

DEFINING OUR ENERGY FUTURE - A Balancing Act



A Discussion with the N.C. Energy Policy Council

December 18, 2009

What We Will Talk About Today



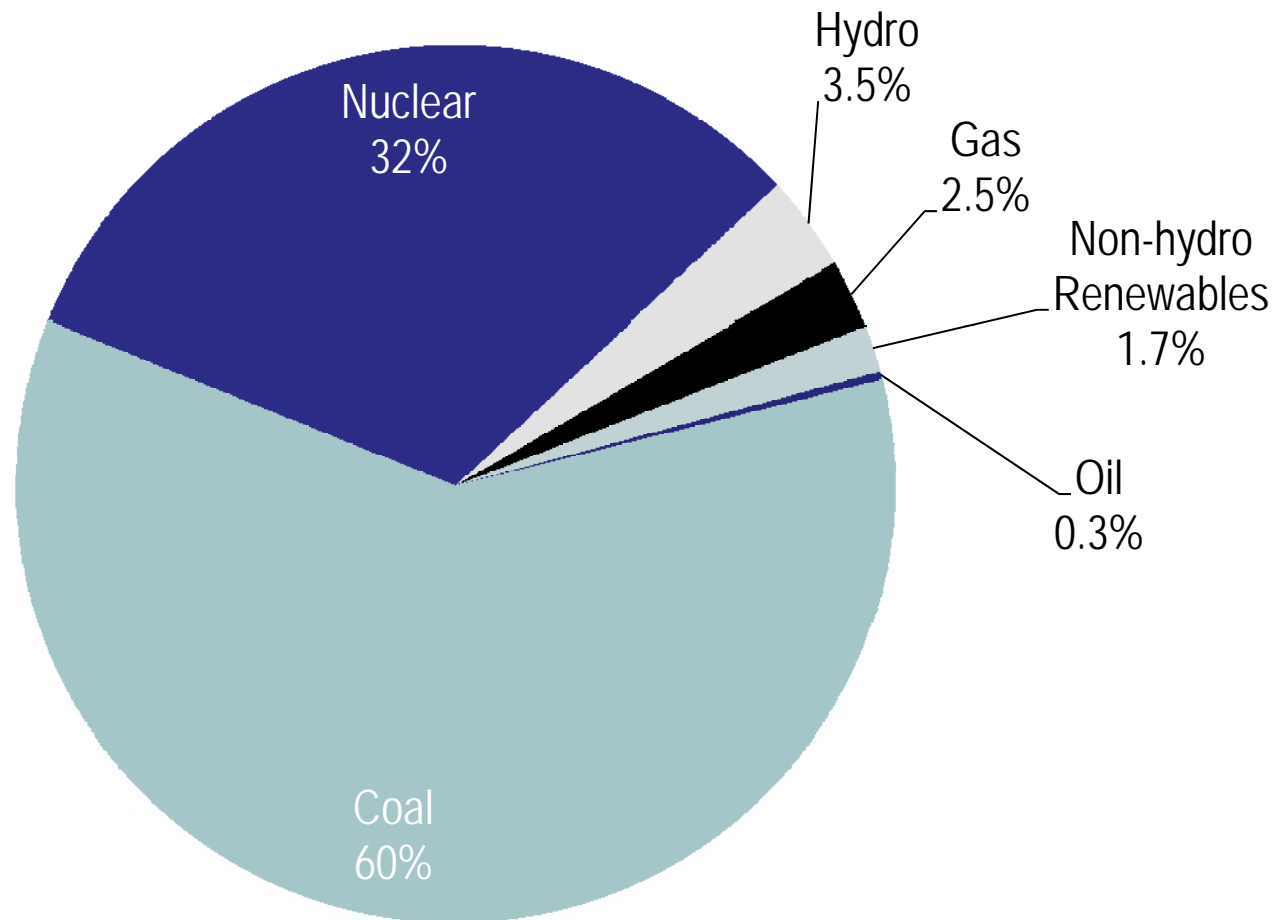
- Utilities – Who We Are and What We Do
- The Balancing Act
 - Reliable
 - Affordable
 - Clean
- Considerations for Tomorrow
- Summary

Who We Are and What We Do

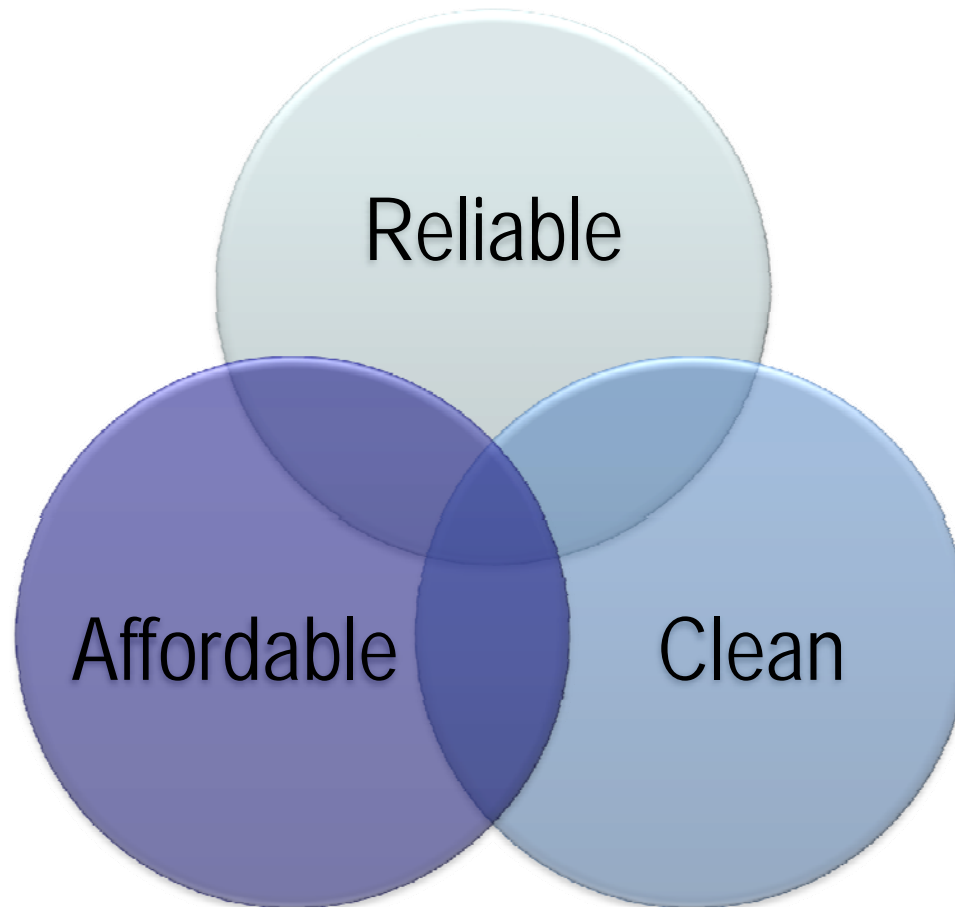


- Energy Providers in NC
 - Investor Owned Utilities (IOUs) – 3 million customers in NC
 - Co-Operatives – 950,000 Customers
 - Municipals – 500,000 Customers
- NC population growth – from 9,398,000 in 2009 to 12,750,000 in 2029
- NC's average cost per kWh is
 - 8.56 ¢/kWh which is 14% below the national average (includes all providers)

Where NC's Energy Comes From



The Balancing Act





Carolinas CO2 Impact



Considerations for Tomorrow



- New Federal Requirements Expected
 - Climate change
 - Regulations on coal
 - Federal Renewable Portfolio Standard and Energy Efficiency requirements
- New Energy Realities
 - Federal renewable requirements vs. available state renewable resources
 - Traditional “least-cost” regulation vs. renewable subsidy requirements
 - Population, load growth & plant retirements vs. opposition to new generation and transmission
 - Timely recovery of nuclear financing costs vs. need for low-carbon generation
 - Traditional regulation vs. opportunities for creative solutions
 - Rapid changes in public opinion and priorities vs. long-term utility planning requirements
- Emerging Technologies May Change The Game (smart grid, distributed generation, battery storage, carbon capture and sequestration, electric vehicles)

In Summary



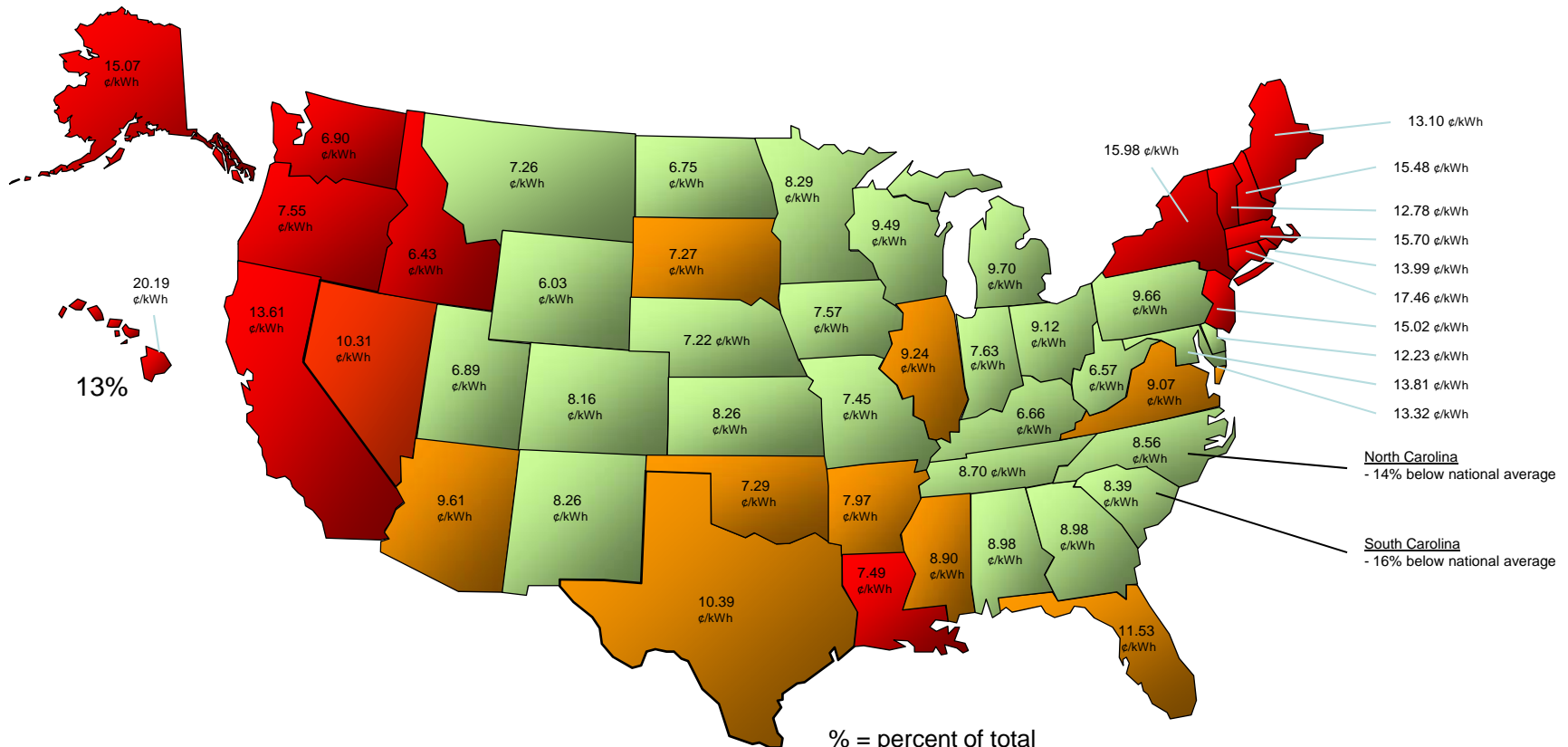
- Utilities in North Carolina need to:
 - Modernize aging generation fleet and decarbonize energy supply
 - Increase supply of renewable energy sources
 - Increase energy efficiency through new programs and services
 - Build cleaner, more efficient generation, including nuclear, as older plants are retired
 - Manage in a rising cost environment for capital outlay; and
 - Keep a sharp focus on the cost of energy to the state's economy.
- No one fuel, including energy efficiency, can meet population growth, load growth and need to replace aging generation fleet
- Federal regulations are increasing and often cross over into state's jurisdictions
- A balanced approach is needed as we consider North Carolina's energy future

Confronting new energy realities together for a secure, clean, affordable energy future



APPENDIX

Affordable Electricity?



North Carolina
- 14% below national average

South Carolina
- 16% below national average

% = percent of total electricity produced from coal generation for 2007

- < 30%
- 30 – 50%
- > 50% **

- Sources:
- Energy Information Administration, March 2008.
 - Electric Power Monthly. Energy Information Administration, Washington, D.C., August 2009 (Average Retail Rates)
 - *An analysis of South Carolina's current electric usage conditions with recommendations for a responsible future* – Office of Regulatory Staff South Carolina (Dec. 2008)