

United States Nuclear Regulatory Commission

Protecting People and the Environment

#### Safety and Regulatory Issues to Address When Considering Nuclear Energy

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#### Outline

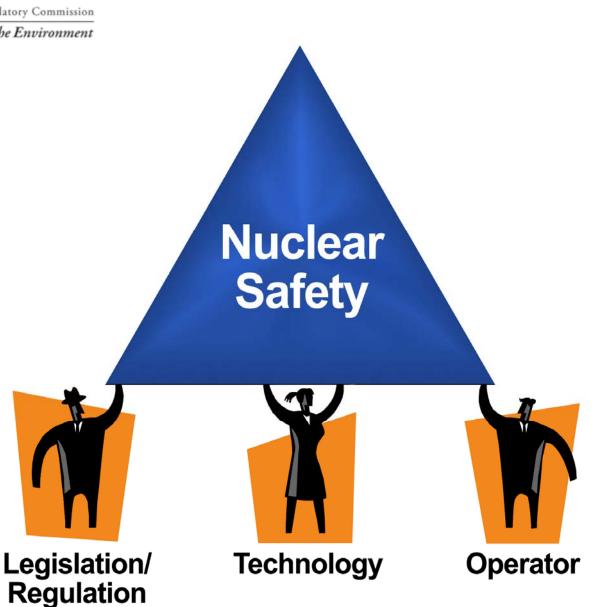
- Essential elements of a nuclear energy program
  - Legislative authorization
  - Clear regulatory framework & a capable regulator
  - Capable operator
- Overview of the U.S. Nuclear Regulatory Commission



# **Nuclear Energy Program**

- Demanding, uncompromising technology
- 100+ year commitment
- Requires
  - Established legislative and regulatory framework
  - -Independent regulator of safety
- Ultimate responsibility for safety resides with licensee/operator







# The Independent Regulator of Safety

- Has ability to carry out its mission
  - -Authority
  - -Technical competence
  - -Resources
    - Staffing
    - Funding



Independent from promotion



### The Regulator – Duties

- Setting Standards
- Licensing or Permitting
- Inspection and monitoring
- Enforcement
- Coordination with other bodies
- Supplying information to the public



#### The Capable Operator

 Bears the primary burden of ensuring that its operations and activities meet safety, security, and environmental protection requirements



- May only do that which is permitted
- Maintains adequate technical & financial resources
- Reports required information to regulator



# **Other Considerations**

 Incorporating international guidance documents or foreign law provisions into national legislation





- Stakeholder involvement
- Safety Culture



#### Overview of the U.S. Nuclear Regulatory Commission





#### NRC's Mission

License and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.











# NRC's Principles of Good Regulation

# IndependenceEfficiencyOpennessClarity

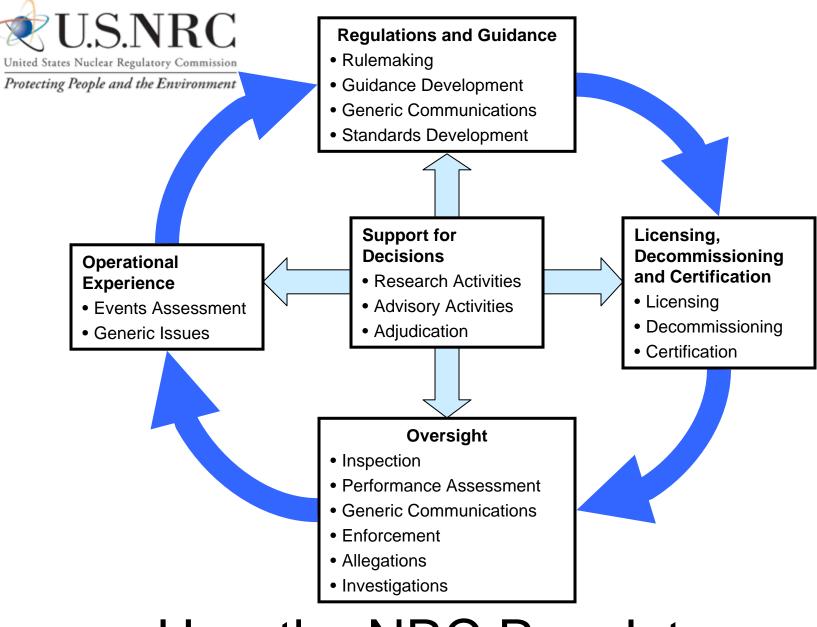
Reliability



# NRC Regulates:



- 104 commercial nuclear power plants
- Over 45 uranium fuel facilities
- Approximately 5,000 large and small users of nuclear material for industrial, medical, or academic purposes
- Radioactive waste storage and disposal
- Containers used in the transportation of radioactive fuel
- Decommissioning of nuclear facilities



#### How the NRC Regulates