Summer Trade Seminar
"Future of Coal"
July 14th, 2014

SCANA Businesses (Fossil & Nuclear)

- **SOUTH CAROLINA ELECTRIC & GAS COMPANY (SCE&G)**

  SCANA's principal subsidiary, SCE&G, is a regulated public utility engaged in the generation, transmission, distribution and sale of electricity to retail and wholesale customers in the central, southern and southwestern portions of South Carolina. SCE&G is also engaged in the purchase, sale and transportation of natural gas at retail to customers in South Carolina.

- **SOUTH CAROLINA GENERATING COMPANY, INC. (GENCO)**

  The company owns and operates Williams Station and sells electricity solely to SCE&G.

- **SOUTH CAROLINA FUEL COMPANY, INC. (SCFC)**

  The company acquires, owns and provides financing for and sells at cost to SCE&G nuclear fuel, certain fossil fuels and emission allowances.

SCANA Businesses (NG)

- **PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC. (PSNC ENERGY)**

  Headquartered in Gastonia, NC, PSNC Energy is a regulated public utility engaged primarily in purchasing, selling and transporting natural gas to residential, commercial and industrial customers in the north central, Piedmont and western areas of North Carolina.

- **CAROLINA GAS TRANSMISSION CORPORATION (CGT)**

  CGT operates as a Federally-regulated, open-access, transportation-only interstate pipeline company that transports natural gas in southeastern Georgia and South Carolina.

- **SCANA ENERGY MARKETING, INC. (SEMI)**

  SEMI markets natural gas, primarily in the Southeast, and provides energy-related risk management services.

- **SCANA ENERGY**

  SCANA Energy is a division of SEMI that markets natural gas to customers in Georgia's deregulated natural gas market. This includes low-income and high credit risk customers served by SCANA Energy as Georgia's Regulated Provider under a contract with the Georgia Public Service Commission.

SCANA Businesses

- **SERVICECARE, INC.**

  ServiceCare provides service contracts on home appliances and heating and air conditioning units.

- **SCANA COMMUNICATIONS, INC.**

  Provides fiber optic telecommunications, ethernet services and data center facilities, and builds, manages and leases communications towers in South Carolina, North Carolina and Georgia.

- **SCANA SERVICES, INC.**

  The company provides administrative, management and other services to the subsidiaries and business units within SCANA Corporation.

Load Growth Expectations

- Residential
  - SCE&G is seeing Customer growth.
  - Weather normalized average use will continue declining due to Energy Efficiency programs.
  - Total weather normalized sales are projected to stay flat for the next few years.
- Commercial
  - Customer growth here as well.
  - Weather normalized average use will continue declining due to Energy Efficiency programs.
  - Total weather normalized sales are projected to grow over the next few years where we have seen a decline in the past.

Load Growth Expectations

- Summary
  - Industrial sales will continue to grow but not at the pace we have seen in the recent past.
  - Total Retail sales will continue to grow at a stronger pace than seen recently.
  - Total Sales will continue to grow at a stronger pace as well. All good news.

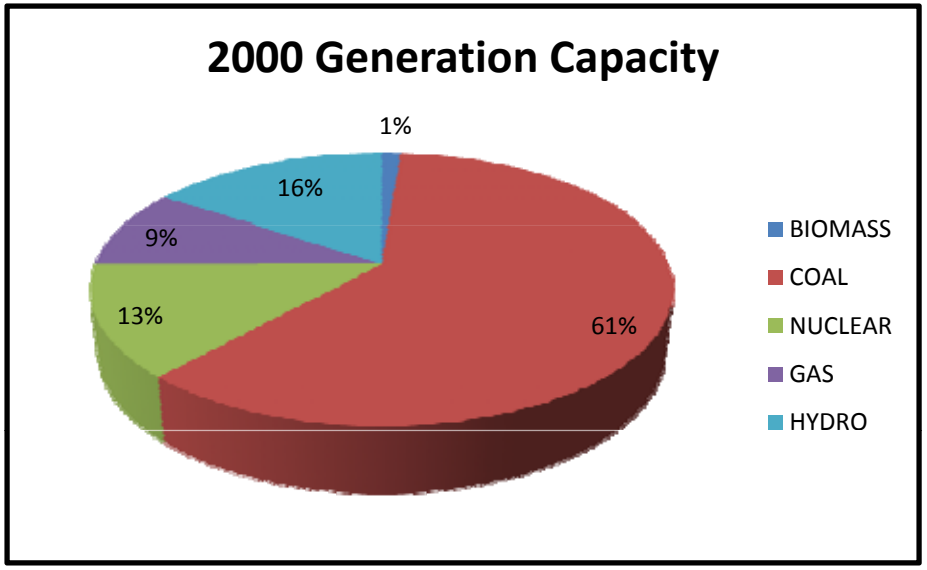
New Nuclear (SCE&G & Santee Cooper)

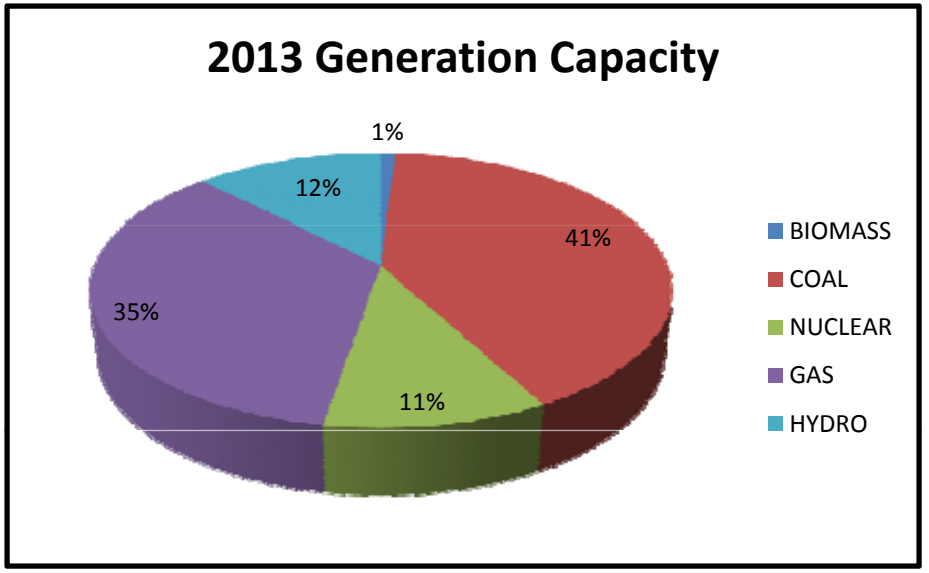
VC Summer Units 2 & 3 / Westinghouse AP1000

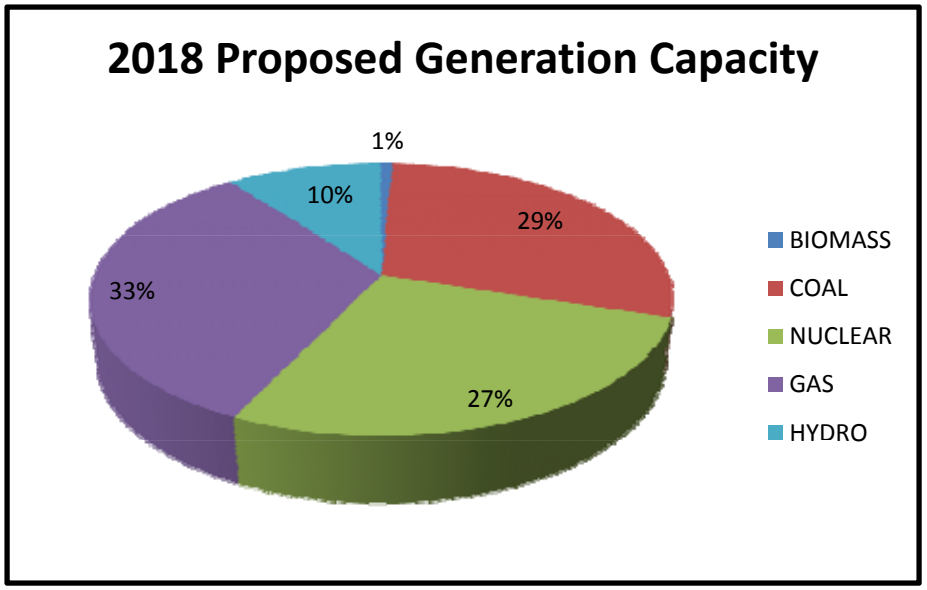
New Nuclear (SCE&G & Santee Cooper)

- Projected Cost for SCE&G's 55% ownership = $4.58 Billion / Total=$8.3 Billion
- Announced 1/27/14 SCE&G will acquire an additional 5% ownership or 110 MW
- Each AP1000 is 1,154 MW
- The two new units will be built using the Westinghouse Advanced Pressurized Water Reactor (AP1000®). This reactor uses fewer moving parts and uses cooling systems that rely on gravity instead of power supplies and motor-driven components. The AP1000® has 85% less cable, 80% less pipe, 50% fewer valves and 35% fewer pumps than today's generation of reactors.
- Emergency Cooling is gravity fed / Core can be cooled for up to 5 days without electrical power.
- VC Summer Unit 2 online 4th Quarter 2017 / 1st Quarter 2018
- VC Summer Unit 3 online 4th Quarter 2018 / 1st Quarter 2019

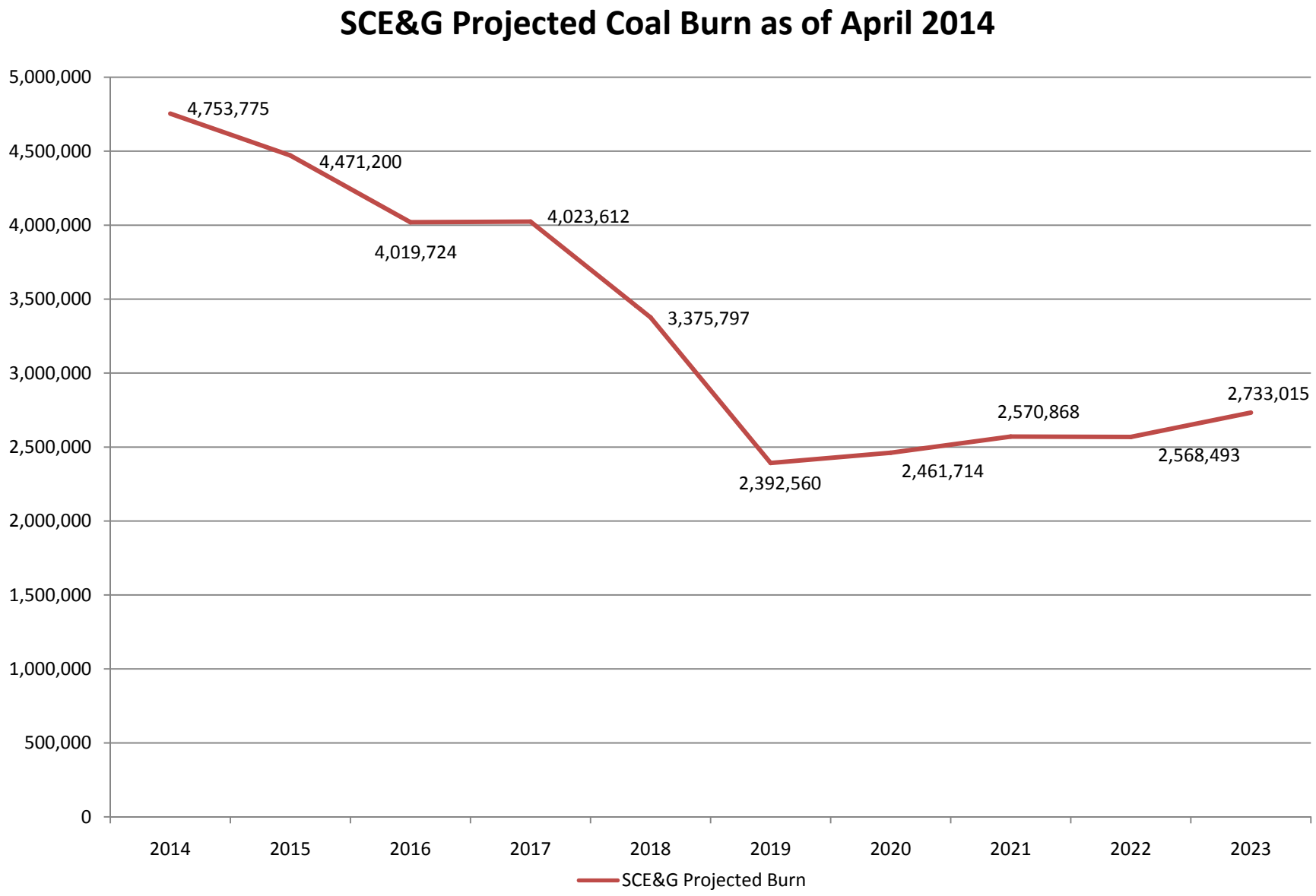
Generation Mix by Nameplate







Coal Requirements



Environmental Protection Agency

- BSER = Best System of Emission Reduction

(BSER Factors)

- BSER Factors (Building Blocks)
  - 1: Heat Rate Improvement
  - 2: Coal-to-Gas re-dispatch
  - 3: Renewable (RE) and nuclear generation
  - 4: End-use Energy Efficiency (EE)

Rough Calculation – Step 1

- South Carolina State Goal:

$$\frac{\text{(Coal CO2+NGCC CO2+OG Steam CO2+Other CO2)}}{\text{(Coal MWH+NGCC MWH+OG Steam MWH+Other MWH)}}$$

= approximately 1800 lb/MWH

Overview

- BSER Calculation Methodology
  - Step 1: 2012 Data for Fossil Sources: coal, OG, NGCC, Other (IGCC's and CT's > 33% capacity).
  - Step 2: 6% Heat Rate Improvement at all Coal-fired Units
  - Step 3: Re-dispatch coal to existing and under construction NGCC capacity (increased to 70% from 45%)
  - Step 4a: Re-dispatch coal to under construction and "at-risk" nuclear capacity

Overview

- Methodology continued
  - Step 4b: Re-dispatch coal to Renewables (national average rate of 10% by 2030)
  - Step 5: Re-dispatch fossil to Demand-Side EE (annual increase to achieve 10.00% in 2030 from 2.32% in SC)
  - Steps 6 & 7: Calculate Interim (avg. for 2020 – 2029) and Final state Goals (2030 and beyond)

Bottom Line

- When all adjustments have been included SC emission target rate drops from approx. **1800 lb/MWH to 860 lb/MWH**.

Renewable

- South Carolina has recently passed new legislation to facilitate the development of renewable energy, mainly solar. (Distributed Energy Resource Act)
- Starts on a limited basis
- SCE&G is trying to be proactive / Customers are asking for help

Coal Imports

CAPP Coal

Questions?