Natural Gas Prices

An Overview and a Look Ahead to the 2010-2011 Heating Season

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Andrew Melnykovych
Communications Director
Kentucky Public Service Commission

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PSC PUBLIC SERVICE COMMISSION OF KENTUCKY naturalgasbriefing@ky.gov

Natural gas prices during the 2010-2011 heating season should remain at the relatively low levels of a year ago.

- 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 2010/2011
- What consumers can do

Structure of the natural gas industry

- Producers/processors
  - Wholesale 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.
  - Return on investment
- Includes fixed monthly charge; volumetric delivery charge
- 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 – passed on directly to consumers through gas cost adjustment
- Regulated by Federal Energy Regulatory Commission
- No profit for local distribution company

Wholesale cost

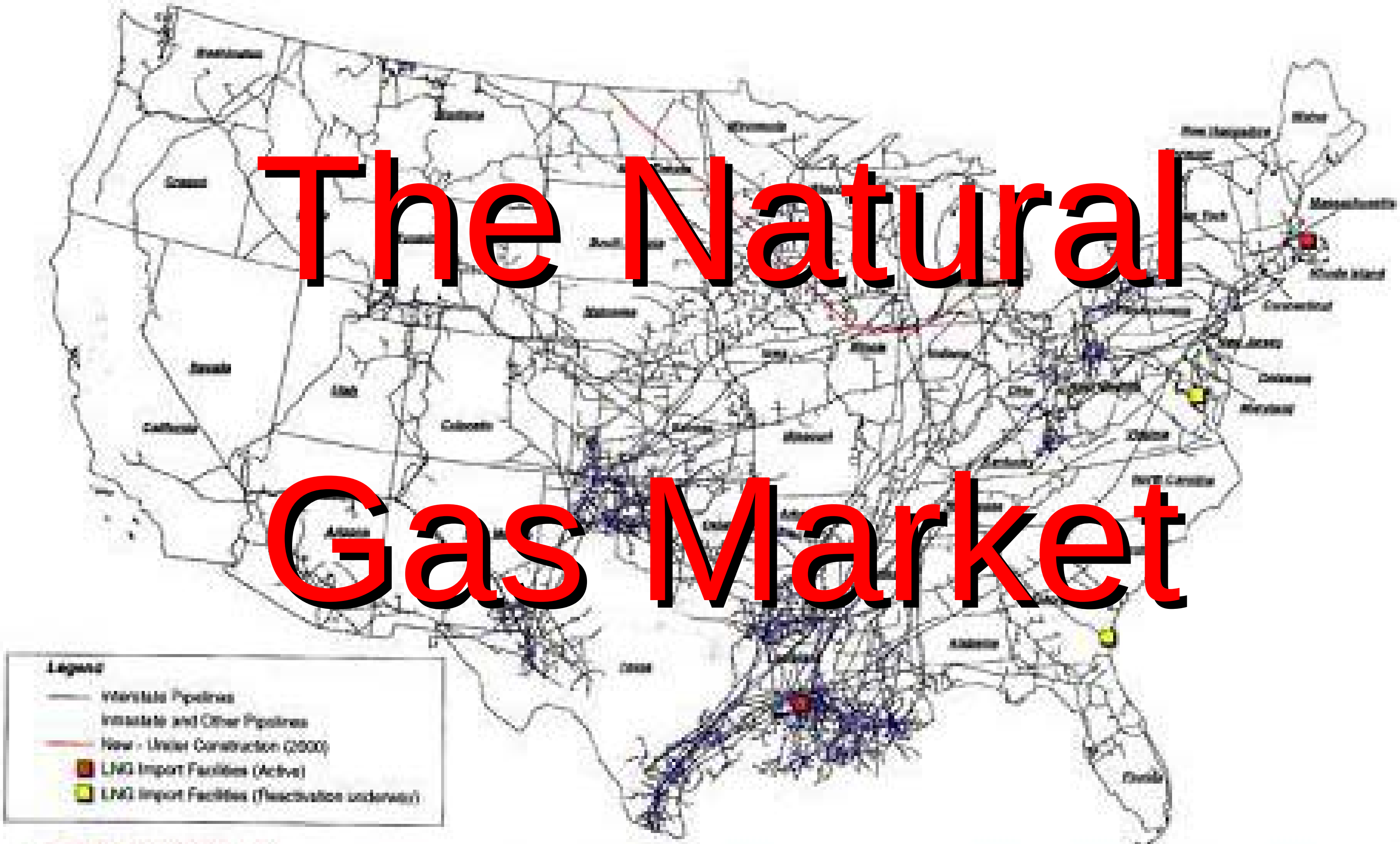
- Deregulation began in 1970s to stimulate gas production during energy crisis – deregulation complete in 1993
- Fluctuates with supply and demand
- Biggest part of retail gas price - about three-fourths (incl. pipeline cost)
- Direct pass-through to consumer via gas cost adjustment (GCA)

Gas cost adjustment

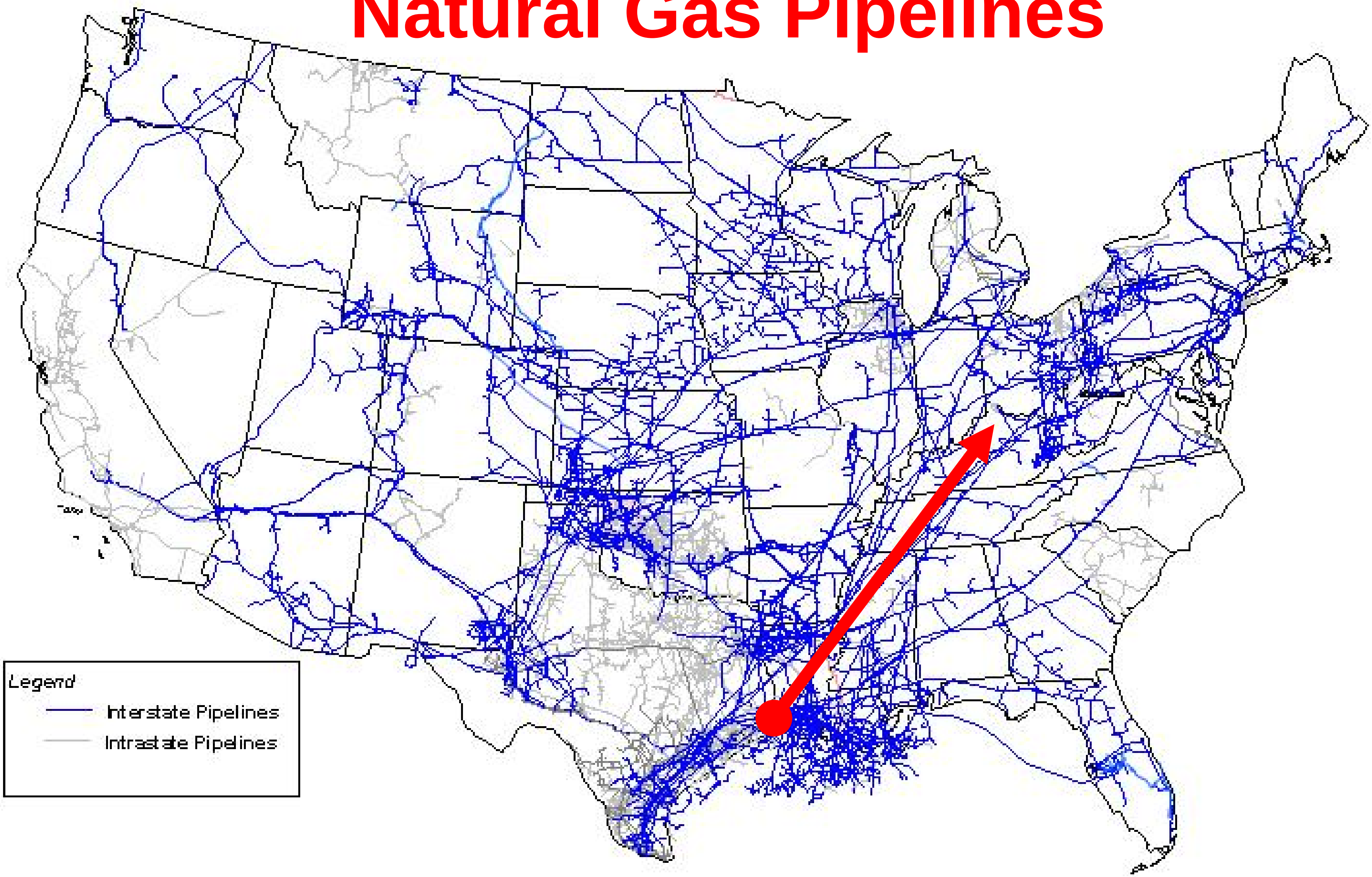
- Allows LDCs to recover wholesale and pipeline cost
- Does NOT include markup for LDCs - simple pass-through of wholesale cost to consumers
- Reviewed by PSC for accuracy
- Typically adjusted quarterly - prospective
- Includes rolling adjustment for over or under recovery of costs in previous periods

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



Natural Gas Pipelines



Source: Energy Information Administration, Office of Oil & Gas, Natural Gas Division, Gas Transportation Information System

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

  - Major new reserves being developed

  - Lags behind demand

- LNG – moving from import to export

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

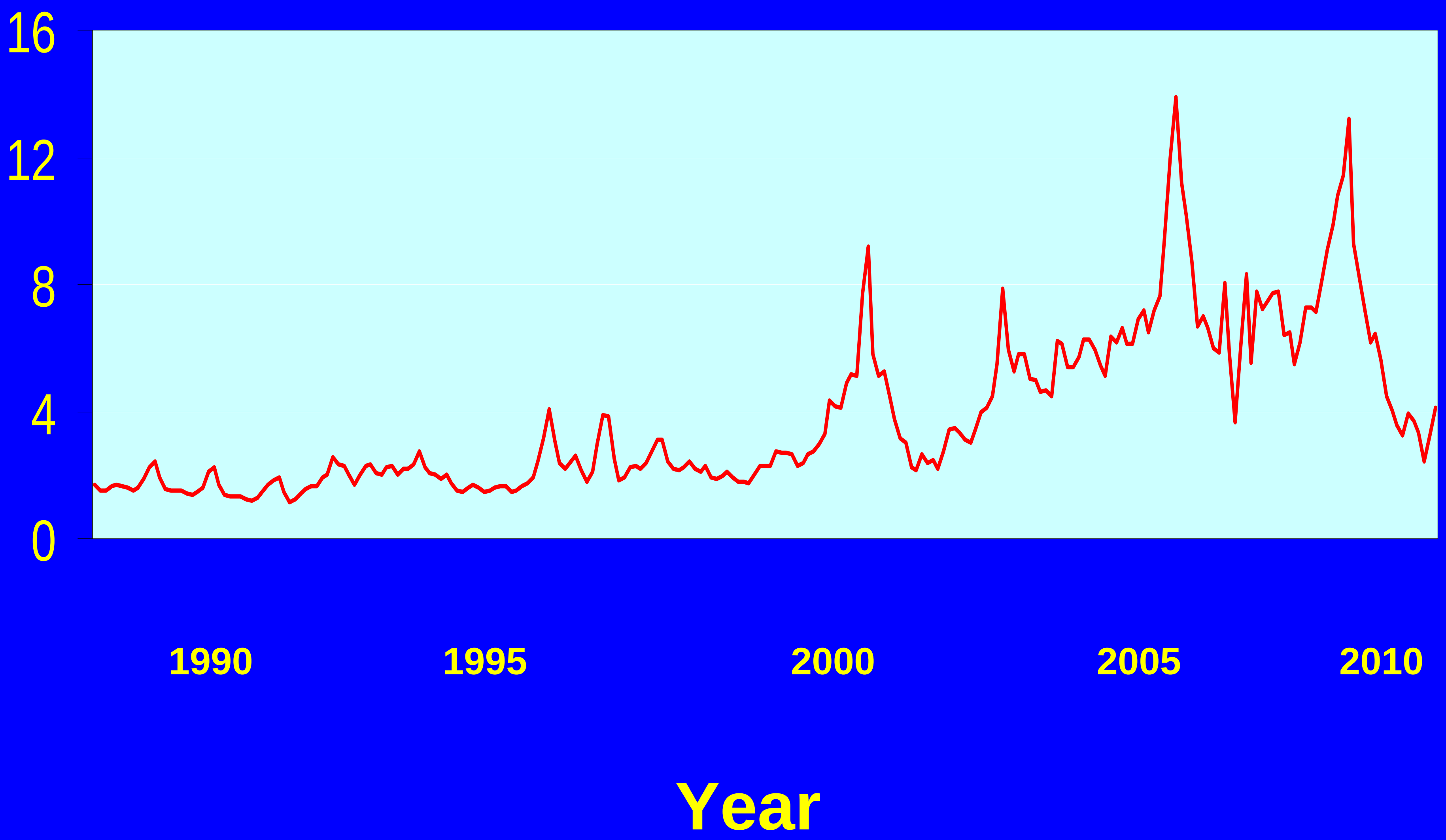
Demand factors

- General economic conditions
- Weather
  - Principal home heating fuel
- Electric generation usage
  - Both peaking & baseload
- Industrial usage
  - Most sensitive to price (fertilizer, etc.)

Market trends 2000-2007

- Increasing demand and production
- Pipeline capacity constraints
- Increased price volatility
- More demand in summer due to peaking electric generation
- Higher summer prices

Henry Hub Price - 1989 to present



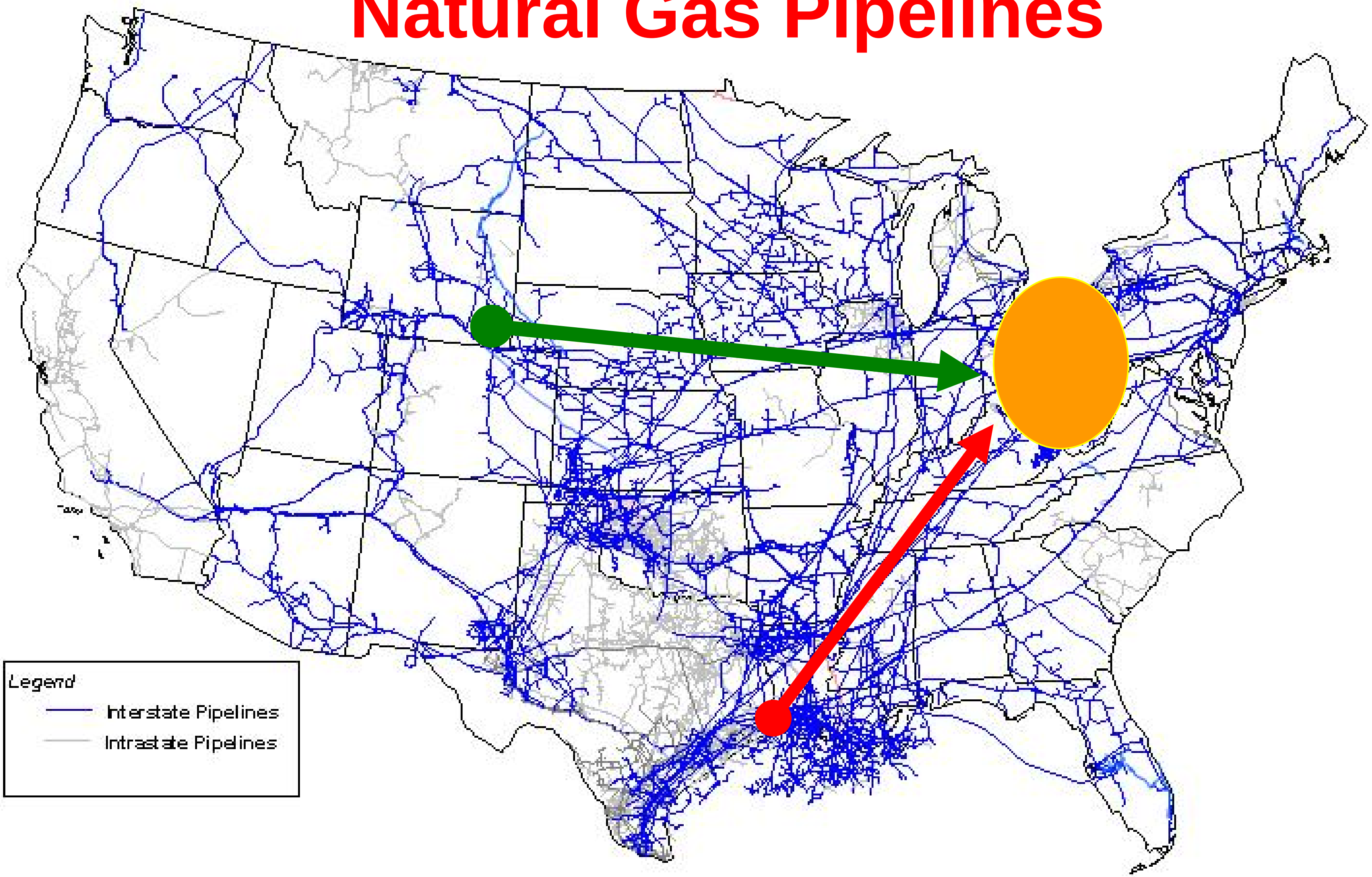
Henry Hub Price - Jan. 2008 to present

Spot price decline – 6/08 ($13) to 8/09 ($2.42) – 81%

What has happened in 2008-2010

- Speculative bubble in first half of 2008
- Unsustainably high prices
- Moderating demand due to economy
- Increasing supply – largely due to shale gas and new pipelines
- Price collapse in summer 2009
- Prices have stabilized in last 15 months

Natural Gas Pipelines



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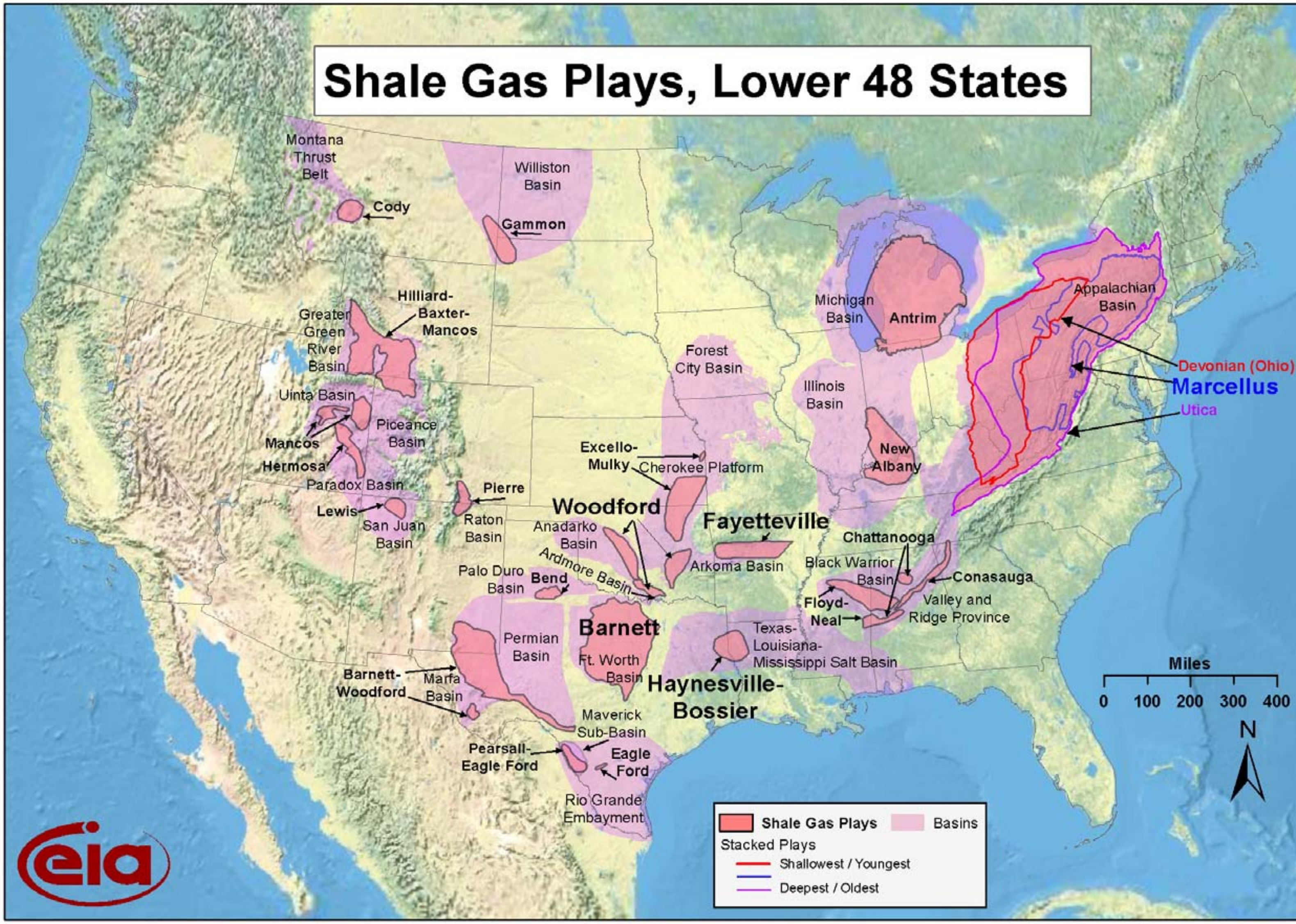
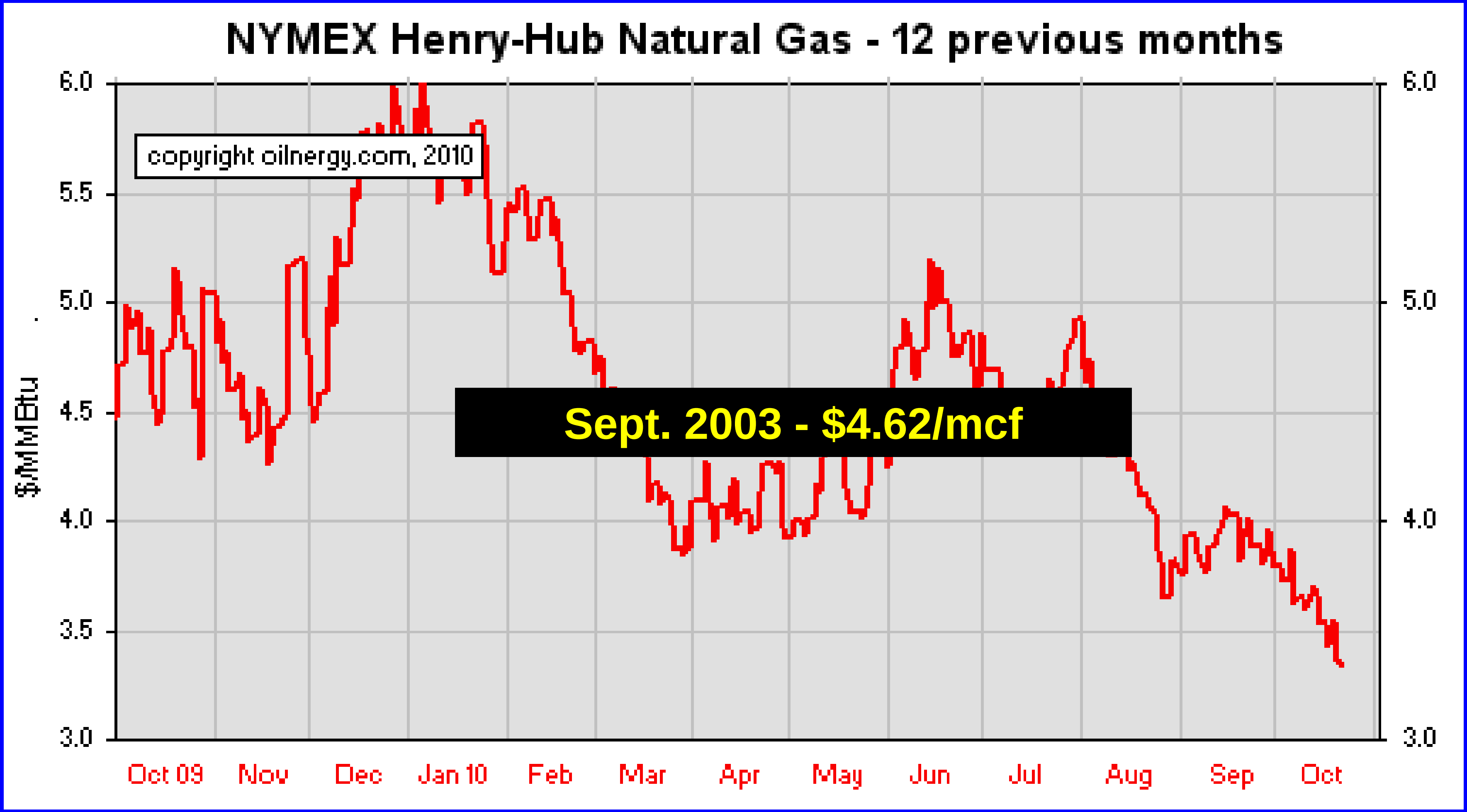


Source: Energy Information Administration based on data from various published studies.
Updated: March 10, 2010

Looking ahead to 2010-2011

Where we are

- Demand stable
- Ample supply
- Prices within narrow range



44% of Kentucky households

Adjusted natural gas costs are 2% higher than a year ago – total November bills (for 10 mcf/month) will be 7 percent above the same quantity bill a year ago

Price forecast

- Latest GCAs filed by all major Kentucky LDCs are $1.42 lower to $3.27 higher per 1,000 cubic feet than last year at this time
- Total bills $11.98 lower to $32.65 higher for customer using 10,000 cubic feet/mo
- Gas storage is at high level nationally
- Kentucky in line with national picture

Current gas costs

Gas Cost Adjustment - per 1000 cubic feet

LDC	11/08	11/09	11/10	09-10 %	08-10%
Average	**$11.70**	**$5.61**	**$5.70**	**+ 2%**	**- 51%**
Atmos	**$11**	**$6.09**	**$4.67**	**- 23%**	**- 58%**
Columbia	**$14.23**	**$3.68**	**$6.95**	**+ 89%**	**- 51%**
Delta	**$13.13**	**$6.66**	**$6.17**	**- 7%**	**- 53%**
Duke	**$9.05**	**$6.70**	**$5.31**	**- 20%**	**- 41%**
LG&E	**$11.09**	**$4.91**	**$5.39**	**+ 10%**	**- 51%**

11/02 average = $4.90/mcf ($5.81 adj. for inflation)

(as of 11-1-10)

Current gas costs

Total gas bill – "typical customer" – 10 mcf/mo

LDC	Nov. 2009	Nov. 2010	% change
#Atmos	$82.18	$70.20	- 15%
Columbia**	$67.90	$100.55	+ 48%
#Delta	$123.73	$125.10	+ 1%
#Duke*	$105.68	$106.30	0%
#LG&E	$80.90	$88.80	+ 10%
Average	$92.08	$98.19	+ 7%

2008 avg. - $150.78

(as of 11-1-10)

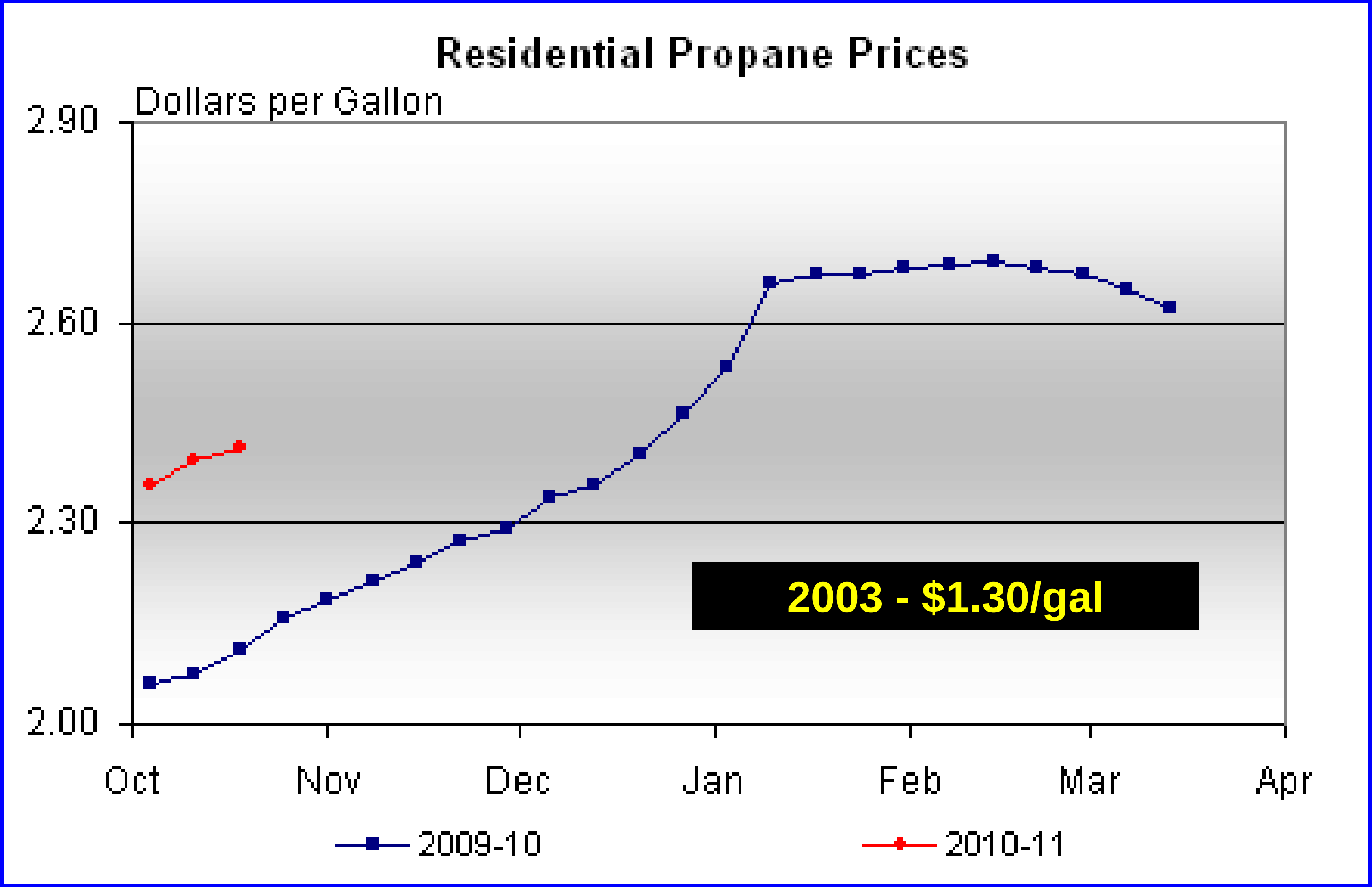
 # Base rate adjustment since 11/01/09
*** Gas cost adjusted monthly**
**** Gas cost last adjusted for September; others for November**

Why do prices vary among companies?

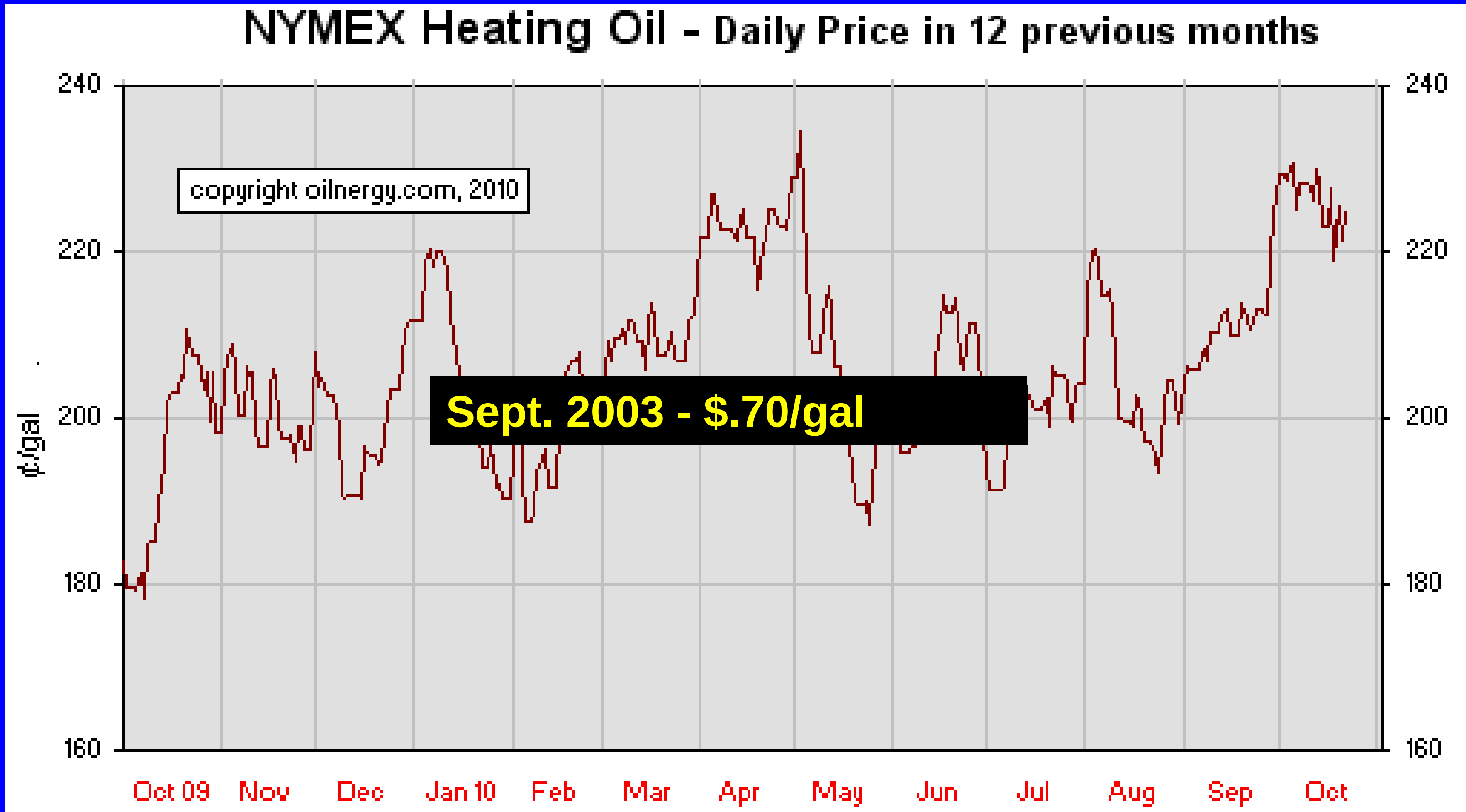
- Base rate changes
- Adjustment factors
- Timing of adjustments
- Availability of on-system storage
- Access to multiple pipelines

Prices appear to be stable for medium term –

Henry Hub futures at $4 to $7 per mcf through April 2016



10% of Kentucky households



Sept. 2003 - $.70/gal

3% of Kentucky households

Winter heating costs:

- Weather – will drive consumption
- Consumption will drive wholesale costs
- Ultimately, individual bills will be determined by individual consumption

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 Health & Family Services - 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

- Dept. for Energy Development & Independence
  - Energy statistics
  - Energy efficiency and conservation programs
- Community Action Kentucky
  - Weatherization assistance
- Cabinet for Health & Family Services
  - LIHEAP information
- UK, UofL & others
  - Energy research

On the Web

Energy efficiency/conservation

http://energy.ky.gov/efficiency/

Assistance programs

- Weatherization assistance

http://www.communityactionky.org/WhatWeDo/EnergyAssistance/Weatherization/tabid/356/Default.aspx

- LIHEAP information

http://chfs.ky.gov/dcbs/dfs/LIHEAP.htm

General information, consumer complaints

http://psc.ky.gov

Contact information:

Andrew Melnykovych

Communications Director

Kentucky Public Service Commission

211 Sower Boulevard, Frankfort KY 40602

502-564-3940 x208

Andrew.Melnykovych@psc.ky.gov

Questions?

naturalgasbriefing@ky.gov