  - Loss of Offsite Power events
  - Earthquakes
  - Hurricanes
  - Transformer failures

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### **Areas to be covered:**

- **Operator Performance Issues identified in Special Inspections**
  - Command and Control
  - Conduct of Operations
  - Procedure Compliance
  - Conservative Decision Making
- **Regualification Issues**
  - Emergency Response Activation
  - Quality of Regualification Examinations
  - Need to Revise IP 71111.11

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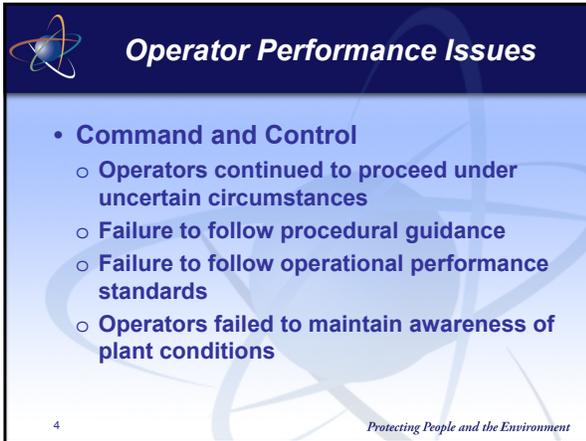
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**Operator Performance Issues**

- **Command and Control**
  - Operators continued to proceed under uncertain circumstances
  - Failure to follow procedural guidance
  - Failure to follow operational performance standards
  - Operators failed to maintain awareness of plant conditions

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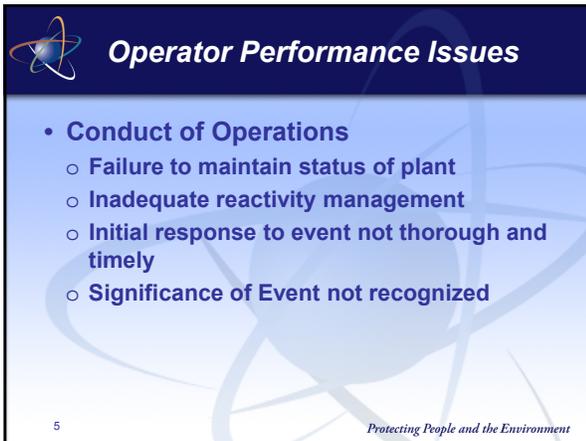
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**Operator Performance Issues**

- **Conduct of Operations**
  - Failure to maintain status of plant
  - Inadequate reactivity management
  - Initial response to event not thorough and timely
  - Significance of Event not recognized

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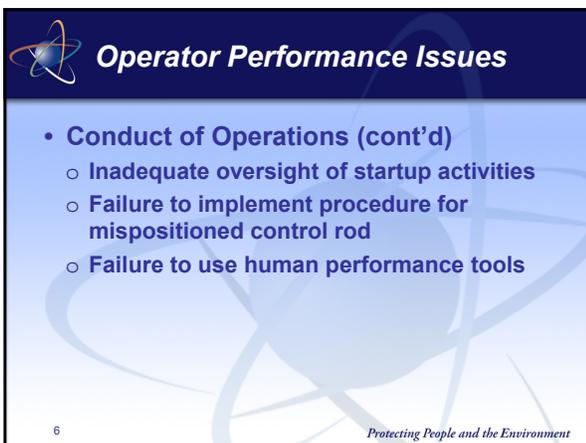
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**Operator Performance Issues**

- **Conduct of Operations (cont'd)**
  - Inadequate oversight of startup activities
  - Failure to implement procedure for mispositioned control rod
  - Failure to use human performance tools

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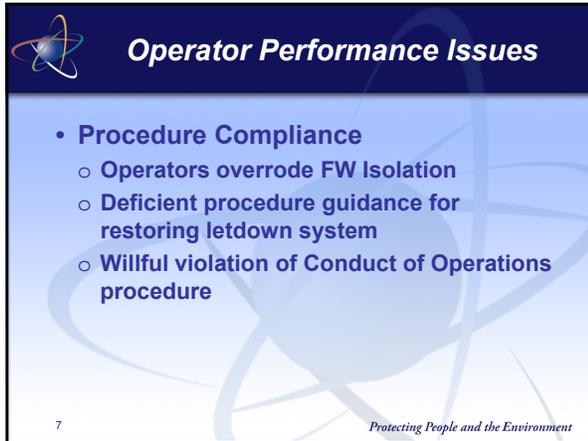
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**Operator Performance Issues**

- **Procedure Compliance**
  - Operators overrode FW Isolation
  - Deficient procedure guidance for restoring letdown system
  - Willful violation of Conduct of Operations procedure

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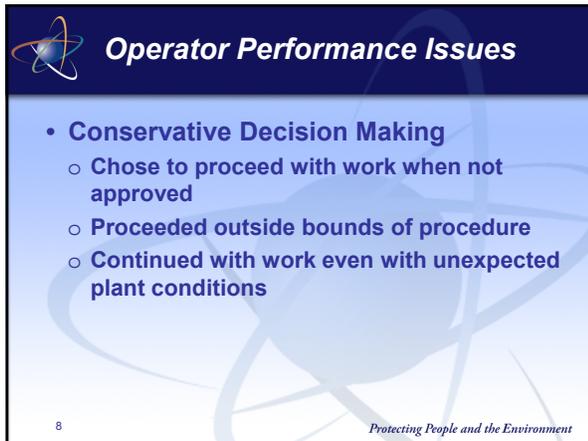
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**Operator Performance Issues**

- **Conservative Decision Making**
  - Chose to proceed with work when not approved
  - Proceeded outside bounds of procedure
  - Continued with work even with unexpected plant conditions

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**Requalification Issues**

- **Failure to detect inadequate Emergency Response capability**
  - Programmatic weaknesses – should have been identified in Requal training
    - Untimely augmentation of plant personnel
    - Inadequate training for Control Room Site Emergency Coordinator
    - Inadequate training for the Control Room Emergency Communicator

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### Requalification Issues

**Examination Quality Observations by NRC staff**

- Appears that written and operating exam quality is declining
- Simulator scenarios less challenging
- Written exam level of difficulty near low end
- Fundamental error prevention techniques not being reinforced consistently

**Ultimately – An increase in human performance errors**

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### Need to Revise IP 71111.11

- Added additional inspection hours for the quarterly control room observations
- Enhanced PI&R section
- Revised SDP

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### Final Message

- The NRC has noted some lapses in operator fundamental skills that have contributed to complications in plant event response
- The Operator Requalification program should address these lapses
- Lets not let our guard down

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