Natural Gas Prices
An Overview and a Look Ahead to the
2004-2005 Heating Season

News Media Briefing

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• Structure of the natural gas industry
• How natural gas rates are set
• The natural gas market
• Recent trends in gas prices
• What’s ahead for 2004/2005
• What consumers can do
Structure of the natural gas industry

• Producers
  - Wellhead prices unregulated

• Interstate pipeline companies
  - Federally regulated

• Local distribution companies (LDCs)
  - State regulation
Natural gas rates

Three components

• Distribution system
• Pipeline delivery cost
• Wholesale price
Distribution system component

• Reflects cost of delivering gas to consumer
  - Operations and maintenance costs
  - Customer service costs, inc. billing
  - Personnel, overhead, etc.
  - Fair, just & reasonable profit

• Determined by PSC through ratemaking

• Second-largest component - %age varies
Pipeline delivery cost

• Cost of moving gas from well to local distribution system
• Smallest component - less than 10%
• Regulated by Federal Energy Regulatory Commission
• Passed on directly to consumers
• No profit for local distribution company
Wholesale cost

- Deregulated in 1970s to stimulate gas production during energy crisis
- Fluctuates with supply and demand
- Biggest part of retail gas price - as much as 70-75 percent
- Direct pass-through to consumer via gas cost adjustment (GCA)
Gas cost adjustment

- Allows LDCs to recover wholesale cost
- Does NOT include markup for LDCs - simple pass-through of wholesale cost to consumers
- Reviewed by PSC for accuracy
- Typically adjusted quarterly - prospective
- Includes rolling adjustment for over or under recovery of costs in previous periods
The largest and most frequent changes in retail gas rates are due to gas cost adjustments, which are driven by conditions in the wholesale gas market.
The Natural Gas Market

Key Points

• National market - regional differences
• Traded as a commodity
• Prices are market-driven
Pricing

Spot market
- Short-term price
- At delivery point (Henry Hub)

Futures market
- For set quantity at set price on set date
- Forward-looking
- NYMEX
Supply factors

• Production
  - Diminishing on per-well basis
  - Lags behind demand

• Imports (LNG) - minor component

• Stored gas - typically about half of winter usage comes from storage
Demand factors

• Weather
  - Principal home heating fuel

• Electric generation usage
  - Increasing - both peaking & baseload

• Industrial usage
  - Most sensitive to price (fertilizer, etc.)
Recent market trends

- Greater supply-demand imbalances
- Increased price volatility
- Exploration less responsive to pricing
- More demand in summer due to peaking electric generation
- Higher summer prices
NYMEX Henry Hub Futures Daily Settlement Prices
April/90-July/04

Source: AGA
Looking ahead to 2004-2005
Where we are

- Storage levels are normal
- Price for stored gas in the past two years has been much higher than in previous summers
  - $4-$7 per mcf vs. $2-$3 per mcf
- Production is increasing somewhat
44% of Kentucky households
Price forecast

• All forecasts suggest natural gas prices during the 2004-2005 heating season will be as high or higher than during the 2003-2004 season

• High natural gas prices are likely to persist for several years
Price forecast

• Latest Gas Cost Adjustments filed by major Kentucky LDCs show prices similar to last year

• Gas to be withdrawn from storage this winter will be at a higher price

• Total gas rates are likely to be somewhat higher this winter than last year, but (all things being equal) increase will be smaller than the one seen from 2002-2003 to 2003-2004
## Current gas costs

**Gas Cost Adjustment** - per 1000 cubic feet

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(Oct. 2002 - GCAs range: $3.92-$5.19)

(as of 10-1-04)
• A normal winter (2002-2003) would create enough demand to keep prices at or somewhat above current levels

• A warmer-than-normal winter (2003-2004) would reduce demand and lead to some softening of prices

• An unusually cold winter could create greater supply-demand imbalances and could likely lead to significantly higher prices
10% of Kentucky households
3% of Kentucky households
Reducing home heating costs
Conservation

• Turn down thermostat
  - Going from 72 degrees to 68 degrees can save 15% or more on your gas bill
  - Programmable thermostats can save even more
Weatherization

Substantial saving are possible if you:

• Caulk around windows, doors
• Replace worn weather stripping
• Seal openings
Weatherization

• Install storm windows
• Cover windows with plastic
• Add insulation
Energy audits

- Identify problem areas
- Suggest corrective actions
- Offered by most major utilities
- Often free or nominal charge
Budget billing

• Annual averaging of monthly bill
• Removes seasonal fluctuations
• Allows predictable budgeting
• Annual or rolling “true up”
• Does NOT cut costs
Low-income Assistance

- Administered through Cabinet for Families & Children - local Community Action Agencies

- Weatherization assistance - eligibility based on income; many utilities provide matching funds
Low-Income Home Energy Assistance Program (LIHEAP)

• 150,000 households each year

• Two programs - Subsidy & Crisis
  - Subsidy - Nov.-Dec. - 90,000-110,000 households
  - Crisis - Jan.-March - 50,000-60,000 households

Low-income assistance also is provided by many local non-profit agencies. Utility companies also have low-income assistance programs (Winterhelp -LG&E; Atmos Cares)
Resources

- Division of Energy
  - Energy statistics
  - Energy efficiency and conservation programs
- University of Kentucky & others
  - Energy research
- Example - Kentucky State Fair exhibit promoting energy-efficient homes
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Questions?