
OVERVIEW OF THE NRC'S REGULATORY OVERSIGHT OF STEAM GENERATORS

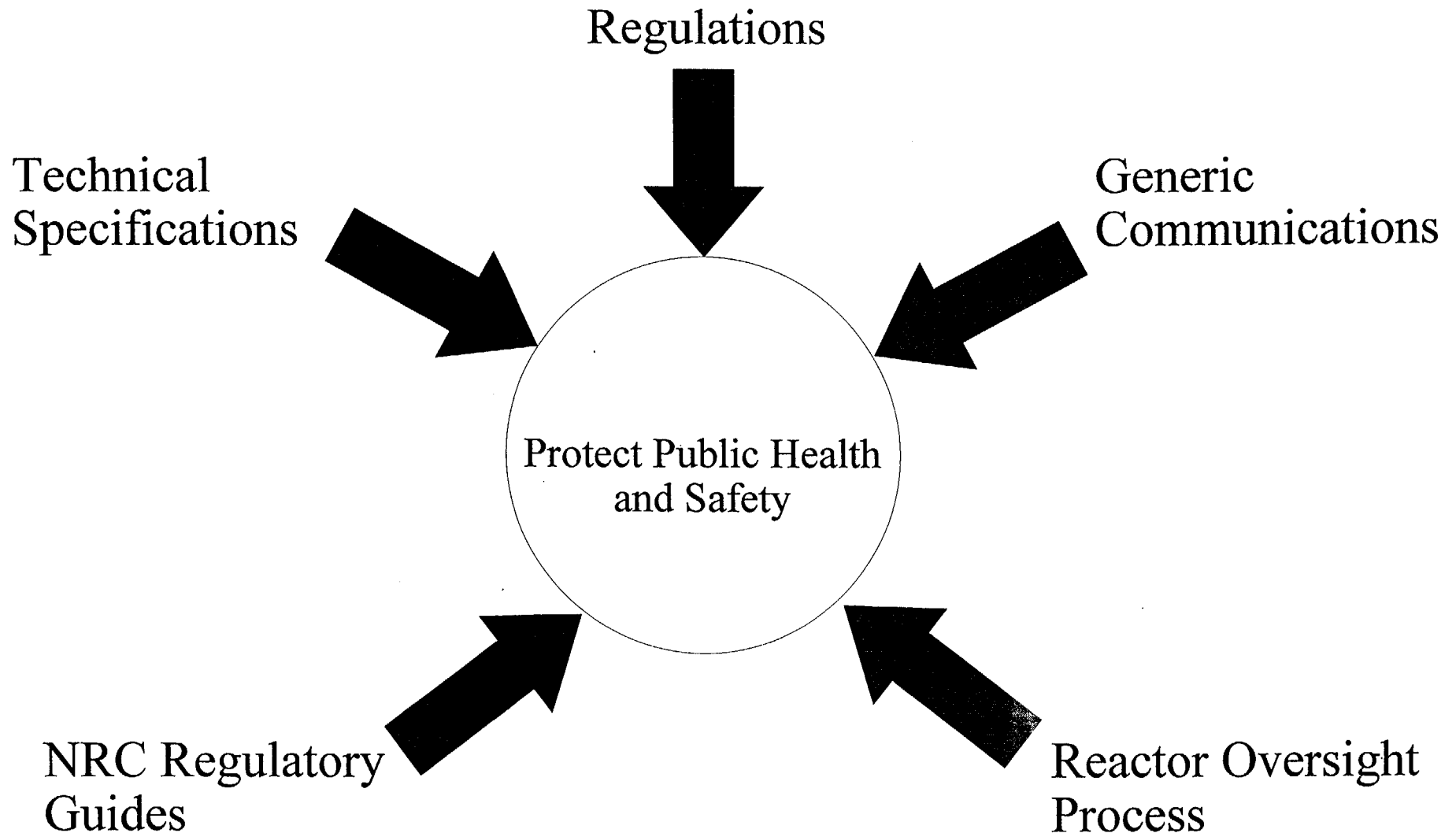
Public Meeting
August 16, 2001
Hampton Inn
Pennsville, NJ

Regulatory Framework

Statutory Authority

- **Congressionally Mandated Oversight Role**
 - ▶ The Atomic Energy Act of 1954, as amended
 - ▶ Energy Reorganization Act of 1974
 - **The Atomic Energy Act (as amended) gives the NRC the authority to issue operating licenses to companies that own and operate commercial nuclear power plants.**
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Regulatory Framework (Cont.)



NRC Responsibilities

■ Regulations

- ▶ Developed by NRC (and previously AEC) to establish the rules that all licensees/vendors are required to follow

■ Regulatory Guides

- ▶ Provides guidance to licensees on acceptable methods for implementing specific parts of the NRC's regulations - do not constitute requirements (e.g. RG 1.121)

■ Generic Communications

- ▶ Information Notice (e.g., IN 98-27)
- ▶ Generic Letters (e.g., GL 97-05, GL 97-06)
- ▶ Regulatory Issue Summary (e.g., RIS 2000-22)

■ Technical Specifications (TS)

- ▶ Requirements for steam generator (SG) tube inspection and repair and normal operating primary-to-secondary leakage limits are in TS
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NRC Responsibilities (cont.)

- Regulations pertaining to SG tube integrity
 - ▶ 10 CFR Part 50, App. A - General Design Criteria (GDC)
 - e.g., GDC 14 - The reactor coolant pressure boundary shall be designed, fabricated, erected, and tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture.
 - ▶ 10 CFR Part 50, App. B - Quality Assurance Criteria
 - e.g., Criterion IX - “Control of Special Processes” - measures shall be established to assure that special processes including... nondestructive testing are controlled and accomplished by qualified personnel with qualified procedures...
 - e.g., Criterion XVI - “Corrective Action” - measures shall be established to assure that conditions adverse to quality... are promptly identified and corrected
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NRC Responsibilities (cont.)

■ Reactor Oversight Process (ROP)

- ▶ NRC - Office of Nuclear Reactor Regulation (Headquarters in Maryland) develops and maintains the overall ROP program
 - Inspection Procedure 71111-08 “Inservice Inspection Activities” - provides guidance to NRC regional offices on the NRC’s oversight of licensee’s inservice inspection programs and steam generator management programs

 - ▶ NRC - Region I Office - Pennsylvania
 - Implement the elements of the Reactor Oversight Process at all Region I plants, including Salem Units 1 and 2
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Licensee Responsibilities

■ Compliance with:

- ▶ Regulations
- ▶ Technical Specifications
- ▶ License/Design Basis
- ▶ Provide Information on Inspection Results

■ Safe Operation

- ▶ Assess potential degradation and plan inspections accordingly
 - ▶ Perform periodic tube inspections/repairs using qualified techniques and personnel
 - ▶ Assess inspection results
 - ▶ Determine need for corrective actions, e.g. more frequent inspections, different inspection techniques
 - ▶ Maintain water chemistry
 - ▶ Monitor primary-to-secondary leakage
 - ▶ Implement foreign material exclusion program
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