



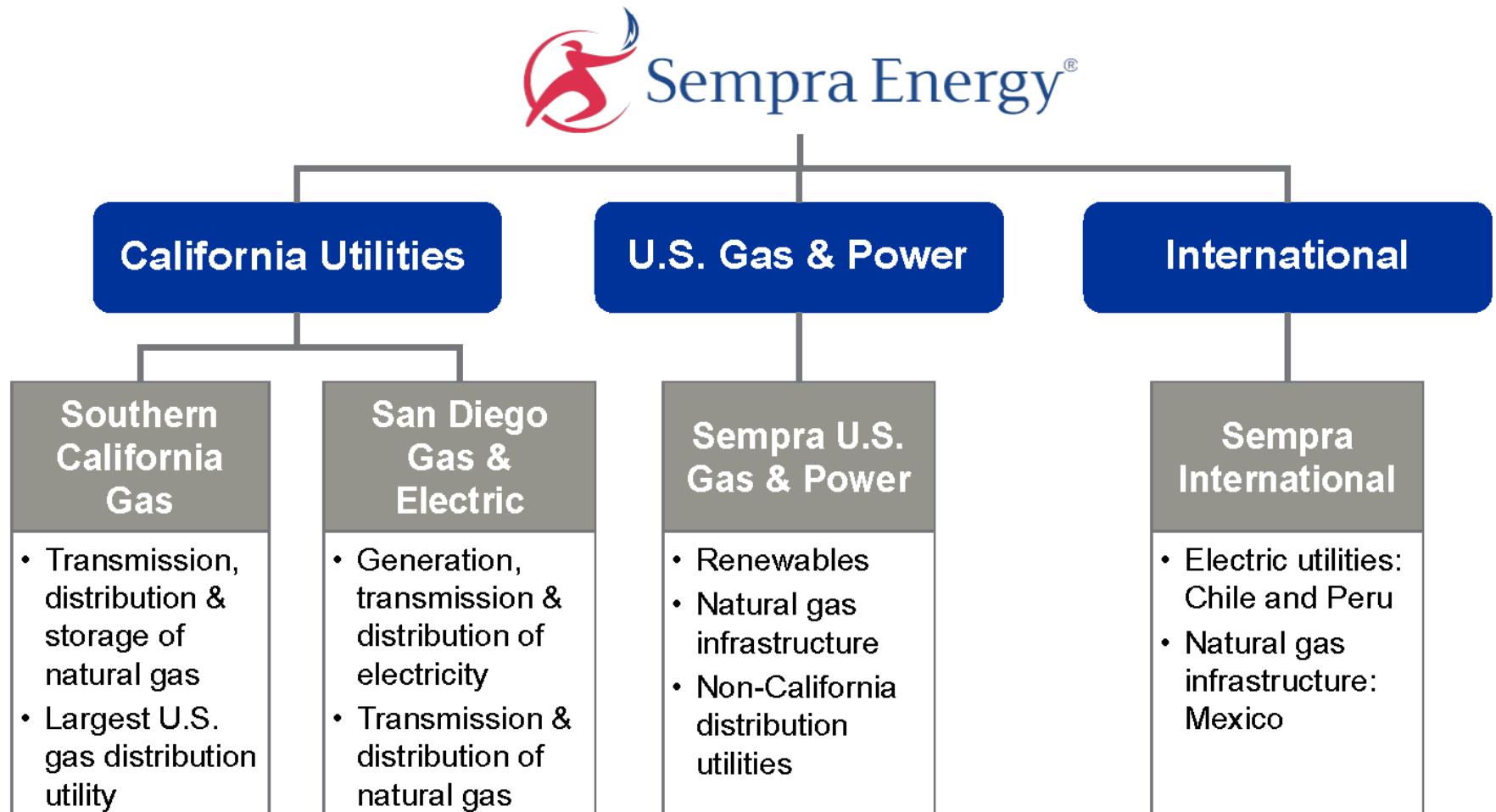
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# *Utility Perspective on Gas Markets*

AABE Conference  
April 20, 2012

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Vice President, Gas Acquisition  
Southern California Gas Company

# 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 Bcf/d LNG terminal

(1) Reflects Sempra's net ownership interest

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- (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%

(3) Sempra ownership interest  
(4) Includes joint ventures

# Southern California Gas Company

## System Assets and Load

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



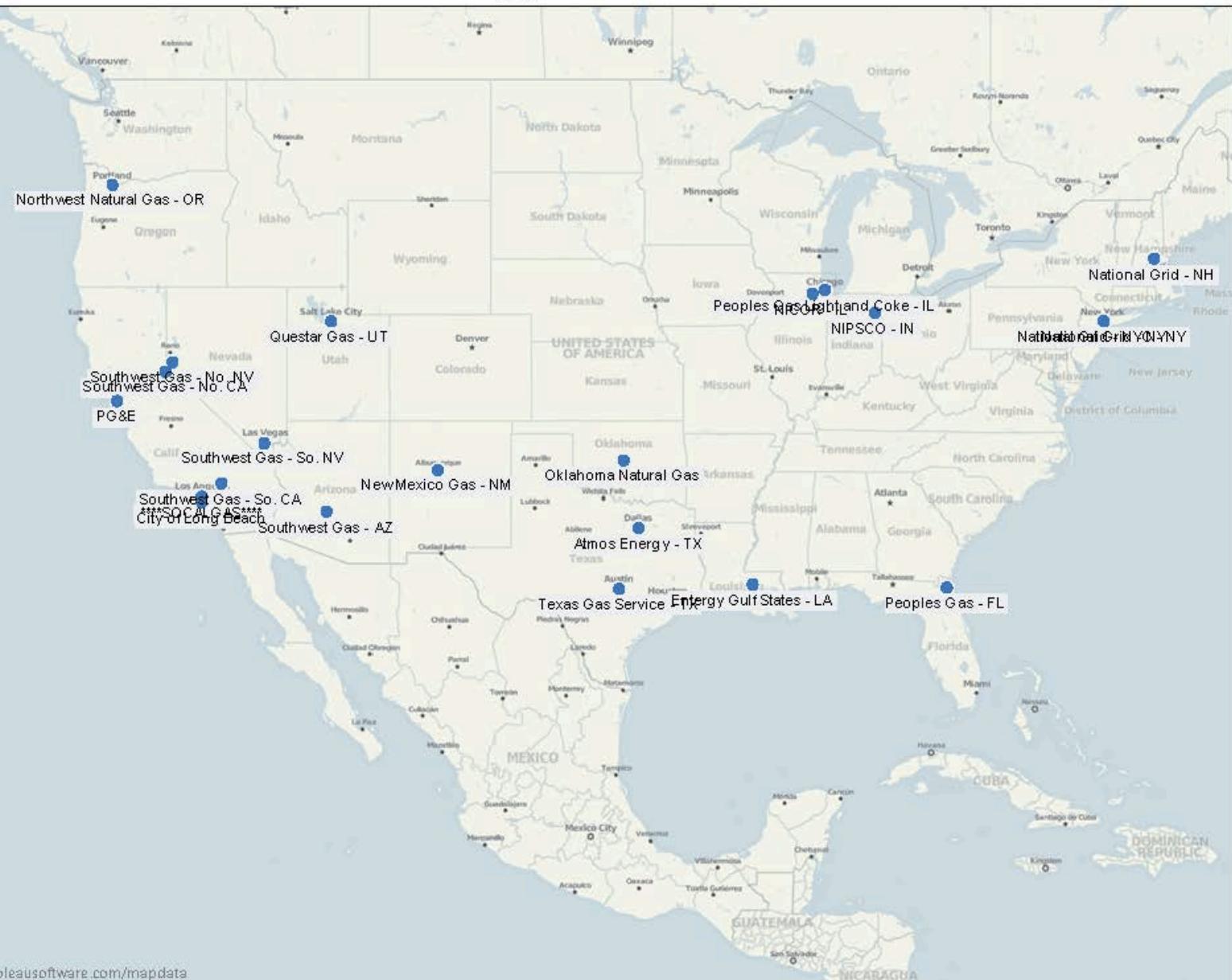
# Long Term Approach

- **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**

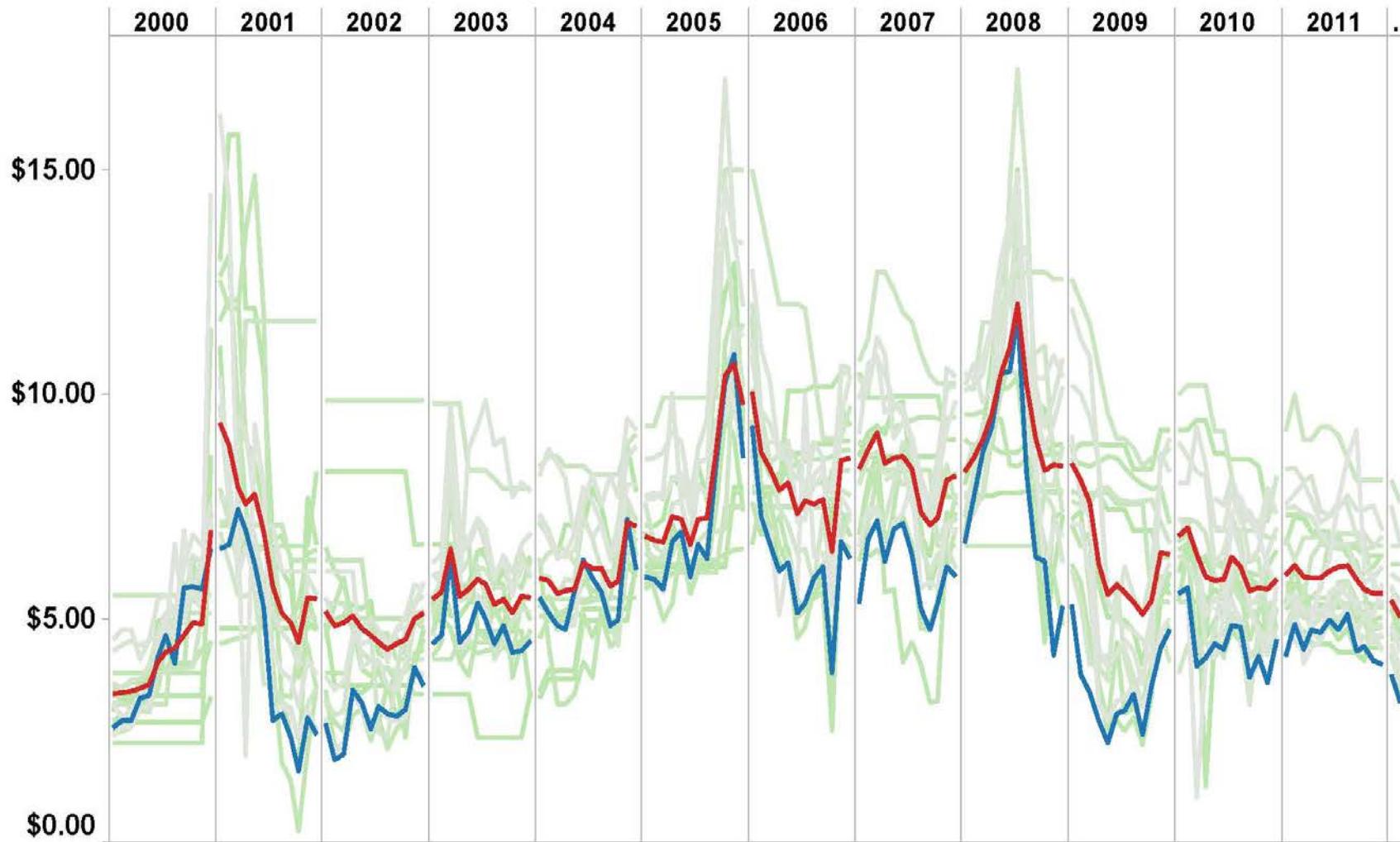
# Order of Gas Acquisition Priorities

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

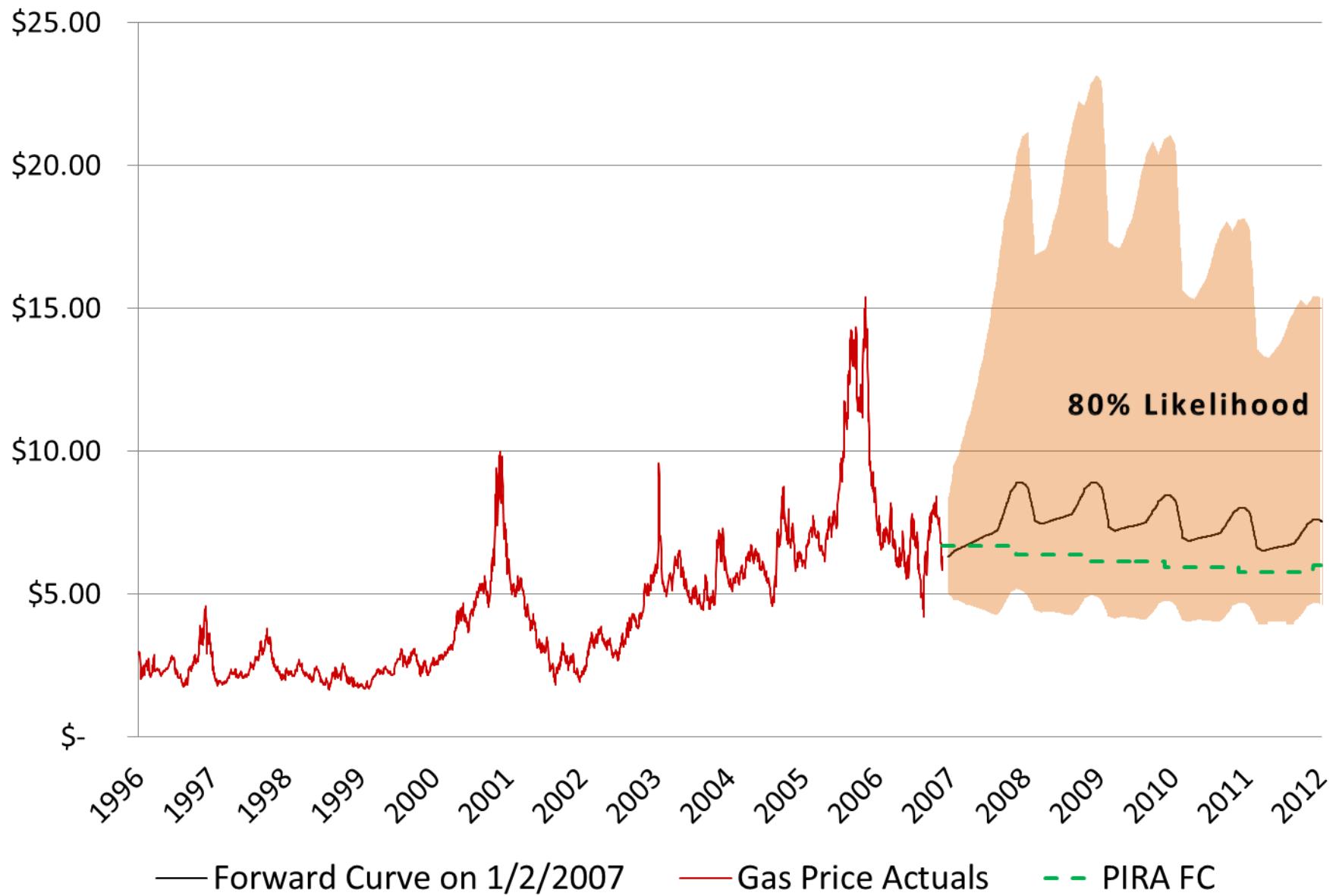
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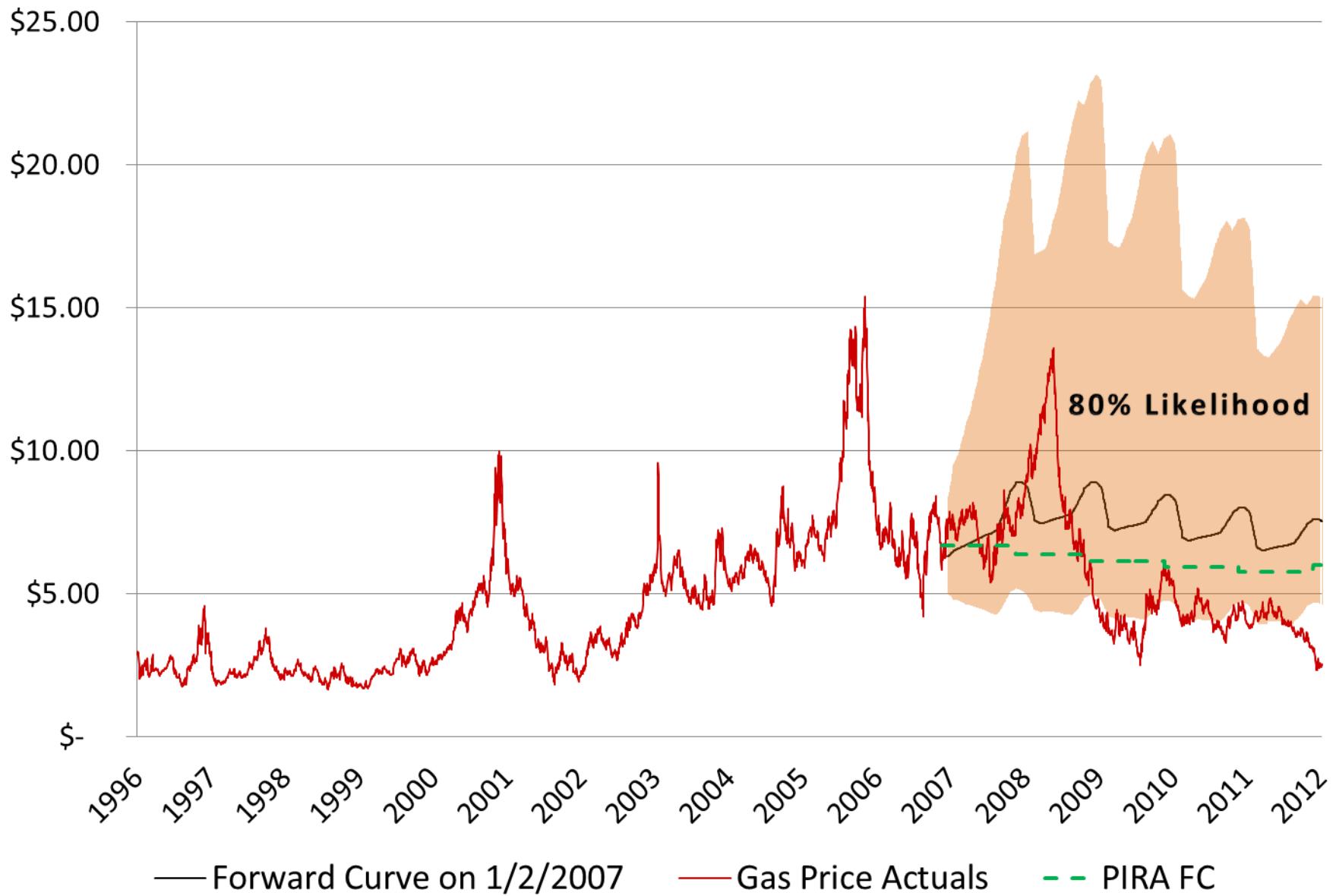
## Peer Group Comparison

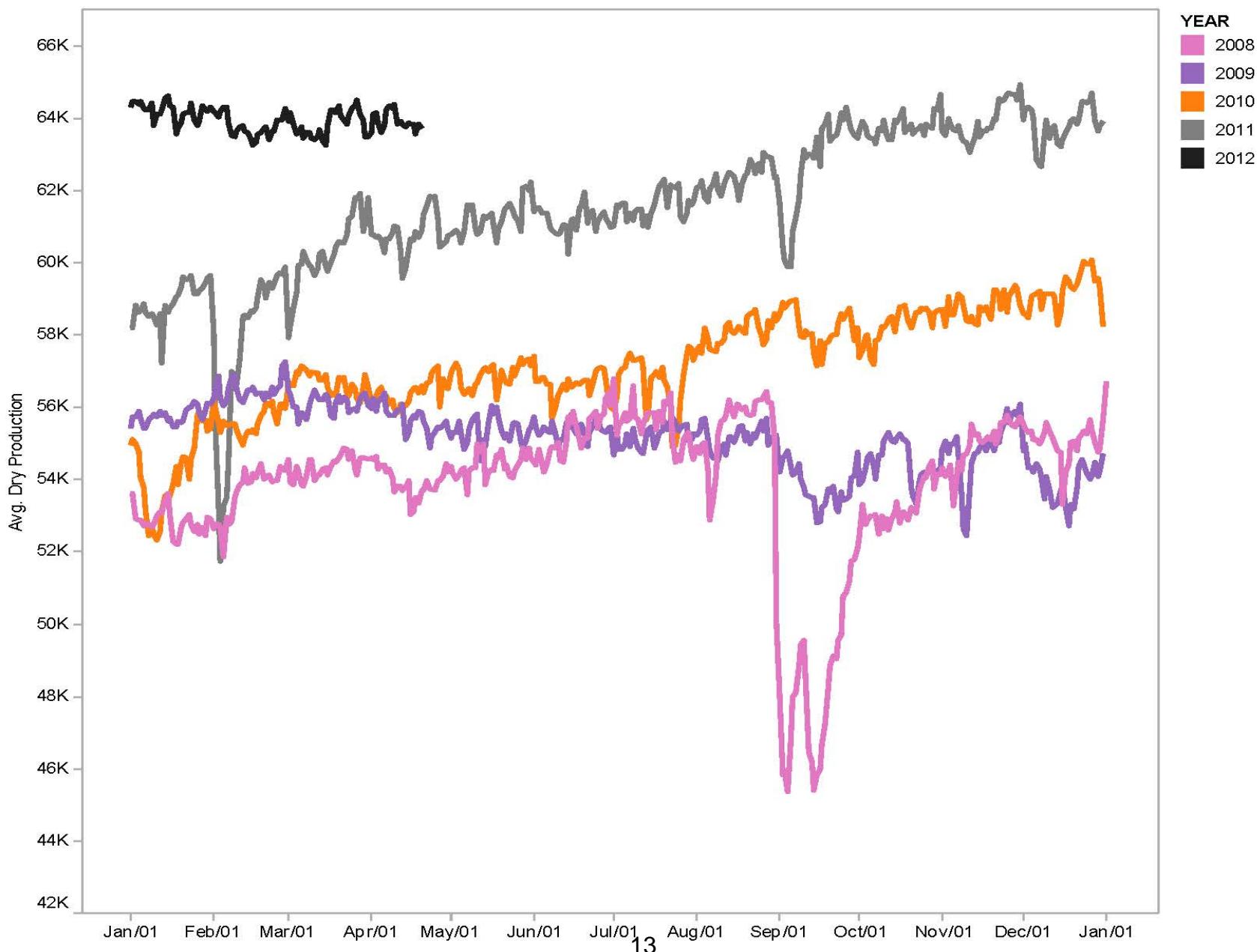


# Gas Price History and Expectations

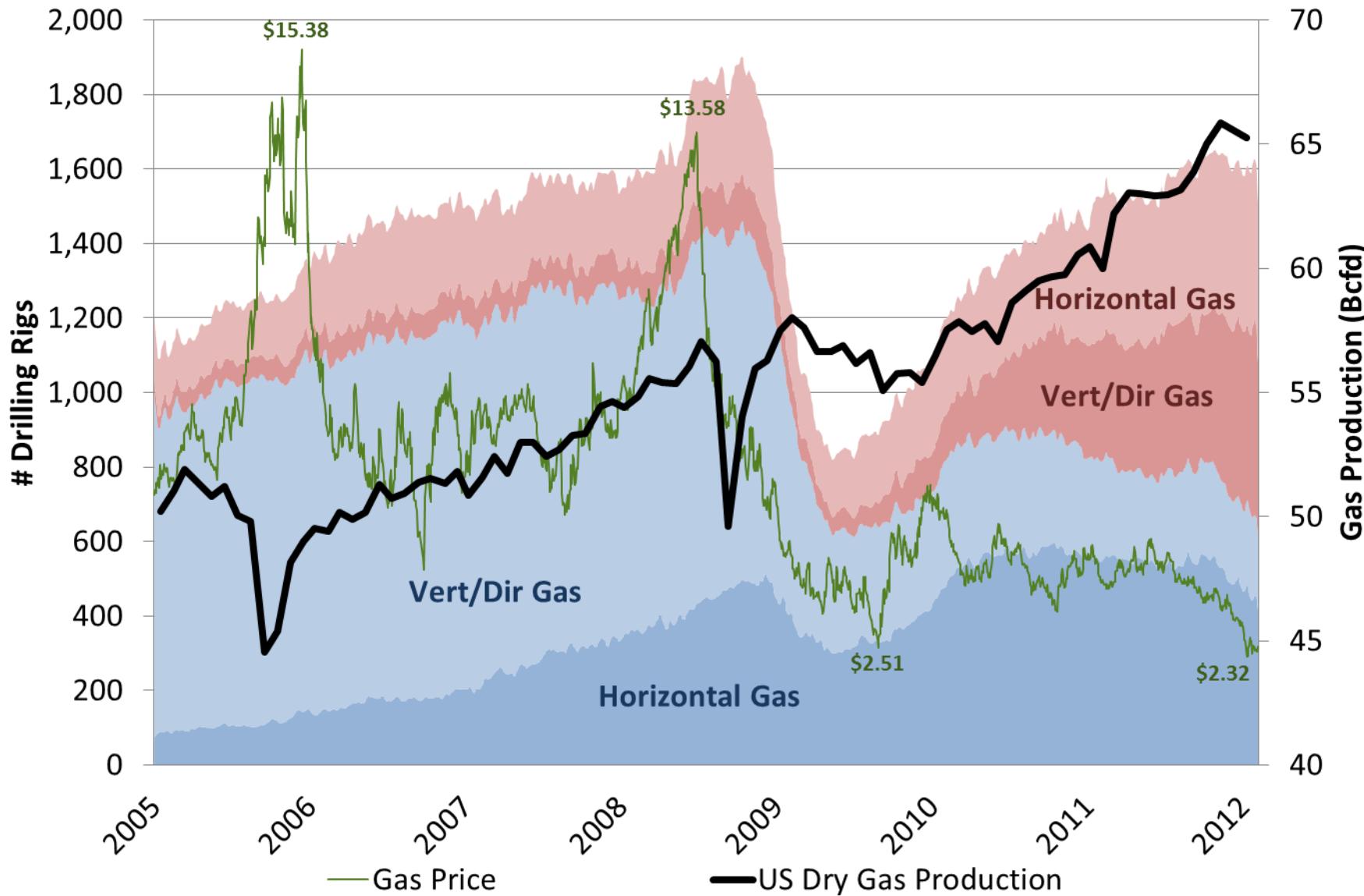


# Gas Price History and Expectations

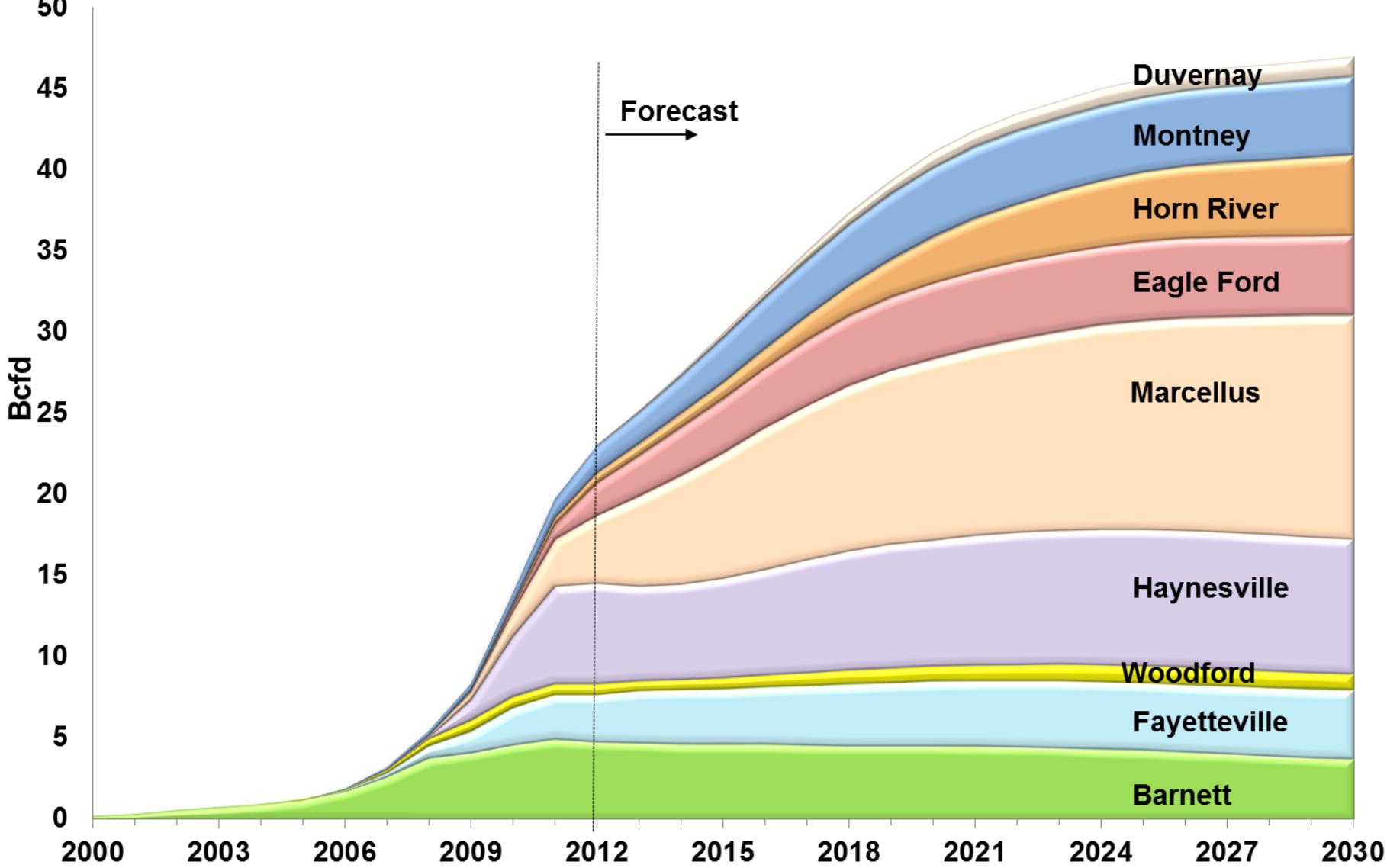




# US Gas Production and Drilling Disconnect



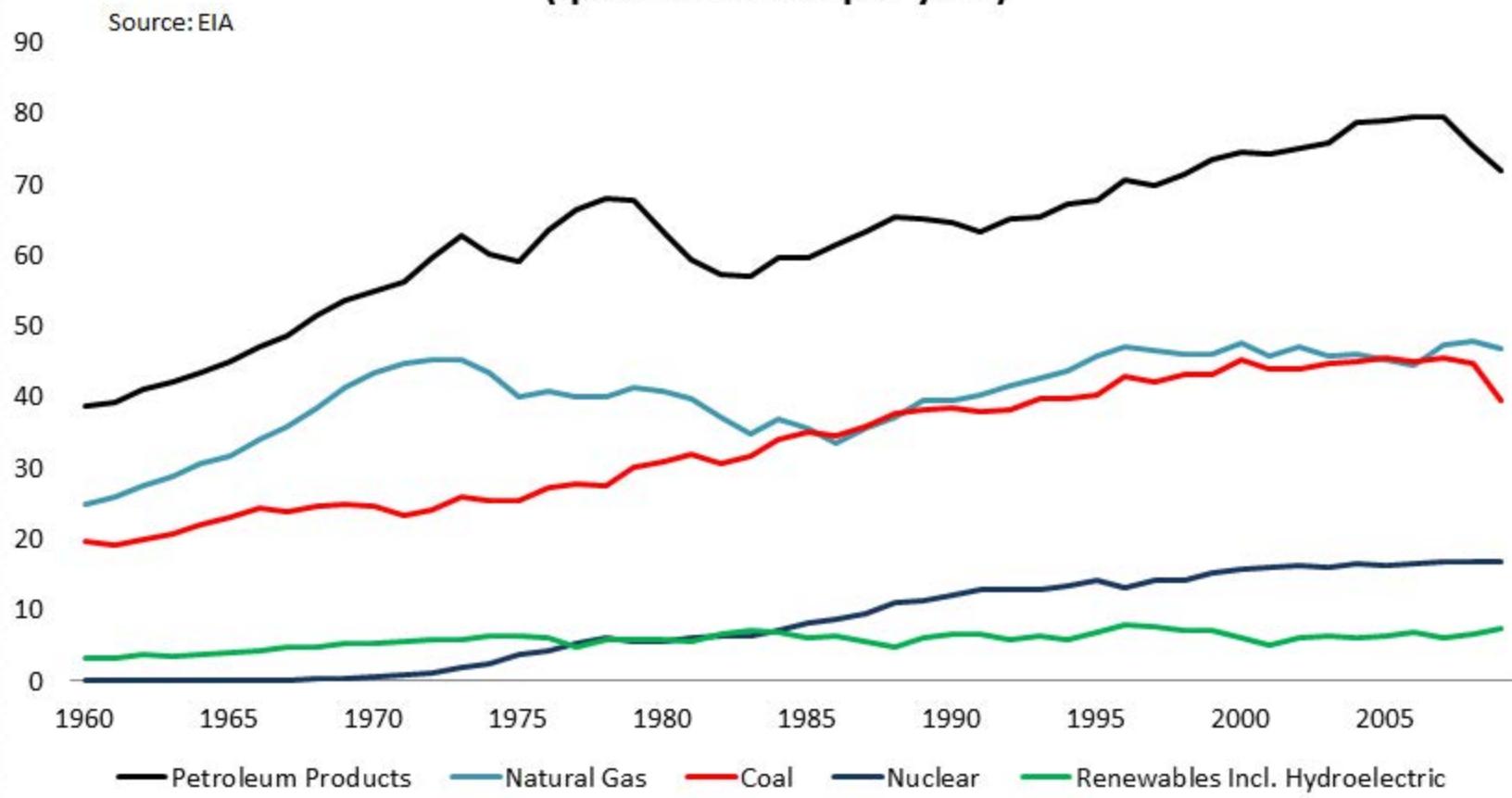
# Growth in Shale Production



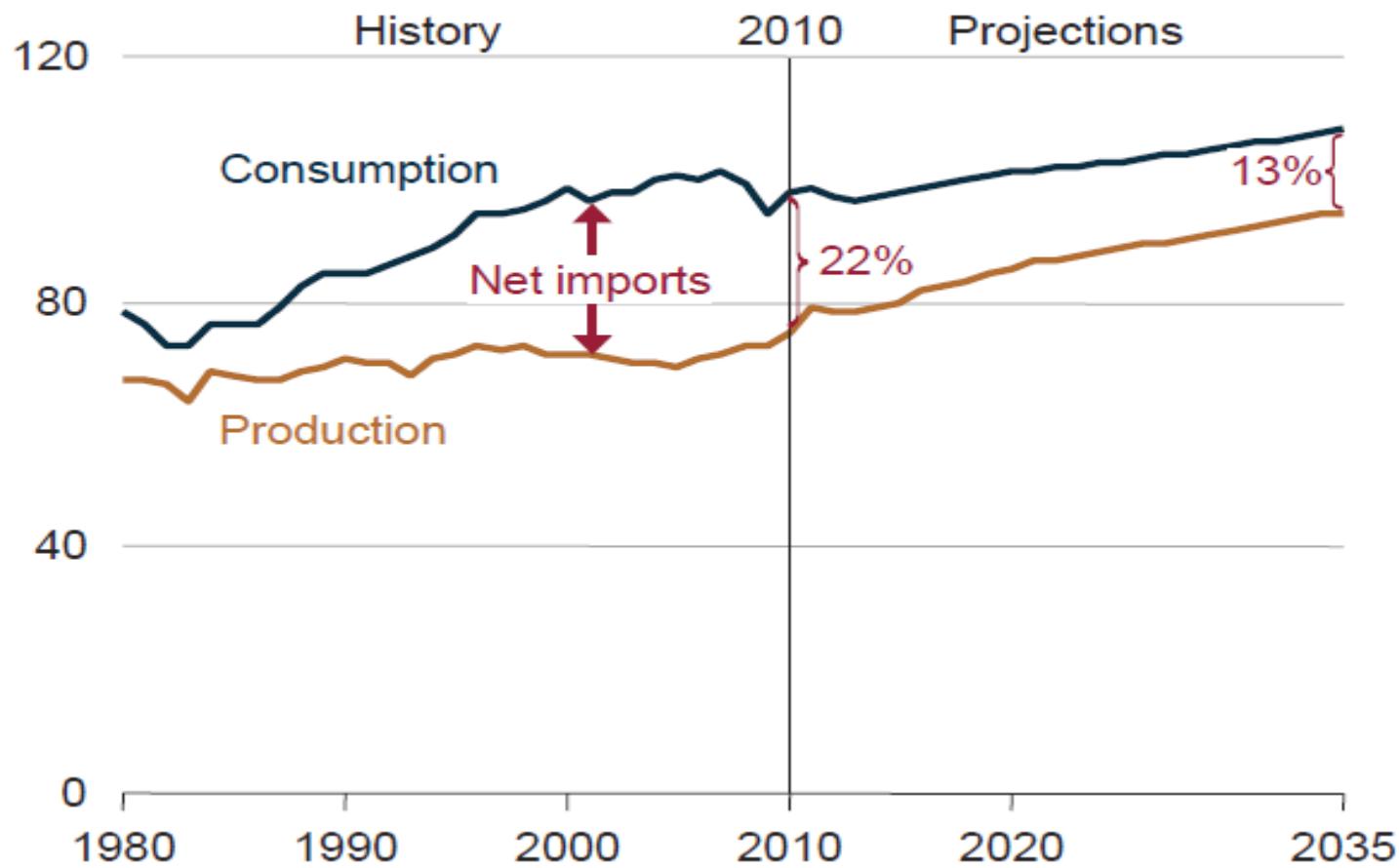
# Regulatory Framework

- **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.

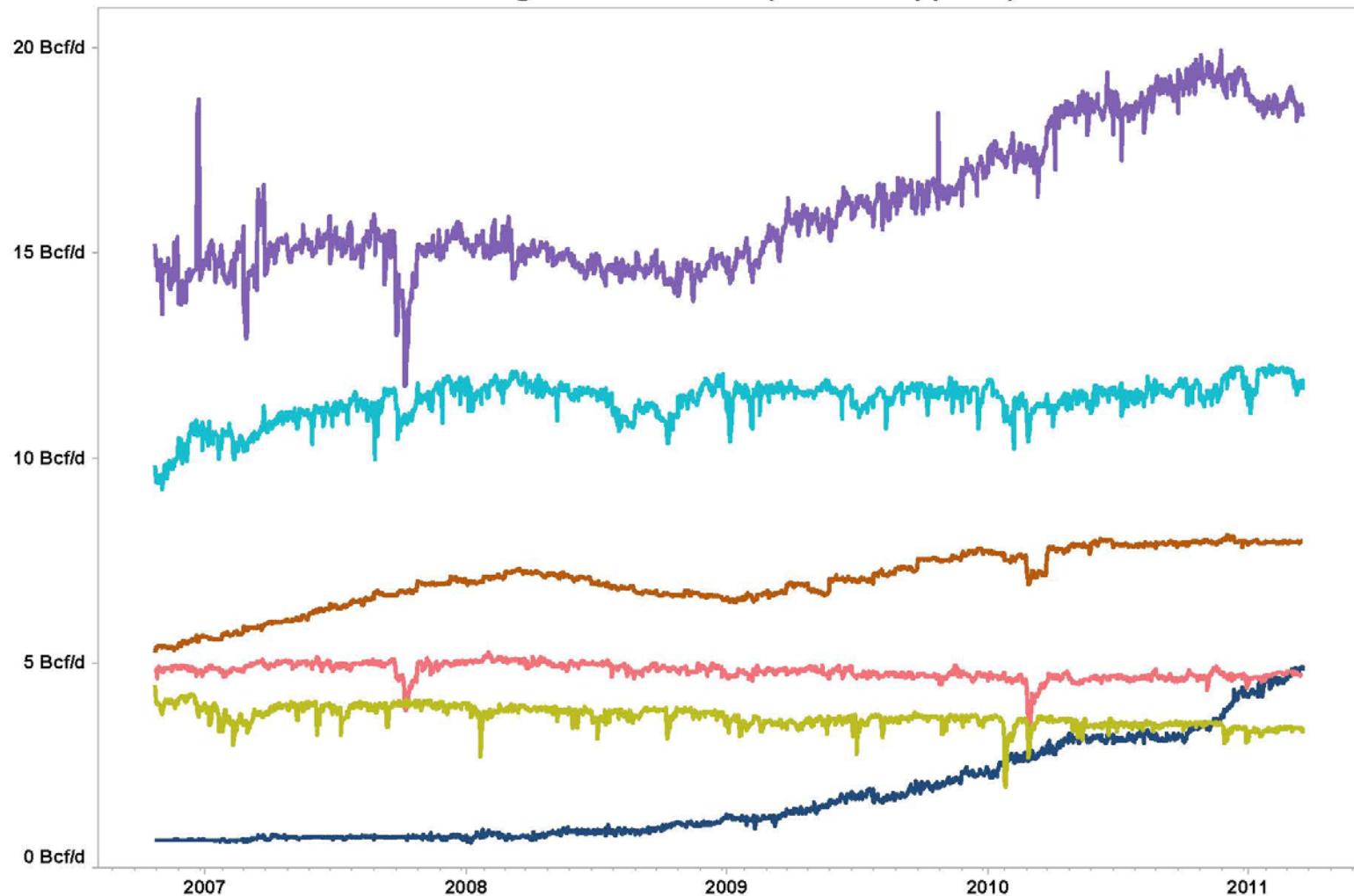
## Primary U.S Energy Consumption by Fuel 1960-2009 (quadrillion Btu per year)



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



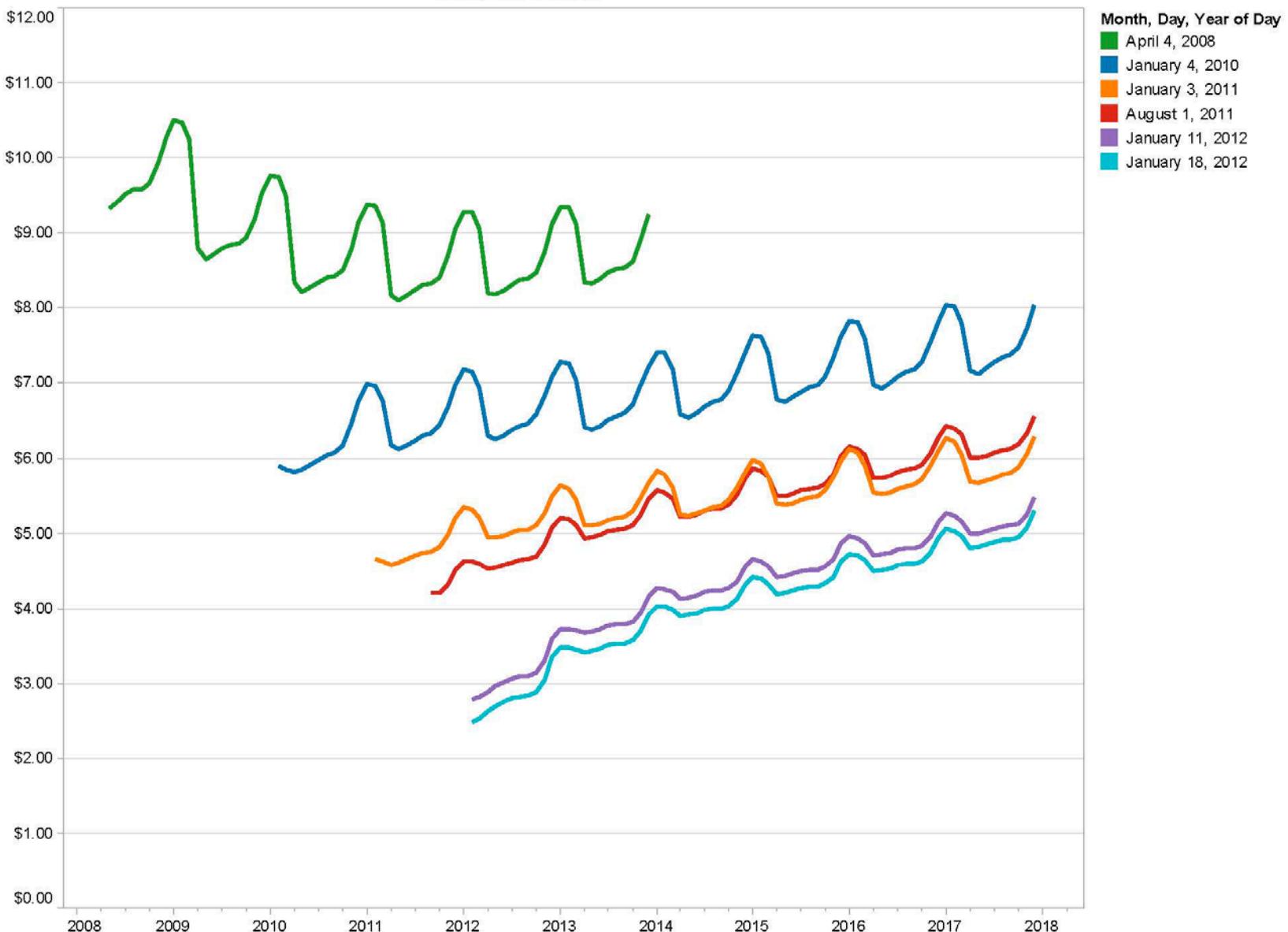
### Selected Regional Production (Source: Lippman)



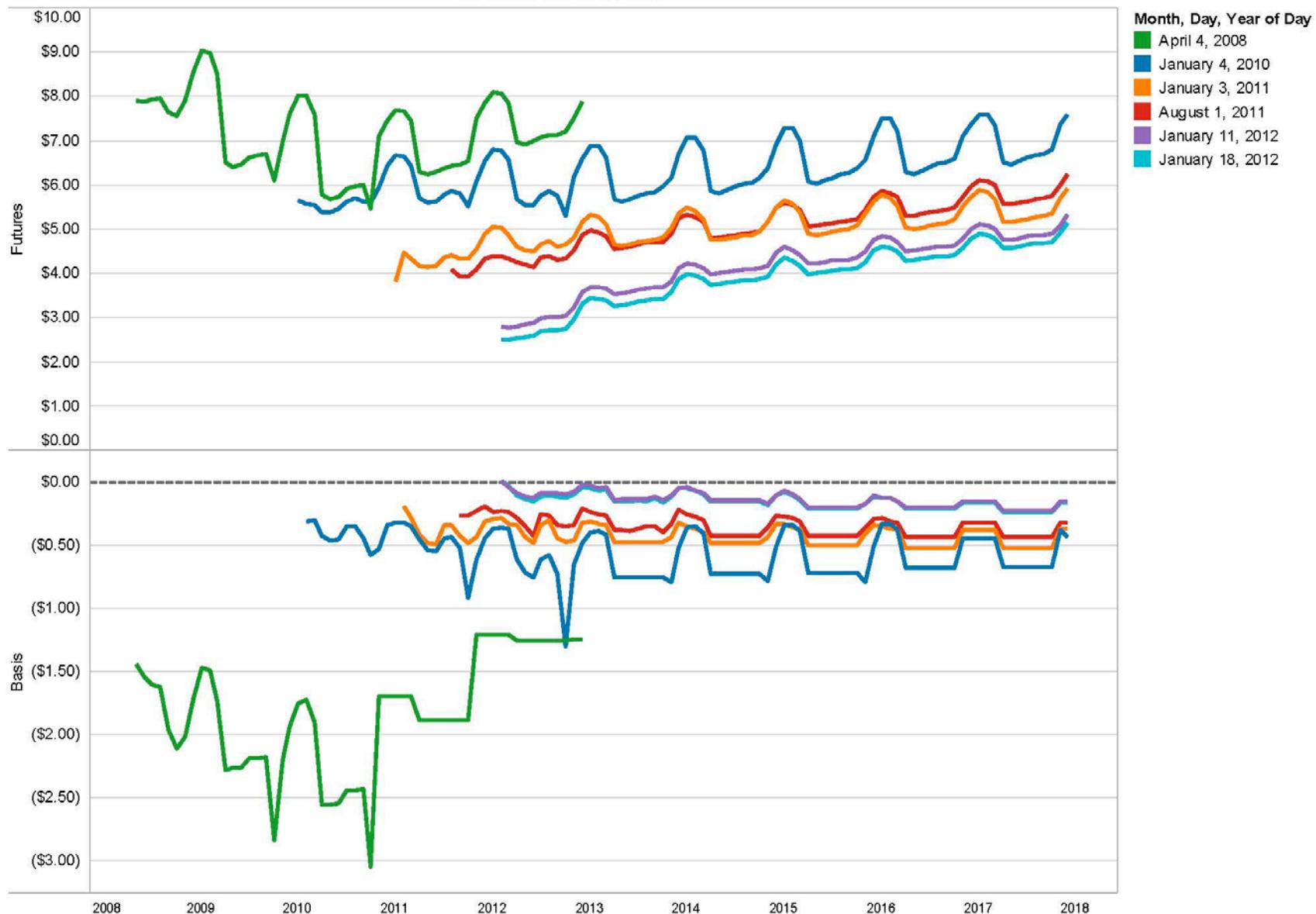
#### Region

- Rocky Mountain
- San Juan
- Texas
- Permian
- Total Gulf Coast
- Northeast

### 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?