



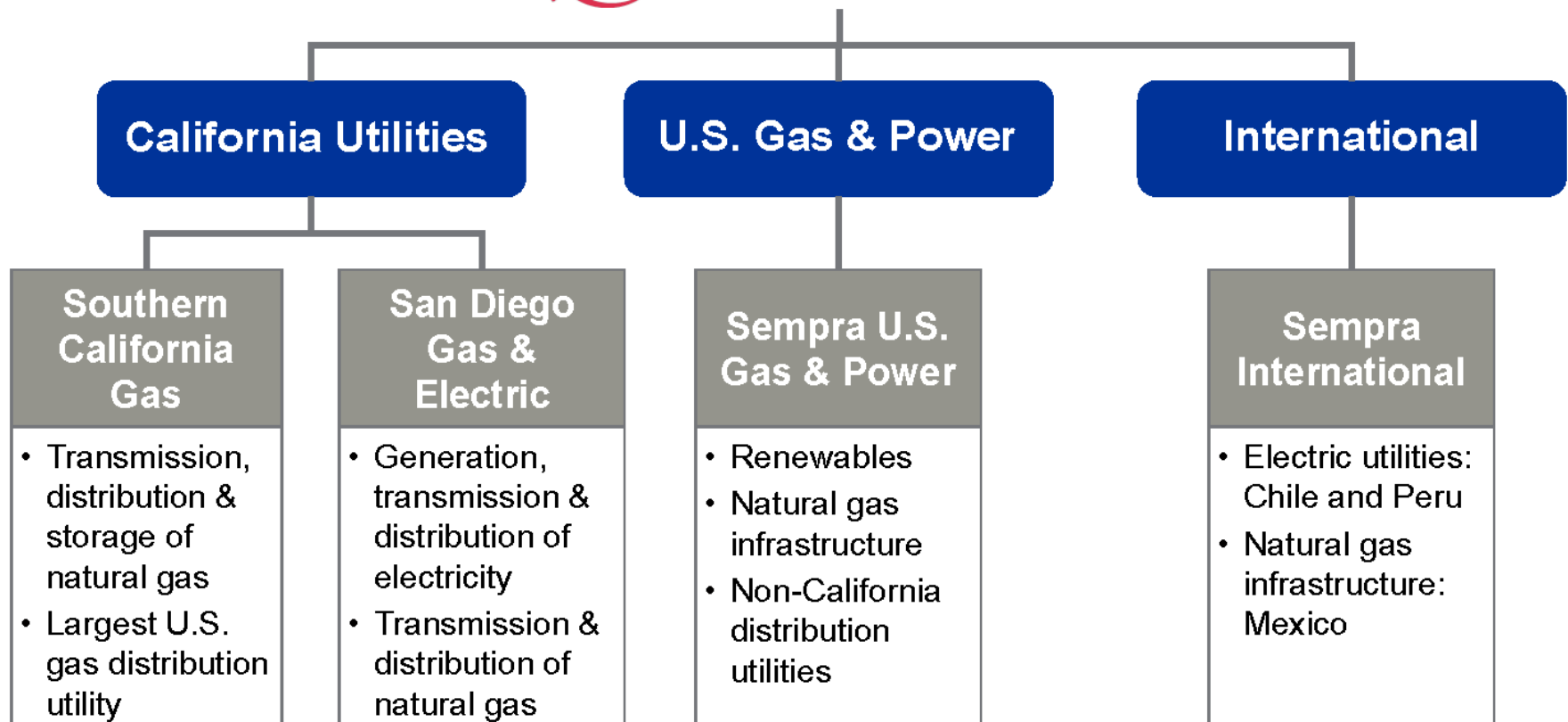
Utility Perspective on Gas Markets

Jim Harrigan
Vice President, Gas Acquisition
Southern California Gas Company

AABE Conference

April 20, 2012

New Organizational Structure



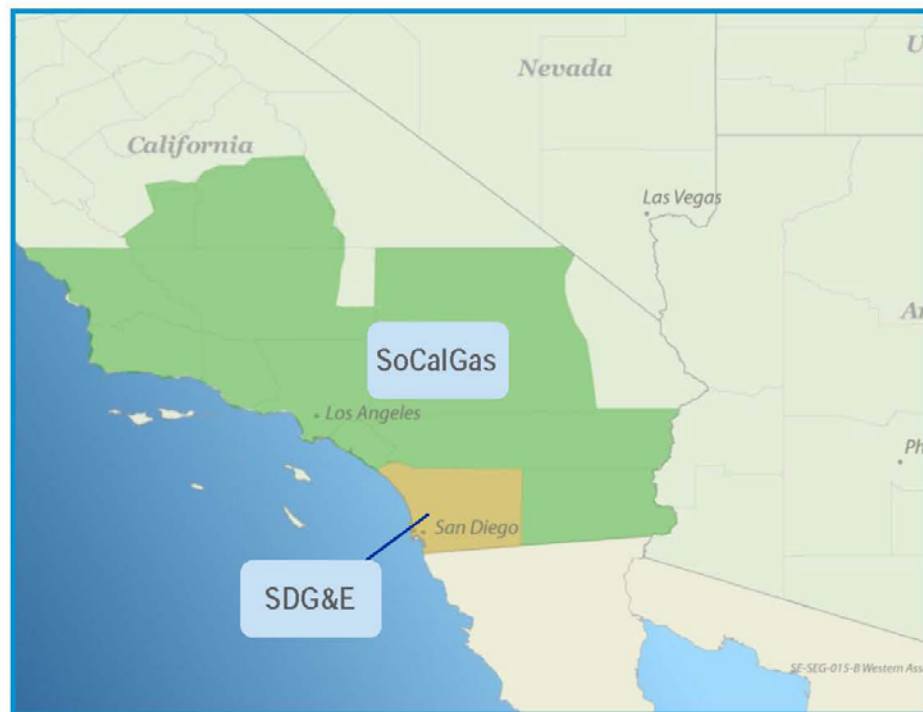
California Utilities

▶ SDG&E

- Provider of electric and natural gas services
- 3.5 million consumers
- 4,100 square miles of service territory
- 2.3 million electric & gas meters
- Ratebase of \$4.7 billion

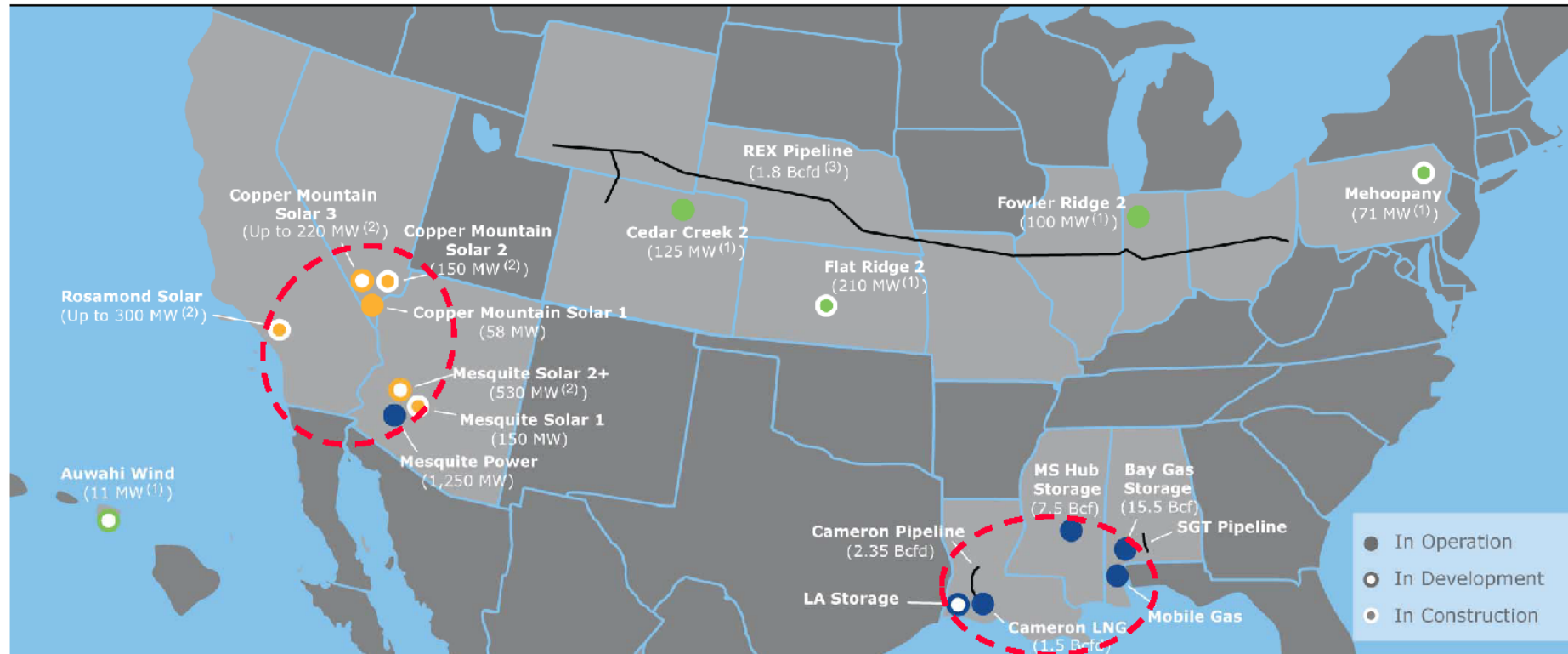
▶ SoCalGas

- Provider of natural gas services
- 20.9 million consumers
- 20,000 square miles of service territory
- 5.8 million gas meters
- Ratebase of \$2.9 billion



Note: Data as of December 31, 2010.

Sempra U.S. Gas & Power Asset Overview



Solar

- 100 MW in operation
- 258 MW in construction
- 1,050 MW pipeline⁽²⁾



Wind

- 225 MW in operation
- 292 MW in construction



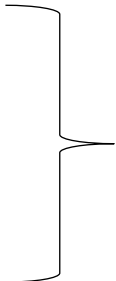
Natural Gas

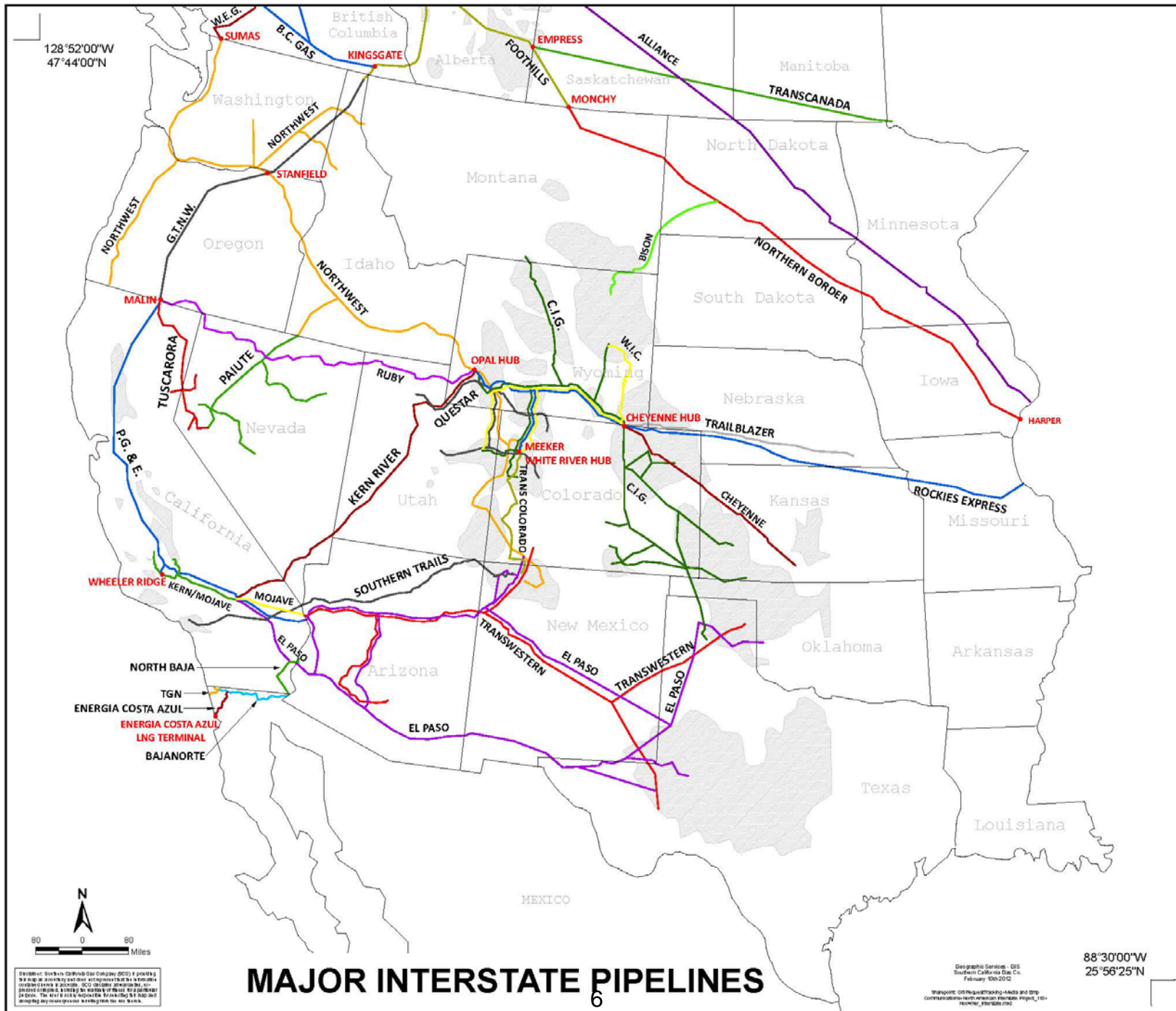
- 1,250 MW generating capacity
- 1,700 miles of pipeline⁽⁴⁾
- 23 Bcf of storage in operation
- Distribution utilities
- 1.5 Bcfd LNG terminal

- (1) Reflects Sempra's net ownership interest
 (2) Reflects total potential capacity of solar project(s) at full build-out; Sempra's net ownership interest expected to be 50%
 (3) Sempra ownership interest is 25%
 (4) Includes joint ventures

Southern California Gas Company

System Assets and Load

	<u>Total</u>	<u>Core</u>	<u>Non-Core/ Wholesale</u>
Throughput (Bcf/d)	2.6	1.1	1.5
Storage Capacity (Bcf)	134	81	53
Core Interstate Pipeline Capacity (Bcf/d)			
Transwestern			1.0 – 1.3
El Paso			
Kern			
GTN			

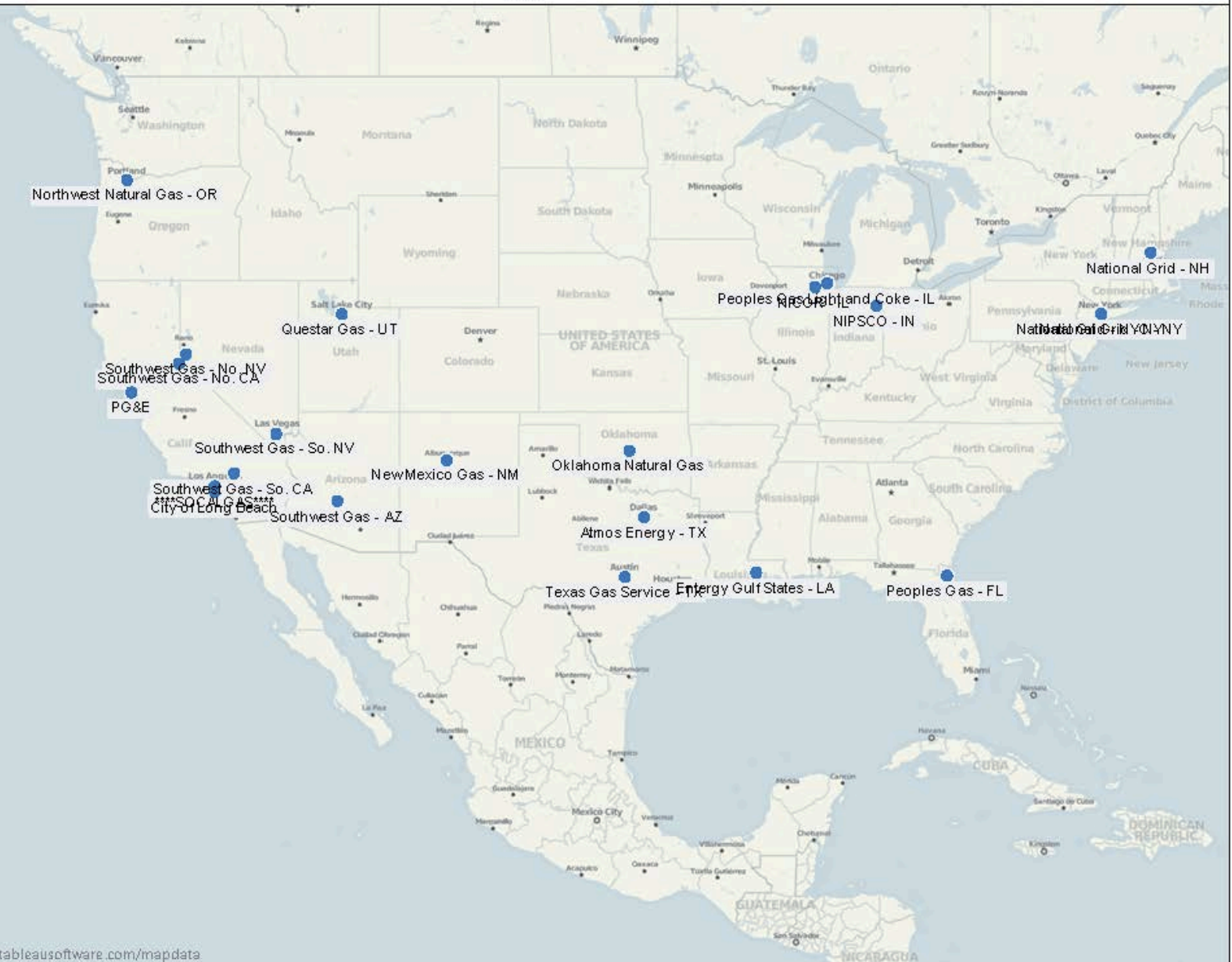


Long Term Approach

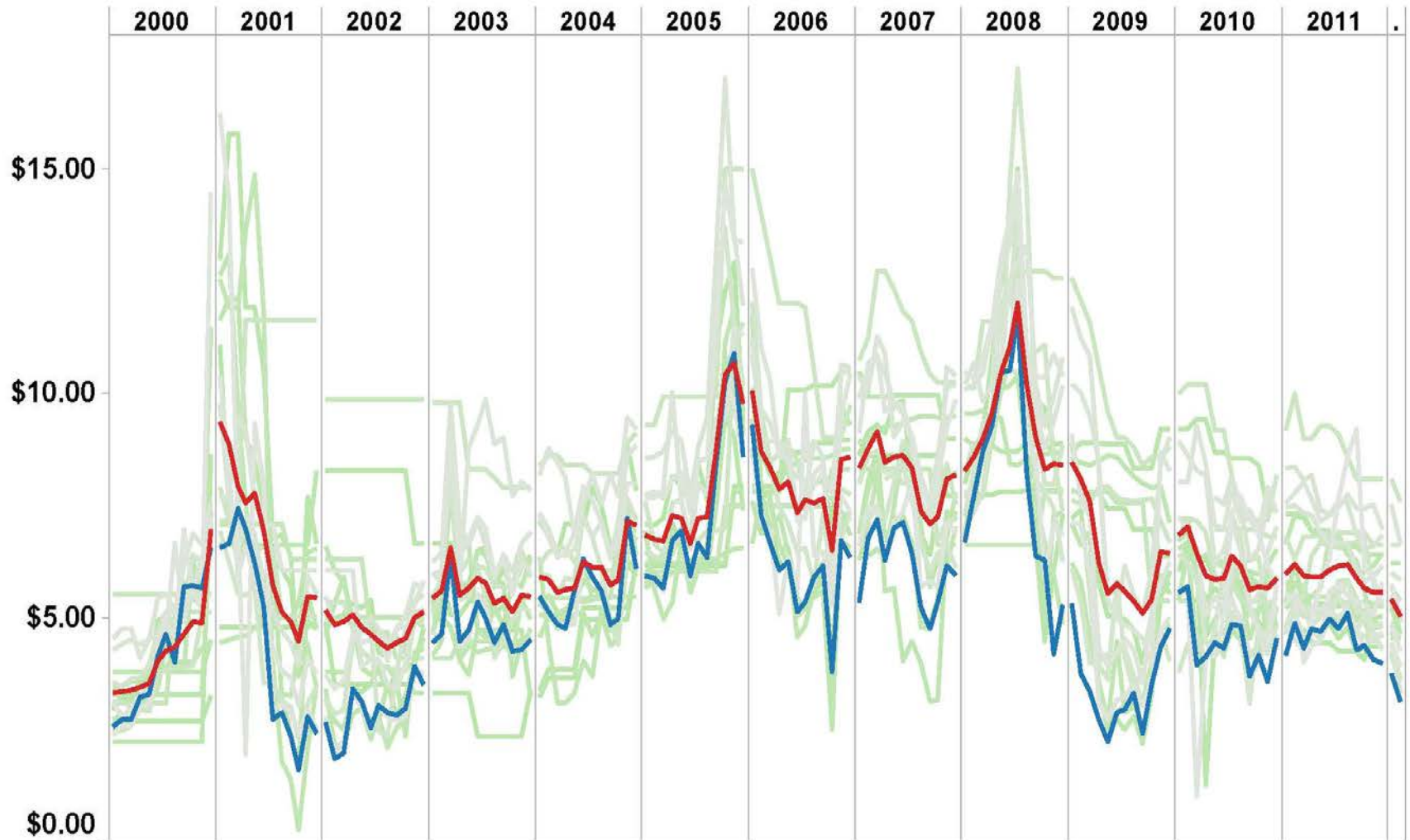
- **Core customer bills generally move with market prices.**
- **Rely primarily on Storage, Interstate Capacity for price protection.**
- **Optimize Storage and Interstate Capacity Assets.**
- **Hedge to protect against major price spikes. Generally seasonal.**
- **Supply Diversity:**
 - Pipelines
 - Basins
 - Term
 - Suppliers
 - Balance diversity objective with low cost objective
- **Frequent Contact with CPUC Staff**

Order of Gas Acquisition Priorities

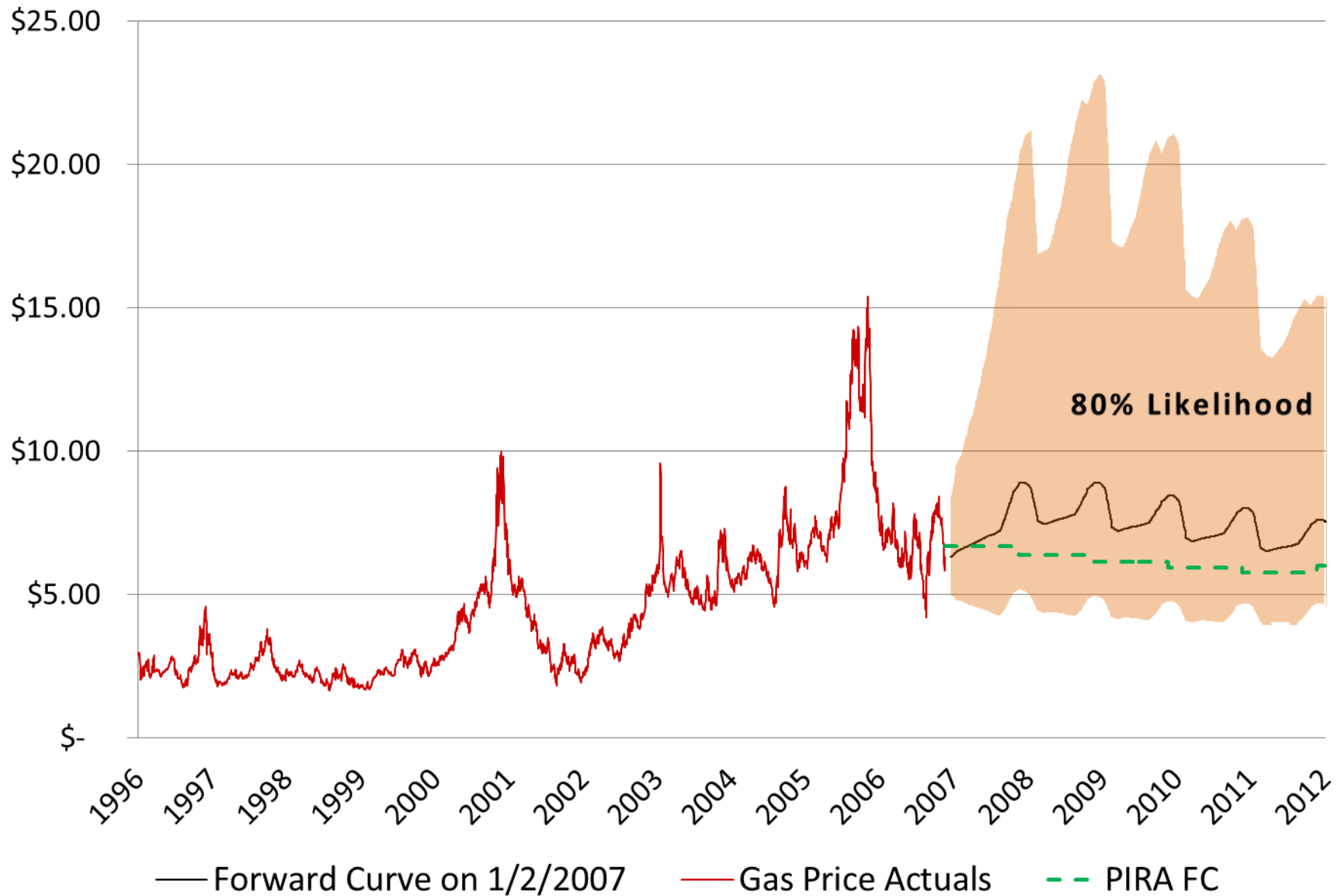
1. Reliability
2. Low Cost Gas with limited rate volatility
3. Shareholder Award through Gas Cost Incentive Mechanism (GCIM)



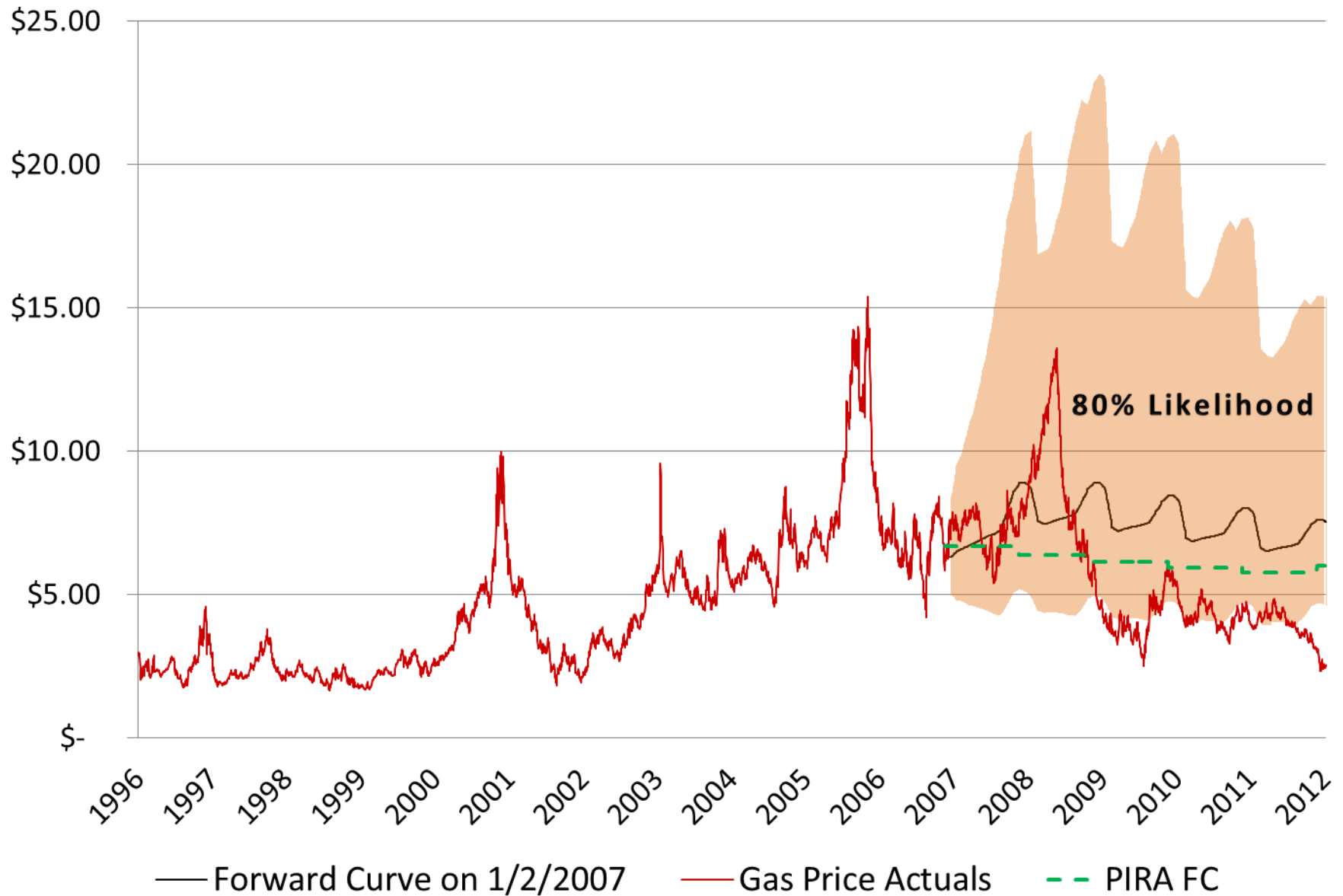
Peer Group Comparison

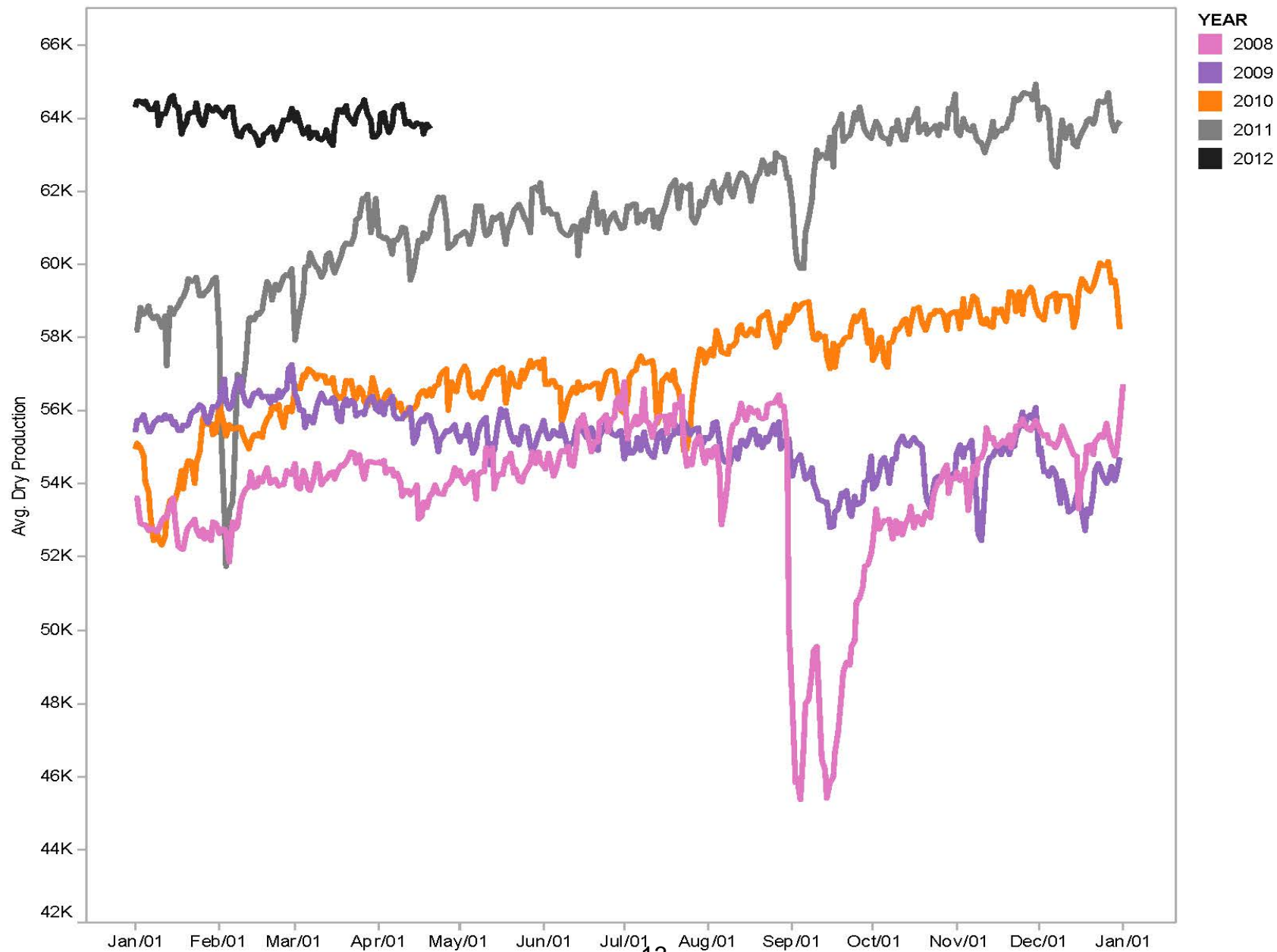


Gas Price History and Expectations

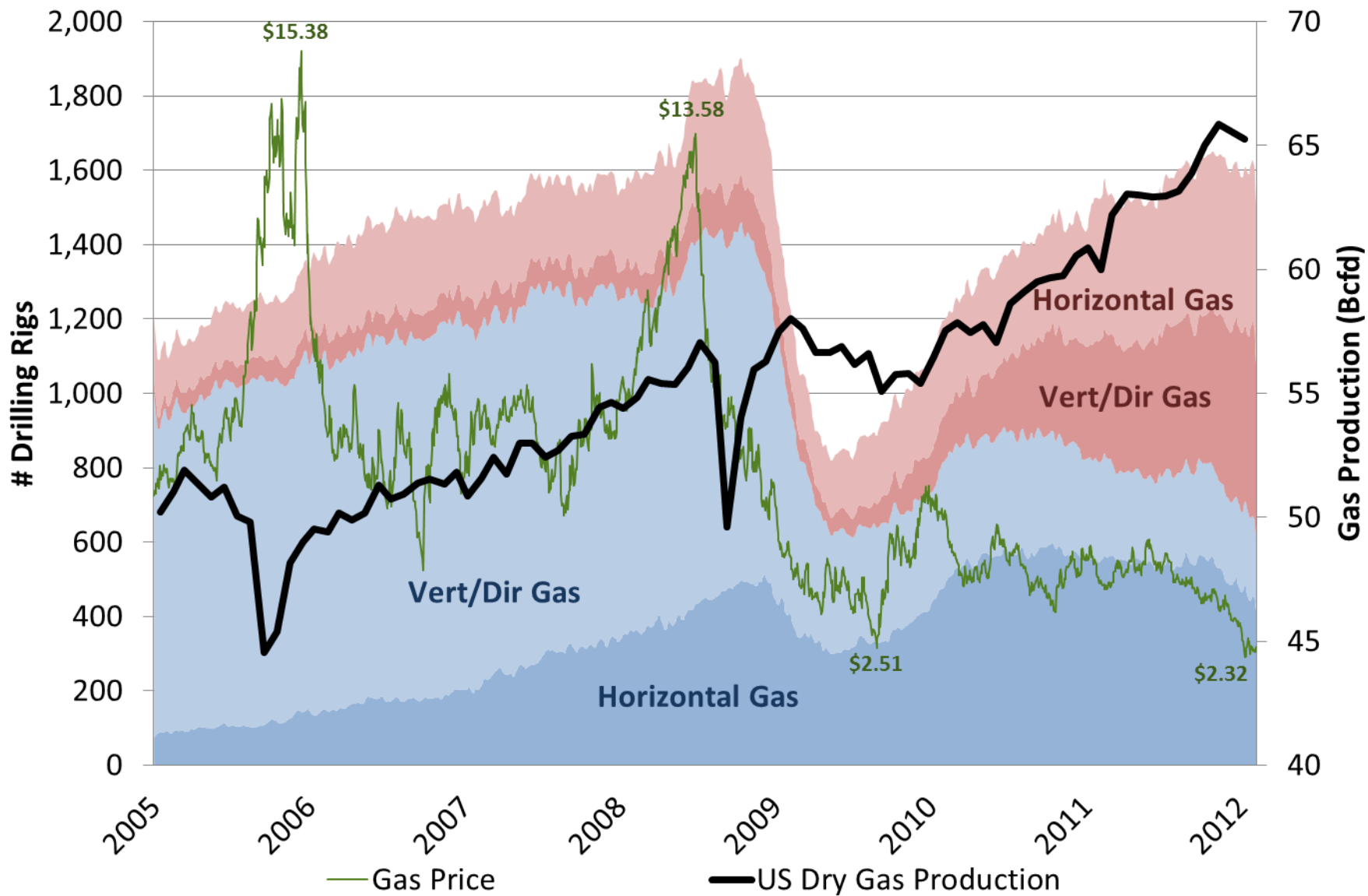


Gas Price History and Expectations

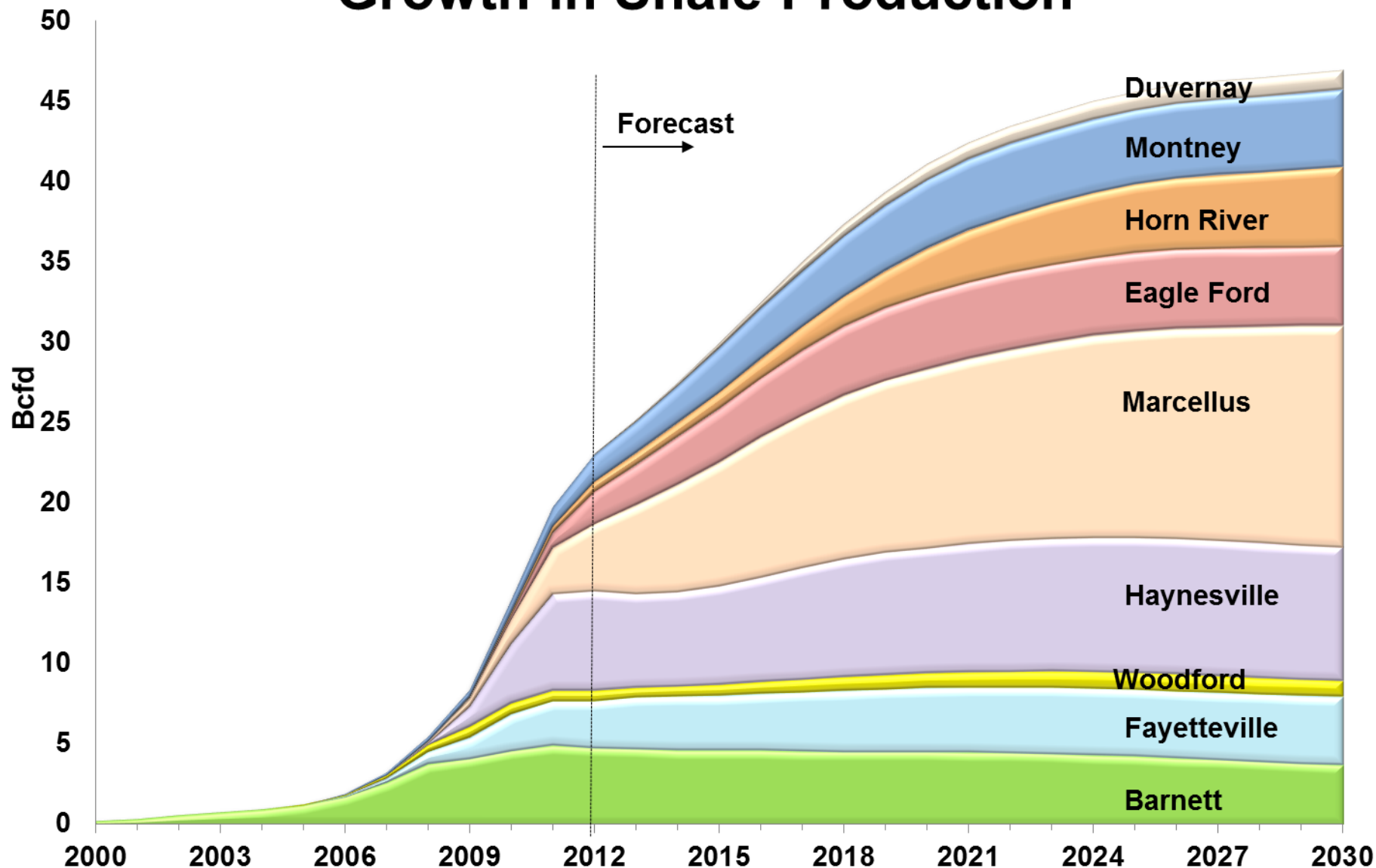




US Gas Production and Drilling Disconnect



Growth in Shale Production



Regulatory Framework

- **Core Commodity Cost.** Gas Cost Incentive Mechanism (GCIM).
- **Core Interstate Capacity Cost.** Advice Letter approvals for capacity. Required to hold 90% to 120 % of demand.
- **SoCalGas Storage and Transportation.** Determined in the Triennial Cost Allocation Proceeding (TCAP).
- **Hedging.** GCIM.
- **Dealings with SoCalGas System Operator and Affiliates.** Remedial Measures and Affiliate Rules approved by CPUC.

Primary U.S. Energy Consumption by Fuel 1960-2009 (quadrillion Btu per year)

Source: EIA

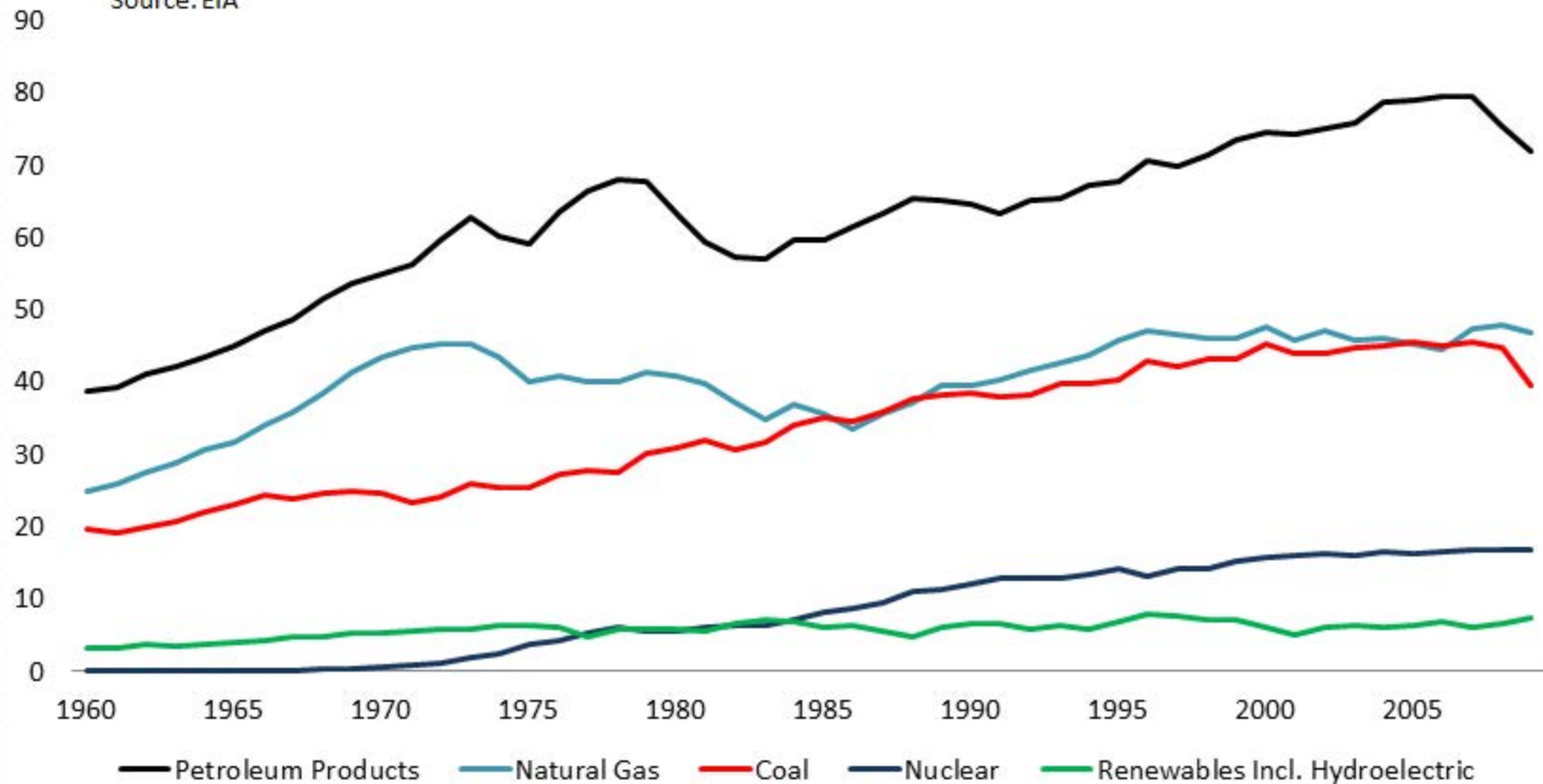
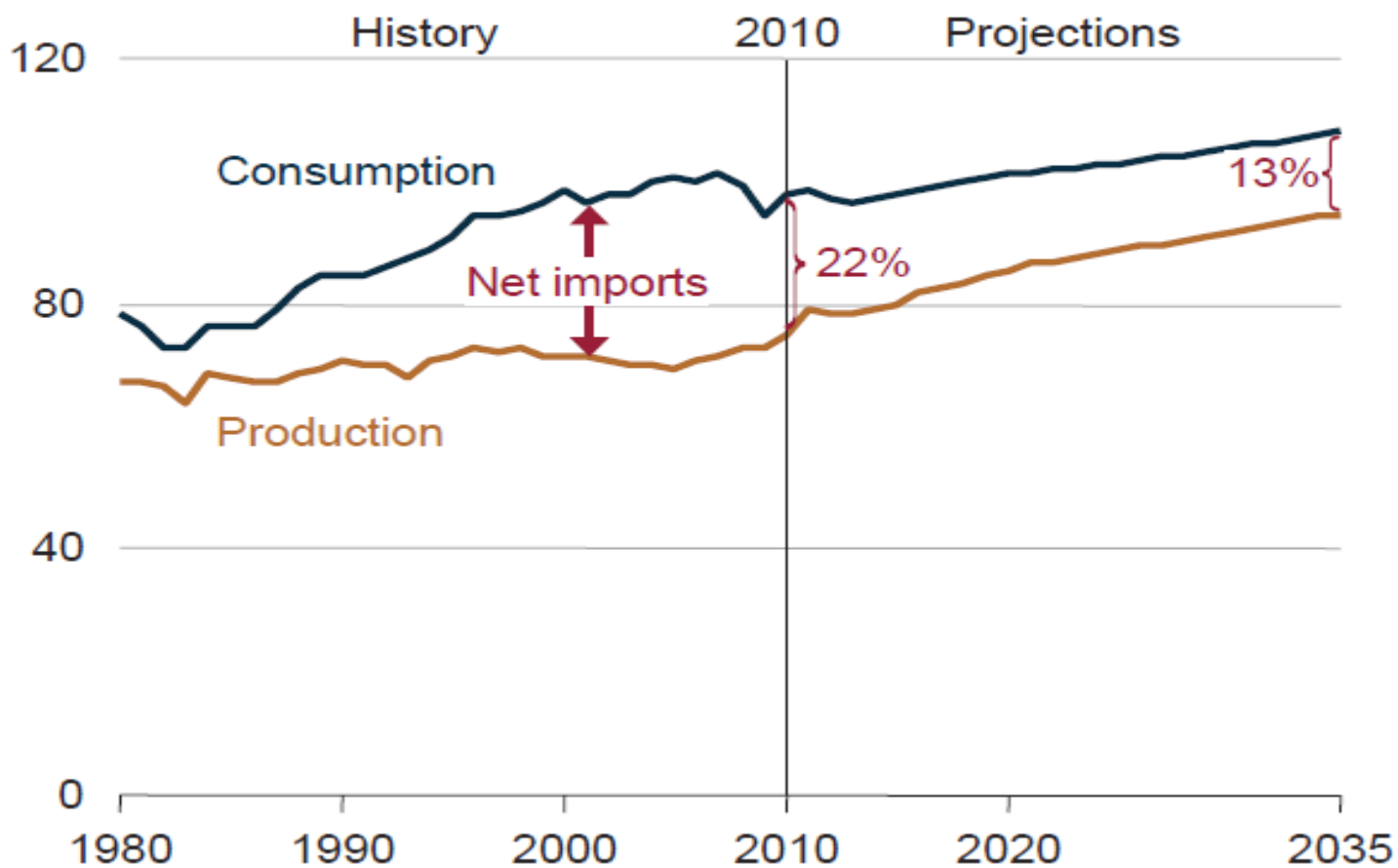
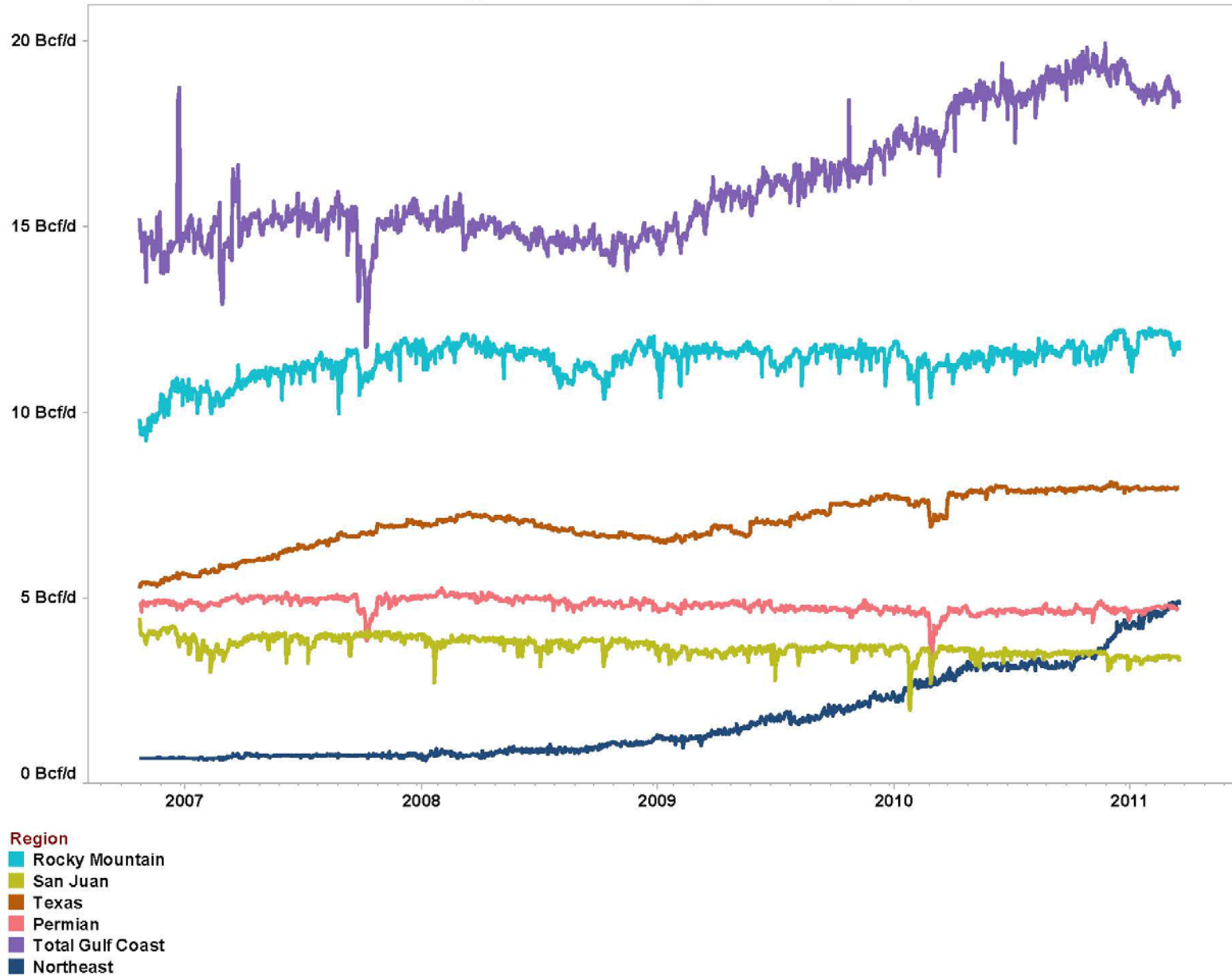


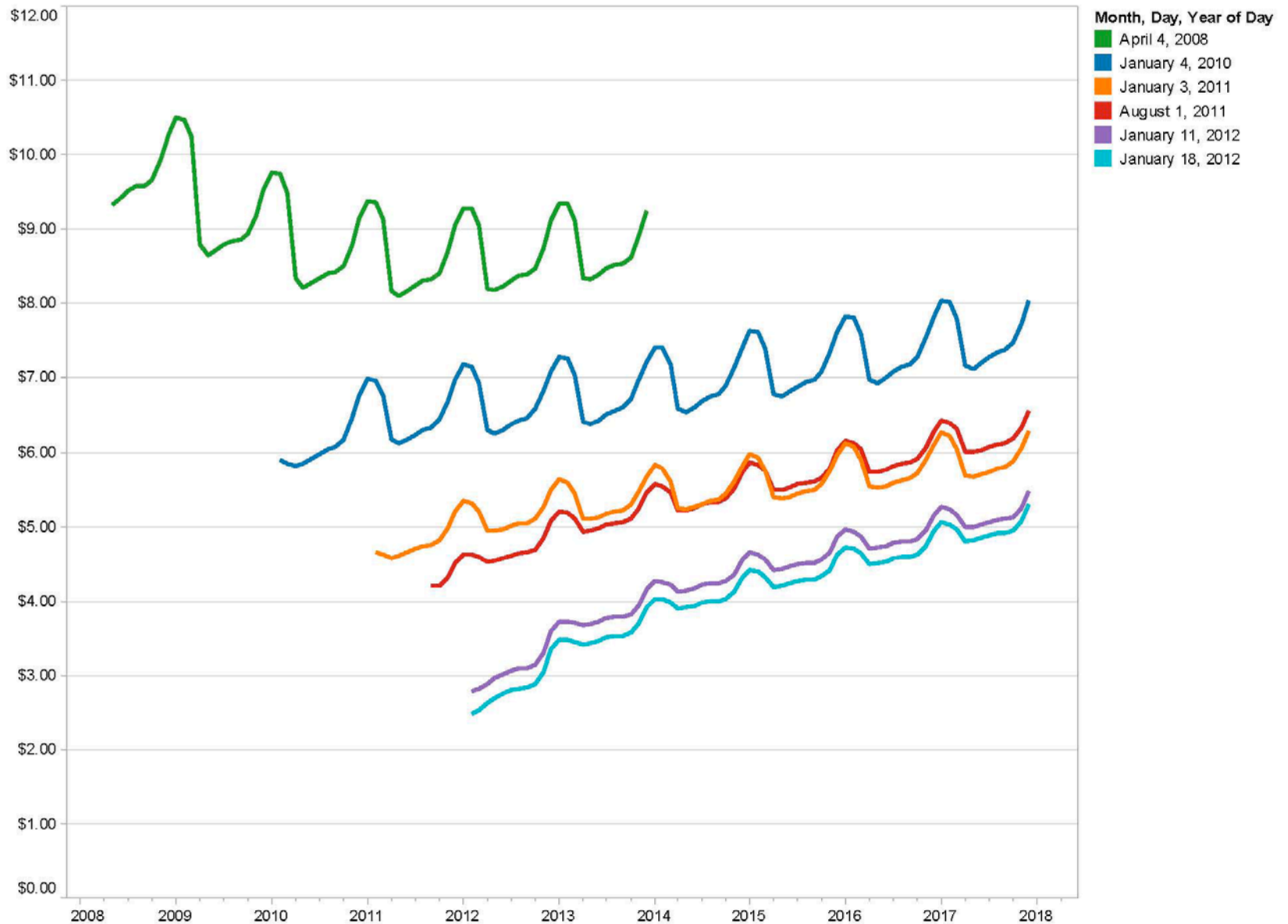
Figure 11. Total energy production and consumption, 1980-2035 (quadrillion Btu)



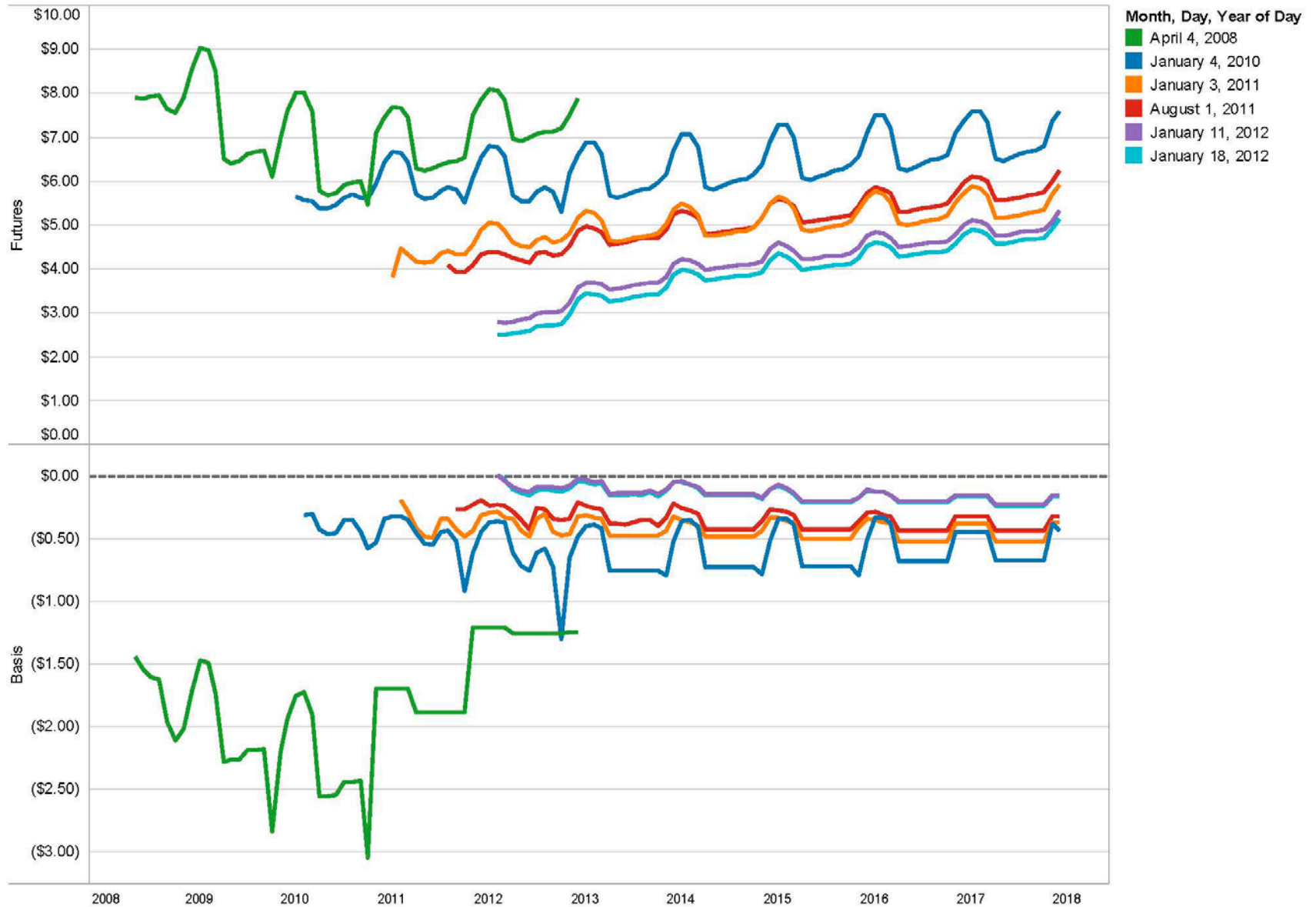
Selected Regional Production (Source: Lippman)



Henry Hub Futures



Rockies Futures & Basis



Opportunities/Challenges in the Current Gas Markets

- **Commodity Prices**
 - Are low prices here to stay?
 - Producer profitability/health?
 - Reduced drilling and production in the West /impact on basis?
 - LNG exports?
 - Hedging?

- **Storage and Pipeline Commitments**
 - Long term vs. short term contracting?
 - What happens when markets indicate only a partial recovery of fixed costs?
 - FERC rates vs. commercial reality?
 - Scheduling complexity on pipelines?
 - Impacts of Abandonment/Mothballing?
 - Variability of flows?