

# *Managing Natural Gas Supplies in An Uncertain Market*

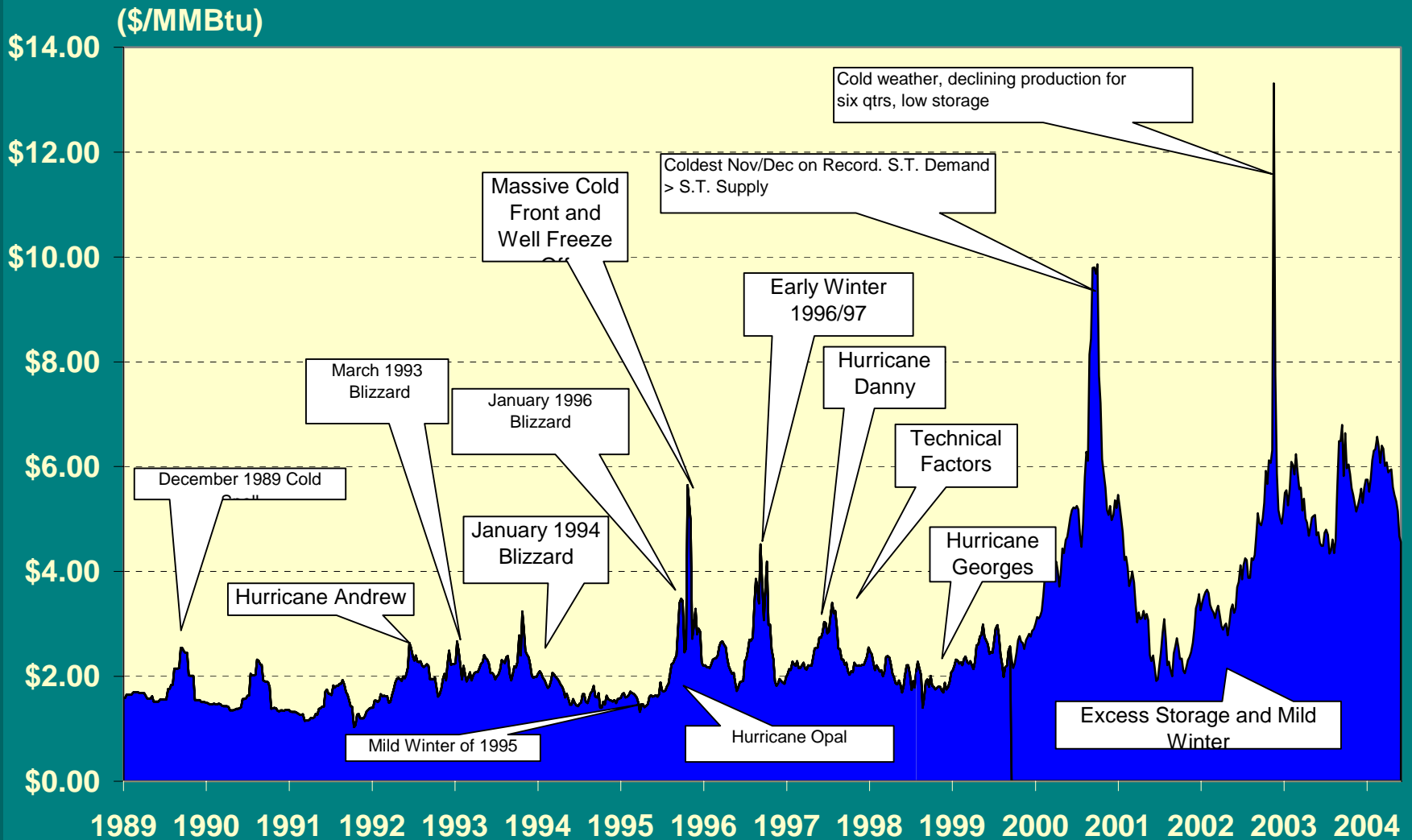
World Energy Engineering Congress

Michael McCluskey  
Senior Vice President  
Austin Energy

September 24, 2004



# Natural Gas Price History



Source: NGW and EVA, Inc.

# *Today's Topics*



## *3 Point Strategy for Controlling Gas Costs*

Maximize Energy Efficiency

Optimize Gas Supply Costs

Minimize Gas Transportation Costs

# *Energy Efficiency*

- Know Your Gas Usage – *Intimately*
  - Critical for Establishing Your Baseline
- Perform Regular Maintenance & Repairs
  - Valve Seals, Gaskets, Fittings and Flanges
- Upgrade/Replace Inefficient Equipment
  - Higher Gas Costs Make Projects More Feasible
- Investigate Local Gas Company Programs
  - Rebates and Other Incentives

# *Energy Efficiency cont.*



## Texas Gas Service (Austin) Programs

- Commercial Hydronic Heating - \$500/unit
- Commercial Water Heating - 20% of cost
- Commercial Washer/Dryer - \$250/unit
- Food Service Equipment - \$200 to \$500/unit
- Natural Gas Vehicles - \$2000/unit

# *Energy Efficiency cont.*



- Use a High Quality Energy Management System
  - Optimize Plant Processes to Reduce Gas Use
- Seek Consulting Assistance
  - Potential Savings Can Far Exceed the Cost
- Consider Energy Service Company
  - First Rate Expertise Available
  - Use OPM to Pay for Your Improvements

# *Natural Gas Supplies*



- Know Your Gas Usage - *Intimately*
  - Accurate Forecast Needed to Solicit Supply Offers
  - Used to Evaluate Supply Options
- Establish Contracts with Multiple Suppliers
  - Reduces Cost via Competition
  - Eliminates “Single Source” Dependency
- Use Alternative Fuel When Feasible
  - Fuel Oil Can Effectively Cap Gas Prices

## *Natural Gas Supplies cont.*

- Consider Base Load and Swing Gas Separately
  - Avoid Premium on Base Load to Cover Swing
- Use Hedging Instruments to Control Cost
  - Gas Futures and Options Most Effective
  - Can be Arranged via Local Brokers
- Follow the Market Daily via the NYMEX
  - [http://www.nymex.com/jsp/markets/ng\\_fut\\_csf.jsp](http://www.nymex.com/jsp/markets/ng_fut_csf.jsp)

# *Natural Gas Transportation*



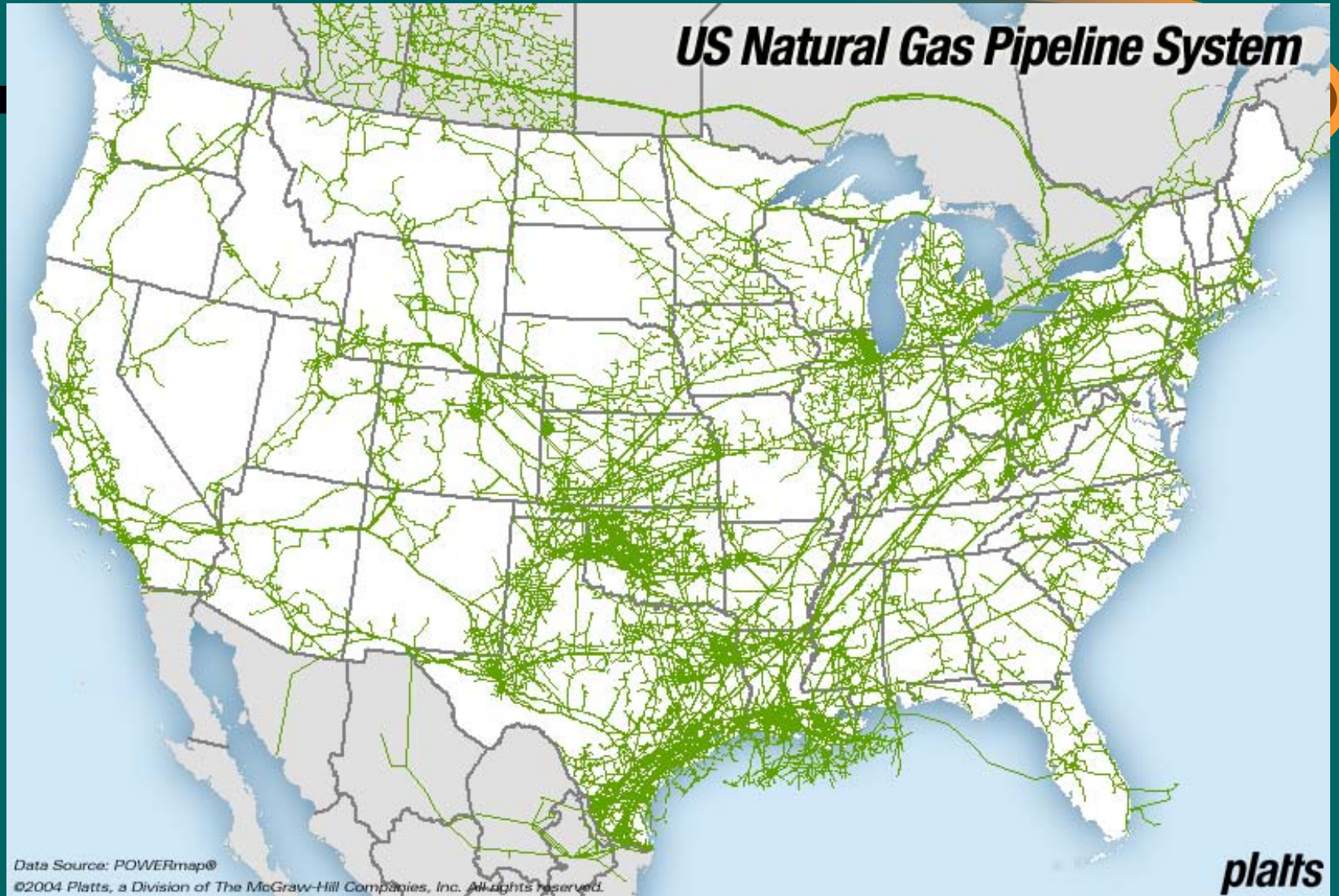
- Know Your Gas Usage - *Intimately*
  - Cannot Evaluate Options Without It
- Know Your Gas Company's Standard Offerings
  - Review all Tariffs Offered by Pipeline
- Seek Lowest Applicable Transportation Tariff
  - Typically Industrial or Plant Rate
- Seek Lowest Possible Non-Tariffed Rate
  - Competitive Options Rate

# *Natural Gas Transportation cont.*



- Consider Bypass Pipeline into Facility
- Identify All Nearby Gas Pipelines
  - Names and Phone Numbers from Pipeline Markers
  - Local Fire Departments or Emergency Management Offices
  - USGS Topographical Maps
  - Commercial Sources – Platts, Penwell, Natural Gas Intelligence etc.

# *Is There a Pipeline Near You?*



# *Natural Gas Transportation cont.*



- Rates and Fees
  - Capacity, Flow, Balancing, Storage, Other
- Capacity
  - Size to Your Needs – Don't Oversubscribe
  - Consider Varying by Season if Applicable
- Firm or Interruptible
  - Match with Your Need
  - May Apply to All or a Portion of the Service
  - Especially Feasible if Alternative Fuel Available

# *Natural Gas Transportation cont.*



- Access to Supply
  - Consider Access to Multiple Pipeline Hubs
- Balancing Provisions
  - Some Free Band, Then Fees Charges
  - Valuable Service, not a Penalty Mechanism
- Storage or Park and Lend
  - Very Useful for Highly Variable Loads
  - Size to Your Needs – Don't Oversubscribe

# Summary



## 3 Point Strategy Efficiency, Supply & Transportation

- Can Be Used Individually or Together
- Benefits are Additive
- Must Know Your Consumption for Any Strategy to Succeed



*End*

*Thank You*

*Presentation Available at [austinenergy.com](http://austinenergy.com)*