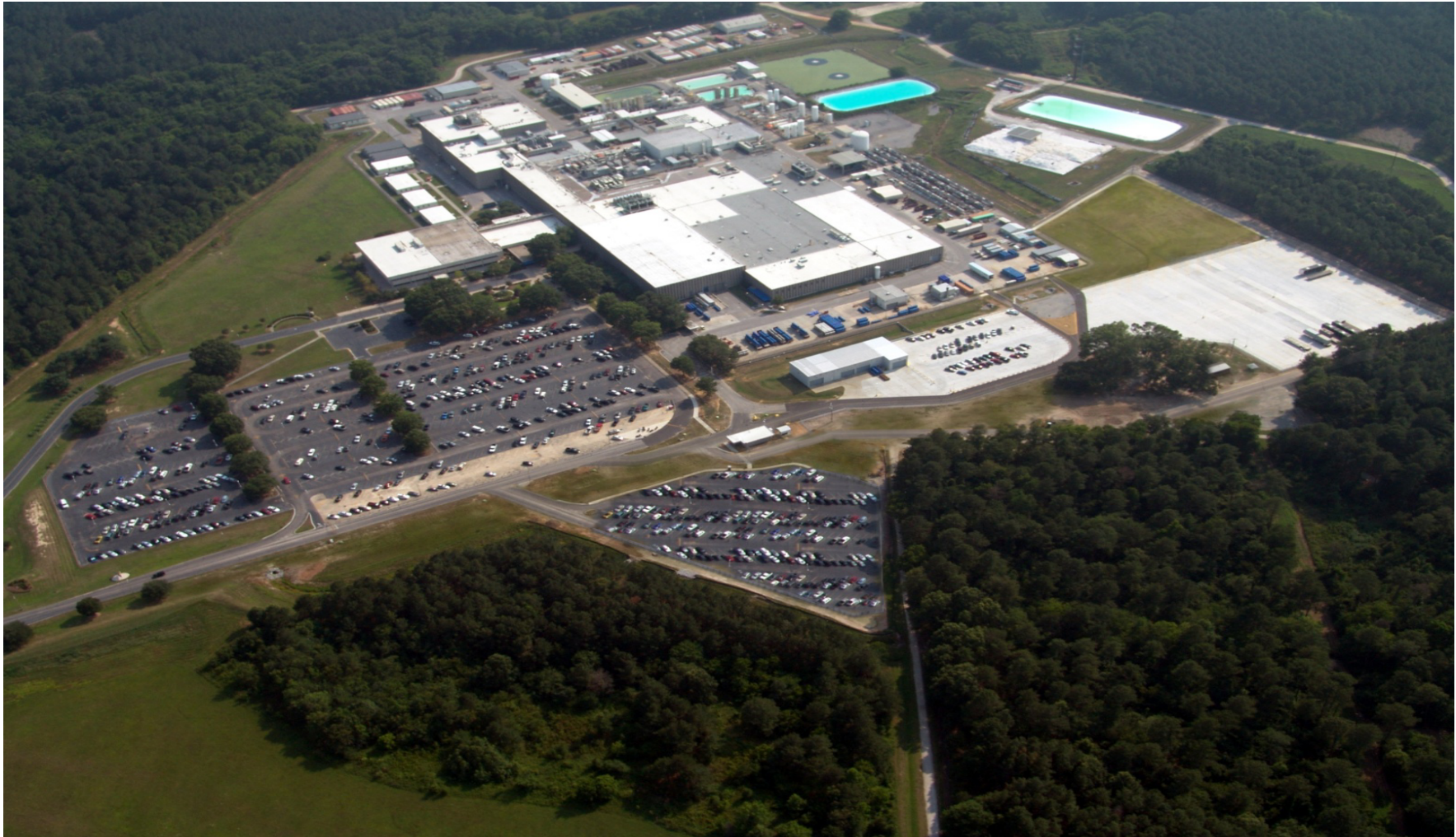


Westinghouse Electric Company LLC Columbia Fuel Fabrication Facility Post-Fukushima

2012 Fuel Cycle Information Exchange
Cary Alstadt



Columbia Fuel Fabrication Facility

Fuel Cycle Challenges

	Reactor	Fuel Cycle Facility
Design	Consistent baseline design in 10 CFR Part 50 for PWRs and for BWRs	Mission specific fuel cycle facilities with no design requirements in 10 CFR Part 70
License Basis	Stringent design criteria	Qualitative hazards analysis
Risk Factor	Large (Core melt) with decay heat dissipation required	Limited, if any, offsite impacts with generally no issues from loss of power

Challenge: Public and its engagement is still equally important

Fuel Cycle Challenges – The Bottom Line

1. Reactor designs are essentially uniform, and can rely heavily on NEI recommended approach for post-Fukushima response vs. Fuel Cycle facilities which vary widely with no consistency in risk, design or hazards
2. Fuel Cycle orders or a one size fits all approach is likely inappropriate
3. Developing the post-Fukushima response, public engagement and safety determinations for the Fuel Cycle facilities is challenging

Westinghouse Columbia Plant Approach

- Columbia Fuel Plant adopting applicable Reactor Tier I Criteria tailored to our facility (i.e. Programs and Emergency Response aspects)

Flooding	Not an issue as upstream Lake Murray back-up dam completed with design upgrade to the Charleston design basis earthquake
Winds	Minimal damage and consequences acceptable
Loss of Power	Scenario's introduce no real safety concerns, plant simply stops making product
Seismic	Area requiring additional focus (IN 2010-19)

- Important to reconcile building codes basis to the design criteria (from 1969 to now)

Westinghouse Columbia Plant Approach

- Adopting Targeted Diverse and Flexible Mitigation Capability (FLEX)
 - Upgrading equipment, procedures, training and periodic drills for severe natural phenomena accidents with extensive damage mitigation required
 - Upgrading capabilities and organizational structure to address prolonged multiple simultaneous events
- Hazardous material releases govern Columbia response versus radiological release

Programs to Address Seismic

- Key activities
 - Initial Seismic Walk-downs followed by seismic analysis
 - Initiate Key Projects (vulnerable equipment) based on hazards analysis
 - Update and finalize Emergency Response procedures/capability/equipment
 - Update budget and staffing resources within 5 year plan
 - Finalize longer term upgrades with transparent engagement of the public and the NRC staff

Summary

- Fuel Cycle Facility risk is significantly less than an operating reactor, but requires the same transparency
- One size fits all approach does not achieve best safety outcomes
- Westinghouse supports regulatory approach to address low probability high consequence events

Westinghouse Electric Company

