



**Savannah River**

Nuclear Solutions, LLC

A Fluor Daniel Partnership<sup>SM</sup>

# A-Area Biomass Steam Plant

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**Pat Livengood**

Site Infrastructure Maintenance Engineering Lead

3/11/2010

CSRA Air Quality Alliance Stakeholder Meeting

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Misty Lake SCE&G Recreation Area



# A-Area Biomass Steam Plant

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## Agenda

- New Steam Plant In A-Area Description
- Reduction in Air Emissions

# A-Area Biomass Steam Plant

- Went Online Sept. 2008
- Two 30,000 lbm/hr boilers
- One Biomass
- One Fuel-Oil



# A-Area Biomass Steam Plant

- Located Just North of 784-A  
(Old Powerhouse)
- 250 psig Saturated Steam
- Mostly Seasonal (HVAC)  
Load



# A-Area Biomass Steam Plant

Emphasis line

- Burns Green Wood
- 25-30,000 tons per year
- Hurst Hybrid Reciprocating Grate Boiler
- Electrostatic Precipitator
- PLC Controls



# A-Area Biomass Steam Plant

Emphasis line

- Fire Tube
- Burns #2 Fuel Oil
- Costs Much more to Operate



# A-Area Biomass Steam Plant

## Comparison of Emissions

	Coal Fired Facility CY2007 (tons)	New Facility CY2009 (tons)	Delta (tons)
Particulate Matter (PM)	75.5	6.2	69.3
Particulate Matter 10 Microns (PM10)	51.7	4.9	46.8
Sulfur Dioxide (SO <sub>2</sub> )	342	3.1	338.9
Nitrogen Oxides (NO <sub>x</sub> )	52.5	28	24.5
Carbon Monoxide (CO)	42	48.9	-6.9