

Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: October 16, 2008..... **Agenda Item #** 7

Companies: All Commission-Regulated Natural Gas Utilities

Docket No. N/A

Issue: Discussion of Short-Term Outlook for Natural Gas for the 2008-2009 Heating Season

Staff: Robert C. Harding..... 651-201-2237

Relevant Document

National Association of Regulatory Utility Commissioners (“NARUC”)
2008 Natural Gas Information Toolkit September 2008

The attached materials are work papers of the Commission Staff. These work papers are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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October 9, 2008

Statement of the Issue

Discussion of the Short-Term Outlook for Natural Gas for the 2008-2009 Heating Season

Background

In the second week of October of each year, the U.S. Department of Energy, Energy Information Administration (“EIA”) releases an expanded version of its monthly short-term energy outlook (STEO).¹ The EIA’s October 2008 Short-Term Energy and Winter Fuels Outlook provides a forecast of winter fuel prices. This forecast is widely reported in the press and is usually released in conjunction with the annual meetings of the National Association of State Energy Officials (“NASEO”). A copy of the EIA Short-Term Energy and Winter Fuels Outlook can be found on the Internet at <http://www.eia.doe.gov/emeu/steo/pub/oct08.pdf> where there is also a link to the slide presentation that EIA gave at the NASEO winter outlook conference.

The Natural Gas Supply Association (“NGSA”) also prepares a winter outlook (as well as a summer outlook in the spring.) NGSA identified several factors that contribute to whether gas prices will be higher, lower, or much the same as the previous winter. Those factors are weather, the economy, overall demand, storage, and overall supply. Because NGSA is a trade association it does not forecast prices but it does include, in its winter outlook materials, a summary of short-term price forecasts prepared by government and for-profit forecasters. A copy of NGSA’s 2008-2009 Winter Outlook can be found on the Internet at http://www.ngsa.org/facts_studies/winter_outlook_2008.asp.

The Federal Energy Regulatory Commission (“FERC”), Office of Enforcement also prepares a monthly energy market assessment that includes natural gas related information. A copy of the midwest states version of the FERC’s October 2008 market snapshot can be found on the Internet at <http://www.ferc.gov/market-oversight/mkt-snp-sht/2008/10-2008-snapshot-mw.pdf>.

The National Association of Regulatory Utility Commissioners (“NARUC”) has released its 2008 Natural Gas Information Toolkit (“Toolkit”). The NARUC toolkit was revised this year because of extremely high spring and summer 2008 natural gas prices. The toolkit contains a lot of excellent information and ideas which staff will not try to summarize. Pages five through ten of toolkit contain a discussion of price forecasts, and pages eleven through fifteen contain a discussion of what can be done to address the problem of high and volatile gas prices. The toolkit is the only identified “relevant document” for this agenda item. A copy of the toolkit can also be found on the Internet at <http://www.naruc.org/Publications/GasToolkit2008.pdf>.

It should be noted that Minnesota will receive \$144.5 million in federal funds for its Low-Income Home Energy Assistance Program (“LIHEAP”) for 2008-2009. This “is almost double the normal appropriation for Minnesota.” In addition, a “new allocation of \$16 million” will allow the state to expand funding for low income weatherization projects.

¹ EIA also issues an expanded short-term energy and summer fuels outlook in April of each year.

Discussion

The relevant documents for this discussion item provide volumes of data and related information about natural gas and other energy prices, as well as other related information. This data is provided as a point of reference for reviewing how well prepared utilities, consumers, and state and other public agencies are for the winter heating season. Staff considers this an opportunity for Commissioners to ask the gas utilities about their plans and preparations for the 2008-2009 heating season, including steps they've taken to prepare their customers for colder weather and higher bills.

As can be seen from the attached chart, spot prices were extremely high throughout the summer of 2008 (over \$10) until August. Since then, prices have declined. Various reasons for the decline have been suggested but most of the explanations attribute the 40% decline to increases in supply (and production), primarily from unconventional sources, and in particular shale gas.

EIA expects spot gas prices this winter at the Henry Hub to average \$8.96 per Mcf under its base case forecast. EIA also forecasted a range of expected values, from \$7.66 to \$10.55 per Mcf, that depend on whether temperatures are 10 percent warmer or 10 percent colder than expected.

In its October 2008 Report, EIA predicted that

“In the Midwest, where 72 percent of all households rely on natural gas, a projected 17-percent increase in average household expenditures results from a 19-percent increase in prices and a decline in consumption of 2 percent due to the forecast of slightly warmer weather than last winter.”

As can be seen from the two previous items on the October 16 agenda, the prices consumers pay are largely a result of the gas purchasing strategy employed by their utility, and the strategies employed by Minnesota LDCs vary. If the utility relies primarily on first-of-the-month indexed or some other type of spot supply then the prices the consumer pays will track the spot price of gas. If, on the other hand, the LDC employs a price hedging strategy (using physical or financial contracts), the prices its customers pay during the winter will be less volatile and will not track the spot price of gas as closely as they otherwise would.

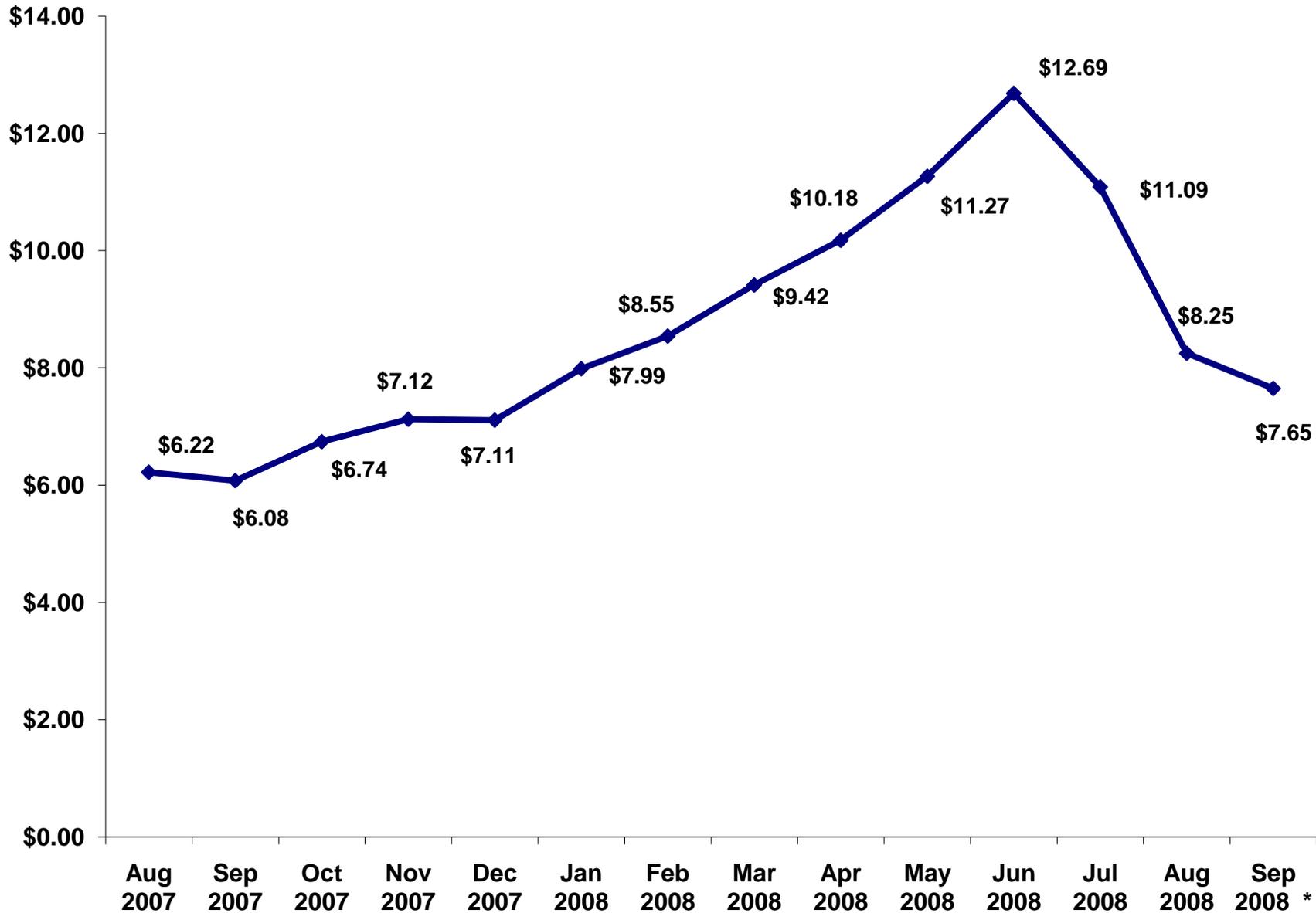
For example, if 50 percent of the LDC's winter gas supply is taken from physical storage (purchased at summer prices) or is hedged using financial instruments or contract pricing terms, then 50 percent of the gas delivered to customers will be at prices determined earlier in the year, including in June 2008 when gas prices were at their highest.

It appears that for several years in a row gas prices have not peaked in mid-winter during the heating season. In calendar year 2008, for example, gas prices peaked in June 2008. If this pattern persists, then it may be predictably uneconomic for Minnesota LDCs to continue using price hedging tools to lock in summer prices for the following winter.

Note

The following charts and graphs were copied from the reports described in the background section of this memo.

NATURAL GAS SUPPLY ASSOCIATION HISTORIC MONTHLY AVERAGE HENRY HUB NATURAL GAS PRICES



Source: Gas Daily,

* Prices through September 29, 2008

Natural Gas Winter Futures Strip and Daily Henry Hub Spot and Bidweek Prices



Source: Derived from *Platts* and *Nymex* data.
October 2008 Midwest Snapshot Report

Natural gas prices are expected to be higher than last winter.

Henry Hub Winter Average Spot Price

10% Colder = \$10.55/ mcf

Base Case = \$8.96/ mcf

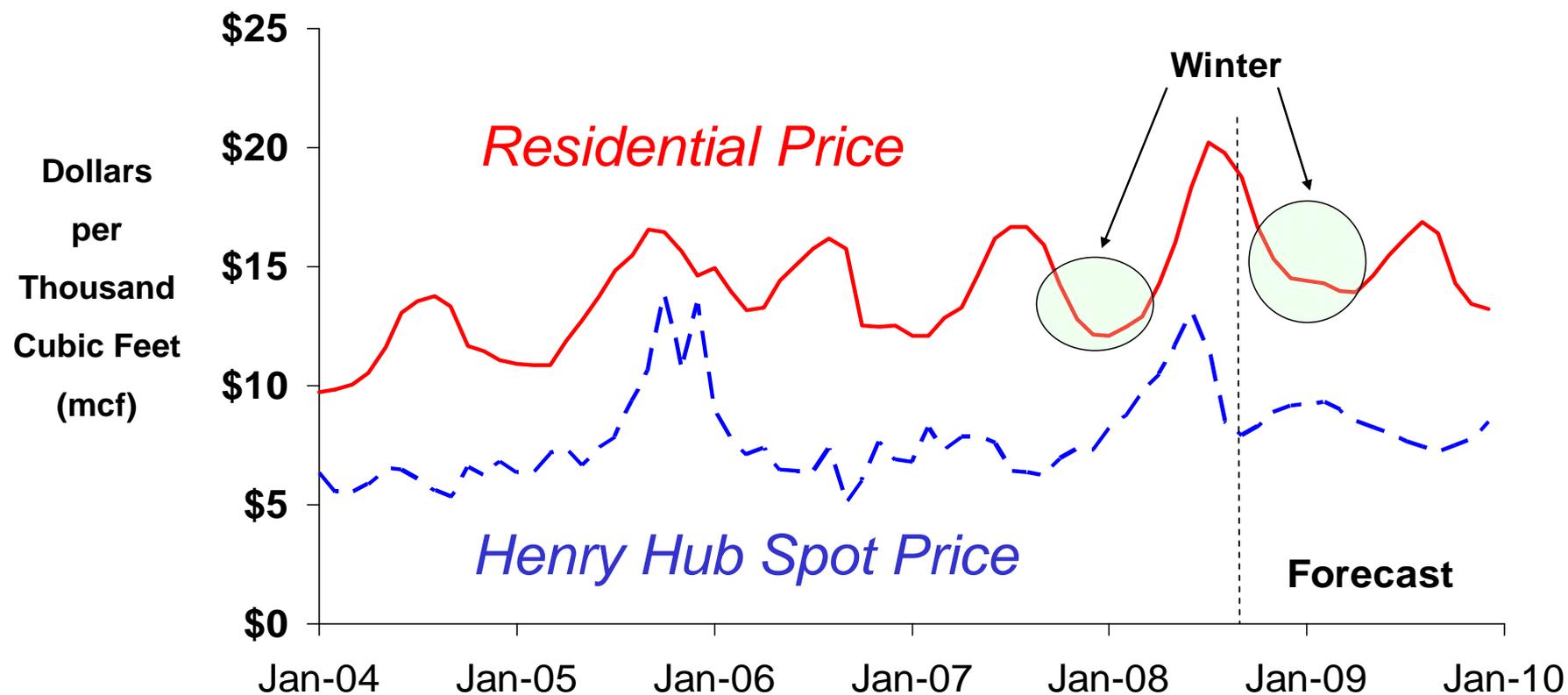
10% Warmer = \$7.66/ mcf

Residential Winter Average Price

10% Colder = \$15.22/ mcf

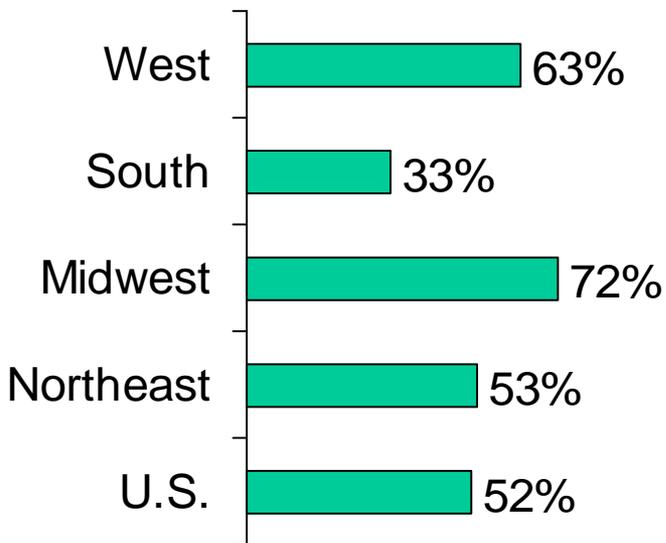
Base Case = \$14.82/ mcf

10% Warmer = \$14.17 mcf



Natural gas heating bills are projected to be higher for all regions this winter.

Households using natural gas as primary heating fuel



Percent Change from Last Winter (Projected)

	Consumption	Average Price	Total Expenditures
West	-2%	+15%	+13%
South	+7%	+18%	+26%
Midwest	-2%	+19%	+17%
Northeast	+6%	+12%	+19%
U.S. Average	+1%	+17%	+18%

This season's winter outlook

Winter season
Period-to-period change

This winter
2008-2009
FORECAST

Weather



Economy



Overall demand



Storage



Overall supply



**Winter-to-winter pressure
on natural gas prices**

