

Principles of Nuclear Safety

Module 8

Operating Policies & Principles (OP&P)

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Purpose of OP&P

- ◆ to define the boundaries for plant operation, maintenance and modification
- ◆ to keep public risk acceptably low

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Three Types of OP&P Boundaries

- 1) Limits on authority of authorized positions
 - ensures adequate defense in depth
- 2) Assumptions of the Safety Analysis
- 3) Recognized good operating practices based on conservative reactor safety principles and industry operating experience

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OP&P Violations

- ◆ Must never occur intentionally
- ◆ Must be formally reported to the AECB
- ◆ Potentially put the plant into an unanalyzed, unsafe state
- ◆ When an OP&P violation is discovered:
 - *the affected system is to be placed in known safe state using procedures approved by the Manager, or the reactor placed in safe shutdown state*

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SS Responsibilities

- ◆ Ensure strict OP&P compliance
- ◆ Communicate his expectations to the crew
- ◆ Bear OP&P in mind when authorizing O&M
- ◆ Ensure safety features credited in safety report are disabled only with compensating, AECB approved safeguards
- ◆ Know & observe the limits of SS authority

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CRO Responsibilities

- ◆ Observe OP&P constraints featured in operating instructions
- ◆ Notify the SS immediately upon discovering OP&P non compliance

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Possible Consequences of OP&P Non Compliance

- ◆ Plant in unanalyzed, unsafe state
 - transients might cause accidents
 - mitigation capability may be impaired
- ◆ Decreased defense in depth on change control and critical O&M authorization
- ◆ Inferior operating practices increase nuclear safety risk