

Principles of Nuclear Safety

Module 10

AUTHORIZATIONS & APPROVALS

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Generic Constraints on Approvers

Approvers of actions and documents must ensure consistency with:

- ◆ their approval limits of authority
- ◆ laws, codes & standards
- ◆ design assumptions and intent
- ◆ established O&M practice

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Role & Authority of AECB

Role: Under the auspices of the Atomic Energy Control Act, to ensure an adequate standard of nuclear safety

Authority to:

- grant PROL and revoke it in event of non compliance
- approve changes affecting safety analysis--eg, changes to special safety systems, minimum complement, fuel design,...
- approve changes to OP&P, Radiation Protection Regulations
- issue binding directives to Utility
- require notification of abnormal events and performance reporting
- make regulations governing the application of atomic energy

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Role & Authority of Operations Manager

- ◆ Ensures that station policies, facilities, programs, organization, resources, and training suffice to support operational excellence and compliance with PROL
- ◆ Communicates expectations to station staff
- ◆ Approves certain O&M activities and changes with potential to jeopardize public safety and holds GSS
- ◆ Sponsors performance monitoring, audits and follow-up
- ◆ Cannot authorize departures from OP&P

Authority limited to ensure operation within safe operating envelope, maintain adequate defense in depth, and ensure proper accountability to AECB

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Role & Authority of SS

- ◆ Senior supervisor, senior license, senior technical resource, and Operations Manager's representative on shift
- ◆ Ensures O&M activities are properly authorized, and comply with PROL and OP&P
- ◆ Assesses upsets, declares alerts/radiation emergencies, and directs response
- ◆ Approves deviations from O&M procedures, jumpers
- ◆ Cannot approve deviations from PROL or OP&P

Authority limited because SS does not have on-shift capability to analyze safety impact of proposed changes to plant configuration

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How the SS Ensures that all O&M has the Proper Authorization

- ◆ Ensures that staff are qualified, and know their R&R and the limits of their authority
- ◆ personally approves deviations, within OP&P and PROL boundaries
- ◆ Approves maintenance on safety related systems
- ◆ Approves critical operations--eg, resetting reactor trips, power increases
- ◆ Obtains approval of Manager/AECB as required

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Role & Authority of SOS

- ◆ Supervises Operators, including ANOs
- ◆ Monitors unit operation on behalf of SS
- ◆ Obtains approval for deviations from approved procedures from SS
- ◆ Second most senior license on shift
- ◆ Takes over if SS becomes incapacitated

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Role of ANO

- ◆ Gives work direction to Field Operators and SCPOs
- ◆ Operates unit, tests systems per approved procedures
 - personally monitors and responds to alarms
 - executes or directly supervises all panel operations
- ◆ Reports abnormal conditions to SOS/SS
- ◆ Issues work protection and maintenance authorizations

Authority more limited than the SS's to ensure adequate defense in depth for implementing changes and key O&M activities, especially as the SS has the overview of the whole station.

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