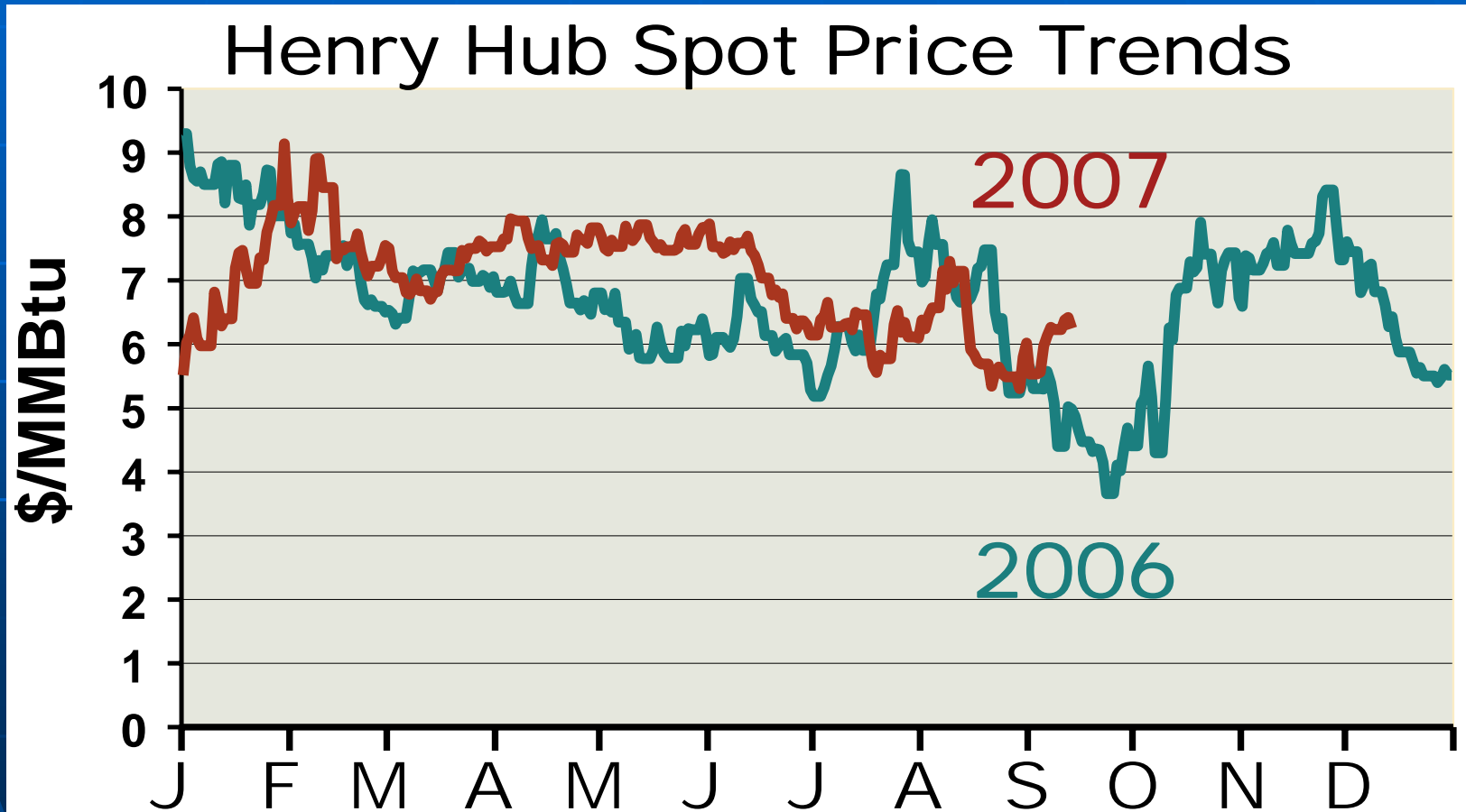




# Winter 2007/2008 Energy Market Assessment

Item No.: A-3  
October 18, 2007

# 2007 Spot Gas Prices Generally Up from 2006

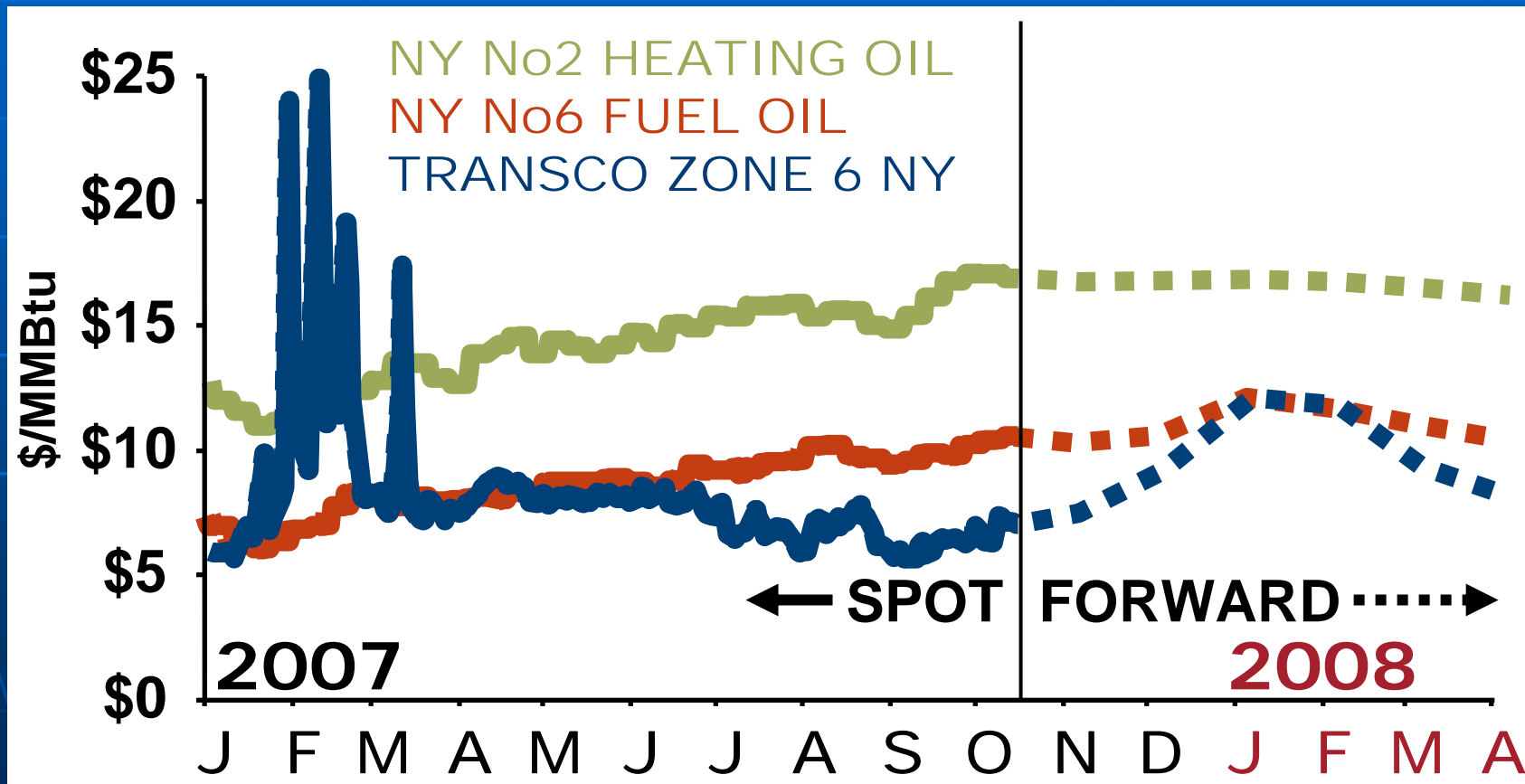


Source: The InterContinental Exchange

# Current Gas Market Conditions

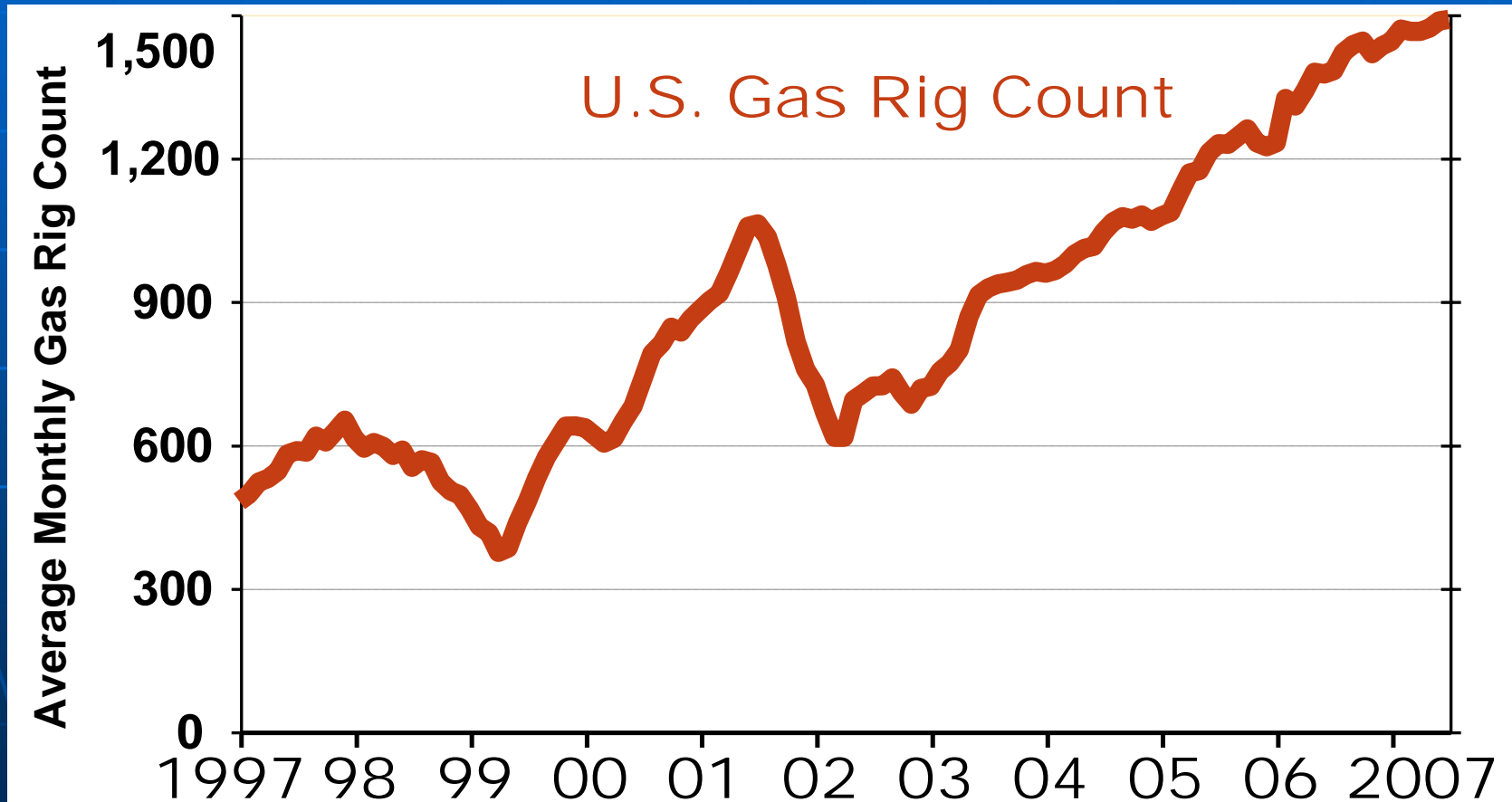
- Higher Oil Prices
- Growing Gas Production
- LNG Slowdown
- Electric Generation
- Storage Inventories
- Winter Forecasts

# Gas Prices Expected to Stay Below Oil



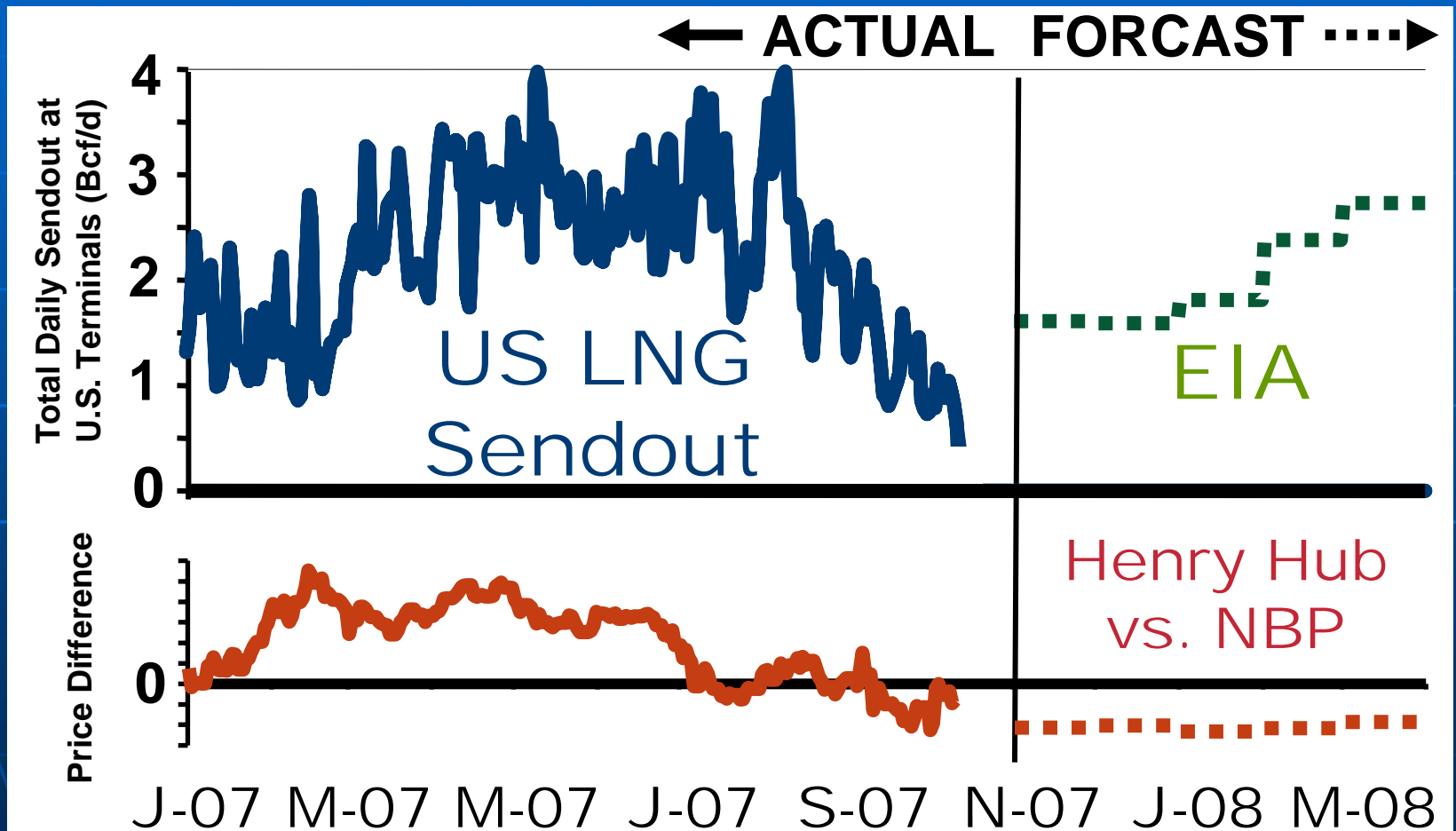
Source: Derived from Bloomberg and ESAI, Inc.

# Gas Drilling Continues to Rise at Current Prices



Sources: Baker  
Hughes, EIA

# Level of LNG Sendout Depends on Price



Source: Bentek,  
EIA, NGS,  
Bloomberg

# Electric Generators Using More Winter Gas

## Natural Gas Burned in U.S. Electric Generation

### April-October Volumes

(Bcf/day)

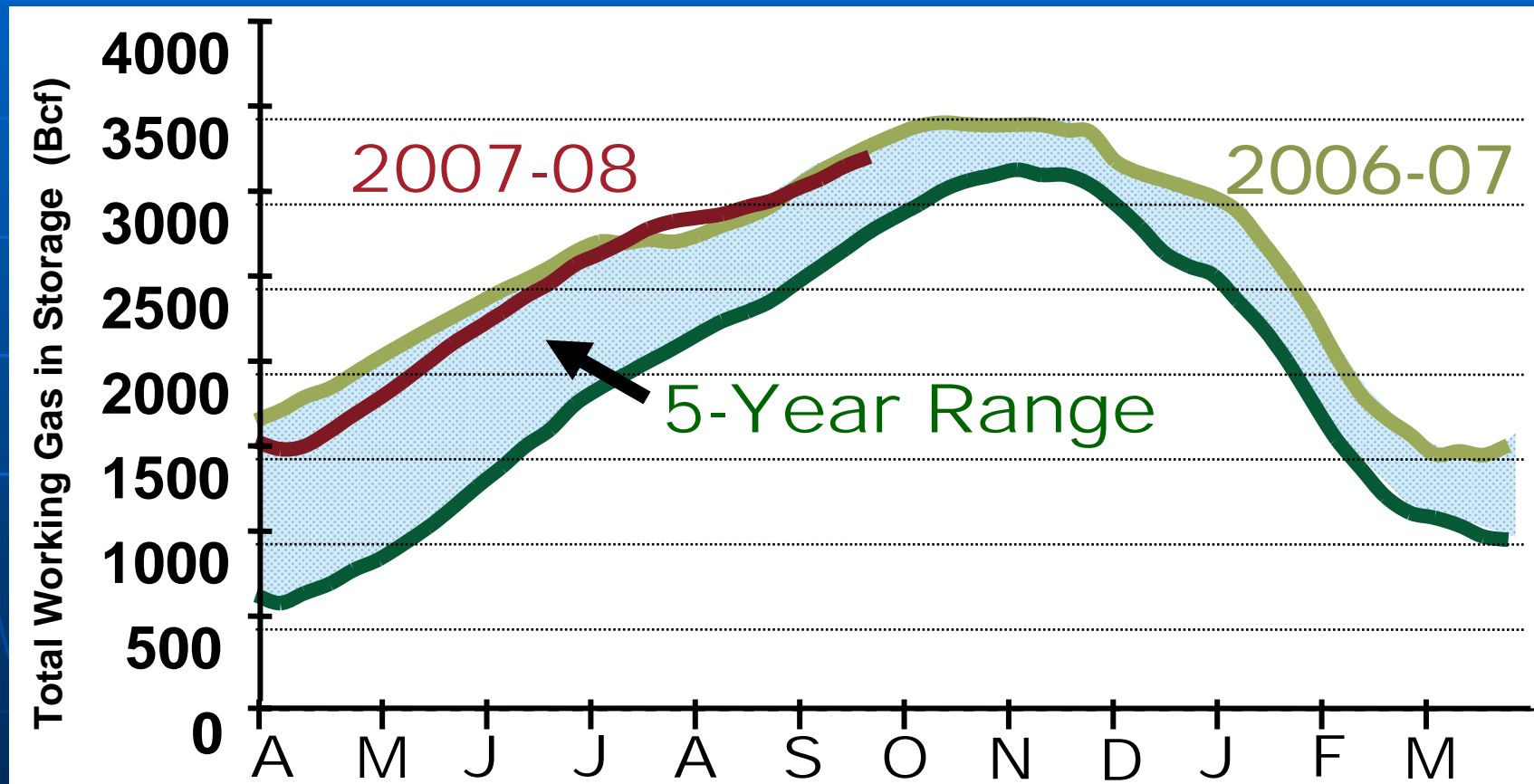
<b>2005</b>	<b>18.6</b>
<b>2006</b>	<b>20.4</b>
<b>Change</b>	<b>9%</b>

### November-March Volumes

(Bcf/day)

<b>2005-06</b>	<b>12.3</b>
<b>2006-07</b>	<b>14.0</b>
<b>Change</b>	<b>14%</b>

# Storage Inventories Close to 2006 Levels



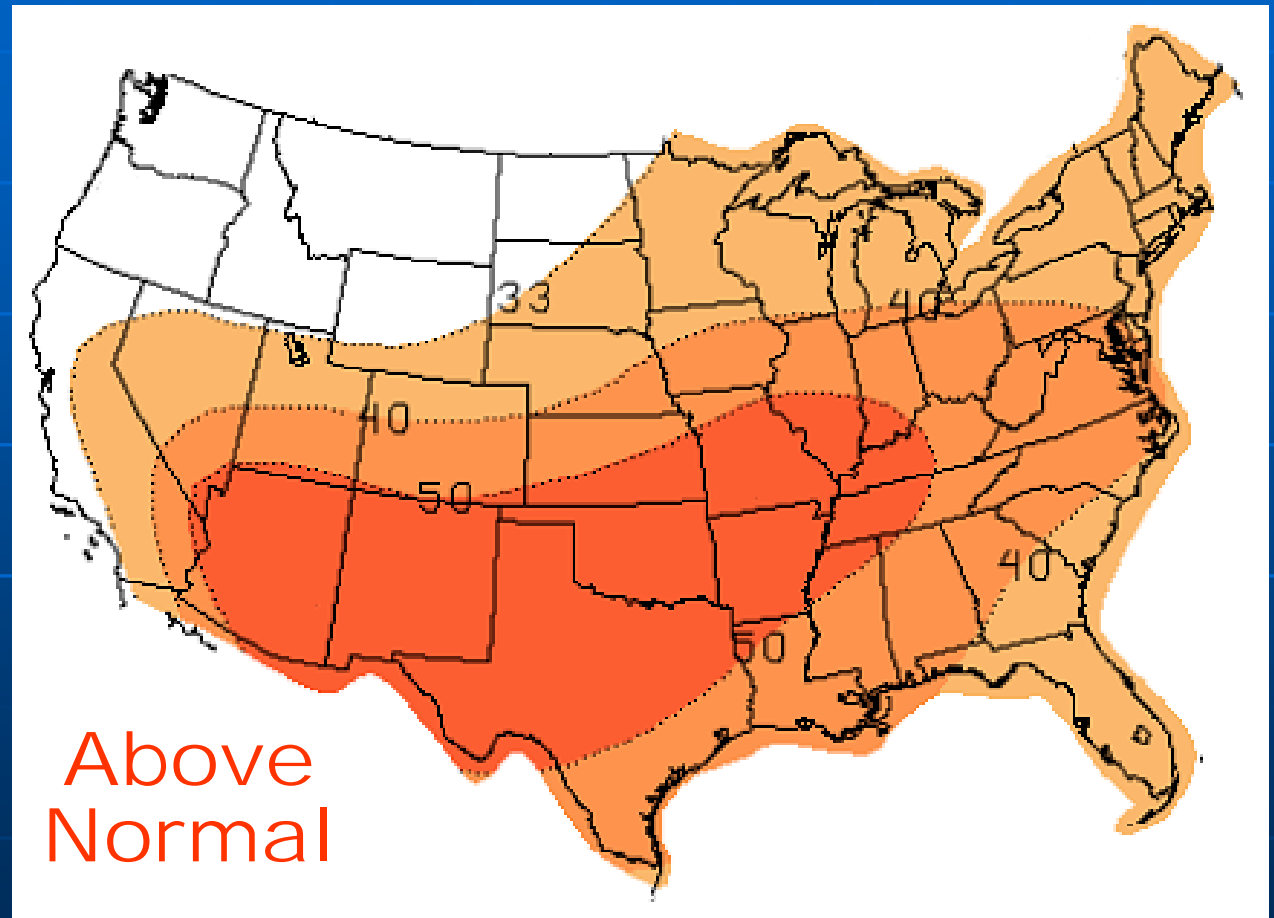
Source: EIA



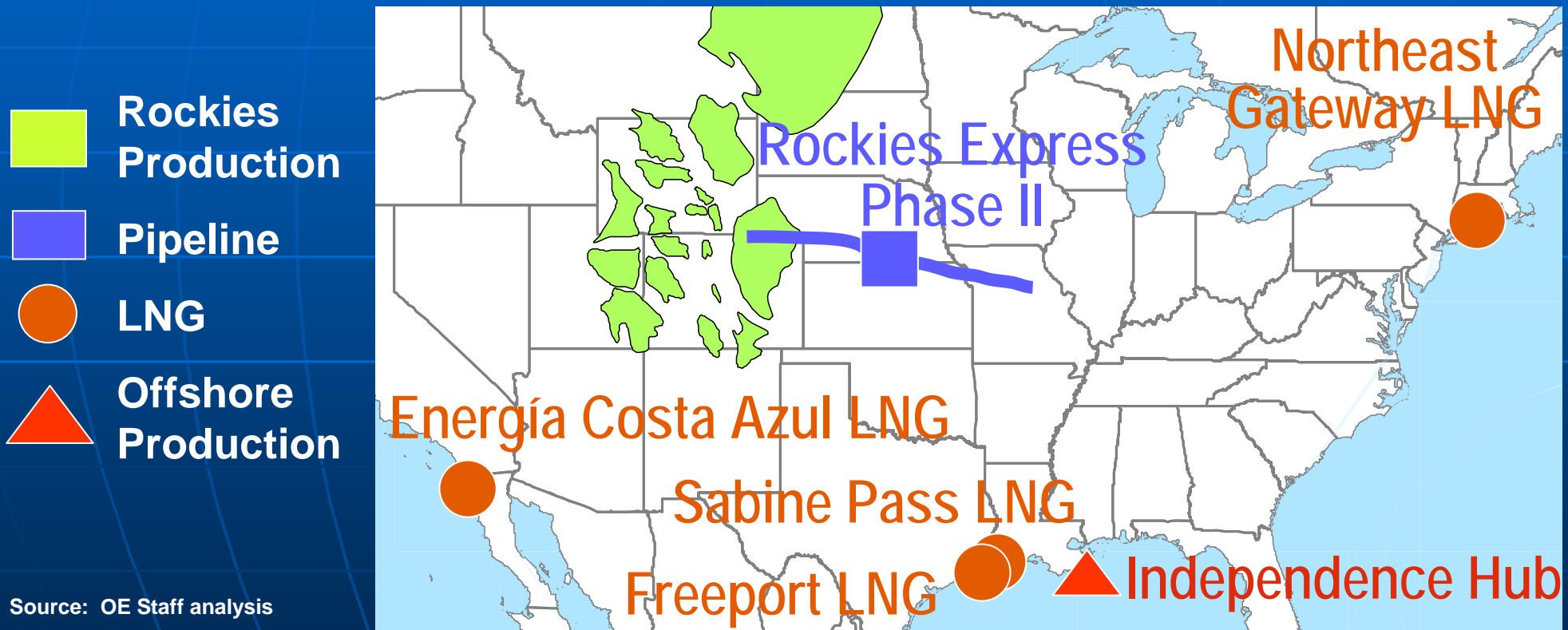
# Current Forecast is Another Mild Winter

NOAA's  
December '07  
through  
February '08  
Outlook

Source: NOAA Three Month  
Outlook – Official Forecast  
for Dec-Jan-Feb 2007-08  
issued September 20, 2007

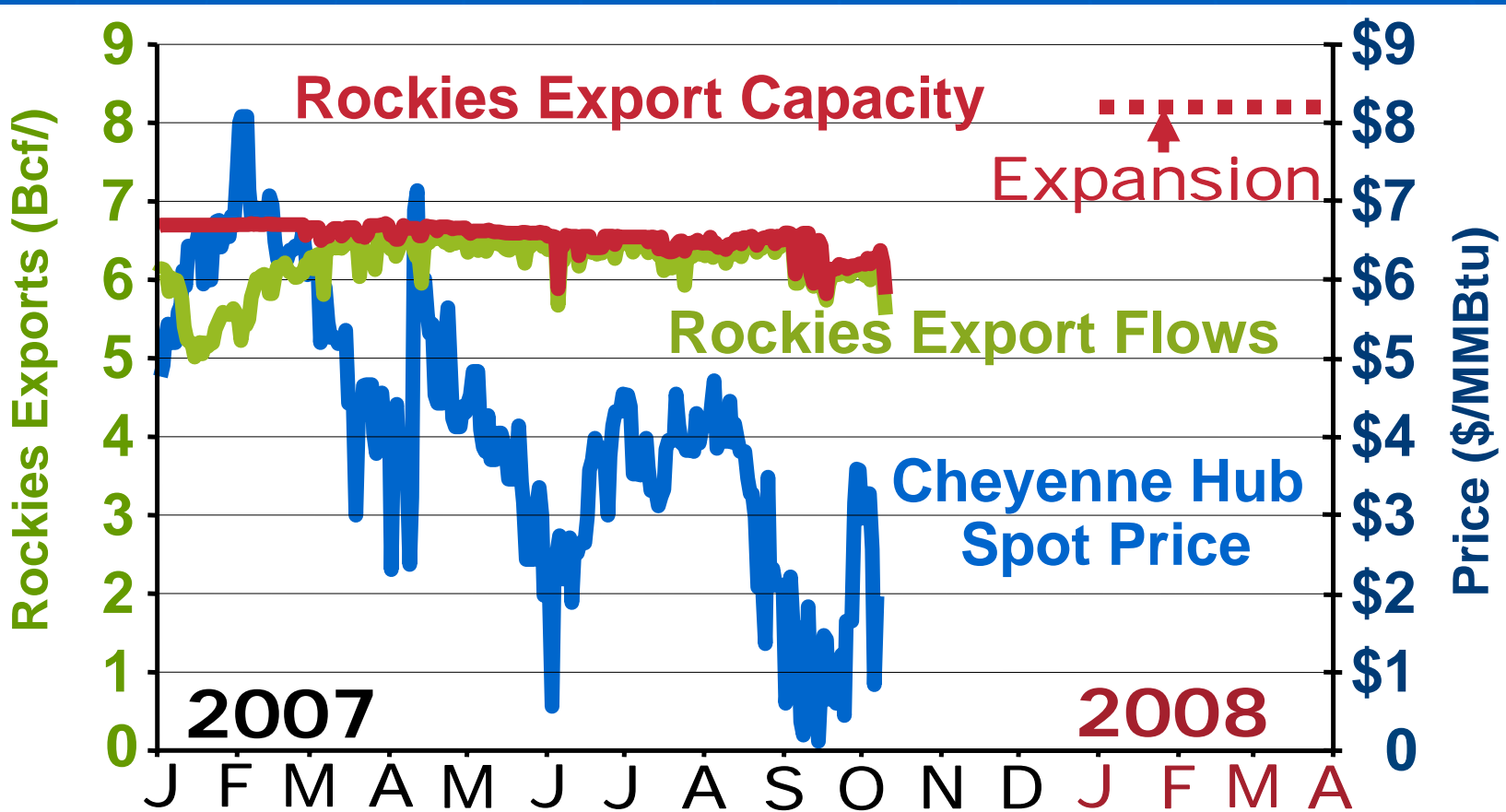


# New Late-Winter Infrastructure Will Affect Markets



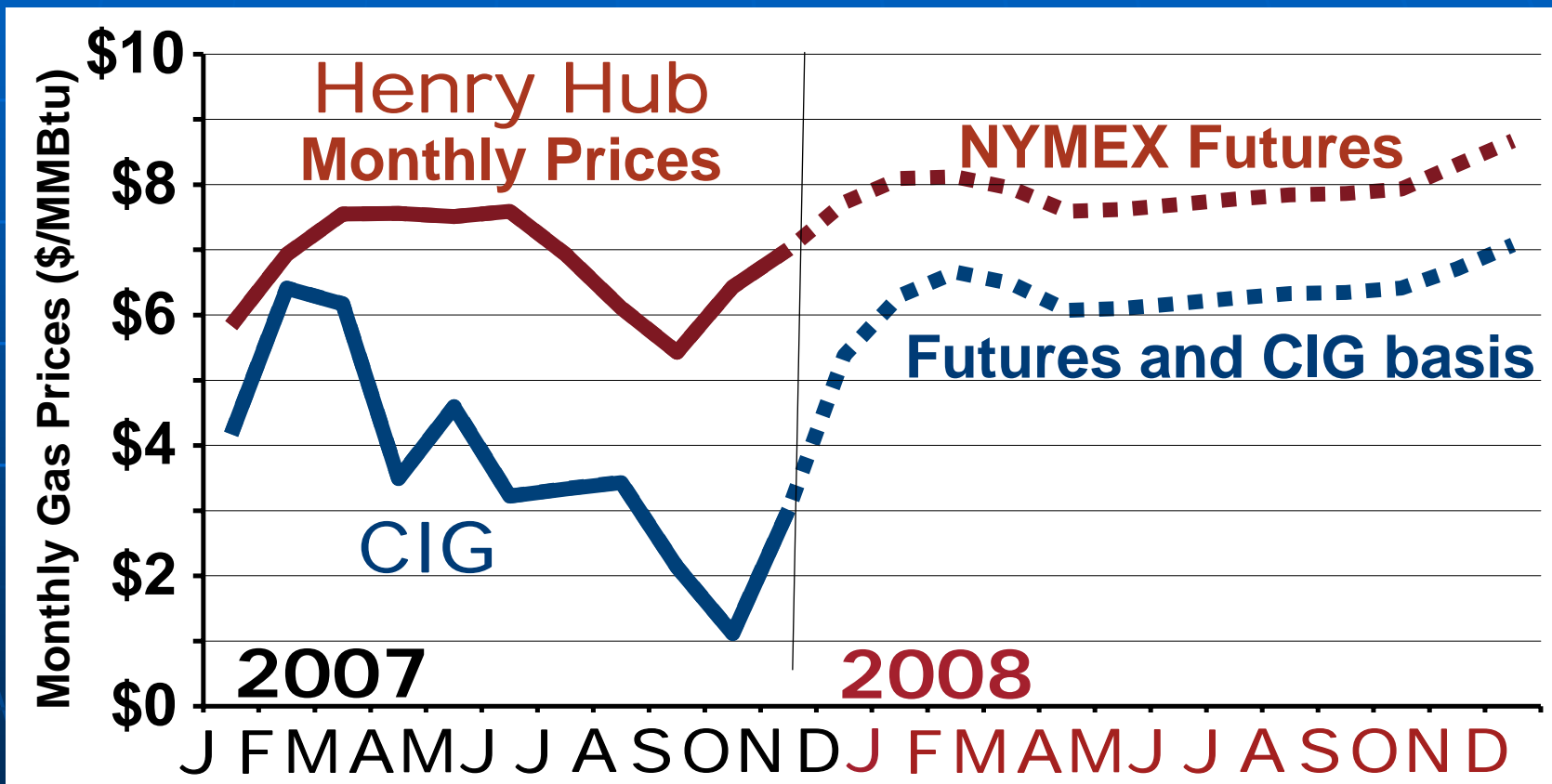
Source: OE Staff analysis

# Limited Rockies Capacity Results in Extreme Prices



Source: Volume information from Bentek Energy, LLC and prices derived from Inter-Continental Exchange

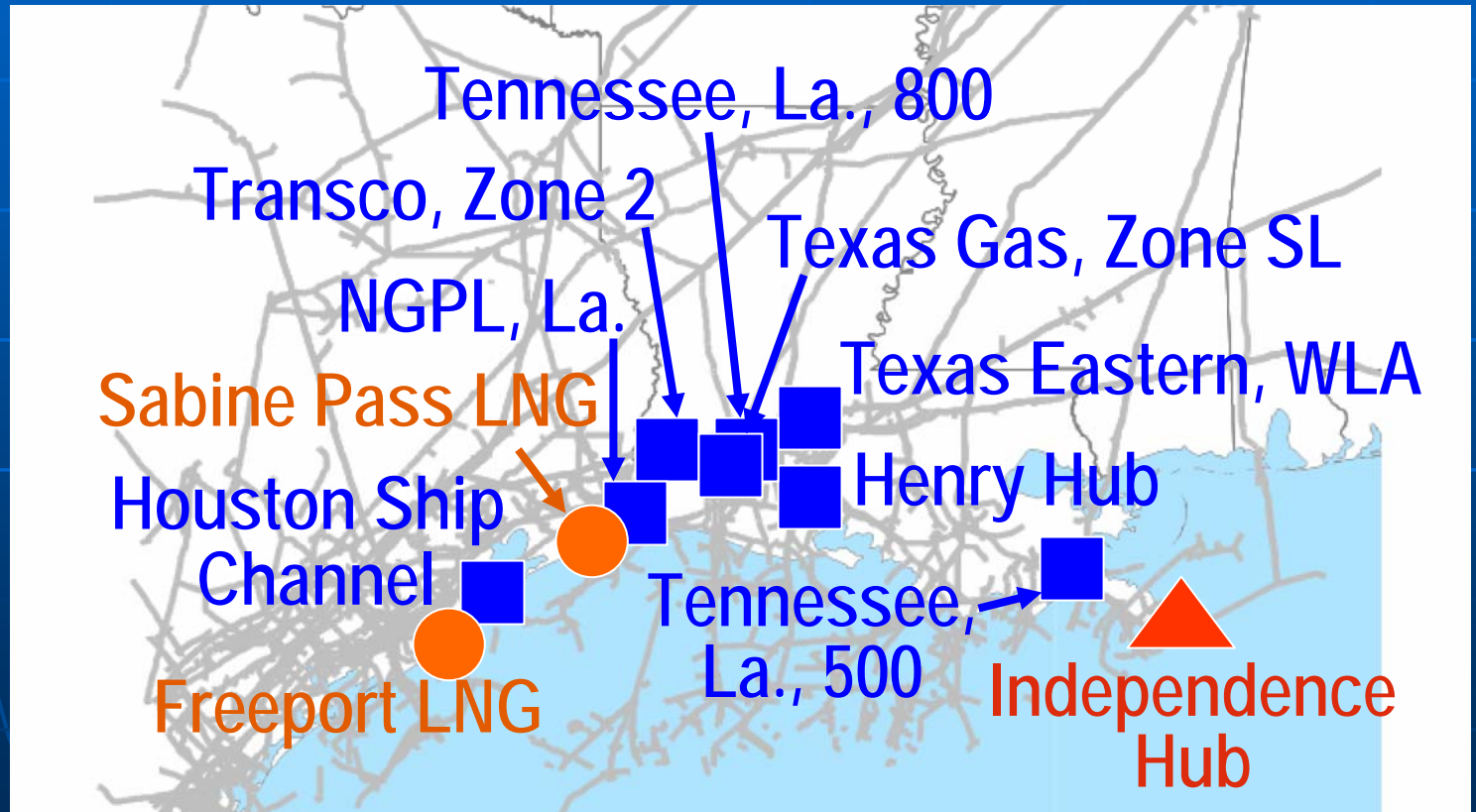
# Expected New Rockies Capacity to Relieve Price Pressures



Source: Bloomberg, L.P. Forwards derived from Sept. 19, 2007 values

# New LNG Capacity Likely to Alter Gulf Pricing

- Index pricing points
- LNG
- Offshore Production



Source: Derived from Platts' PowerMap

# FERC Natural Gas Infrastructure Review: Pipelines, Storage, LNG

- Approved
- Pending
- Potential
- In-service in 2007

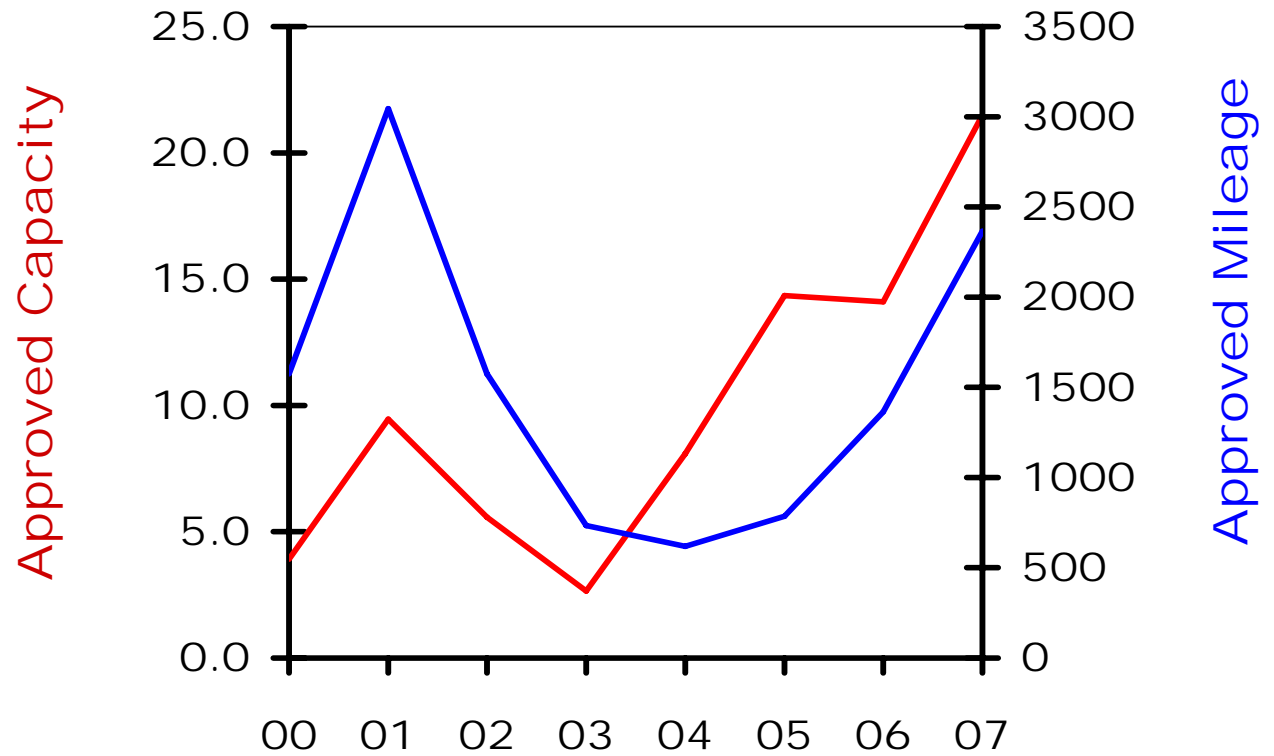
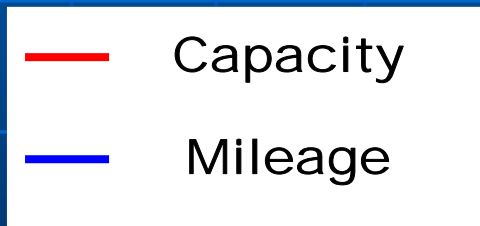


# Pipeline Approvals 2000-2007 (Oct)

	Capacity (Bcf/day)	Miles of Pipe	Compression (HP)	Cost (Billions)
2000	2.2	1,102.8	151,096	0.8
2001	8.8	2,700.3	870,767	4.4
2002	5.8	1,590.0	560,064	3.1
2003	1.7	352.4	221,545	1.0
2004	8.1	619.3	83,538	1.2
2005	14.3	785.1	123,036	1.9
2006	14.1	1,363.6	329,657	4.2
2007 (Oct)	21.5	2,365.7	746,180	7.0
<b>TOTAL</b>	<b>76.5</b>	<b>10,879.2</b>	<b>3,085,883</b>	<b>23.6</b>

Source:  
FERC

# Pipeline Approvals Soared in 2007



Source: FERC

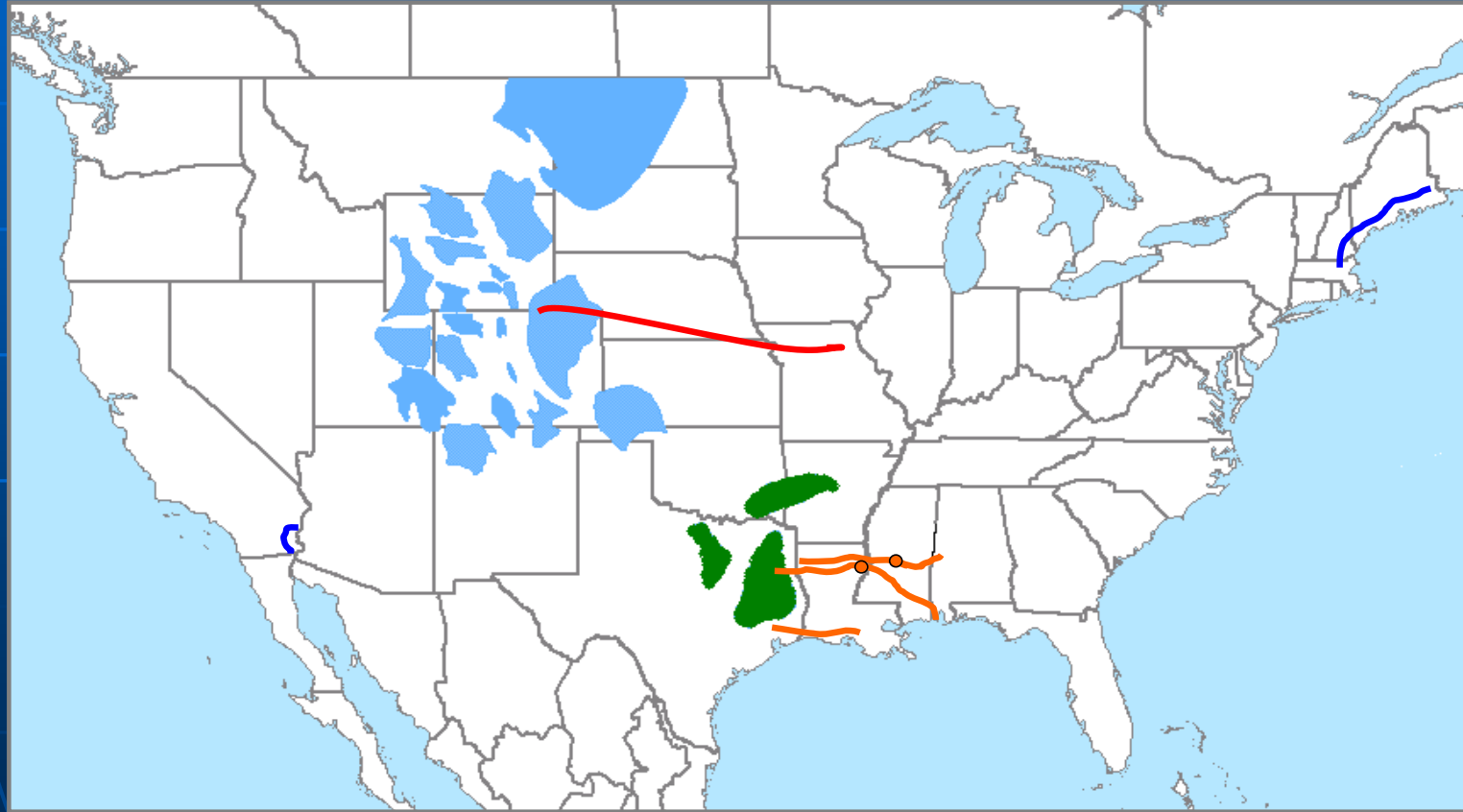


# New Pipelines, New Sources

## Production

- Rockies
- Shale

- REX West
- SE Pipe
- Imports



Source: Platts'  
PowerMap, FERC



# Pipeline Infrastructure - Pending Applications

- 17.97 Bcf/day of capacity
- 2,804.0 miles of pipeline
- 575,891 HP compression
- 47% of capacity - LNG related
- Gas source for projects slowly changing

# Pipeline Infrastructure - Prefiling

- 3.3 Bcf/day of capacity
- 603.8 miles of pipeline
- 126,310 HP Compression
- Little LNG-related capacity

# Pipeline Infrastructure - Potential

- 18.42 Bcf/day of capacity
- 4,384 miles of pipeline
- 120,750 HP compression
- No LNG-related capacity
- Contains Alaska capacity

# Gas Storage Approvals: 2000-2007

- 465.5 Bcf of working storage capacity
- 20.7 Bcf/day of deliverability
- Majority of proposals in Southeast
  - Proximity to salt formations
  - Proximity to LNG development

# Storage Infrastructure: Pending, Pre-Filing and Potential

- Pending
  - 141.6 Bcf of storage capacity, 4.5 Bcf/day of deliverability
- Pre-Filing
  - 52.2 Bcf of storage capacity, 2.2 Bcf/day of deliverability
- Potential
  - 250.1 Bcf of storage capacity, 3.5 Bcf/day of deliverability
- Majority of proposals in Southeast and Northeast
- Lack of development in the West

# LNG Approvals: 2002-2007

- 14 new terminal sites
  - Redelivery capacity of 24.7 Bcf/day
  - 12 sites on Gulf Coast, 2 in the Northeast
- 5 expansions
  - Redelivery capacity of 6.4 Bcf/day



# LNG Infrastructure: Pending

- Pending
  - 8 new terminal sites
    - Redelivery capacity of 9.2 Bcf/day
    - Sites in the Northeast, California and Oregon

# What Has Been Placed Into Service through October 2007?

## ■ Pipelines

- 7 Projects: 4.4 Bcf/day, 847 miles

## ■ Storage

- 9 Projects: 85.6 Bcf of storage, 1.8 Bcf/day of deliverability