

JOINT SUBCOMMITTEE STUDYING MANUFACTURING NEEDS AND THE FUTURE OF MANUFACTURING IN VIRGINIA

**DIANE LEOPOLD
V.P. - BUSINESS
PLANNING &
MARKET ANALYSIS**



Dominion®



Dominion – A Fully Integrated Energy Company

26,000 MW of electric generation
6,000 miles of transmission lines
7,900 miles of gas pipeline
4 million retail customers



E & P

- Oil and natural gas development



Energy

- Natural gas pipeline
- Electric transmission
- Natural gas storage
- LNG
- Energy trading



Generation

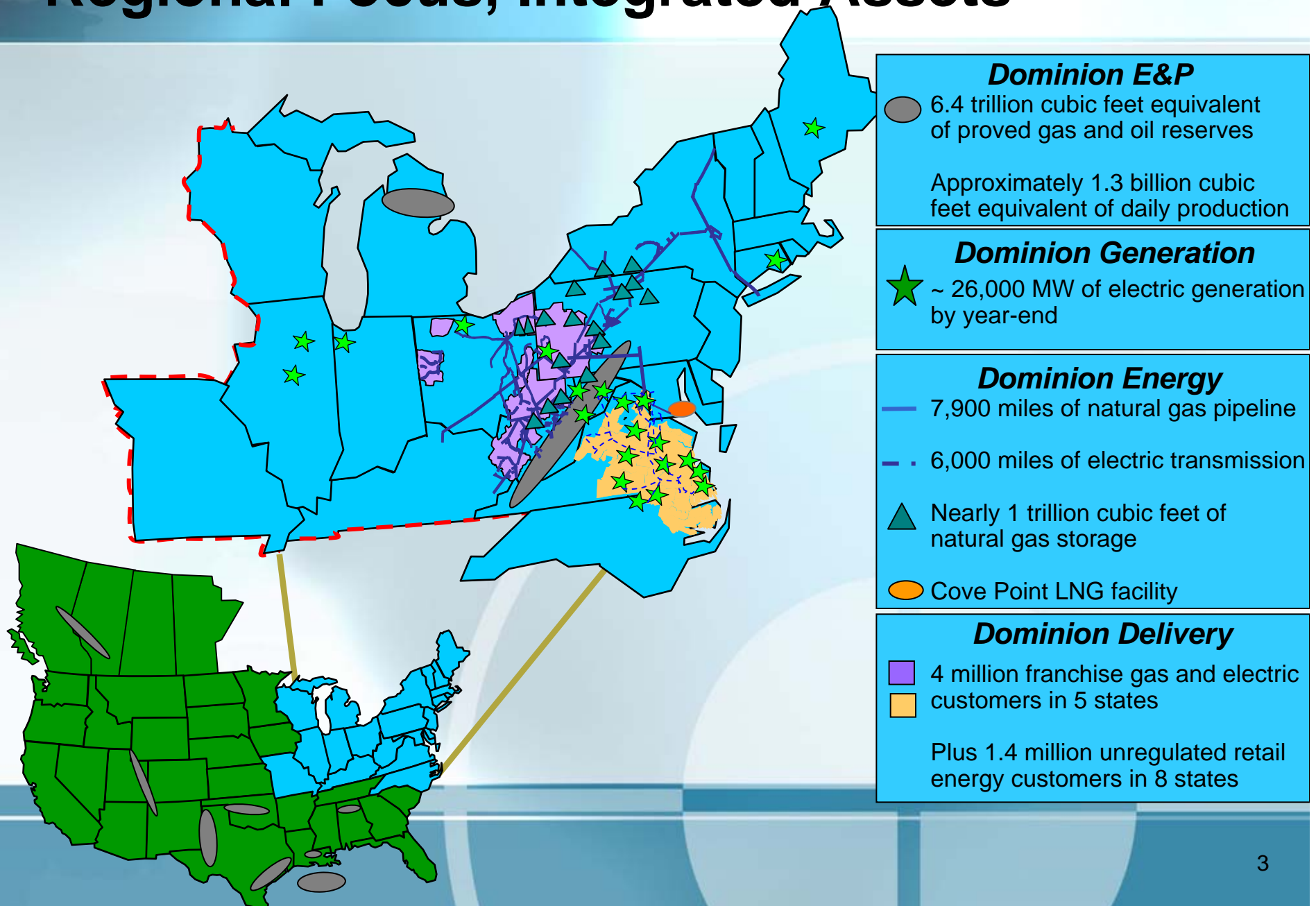
- Coal
- Natural gas
- Nuclear
- Oil
- Hydro



Delivery

- Franchise gas/ electric customers in 5 states
- Unregulated retail customers in 8 other states

Regional Focus, Integrated Assets

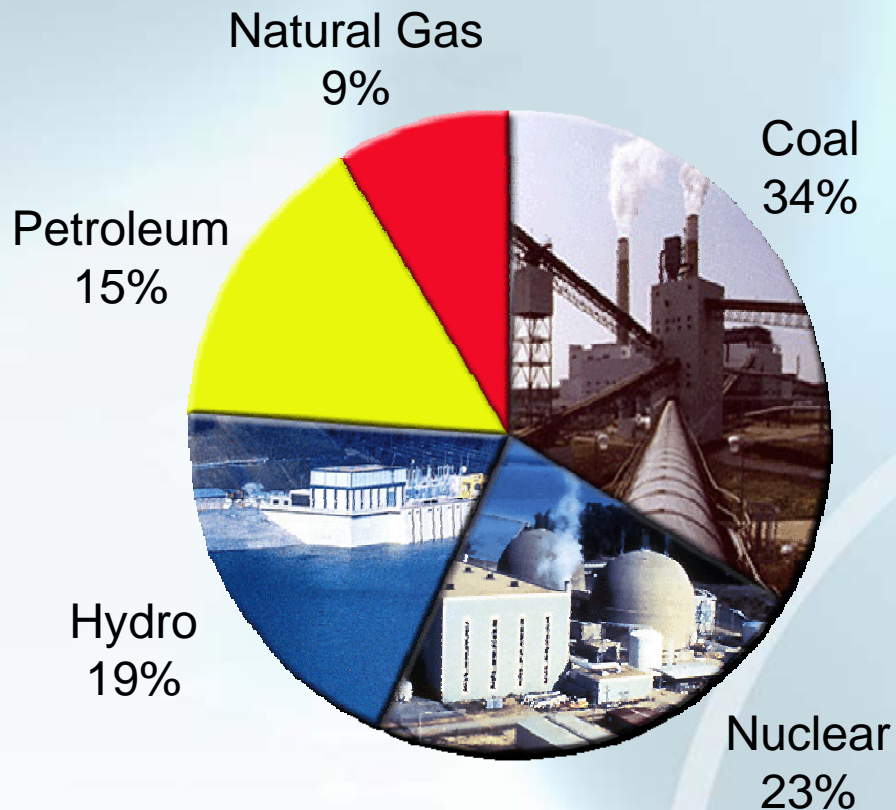


Dominion: Assisting Virginia's Manufacturers

- Providing reliable and affordable energy
- Pro-active economic development team works with the state and localities to attract and keep industries
- Key account rep assigned to each large customer
- Supporting economic development rates

Dominion's Balanced Generation Fuel Mix

Fuel diversity is important!



- Enhances reliability
- Improves energy security
- Provides hedge against price volatility

Dominion: Dependable Generation Assets

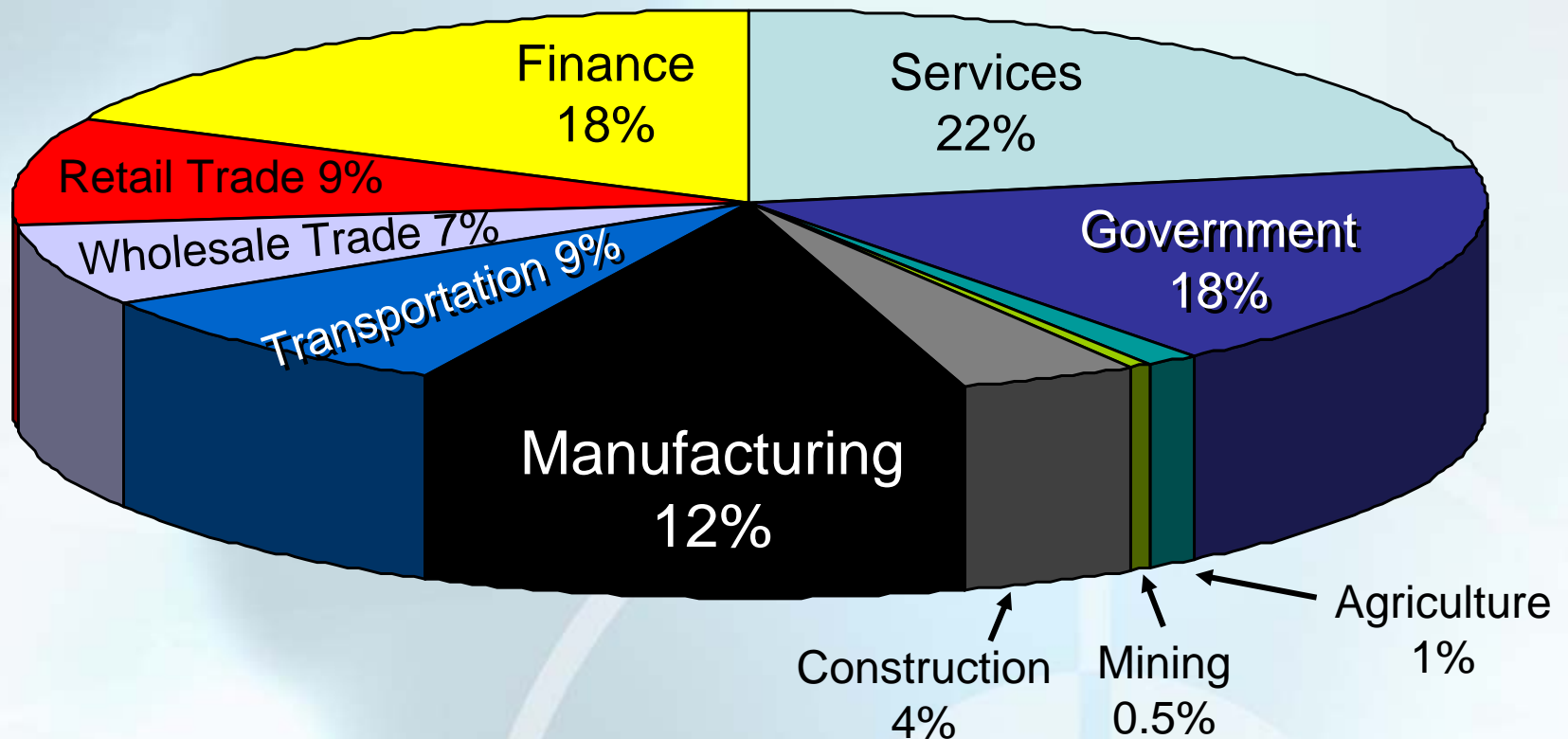
Committed to protecting and expanding our low-cost and reliable generation assets

- EPA settlement insures continued operation of fossil units (costs shareholders \$1.2 B)
- Operating licenses extended for all four nuclear units in Virginia
- Recently re-powered units at Possum Point Power Station with natural gas
- Exploring possibility of new coal plant in southwest Virginia

Energy and Manufacturing in Virginia

- Government, Finance and Services influence Virginia GSP greater than the manufacturing sector
 - Government, Finance and Services: ~58% of VA GSP
 - Manufacturing: 12% of VA GSP
- 76% of manufacturing sector are energy intensive industries
 - ~10% of total GSP in Virginia
- Chemical and Primary Metal industry are very energy intensive. These industries represent ~2-2.5% of VA GSP
 - Chemical industry fell victim to high energy prices
 - Primary Metals is experiencing a significant recovery due to growing international demand and lower U.S. dollar valuation
- The energy intensive industries least impacted by higher prices are paper and food processing

Virginia Gross State Product Components



Government, Finance and Service sectors represent about 58% of the total Virginia GSP. Manufacturing sector only accounts for about 12%.

*Source: Bureau of Economic Analysis,
Regional Economic Accounts*

Virginia GSP Sector Breakout (12% total GSP)

Manufacturing: Energy Intensive

Real GSP (M of chained 1996 \$) 5 Yrs. Avg.

Manufacturing Industry (1997-2001) % Total

Chemicals and allied products	3816	13%
Electronic and other electric	2992	10%
Food and kindred products	2918	10%
Industrial machinery/equipment	2378	8%
Motor vehicles/equipment	2002	7%
Rubber & misc. plastic products	1749	6%
Paper & allied products	1379	5%
Fabricated metal products	1194	4%
Other transportation equipment	1184	4%
Textile mill products	1033	4%
Primary metal industries	763	3%
Stone, clay & glass products	638	2%
Petroleum & coal products	108	0.4%

Energy Intensive Average 76%

Manufacturing: Non-Energy Intensive

Real GSP (M of chained 1996 \$) 5 Yrs. Avg.

Manufacturing Industry (1997-2001) % Total

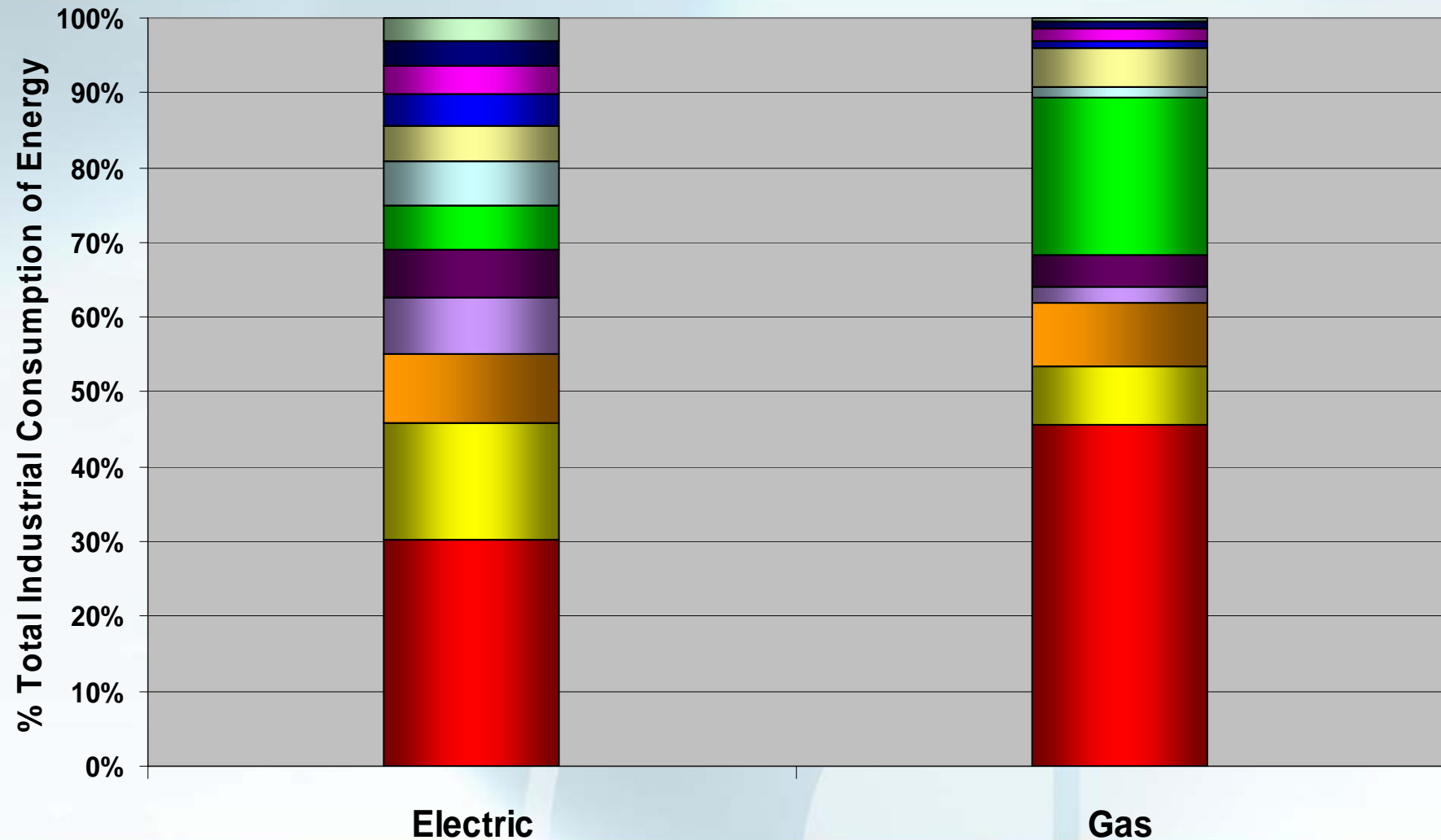
Tobacco products	2112	7%
Printing & publishing	1697	6%
Lumber & wood products	1410	5%
Furniture & fixtures	724	2%
Instruments & related products	579	2%
Apparel & other textile	383	1%
Miscellaneous manufacturing	260	1%
Leather & leather products	16	0.1%

Non-Energy Intensive Average 24%

Energy Intensive Industries account for 10% of Virginia's GSP

Source: Bureau of Economic Analysis,
Regional Economic Accounts

Industrial Consumption by Sector



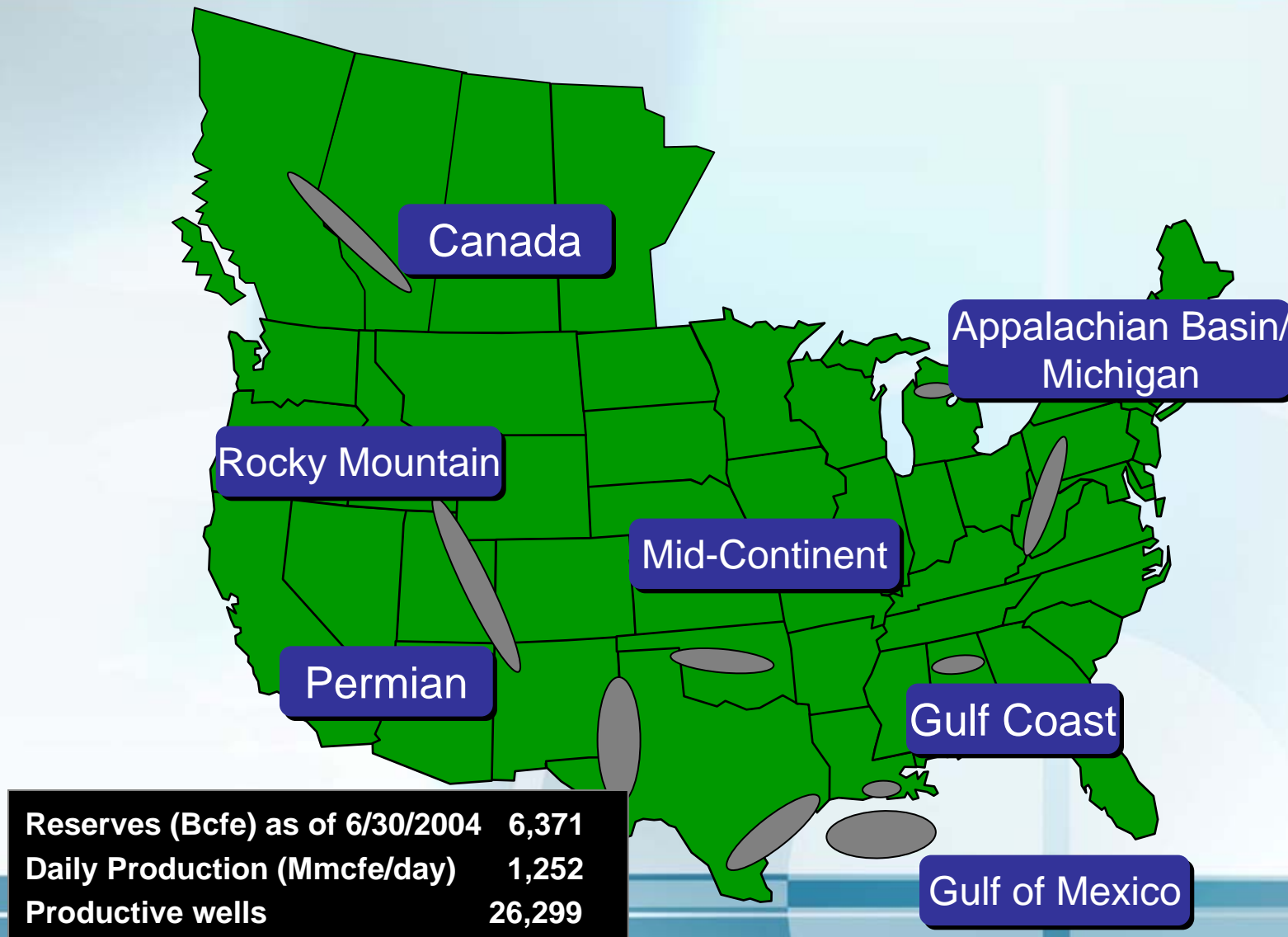
Energy Intensive Industries % of Virginia GSP

Industrial Sector	% of GDP	
	1995	2003
Chemicals	1.6%	1.1%
Food	1.8%	1%
Computer & Electronics	1%	1.2%
Paper	< 1%	< 1%
Textile	< 1%	< 1%
Primary Metals	< 1%	< 1%
Petroleum & Coal	< 1%	< 1%
% Total GSP	5.7%	4.2%

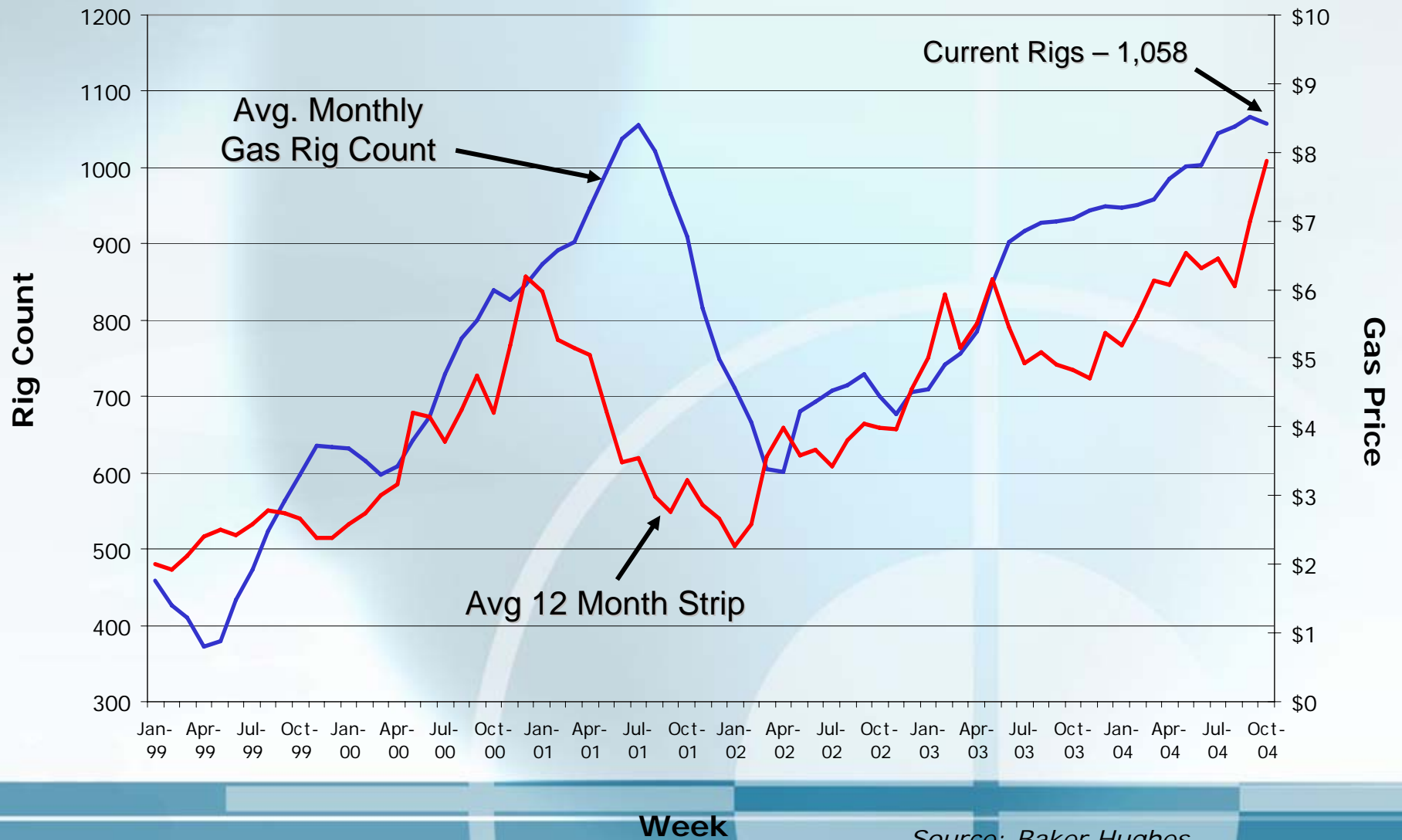
Virginia's GSP is becoming less influenced by energy intensive industries

Source: Economy.com

Dominion Natural Gas Production



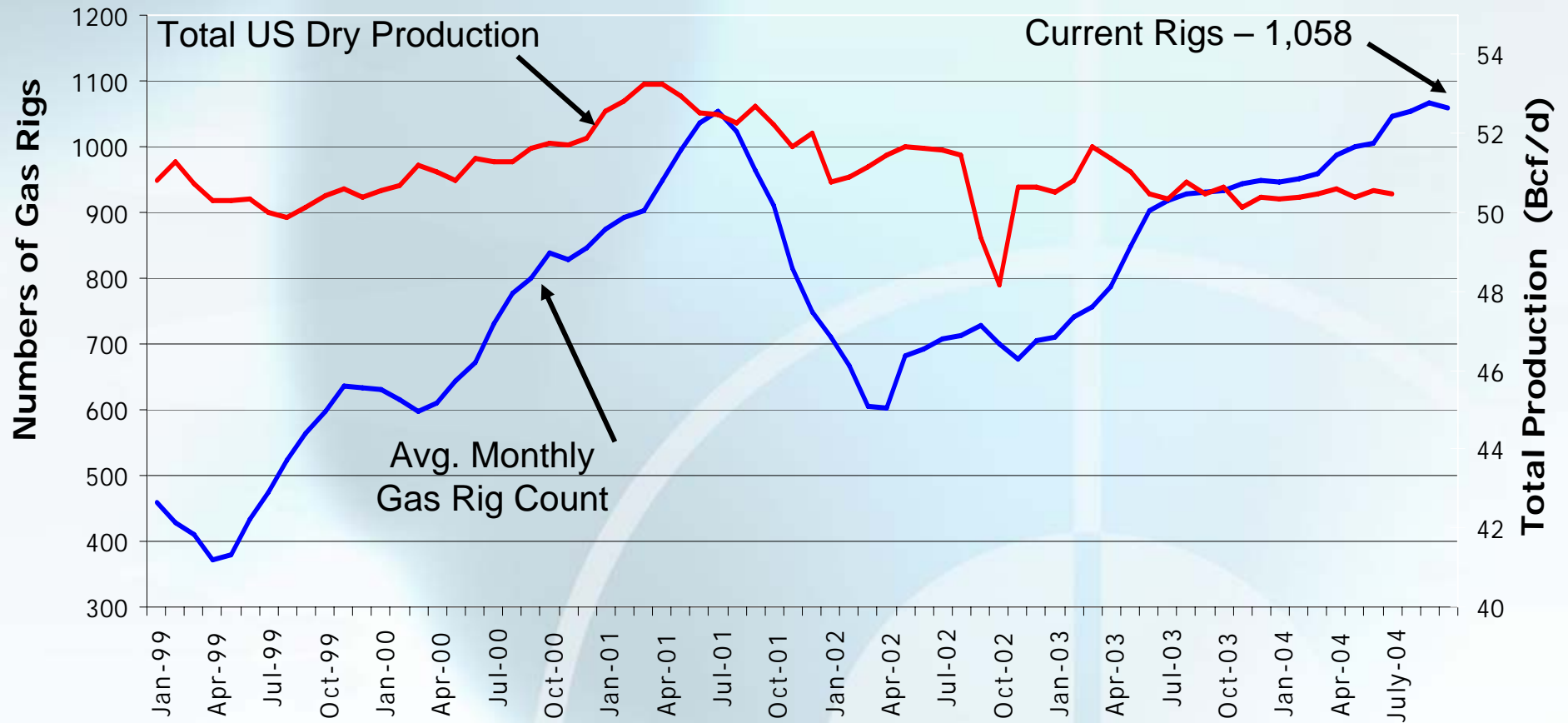
Rigs have responded to price...



Source: Baker Hughes

Production has dropped

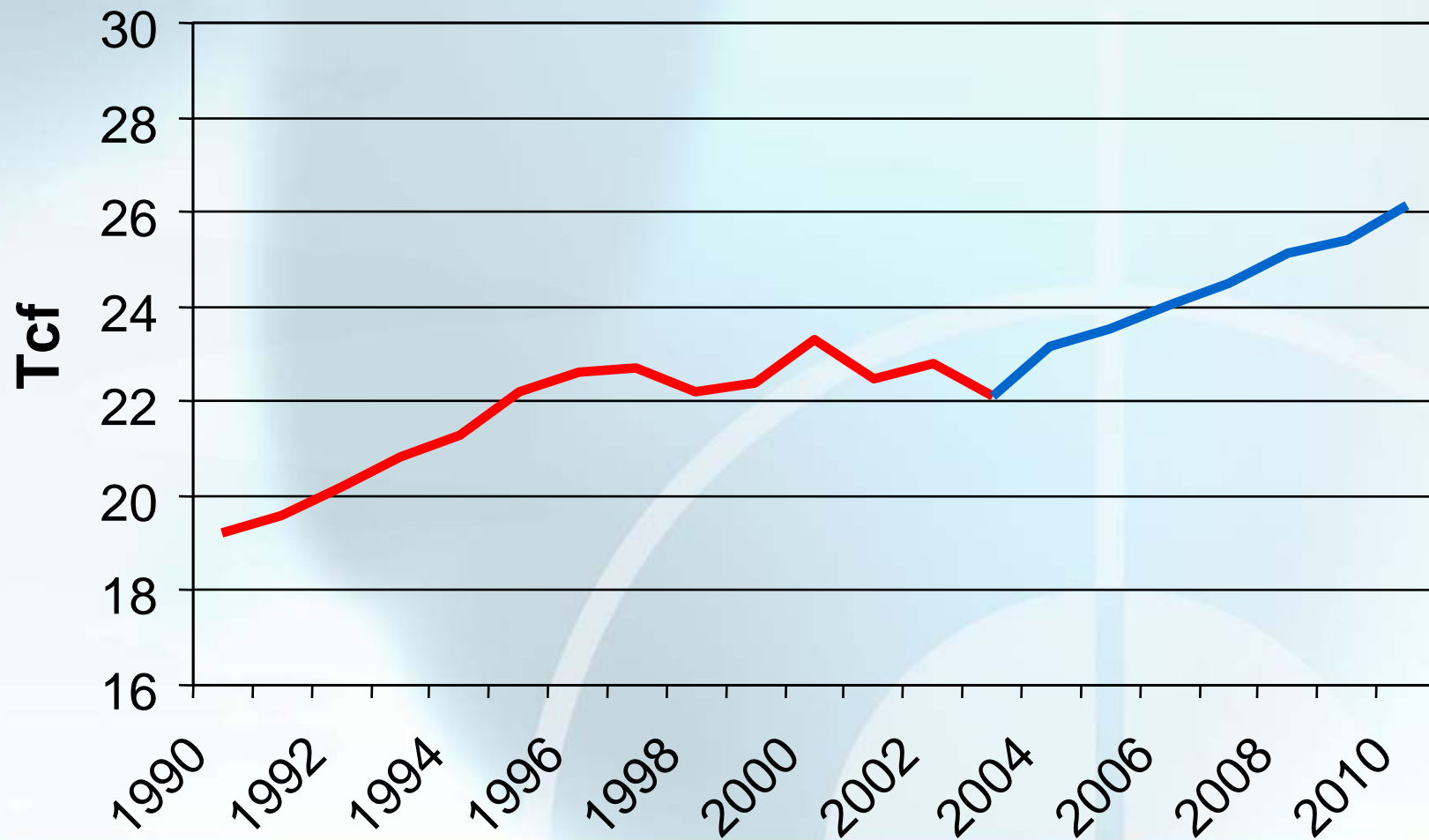
Gas Production vs. Drilling Activity (Lower 48)



Record activity levels are required to offset production decline

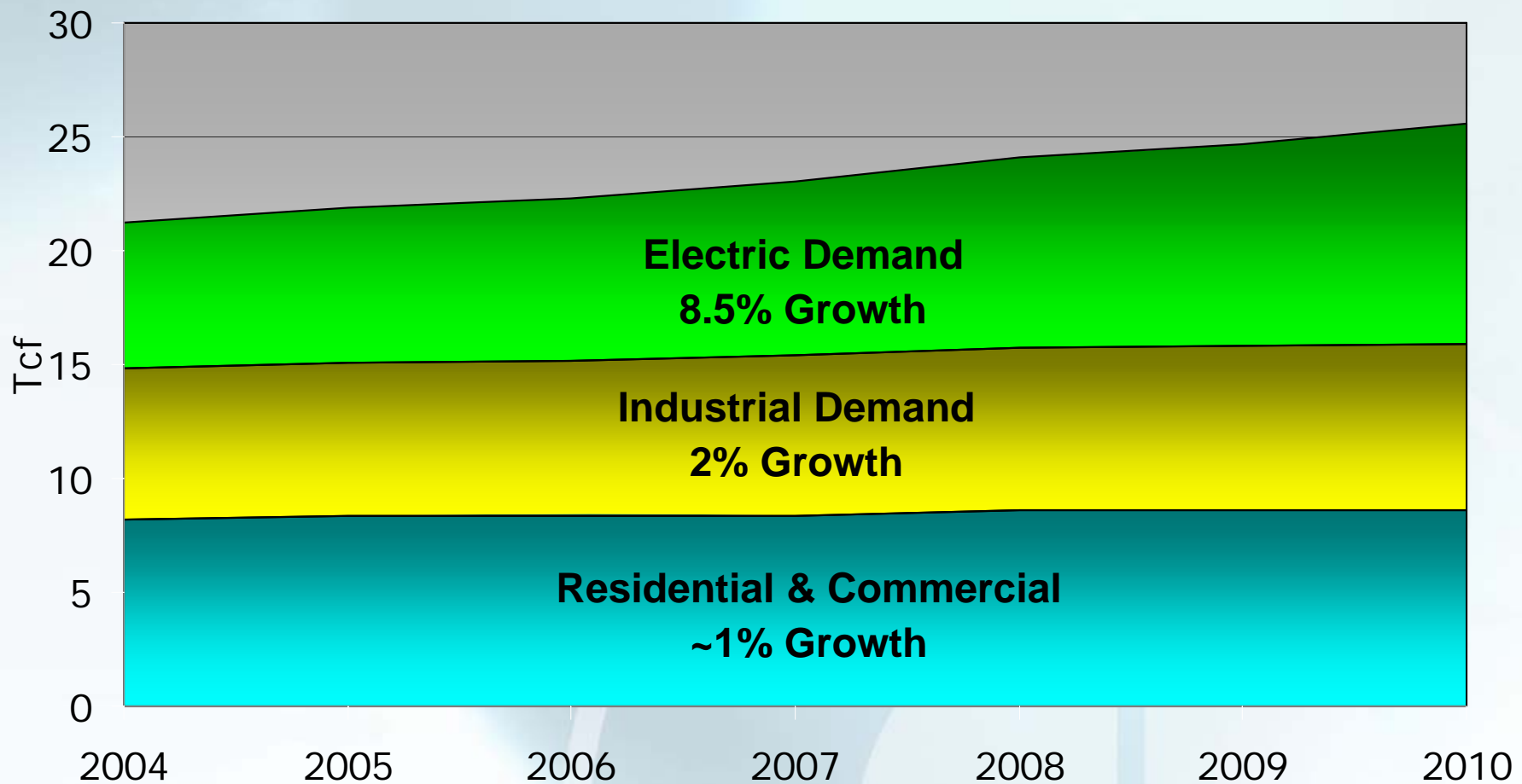
Source: Lippman Consulting, Inc., Baker Hughes

U.S. Natural Gas Demand Growth - 2010



Source: Energy Information Administration

U.S. Demand for Natural Gas (2004-2010)



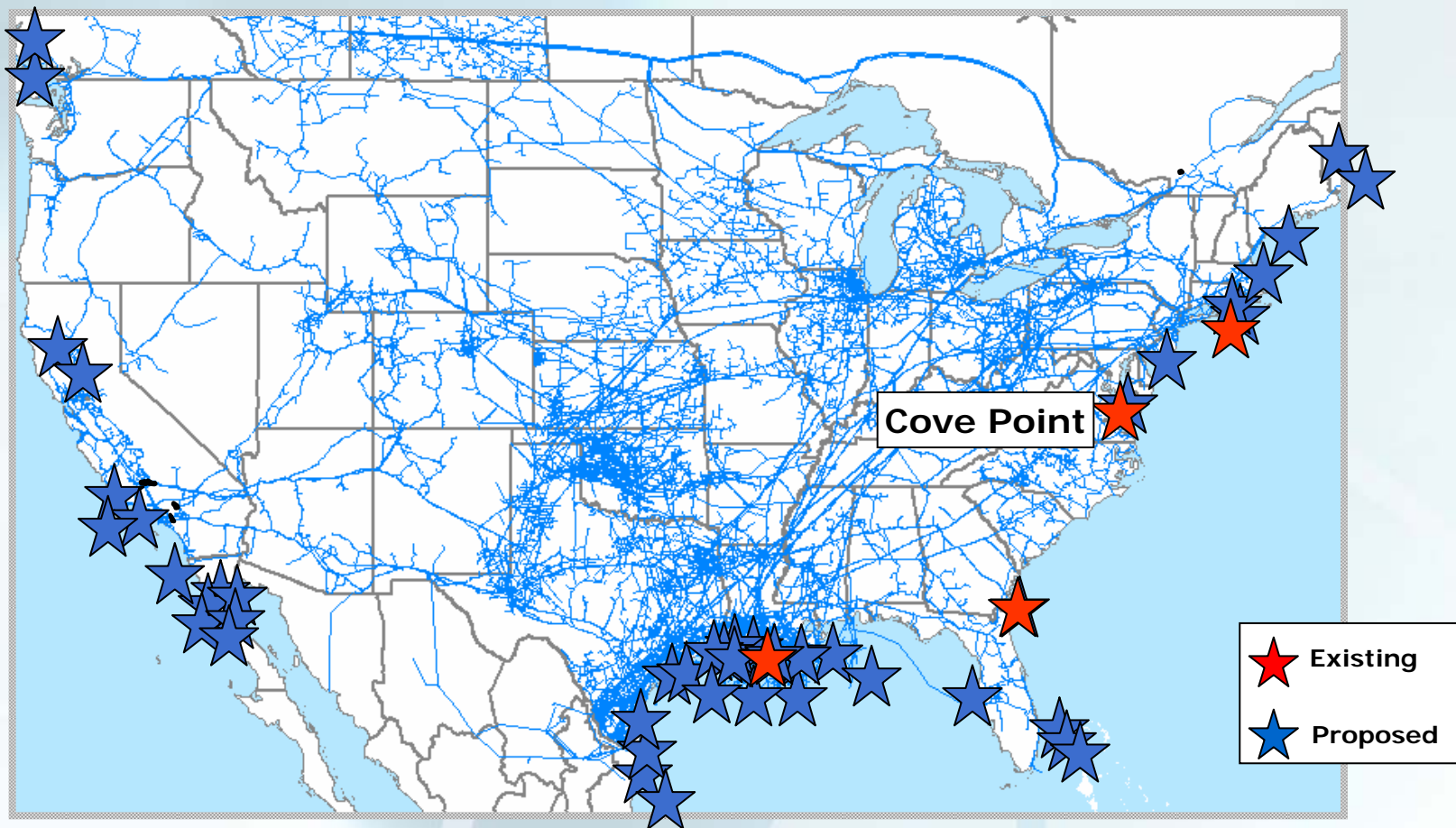
Source: BPMA internal projections

The Natural Gas Situation

*With demand increasing and the North American supply base struggling to stay flat, maintaining access to domestic supply sources **and adding LNG** is the key*



LNG Import Terminals



- Of 40+ new LNG projects targeting North America, 8 are canceled

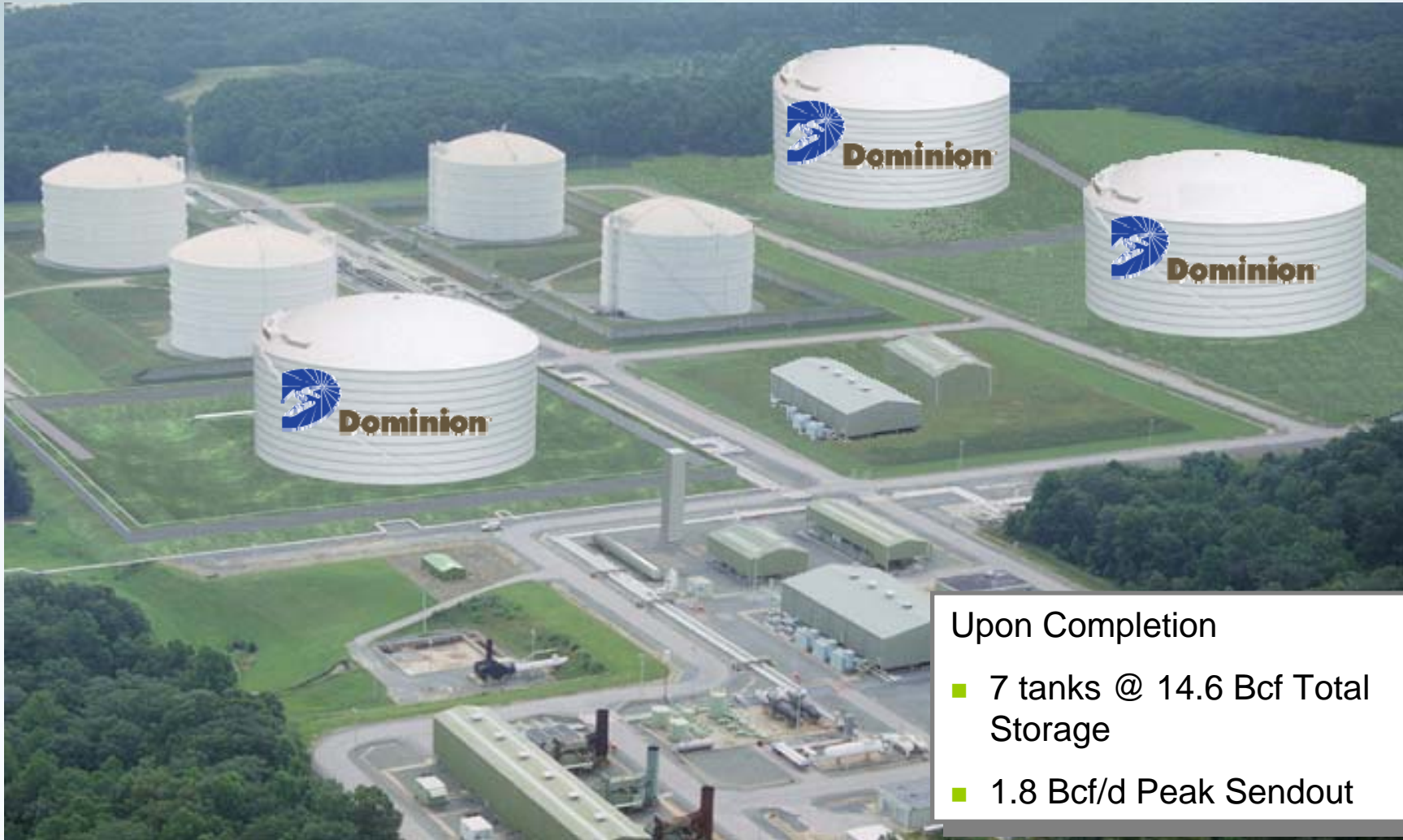
Source: EIA, Poten, Internal Estimates

Dominion Cove Point



- 80 ships received August '03 – September 15, 2004
- 215 MMDt throughput since reactivation
- Record peak hourly sendout - 958,000 Dt/day - 2/5/04

Dominion Cove Point – Future Expansion



Upon Completion

- 7 tanks @ 14.6 Bcf Total Storage
- 1.8 Bcf/d Peak Sendout

Benefits of Cove Point Expansion

- Provides a safe and secure source of needed energy for the mid-Atlantic market
- Supplements available natural gas resources
- Increases supply options for electric generation and gas customers
- Helps reduce price spikes due to supply problems

Restructuring Benefits Manufacturers

The 1999 Restructuring Act:

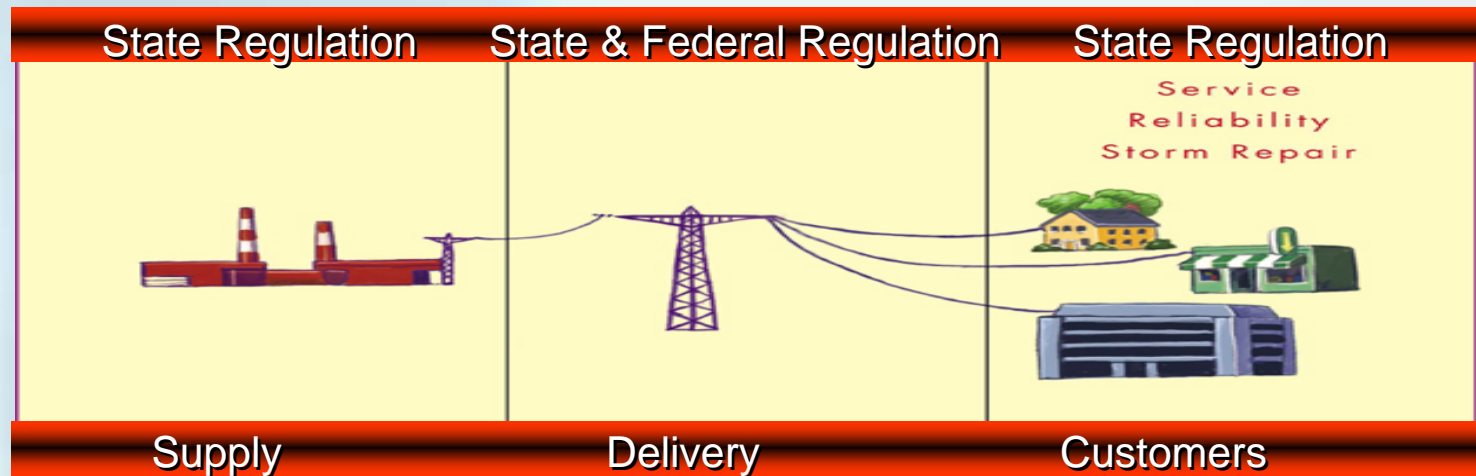
- Caps rates at 1993 levels to mid-2007
 - CPI has risen 25% since 1993
- Deregulates generation only; transmission and distribution remain regulated

SB 651

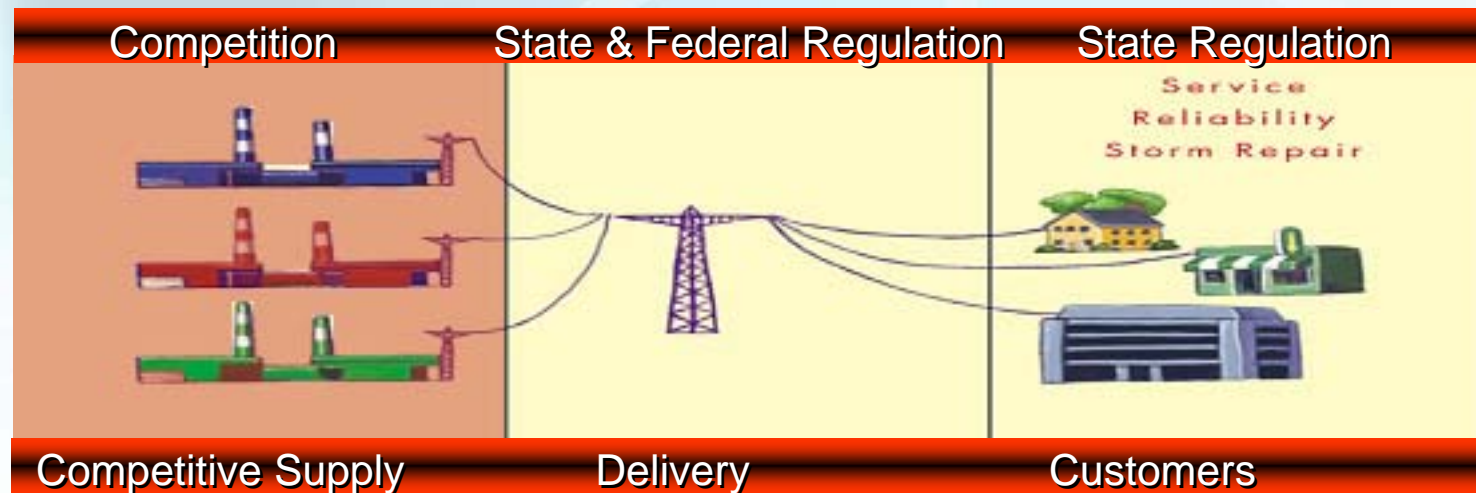
- Extends capped rates to 2011
 - Continued savings for customers (total \$1.8 B)
- Freezes Dominion's fuel cost adjustment
 - Shields customers from rising fuel costs
- Encourages coal plant(s) in southwest Virginia

Changes to Virginia's Electric Business Structure

Past



Present



Restructuring Benefits Manufacturers

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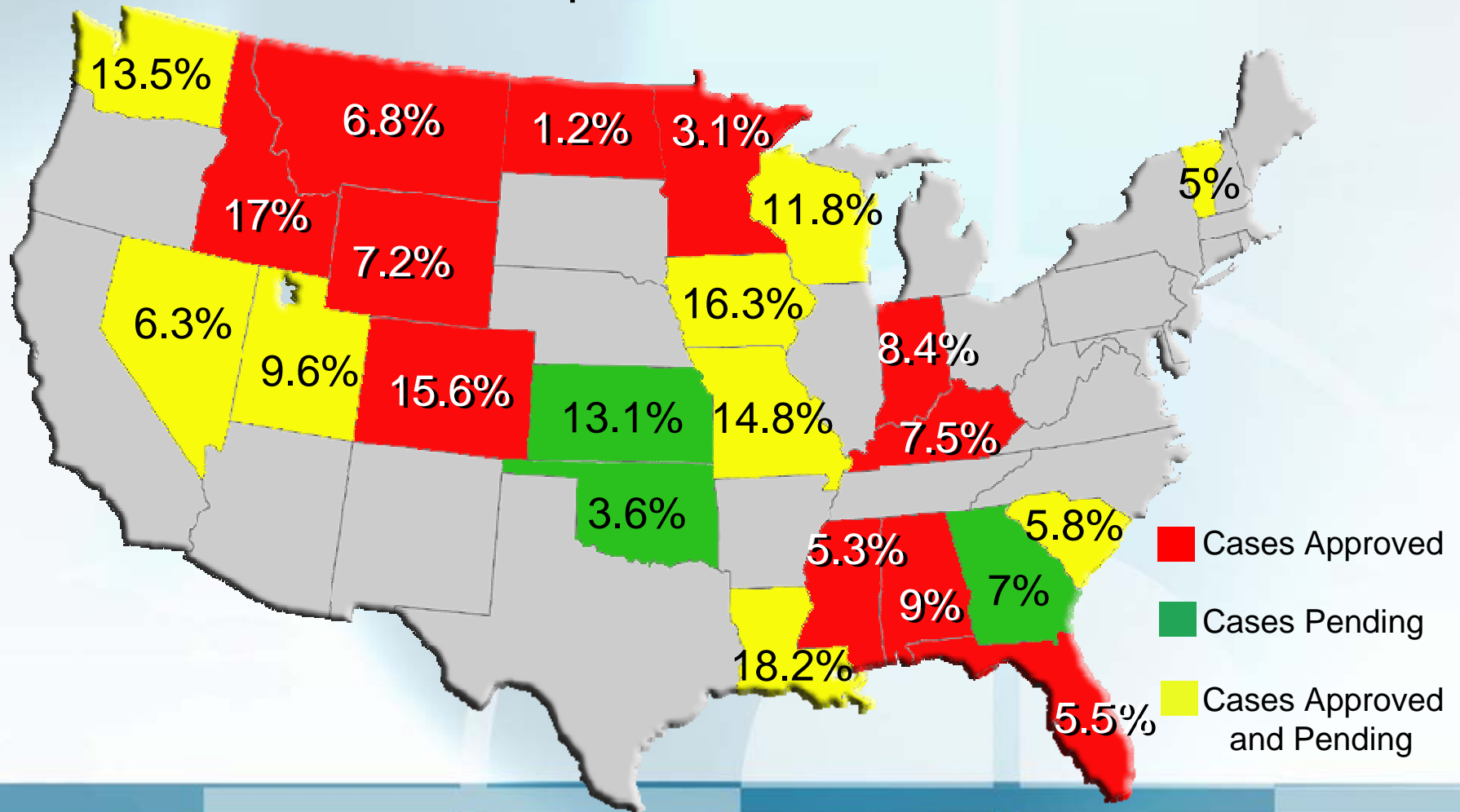
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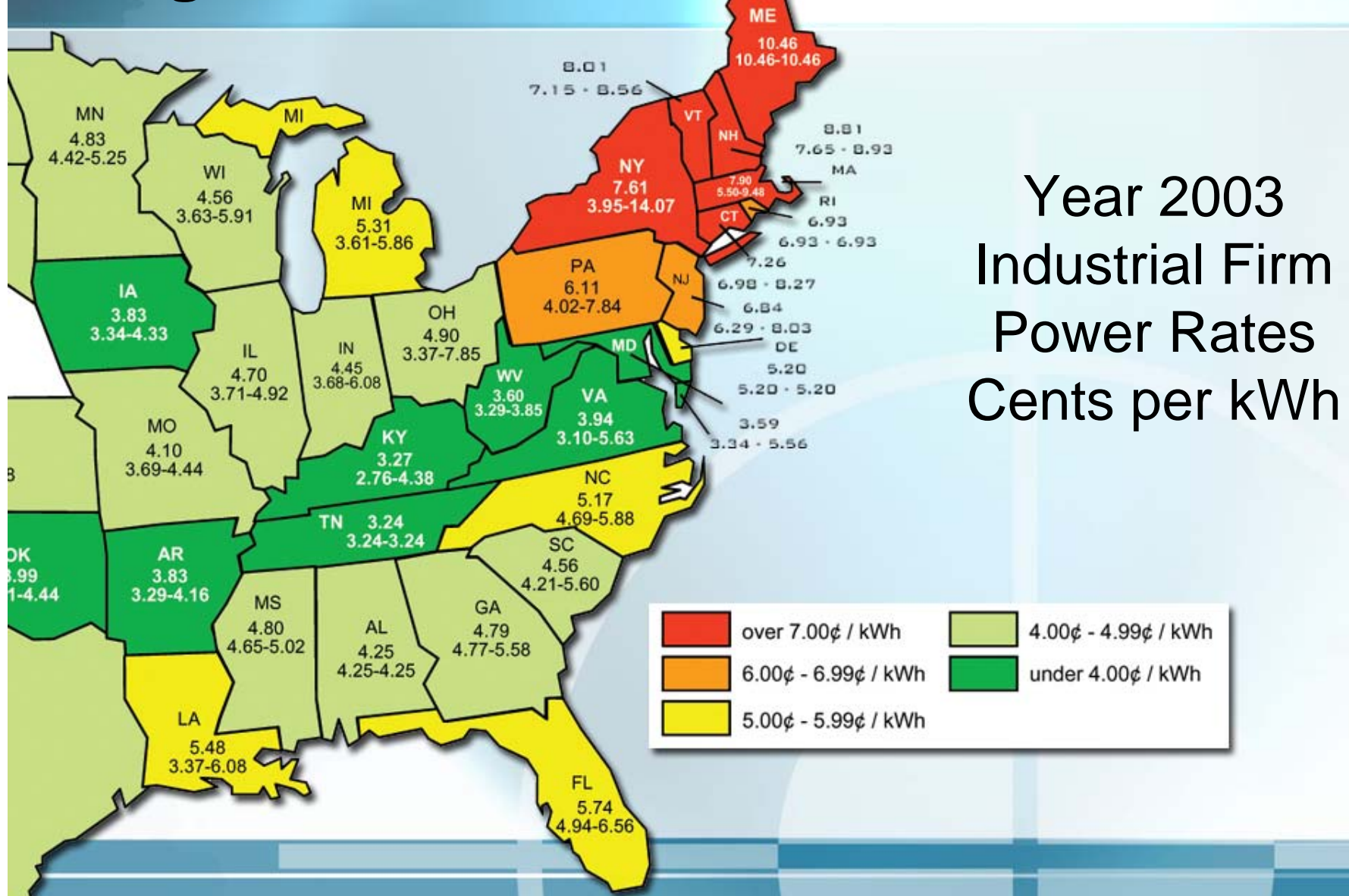
Cost-of-Service Rate Increases – 2003-04

Rate increases and request in selected states



Source: Regulatory Research Associates, Inc.
Press Reports, Corporate News Releases

Virginia's Rates Are Lower



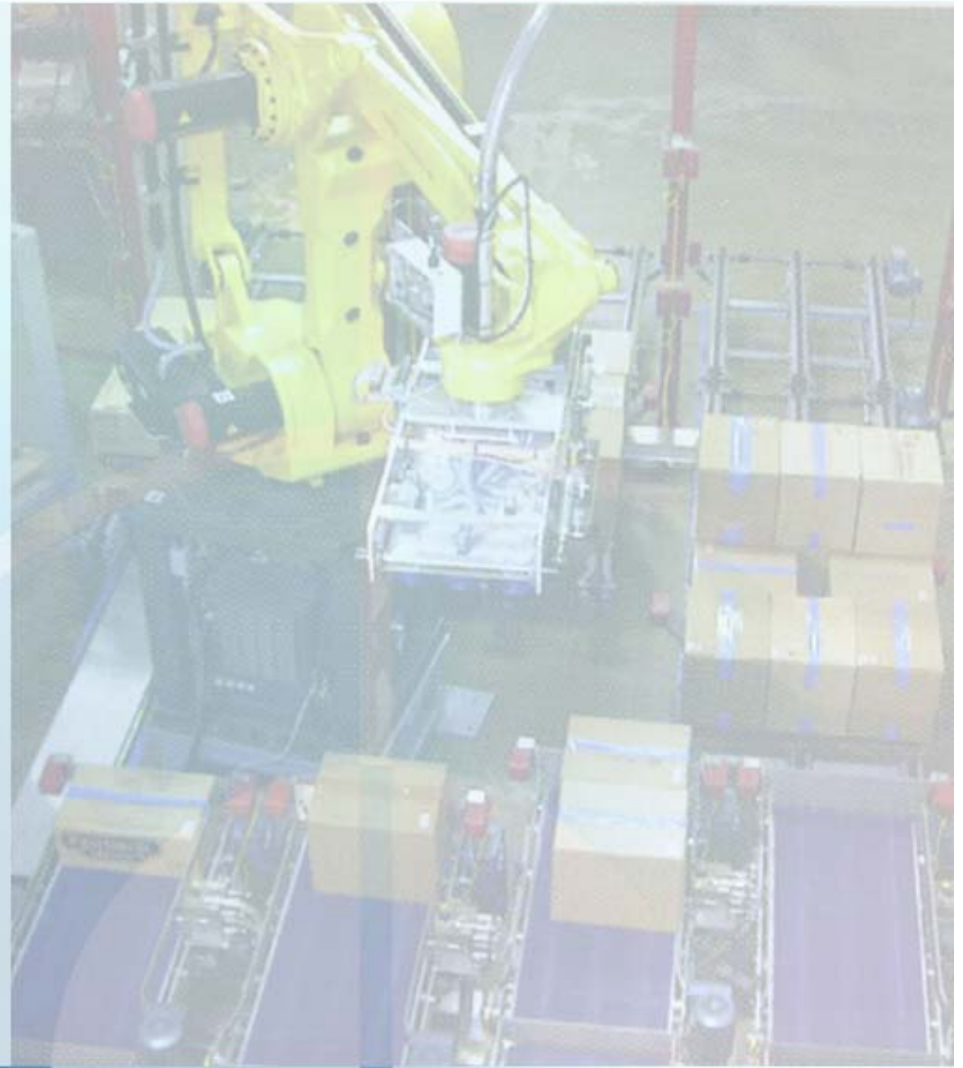
Source: Rates: Edison Electric Institute
Weighting: Energy Information Administration

Demand of 50,000 KW
68% load factor

Virginia Benefits from Restructuring

Virginia's electric rates are at a competitive advantage now.

Virginia's wide range of fuels for electric generation, capped rates, and frozen fuel factor will help keep it that way.



Keys to Future Competitiveness

- Natural gas, LNG expansion
- Clean-coal fired generation
- Extension of nuclear licenses
- Capped rates through 2010
- Fuel factor frozen



Dominion[®]