# Indiana Coal to SNG

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Gasification Technologies Council Workshop

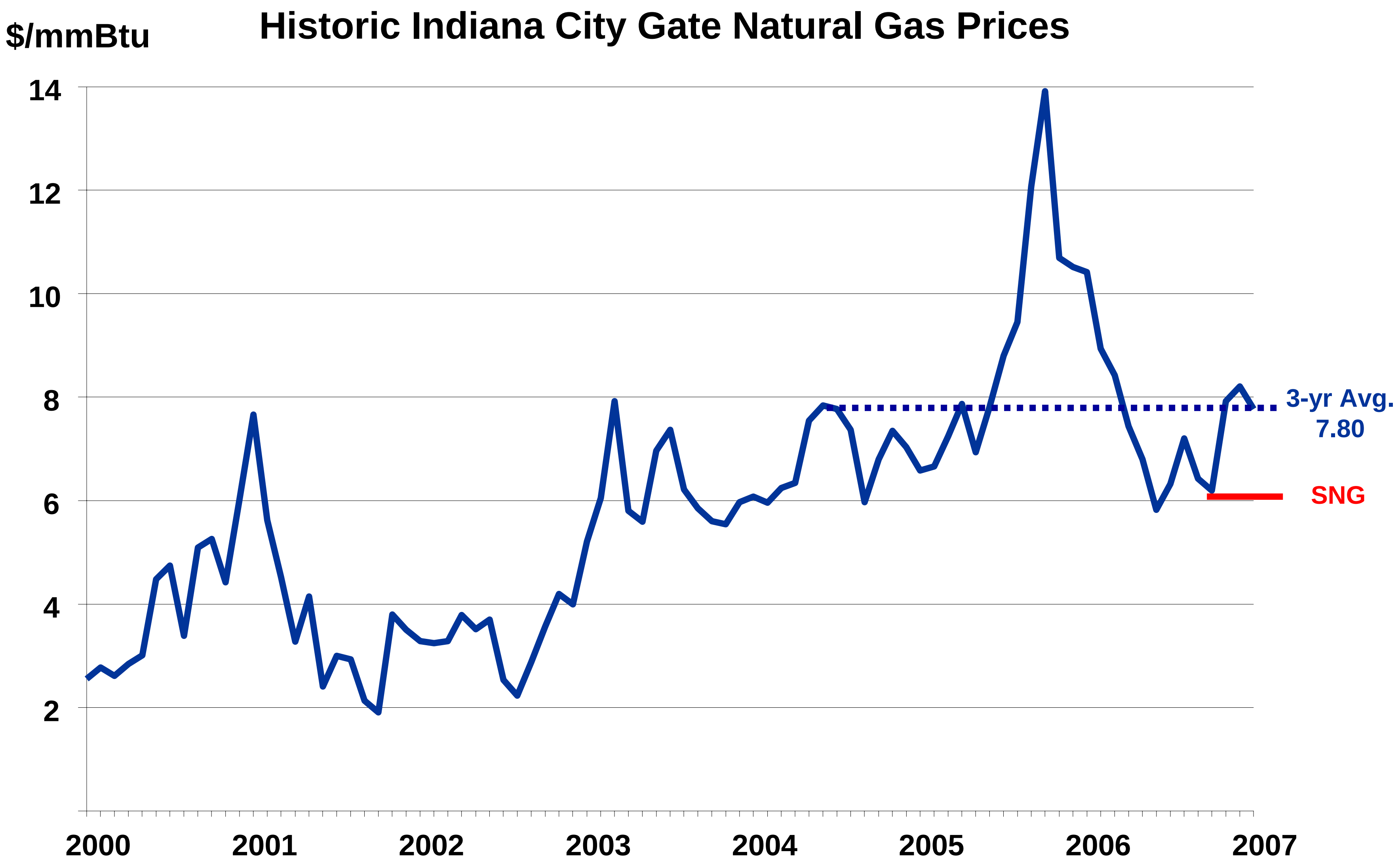
Indianapolis, IN

June 13 2007

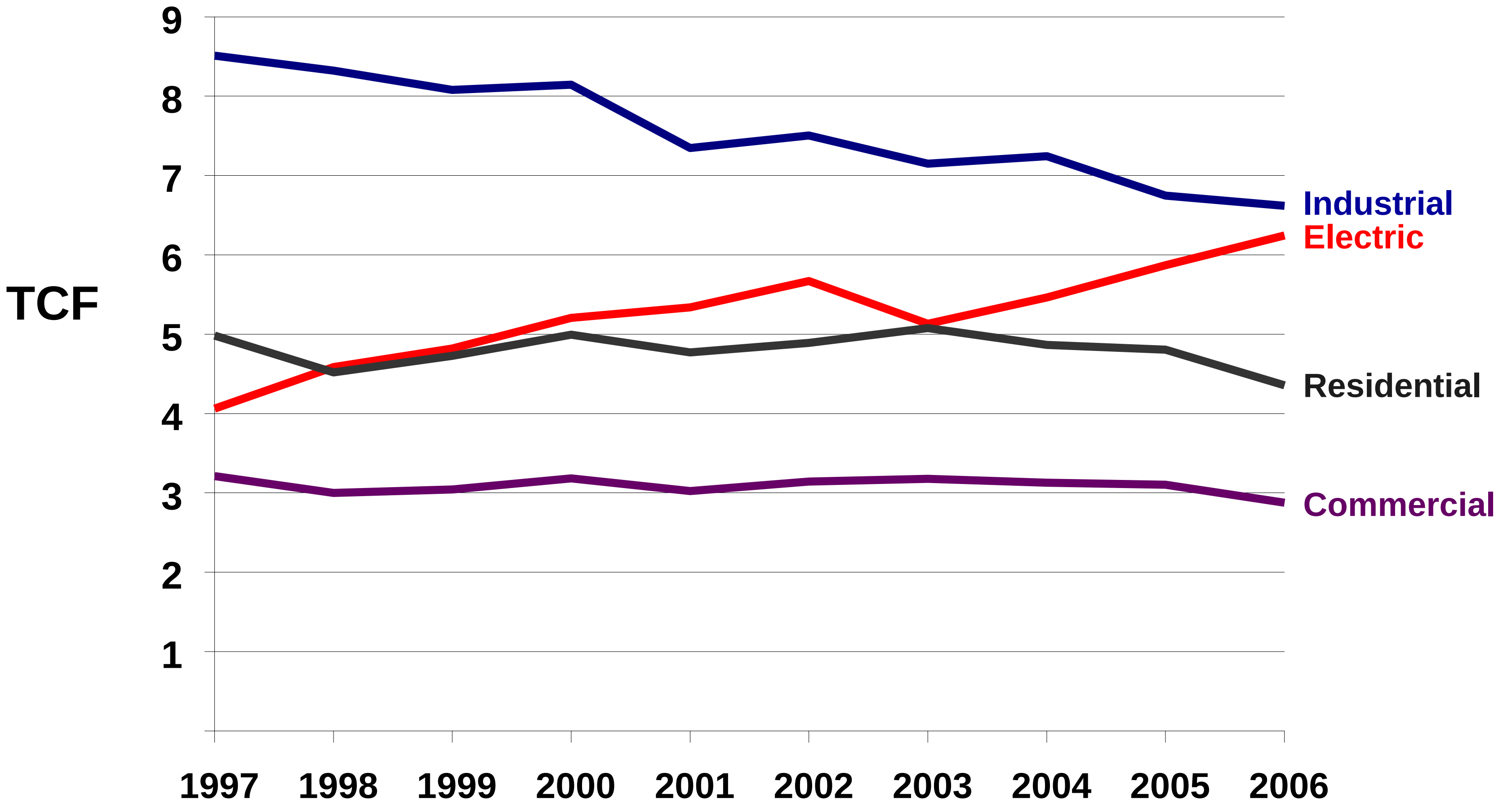
# Indiana SNG Project Overview

- $1.7 billion project to convert 3.2 million tons of Indiana coal into 40 Bcf of SNG per year
- Financial structure patterned after Harvard “3Party Covenant” coupling a federal loan guarantee with strong credit from utility regulatory approval of long-term contracts
- Detailed Letters of Intent signed October, 2006 with Indiana utilities
- Petition and initial testimony filed November, 2006 with Indiana Utility Regulatory Commission (IURC) to initiate contract approval process
- Federal loan guarantee application filed December, 2006
- State legislation passed May, 2007 to provide “no look back” over 30-year contract term if approved by IURC
- FEED expected to begin in 3rd quarter 2007 and construction by end of 2008.

# SNG – An Attractive Gas Supply Option



# U.S. Natural Gas Consumption Trends

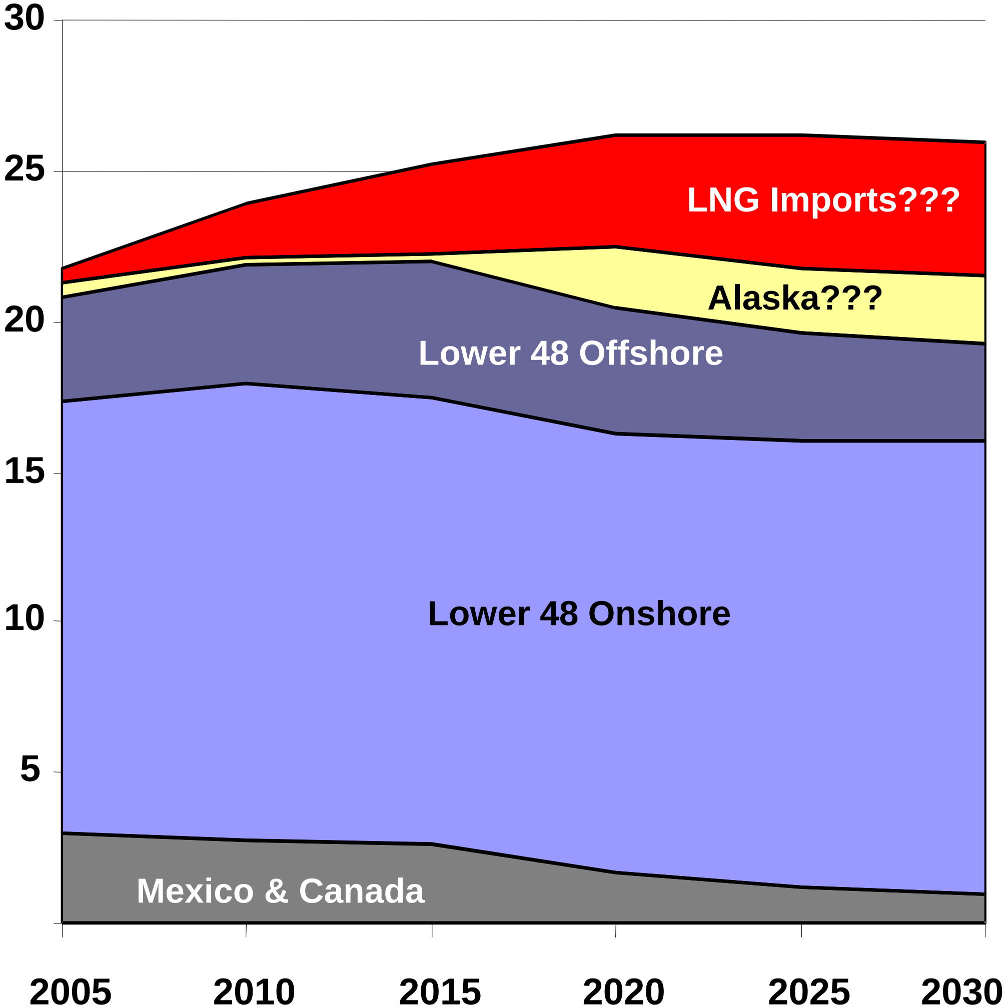



Source: EIA

# Natural Gas Supply Uncertainty

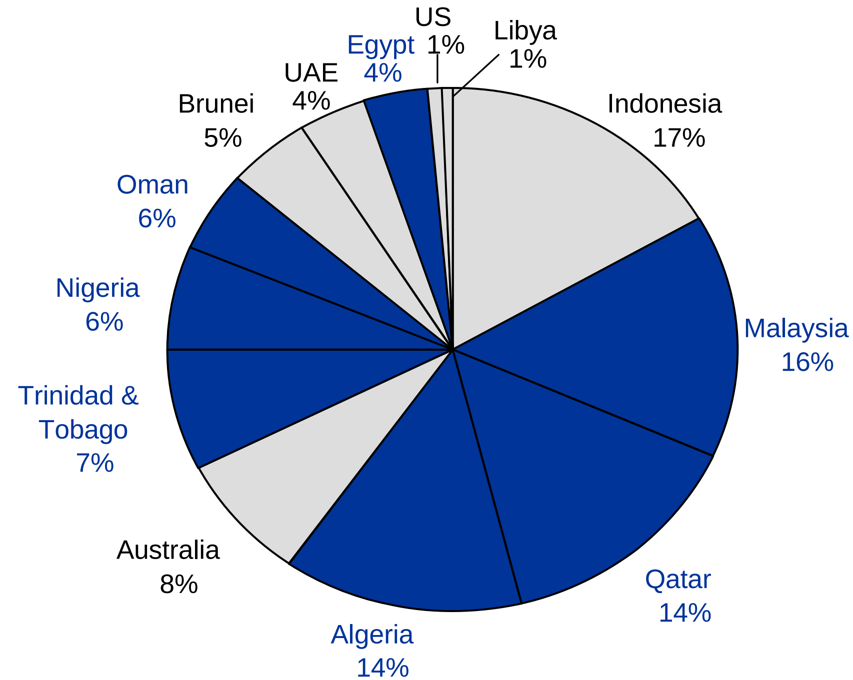
TCF

**U.S. Natural Gas Supply Forecast**




Source: EIA Annual Energy Outlook 2007, Tables A13-A14.

**2005 LNG Exporting Countries**




**Blue = Exported to US in 2005**

Source: BP Statistical Review of Word Energy 2006.

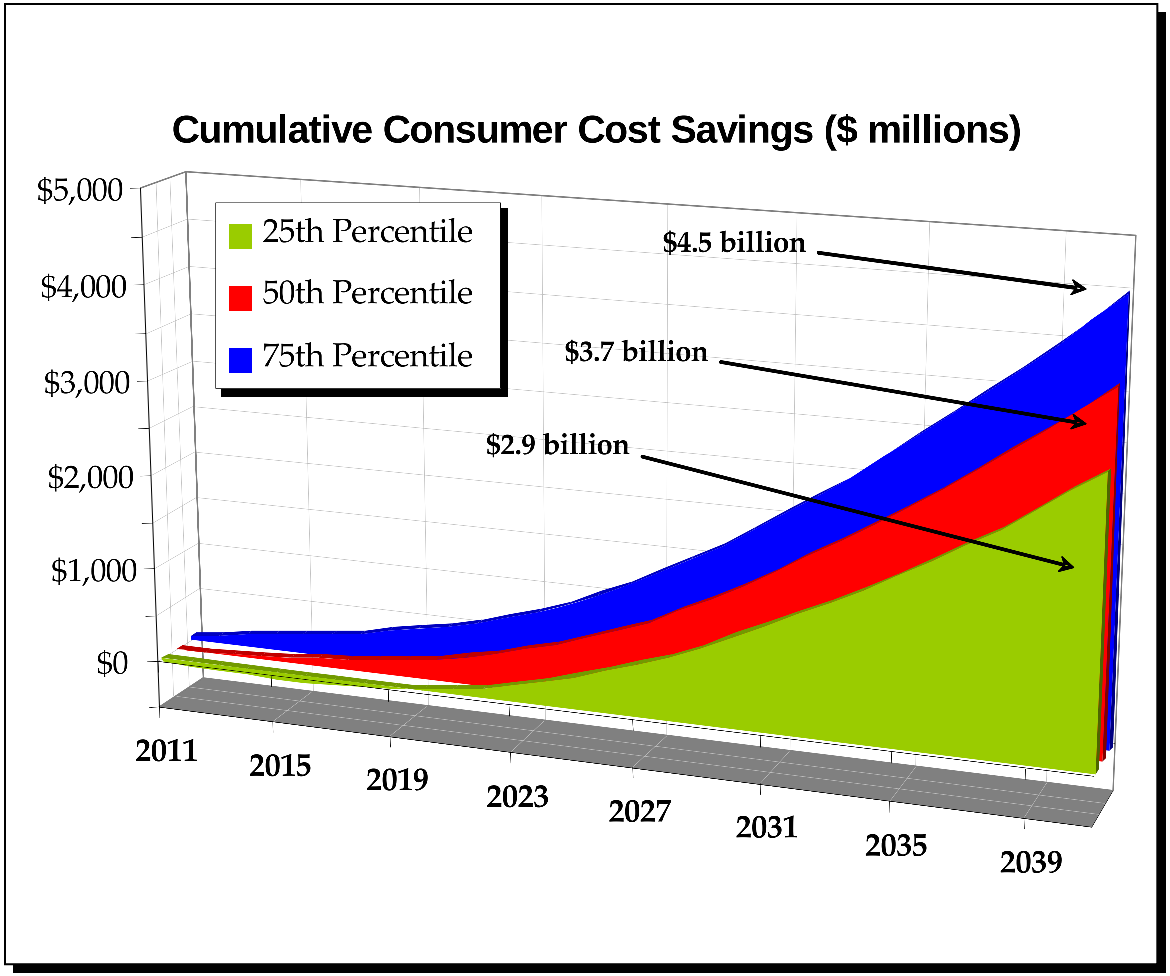
"In the long run, yes, we are moving toward a gas OPEC" *Algeria Oil Minister*

"We are trying to strengthen the cooperation among gas producers to avoid harmful competition" *Libya*

(Source: *Wall Street Journal*, April 10, 2007)

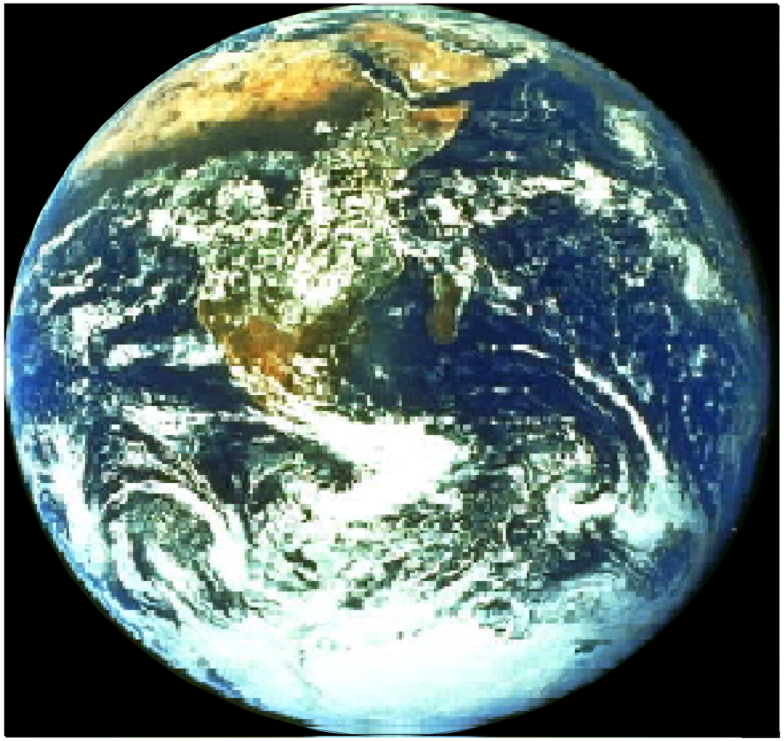
# Consumer Savings

- **Carnegie Mellon University professors evaluated the economic benefits of Indiana SNG for Indiana natural gas consumers**
- **Study concluded: "Not only are the costs lower with the SNG project, the risks are lower as well"**
  - Ratepayers expected to save **$3.7 billion** (nominal) in costs alone
  - The value of risk reduction is **another $1.85 billion** (nominal)
  - Total of **$5.5 billion** benefit to Indiana consumers
  - Significant immediate risk reduction



# $CO_2$ Policy Implications

- Increased pressure on natural gas prices
  - Low carbon intensity
  - Increased use for power generation
- Decreased pressure on coal prices
  - Increasing challenge to build traditional coal power plants
  - TXU, FPL examples
- Even for projects that capture $CO_2$ (such as SNG) sequestration technologies and costs remain uncertain
  - Cannot make firm commitment to $CO_2$ sequestration today
  - Consumers must bear risks (climate mitigation is societal benefit/cost)
- **Rating agencies are focused on issue**
  - Utility commission treatment critical
  - May dictate where coal plants can be built

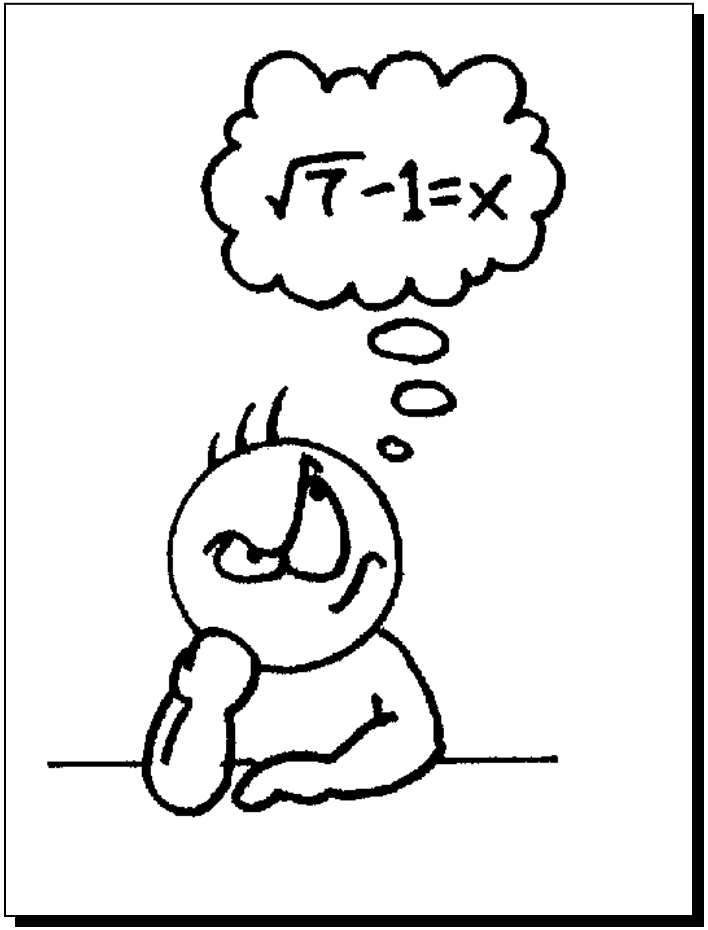


# 3Party Covenant Financing Structure

| | Provides | Receives |
|---|---|---|
| **Federal Government** | -- Loan guarantee on long-term debt<br>-- Lower cost of capital | -- Near-zero credit risk<br>-- State regulatory credit support<br>-- “Self-pay” for scoring<br>-- Replicable achievement of energy security/environmental objectives |
| **Utilities** | -- Long-term SNG (and power) purchase agreements | -- IURC approval of cost recovery<br>-- No look back assurance<br>-- Long-term price hedge<br>-- Lower cost, less volatile gas supply |
| **State Regulatory Commission** | -- Approval of SNG contracts for pass-through of cost | -- Long-term supply and price hedge<br>-- $5.5 billion expected consumer savings<br>-- Reduced price volatility<br>-- Increased jobs and development |
| **Owner** | -- Development capital<br>-- Construction financing<br>-- 20% equity<br>-- Expertise in development, construction & operation | -- Reasonable risk/reward return |

# Challenges for Utility Regulators

- **Long-term contracts**
  - Foundation for financing
  - Must acknowledge value of hedge and portfolio diversity—can be "in" or "out" of the money
  - Analogous to fix vs. variable rate mortgages
- **Change in law risk**
  - $CO_2$ regulation
  - Issue may dictate ability to finance large projects
- **Up-front decision**
  - Must have regulatory clarity prior to financing
  - Must have "no-look back" protection



# Conclusions

- Natural gas supply and price risks are a real national energy security and economic risk
- Diversifying natural gas supply with coal-derived SNG is in states and national interests
- SNG plant financing requires state regulatory support—approval of long-term contracts and cover on climate change risks
- Indiana has provided a very good regulatory and political environment for plant development—passage of no look back legislation was critical
- Contract completion, regulatory review and federal guarantee clarity are primary remaining hurdles before Indiana plant can move forward towards construction