



Issues to Consider in Natural Gas Pricing

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Pricing Natural Gas for Customers

- Of the total bill paid by the customer
 - 80% is for the cost of the natural gas
 - 20% is the cost for the LDC to deliver the gas



Pricing of Natural Gas for Customers

- Two separate types of Commission approved filings
 - Rate Case filing
 - Enables LDC to recover its operating expenses and profit
 - 20% of customer's bill
 - Establishes the LDC's base rates
 - Gas Cost Recovery (GCR)
 - All gas costs from suppliers
 - Transmission costs from pipeline (WAGP)
 - 80% of customer's bill



20% Cost of Delivering Gas

- Non gas cost, or
- Distribution cost, or
- Base rate, or
- Delivery cost
 - This cost for the transportation of gas must be adequate to recover LDC's operating expenses (labor, benefits, office expenses, depreciation, taxes, etc.) and includes an allowance for profit on its investments.



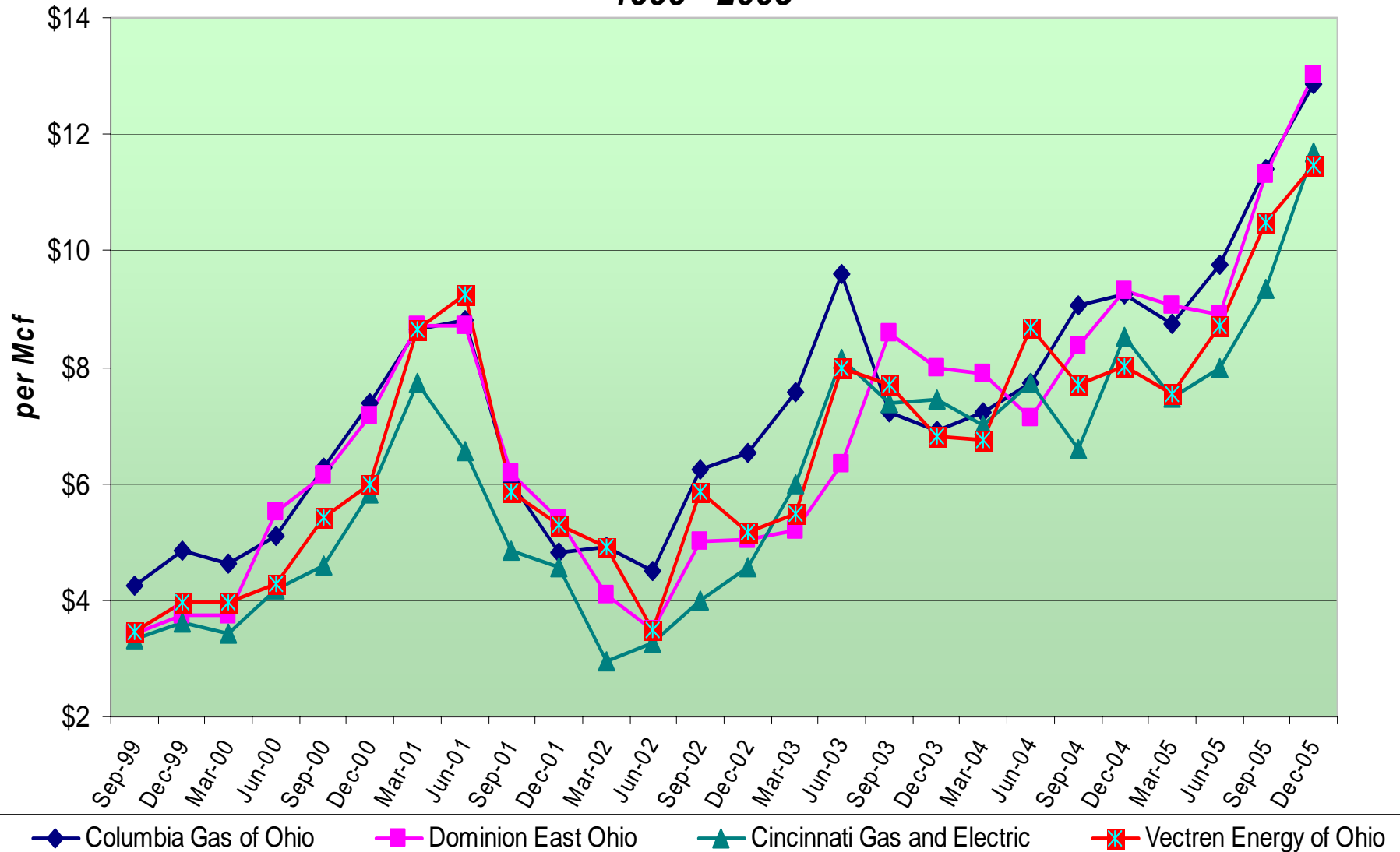
Average Cost of Gas (GCR)

(about 80% of total billed to customer)

- Recovers the cost of gas paid by the LDC (to pipeline suppliers, producers, marketers, transmission company)
- Amount paid by LDC is passed on to customer dollar-for-dollar (no profit)
- This average cost can be changed monthly, quarterly, or annually.
- Has been very volatile

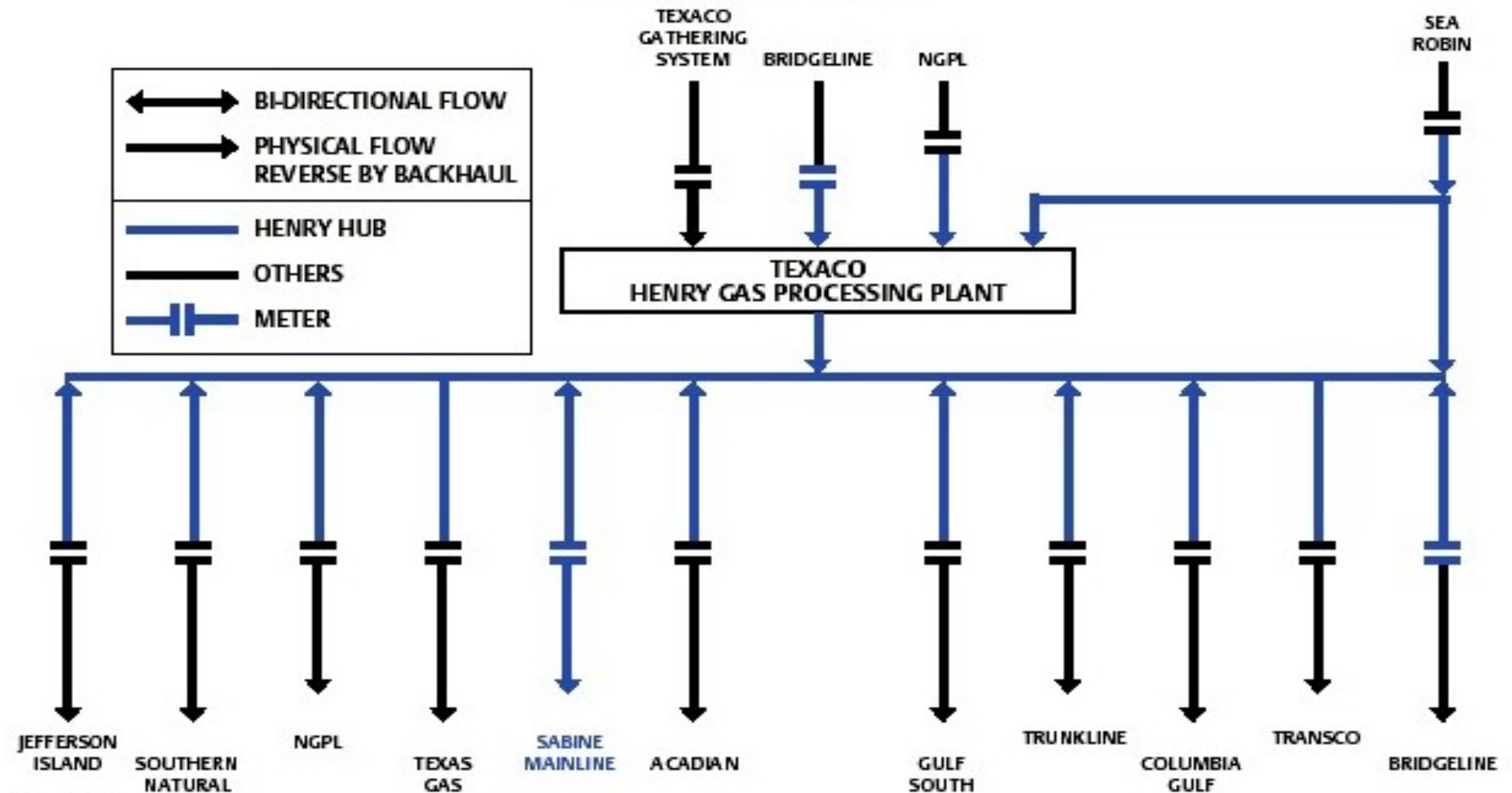


Ohio's Major Natural Gas Distribution Company Gas Cost Rates 1999 - 2005





Henry Hub



Revised: 4/01

[illegible]

Public Utilities Commission of Ohio, 2002
<http://www.PUCOhio.gov>





Aggregation

- Pooling of gas supply to meet the annual requirement of customers
- Base load
- Swing gas
- Peaking



Cost of Total Gas Requirements

Should the LDC enter into these contracts?

- Long term contract
- Short term contract
- Daily spot market
- Hedging



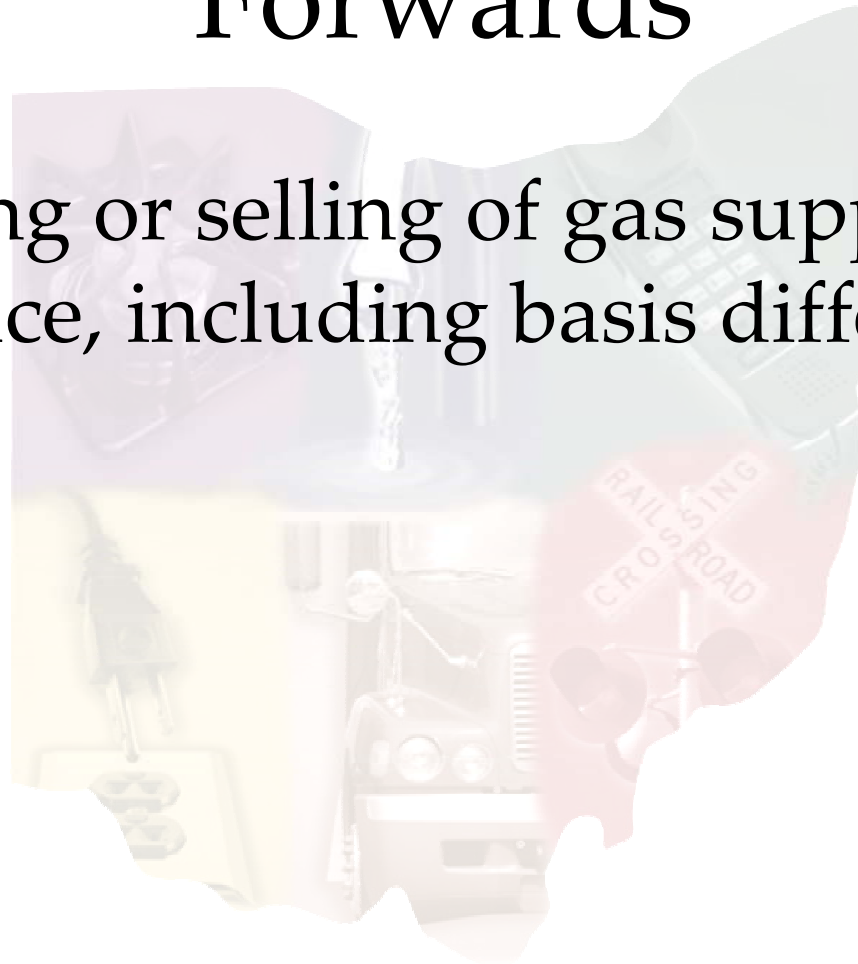
Hedging

- An investment made to reduce the risks of adverse price movement
 - Forwards
 - Futures
 - Options
 - Swap Contracts



Forwards

- The buying or selling of gas supply at a future price, including basis differences





Futures

- Very similar to Forwards, but they are based on NYMEX prices only



Natural Gas Futures – March 2006





- The selling of the right to purchase (or sell) a commodity at some future date at today's price



Swap Contracts

- Agreements to buy (or sell) a volume of gas at today's price and have the same volume of gas returned (or delivered) on an agreed to date



Coping with High Prices

- Reduce consumption / reduce demand
- Self interrupt
- Switch fuels / Use alternate fuels
- Additional supply sources (from east, west, domestic)
- Storage



Market Manipulation

- ENRON
- Ukraine





Dispute Resolution Process Overview

- Introduction
- Problem Determination
- Summarizing
- Issue Identification
- Generation and Evaluation of Alternatives
- Selection of Appropriate Alternatives
- Conclusion



Introduction

- Introduce Mediator(s)
- Obtain names and authority of parties
- Define the process - formal, structured process in which a neutral third party helps disputing parties to generate and evaluate options for reaching a mutually acceptable solution.
- Explain the process - overview of stages, role of the mediator, role of the parties
- Establish ground rules - common courtesy, direct all speech to the mediator
- Discuss confidentiality and caucusing
- Allow for questions on process



Problem Determination

- Each party relates his or her side of the story.
- Flow of information is from the party to the mediator
- Other parties hear all that is said, but there is not interaction between / among parties
- Words used by the mediator must be neutral
- Mediator role is to facilitate flow of information from each party to the mediator



Summarizing

- After each party has completed his story, mediator should summarize
- Complete and Accurate
- Essence, not detail



Issue Identification

- No Solutions!
- Generalize what to solve
- Assist the parties in identifying the issues that need to be mediated in order to reach resolution of the problem



Generation and Evaluation of Alternatives

- Start with the party most likely to offer resolution
- Parties propose alternatives for resolving conflicts
- Focus in on resolution, not on positioning or posturing
- Parties to discuss the alternatives



Selection of Appropriate Alternatives

- Parties must agree on which alternatives will resolve
- Identify tradeoffs for parties



Conclusion

Ideal: Parties come to resolution and agreement
Commission approves

2nd Best: Choices are narrowed
Tradeoffs are clarified
Commission decides

REDUCE TO WRITING!