

## Industry Activities to Support Deployment of Small and Medium Sized Reactors

Doug Walters  
Vice President - Regulatory Affairs  
Nuclear Energy Institute

NRC Regulatory Information Conference  
March 8, 2011



---

---

---

---

---

---

---

---

## Why Small Reactors?

- Expand nuclear benefits to more companies
- Reduced financial risk
- Suitable for a variety of applications
- Replacement of fossil generation



---

---

---

---

---

---

---

---

## Small Reactor Designs and Applications

- Modular, scalable or innovative LWR's
  - NuScale, B&W, Westinghouse
- Mini, distributed & fuel-cycle applications
  - Hyperion, Toshiba, GE Hitachi
- HTGR's for process heat and hydrogen
  - PBMR, AREVA and General Atomics



---

---

---

---

---

---

---

---

### Challenges

- Generic regulatory issues must be addressed to establish business case
- Existing regulatory paradigm change
- Gas and metal cooled designs require materials and fuels R&D



---

---

---

---

---

---

---

---

### NEI Activities

- NEI SMR Licensing Task Force
  - Position papers on multiple generic licensing issues
- Working Group focused on policy issues
- Intent is to maximize efficiency of industry and NRC resources



---

---

---

---

---

---

---

---

### Completed Position Papers

- NRC Annual Fees
- Decommissioning Funding
- License Structure for Multi-Module Facilities
- Pre-Application Engagement



---

---

---

---

---

---

---

---

### Position Papers Under Development

- Emergency Preparedness
- Price-Anderson
  - Evaluating implications and interpretation of current statute and NRC regulations
- Security design and staffing
  - Focusing on evaluation of current requirements and application of advanced technology



---

---

---

---

---

---

---

---

### Position Papers Under Development

- Plant and site staffing
  - Will evaluate minimum site staffing needs
    - Reviewing current regulatory framework
    - In concert with evaluation of emergency planning, security and control room staffing needs
- Modularity and source terms
- Loss of large areas



---

---

---

---

---

---

---

---

### Summary

- Small sized reactors have captured the public imagination
- Growing political support
- Important addition to the energy mix
- Stable and predictable regulatory process critical



---

---

---

---

---

---

---

---