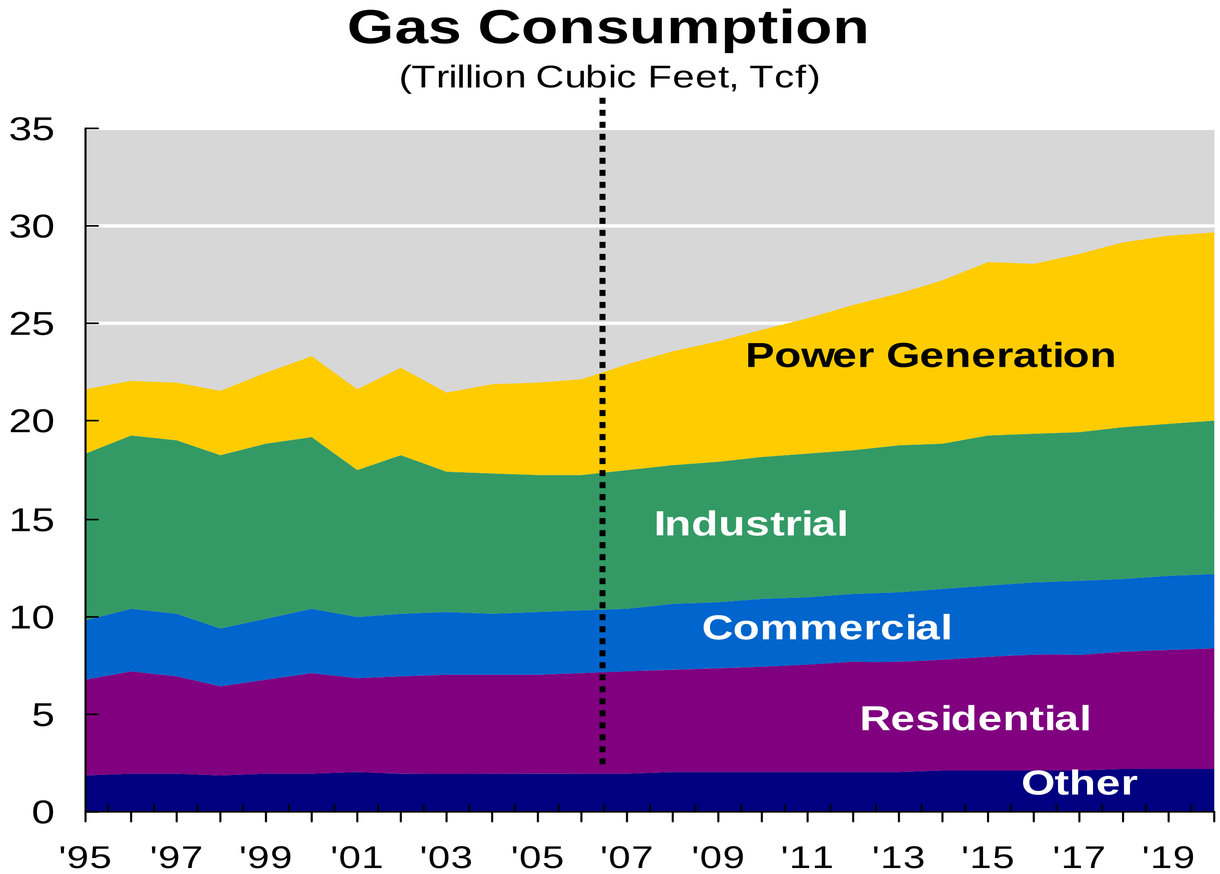
America’s Natural Gas Market Challenge 2005

Christopher B. McGill

American Gas Association

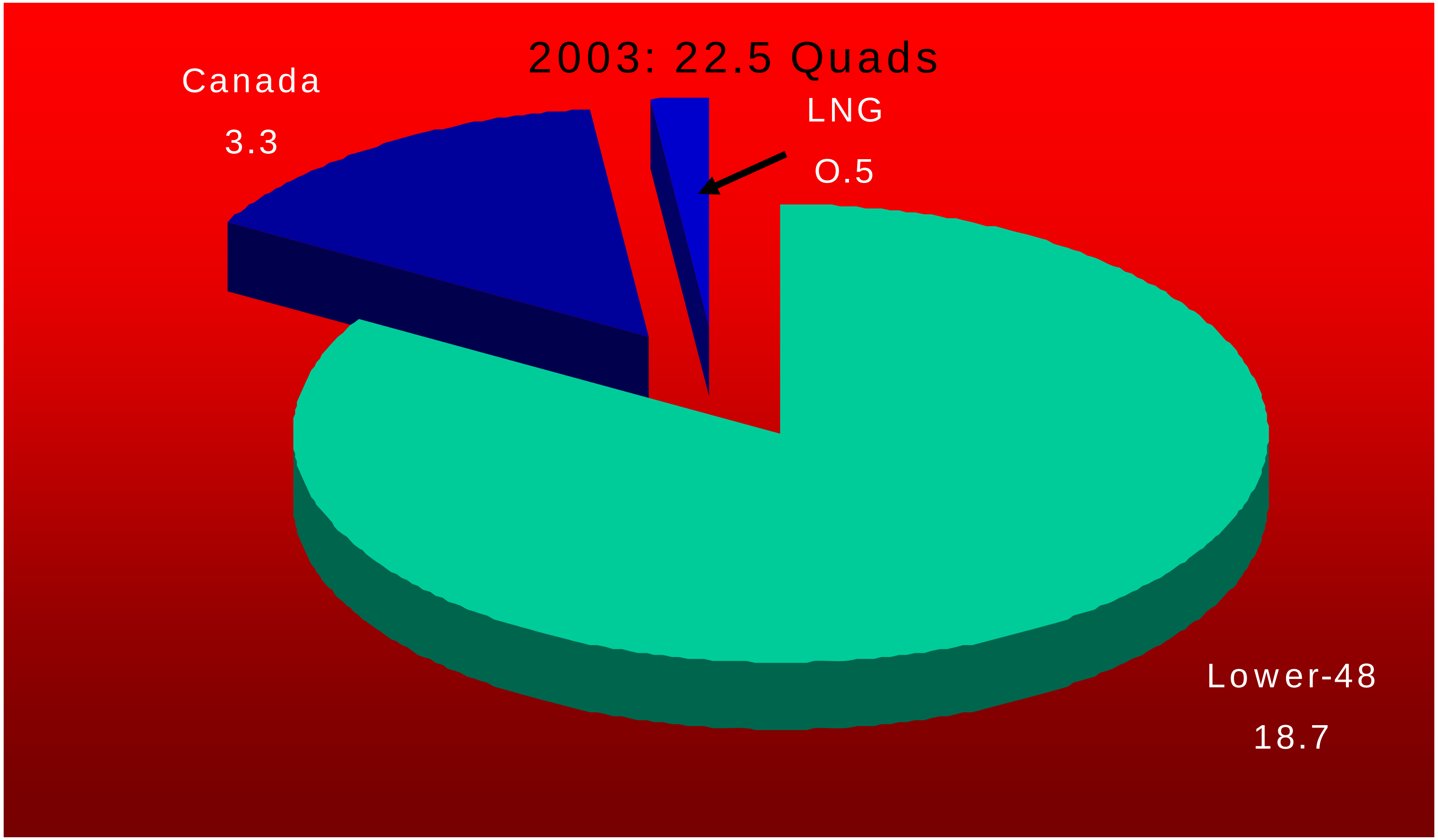
cmcgill@aga.org

Gas Demand Outlook



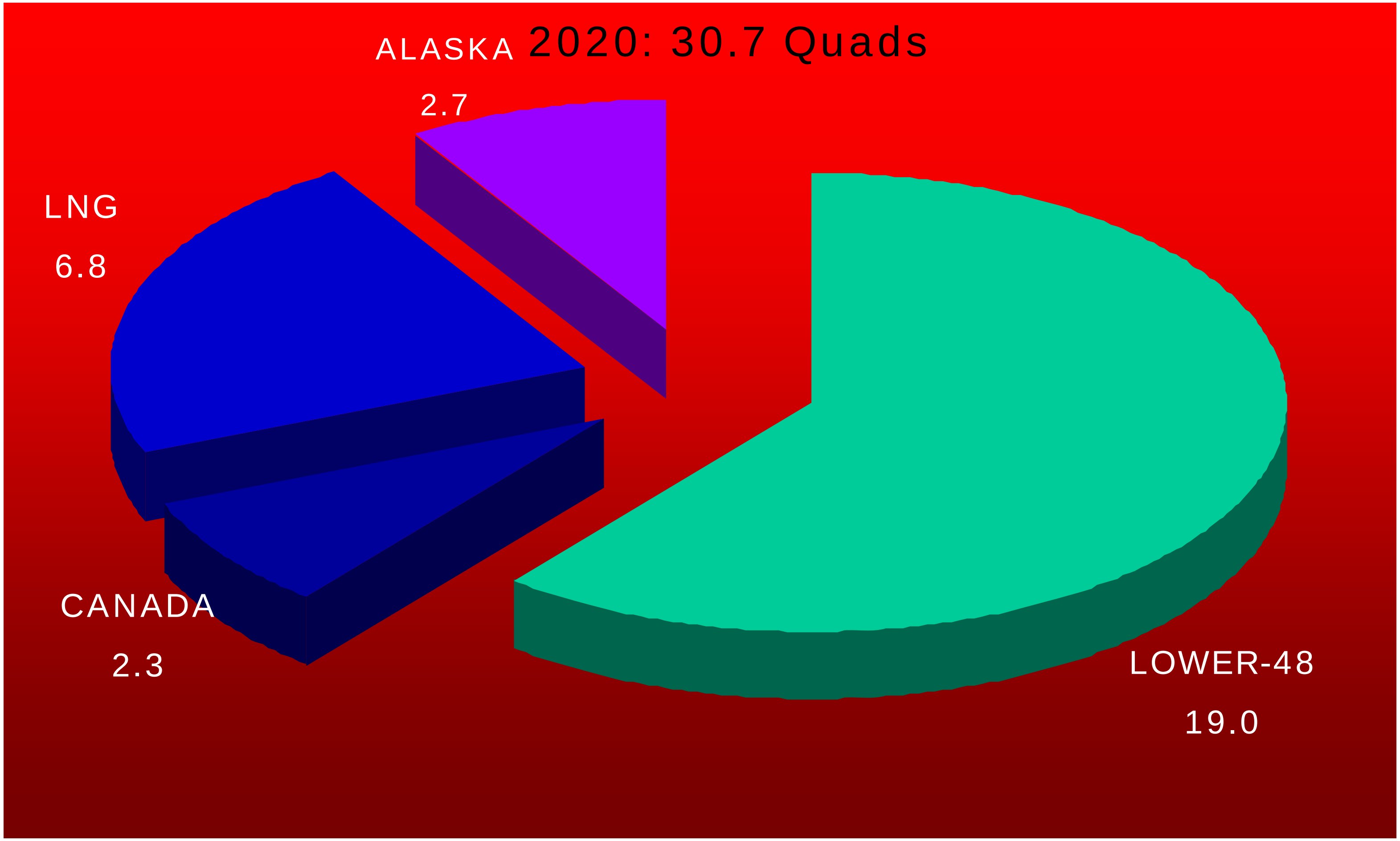
Source: Energy and Environmental Analysis (EEA)

SOURCES OF CURRENT U.S. NATURAL GAS SUPPLY



American Gas Foundation

SOURCES OF PROJECTED U.S. NATURAL GAS SUPPLY

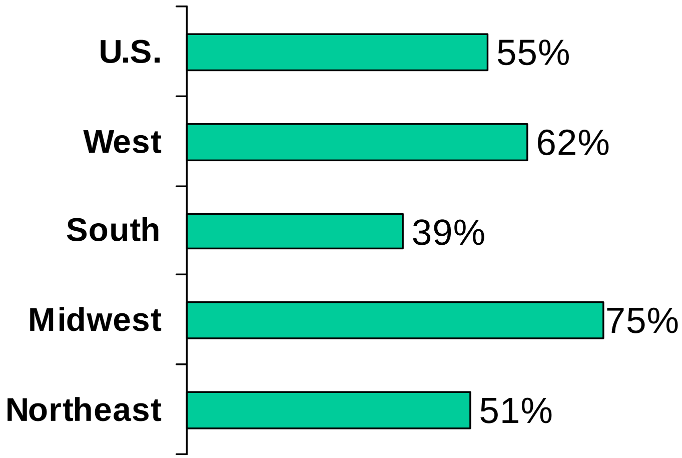


American Gas Foundation

Natural Gas Heating Bills Are Projected to Rise by Between 32% and 61%

Source: Energy Information Administration

Households using natural gas as primary heating fuel



% Change from Last Winter (Projected)

	Consumption	Average Price	Total Expenditures
West	+ 4 %	+ 29 %	+ 34 %
South	+ 5 %	+ 48 %	+ 56 %
Midwest	+ 4 %	+ 55 %	+ 61 %
Northeast	- 1 %	+ 33 %	+ 32 %

American Gas Association

Estimated Peak Month Gas Supplies 2005-2006

Source	Bcf	%
✦ Conventional Prod.	1,600	57.3
✦ Underground Storage	840	30.1
✦ Supplementals	6	0.3
✦ Net Canadian Imports	300	10.8
✦ LNG Imports	50	1.8
Subtotal	**2,796**	**100.0***
✦ Mexico Exports	33	
Total Gas Supplies	**2,763**	

(*Do **not add due to rounding)**

American Gas Association

Estimated Peak Month
January 2006

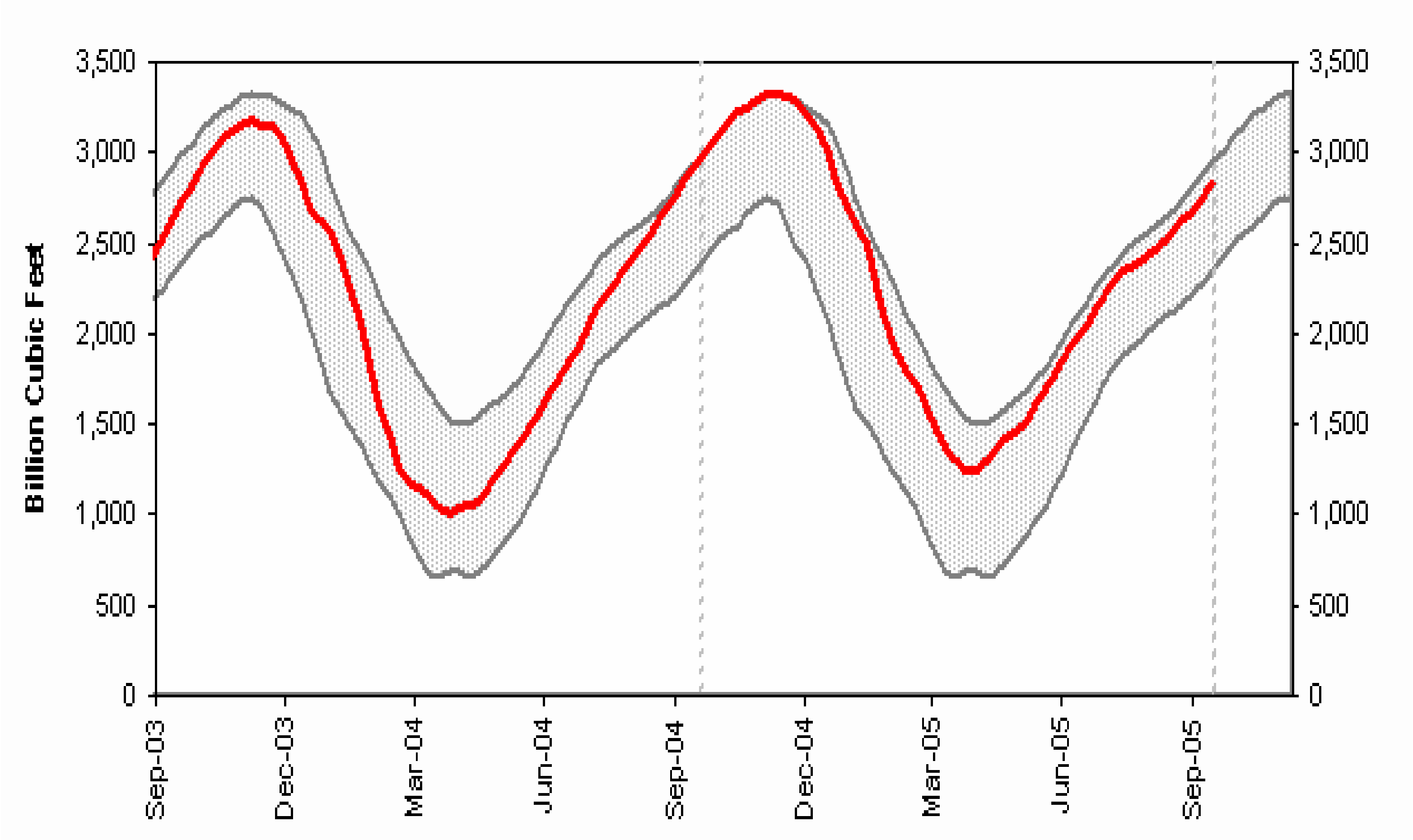
Estimated Total Gas Supplies

2,763 Bcf

Estimated Peak Consumption

2,716 Bcf

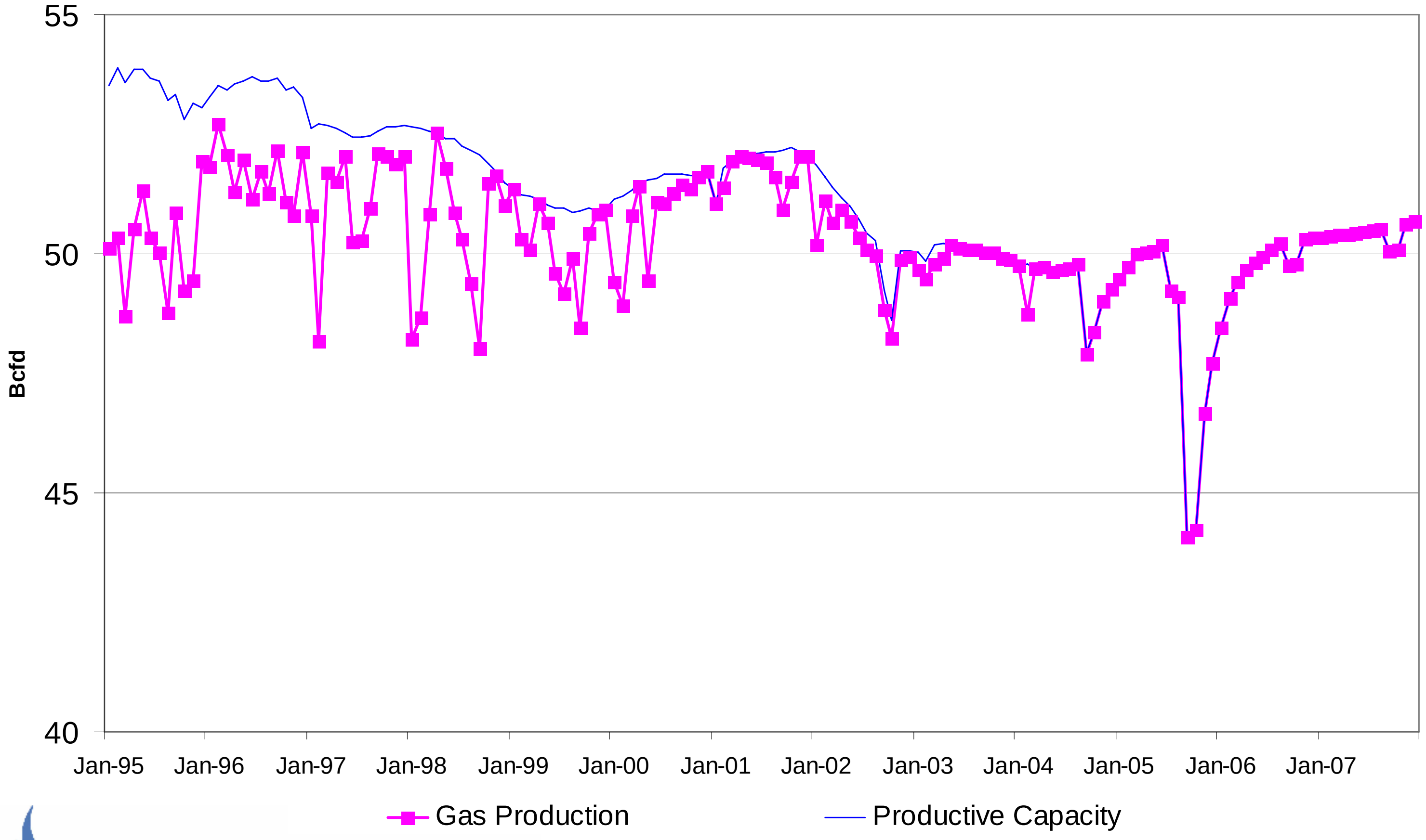
Working Gas in Underground Storage Compared With 5-Year Range (EIA)



American Gas Association

Lower-48 Dry Gas Production vs. Dry Gas Productive Capacity

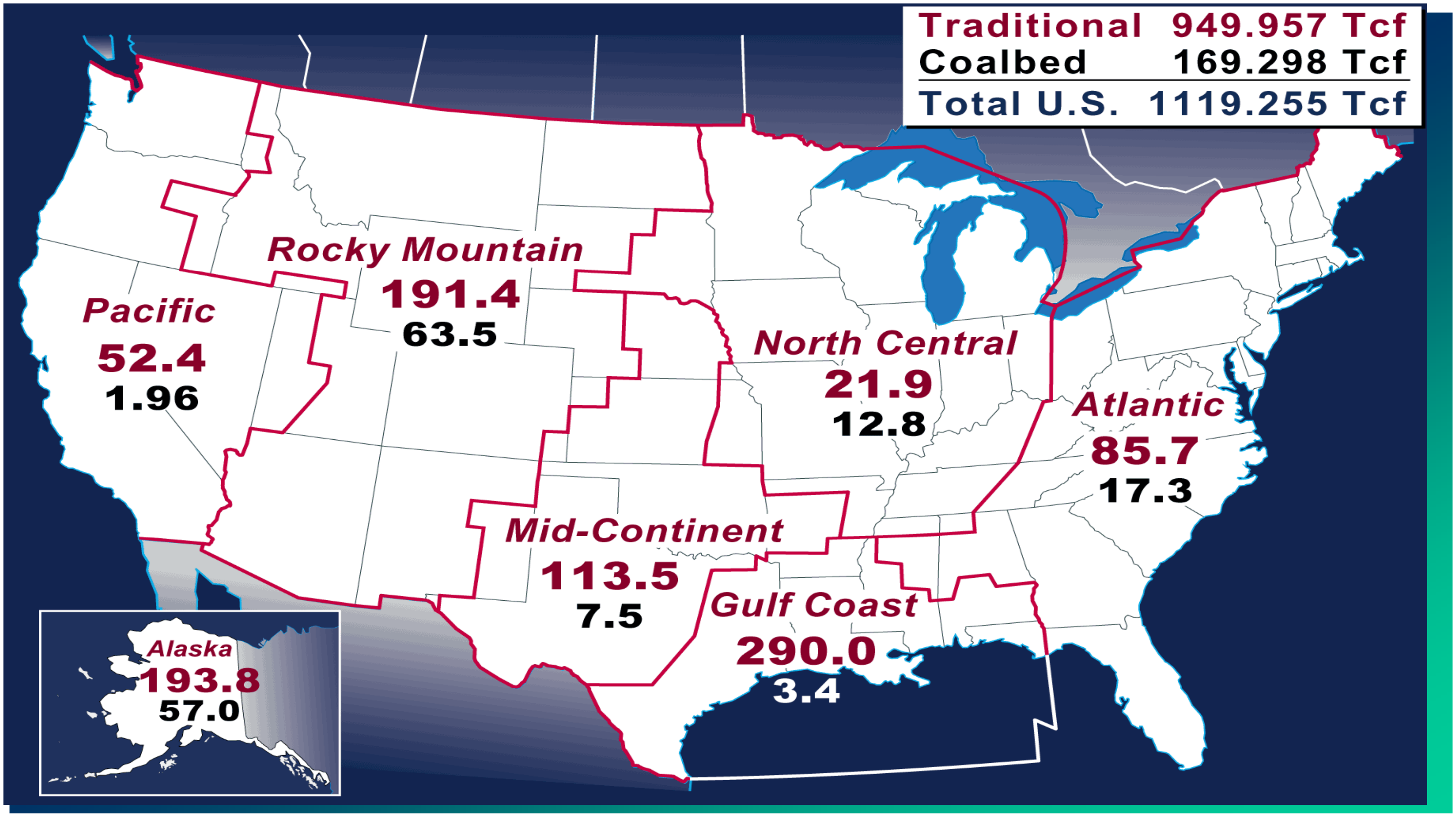
Source: Energy and Environmental Analysis, Inc.



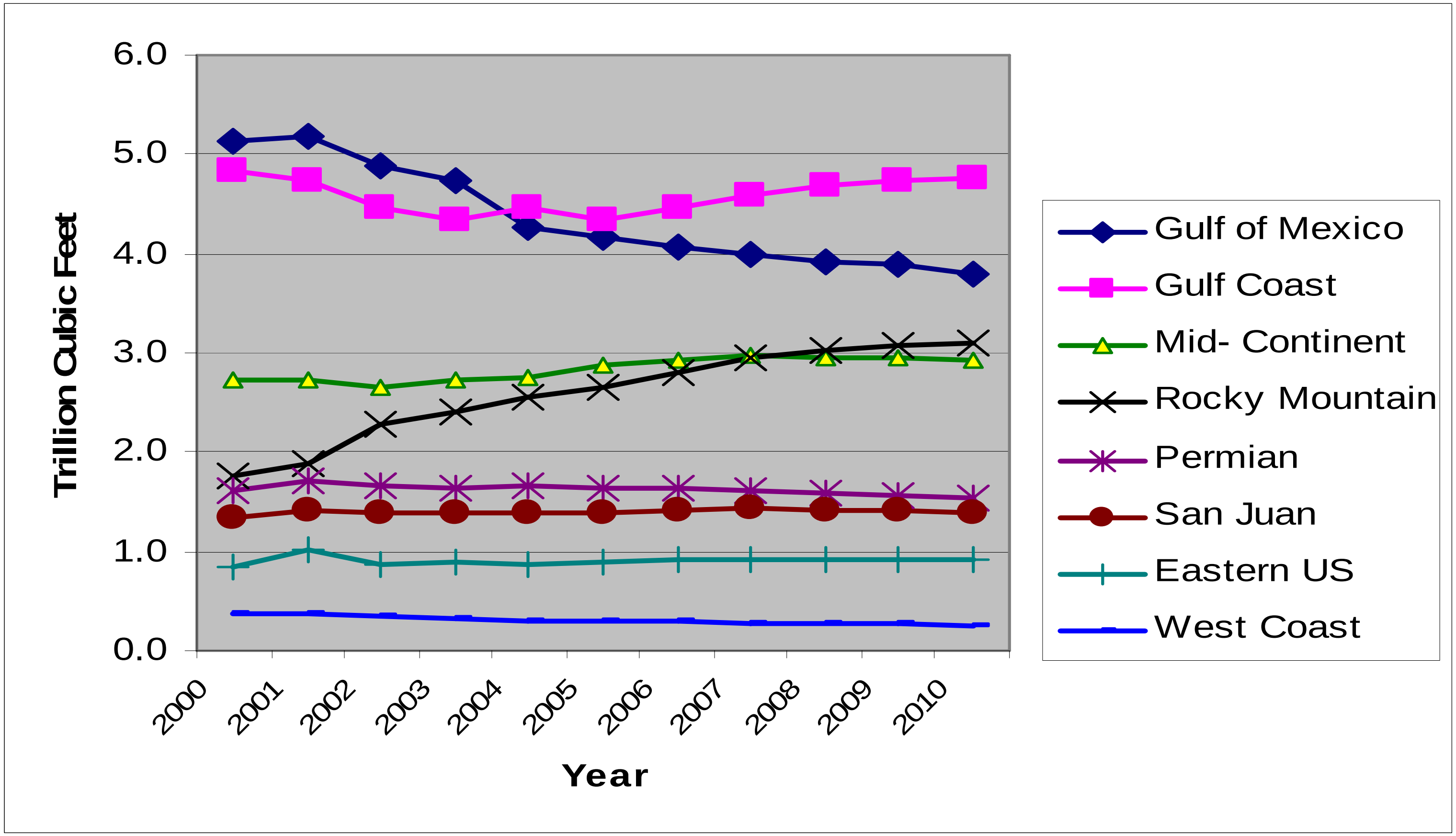
American Gas Association

Regional Resource Assessment

(Potential Gas Committee, 2004)



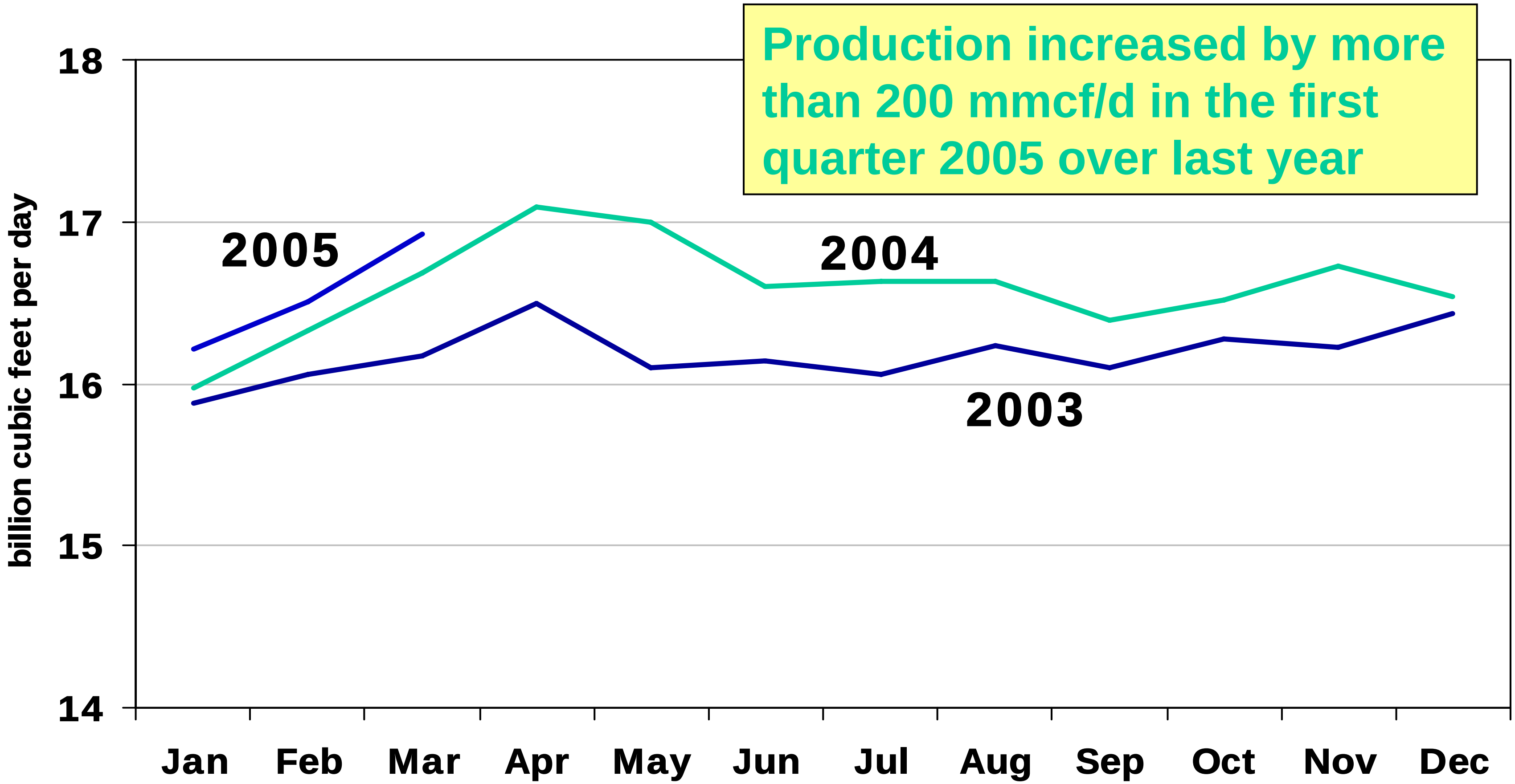
Lower-48 Annual Gas Production By Region 2000-2010



Source: Lippman Consulting, Inc.

American Gas Association

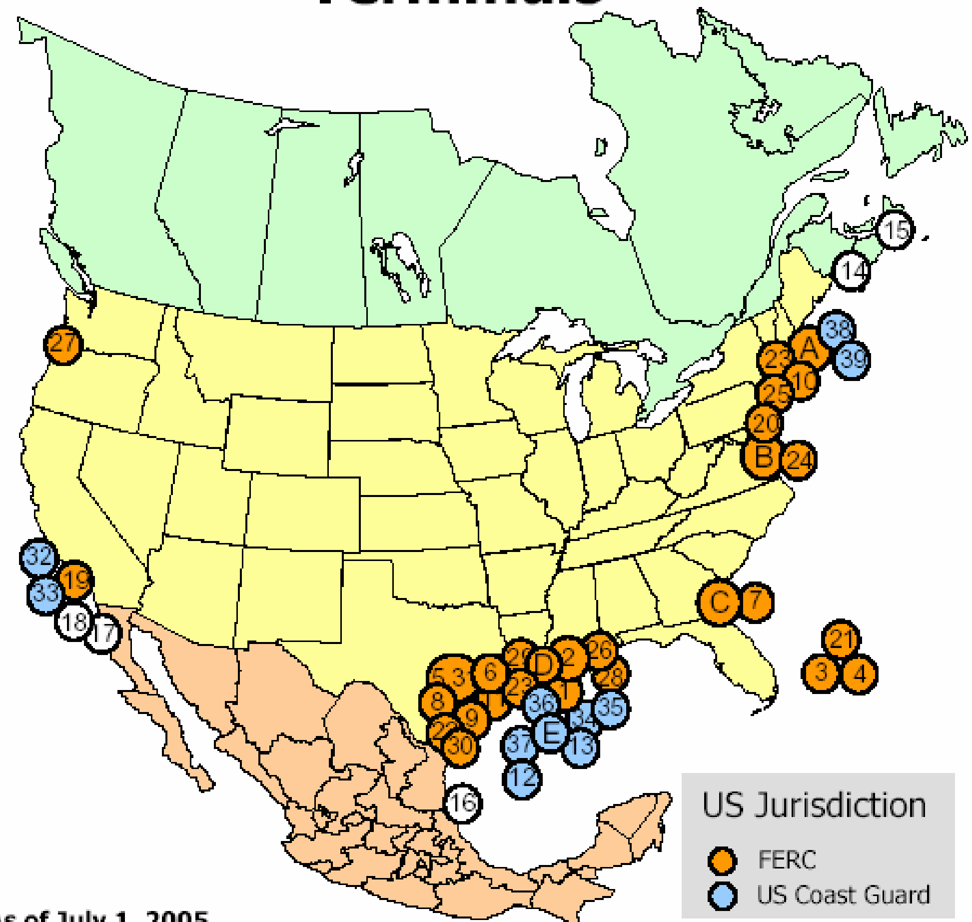
Western Canada Natural Gas Production



Source: FirstEnergy Capital

FERC

Existing and Proposed North American LNG Terminals



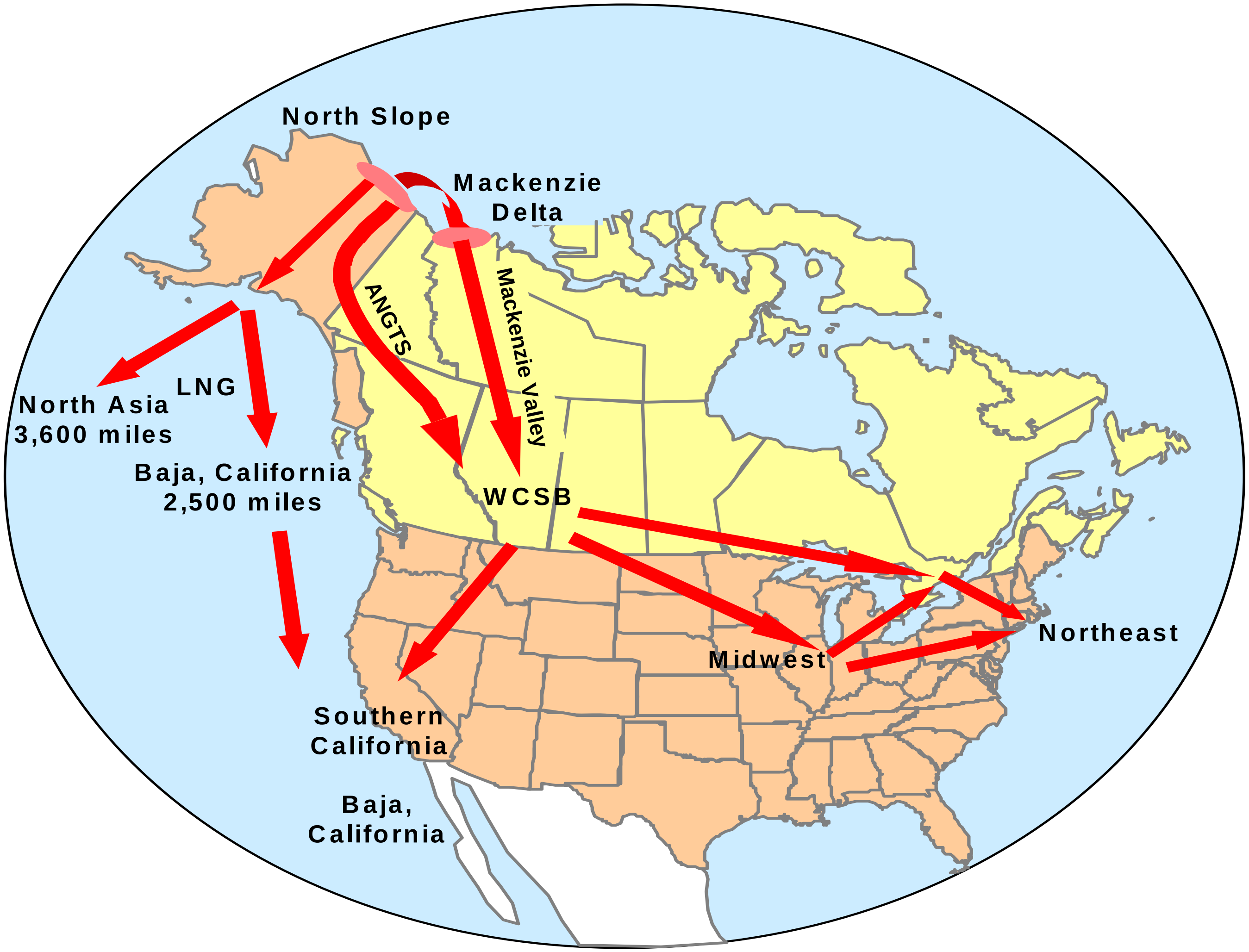
As of July 1, 2005

* *US pipeline approved; LNG terminal pending in Bahamas*

CONSTRUCTED
A. Everett, MA : 1.035 Bcfd (Tractebel - DOMAC)
B. Cove Point, MD : 1.0 Bcfd (Dominion - Cove Point LNG)
C. Elba Island, GA : 0.68 Bcfd (El Paso - Southern LNG)
D. Lake Charles, LA : 1.0 Bcfd (Southern Union - Trunkline LNG)
E. Gulf of Mexico: 0.5 Bcfd, (Gulf Gateway Energy Bridge - Excelerate Energy)
APPROVED BY FERC
1. Lake Charles, LA: 1.1 Bcfd (Southern Union - Trunkline LNG)
2. Hackberry, LA : 1.5 Bcfd, (Sempra Energy)
3. Bahamas : 0.84 Bcfd, (AES Ocean Express)*
4. Bahamas : 0.83 Bcfd, (Calypso Tractebel)*
5. Freeport, TX : 1.5 Bcfd, (Cheniere/Freeport LNG Dev.)
6. Sabine, LA : 2.6 Bcfd (Cheniere LNG)
7. Elba Island, GA: 0.54 Bcfd (El Paso - Southern LNG)
8. Corpus Christi, TX: 2.6 Bcfd, (Cheniere LNG)
9. Corpus Christi, TX : 1.0 Bcfd (Vista Del Sol - ExxonMobil)
10. Fall River, MA : 0.8 Bcfd, (Weaver's Cove Energy/Hess LNG)
11. Sabine, TX : 1.0 Bcfd (Golden Pass - ExxonMobil)
APPROVED BY MARAD/COAST GUARD
12. Port Pelican: 1.6 Bcfd, (Chevron Texaco)
13. Louisiana Offshore : 1.0 Bcfd (Gulf Landing - Shell)
CANADIAN APPROVED TERMINALS
14. St. John, NB : 1.0 Bcfd, (Canaport - Irving Oil)
15. Point Tupper, NS 1.0 Bcf/d (Bear Head LNG - Anadarko)
MEXICAN APPROVED TERMINALS
16. Altamira, Tamulipas : 0.7 Bcfd, (Shell/Total/Mitsui)
17. Baja California, MX : 1.0 Bcfd, (Sempra & Shell)
18. Baja California - Offshore : 1.4 Bcfd, (Chevron Texaco)
PROPOSED TO FERC
19. Long Beach, CA : 0.7 Bcfd, (Mitsubishi/ConocoPhillips - Sound Energy Solution
20. Logan Township, NJ : 1.2 Bcfd (Crown Landing LNG - BP)
21. Bahamas : 0.5 Bcfd, (Seafarer - El Paso/FPL)
22. Corpus Christi, TX: 1.0 Bcfd (Ingleside Energy - Occidental Energy Ventures)
23. Port Arthur, TX: 1.5 Bcfd (Sempra)
24. Cove Point, MD : 0.8 Bcfd (Dominion)
25. LI Sound, NY: 1.0 Bcfd (Broadwater Energy - TransCanada/Shell)
26. Pascagoula, MS: 1.0 Bcfd (Gulf LNG Energy LLC)
27. Bradwood, OR: 1.0 Bcfd (Northern Star LNG - Northern Star Natural Gas LLC)
28. Pascagoula, MS: 1.3 Bcfd (Casotte Landing - ChevronTexaco)
29. Cameron, LA: 3.3 Bcfd (Creole Trail LNG - Cheniere LNG)
30. Port Lavaca, TX: 1.0 Bcfd (Calhoun LNG - Gulf Coast LNG Partners)
31. Freeport, TX: 2.5 Bcfd, (Cheniere/Freeport LNG Dev. - Expansion)
PROPOSED TO MARAD/COAST GUARD
32. California Offshore: 1.5 Bcfd (Cabrillo Port - BHP Billiton)
33. So. California Offshore : 0.5 Bcfd, (Crystal Energy)
34. Louisiana Offshore : 1.0 Bcfd (Main Pass McMoRan Exp.)
35. Gulf of Mexico: 1.0 Bcfd (Compass Port - ConocoPhillips)
36. Gulf of Mexico: 2.8 Bcfd (Pearl Crossing - ExxonMobil)
37. Gulf of Mexico: 1.5 Bcfd (Beacon Port Clean Energy Terminal - ConocoPhillips)
38. Offshore Boston, MA: 0.4 Bcfd (Neptune LNG - Tractebel)
39. Offshore Boston, MA: 0.8 Bcfd (Northeast Gateway - Excelerate Energy)

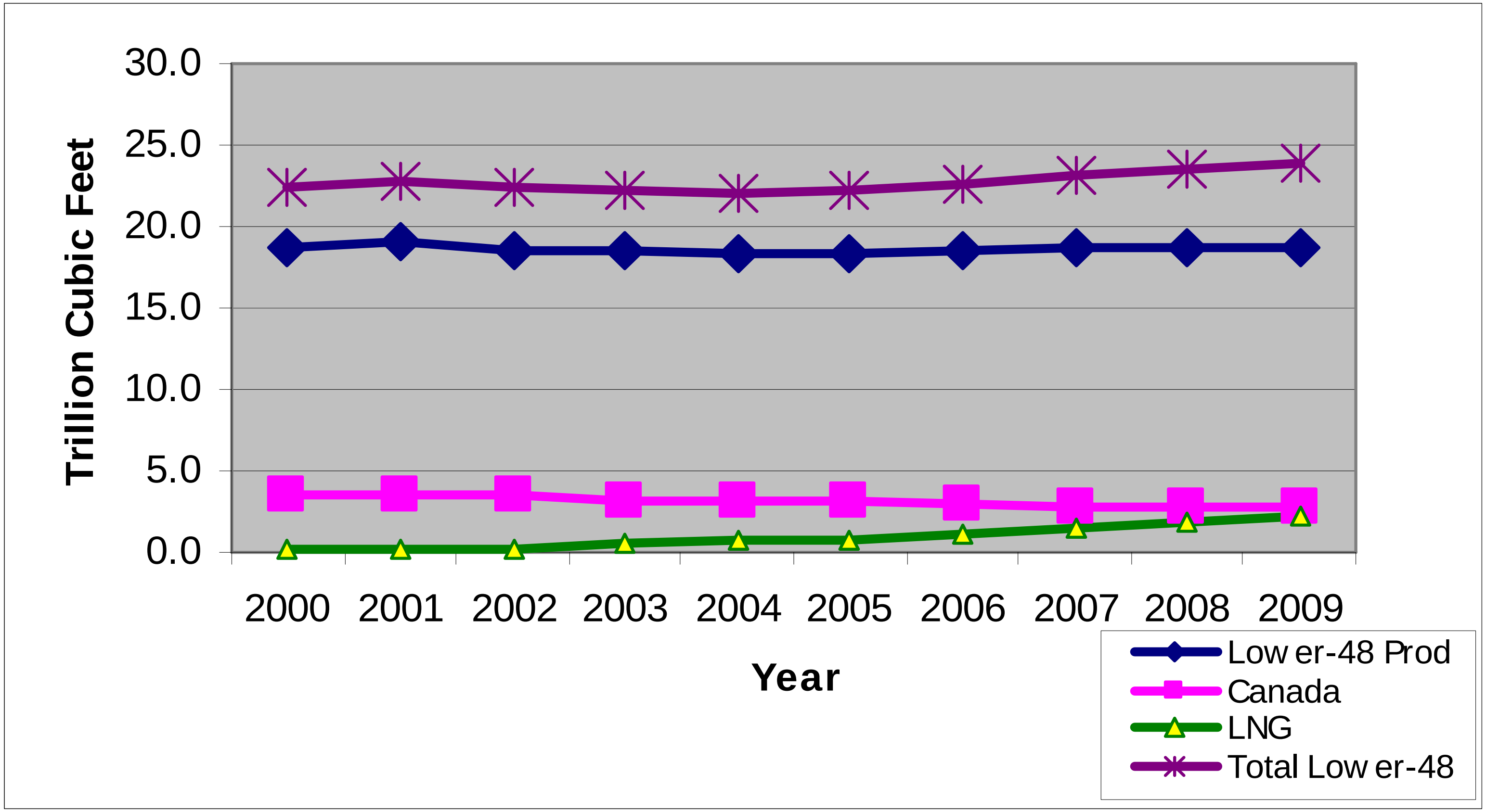
Office of Energy Projects

Northern Gas Market Options



American Gas Association

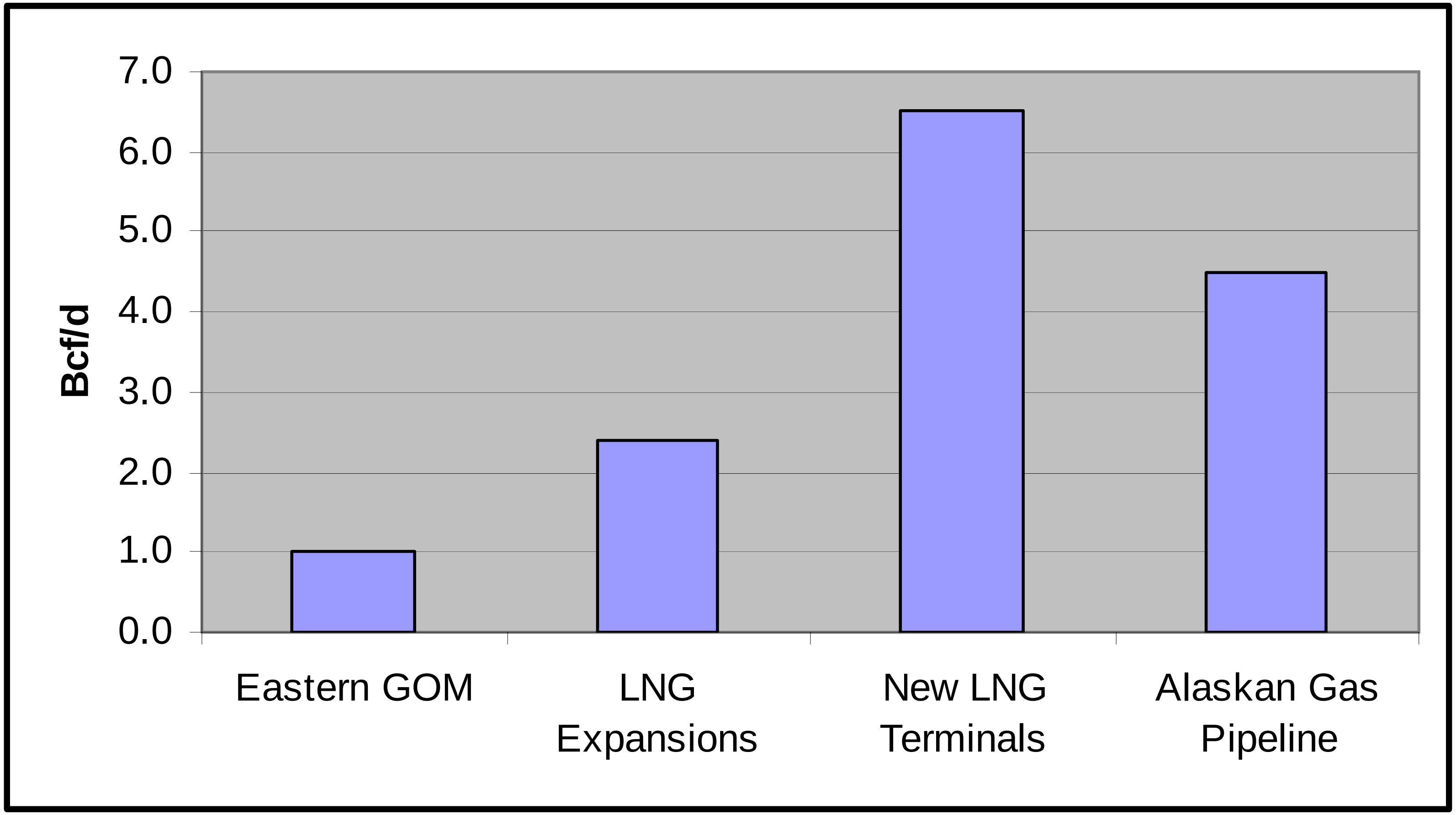
Total Lower-48 Gas Supply By Source 2000-2009



Sources: Lippman Consulting, Inc., AGA, EEA, CAPP

American Gas Association

Potential Incremental Gas Supply



American Gas Association

What Can We Do?

- Promote energy efficiency and conservation
- Encourage the development of storage
- Encourage balance between economic and environmental values
- Diversify sources of power generation
- Encourage Alaskan supply
- Encourage LNG supply

The Impact of Hurricane Katrina

Photo by NASA

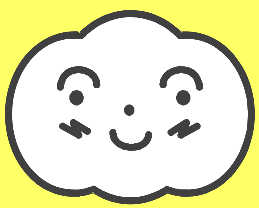
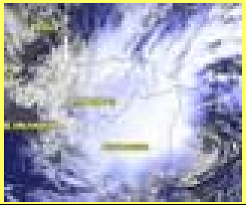
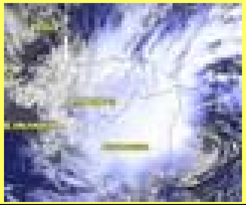
American Gas Association

Katrina Damaged Production Assets (Cont'd)

SOURCE: Shell Oil

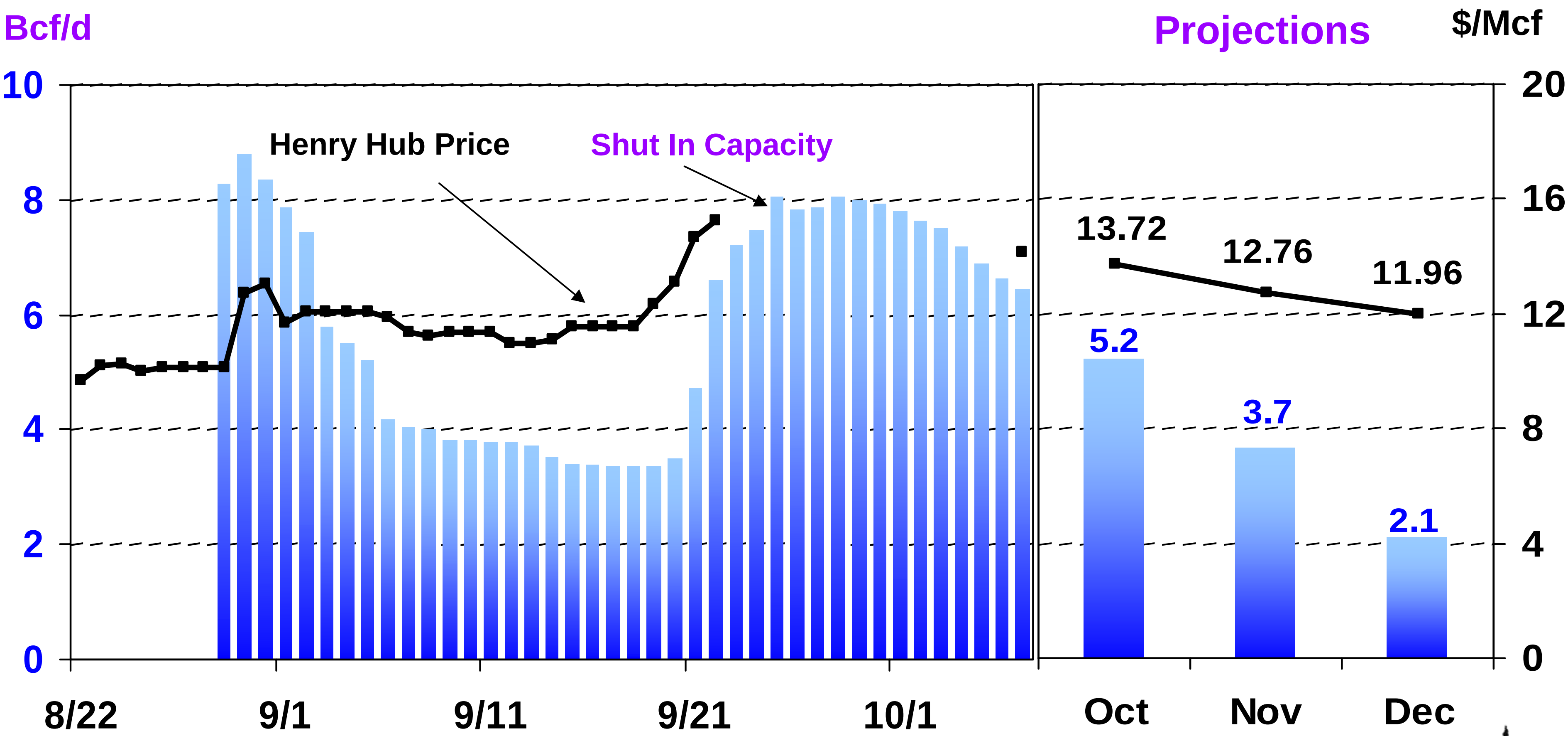
American Gas Association

Summer Heat + Gas-Fired Electricity + Hurricanes = Higher Natural Gas Prices

	MAY 2005	JUNE 2005	JULY 2005	AUG. 2005	SEP. 2005
NYMEX	$6.12	$6.98	$7.65	$9.98	$13.90
Average U.S. Temps *(over 2004)*	 - 35%	 +24%	 +18%	 +37%	 +83%
Storms					

Hurricanes Katrina and Rita Shut In Significant Gulf Natural Gas Production

Source: Energy Information Administration



American Gas Association

North American Gas Market

- North American supply/demand balance is and will remain tight.
- Gas consumption grows.
- “New frontier” gas supplies are necessary and take time.
- Gas prices remain relatively high.
- High levels of gas price volatility continue.
- LNG imports become an important player in natural gas pricing.