

Byron Wright

Vice President, Strategy and Rates
El Paso Pipeline Group

That Gas Light Will Need Some Infrastructure

July 25, 2005

National Petroleum Council – Study on Balancing Natural Gas Policy, Sept. 2003

Transmission, Distribution, & Storage Task Group findings:

- ▶ New, large-scale resources such as Arctic gas and LNG are available and could meet 20-25% US demand, but are higher cost, have longer lead times and face major barriers to development.
- ▶ Pipeline and distribution investments infrastructure will average \$8 billion per year, with an increasing share required to sustain the reliability of existing infrastructure.
- ▶ Regulatory barriers to long term contracts for transportation and storage impair infrastructure investment

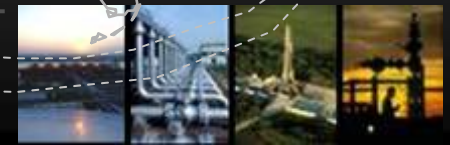
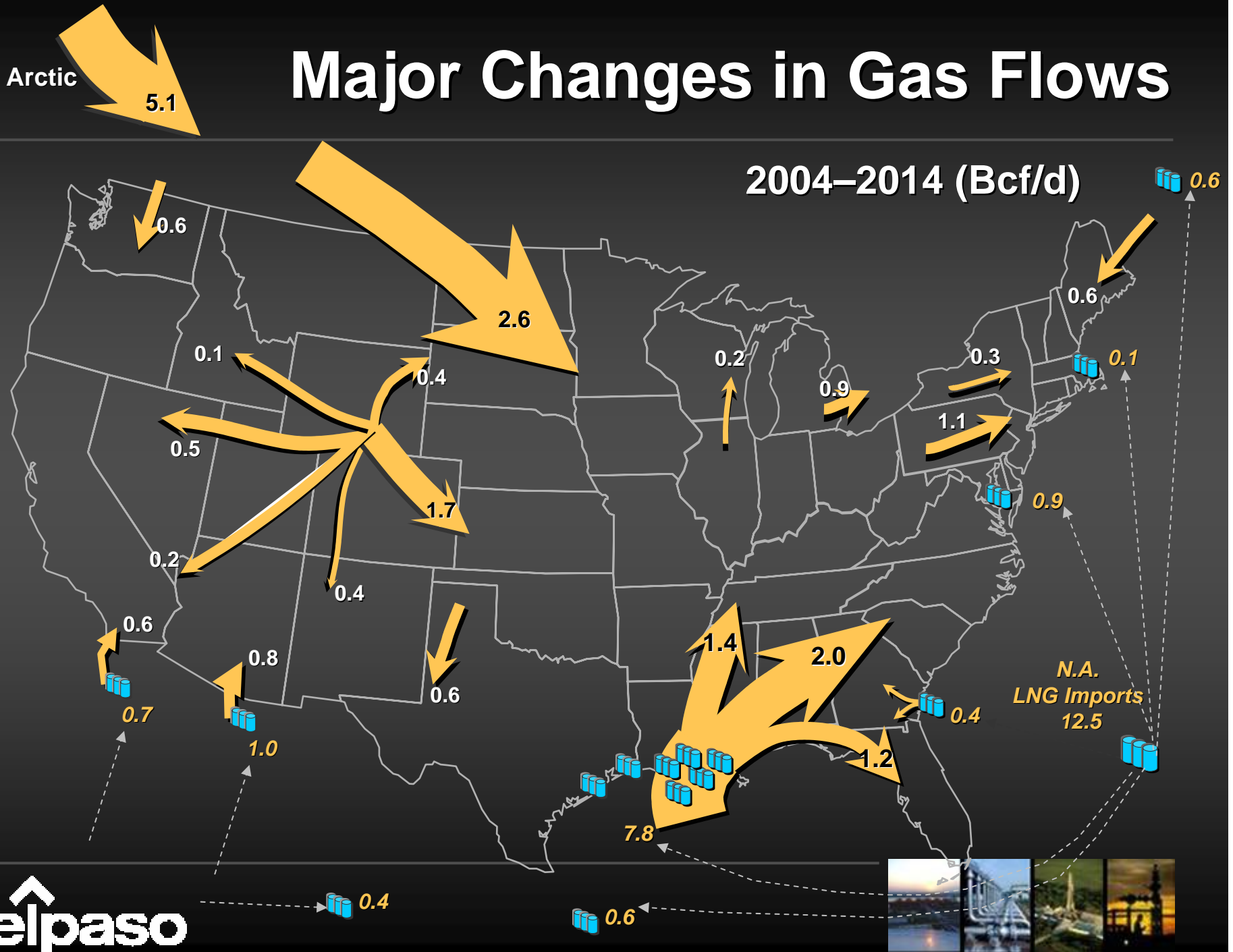
Recommendations to sustain and enhance infrastructure:

- ▶ Federal and State regulators should provide regulatory certainty by maintaining a consistent cost recovery and contracting environment
- ▶ Local, state, and federal permit reviews of major infrastructure projects should occur within a one year period utilizing a “Joint Agency Review Process”
- ▶ Regulatory policies should address the barriers to long-term, firm contracts for entities providing service to human needs customers
- ▶ FERC should allow operators to configure transportation and storage infrastructure and related tariff services to meet changing market demand profiles
- ▶ Regulators should encourage collaborative research into more efficient and less expensive infrastructure options



Major Changes in Gas Flows

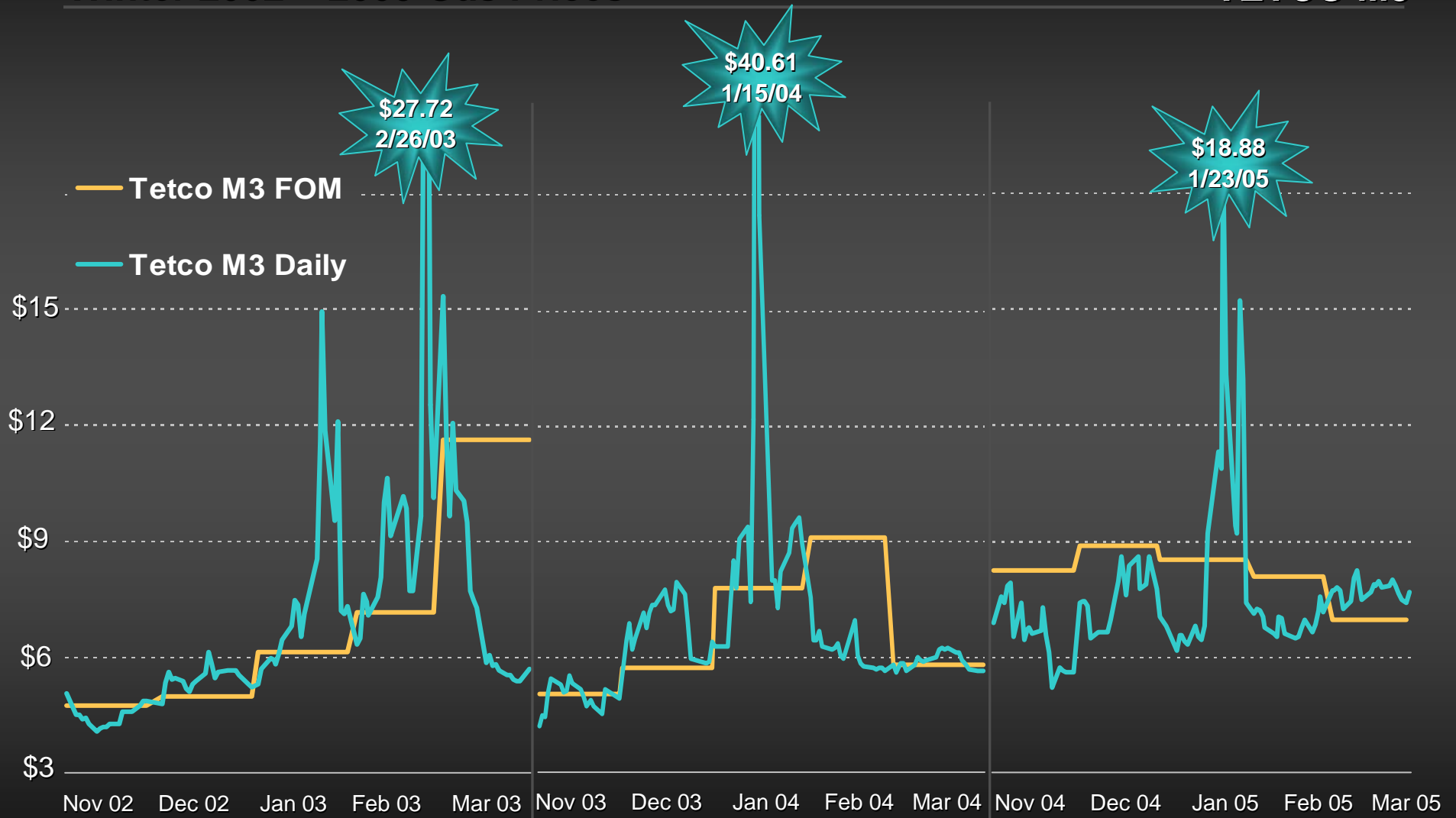
2004–2014 (Bcf/d)



Winter Price Signals in New York

Winter 2002 – 2005 Gas Prices

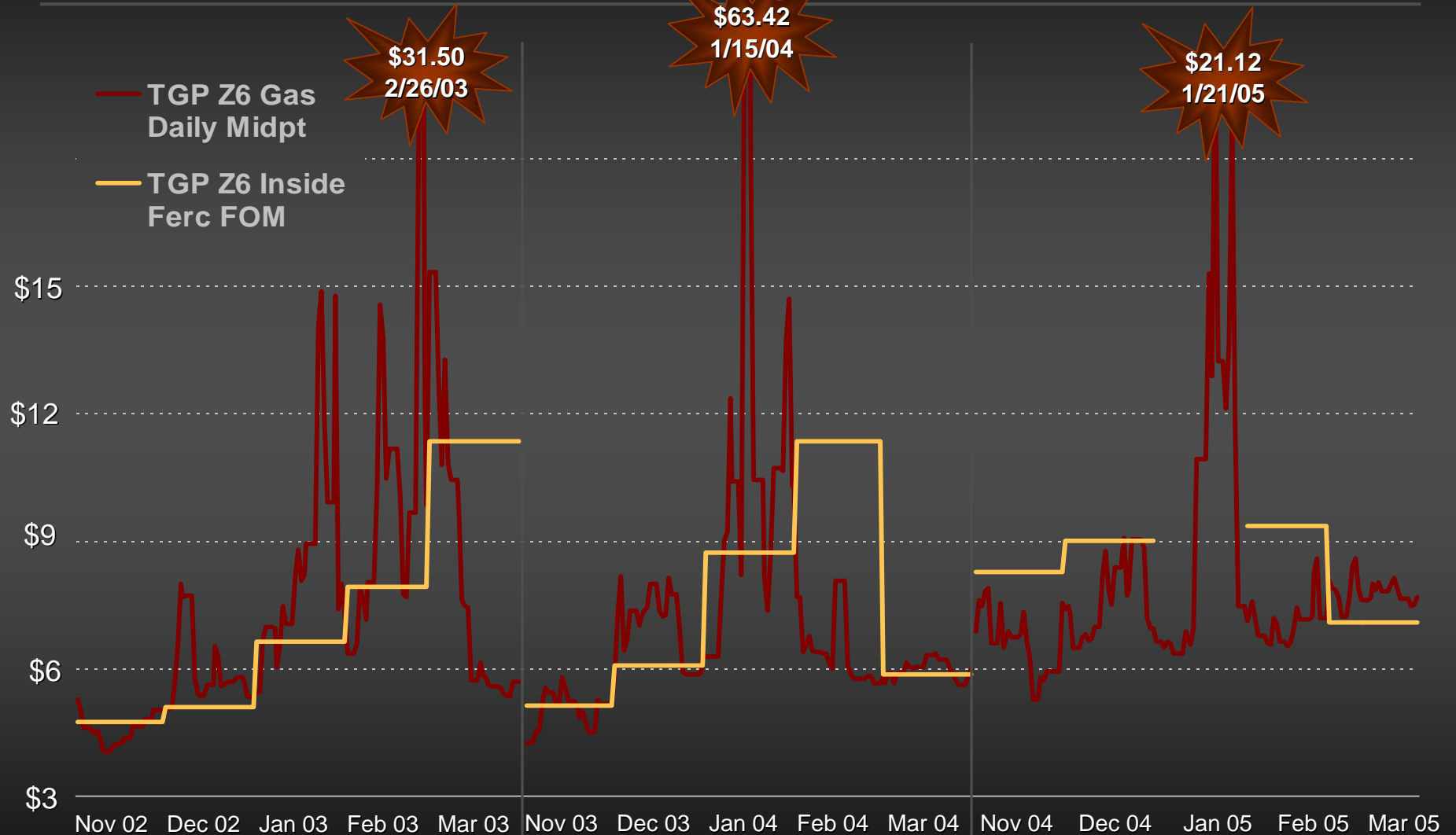
TETCO M3



Winter Price Signals in New England

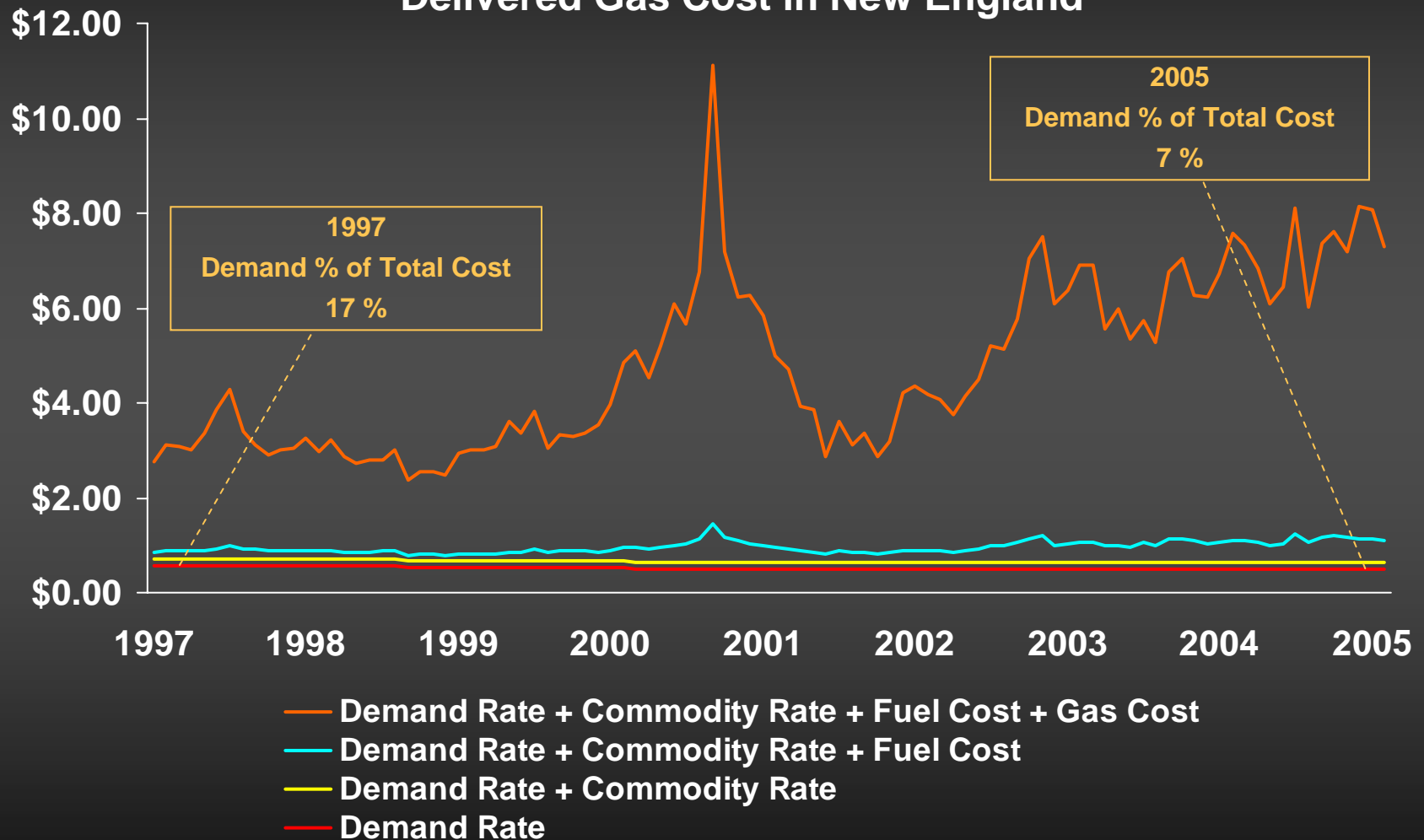
Winter 2002 – 2005 Gas Prices

TGP Zone 6



Tennessee Gas Pipeline Company Transportation Cost Share

Delivered Gas Cost in New England



Why is Gas the Stepchild Fuel?

People often ask:
Are we overly committed to gas?

Let's compare the total fuel chain for
nuclear, coal, oil and gas



How Do Power Plants Manage the Supply Chain?

Gas versus other fuels:

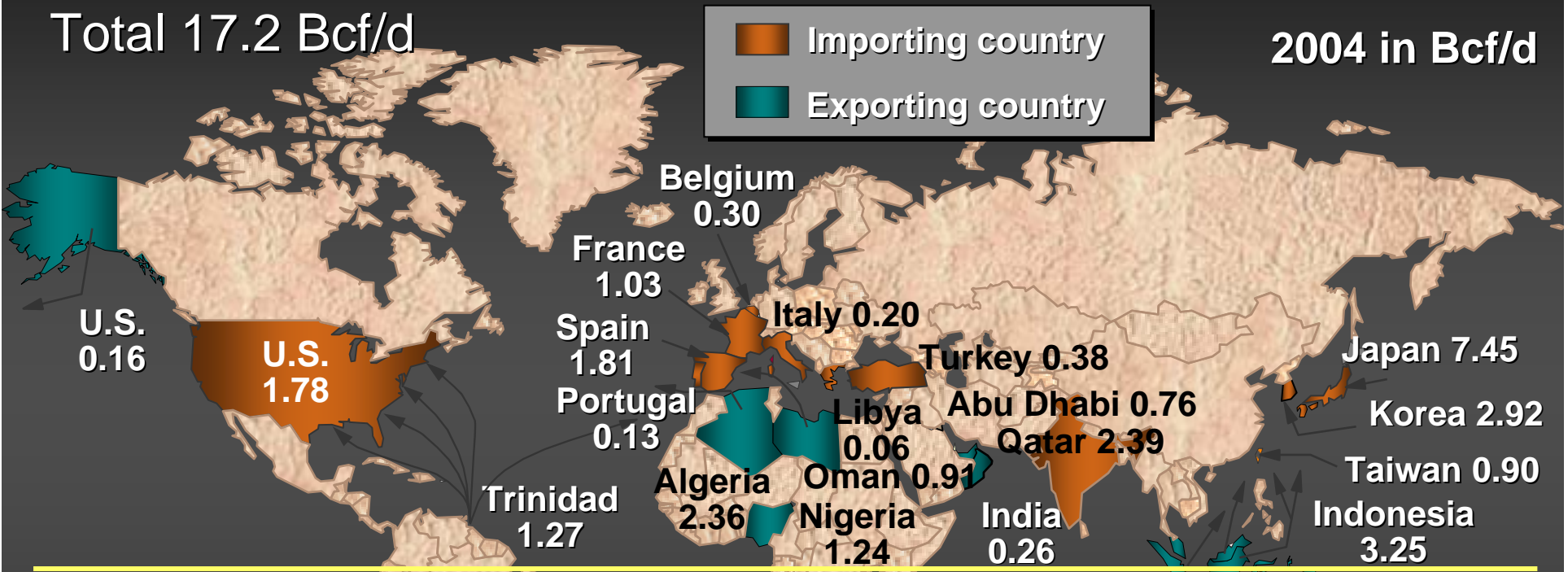
- ▶ Storage
- ▶ Long-term supply contracts
- ▶ Firm transportation contracts and facilities
- ▶ Integrated logistical planning vs. “just-in-time” scheduling
- ▶ Full value chain assessment

**The question should be:
Do we have *enough* commitments to gas?**



Why Are We Different than the Rest of the World?

Total 17.2 Bcf/d



Traditional LNG Supply Arrangements:

- Long term contracts: 20+ years
 - Risk sharing; buyer takes volume risk, seller takes price risk
 - *Take or Pay & Price Escalation* provisions
- Pricing: Complicated compared to US
 - Tied to oil, not gas on gas competition



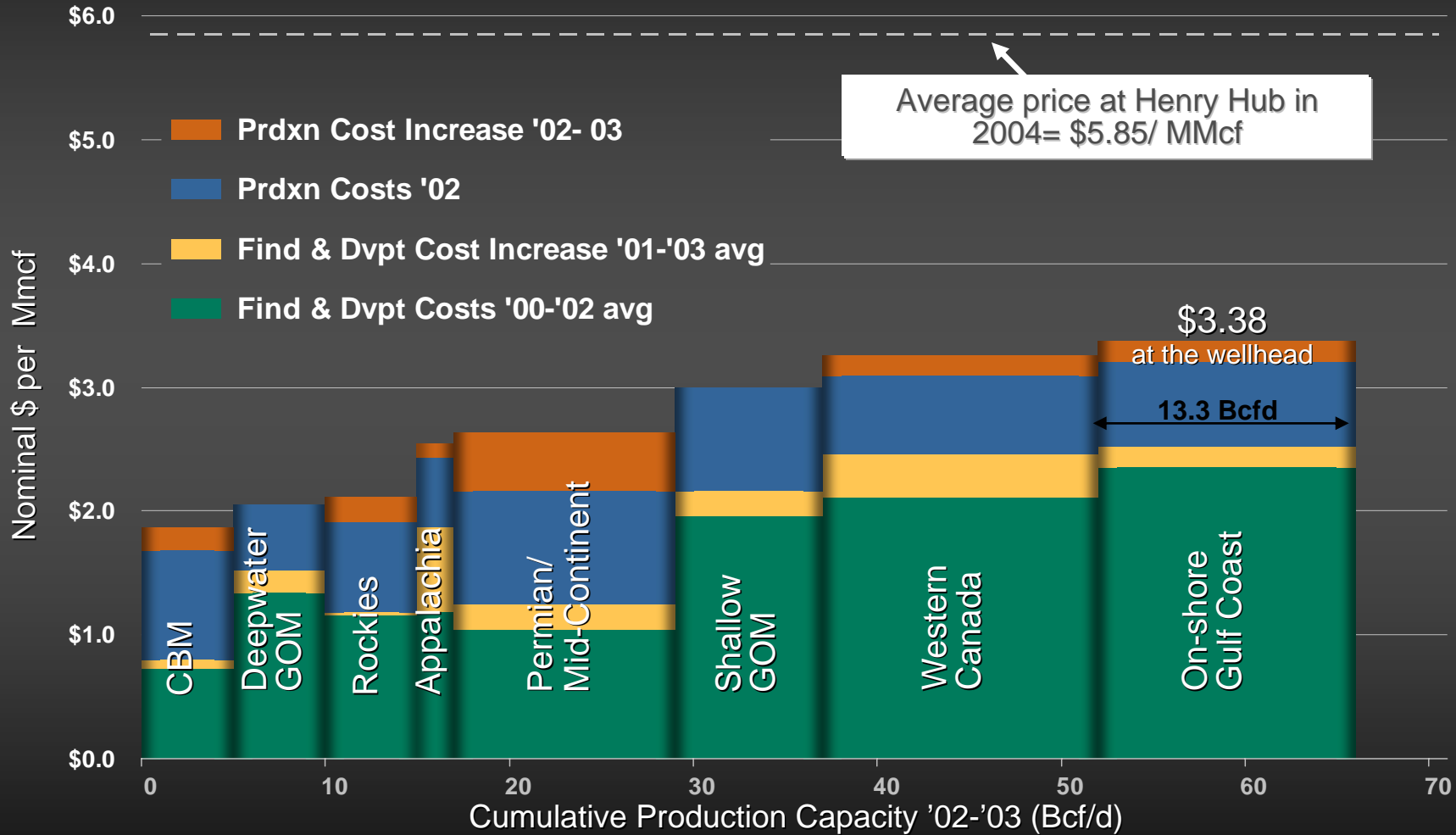
Source: CEDIGAZ



LNG: Price Taker, Not Price Maker

North American Gas Resource Costs

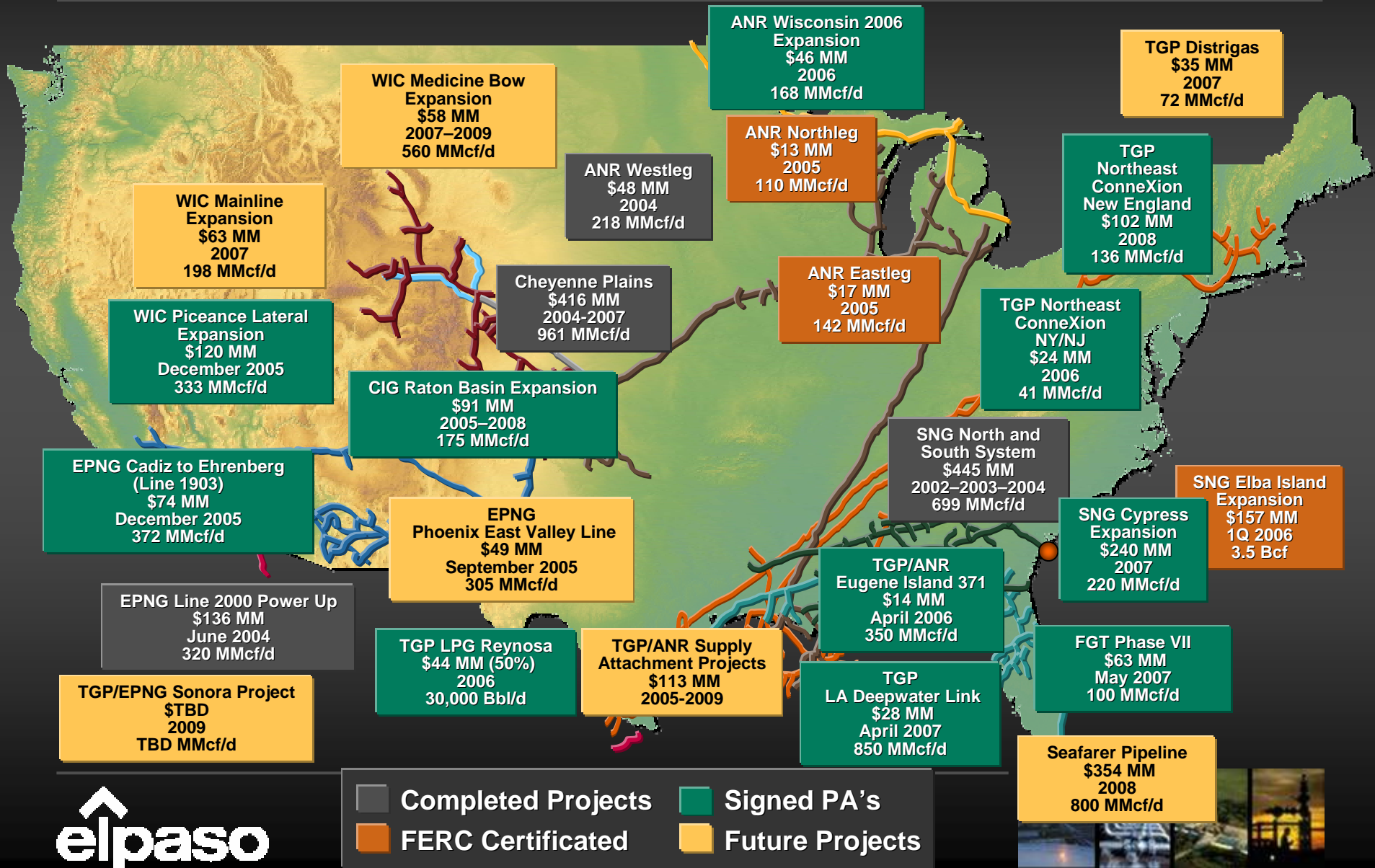
Source: CERA



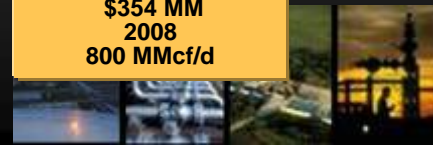
**Increasing Costs of Marginal Supply
Sets Price Floor at \$3.50**



El Paso Growth Projects



Completed Projects
 Signed PA's
 FERC Certificated
 Future Projects



Conclusions

- ▶ Understand and facilitate “supply push” projects
- ▶ Promote reliability and flexibility projects for “last mile”
- ▶ Consider the benefits of long term access to assured supplies

