

# North Carolina's Public Utility Infrastructure & Regulatory Climate

Presentation to the  
**Joint Legislative Commission on Energy Policy**

December 3, 2013

Chairman Edward S. Finley, Jr.  
**North Carolina Utilities Commission**

# Who We Are

The header features a dark blue background. On the left is the Great Seal of the State of North Carolina, which includes the date 'MAY 20. 1775' and the words 'EAT SEAL OF NORTH CAROLINA'. To the right of the seal is a stylized map of North Carolina with a power line tower and lines superimposed on it, set against a lighter blue and orange gradient.

## **NORTH CAROLINA UTILITIES COMMISSION**

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### **Commissioners**

**Edward S. Finley, Jr., Chairman**

**Bryan E. Beatty  
Susan W. Rabon  
ToNola D. Brown-Bland**

**Don M. Bailey  
Jerry C. Dockham  
James G. Patterson**

# Regulation of Public Utilities



- Purpose: protect the public's interest in receiving adequate service at reasonable rates.
- Traditional regulatory bargain: utilities exchange benefit of monopoly franchised service territory for obligation to provide adequate service at reasonable rates.
- Commission's regulatory obligation: to be fair and reasonable to public utilities and their customers.
- Commission's regulatory tools:
  - certification of new facilities
  - rate establishment or review
  - service quality oversight
- Recent trends: regulation of certain utility industries and services by the Commission has become more complex due to changes in State and Federal law and rules, and industry trends. Certain utility services have been fully or partially deregulated.

# History of NC Utilities Commission



- Oldest regulatory body in state government: evolved from Railroad Commission (1891) to Corporation Commission (1899) to Utilities Commission (1933)
- History of significant legislative grants of, or limitation on, regulatory authority:
  - Railroad – 1891
  - Telephone – 1893
  - Electric, Gas, & Water – 1913
  - Wastewater – 1917
  - Housing – 1935
  - Hospitals – 1943
  - Buses/Brokers – 1949
  - Motor Carriers & Ferries – 1963
  - Electric Generation – 1965
  - Electric Membership Cooperatives – 1965
  - Payphone Service Providers - 1985
  - Long Distance Telephone Competition – 1985
  - Telephone Shared Tenant Service – 1987
  - Local Telephone Competition – 1995
  - Motor Carriers of Property, except Household Goods, Deregulation – 1995
  - Railroad Transferred to Dept. of Transportation – 1996
  - Water Resale – 1996
  - Charter Bus Deregulation – 1998
  - Long Distance Telephone Rate Deregulation – 2003

# NCUC Organization



- Administrative agency of General Assembly; legislative oversight by House Public Utilities and Energy Committee, Senate Commerce Committee, and Joint Legislative Commission on Governmental Operations.
- Seven members: appointed by Governor, subject to confirmation by General Assembly. Terms of five Commissioners now serving are staggered, remaining portions of eight-year terms. Terms of two most recently appointed Commissioners are six-year terms. (G.S. 62-10)
- Chairman: appointed by Governor, four-year term, organizes Commission's work. *Ex officio* member of Geographic Information Coordinating Council. Membership responsibilities currently shared among Commissioners. (G.S. 62-12, 13)

# NCUC Organization *cont.*

- Commissioners are subject to standards of judicial conduct and prohibited by law from engaging in any other employment, business or profession while in office (*G.S. 62-10(i)*)
- Commission employs up to 65 people, current staffing is 55, organized among three divisions:
  - Legal, Operations, and Fiscal Management & Administrative
- Certified FY2013 annual budget: \$7,699,263 (excludes legislatively mandated cash transfer to State Treasurer)

NCUC budget:	\$ 6,983,949
Gas Pipeline Safety budget:	\$ 605,060
NCUC ARRA Grant (Dept. of Energy):	\$ 110,254

  - Gas Pipeline Safety is housed in Commission and receives partial federal reimbursement
  - NCUC is a fee-funded agency, supported by regulatory fee percentage established by General Assembly annually and applied to the jurisdictional revenues of public utilities (*G.S. 62-302*)
  - The Public Staff maintains its own budget which is separate from the Commission's budget but it is funded by the same regulatory fee





# NCUC's Responsibilities & Procedures

- For the 12-Month Period Ending 6/30/13:
  - 2,530 formal proceedings instituted before NCUC
  - 58 hearings in contested cases
  - 11,417 filings in Chief Clerk's office
  - 2,704 orders issued
  - 2,031 open dockets as of 6/30/13
- Appeals from general rate case decisions to NC Supreme Court; all others to NC Court of Appeals (absent federal jurisdiction)
- NCUC conducts proceedings pursuant to federal law and participates in proceedings before federal courts and regulatory agencies (*G.S. 62-48*)

# NCUC's Responsibilities & Procedures *cont.*



- Publication requirements (G.S. 62-17):
  - Annual reports to Governor include copies of general orders, regulations, comparative statistical data, rate comparisons, report of pending matters, and digest of principal decisions
  - Final decisions on merits in formal proceedings
- Limited jurisdiction over municipalities and cooperatives



# Regulated Entities

(As of 3/31/13)

	<u>QTY</u>
BUS / BROKER	19
ELECTRIC	5
ELECTRIC COOPERATIVES	31
ELECTRIC MERCHANT PLANTS	8
ELECTRIC RESELLER	7
FERRIES	17
NATURAL GAS:	
– LOCAL DISTRIBUTION COMPANIES	5
– INTRASTATE PIPELINE	1
MOTOR CARRIERS OF HOUSEHOLD GOODS	255
SMALL POWER PRODUCERS	281
TELEPHONE:	
– COMPETING LOCAL PROVIDERS	173
– INCUMBENT LOCAL EXCHANGE COMPANIES	16
– LONG DISTANCE CARRIERS	306
– PAYPHONE SERVICE PROVIDERS	67
– SHARED TENANT SERVICES	19
WATER / WASTEWATER RESELLERS	872
WATER / WASTEWATER	<u>119</u>
<b>TOTAL</b>	<b>2,201</b>

# Industry Revenue Profile



- FY2012 Jurisdictional Revenues: \$11.015 billion
  - Electric: \$8.065 billion
  - Telecommunications: \$1.633 billion
    - Includes Local and Long Distance Telephone Companies, Payphone Service Providers, and Shared Tenant Service Providers
  - Natural Gas: \$1.120 billion
  - Water and Wastewater: \$141 million
    - Includes Water/Wastewater Resale Companies
  - Transportation: \$56 million
    - Includes Brokers, Buses, Ferries, and Household Goods (HHG) Carriers

# Filings & Orders by Industry Group

(For the 12-Month Period Ending 6/30/13)

	<u>Filings</u>	<u>Orders</u>
• Electric	2,220	435
• Telephone	1,846	246
• Natural Gas	506	82
• Water/Wastewater	1,678	997
• Household Goods Carriers	795	177
• Small Power Producers	3,857	657
• Other (Bus/Broker, Electric Merchant Plant, EMC, Ferry, Payphone Provider, Renewable Energy Facilities, & Misc.)	<u>515</u>	<u>110</u>
TOTAL	11,417	2,704

# Noteworthy NCUC-Approved Mergers and Acquisitions: 2003 to Present

- Electric
  - In 2005, Dominion joined PJM Interconnection, LLC
  - In 2006, Duke Energy acquired Cinergy
  - In 2012, Progress Energy merged with Duke Energy
- Natural Gas
  - In 2003, Piedmont acquired NCNG and 50% interest in Eastern NCNG
  - In 2005, Piedmont acquired the remaining 50% interest in Eastern NCNG
  - In 2007, Energy West acquired Frontier
- Water/Wastewater
  - In 2004, Aqua America acquired stock of Heater Utilities
  - In 2006, Hydro Star acquired stock of Utilities, Inc., from nv Nuon
  - In 2009, Pluris, LLC, acquired North Topsail Utilities, Inc.
  - In 2012, Corix Utilities acquired stock of Utilities, Inc., from Hydro Star

# Electric

## Basic Facts: Regulated Electric Utilities

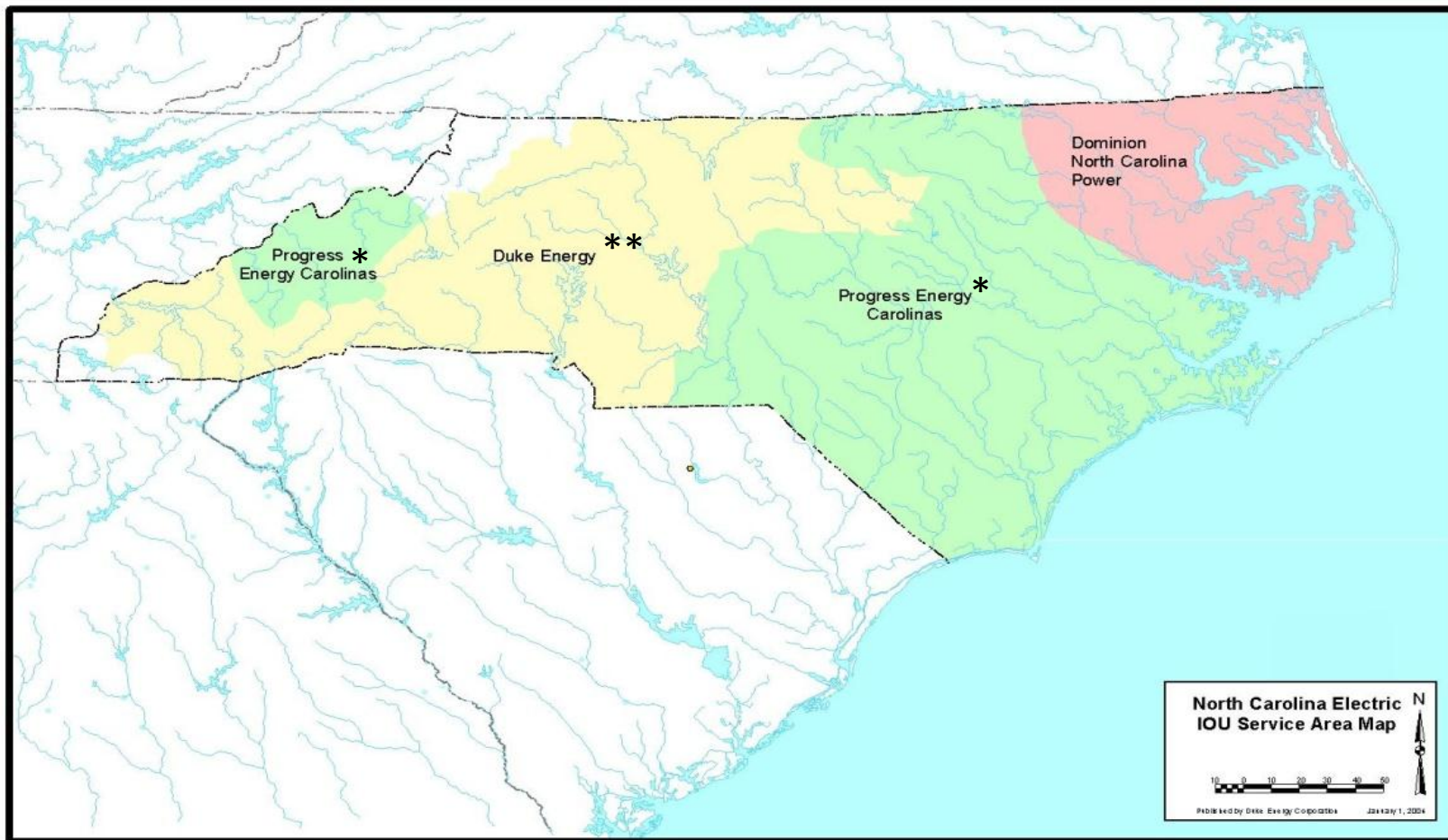


### 3 Investor-Owned Utilities (IOUs)

- Duke Energy Carolinas – 1,865,000 customers in Piedmont and Western North Carolina
- Duke Energy Progress – 1,290,000 customers in Eastern and Western North Carolina
- Dominion NC Power – 119,000 customers in Northeastern North Carolina



# North Carolina Electric IOU Service Area Map



\* Duke Energy Progress

\*\* Duke Energy Carolinas

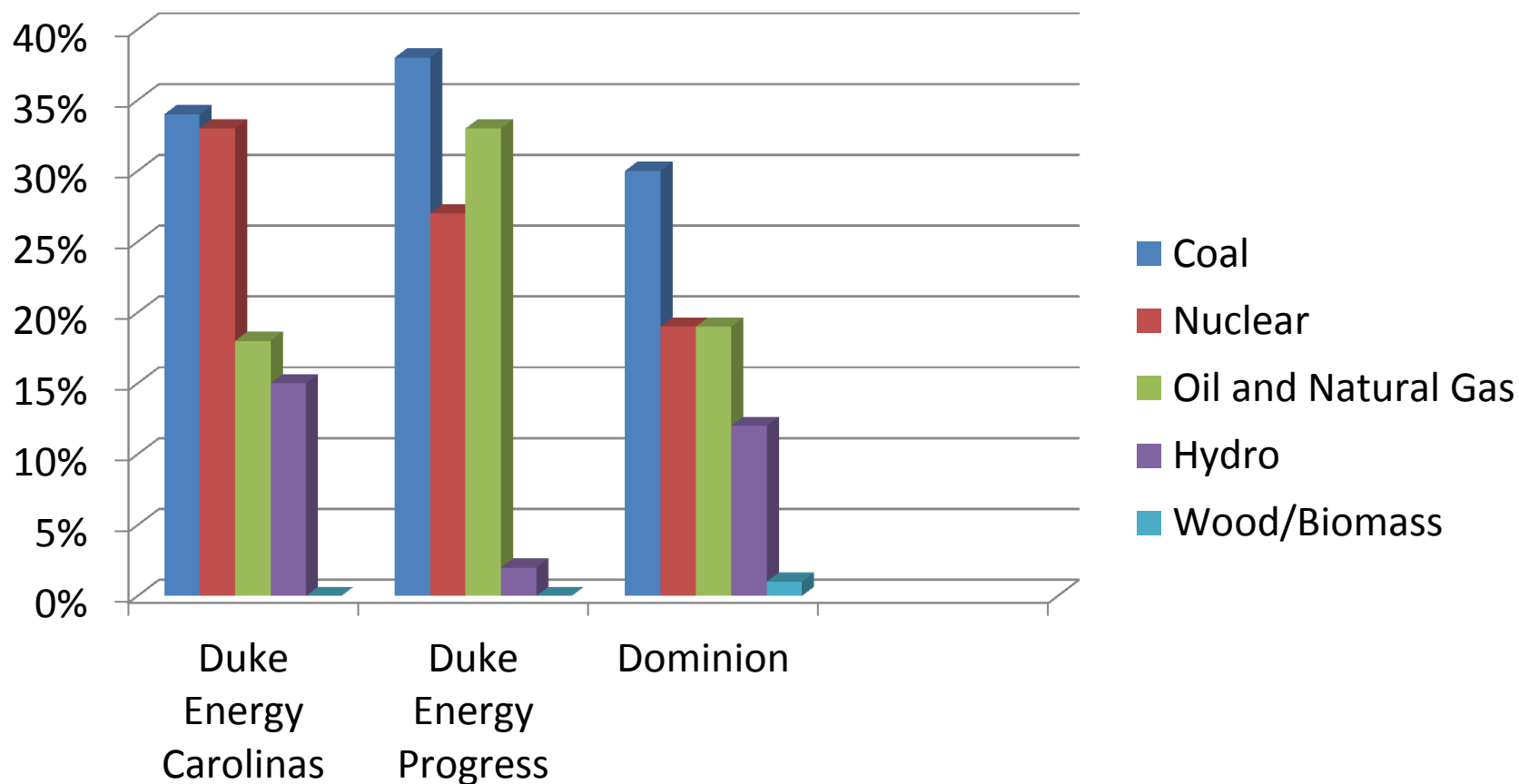
# Electric: EMC, Municipal-Owned, University-Owned



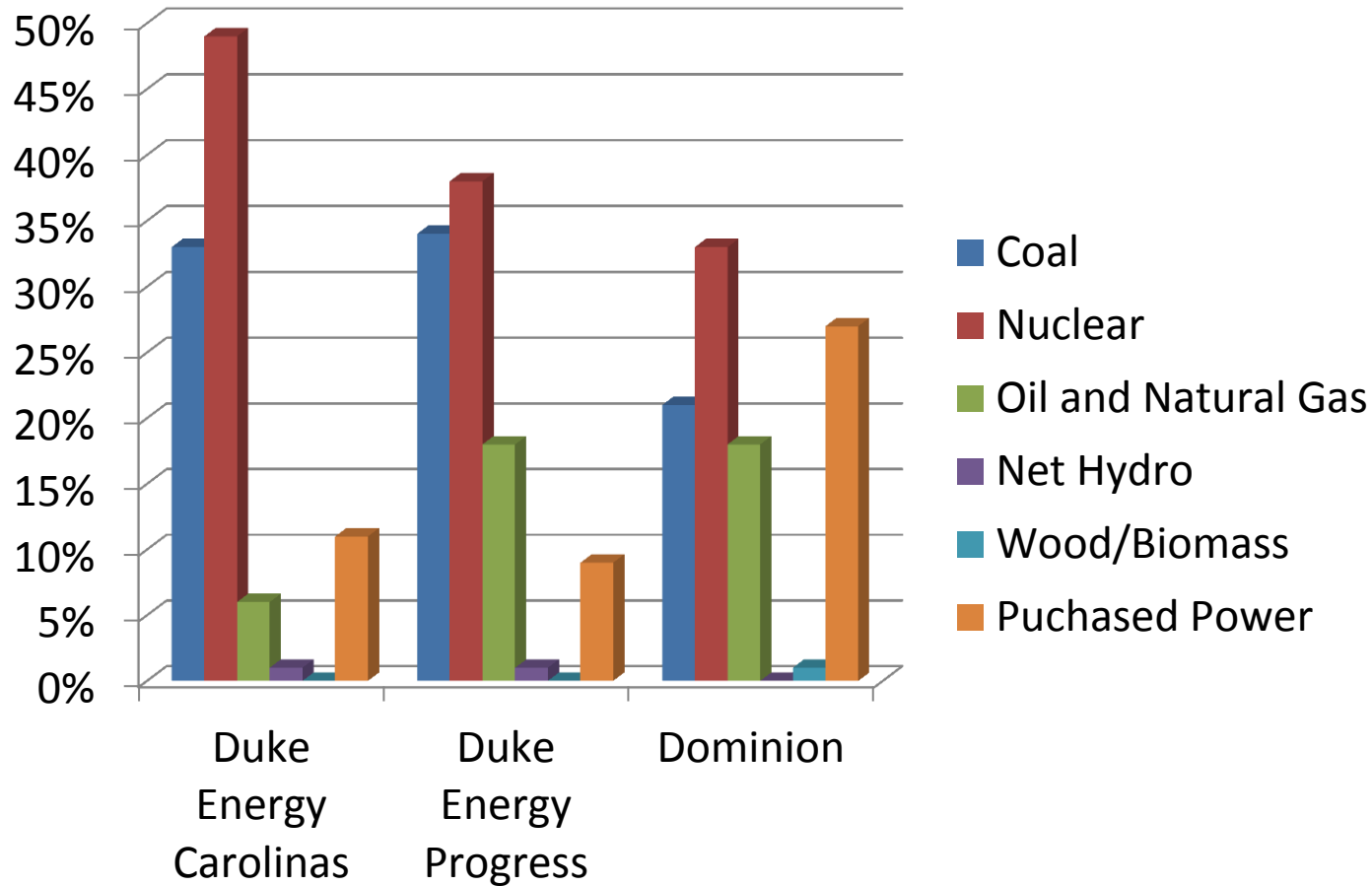
- 31 Electric Membership Corporations (EMCs) – 1,047,000 customers
- About 75 Municipal and University-owned electric distribution systems – 570,000 customers
- Limited NCUC jurisdiction: EMCs, Munis, and certain University systems
  - Monitor subsidiary business activities of EMCs to prevent subsidization by electric customers (*G.S. 117-18.1*)
  - EMC territorial assignment issues (*G.S. 62-110.2*)
  - Certification authority for construction of electric generating facilities (*G.S. 62-110.1*)
  - Certification authority for construction of electric transmission lines of 161+ kV (*G.S. 62-101*)
  - Safety jurisdiction over gas pipeline facilities operated by municipalities and similar entities (*G.S. 62-50*)
  - Rates charged to customers of New River Light and Power (Boone) and Western Carolina University (Cullowhee) are regulated by the Commission



# Electric: Generating Capacity by Fuel Type (Utility Owned)



# Electric: Total Energy Resources by Fuel Type (2012)



# Electric: Renewable Energy & Energy Efficiency Portfolio Standard

- In 2007, North Carolina became the first State in Southeast to adopt a renewable energy portfolio standard – Session Law 2007-397 (Senate Bill 3)
  - May be met through combination of renewable energy generation and energy efficiency

Calendar Year	General Requirement	Solar	Swine Waste*	Poultry Waste*
2010	-----	0.02%		
2012	3% of 2011 NC retail sales	0.07%	0.07%	170,000 megawatt hours
2015	6% of 2014 NC retail sales	0.14%	0.14%	700,000 megawatt hours
2018	10% of 2017 NC retail sales	0.20%	0.20%	900,000 megawatt hours
2021 and thereafter	12.5% of 2020 NC retail sales <i>(2021 increased requirement only applies to IOUs)</i>			

\*Portions of the Swine and Poultry waste set-asides have been delayed or cancelled by Commission Order in Docket No. E-100, Sub 113, additional delays have been requested and the matter is pending before the Commission.

<b>Current REPS Riders per month:</b>	<b>Residential (cap \$1.00)</b>	<b>Commercial (cap \$12.50)</b>	<b>Industrial (cap \$83.33)</b>
Duke Energy Carolinas	<b>\$-0.04</b> credit	\$3.14	\$10.73
Duke Energy Progress	\$0.19	\$7.83	\$29.62
Dominion North Carolina Power**	--	--	--

\*\*Dominion filed for its first REPS Rider in Docket No. E-22, Sub 503, a hearing was held on November 13, 2013, the matter is still pending before the Commission.



# Major/Emerging Issues

- Electricity
  - Fuel and fuel-related costs
  - Conventional and renewable generation
  - Renewable Energy and Energy Efficiency Portfolio Standard (REPS)
  - Grid integration of distributed generation
  - Transmission planning and construction, FERC Order 1000
  - Energy efficiency and demand response

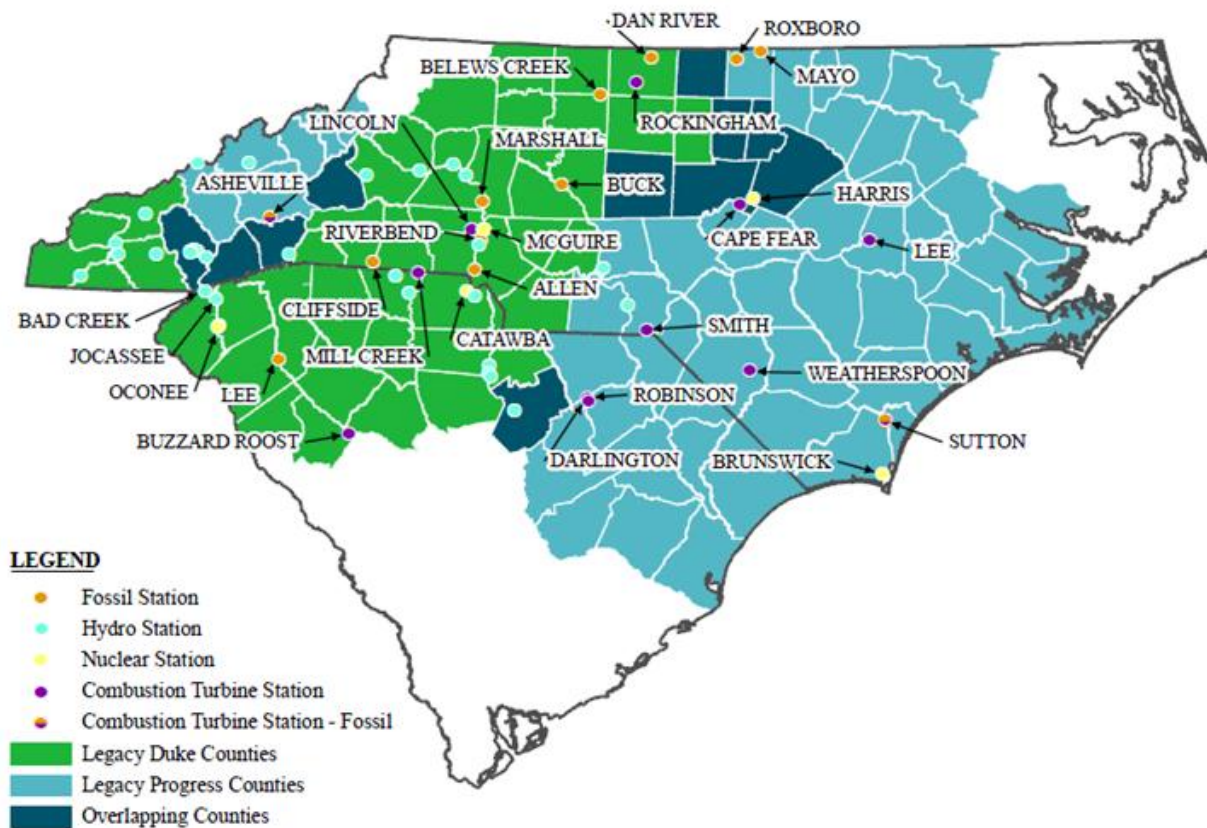


# Major/Emerging Issues

- Electricity continued...
  - Nuclear waste management
  - Greenhouse gas emissions and carbon regulation under Section 111(d) of the Clean Air Act
  - Credit/financing
  - Third party sales and net-metering
  - Continued issues relating to the Duke/Progress Merger
  - Rate increases, appeals, Supreme Court decisions



# Electric: Generating Facilities- Additions and Retirements



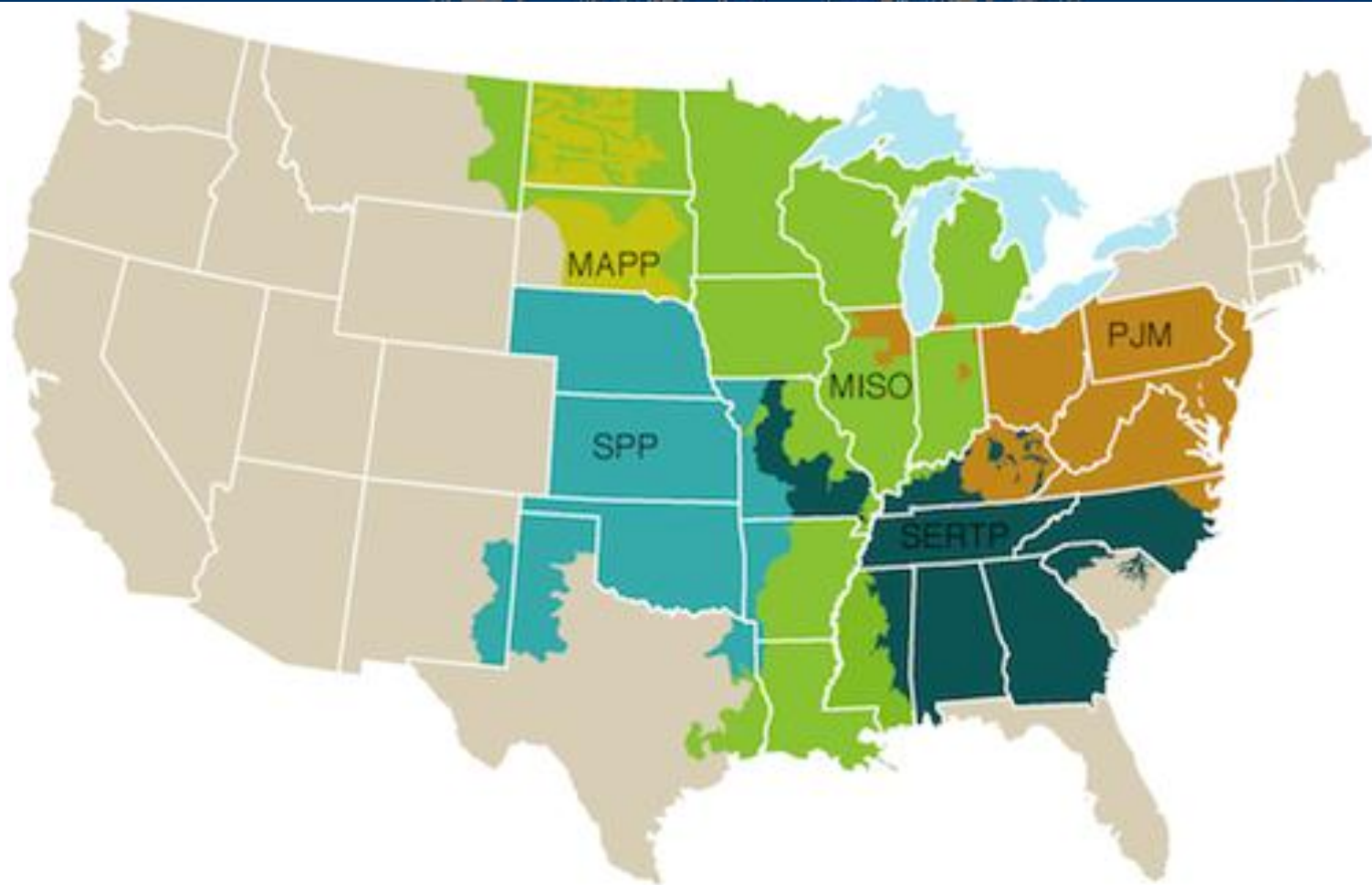
## **Recent Additions/Retrofits:**

Cliffside 6 (825 MW)  
Lee CT (82 MW)  
Dan River CC (620 MW)  
Sutton CC (625 MW)  
Buck CC (620 MW)  
Smith CC (600 MW)

## **Recent Coal Retirements since 2011:**

Cliffside 1,2,3,4 (198 MW)  
Buck 3,4 (113 MW)  
Weatherspoon 1,2,3 (170 MW)  
Dan River 1,2,3 (276 MW)  
Lee 1,2,3 (382 MW)  
Cape Fear 5,6 (316 MW)  
Robinson 1 (177 MW)  
Riverbend 4,5,6,7 (454 MW)  
Buck 5,6 (256 MW)  
*Sutton 1,2,3 (553 MW) – projected*  
*Lee 1,2,3 (370 MW) – projected 2015*

# Electric: FERC Order 1000





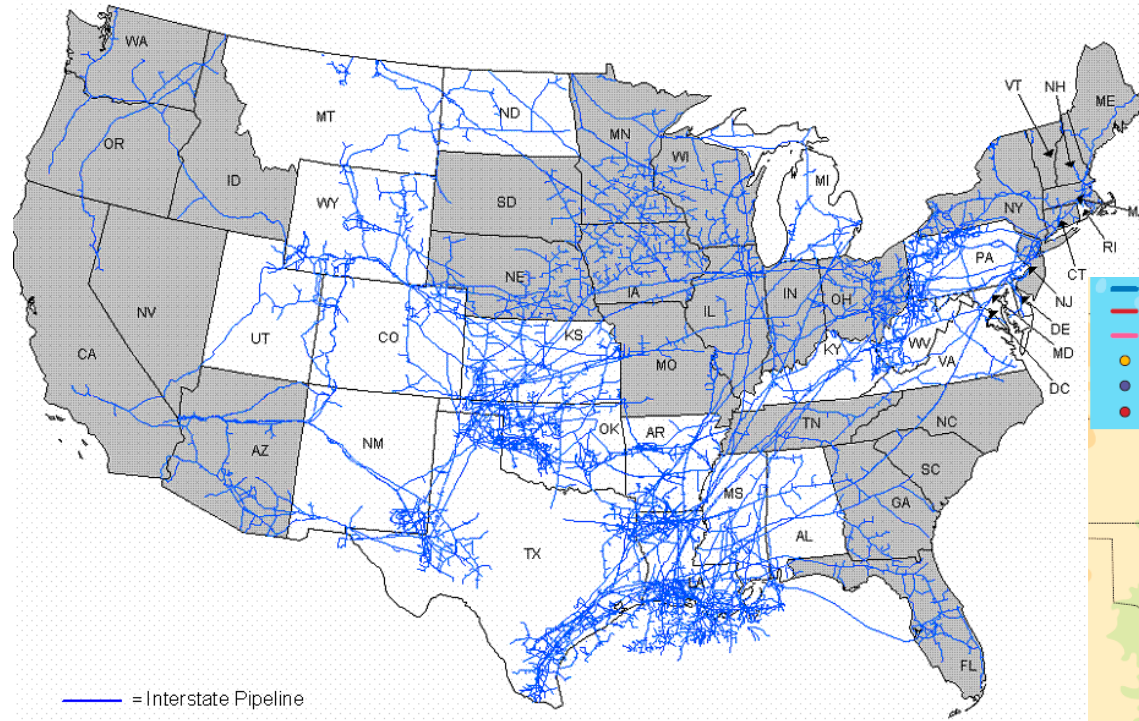
# Natural Gas

## Basic Facts: Industry Structure



- Three parts of natural gas industry
  - Exploration and Production (E&P)
  - Interstate pipelines and storage facilities
  - Local Distribution Companies (LDCs)
- E&P companies not price-regulated
- Interstate companies regulated by Federal Energy Regulatory Commission (FERC)
- LDCs regulated by state commissions

# Interstate Pipeline Network: Transco



Only one interstate pipeline (Transco) serves North Carolina.



# Natural Gas Utilities



- 4 Local Distribution Companies (LDCs) in the state  
(Piedmont Natural Gas Company, Inc.; PSNC Energy; Frontier Natural Gas Company, LLC; Toccoa Natural Gas)
- 1 very small propane distribution system (Summerlyn Farms)
- 1 Intrastate Gas Pipeline (Cardinal Pipeline Company, LLC)
- 8 Municipal Gas Systems – rates not regulated by NCUC
- 1 Interstate Gas Pipeline (Transco) crosses the state  
— 2 others (Columbia and Patriot) provide small volumes
- 1 interstate liquefied natural gas storage facility  
(Pine Needle LNG Company, LLC)

# State Regulatory Framework For Local Distribution Companies

## Certification

- NCUC issues certificates for LDCs' service territories
- LDC must provide adequate service at reasonable rates
- Four counties are not certificated
  - Alleghany, Cherokee, Clay, and Graham

## Rates

- NCUC establishes level of base rates
- LDCs earn a return on equity invested
  - Pass through prudently incurred costs
- LDCs may file purchased gas adjustments at any time
  - To adjust gas cost portion of rates prospectively
  - To pass through the wholesale cost of natural gas
  - LDCs do not profit from high gas prices
- NCUC annually reviews each LDC's gas purchasing practices
  - Compares prudently incurred costs to costs recovered
  - Changes rates to "true up" under-recoveries or over-recoveries

# Major/Emerging Issues



- Natural Gas
  - Low natural gas prices; growing, changing market
  - U.S. natural gas production is at a four-decade high
  - New shale plays have greatly increased production
  - Infrastructure needed to move shale gas
  - Demand for gas for electric generation is increasing
  - U.S. natural gas use at historic high, 25.5 trillion cubic feet in 2012, up 10% over 2008



# Major/Emerging Issues



- Natural Gas continued...

## Revenue Decoupling:

- Traditionally, rates are set using historic sales volumes
- Encourages the promotion of increased energy usage
- “Decoupling” decouples LDC’s margin recovery from sales
- Pursuant to G.S. 62-133.7, NCUC approved decoupling plans for PSNC & Piedmont



# Major/Emerging Issues (Telecom/Water)

- Telecommunications
  - Transition to all IP network
  - Broadband deployment
  - Intercarrier compensation
  - Universal service
  - Lifeline reform
- Water & Wastewater
  - Water supply
  - Environmental issues
  - Industry consolidation
  - Drought conditions
  - Financing/bonding





# Major/Emerging Issues

- General
  - Financial market pressures
  - Storm impacts
  - Emergency preparedness
  - Accounting issues
  - Merger conditions
  - Tension at intersection of regulated and competitive activities of regulated companies
  - State versus Federal regulatory authority issues.

# Telecommunications

## Basic Facts: Telecom Utilities

- 16 Incumbent Local Exchange Companies (ILECs)  
(4 ILECs price-plan regulated, 2 ILECs rate-of-return regulated, 9 ILECs Subsection (h) price-plan elected, effective upon filing notice (*G.S. 62-133.5(h)*), 1 ILEC Subsection (m) price-plan elected, effective upon filing notice (*G.S. 62-133.5(m)*))
- 174 Competing Local Providers (CLPs) - Rates are not regulated; may raise rates after 14 days customer notice
- 305 Interexchange Long Distance Carriers (IXCs)
  - Senate Bill 814, signed into law on 5/30/03, found long distance services sufficiently competitive and no longer subject to regulation by the Commission. However, the Commission has authority regarding certification and enforcement of slamming and cramming rules.
- 68 Payphone Service Providers (PSPs)
- 18 Shared Tenant Services (STS) Providers
- Commission does not regulate: Telephone Membership Corporations, Cable and Satellite, Commercial Mobile Radio Service (*includes cellular and pagers*), Data and Internet Service Providers, Long Distance Providers (*with the exceptions of certification and enforcement of slamming and cramming rules*), Rates, terms, conditions, or availability of retail services of Subsection (h) and Subsection (m) price-plan entities (ILEC or CLP)

# Water and Wastewater

## Basic Facts: Water/Wastewater Industry

- Anyone furnishing water to the public for compensation or operating a public sewerage system for compensation is a public utility (G.S. 62-3(23)a.2)
- Regulation does not include –
  - Operations with less than 15 residential customers
  - Municipal or County systems
  - Sanitary Districts
  - Mobile Home Parks (where water/wastewater included in rent)
  - Homeowners' Associations
  - Nonprofit and consumer-owned corporations
- NCUC grants certificates for specific service area and regulates rates and service aspects of utility operation.
- NCUC does not regulate drinking water quality, but requires compliance with NCDENR, Division of Water Resources, regulations.
- NCUC does not regulate discharge of sewage being treated, but requires compliance with NCDENR, Division of Water Quality, regulations.

# Questions/Contact



Questions?

Contact:

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