

# *Principles of Nuclear Safety*

## *Module 10*

### **AUTHORIZATIONS & APPROVALS**

Slide 1

#### *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

Slide 2

## *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

Slide 3

## *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

<p><b>Authority limited to ensure operation within safe operating envelope, maintain adequate defense in depth, and ensure proper accountability to AECB</b></p>
--

Slide 4

## *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**

Slide 5

## *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

Slide 6

## *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

Slide 7

## *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

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

Slide 8