U.S. Natural Gas Regulation: Evolution of a Market

International Gas Union
23rd World Gas Conference

J. Mark Robinson, Director
Office of Energy Projects
Federal Energy Regulatory Commission
Amsterdam, Netherlands
June 8, 2006

U.S. Natural Gas Regulation

- Natural Gas Act (1938)
  - Began regulation of interstate natural gas sales via rate regulation.
  - Construction regulation began in 1942.
- *Phillips* Decision (1954)
  - Supreme Court found that producers were subject to the Natural Gas Act.
  - Began price regulation at the wellhead.

U.S. Natural Gas (De)Regulation

- Natural Gas Policy Act (1978)
  - Attempt to establish a single national gas market by decontrolling wellhead prices
  - Established wellhead pricing categories based on age, depth, proximity to other wells and other categories plus inflation factors.
- Natural Gas Wellhead Decontrol Act (1989)
  - Wellhead price control ends by 1/1/93

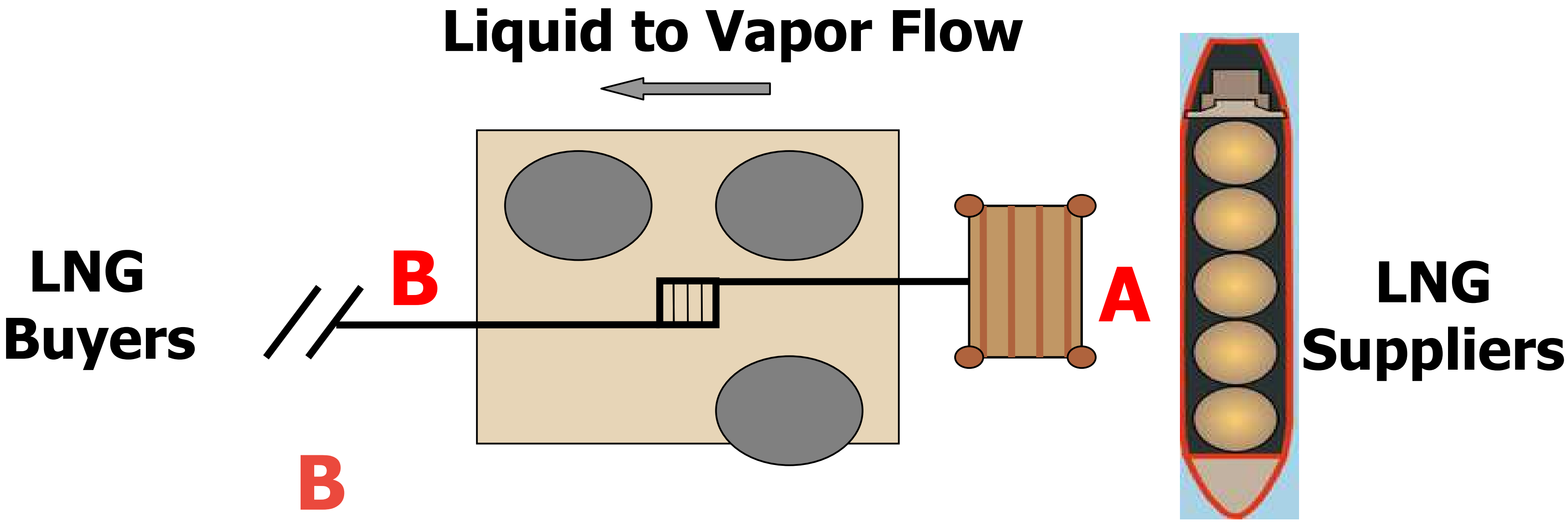
Regulation's Effects on LNG Imports

- Wellhead price regulation caused:
  - Artificially low prices
  - Encouraged demand
  - Discouraged production
- Bad for consumers
  - Lack of supply as producers kept gas in intrastate markets to receive higher prices.
- Good for LNG imports
  - Domestic supplies were constrained.
  - Led to the construction of the four existing onshore import terminals.

(De)Regulation's Effects on LNG Imports

- Decontrol of wellhead price regulation caused:
  - Decreased demand
  - Led to oversupply
- Good for Consumers
  - More competition, more choices, lower prices
- Bad for LNG
  - Uneconomic alternative to domestic gas
  - LNG imports declined and the four terminals were idled.

Hackberry Decision: Another (De)Regulatory Solution



B

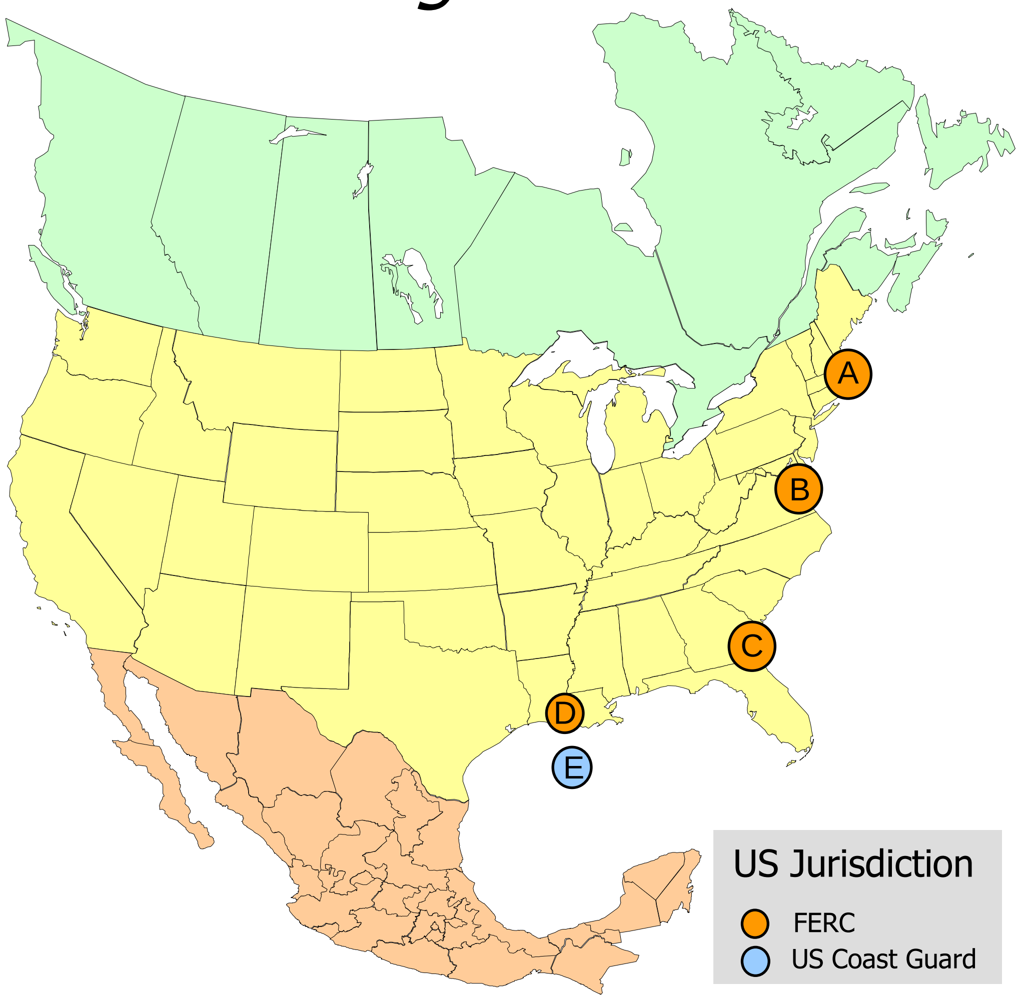
Open Access At Delivery of Vapor into Interstate Pipeline System

A

Open Access At Delivery of Liquid to Terminal

North American LNG Terminals

Existing



A. Everett, MA : 1.035 Bcfd (Tractebel - DOMAC)
Total Deliveries: '04 - 172 Bcf, '05 - 172 Bcf

B. Cove Point, MD : 1.0 Bcfd (Dominion - Cove Point LNG)
Total Deliveries: '04 - 216 Bcf, '05 - 218 Bcf

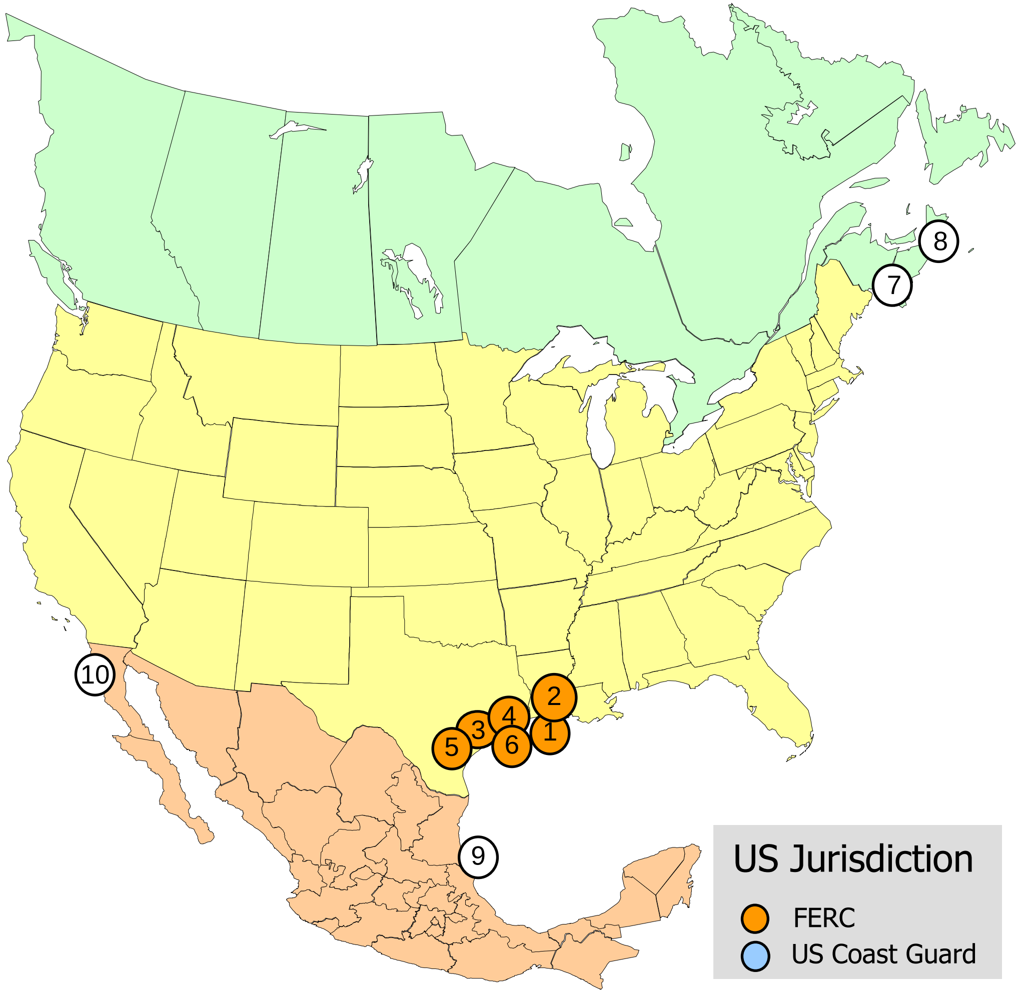
C. Elba Island, GA : 1.2 Bcfd (El Paso - Southern LNG)
Total Deliveries: '04 - 106 Bcf, '05 - 132 Bcf

D. Lake Charles, LA : 1.5 Bcfd (Southern Union - Trunkline LNG)
Total Deliveries: '04 - 163 Bcf, '05 - 104 Bcf

E. Gulf of Mexico: 0.5 Bcfd, (Gulf Gateway Energy Bridge - Excelerate Energy)
Total Deliveries: '04 - 0 Bcf, '05 - 5 Bcf

North American LNG Terminals

Under Construction



U.S.

1. Lake Charles, LA: 0.6 Bcfd (Southern Union - Trunkline LNG)*****

2. Hackberry, LA: 1.5 Bcfd (Cameron LNG - Sempra Energy)

3. Freeport, TX: 1.5 Bcfd, (Cheniere/Freeport LNG Dev.)

4. Sabine, LA: 2.6 Bcfd (Cheniere LNG)

5. Corpus Christi, TX: 2.6 Bcfd, (Cheniere LNG)

6. Sabine, TX: 1.0 Bcfd (Golden Pass - ExxonMobil)

CANADA

7. St. John, NB: 1.0 Bcfd, (Canaport - Irving Oil)

8. Point Tupper, NS: 1.0 Bcf/d (Bear Head LNG - Anadarko)**

MEXICO

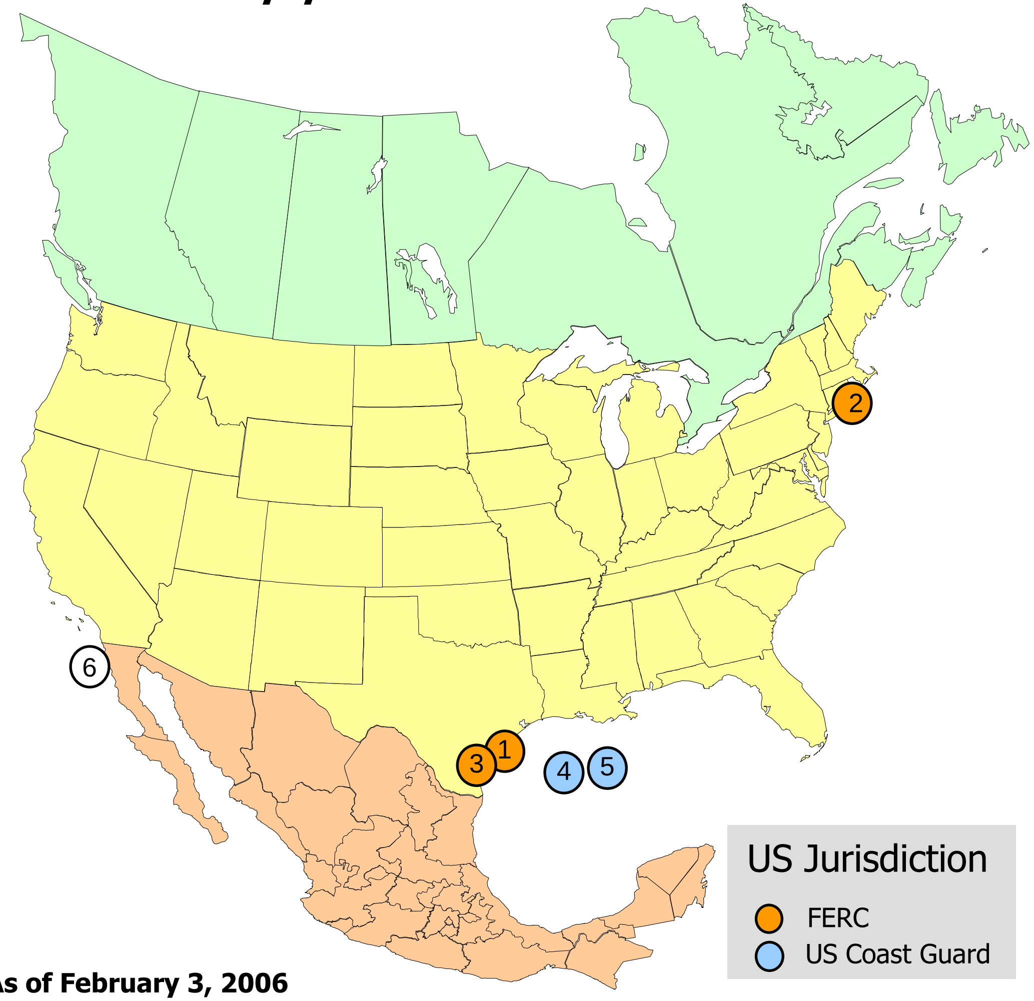
9. Altamira, Tamulipas: 0.7 Bcfd, (Shell/Total/Mitsui)

10. Baja California, MX: 1.0 Bcfd, (Sempra)

** Expansion of an existing facility*
*** Construction suspended*

North American LNG Terminals

Approved - Not Under Construction



As of February 3, 2006

U.S. - FERC

1. Corpus Christi, TX : 1.0 Bcfd (Vista Del Sol - ExxonMobil)

2. Fall River, MA : 0.8 Bcfd, (Weaver's Cove Energy/Hess LNG)

3. Corpus Christi, TX: 1.0 Bcfd (Ingleside Energy - Occidental Energy Ventures)

U.S. - MARAD/COAST GUARD

4. Port Pelican: 1.6 Bcfd, (Chevron Texaco)

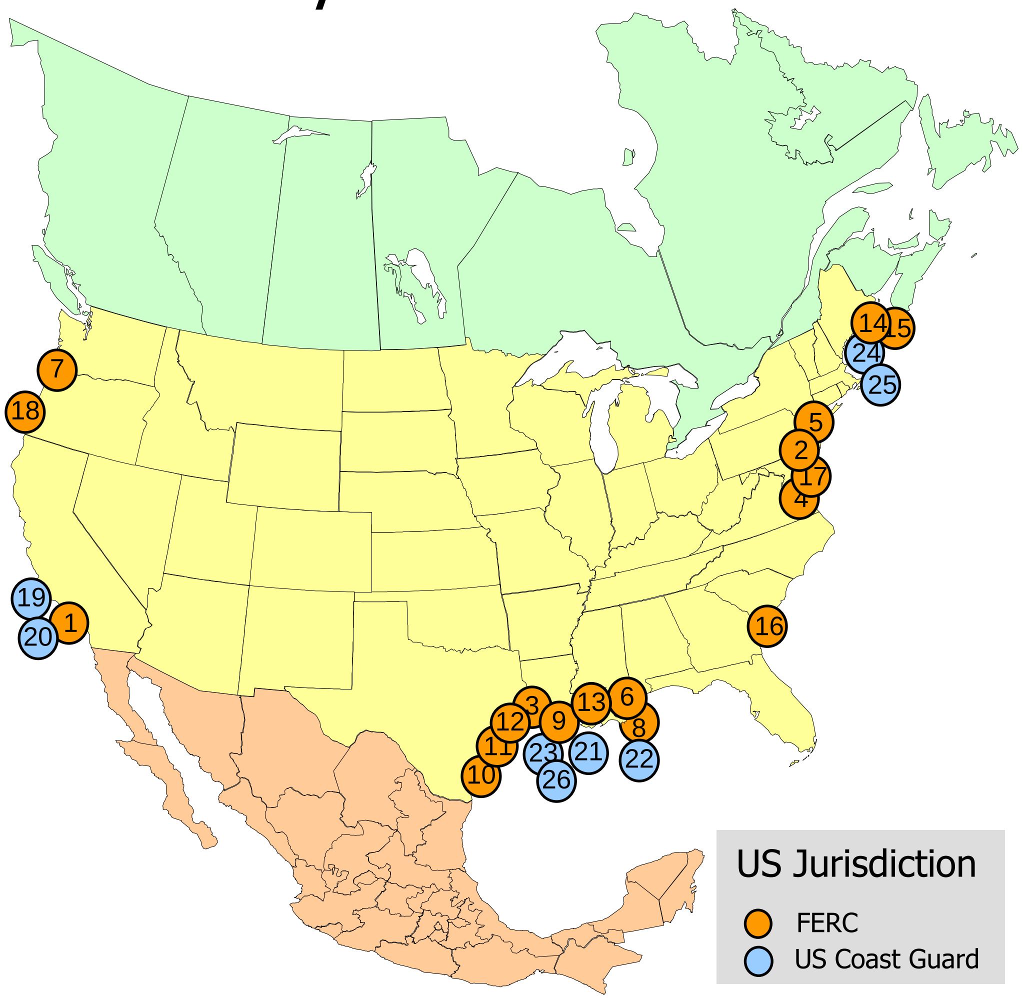
5. Louisiana Offshore : 1.0 Bcfd (Gulf Landing - Shell)

MEXICO

6. Baja California - Offshore : 1.4 Bcfd, (Chevron Texaco)

U.S. LNG Terminals

Proposed



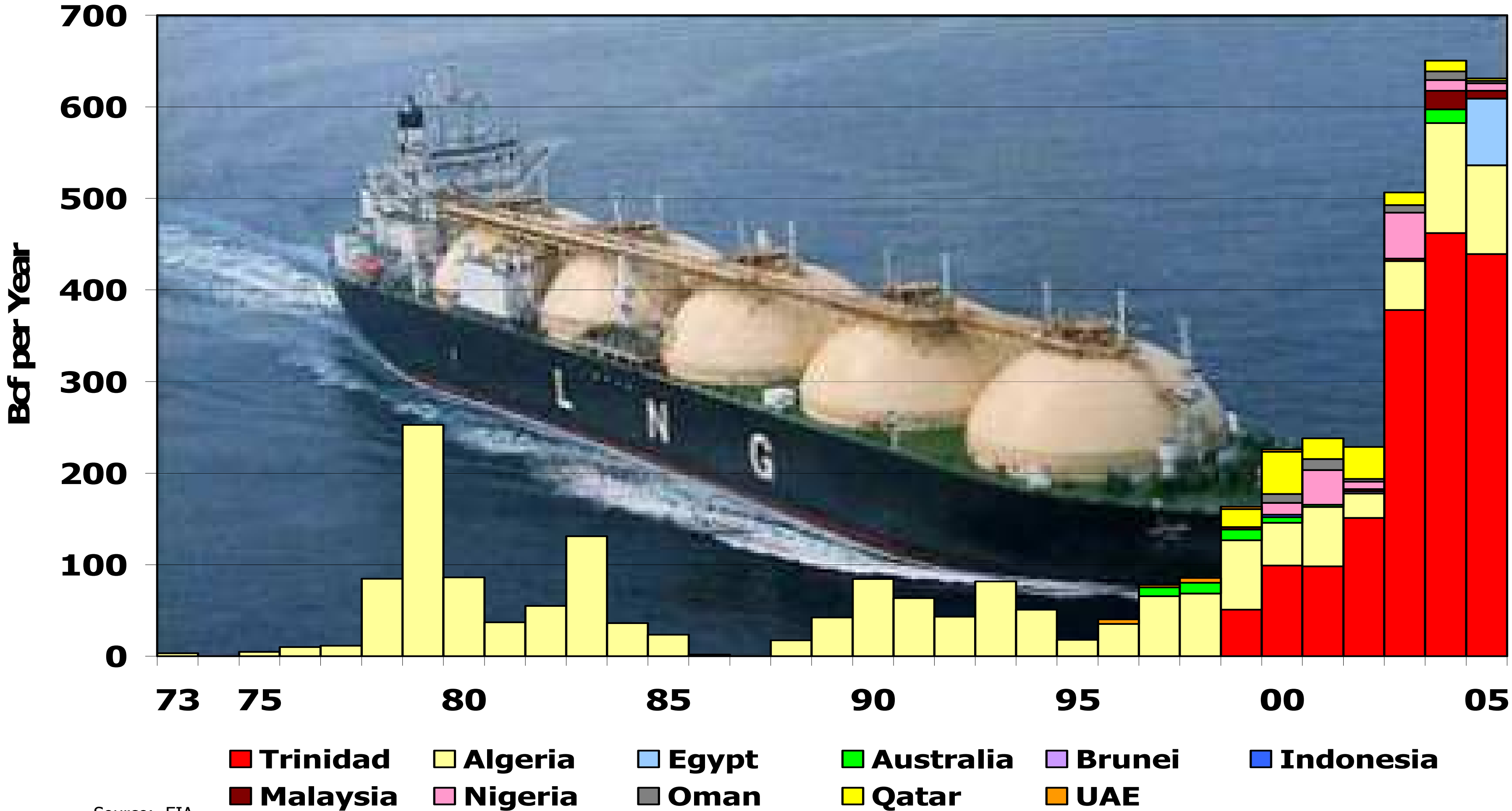
PROPOSED TO FERC

1. Long Beach, CA : 0.7 Bcfd, (Mitsubishi/ConocoPhillips - Sound Energy Solutions)
2. Logan Township, NJ : 1.2 Bcfd (Crown Landing LNG - BP)
3. Port Arthur, TX: 1.5 Bcfd (Sempra)
4. Cove Point, MD : 0.8 Bcfd (Dominion)*
5. LI Sound, NY: 1.0 Bcfd (Broadwater Energy - TransCanada/Shell)
6. Pascagoula, MS: 1.0 Bcfd (Gulf LNG Energy LLC)
7. Bradwood, OR: 1.0 Bcfd (Northern Star LNG - Northern Star Natural Gas LLC)
8. Pascagoula, MS: 1.3 Bcfd (Casotte Landing - ChevronTexaco)
9. Cameron, LA: 3.3 Bcfd (Creole Trail LNG - Cheniere LNG)
10. Port Lavaca, TX: 1.0 Bcfd (Calhoun LNG - Gulf Coast LNG Partners)
11. Freeport, TX: 2.5 Bcfd (Cheniere/Freeport LNG Dev. - Expansion)
12. Sabine, LA: 1.4 Bcfd (Cheniere LNG - Expansion)
13. Hackberry, LA: 1.15 Bcfd (Cameron LNG - Sempra Energy - Expansion)
14. Pleasant Point, ME: 0.5 Bcfd (Quoddy Bay, LLC)
15. Robbinston, ME: 0.5 Bcfd (Downeast LNG - Kestrel Energy
16. Elba Island, GA: 0.9 Bcfd (El Paso - Southern LNG Expansion)
17. Baltimore, MD: 1.5 Bcfd (AES Sparrows Point - AES Corporation)
18. Coos Bay, OR: 1.0 Bcfd (Jordan Cove Energy Project)

PROPOSED TO MARAD/COAST GUARD

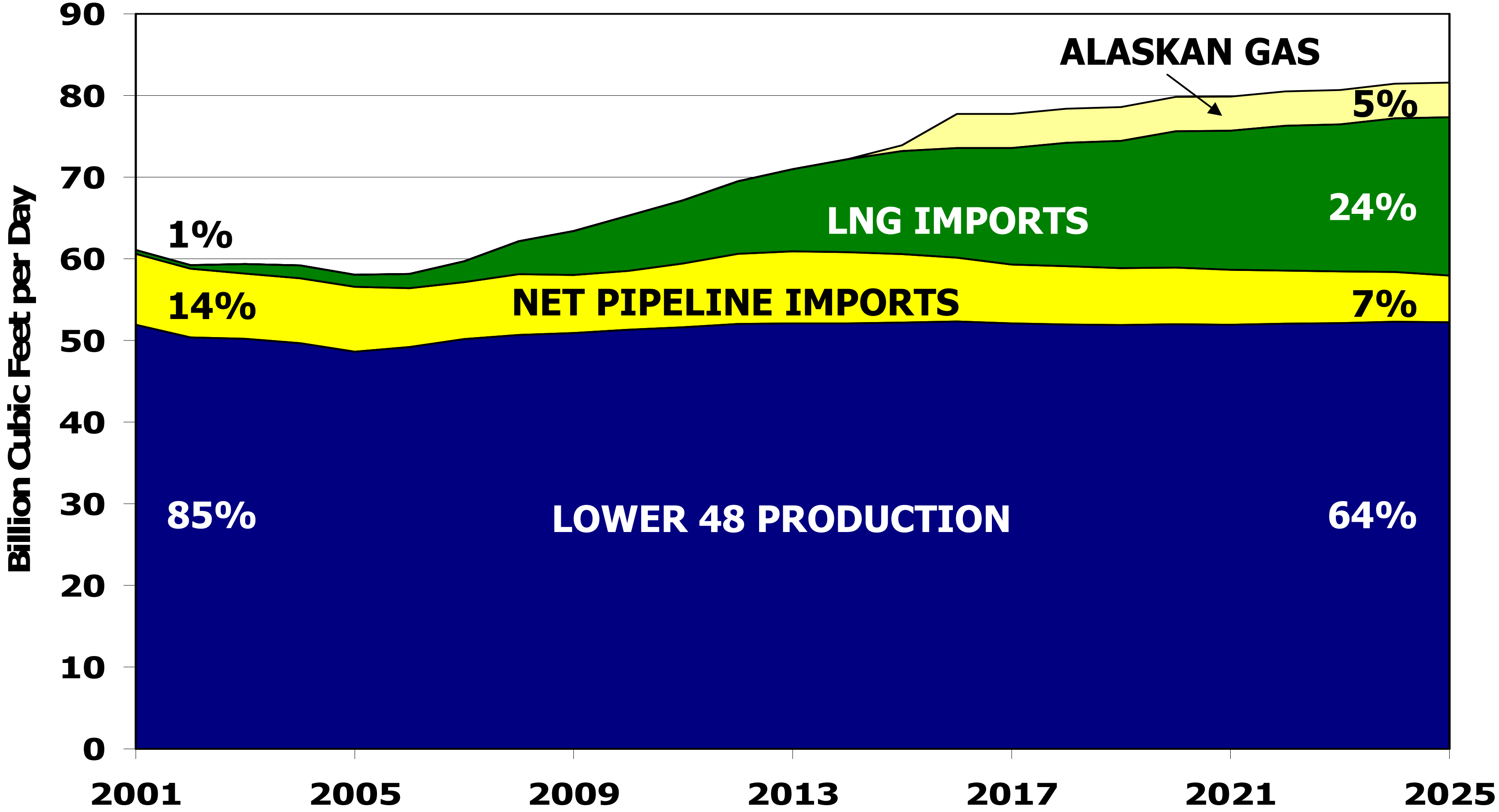
19. California Offshore: 1.5 Bcfd (Cabrillo Port - BHP Billiton)
20. So. California Offshore : 0.5 Bcfd, (Crystal Energy)
21. Gulf of Mexico: 1.0 Bcfd (Main Pass McMoRan Exp.)
22. Gulf of Mexico: 1.0 Bcfd (Compass Port - ConocoPhillips)
23. Gulf of Mexico: 1.5 Bcfd (Beacon Port Clean Energy Terminal - ConocoPhillips)
24. Offshore Boston, MA: 0.4 Bcfd (Neptune LNG - Tractebel)
25. Offshore Boston, MA: 0.8 Bcfd (Northeast Gateway - Excelerate Energy)
26. Gulf of Mexico: 1.4 Bcfd (Bienville LNG - TORP Technology)

U.S. LNG Imports Have Increased To Meet Demand



Source: EIA

LNG Now a Viable and Necessary Alternative



Source: Energy and Environmental Analysis, April 2006 Compass

Conclusions

- Mature, free market economies demand regulation that allows market-based decisions and responses.
- U.S. gas market required less economic regulation to spur development of new gas supplies - LNG.
- Absence of price regulation will allow U.S. to compete in developing world LNG market.