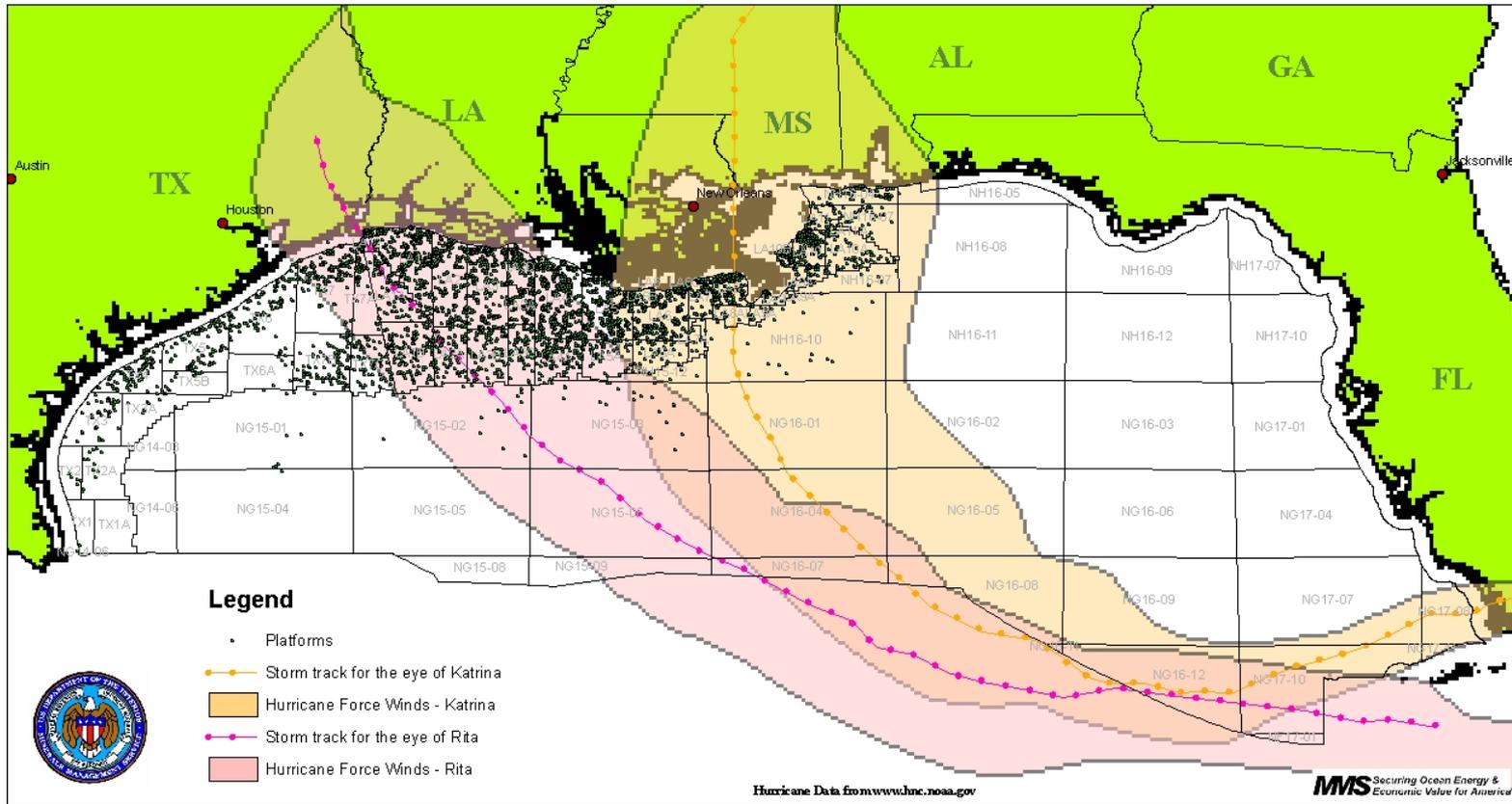


Offshore Natural Gas Production: Potential Economic Benefits to Virginia



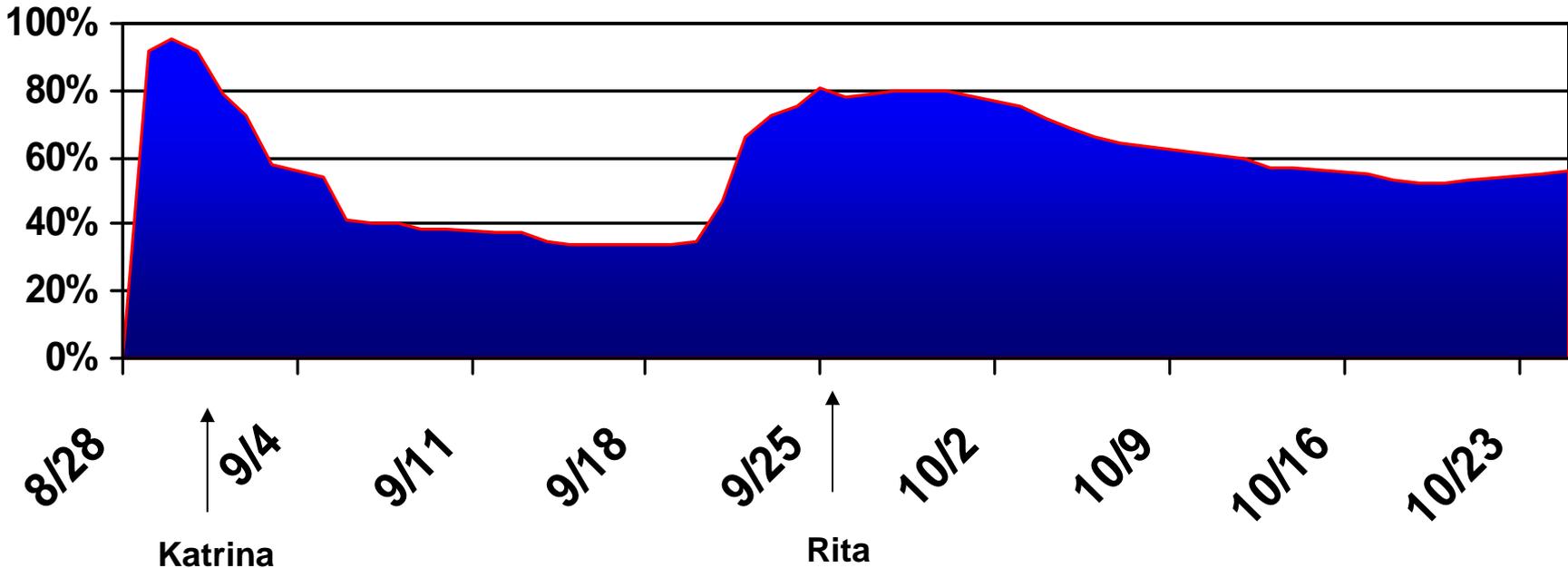
Two Paths of Devastation

Hurricanes Rita and Katrina, August - September 2005



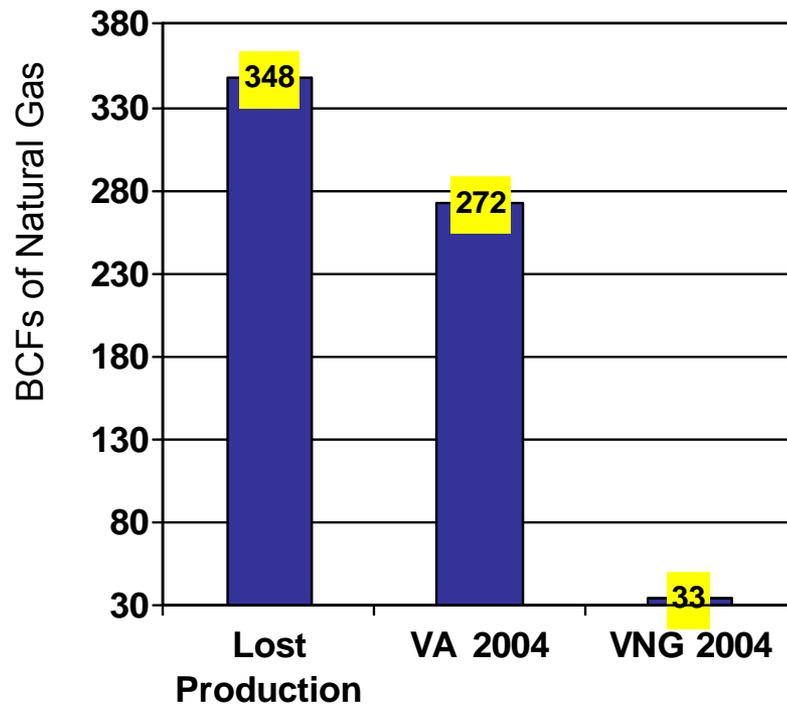
Gulf of Mexico Gas Shut-In – 2 months alone

Source: MMS Date: October 25, 2005



The cumulative shut-in gas production 8/26/05-10/25/05 was **348.093 BCF**, which was equivalent to 9.537 % of the yearly production of gas in the GOM (approximately 3.65 TCF).

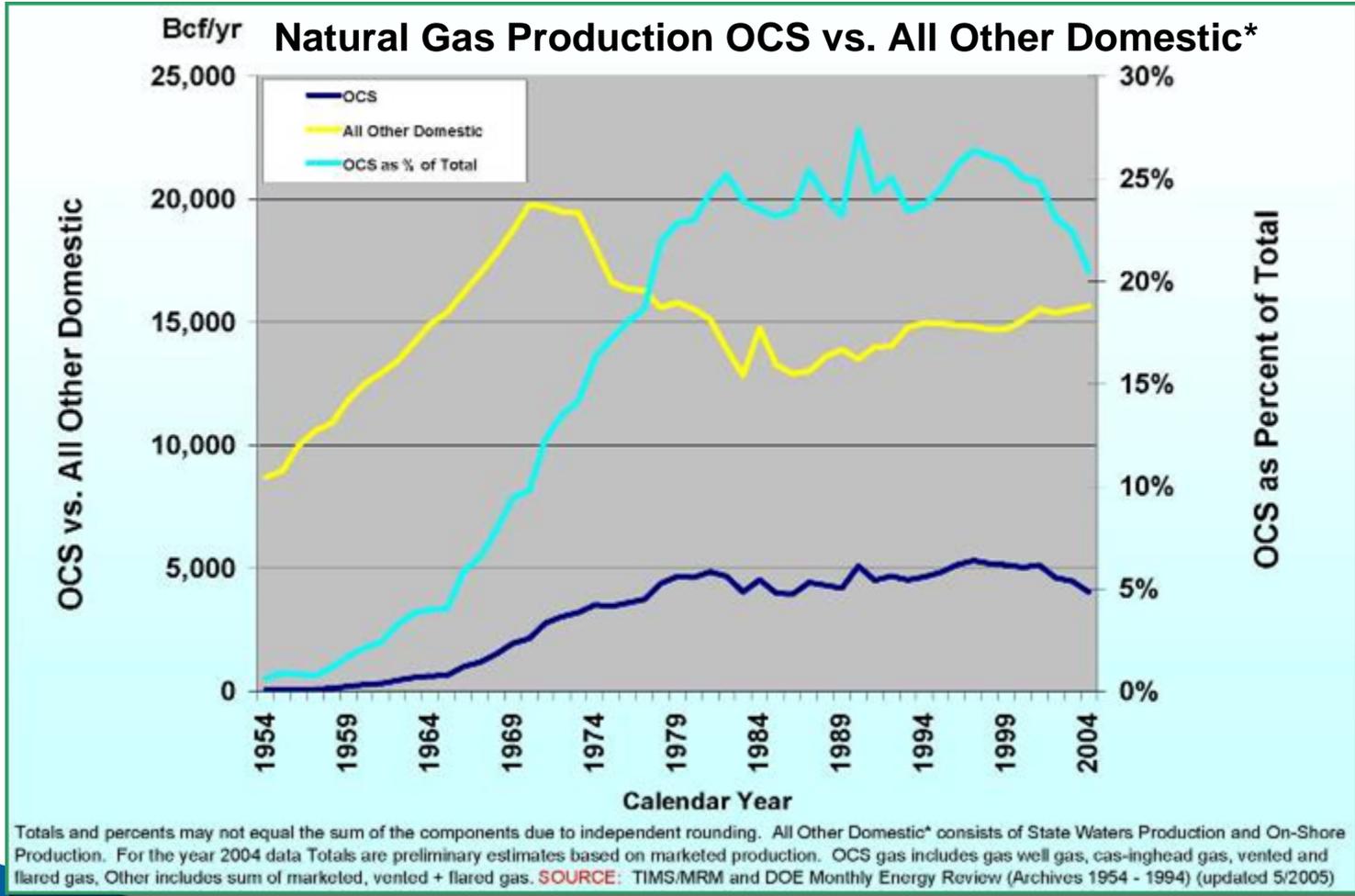
More Than VA's Total Annual Consumption; About 10x VNG's Average Throughput



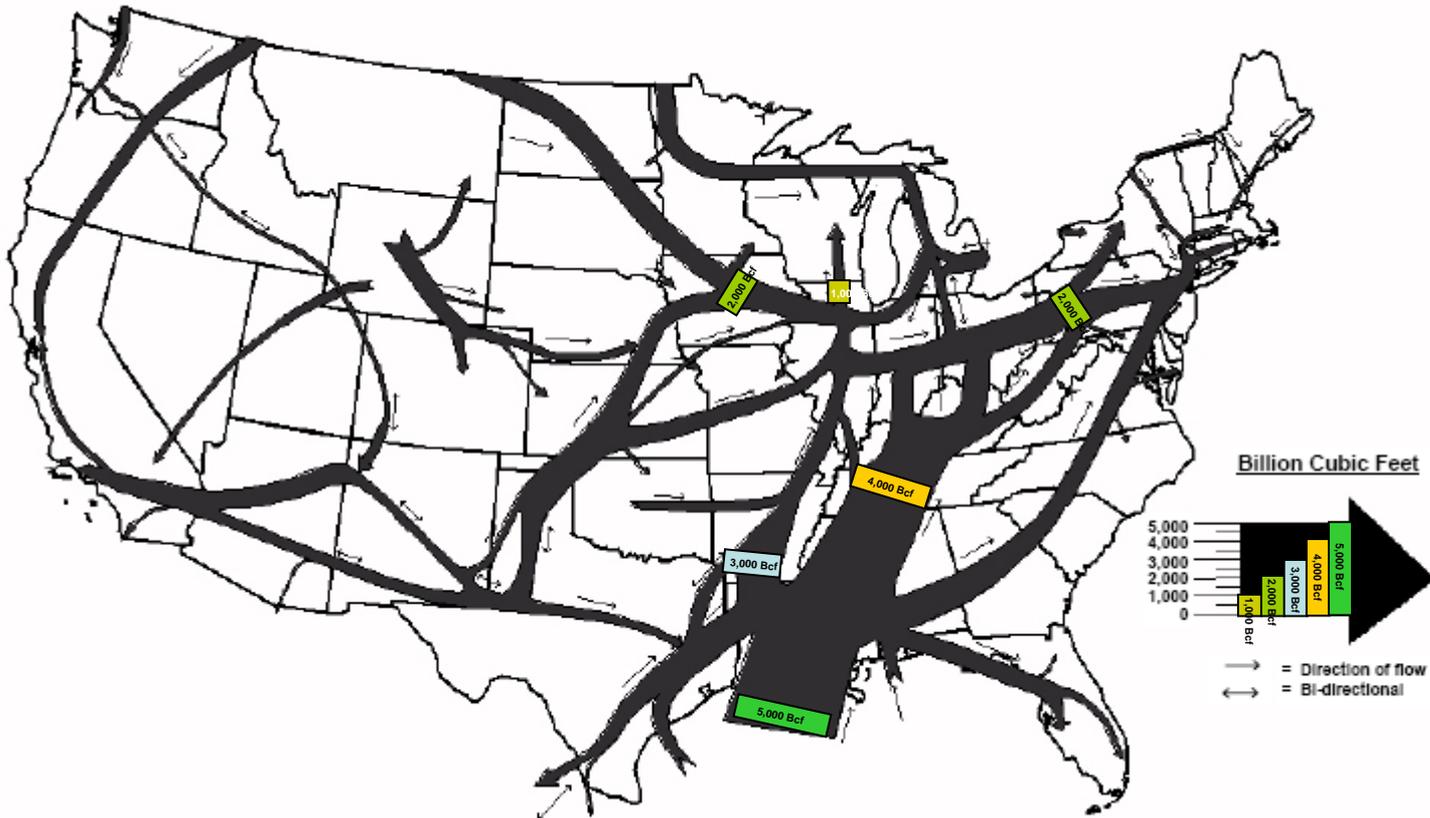
All data as of October 25, 2005

Source: MMS, EIA and internal company data

Last Fling for Gulf of Mexico

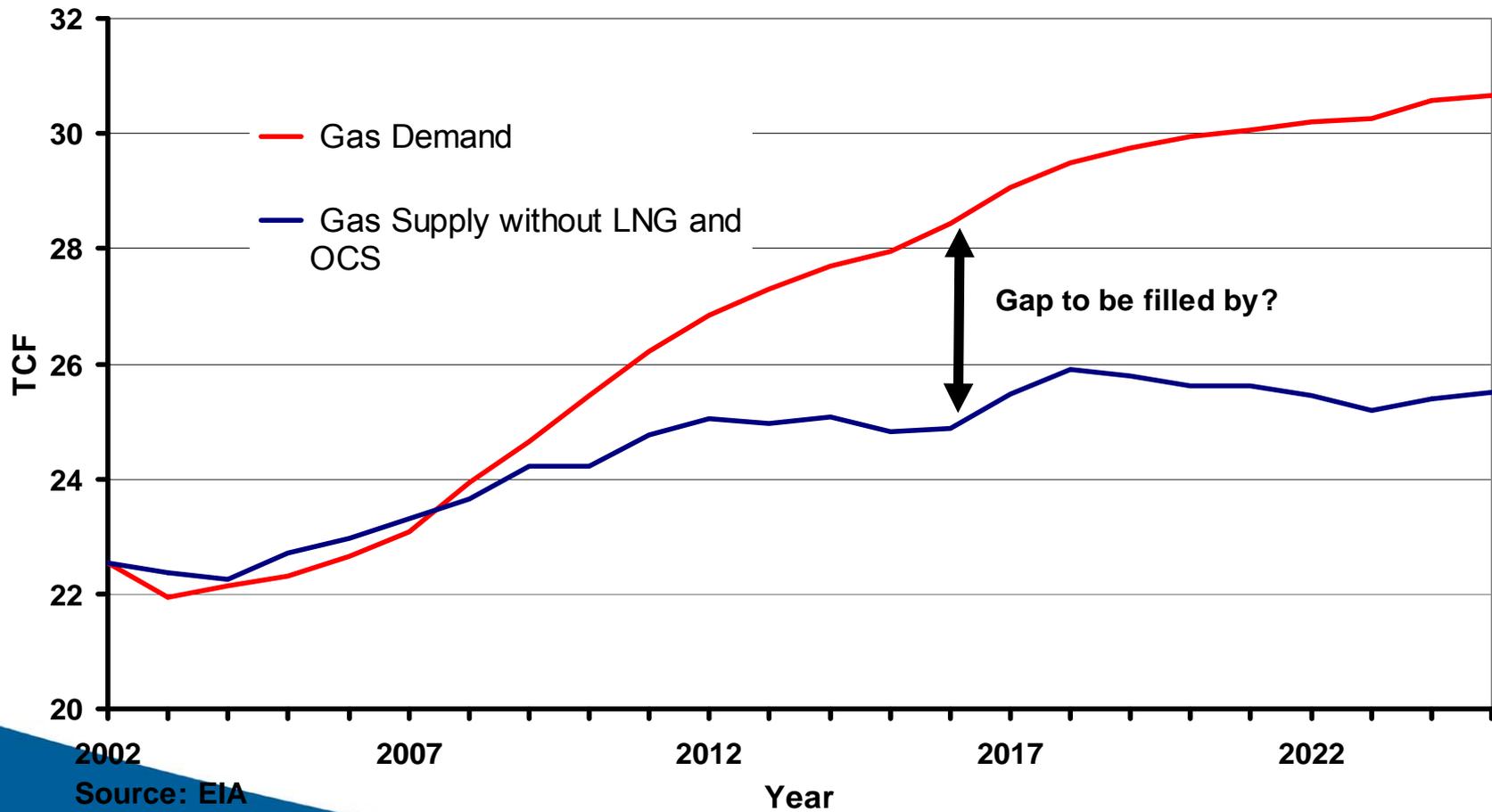


Capacity Designed for Gulf Production



Source: EIA, Office of Oil and Gas, Natural Gas Division

Supply – Demand Forecast



Source: EIA

Coal – Natural Gas Pricing

- Since the beginning of 2007:
 - Coal ↑113%
 - NG ↑22%
- One analyst – this could increase natural gas consumption by 2.6 Tcf/yr, or about 11% of total US natural gas consumption, assuming no transmission constraints

Source: Sanford Bernstein

New finds -- onshore

- Haynesville, Barnett, Marcellus – all promising
- Buts: prices and pipelines
- One analyst – shale plays viable at \$6-\$8
 - Deep offshore may be viable at \$2-\$3
- Some utilities holding off on subscribing to shale gas at the moment

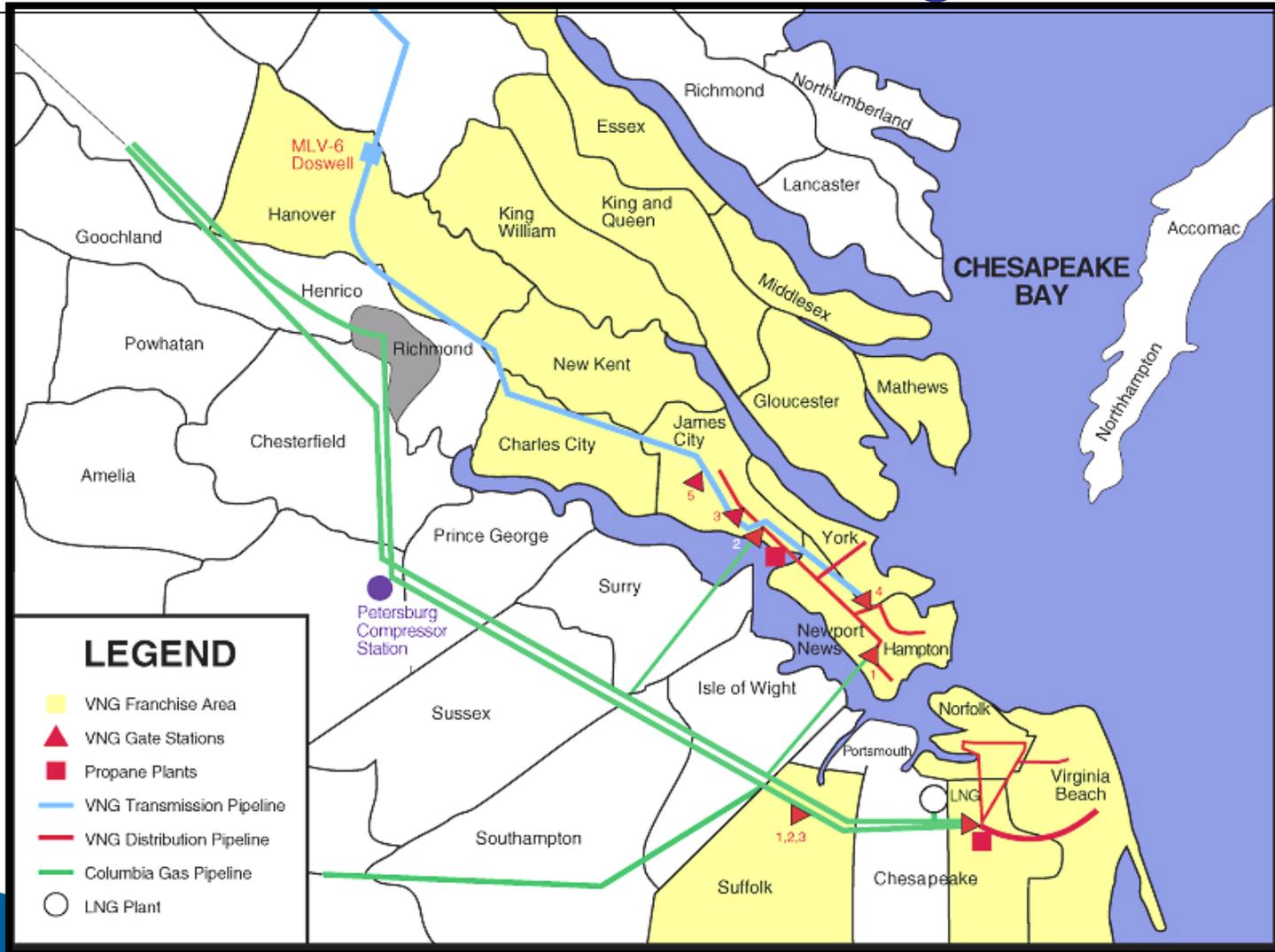
Looking Offshore

Recoverable natural gas in Tcf from areas generally
Covered by federal moratoriums on offshore drilling



Source: Interior Department

Current Infrastructure in Virginia



Longer Term Economic Impact to Virginia?

- Natural Gas Prices
- Jobs
- Investment
- Taxes
- Royalties

Sources: Nova Scotia and Louisiana studies, ODU review

Effect on Natural Gas Prices

- Current VA market = about 750 Mcf per day or 272 Bcf per year
- 750 Mcf to 1.2 Bcf per day of new natural gas supply in Virginia could generate \$250 million to \$500 million in savings on natural gas prices over 30 years

Assumptions

- 350 Bcf per year
 - Expected: 500 Bcf per year to 1 Tcf per year
- Onshore economic impacts increase with production, but not in direct proportion
- VA more like LA than Nova Scotia – Maritime and Engineering industry exist to capture onshore investment
- Geographic location captures onshore activity
- ODU peer-reviewed econometric model

Jobs

- Nova Scotia – over 11 years:
 - 1446 jobs/year
 - \$229 million in direct/indirect payroll
 - Many jobs not captured due to lack of then-existing professionals/trades
- Louisiana: 25% “ripple effect”
- Virginia – over 10 years:
 - 2,578 jobs/year/equivalent
 - \$644 million in direct/indirect payroll

Investment

- Nova Scotia: \$3.93 billion (today's dollars)
- Virginia: \$7.84 billion

Taxes

- Virginia
 - \$271 in state and local income taxes
 - Sales and real estate taxes excluded due to difficulty in projecting

Royalties

- Some federal legislation would yield \$3 billion or more to VA over 30 years

Potential

- Significant reductions in natural gas prices
- Decreased price volatility
- Thousands of jobs
- Hundreds of millions in payroll
- Hundreds of millions in payroll taxes
- Billions in investment
- Billions in royalties