

Westinghouse Columbia Fuel Fabrication Facility 2014 Update

Carl Snyder

Manager

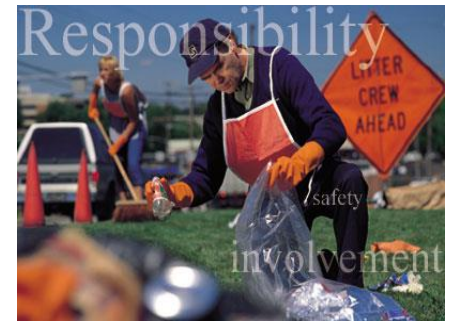
Criticality & Environmental Safety



Westinghouse Electric Company



Westinghouse Electric Company provides fuel, services, technology, plant design, and equipment to utility and industrial customers in the worldwide commercial nuclear electric power industry



Westinghouse Global Commitment

- Approximately 12,000 employees in 19 countries
- Focused solely on nuclear technology
- Original equipment manufacturer (OEM) for PWRs and BWRs
- Apply world-based operating experience (OE)



Global Technology with Local Execution

Westinghouse Electric Company

Product Line Structure

Engineering, Equipment and Major Projects

Focused on ensuring new and operating plant success by providing technically superior engineering, hardware and services that enhance plant safety, ensure plant reliability, extend plant life and improve plant performance.

Nuclear Fuel

A single-source fuel provider for PWR, BWR, VVER and AGR reactors worldwide

Nuclear Power Plants

Specializing in the technology of new nuclear power plants and component manufacturing

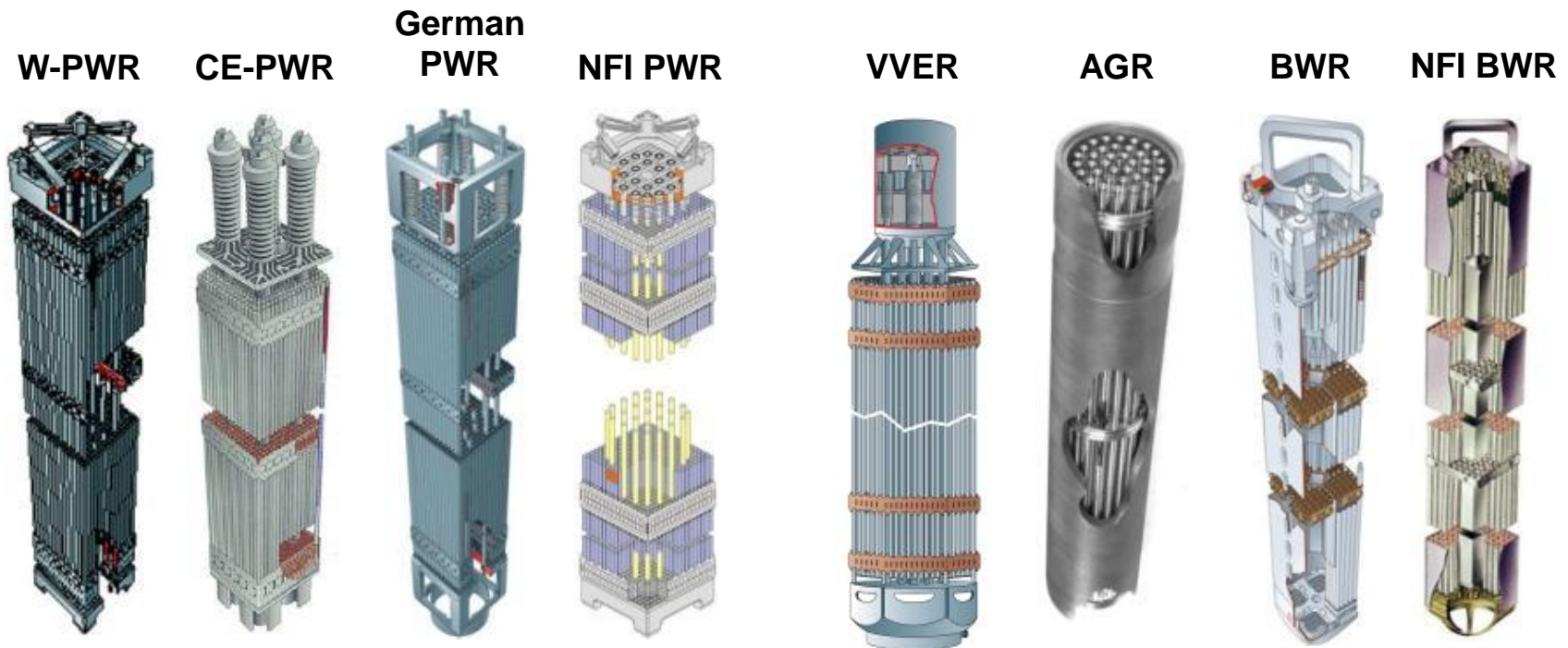
Automation and Field Services

A global field services and instrumentation and control solutions provider, focused on delivering industry-leading operations solutions and better outage services worldwide.



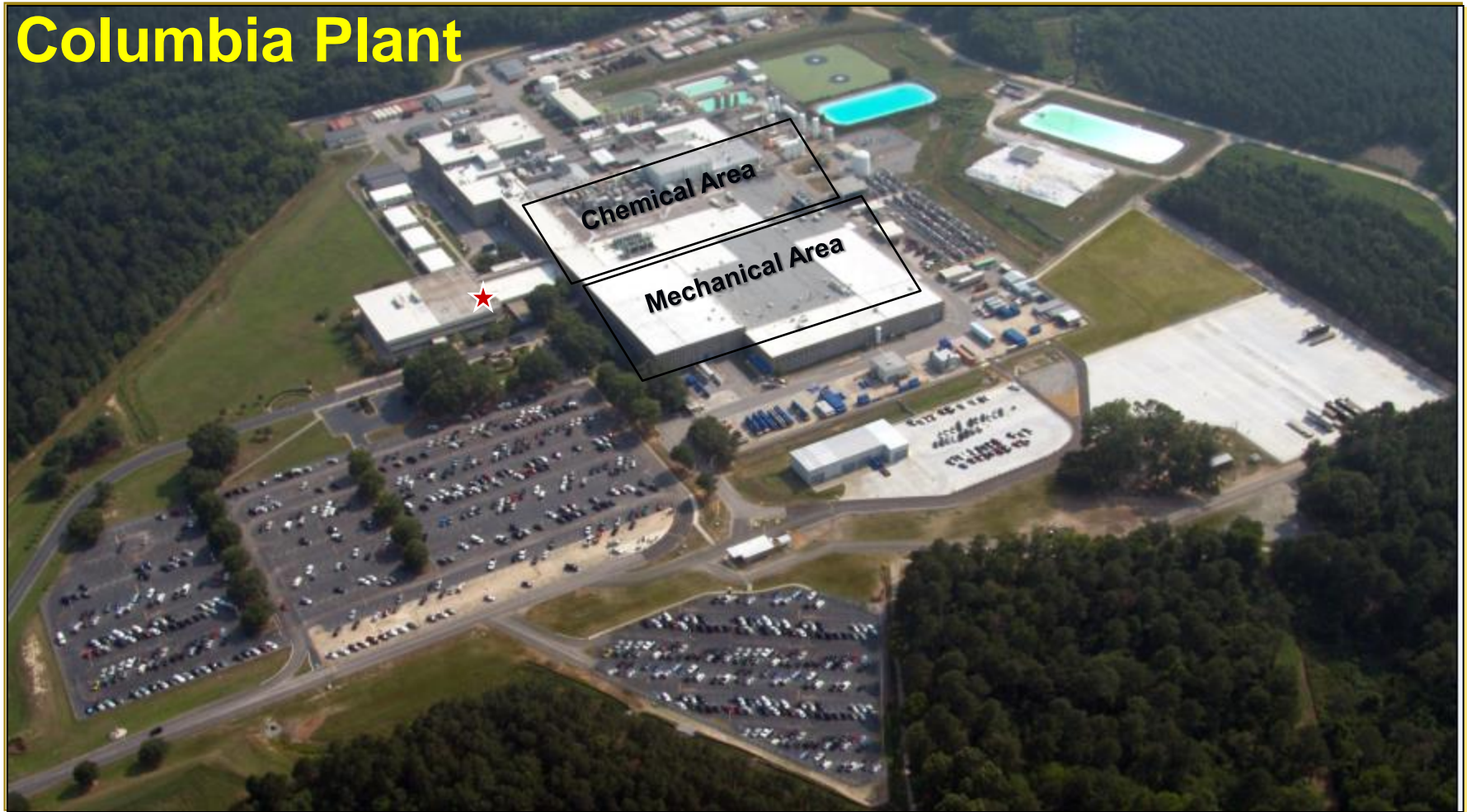
Nuclear Fuel Products

- Westinghouse manufactures more types of fuel than any other supplier



Westinghouse Nuclear Fuel

Columbia Plant

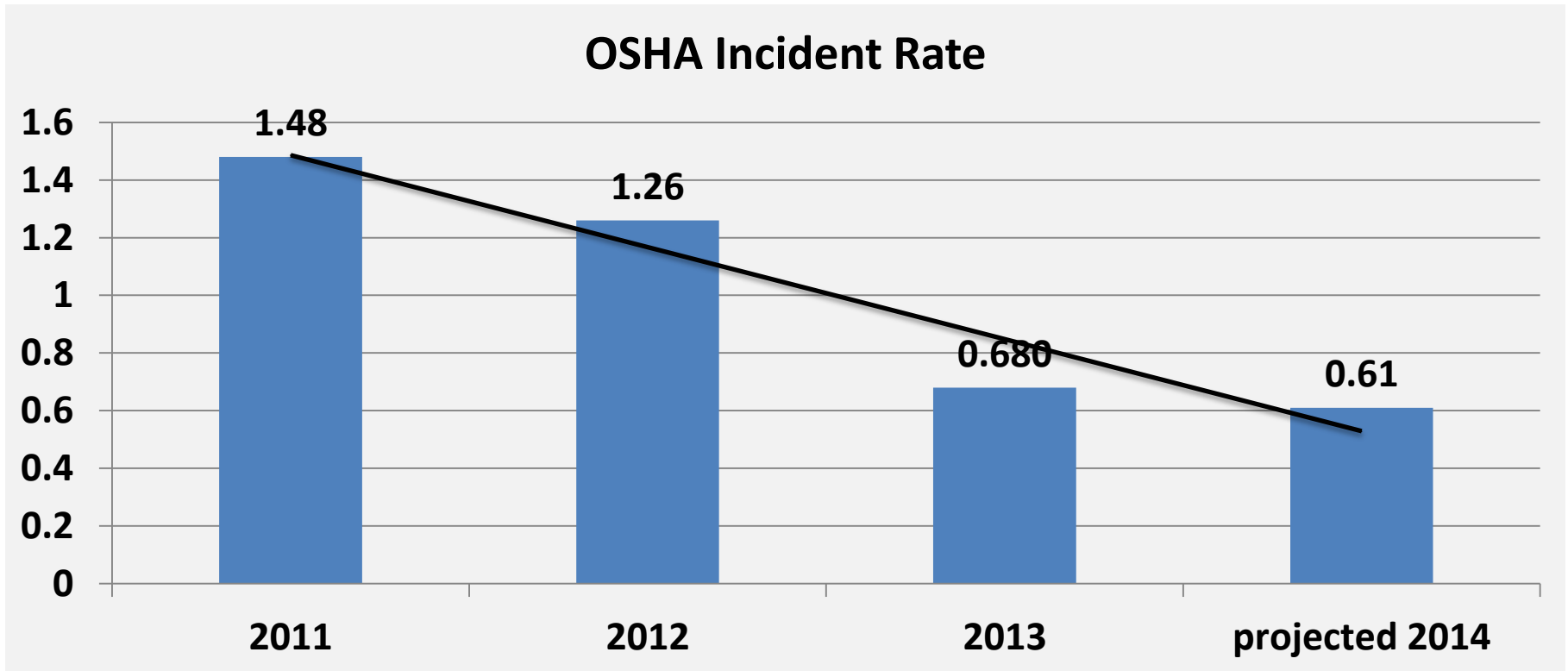


Westinghouse Columbia Plant – Key Facts



- Opened 1969
- 550,000 ft² facility; 1156 acre site
- Current capacity at 1700 MTU/yr
- Approximately 1200 people; 900 in the plant
- Over \$100 million of annual compensation
- Over 10% of electricity generated in the US and 50% of South Carolina's comes from nuclear fuel made at our plant
- Shipped fuel assemblies for new AP1000 China Plant and building fuel assemblies for plants under construction in SC and GA
- Built first ever Small Modular Reactor Assembly

Safety – We are reducing the frequency and severity of injuries.

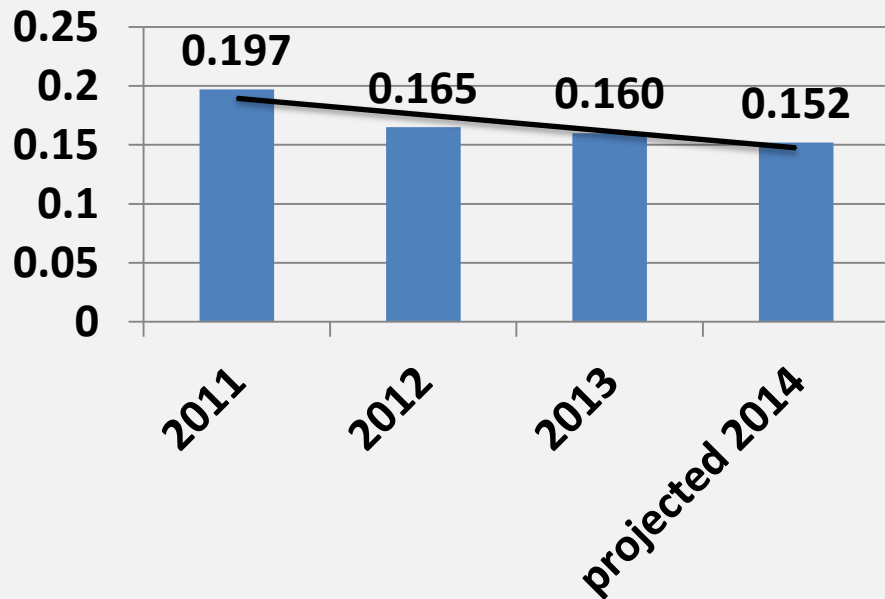


Our industrial safety performance has greatly improved – but we are not at 0 accidents yet.



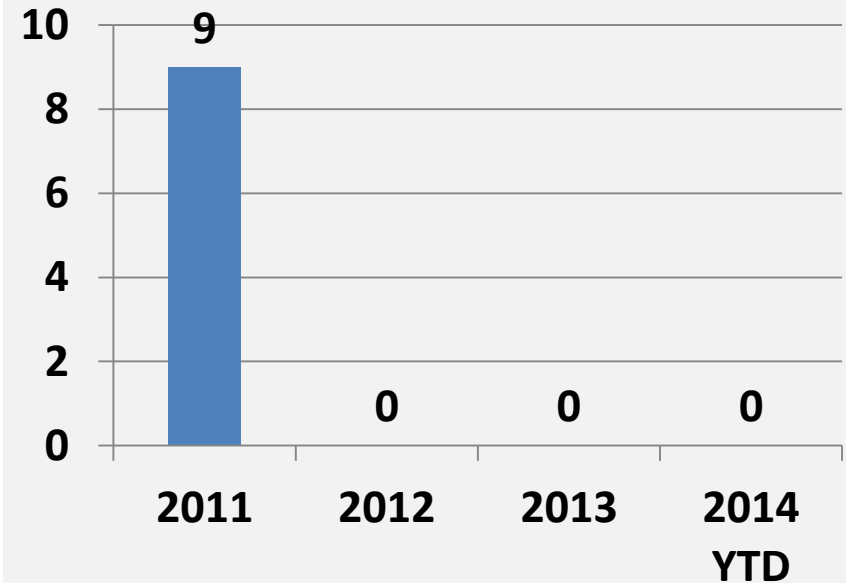
Compliance – Our average exposure per person continues to decline.

Average Employee Dose (REM)



Our average exposure per person continues to decline.

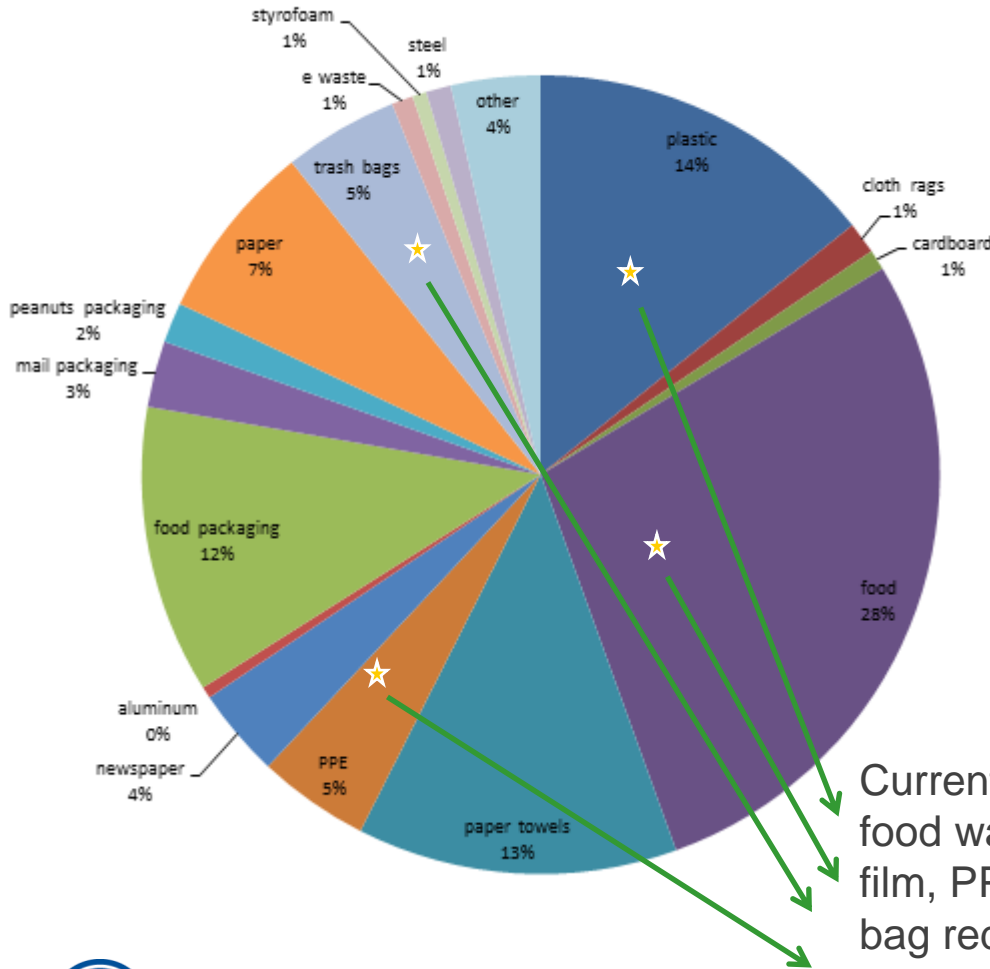
of NRC Violations



We are focused on maintaining this very good performance.

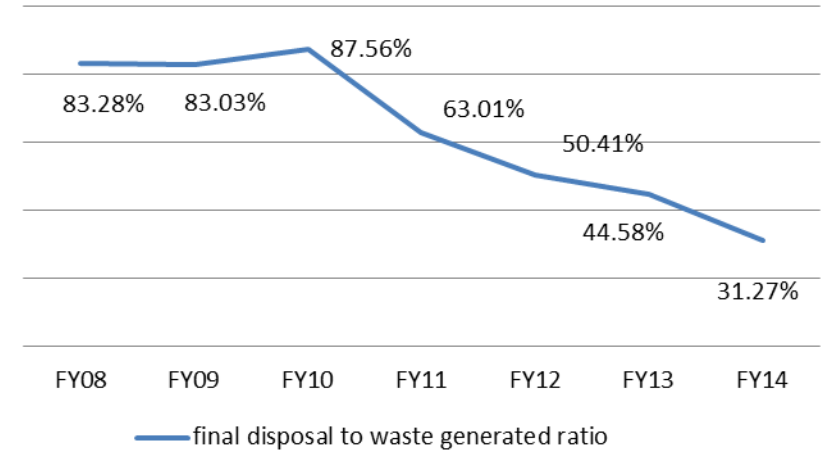
We continue our focus on sustainability and plant improvements by setting challenging goals.

Representative Sample Dumpster Dive, Sep 2013



Current focus on food waste, plastic film, PPE, and trash bag reductions in waste to landfill

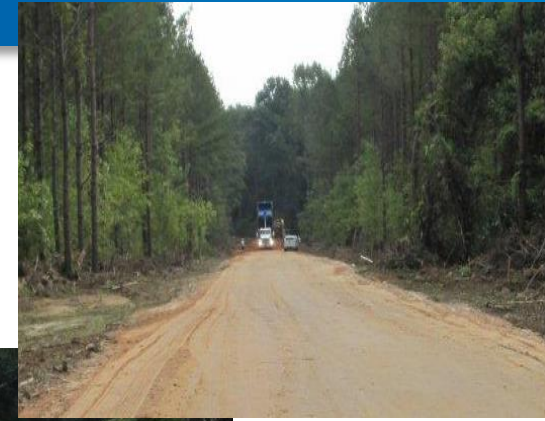
CFFF's Final Disposal Rate, without CaF



We've enhanced Security, because the world is getting more dangerous.

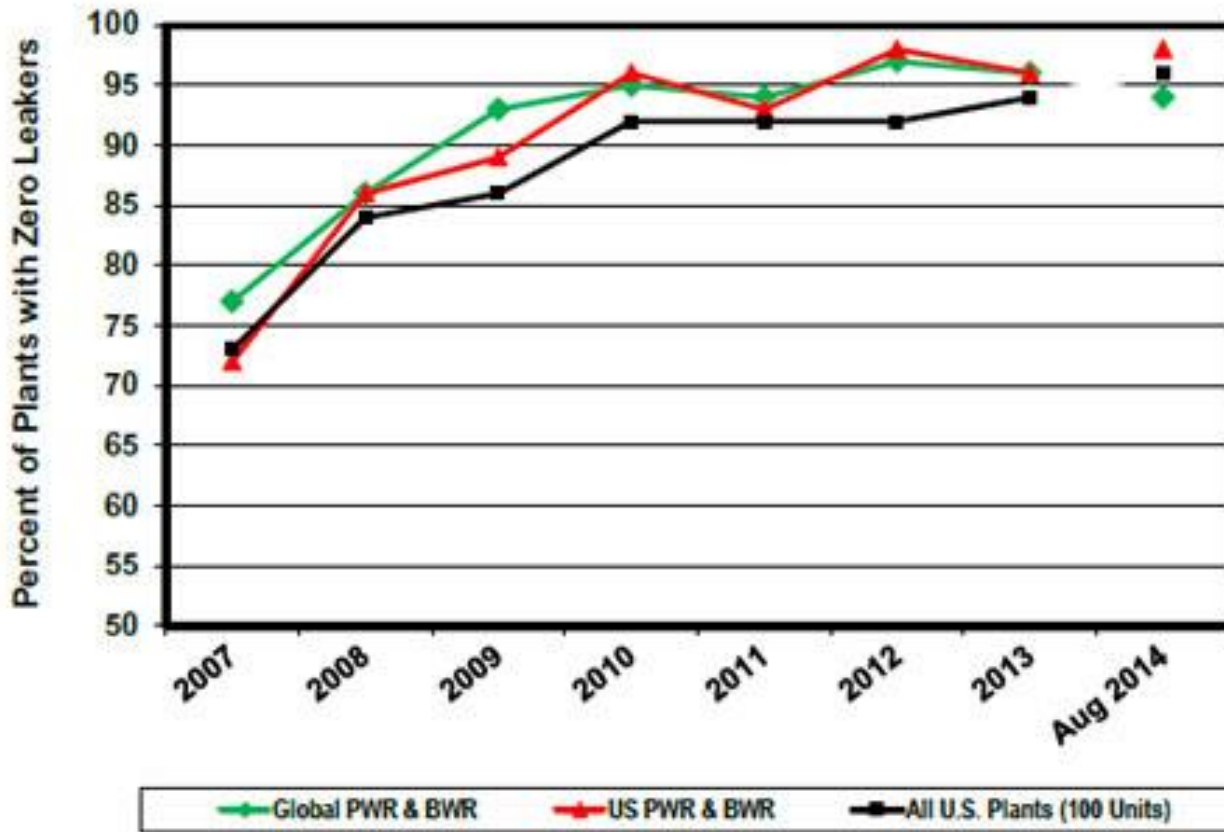
Some recent enhancements:

- Continued partnering with local first responders, both fire and law enforcement - Richland County, SLED, Homeland Security, Columbia Fire, other industrial sites.
- Additional security is provided during higher risk periods.
- New road to open soon.
 - The new road takes traffic away from higher risk areas.



Quality - We've had 100% leaker-free operation in the U.S. fleet since May 2014

Nuclear Fuel Reliability Progress – August 2014



Global PWR/BWR Plants	
(Westinghouse-supplied fuel)	
Total PWR/BWR (145)	94%
PWR (119)	95%
BWR (26)	92%
U.S. PWR/BWR Plants	
(Westinghouse-supplied fuel)	
Total U.S. (55)	98%
W-PWR (43)	98%
CE-PWR (8)	100%
BWR (4)	100%
All U.S. Plants	
(All fuel vendors)	
U.S. Total (100)	96%



We continue to invest capital into the plant to update our facility and make improvements.

- Chem Lab Hood Replacement
- Receipt Inspection Automatic Vision Measurement System
- Chemical Cooling Tower Gamma Monitors
- Met Lab Hood Replacements
- IFBA Dock 9 Modifications
- IFBA ICP Optical Spectrometer Replacement
- Bulge Carriages for Skeleton Fixtures 2 & 3
- Soft Handling Outfeed Controls Upgrade
- Front Entrance Windows Replacement
- Met Lab Autoclaves (6-8) Upgrades
- CFFF WETCANS Storage Racks
- Pellet Oxidation Ovens - Ln 3 & 4
- Pellet Press FY13 Rebuild - ADU Line 5
- Diesel Fire Pump #2 Skid Replacement
- Pellet Cart Replacement - Phase 2
- Pellet Press #3 Boatloader PLC Combo Upgrade
- Grid Furnace ABAR Replacement

- CCSU - Line 2 SIS Controls
- Calciner Discharge Chute Level Transmitter
- UPS#2 Automated Transfer Switch
- IFBA Line 5 (Dry Room) Bar Code Reader
- WETCANS Resistance Welder Upgrade
- Pellet Torit Drexelbrook Level Probe Replacement
- West Lagoon Transfer Line
- Dirty Dissolvers' Pump Replacement
- FHA IFBA Smoke Detectors
- ADU Drag Chain Upgrade
- Final Assembly Inspection Lifts
- Soft Handling G-Section Controls Upgrade
- Pellet Furnace Saturator Tanks
- IFBA Vacuum Oven Front & Rear Door Replacement
- Met Lab EDS Spectrometer Replacement
- NCSIP II Program - Minor Mods
- ADU Conversion Line 3 Decanter Frame Upgrade

We have moved manufacturing activities from Connecticut to Columbia!



AP1000 PWR Fuel Assembly Fabrication Update

- Sanmen Units 1&2
 - Unit 1 initial core delivered to Sanmen site in March 2013 and stored in Traveller packages in secure area of site. Fuel unloading begins this week.
 - Unit 2 initial core is currently 50 percent complete and being stored in forest at CFFF.
- Haiyang Units 1&2
 - Unit 1 initial core completed and currently being stored in forest at CFFF.

All four Chinese AP1000s are scheduled to be in operation by 2016. Third and fourth units are planned at both Sanmen and Haiyang.

Closing Thoughts

- The Westinghouse Columbia Plant is a safe operation, with more safety margin than ever.
- Our product performs very well. All 55 of our US Plants are leak-free.
- Westinghouse continues to promote healthy dialogue and open communication to assure we meet expectations of the public and our regulators.
- Westinghouse continues to engage in the community to maintain public trust.

We care, we protect and we improve.

Questions?

