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Dianne B. Kuhnell. Senior Paralegal

VIA HAND DELIVERY

May 13, 2010

Jeff Derouen
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

Re: Case No. 2008-00175

RECEIVED

MAY 1 4 2010

PUBLIC SERVICE COMMISSION

Dear Mr. Derouen:

Enclosed please find an original and twelve copies of *Duke Energy Kentucky, Inc.'s Final Report on Hedging Activity for April 1, 2009 through March 31, 2010 and Interim Report* and the *Petition of Duke Energy Kentucky, Inc. for Confidential Treatment Contained in the Hedging Report of April 1, 2009 through March 31, 2010, and Interim Report on Ongoing Hedging Activity.* Also enclosed is one copy of the Confidential Material (Attachment A and Report) to be Filed Under Seal as requested in the Petition for Confidential Treatment.

Please date-stamp the extra two copies of the Report and Petition and return to me in the enclosed envelope.

Sincerely,

Dianne Kuhnell Senior Paralegal

cc: Larry Cook (w/enclosures)

COMMONWEALTH OF KENTUCKY

RECEIVED

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

MAY 1 4 2010

In the Matter of:

PUBLIC SERVICE COMMISSION

APPLICATION OF)	
DUKE ENERGY KENTUCKY, INC. TO)	
IMPLEMENT A HEDGING PROGRAM)	CASE NO. 2008-00175
TO MITIGATE PRICE VOLATILITY)	
IN THE PROCUREMENT OF)	
NATURAL GAS)	

PETITION OF DUKE ENERGY KENTUCKY, INC.
FOR CONFIDENTIAL TREATMENT OF INFORMATION CONTAINED IN
THE HEDGING REPORT OF APRIL 1, 2009 THROUGH MARCH 31, 2010,
AND INTERIM REPORT ON ONGOING GAS HEDGING ACTIVITY

Duke Energy Kentucky, Inc. (Duke Energy Kentucky), pursuant to 807 KAR 5:001, Section 7, respectfully requests the Commission to classify and protect as confidential certain information that is contained in its Final Hedging Report for the Period of April 1, 2009 through March 31, 2010 and Interim Report on Ongoing Gas Hedging Activity Program (Report Period) in this proceeding, which is being filed contemporaneously with this petition. In support thereof, Duke Energy Kentucky states:

1. Duke Energy Kentucky has filed today documents containing sensitive and confidential information relating to the volumes of gas that Duke Energy Kentucky purchased through the use of hedging instruments for its hedging plan. Disclosure of this information would damage Duke Energy Kentucky by alerting suppliers as to how much gas Duke Energy Kentucky intends to purchase through hedging instruments at any particular point in time, which could allow suppliers to raise the cost of their hedging

instruments to Duke Energy Kentucky, thus making it more costly to Duke Energy Kentucky to acquire hedging instruments for future gas supply. As required by 807 KAR 5:001, Section 7(2)(b), Duke Energy Kentucky is providing one copy of the hedging program volume information under seal.

- 2. The Kentucky Open Records Act exempts from disclosure certain commercial information. KRS 61.878 (1)(c). To qualify for this exemption and, therefore, maintain the confidentiality of the information, a party must establish that disclosure of the commercial information would permit an unfair advantage to competitors of that party.
- 3. The hedging volume information described above contains sensitive commercial information, the disclosure of which would injure Duke Energy Kentucky for the reasons stated above. Duke Energy Kentucky's purchases of hedging instruments are confidential. Public release of this information would allow other suppliers to have access to this information and could enable such suppliers to charge higher prices to Duke Energy Kentucky for hedging instruments. The Commission previously granted confidential treatment to similar information on October 8, 2009.
- 4. The information for which Duke Energy Kentucky is seeking confidential treatment is not known outside of Duke Energy Kentucky, and it is not disseminated within Duke Energy Kentucky except to those employees with a legitimate business need to know and act upon the information.
- 5. The public interest will be served by granting this Petition, in that Duke Energy Kentucky's ability to obtain low cost gas supplies will be fostered and the cost of gas to Duke Energy Kentucky's customers will thereby be minimized.

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission classify and protect as confidential the specific information described herein.

Respectfully submitted,

DUKE ENERGY KENTUCKY, INC.

Rocco O. D'Ascenzo Senior Counsel Amy B. Spiller Associate General Counsel Duke Energy Shared Services, Inc. 2500 Atrium II 139 East Fourth Street Cincinnati, OH 45201-0960 (513) 419-1852

e-mail: rocco.d'ascenzo@duke-energy.com

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing Petition for Confidential Treatment was served to the parties listed below by regular United States mail, postage prepaid, this 13th day of May, 2010.

day of May, 2010.

Hon. Larry Cook Assistant Attorney General Capital Center Drive, Suite 200 Frankfort, Kentucky 40601-8204

BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

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MAY 1 4 2010

PUBLIC SERVICE

COMMISSION

Annual Report on Hedging Activity
For April 1, 2009 – March 31, 2010
And Report on Hedging Activity
For Future Gas Deliveries

By Duke Energy Kentucky

May, 2010

The Senior Vice President Ohio and Kentucky Gas Operations, General Manager of Gas Commercial Operations, Manager of Gas Resources, the Lead of Gas Procurement and Analysis and other personnel (Natural Gas Hedging Committee) met on a regular basis to review current market conditions for natural gas, short and long-term weather forecasts, gas industry trade publications, and price estimates to determine whether to enter into any hedging transactions. These meetings were scheduled at least monthly, but can occur more frequently depending on the season and market conditions. A brief summary of the decision made at each of these meetings during the 12 months ended March 2010 is attached, along with the information reviewed during each meeting (see Attachment A).

A summary of the amounts hedged for delivery during the 12 months ended March 31, 2010 and hedged prior to March 31, 2010 for delivery at a later date is shown below, followed by details of the factors influencing Duke Energy Kentucky, Inc's ("Duke Energy Kentucky") decision to enter into a hedging agreement each time.

Strike		I	Price	Delivery	Volume		Seasonal
Date	Supplier	Type	Per Dth	Point	Dth/day	Month(s)	Volume
							
Summer 2009							i
3/6/2007*		Fixed	多型型型器的	CGT-M		Nov 07 – Oct 09	
10/16/2007**		Fixed		CGT-M		Nov 08 – Mar 10	
10/22/2008***		Fixed	\$4.5	CGT-M		Apr 09 – Mar 10	医阴茎虫 美
12/3/2008***		Fixed		CGT-M		Apr 09 – Mar 11	
1/26/2009***		Collar		CGT-M		Apr 09 – Mar 11	
Winter 2009/10							
10/16/2007**		Fixed		CGT-M		Nov 08 – Mar 10	
3/19/2008**		Fixed		CGT		Nov 09 – Oct 10	
10/22/2008***		Fixed		CGT-M		Apr 09 –Mar 10	
12/3/2008***		Fixed		CGT-M		Apr 09 – Mar 11	
1/26/2009***		Collar		CGT-M		Apr 09 – Mar 11	
4/8/2009		Fixed		CGT-M		Nov 09 – Oct 11	
7/7/2009		Cst Avg		CGT-M	Mark Sept.	Dec 09 – Feb 10	
11/3/2009		Fixed	Richtschafter	CGT-M		Dec 09 – Feb 10	
S.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Summer 2010 3/19/2008**	\$4,5 pt. 103.0 gf	Fixed		CGT		Nov 09 – Oct 10	
12/3/2008***		Fixed					_ = = = = = = = = = = = = = = = = = = =
1/26/2009***				CGT-M		Apr 09 – Mar 11	- 63 33
		Collar		CGT-M		Apr 09 – Mar 11	
4/8/2009		Fixed		CGT-M		Nov 09 – Oct 11	
11/17/2009		Fixed		CGT-M		Jun 10 - Aug 10	
2/24/2010		Fixed		CGT-M	L RESIDE	Apr 10 – Sep 10	
					~		
Winter 2010/11							
12/3/2008***	Prince Alle	Fixed	10.370 (9.3	CGT-M	14 14 1 <u>4 1</u>	Apr 09 – Mar 11	1300 700
1/26/2009***		Collar		CGT-M		Apr 09 – Mar 11	
4/8/2009		Fixed		CGT-M		Nov 09 – Oct 11	
11/17/2009		Fixed		CGT-M		Nov 10 – Oct 12	
2/24/2010		Fixed		CGT-M	- 4.5 i. i.	Dec 10 -Feb 11	
		1					

Strike			Price	Delivery	Volume		Seasonal
Date	Supplier	Туре	Per Dth	Point	Dth/day	Month(s)	Volume
Summer 201	1						
4/8/2009	195g 增加的	Fixed	14683236	CGT-M		Nov 09 - Oct 11	
9/9/2009		Fixed		CGT-M		Apr 11 – Mar 12	
11/17/2009	And	Fixed		CGT-M	2000年	Nov 10 - Oct 12	1.4
Winter 2011	/12						
9/9/2009		Fixed		CGT-M	T Project	Apr 11 – Mar 12	10多色的
11/17/2009		Fixed		CGT-M		Nov 10 - Oct 12	
							1844

- * See Annual Report on Hedging Activity for April 1, 2006 March 31, 2007
- ** See Annual Report on Hedging Activity for April 1, 2007 March 31, 2008
- *** See Annual Report on Hedging Activity for April 1, 2008 March 31, 2009

CGT = Columbia Gulf Transmission South Louisiana Onshore CGT-M = Columbia Gulf Transmission Mainline

There were no transactional costs associated with any of these arrangements. When the natural gas is delivered, the suppliers simply invoice Duke Energy Kentucky based on the hedged price. The portions of system supply hedged for each season are listed in the table below, along with the percentage including storage:

Season As of March 31, 2010	Total System	Total Hedged	%	% Hedged
AS OF MIARCH 31, 2010	Supply		Hedged	And Storage*
Summer 2009				
Winter 2009/10	oking gradient to the state of		\$0.885 c. 155 21.457 d. 15	
Summer 2010			50.0	\$ 48 K
Winter 2010/11				
Summer 2011				
Winter 2011/12				
Summer 2012	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			

^{*} Includes Interstate Pipeline Storage and Supply Contracts that mimic Storage Service.

2 Year Fixed Price with — April 8, 2009

During the hedging meeting on March 19, 2009, the Natural Gas Hedging Committee decided that additional hedging should take place after the hedging levels of the Hedging Program change on April 1, 2009. In addition, during the hedging meeting, a proposal was made to use World Energy Exchange, an online auction, for this transaction. After significant discussion, the Natural Gas Hedging Committee decided to seek bids using World Energy Exchange for the long term fixed price in the first half of April for 1,000 dth per day to be delivered at Columbia Gulf Mainline from November 1, 2009 through October 31, 2011.

World Energy Exchange invited 14 of Duke Energy Kentucky's suppliers to participate in the online auction. On April 8, 2009, the auction opened at 11:00 A.M. and closed at 11:15 A.M. Five suppliers participated in the online auction and was the lowest bidder at fixed price bid of was accepted. Subsequent to the auction, the decision was made not to continue using World Energy Exchange auction process. It was determined that based on Duke Energy's deal structures, the auction process and Duke Energy's prior bidding mechanism, would result in similar to lower bids based on the fees associated with the auction. (Fees were paid by the winning bidder and included in the price.)

The EIA storage report released on April 2, 2009 indicated that as of March 27, 2009, total U.S. amount of gas in storage was 1,654 bcf (37% full), which was 402 bcf higher than the previous year and 303 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately pocf (full).

The table below compares the futures price data for April 8th with the most recently available forecasts from CERA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay Please note that EIA's forecast did not cover the entire term.

	Price F	orecasts	NYM	Fixed		
Month	CERA	EIA	High	Low	Close	Price
Nov 09	\$3.890	\$4.900	\$4.834	\$4.834	\$4.834	
Dec 09	\$3.860	\$5.320	\$5.454	\$5.454	\$5.454	
Jan 10	\$3.910	\$5.520	\$5.724	\$5.724	\$5.724	
Feb 10	\$3.950	\$5.830	\$5.749	\$5.749	\$5.749	
Mar 10	\$4.120	\$5.830	\$5.669	\$5.669	\$5.669	
Apr 10	\$4.270	\$5.750	\$5.484	\$5.484	\$5.484	
May 10	\$4.400	\$5.570	\$5.532	\$5.532	\$5.532	
Jun 10	\$4.320	\$5.550	\$5.647	\$5.590	\$5.647	
Jul 10	\$4.350	\$5.530	\$5.767	\$5.767	\$5.767	
Aug 10	\$4.090	\$5.510	\$5.837	\$5.837	\$5.837	
Sep 10	\$4.500	\$5.340	\$5.869	\$5.869	\$5.869	
Oct 10	\$5.050	\$5.700	\$5.964	\$5.964	\$5.964	
Nov 10	\$4.550	, \$5.930	\$6.319	\$6.319	\$6.319	
Dec 10	\$4.450	\$6.400	\$6.704	\$6.704	\$6.704	
Jan II	\$4.300		\$6.944	\$6.944	\$6.944	
Feb 11	\$4.180		\$6.949	\$6.949	\$6.949	
Mar II	\$4.310	41. 21.	\$6.759	\$6.759	\$6.759	
Арг 11	\$5.360		\$6.314	\$6.314	\$6.314	
May II	\$6.670		\$6.299	\$6.299	\$6.299	
Jun 11	\$7.370		\$6.384	\$6.384	\$6.384	
Jul 11	\$7.950		\$6.479	\$6.479	\$6.479	
Aug II	\$8.030		\$6.549	\$6.549	\$6.549	
Sep 11	\$7.350		\$6.579	\$6.579	\$6.579	
Oct 11	\$6.770		\$6.669	\$6.669	\$6.669	
2 Year Average	\$5.083		\$6.103	\$6.101	\$6.103	13468 APR

December 2009-February 2010 Cost Averaging with July 7, 2009

During the hedging meeting on June 30, 2009, the Natural Gas Hedging Committee
decided to begin the cost averaging to accumulate a price between July 15, 2009 and
September 30, 2009. Bids were sought for December 2009 through February 2010 for 5,000
dth per day to be delivered at Columbia Gulf Mainline.
were each contacted by phone on July 6, 2009 requesting a bid at 11:00 A.M. on July 7,
2009. bid was bid was - bid was - and bid was -
bid was accepted. The price would be the average of the NYMEX closing price for
the December 2009, January 2010, and February 2010 NYMEX contracts from July 15, 2009
through September 30, 2009 minus \$0.09 for 5,000 dth/day delivered to Columbia Gulf
Mainline. The final result was a price of per dth. (See Attachment B).

1 Year Fixed Price with - September 9, 2009

During the hedging meeting on August 26, 2009, discussion focused on the fundamentals of the market. In addition, the Natural Gas Hedging Committee discussed the record storage levels and the impact on prices as well as the spread between prompt month and Winter 09/10 and Summer 2010 NYMEX prices. The Natural Gas Hedging Committee decided to hedge additional volumes for the Summer 2011 and Winter 2011/12.

Due to the illiquidity of the market beyond the next season, Duke Energy Kentucky used the same technique as in previous long term fixed prices. Three suppliers were contacted and told to expect a call from Duke Energy Kentucky at 11:00 am on September 9, 2009. Was the lowest bidder at the lowest bidding and respectively. The fixed price with was selected as the lowest bid.

The EIA storage report released on September 3, 2009 indicated that as of August 28, 2009, total U.S. amount of gas in storage was 3,323 bcf (74% full), which was 489 bcf higher than the previous year and 501 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately bcf (1995).

The table below compares the futures price data for September 9th with the most recently available forecasts from CERA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay Please note that EIA's forecast did not cover the term.

	Price Forecasts NYMEX Future			EX Futures F	rice	Fixed
Month	CERA	EIA	High	Low	Close	Price
Apr 11	\$5.360		\$6.140	\$6.034	\$6.034	
May 11	\$6.670		\$6.110	\$6.004	\$6.004	
Jun 11	\$7.370		\$6.190	\$6.084	\$6.084	
Jul 11	\$7.950		\$6.174	\$6.174	\$6.174	
Aug 11	\$8.030		\$6.350	\$6.244	\$6.244	
Sep 11	\$7.350		\$6.330	\$6.274	\$6.274	
Oct 11	\$6.820		\$6.405	\$6.359	\$6.359	
Nov II	\$6.760		\$6.609	\$6.609	\$6.609	

	Price Fo	orecasts	NYME	Fixed		
Month	CERA	EIA	High	Low	Close	Price
Dec 11	\$6.610		\$6.904	\$6.904	\$6.904	
Jan 12	\$6.400		\$7.119	\$7.050	\$7.119	
Feb 12	\$6.320		\$7.119	\$7.119	\$7.119	
Mar 12	\$6.230		\$6.909	\$6.909	\$6.909	_
1 Year Avg	\$6.823		\$6.530	\$6.480	\$6.486	74 W.

Winter 2009-10 Fixed Price with ____ November 3, 2009

During the hedging meeting on October 23, 2009, discussed market fundamentals and the significant increase in NYMEX over the past several weeks and that the "Bulls" seem to be in control of the market, even though the fundamentals remain bearish. At that time a decision was reached not to hedge additional volumes due to a run-up in NYMEX prices, but instead to monitor the market for significant price movements. On November 3, 2009, members of the Natural Gas Hedging Committee met to discuss additional hedging in light of changing market conditions. NYMEX prices for the December 2009—Febraury 2010 strip had decreased significantly from the October 23, 2009 meeting of the based on the November 2nd close price. After discussing pricing information and the position in the Kentucky Hedging Program a determination was made to hedge additional volumes by converting FOMI base gas to a fixed price. A portion of the supply from at Columbia Gulf Mainline would be converted from FOMI to a fixed price of the December 2009 through February 2010.

The EIA storage report released on October 29, 2009 indicated that as of October 23, 2009, total U.S. amount of gas in storage was 3,759 bcf (83% full), which was 373 bcf higher than the previous year and 414 bcf higher than the five-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately bcf (100 full).

The table below compares the futures price data for November 3rd with the most recently available forecasts from CERA and EIA and the locked in price that Duke Energy Kentucky agreed to pay for base gas to be delivered December 1, 2009 through February 28, 2010 at Columbia Gulf Mainline.

	Dec 09	Jan 10	Feb 10	Average						
Price Forecasts										
CERA (10/26/09)	\$3.53	\$3.70	\$3.61	\$3.613						
EIA (10/06/09)	\$4.23	\$4.70	\$4.98	\$4.637						
NYMEX (11/03/09)	NYMEX (11/03/09)									
High	\$4.922	\$5.248	\$5.296	\$5.155						
Low	\$4.820	\$5.130	\$5.215	\$5.055						
Close	\$4.922	\$5.248	\$5.296	\$5.155						
Fixed Price (11/03/2009)										
dth/day 12										

2 Year Fixed Price with - November 17, 2009

During the hedging meeting on November 13, 2009, discussions focused on market fundamentals such as the warm November temperatures impact on the NYMEX price, storage levels, and economic factors such as supply and demand as well as spreads between current NYMEX prices and historical prices. In addition, discussed the Kentucky Hedging program and that the levels had changed November 1st. Based on this information the Natural Gas Hedging Committee decided that additional hedging was appropriate at this time. The term of the hedging would be for a 24 month period beginning November 1, 2010 through October 31, 2012, and the delivered at Columbia Gulf Mainline. Three suppliers were contacted and asked to bid on this deal. The results were:

The EIA storage report released on November 13, 2009 indicated that as of November 6, 2009, total U.S. amount of gas in storage was 3,813 bcf (84% full), which was 350 bcf higher than the previous year and 409 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately total full).

The table below compares the futures price data for November 17th with the most recently available forecasts from CERA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay

Please note that EIA's forecast did not cover the entire term.

	Price F	orecasts	NYM	EX Futures	Fixed	
Month	CERA	EIA	High	Low	Close	Price
Nov 10	\$4.090	\$5.500	\$6.060	\$5.945	\$5.970	
Dec 10	\$4.200	\$6.000	\$6.460	\$6.330	\$6.355	
Jan I I	\$4.240		\$6.665	\$6.575	\$6.580	
Feb 11	\$4.330		\$6.642	\$6.550	\$6.570	
Mar II	\$4.460		\$6.469	\$6.390	\$6.400	
Apr 11	\$5.210		\$6.015	\$5.947	\$5.965	
May 11	\$5.230	4 1	\$5.990	\$5.930	\$5.930	
Jun 11	\$5.240	*****	\$5.985	\$5.985	\$5.985	
Jul 11	\$5.500	7.6	\$6.055	\$6.050	\$6.050	
Aug 11	\$5.650	200	\$6.115	\$6.115	\$6.115	
Sep 11	\$5.580		\$6.150	\$6.150	\$6.150	
Oct 11	\$5.270		\$6.310	\$6.249	\$6.260	
Nov II	\$5.880		\$6.592	\$6.540	\$6.540	
Dec 11	\$6.160	表现的	\$6.880	\$6.820	\$6.820	
Jan 12	\$6.210		\$7.090	\$7.020	\$7.020	
Feb 12	\$6.260		\$7.080	\$7.010	\$7.010	
Mar 12	\$6.270	装模 (1)	\$6.850	\$6.780	\$6.780	
Apr 12	\$5.650		\$6.160	\$6.160	\$6.160	
May 12	\$5.660		\$6.105	\$6.105	\$6.105	
Jun 12	\$5.850		\$6.160	\$6.160	\$6.160	
Jul 12	\$6.060		\$6.225	\$6.225	\$6.225	
Aug 12	\$6.470		\$6.285	\$6.285	\$6.285	
Sep 12	\$6.450		\$6.315	\$6.315	\$6.315	
Oct 12	\$5.700	有一种	\$6.420	\$6.420	\$6.420	
2 Year Average	\$5.484		\$6.378	\$6.336	\$6.340	

Summer 2010 Fixed Price with November 17, 2009

During the hedging meeting on November 13, 2009, discussions focused on market fundamentals such as the warm November temperatures impact on the NYMEX price, storage levels, and economic factors such as supply and demand as well as spreads between current NYMEX prices and historical prices. In addition, discussed the Kentucky Hedging program and that the levels had changed November 1st. Based on this information the Natural Gas Hedging Committee decided that additional hedging was appropriate at this time. Duke Energy Kentucky contacted and requested a bid on dth/day on Columbia Gulf Mainline for the period beginning June 1, 2010 through August 31, 2010. The sponded with a bid of the Based on the NYMEX prices and the basis spread at that time, the bid met the requirements of Duke Energy Kentucky and the offer was accepted.

The EIA storage report released on November 13, 2009 indicated that as of November 6, 2009, total U.S. amount of gas in storage was 3,813 bcf (84% full), which was 350 bcf higher than the previous year and 409 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately bcf (1996) full).

The table below compares the futures price data for November 17th with the most recently available forecasts from CERA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay

	Jun 10	Jul 10	Aug 10	Average
Price Forecasts				
CERA (10/26/09)	\$4.06	\$4.28	\$4.28	\$4.207
EIA (11/10/09)	\$4.55	\$4.48	\$4.41	\$4.480
NYMEX (11/17/09)				
High	\$5.301	\$5.413	\$5.459	\$5.391
Low	\$5.155	\$5.255	\$5.335	\$5.248
Close	\$5.175	\$5.281	\$5.359	\$5.272
Fixed Price (11/17/2009)			
dth/day 6	0.000			

Summer 2010 Fixed Price with February 24, 2010

During the hedging meeting on February 24, 2010, discussions focused on market fundamentals such as the drop in NYMEX prices and the impact of increased number of drilling rigs in the field, long-term and short-term weather forecasts, independent analysts projections for gas prices, storage levels, and economic factors such as supply and demand. In addition, discussed the position of the Kentucky Hedging program. Based on this information the Natural Gas Hedging Committee decided that additional hedging was appropriate at this time. Duke Energy Kentucky contacted and requested a bid on dth/day on Columbia Gulf Mainline for the period beginning April 1, 2010 through September 30, 2010. Tresponded that they were not interested in bidding. As a result, was contacted.

the NYMEX prices and the basis spread at that time, the bid met the requirements of Duke Energy Kentucky and offer was accepted.

The EIA storage report released on February 18, 2010 indicated that as of February 12, 2010, total U.S. amount of gas in storage was 2,025 bcf (45% full), which was 26 bcf higher than the previous year and 53 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately bcf (full).

The table below compares the futures price data for February 24th with the most recently available forecasts from PIRA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay

	Price F	orecasts	NYM	Fixed		
Month	PIRA	EIA	High	Low	Close	Price
Apr 10	\$5.300	\$5.200	\$4.880	\$4.840	\$4.859	
May 10	\$5.500	\$5.130	\$4.993	\$4.859	\$4.927	•
Jun 10	\$5.700	\$5.090	\$5.067	\$4.942	\$5.005	
Jul 10	\$6.000	\$4.990	\$5.140	\$5.086	\$5.086	
Aug 10	\$6.000	\$5.070	\$5.190	\$5.146	\$5.146	
Sep 10	\$5.800	\$5.210	\$5.225	\$5.181	\$5.181	
Average	\$5.717	\$5.115	\$5.083	\$5.009	\$5.034	944675

December 2010-February 2011 Fixed Price with

- February 24, 2010

During the hedging meeting on February 24, 2010, discussions focused on market fundamentals such as the drop in NYMEX prices and the impact of increased number of drilling rigs in the field, long-term and short-term weather forecasts, independent analysts projections for gas prices, storage levels, and economic factors such as supply and demand. In addition, discussed the position of the Kentucky Hedging program. Based on this information the Natural Gas Hedging Committee decided that additional hedging was appropriate at this time. Duke Energy Kentucky contacted and requested a bid on dth/day on Columbia Gulf Mainline for the period beginning December 1, 2010 through February 28, 2011. Tenaska responded with a bid of an absolute Based on the NYMEX prices and the basis spread at that time, the bid met the requirements of Duke Energy Kentucky and offer was accepted.

The EIA storage report released on February 18, 2010 indicated that as of February 12, 2010, total U.S. amount of gas in storage was 2,025 bcf (45% full), which was 26 bcf higher than the previous year and 53 bcf higher than the 5-year average. Duke Energy Kentucky's storage with Columbia Gas was approximately bcf (full).

The table below compares the futures price data for February 24th with the most recently available forecasts from PIRA and EIA and the locked in prices that Duke Energy Kentucky agreed to pay

	Dec 10	Jan 11	Feb 11	Average
Price Forecasts				
PIRA (2/23/10)	\$6.00	\$6.00	\$5.80	\$5.933
EIA (2/10/10)	\$6.10	\$6.37	\$6.34	\$6.270
NYMEX (2/24/10)				
High	\$5.940	\$6.165	\$6.130	\$6.078
Low	\$5.900	\$6.131	\$6.096	\$6.042
Close	\$5.906	\$6.131	\$6.096	\$6.044
Fixed Price (2/24/2010)				
dth/day 12	1865.0996			

Effect of Hedging Program on Gas Costs

The effect of the hedging activity on gas cost can be determined by comparing the price paid for any hedged gas with the published Inside FERC First of Month Index (FOMI) for the delivery point where physical delivery of the hedged gas was received (Columbia Gulf Onshore or Columbia Gulf Mainline). The hedged price includes the basis from Henry Hub to the point of delivery. This analysis shows that for the 12 months ended March 31, 2010 gas costs were about \$8.3 million higher when comparing the hedged price with the FOMI at the time of physical delivery than they would have been if no hedging had taken place. The following tables list each package of hedged gas and the impact on the total gas cost resulting from that hedge.

Summer Season 2009

			, , , , , , , , , , , , , , , , , , , 				
			Total	Receipt	Hedged Price	IFERC FOMI	Cost increase/
Supplier	Type	Dth/day	Dth	Point	\$/dth	\$/dth	(Savings)
Anril							
Fixed			KARATA DE LA COMPANIA DEL COMPANIA DEL COMPANIA DE LA COMPANIA DE LA COMPANIA DE LA COMPANIA DEL COMPANIA D	CGT-M		\$3.58	
Fixed				CGT-M		\$3.58	
Fixed				CGT-M		\$3.58	
Collar	(4/2 / 18/ m			CGT-M		\$3.58	
Fixed		5.44	177	CGT-M		\$3.58	Later Wilder
May							
Fixed				CGT-M		\$3.29	
Fixed		4.5		CGT-M		\$3.29	
Fixed		1.446		CGT-M		\$3.29	
Collar				CGT-M	•	\$3.29	
Fixed				CGT-M		\$3.29	
June							
Fixed				CGT-M		\$3.50	
Fixed				CGT-M		\$3.50	
Fixed				CGT-M		\$3.50	
Collar				CGT-M		\$3.50	
Fixed				CGT-M		\$3.50	

				Total	Receipt	Hedged Price	IFERC FOMI	Cost Increase/
Supplier	1	Гуре	Dth/day	Dth	Point	\$/dth	\$/dth	(Savings)
July						· · · · · · · · · · · · · · · · · · ·		
	Fixed				CGT-M		\$3.92	13/1/2014
	Fixed				CGT-M		\$3.92	
	Fixed				CGT-M		\$3.92	
	Collar ((現為() () (() () ()			CGT-M		\$3.92	
	Fixed				CGT-M		\$3.92	
August					· · · · · · · · · · · · · · · · · · ·			
	Fixed				CGT-M	14 14 Sacrit	\$3.33	医内蒙氏试验
	Fixed				CGT-M		\$3.33	
	Fixed				CGT-M		\$3.33	
	Collar (CGT-M		\$3.33	
	Fixed				CGT-M		\$3.33	
September		***************************************	·		· · · · · · · · · · · · · · · · · · ·			
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Fixed			A-1/27	CGT-M		\$2.79	
	Fixed				CGT-M		\$2.79	
	Fixed				CGT-M		\$2.79	
	Collar	1380 B (8)			CGT-M		\$2.79	
	Fixed				CGT-M		\$2.79	
October	h		<u> </u>					
	Fixed	***************************************		7. 玻璃板	CGT-M	1860.014	\$3.66	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Fixed				CGT-M		\$3.66	
	Fixed				CGT-M		\$3.66	
	Collar (CGT-M		\$3.66	
	Fixed				CGT-M		\$3.66	
Season Total								
Winter Sea	son 200	9-10						
						Hedged	IFERC	Cost
				Total	Receipt	Price	FOMI	Increase/
Supplier	1	уре	Dth/day	Dth	Point	\$/dth	\$/dth	(Savings)
November								
	Fixed				CGT-M	(3/4)	\$4.26	
	Fixed				CGT-M		\$4.26	
Paratira de la constanta de la	Collar (•	思想人に多)			CGT-M		\$4.26	
	Fixed				CGT-M		\$4.26	
	Fixed				CGT-M		\$4.26	
	Fixed			11 11 11	CGT		\$4.26	
December								
	Fixed				CGT-M	25 8 9 25	\$4.47	
	Fixed				CGT-M		\$4.47	
B	Fixed				CGT-M		\$4.47	
	Collar (l	(# (#)			CGT-M		\$4.47	
曹俊	Fixed			1,17,54	CGT-M		\$4.47	
	Fixed				CGT-M		\$4.47	
	Cost Ave	eraging			CGT-M		\$4.47	
	Fixed				CGT-M		\$4.47	
	L Mod				CO 1-141		.94.4/	

Page 10

Supplier	Туре	Dth/day	Total Dth	Receipt Point	Hedged Price \$/dth	IFERC FOMI \$/dth	Cost Increase/ (Savings)
January		3		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
	Fixed			CGT-M	544	\$5.83	
	Fixed			CGT-M		\$5.83	
Ť.	Fixed			CGT-M		\$5.83	
	Collar			CGT-M		\$5.83	
	Fixed			CGT-M		\$5.83	
	Fixed			CGT-M		\$5.83	
	Cost Averaging			CGT-M		\$5.83	
11 E 12	Fixed			CGT		\$5.81	250, 230
February							
	Fixed	A. N. A.		CGT-M		\$5.28	
	Fixed			CGT-M		\$5.28	
	Fixed	\$ 10 miles		CGT-M		\$5.28	
	Collar (CGT-M		\$5.28	
	Fixed			CGT-M		\$5.28	
	Fixed			CGT-M		\$5.28	
	Cost Averaging			CGT-M		\$5.28	
	Fixed			CGT		\$5.26	
March							
	Fixed			CGT-M		\$4.78	
	Fixed			CGT-M		\$4.78	
	Collar (Tay of 1	CGT-M		\$4.78	
	Fixed	100		CGT-M		\$4.78	
	Fixed			CGT-M		\$4.78	
d. 1758	Fixed	sine de logida	sadu sijida	CGT	digital sign	\$4.78	
Season Total							

Due to the mechanics of the Gas Cost Adjustment (GCA) Clause, the effect of the hedging program on the gas cost portion of customer's bills will occur in stages. The Expected Gas Cost (EGC) component of each GCA included estimated gas costs based on a combination of hedged gas and gas at estimated market prices. Absent the hedging program, the EGC would have been calculated on market prices alone. The Actual Adjustment (AA) component of each GCA also includes the effect of the hedging program reflected in the actual gas costs, which are compared to GCA revenues to calculate the AA.

When the monthly EGCs were calculated, the forecasted natural gas requirements were priced out based on the weighted average of known hedged prices and the NYMEX futures price on the day that the calculation was performed. To determine the impact of the hedging program on the EGC, the hedging transactions were removed from the original calculations to determine what EGC would have been filed if no hedging had taken place. This effect may differ from the ultimate impact on the GCA once actual costs are known and flow through the AA.

The following table shows the effect that hedging had on each separate GCA rate for the 12 months ending March 31, 2010. The prior year's hedging program continues to affect the AA portion of the GCA through August 31, 2009. Likewise, gas costs during the 12 months ended March 31, 2010 will continue to affect the AA portion of the GCA through August 31, 2010. A negative sign means that the rate was decreased due to the hedging program, and a positive indicates that the rate was increased. Rates are in dollars per ccf.

Month	Impact on EGC	Impact on AA *	Impact on GCA
April 2009	+\$0.0957	+\$0.0046	+\$0.1003
May 2009	+\$0.1469	+\$0.0046	+\$0.1515
June 2009	+\$0.1514	-\$0.0030	+\$0.1484
July 2009	+\$0.1470	-\$0.0030	+\$0.1440
August 2009	+\$0.1590	-\$0.0030	+\$0.1560
September 2009	+\$0.1848	+\$0.0054	+\$0.1902
October 2009	+\$0.1596	+\$0.0054	+\$0.1650
November 2009	+\$0.0601	+\$0.0054	+\$0.0655
December 2009	+\$0.0443	+\$0.0161	+\$0.0604
January 2010	+\$0.0250	+\$0.0161	+\$0.0411
February 2010	+\$0.0174	+\$0.0161	+\$0.0335
March 2010	+\$0.0368	+\$0.0198	+\$0.0566

^{*}Includes impact on AA from previous year's hedging activity.

To determine the ultimate effect on the price paid by customers subject to the GCA, the total difference in gas cost due to the hedging program was divided by the annual total Ccf used in the calculation of the EGC as part of the GCA filing effective March 1, 2010. Based on this calculation, GCA customers will pay approximately Ccf more than they would have paid absent the hedging program for natural gas purchased between April 1, 2009 and March 31, 2010, as shown below:



Effect of Hedging Program on Volatility

The hedging program increases costs when market prices are relatively low and decreases costs when market prices are high. This provides prima facie evidence that the hedging program meets its stated goal of reducing the volatility in gas prices and providing some protection against extremely high prices. Based on a more statistical definition of volatility, the hedging program reduced the standard deviation of the average commodity cost of gas by \$0.523/dth over the 12 months ended March 31, 2010.

		ge Commodity			Estimated Avera		
	Gas (In	cludes Hedgin	g)		Gas W	ithout Hedging	,
	Commodity		Wgt.	Cost/	Commodity		Wgt.
1	Cost	<u>Dth</u>	Avg.	(Savings)	Cost	Dth	Avg.
Apr-09						1 3 1 1	
May-09							
Jun-09							
Jul-09							
Aug-09				4.4.6			
Sep-09							
Oct-09							
Nov-09							
Dec-09		1.00					
Jan-10		100					
Feb-10							
Mar-10	46.49.79.45.49			1944 香港			
Standard I	Deviation						
Reduction	in Standard Dev	/iation					

Weather Analysis

The table below lists heating degree days for November 2009 through March 2010 compared to normal.

	Nov	Dec	Jan	Feb	Mar	Total
Normal Heating Degree Days*	621	907	1,069	855	662	4,114
2009/2010						
Heating Degree Days	518	982	1,179	1,058	594	4,331
% Colder (Warmer) than Normal	(17%)	8%	10%	24%	(10%)	5%

^{*} Based on 10-year average 1990-1999.

Summary

Gas prices for the 12 months ended March 2010 were consistent and historically low priced. The average NYMEX settlement price for the 12 month period ended March 31, 2010 was about \$4.09 with a range of \$2.97. The comparable 2009/2008 average was about \$8.25 with a range of about \$9.05. During this period the result of the hedging program was increased costs. Although the hedging plan increased gas costs overall, the hedging strategy was in place to provide protection against extreme prices and reduce volatility. The hedging program was successful in reducing the impact of volatility on the GCA by 58%.

Attachment A Information Reviewed at Hedging Meetings

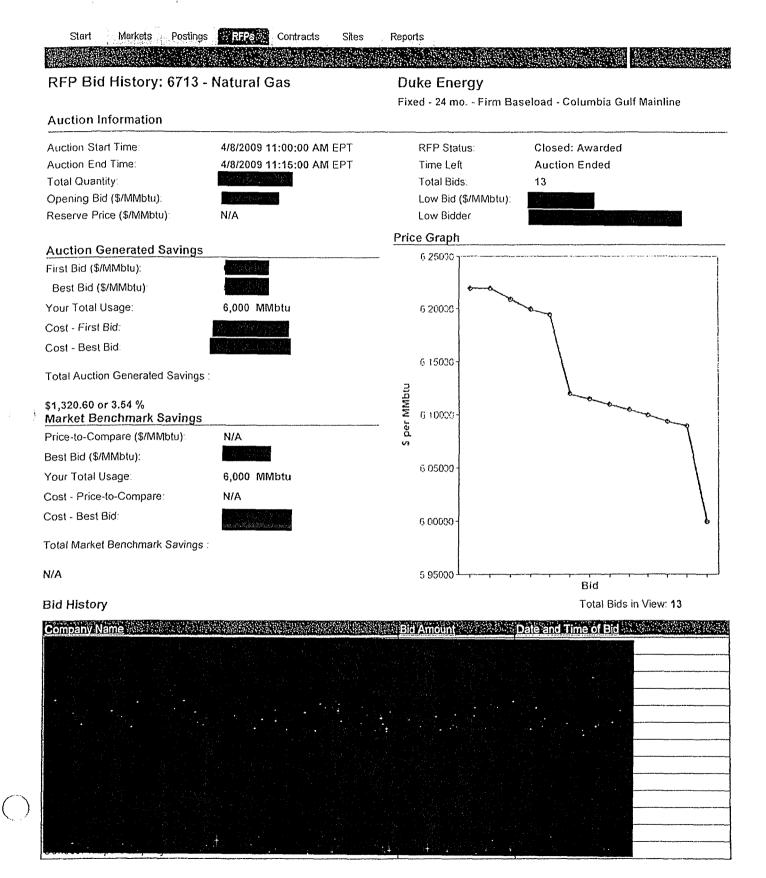
Gas Commercial Operations Hedging Program Market Indicators Summary April 27, 2009

	Price Pressure	Term	Comments	Page Ref
Weather				
Long Term Forecast	-	Long	NOAA predicting an equal chance of above, below or normal temperatures for May-July for areas east of the Mississippi River and above average temperatures for the majority of area west of the Mississippi.	14
Mid Term Forecast (30-60 days)		Long	May predicted to be 3.5% warmer than 10 year normal and June is predicted to be 2.3% warmer than 10 year normal	15
Short Term Forecast (6-10 days)	←→	Short	Above and Much Above over Mid-Continent during the period. Some Cool air in the West early in the period.	16
Tropical Storm Activity	←→	Long	Colorado State forecast team lowers number of hurricanes it expects this year from above average number to average	17.
Storage Inventory				
EIA Weekly Storage Report	<u> </u>	Long	Storage injections for the week ending April 17th were 46 BCF. Storage levels are at 1.741 TCF which is 35 8% higher than last year and 22 7% higher than the 5 year average.	18
Industry Publications	-γ		local in the life of the local MIR to for	
Cambridge Energy Research Associates Summer 2009: Winter 2009/10	+	Long	CERA projects the Henry Hub price to average per MMBtu for 2009. Economic outlook continues to deteriorate. Natural gas demand continues to fall faster than supply.	19
Gas Daily	↓	Long	"We finally broke," a broker said of the contract's break of the \$3.50 support level. "I say we're going to keep going down. There's no reason not to."	20-21
Gas Daily	ţ	Long	"Gas prices are headed for a train wreck this summer, plunging below \$3/Mcf and forcing producers to shut in production to rebalance the market."	22-23
Gas Daily	1	Long	"We believe energy prices have bottomed and are likely to rise, but the pace and the magnitude will depend on the level of economic activity," according to an Oppenheimer analyst.	24
Gas Daily	ţ	Long	Global economic strife continues to batter gas demand and will almost certainly lead to an oversupply of LNG this year, and possibly for the next few years.	25
Gas Daily	Į.	Long	A flood of LNG imports this year will lead to dramatic shut-ins of domestic production in the short term and send prices as low as \$2/MMBtu, according to a Credit Suisse analyst.	26
Gas Daily	1	Long	While the economy continues to deflate industrial gas consumption, there are growing signs that demand is starting to stabilize notably among chemical companies and some analysts expect it to support gas prices as early as mid-summer.	27-28
Government Agencles				·
Energy Information Administration Winter 2009/10: \$5.212 Summer 2009: \$3.776	+	Long	The current decline in economic activity will have a significant impact on natural gas consumption in the industrial sector, which is forecast to fall by 7.4% in 2009.	29
Technical Analysis	т	r		T
Winter 2009-10 Strip Chart	◄→	Short	Closed at \$5.49	30
Summer 2010 Strip Chart	←→	Short	Closed at \$5.80	31
Economy		1	Tria. At	7
Demand		Long	EIA: Natural gas consumption is projected to decline by 1.8% in 2009 and remain relatively unchanged in 2010.	32
Supply	+	Long	EIA: Total U.S. marketed natural gas production is expected to decline by 0.3% in 2009 and fall by 1.0% in 2010. Baker-Hughes reports slightly below 800 rigs working as of April 9, 2009, a decline of over 50% from August 2008. This drop in drilling activity and declining productivity of wells are expected to cause production to steadily decline as the year progresses.	32
Oil Market	}	Long	WTI prices are projected to average \$53 per barrel in 2009 and \$63 in	32

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm Attendees: Jeff Kern, Jim Henning, Patty Walker, Mike Brumback, Joachim Fischesser, Sleve Niederbaumer

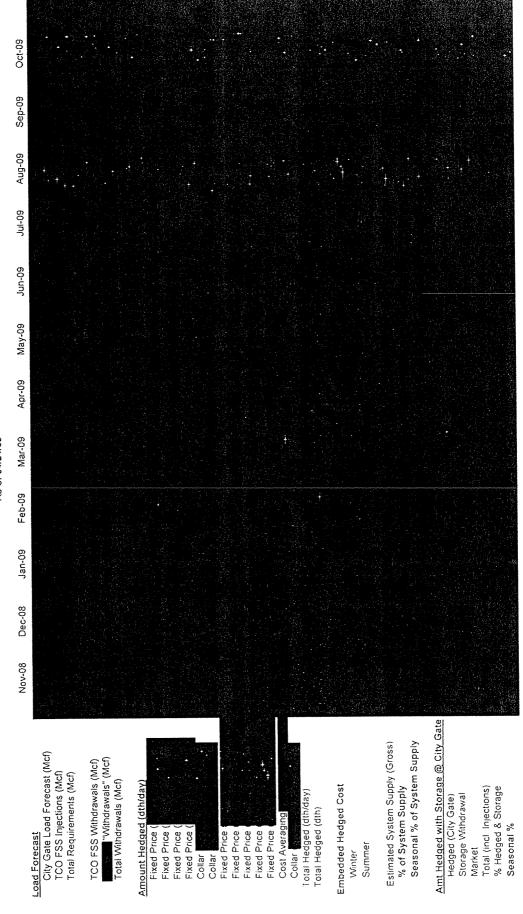
Discussed results of online auction on April 8, 2009 for total of addition, discussed the online auction process and its value. Discussed current market fundamental such as: weather forecast, tropical storm activity, storage levels, industry publication, governmental agency, analysts opinions, technical analysis and economic determinants. Based on the information provided as well as the current positions within the Hedging Program additional hedging is not necessary at this time.

WerldEnergy

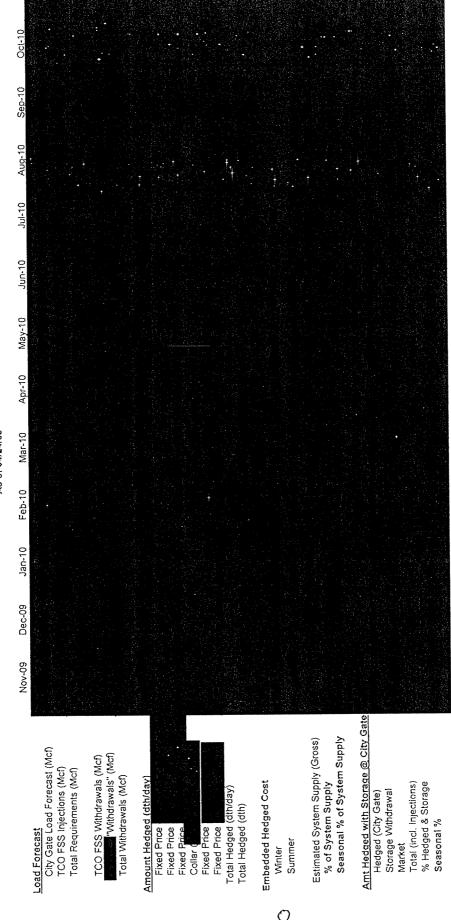


	NYMEX.COM
Nov-09	\$4.798 ^
Dec-09	\$5.424 ^
Jan-10	\$5.699 ^
Feb-10	\$5.720 ^-
Mar-10	\$5.633 ^
Apr-10	\$5.446 ^
May-10	\$5.460 ^
Jun-10	\$5.590 ^
Jul-10	\$5.715 ^
Aug-10	\$5.787 ^
Sep-10	\$5.815 ^
Oct-10	\$5.917 ^
Nov-10	\$6.272 ^
Dec-10	\$6.662
Jan-11	\$6.920
Feb-11	\$6.912
Mar-11	\$6.690 ^
Apr-11	\$6,300 ^
May-11	\$6.267
Jun-11	\$6.335 ^
Jul-11	\$6.445
Aug-11	\$6.517
Sep-11	\$6.547
Oct-11	\$6.637 ~
Average	\$6.063 ~
Low End	
Basis	-\$0.115 ^
Adder	\$0.010
	\$5.958
High End	
Basis	-\$0.095 ^
Adder	\$0.060
	\$6.028
	•

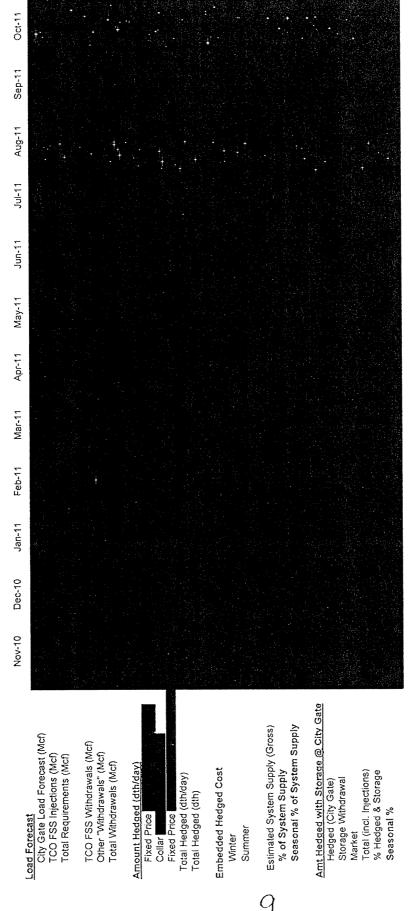
Duke Energy Kentucky Hedging Program - Current Position November 2008 - October 2009 As of 04/24/09



Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 04/24/09



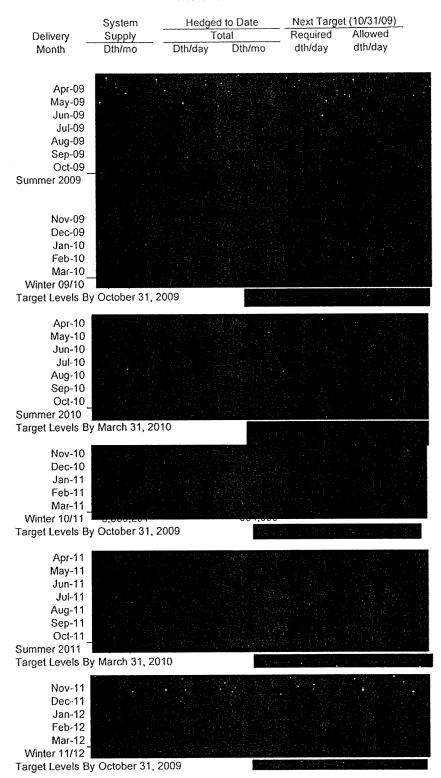
Hedging Program - Current Position November 2010 - October 2011 **Duke Energy Kentucky** As of 04/24/09



Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 04/24/09

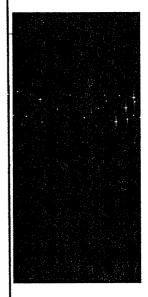
Oct-12 Sep-12 Aug-12 Jul-12 Jun-12 May-12 Apr-12 Mar-12 Feb-12 Jan-12 Dec-11 Nov-11 Amt Hedged with Storage @ City Gate % of System Supply Seasonal % of System Supply Estimated System Supply (Gross) Load Forecast
City Gate Load Forecast (Mcf)
TCO FSS Injections (Mcf)
Total Requirements (Mcf) TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf) Amount Hedged (dth/day) Embedded Hedged Cost Total (incl. Injections) % Hedged & Storage Total Hedged (dth/day) Total Hedged (dth) Storage Withdrawal Hedged (City Gate) Seasonal % Summer Market Winter TBD

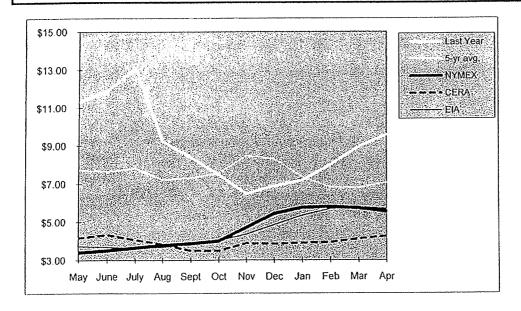
Duke Energy Kentucky Hedging Program Current Position

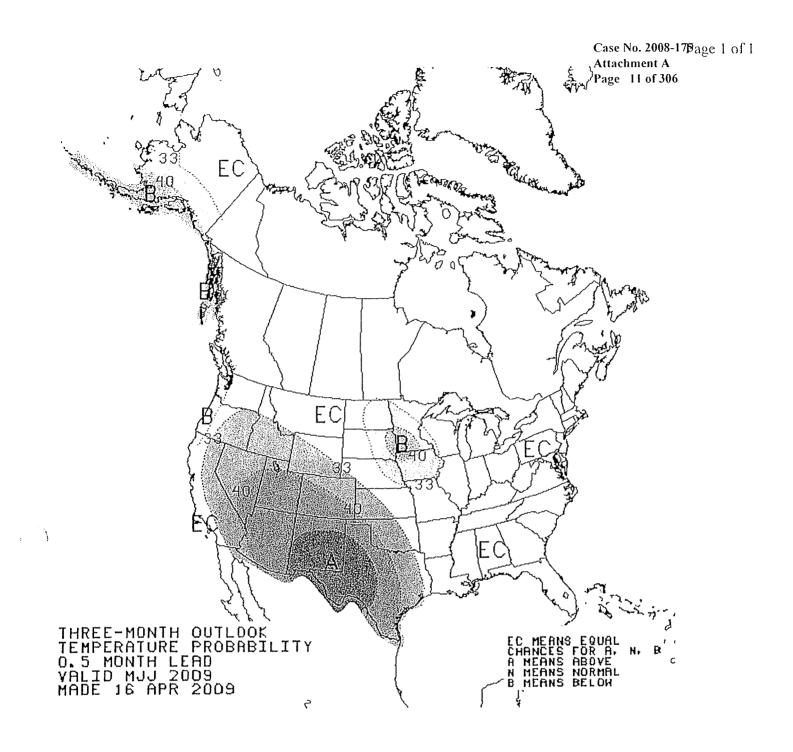


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES $^{\mathrm{Page}}$ 10 of 306 TO CURRENT FUTURES PRICES

	Histori	ic Prices:				
	NYMEX C	osing Price				
	5-yr. avg.	Last Year		CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)		23-Apr-09	14-Apr-09	24-Apr-09
				148.85 %		
May	\$7.72	\$11.28			\$3.740	\$3.409
June	\$7.65	\$11.92			\$3.690	\$3.516
July	\$7.81	\$13.11			\$3.650	\$3.662
Aug	\$7.21	\$9.22			\$3,690	\$3.793
Sept	\$7.31	\$8.39			\$3.840	\$3.873
Oct	\$7.55	\$7.47			\$4.030	\$4.016
Nov	\$8.47	\$6.47			\$4.370	\$4.716
Dec	\$8.31	\$6.89			\$4.860	\$5.441
Jan	\$7.36	\$7.17			\$5.350	\$5.761
Feb	\$6.82	\$8.00			\$5.690	\$5.803
Mar	\$6.79	\$8.93			\$5.790	\$5.735
Apr	\$7.06	\$9.58			\$5.690	\$5.550
12 Month Avg	\$7.50	\$9.03	·		\$4.533	\$4.606
	er Average				\$4.047	\$3.974
Winter A	Average				\$5.212	\$5.491





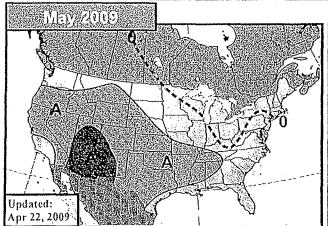


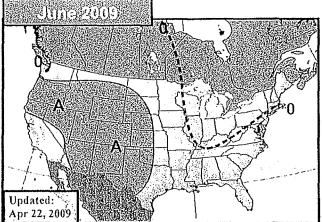


EarthSat's 30-60 Day Outlook

Wednesday, April 22, 2009

Forecaster: SS/BH





Previous

Above (+3) Above (+2) Above (+1)

Below (-1)

Below (-2) Below (-3)



Slight cool changes for the East Coast

Still very warm West

Changes were generally in the cooler direction in the East Coast today with slight cool changes for Philly, New York, and Boston. Warm changes were sparse, but the anomaly in Phoenix went higher to +2.7F. The forecast is still warmer than the 10Y and 30Y normals and much warmer than May of last year. Drought is still extreme to exceptional across parts of southern and western Texas, so the risk looks to be

the warmer side in that area. The map to the right is our CropCast 15-30 Day precip forecast, which covers much of the month. The below normal precip in the East could lead to warmer temps there.

May GWHDD* Forecasts

'10Y Normal updated to 99-08

May 2009 Fcst:

Change: +0.5

10Y Normal * 152.8 30Y Normal : 156.5 May-2008 184.4

*National Gas-Weighted HDDs

Previous

Not quite as warm in the Southwest

Warmer change in East

Changes were in the cooler direction across the West, especially in the Southwest where Phoenix dropped from +1.6F to +1.3F. Slight warm changes were noted across the East Coast and into parts of the Midwest. This theme of a warm west and a near normal east is continued into the rest of our summer outlook, so don't look for the general look of these maps to change much as we head into July. This is also a time where we start to look at the tropics as the beginning of the Atlantic hurricane season takes place on June 1. As far as recent history goes, a named storm has made a June US landfall in five of the last ten years. Our forecast for the entire season projects 13 named storms overall.

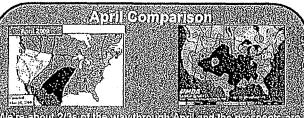
June PWCDD* Forecasts

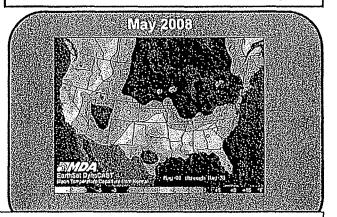
*10Y Normal updated to 99-08

Jun 2009 Fcst:

10Y Normal* 228.7 30Y Normal 217.4 Jun-2008 263.1

Change: +1.2
*National Population-Weighted CDDs





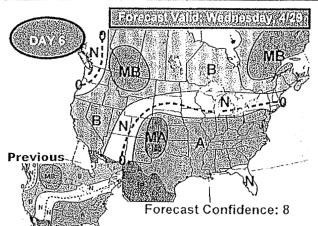
Maps above depict deviations of average temperatures from 30 Y normal in Fahrenheit.



EarthSat's 6-10 Day Forecast-Detailed

Friday, April 24, 2009 Forecaster: BH/AC

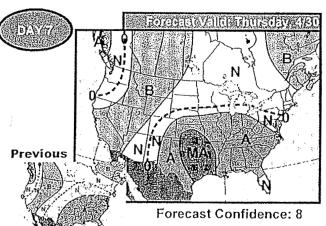
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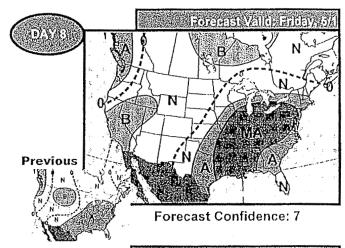
Today's Forecast:

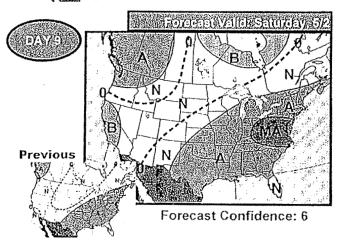
Cool Air In West Holds On Through Early Period Warm Temps in East Persist Nearly All Period

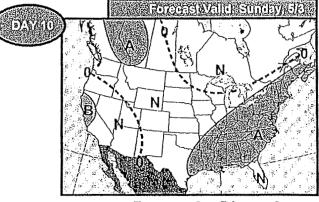
The cooler weather in the Western U.S. early in the period is maintained, and could also turn to be cooler than the forecast depicts. This cooler air, in the form of belows, could reach the northern half of the Plains by the mid-period. While much aboves have departed the East for the period composite, the warmth continues to be seen throughout. Late in the period, however, the potential for widespread much above normals to reach the East Coast is possible. Plenty of wet weather chances during the mid to late period in the Plains and Midwest may cause some issues, mostly towards the cooler side.











Forecast Confidence: 6

Strong Above+15 or UP

Much Above+8F to +14F

■ Above+3F to +7F

Normal 2F

Strong Below-15 or Lower Much Below-8F to -14F

Below-3F to -7F

MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [Morning Basic-Page 3, Version 2.0]

US forecaster lowers Atlantic hurricane prediction

Tue, 7 Apr 2009 16:19:00 GMT

- * CSU predicts six hurricanes, two expected to be "major"
- * Sea temperatures have cooled, weak El Nino could emerge
- * 31 pct chance of "major" hurricane hitting US Gulf coast

By Jim Loney

MIAMI, April 7 (Reuters) - <u>Citing cooler seas and the prospect of a weak EJ Nino, Colorado State University's</u>
https://doi.org/10.1001/j.colorado-state-university's
https://doi.org/10.1001/j.colorado-state-university
https://doi.org/10.1001/j.colorado-state-university
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https://doi.org/10.1001/j.colorado-state-university
<a href="https://doi.org/10.1001/j.colorado-state-university-uni

The research team, founded by storm forecasting pioneer William Gray, said the season could see two "major" hurricanes of Category 3 or higher on the five-step Saffir-Simpson intensity scale. Hurricanes of that magnitude have sustained winds of more than 110 miles per hour (177 km per hour).

In its December forecast, the CSU team predicted 14 storms, seven hurricanes and three major hurricanes in the 2009 season, which begins on June 1 and lasts six months.

The researchers said sea surface temperatures in the tropical Atlantic Ocean had cooled in recent months. Hurricanes draw energy from warm sea water, so cooler water could diminish hurricane activity.

In addition, the eastern Pacific Ocean could see the current weak La Nina conditions change to neutral, or even weak El Nino, by June, the researchers said. El Nino is a warm water phenomenon that can suppress Atlantic hurricane formation.

"If El Nino conditions develop for this year's hurricane season, it would tend to increase levels of vertical wind shear and decrease levels of Atlantic hurricane activity," Gray said in a statement.

FORECASTS CLOSELY WATCHED

The forecasts are closely watched by energy, commodities and insurance markets, particularly since the devastating 2005 season, when a series of hurricanes rolled through Gulf of Mexico oil and gas fields and Hurricane Katrina, the costliest in U.S. history, swamped New Orleans.

The Colorado State team predicted a 31 percent chance that a major hurricane would hit the U.S. Gulf coast this year, compared to a 30 percent long-term average. For the U.S. East Coast, the probability was 32 percent, compared to 31 percent long-term.

The 2008 Atlantic season was one of the busiest on record, with 16 tropical storms, of which eight became hurricanes with sustained winds of 74 mph (119 kph) or higher. Five were of Category 3 or higher.

The long-term average for the Atlantic hurricane season is about 10 tropical storms and six hurricanes. But experts said a period of heightened Atlantic hurricane activity started around 1995 and was expected to last 25 to 40 years.

Home > Natural Gas > Weekly Natural Gas Storage Report

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Attachment A.
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Glossary

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

, $\,$ sed: April 23, 2009 at 10:30 A.M. (eastern time) for the Week Ending April 17, 2009 Next Release: April 30, 2009

Working Gas in Underground Storage, Lower 48

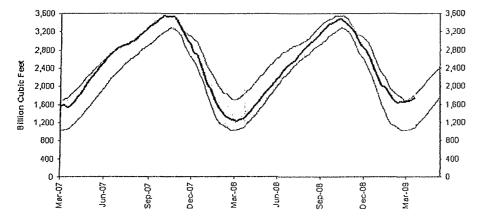
	Stocks i	n billion cubic fe	et (Bcf)	Historical Comparisons				
Region	Region 04/17/09 04/10/09	Change	Year Ago (Year Ago (04/17/08)		1008) Average		
	04/1//03	04/10/03	Change	Stocks (Bcf)	% Change	omparisons 5-Year (2004- Stocks (Bcf) 651 212 556 1,419	% Change	
East	668	651	17	596	12.1	651	2.6	
West	294	288	6	180	63.3	212	38.7	
Producing	779	756	23	506	54.0	556	40.1	
Total	1,741	1,695	46	1,282	35.8	1,419	22.7	

Notes and Definitions

Summary

Working gas in storage was 1,741 Bcf as of Friday, April 17, 2009, according to EIA estimates. This represents a net increase of 46 Bcf from the previous week. Stocks were 459 Bcf higher than last year at this time and 322 Bcf above the 5-year average of 1,419 Bcf. In the East Region, stocks were 17 Bcf above the 5-year average following net injections of 17 Bcf. Stocks in the Producing Region were 223 Bcf above the 5-year average of 556 Bcf after a net injection of 23 Bcf. Stocks in the West Region were 82 Bcf above the 5-year average after a net addition of 6 Bcf. At 1,741 Bcf, total working gas is within the 5-year historical range.

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008. Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

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Data

History (XLS)

other formats: Summary TXT CSV

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

Revision Policy

Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator

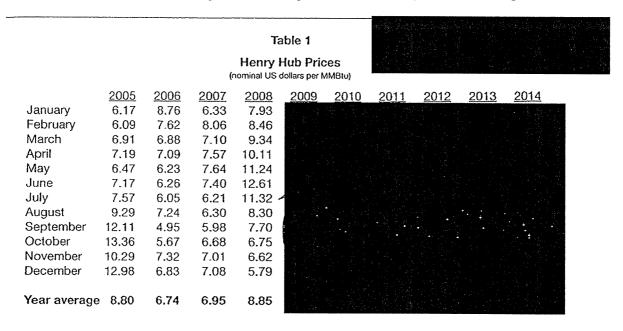
For April CERA expects the price at Henry Hub to average \$3.71 per million British thermal units (MMBtu), rising to \$4.17 in May and averaging \$4.05 for the year (see Table 1). For AECO-NIT, CERA expects prices to average C\$3.74 per gigajoule (GJ) (\$3.17 per MMBtu) in April, C\$3.85 per GJ (\$3.26 per MMBtu) in May, and C\$3.73 per GJ (\$3.21 per MMBtu) for all of 2009.

NORTH AMERICAN SUPPLY: LOWER-48 RIG COUNT CONTINUES TO FALL

The gas-directed rig count for the United States fell to 760 for the week ending April 16, a level only slightly below CERA's estimated rig count needed to maintain a production level of approximately 55 Bcf per day. This illustrates that it will be difficult indeed to reduce production through a reduction in drilling activity, since the more than 50 percent decline in the rig count from its September peak will only maintain production at current levels. Further declines in rig activity will be required to achieve actual reductions in gas production. The competitiveness of the major gas shale plays is indicated by the increase in drilling activity in Pennsylvania (Marcellus Shale), North Louisiana (Haynesville Shale), and Arkansas (Fayetteville Shale) (see Figure 2 and Table 2).

While the total rig count figures dovetail nicely with the overall market view of a rapid decline in drilling, some data at the state level are a mixed bag. Statistics from the Railroad Commission of Texas provide some examples of the variance in how the drilling slowdown is playing out at the ground level. Total drilling for new wells in Texas is actually trending above its January lows, even though it is still below its fall 2008 peak. This is consistent with CERA's rig count analysis at the state and regional levels.

Furthermore, the number of gas well completions, an indicator that usually lags one month behind new well drilling, continues to rise. This suggests not only that recently drilled wells that have lain fallow are now being completed and put onto production, but also that recompletions, which increase the production of existing wells (usually at the lowest cost), are at their highest level



Sources: Cambridge Energy Research Associates; Platts Gas Daily historical data.

Excel tables are available in the North American Natural Gas Client Services area at CERA com.

Gas Daily

Friday, April 24, 2009

NYMEX cracks \$3.50, settles at new 61/2-year low

After breaching a key support level, the May NYMEX gas futures contract shed 12.3 cents Thursday to close at \$3.409/MMBtu — the lowest prompt-month settlement since September 11, 2002. Cash prices were weaker in every region except the Rockies, where a spate of warm weather triggered cooling demand.

Traders said the futures contract responded to the Energy Information Administration's report of a 46-Bcf net injection for the week. "We finally broke," a broker said of the contract's break of the \$3.50 support level. "I say we're going to keep going down. There's no reason not to."

The broker viewed the contract as weak from both a fundamental and a technical perspective—"that's what makes the most powerful markets." In addition to holding below \$3.50, it settled close to its low for the session, he noted.

In the spot market, a trader attributed the Rockies' climb to higher heat-rated power-generation units coming online as temperatures shot to the upper 70s across much of the region.

"The more efficient units come on first with a heat rate of about 8.5 to 9, and then once loads increase it's necessary to turn on the older, less efficient units with heat rates up to 11.5 that require more gas," the trader explained.

Colorado Interstate Gas gained the most, rising more than 20 cents to average in the mid-\$2.40s. Kern River Gas Transmission at the Opal, Wyoming, plant gained 10 cents and other regional points moved up a few cents.

A trader said daytime temperatures in Vancouver are rising to seasonal levels but nighttime readings remain a bit below average, buttressing heating demand. The Aitken Creek storage facility's annual outage downstream of Westcoast Energy's station 2 in British Columbia had something to do with the more than 370,000 Gj trading at the point on the Intercontinental Exchange, the trader said, as players scrambled to unload supply. "Station 2 ran up quickly to near C\$2.92 as buying there was heavy again."

The point averaged in the upper C\$2.80s for a gain of nearly 10 cents. That average put it nearly 40 cents below AECO-NIT in Alberta, which lost nearly a nickel. South of the border, Sumas, Washington, rose more than 5 cents. Prices in California and the Southwest fell as much as 10 cents, but the Pacific Gas and Electric city-gate was the exception, rising a couple of cents to average in the upper \$3.20s. Southern California Gas' city-gate premium to Kern River Gas Transmission, delivered stayed at around 5 cents as the city-gate lost nearly a dime.

As Phoenix and interior California temperatures moderated from recent near-100-degree levels, prices on El Paso Natural Gas' south mainline fell more than 5 cents. El Paso in the Permian Basin fell about 5 cents, while El Paso in the San Juan Basin slid nearly 10 cents.

In the Midcontinent, CenterPoint Energy Gas Transmission East fell almost 10 cents amid plentiful selling on Intercontinental Exchange, while CenterPoint South prices fell about as much on ICE. "People used to jump on gas on South pool, now they let things ride and see how it pans out rather than make a rash judgment," a trader said.

The Carthage Hub fell about 10 cents, while Natural Gas Pipeline Co. of America's Texok zone dropped less than 5 cents as volumes there increased to nearly 1 Bcf from 755,000 Mcf on Wednesday.

Prices fell slightly throughout the Upper Midwest despite temperatures forecast to reach as high as 15 degrees above average through the weekend. The Chicago city-gates lost almost a nickel.

Cash stabilized at the Michigan city-gates after diverging sharply Wednesday. ANR Pipeline finished maintenance at its Defiance compressor station and ended related delivery constraints, increasing Michigan's premium to the Chicago city-gates to almost 55 cents. Consumers Energy lost around a cent while Michigan Consolidated Gas ticked down a few cents. Prices in the Upper Midwest production area fell almost 10 cents.

In the Northeast, Transcontinental Gas Pipe Line zone 6 non-New York fell more than 10 cents, Transco zone 6-New York shed nearly 15 cents and Texas Eastern Transmission zone M-3 prices lost almost a nickel.

In New England, Algonquin Gas Transmission prices came off nearly 5 cents, while Tennessee Gas Pipeline zone 6 lost more than a nickel.

In Appalachia, Columbia Gas Transmission lost almost 15 cents and Dominion Transmission shed nearly 10 cents.

Along the Gulf Coast, prices generally traded within a couple of cents of Wednesday's levels, with most points showing declines as demand remained soft. Tennessee's 500 Leg and Southern Natural Gas in Louisiana shed around 5 cents apiece, however.

Florida Gas Transmission zone 3 prices traded flat as volumes on ICE ballooned to 93,400 Mcf from 20,600 Mcf on Wednesday. In Texas, Houston Ship Channel prices gave back a few cents, while the Katy Hub gained a penny. — *Market Staff Reports*

Tuesday, March 24, 2009

Gas to fall below \$3/Mcf on oversupply: Adkins

A long-time natural gas bull reiterated his bearish prediction Monday that gas prices are headed for a train wreck this summer, plunging below \$3/Mcf and forcing producers to shut in production to rebalance the market.

"At the expense of sounding like a broken record, we continue to see further downside in natural gas prices heading into the seemingly certain scenario of production shut-ins this summer," Raymond James energy analyst Marshall Adkins said.

"We believe that not only are we headed to sub-\$3/Mcf gas prices, but that consensus earnings estimates and rig count forecasts have further room to fall," he warned.

Adkins said that despite hefty drilling cuts by producers and a sharp drop in the rig count, production companies are still calling for a 5% increase in gas production year-over-year.

Shale plays are behind the growth, Adkins said, with Barnett Shale wells averaging five times the production of conventional wells, and new Haynesville Shale wells producing three times the volumes of the Barnett's wells.

"Much of the supply growth seen in the past two quarters (8% excluding hurricanes in the third quarter and fourth quarter of 2008) was based off a gas rig count that had been essentially flat year-over-year," Adkins said. "This is a perfect example of higher productivity stemming from these resource plays."

Adkins thinks the burgeoning shale production will mute the impact of rig cuts and extend the oversupplied condition longer than the market expects, perhaps into 2010.

Because of shale plays, another influential team of energy analysts sees demand replacing supply as the driver for North American natural gas prices for the next decade.

The technology revolution has unlocked shale and tight sands gas that has essentially made the continent self-supporting for gas supply, Cambridge Energy Research Associates said in a report released Monday.

"North American gas production is no longer opportunity constrained," CERA Senior Director and study co-author Robert Ineson said. "Resource-bearing shales and tight sands are extensive, and North America now has sufficient inventory of drillable prospects to maintain, or, if necessary, increase productive capacity for at least the next 10 years — even after the current recession becomes a memory."

The authors of CERA's study, "Rising to the Challenge: A Study of North American Natural Gas Supply to 2018," noted that from a low of 49.8 Bcf/d in 2007, producers added nearly 7 Bcf/d — 14% of new production — to reach 56.7 Bcf/d by July 2008.

For the next 10 years, they posit, gas production will be limited by demand, which is falling sharply in the current global recession, the authors said. "The market is struggling to absorb existing production — as reflected in the current price trend — rendering new drilling in higher cost areas uneconomic."

Even as prices rebound, they contend, profit margins won't increase greatly, because drilling costs will increase. "Full cycle unit costs are expected to increase from a weighted average of \$4.63/Mcf in 2009 to \$7.54/Mcf in 2018," they said.

CERA said the implications of their study extend beyond North America, as supply growth there shrinks the need for liquefied natural gas, throwing that LNG back into the global market, "triggering changes in projected LNG flows and potentially affecting prices and the viability of projects worldwide."

CERA said it will still be profitable to sell LNG into the North American market, but that gas will compete with gas coming from conventional vertical wells, rather than shale gas coming from horizontal wells. — Bill Holland

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Friday, April 3, 2009

Oppenheimer: US gas prices at bottom, but recovery will be long

US gas prices have probably reached their lows, Oppenheimer energy analyst Fadel Gheit said Thursday, but they will probably remain soft for a while longer due to a continued oversupply.

"We believe energy prices have bottomed and are likely to rise, but the pace and the magnitude will depend on the level of economic activity," Gheit said. "We expect oil prices to trade between \$45/barrel and \$65/barrel and gas prices to trade between \$4/Mcf and \$6/Mcf. Prices significantly outside these ranges are, in our view, not sustainable and would more likely be due to excessive speculation than to market fundamentals."

Weak industrial demand coupled with strong domestic production growth from shale plays will continue to keep a lid on gas prices, Gheit predicted, with liquefied natural gas imports adding a wild card to the equation.

"Barring a surge in demand or a drop in supply, gas prices could remain low longer than originally expected, especially if LNG imports from newly completed facilities are dumped in the US market, which has the world's only sizable gas storage capacity."

Weak gas prices will drag earnings in the exploration and production sector down, Gheit said, noting that while prices have dropped 40% in the quarter, service costs have only declined 10%, putting pressure on profit margins.

Lightly hedged producers will be hammered, as will those companies with high costs, he predicted.

"Barring a surge in oil and gas prices this year, we expect many high-cost producers to report losses for the year and many may be forced to sell assets or seek mergers." — Bill Holland

Wednesday, April 8, 2009

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LNG supply glut called a temporary phenomenon

Global economic strife continues to batter gas demand and will almost certainly lead to an oversupply of liquefied natural gas this year, and possibly for the next few years, analysts with Bank of America- Merrill Lynch Research said Tuesday. But they maintained that the long term outlook for LNG producers remains bullish.

Echoing opinions of several other industry observers in recent weeks, the analysts said lower Asian demand for LNG is already pushing several cargoes to Europe. Once Europe's relatively limited storage capacity is full, cargoes will then make their way to the US.

In addition, the analysts see about 7.3 Bcf/d of new LNG export capacity coming online between now and the end of next year. As for actual volumes reaching the market, they predicted about 2.4 Bcf/d this year followed by 5.7 Bcf/d in 2010.

Development of LNG shipping capacity — previously feared to cause bottlenecks in getting LNG to markets — has more than kept pace with production capacity, the analysts noted, and should lead to "relatively cheap LNG transport costs going forward."

Bottlenecks are far more likely to emerge in the European market, where storage capacity in Central and Eastern Europe is relatively far removed from the regasification facilities in Spain, France, Belgium and the UK, the report noted.

Those dynamics have caused LNG prices to plummet since last summer, when spot cargoes hit record highs of around \$25/MMBtu. <u>Currently, spot cargoes in Asia are trading between</u> \$3.80/MMBtu and \$5/MMBtu, compared with an average price of \$4.60/MMBtu at the UK's national balancing point and \$4/MMBtu at the Henry Hub for March.

Despite those sharp drops, "a shut-in of LNG liquefaction capacity looks unlikely," the analysts maintained. "Instead, we see the need to further reduce high-cost natural gas production in consuming regions."

The analysts estimated that NYMEX gas futures prices would have to drop to \$2.50/MMBtu or below before widespread LNG liquefaction shut-ins would occur, since variable LNG production costs only range between 50 cents/MMBtu and \$2/MMBtu "despite the billions of dollars required in upfront investment."

<u>Ultimately, any LNG supply glut is not likely to last more than a few years, the report said.</u> A lack of investment will probably lead to a slowdown in LNG supply expansions as early as 2012, while new regasification facilities are being built all around the world. As such, "any available LNG will surely be in high demand on a 10-year view." — *Melanie Tatum*

Monday, April 20, 2009

Analyst sees LNG swamping market, deflating prices

A flood of liquefied natural gas imports this year will lead to dramatic shut-ins of domestic production in the short term and send prices as low as \$2/MMBtu, a Credit Suisse analyst said last week

Teri Viswanath, the bank's commodities research director, <u>cut Credit Suisse's 2009 gas price forecast to an average of \$4/MMBtu from \$7.67/MMBtu and 2010's average to \$5.14/MMBtu from \$7.50/MMBtu, largely on the belief that the spike in LNG imports will swamp the domestic market.</u>

By 2011, however, Viswanath predicted a sharp price correction as LNG cargoes are drawn away from the US to higher-priced markets and domestic production proves insufficient to meet demand.

The Energy Information Administration earlier this week estimated total US gas demand this year will be 2.27 Bcf/d below last year, in large part because of lost industrial demand. "If these losses continue unchecked, the level of demand contraction this year could rival the massive build-up in domestic supplies last year," Viswanath said.

"These titanic movements in supply and demand, over such a short period of time, have fueled the most volatile price environment for natural gas in the last 30 years and have harmed not only end-consumers, but also their suppliers," she added.

Credit Suisse is predicting about 2.05 Bcf/d of LNG imports this year, up from the 0.82 Bcf/d in 2008. Volumes will hit a peak of 2.75 Bcf/d this August, according to the bank's estimates.

The report also said price-induced production shut-ins will cut domestic output this year to about 51.65 Bcf/d from the current estimate of 57.95 Bcf/d at the same time that LNG imports increase as global liquefaction capacity soars.

Viswanath said between now and the end of 2010, global liquefaction capacity will rise from 25.9 Bcf/d to 37.8 Bcf/d, with the bulk of that coming from Qatar, which already is the largest global exporter of LNG.

"There is a real possibility that the industry will witness supplier dislocation before the end of this cycle," she wrote. "This lethal combination of plummeting demand, lower prices and over-extended credit will likely prove to be too much for quite a number of US natural gas producers that were unable to lock in prices last year in order to better weather the current environment."

But by 2011, LNG cargoes are expected to swing to higher netback markets, Viswanath said.

"It is our contention that once the global markets return to equilibrium, the spot LNG cargoes will be attracted to greener pastures. The inability of the US to replace lost LNG imports with domestic production in a timely manner should lead to another period of tightness and higher prices for consumers." — Samantha Santa Maria

Monday, April 20, 2009

Chemical reaction? Gas demand slowly returning

While the soft economy continues to deflate industrial gas consumption, there are growing signs that demand is starting to stabilize notably among chemical companies and some analysts expect it to support gas prices as early as mid-summer.

"There is some recovery in the chemical sector. It makes sense to buy gas here. It's a healthy sign," Jefferies & Company analyst Subash Chandra said last week. In addition, "there are other healthy signs. Refineries are ... holding up. These are decent signs that we are stepping back from the precipice."

<u>Chemical manufacturers account for as much as 36% of gas demand within the industrial sector</u>. Most of the petrochemical production is located along the Texas and Louisiana Gulf coasts between Houston and Baton Rouge, and demand swings can have a direct impact on Houston Ship Channel and Henry Hub gas prices.

For instance, in February Ship Channel prices were hit by significant industrial demand destruction as refineries went down for maintenance and chemical plants went offline or slowed production in response to adverse economic conditions, according to market sources.

Since then, however, five ethylene crackers reportedly restarted and weekly numbers for rail freight load numbers — 21% of chemicals are transported by railcar, according to one analyst — show intermittent flurries of demand.

It is unclear how much of the returning demand from chemicals will lean on gas supplies, but Ship Channel basis has shown signs of strength as well. Prompt month basis there as of midweek was at minus 16.5 cents/MMBtu, up sharply from minus 45.25 cents/MMBtu on January 2.

Analysts believe January and February may have marked the bottom for the chemical sector, according to Chandra. And as that sector stabilizes, analysts expect it to continue favoring gas for its feedstocks given favorable pricing compared with crude oil through at least 2010.

With the combination of returning chemical demand and sharply falling rig counts, Gelber & Associates analyst Kent Bayazitoglu said gas prices could begin to recover as early as mid-summer.

But there is a caveat. While some chemical plants are restarting, others are going offline. "We are noticing plants are taking advantage [of the economic downturn] to do extra maintenance," Bayazitoglu said. "When margins are so low, it makes it less costly to do maintenance."

Moreover, the chemical demand uptick is largely due to an effort to restock inventories that

were depleted during the shutdowns that began last fall and extended into early 2009, analysts said.

From January to February, ethane inventories fell 637,000 barrels, compared with 1,000 barrels from December to January, according to American Petroleum Institute data. At the same time, the price has climbed to 37 cents/gallon for the April spot month, compared to 35.5 cents/gallon in the first quarter, according to Platts assessments.

"If you send everyone home for Christmas and no one comes back to work in January, you're going to sell out inventory quickly," Chandra said, adding that the "original increase is already eight weeks behind us."

While low gas prices are "helping better than high gas prices, competition for the chemical sector is pretty severe, too," Chandra said, referring to new plants coming online in the Middle East. He also sees "significant headwinds" from a strengthening dollar to dampen exports and a flailing gross domestic product.

Rail freight traffic, while showing increases some weeks, has been volatile, indicating that any upticks are more for immediate needs than for sustained demand, according to sources.

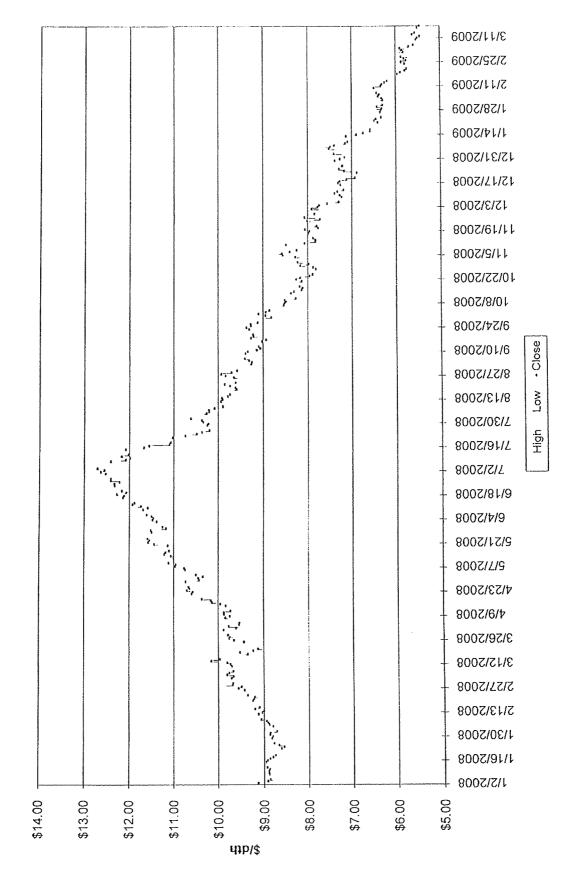
"There are more spot orders that are making it through into the system. But as people lack visibility with the economy, they're not ordering ahead. They're ordering only what they need," a New York-based analyst said.

Ultimately, most analysts agree that a true recovery, at least from the chemical sector, is expressly dependent on overall economic recovery and positive GDP rates. "It could be as early as October," Chandra said. "But it's just a guessing game." — Sheetal Nasta, Angie Joe, Kathleen Williams, Kevin Allen

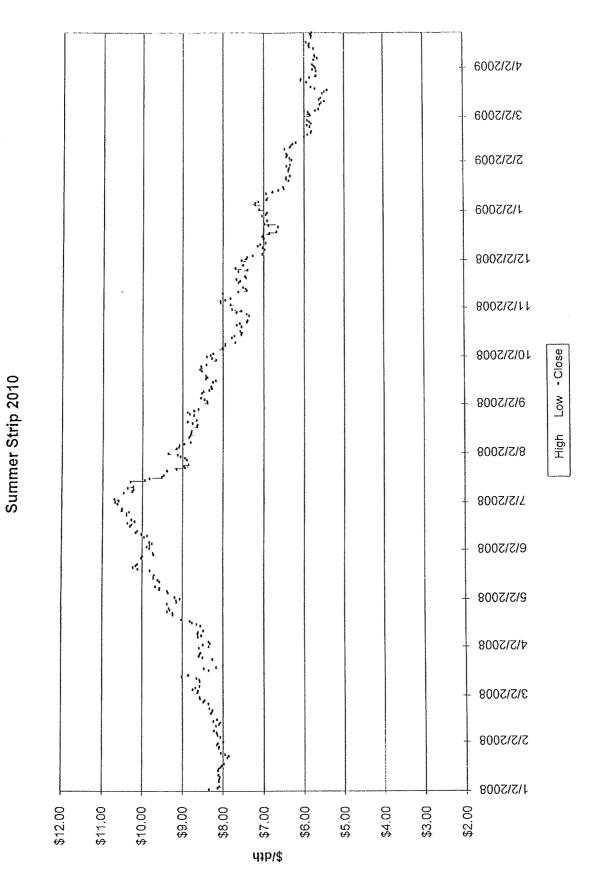
Case No. 2008-175 Attachment A Page 26 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu April 14, 2009 Release

Jan-08		8.01	Jan-09		5.24	Jan-10		5.35
Feb-08		8.51	Feb-09		4.51	Feb-10		5.69
Mar-08		9.46	Mar-09	Mar-09		Mar-10		5.79
Apr-08		10.18	Apr-09		3.79	Apr-10		5.69
May-08		11.32	May-09		3.74	May-10		5.54
Jun-08		12.68	Jun-09		3.69	Jun-10		5.4
Jul-08		11.11	Jul-09		3.65	Jul-10		5.35
Aug-08		8.26	Aug-09		3.69	Aug-10		5.49
Sep-08		7.65	Sep-09		3.84	Sep-10		5.59
Oct-08		6.74	Oct-09		4.03	Oct-10		5.69
Nov-08		6.67	Nov-09		4.37	Nov-10		6.07
Dec-08		5.82	Dec-09		4.86	Dec-10		6.32
Average			Average			Average		
2008	Ś	8.868	2009	\$	4.114	2010	\$	5.664
2000	Ų	0.000	2000	7	7.117	20.0	Υ	3.001
Summer 2008	\$	9.706	Summer 2009	\$	3.776	Summer 2010	\$	5.536
Winter 2008- 2009	\$	5.240	Winter 2009- 2010	\$	5.212			



Winter Strip Nov09 - Mar10



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Short-Term Energy and Summer Fuels Outlook

April 14, 2009 Release (Next Update: May 12, 2009)

Natural Gas

Consumption. Total natural gas consumption is projected to decline by 1.8 percent in 2009 and remain relatively unchanged in 2010. EIA expects the current decline in economic activity will have a significant impact on natural gas consumption in the industrial sector, which is forecast to fall by 7.4 percent this year. In the residential and commercial sectors, where consumption is influenced more by weather than by macroeconomic conditions, natural gas use is expected to increase slightly in 2009. The expected 0.7-percent increase in natural gas consumption in the electric power sector this year is supported by a projection of lower natural gas prices for power generation relative to coal, particularly in the Southeast. The outlook for natural gas consumption in 2010 remains subject to uncertainty about the status of future economic conditions. If the economy begins to recover later this year as currently expected and weather remains near normal, small consumption growth in the industrial and electric power sectors should be offset by small declines in the residential and commercial sectors.

Production and Imports. Total U.S. marketed natural gas production is expected to decline by 0.3 percent in 2009 and by 1.0 percent in 2010. Total working natural gas rigs in the United States have declined from slightly more than 1,600 in late August 2008 to slightly below 800 as of April 9, according to Baker Hughes. The precipitous drop in drilling activity and declining productivity of wells already in place are expected to cause production to steadily decline as the year progresses. The resultant impact of lower production in the lower-48 non-Gulf of Mexico (GOM) during the second half of 2009 is expected to more than offset higher year-over-year production during the first half of the year. Additional supply curtailments may be necessary as natural gas storage levels approach capacity later this summer. Marketed production from the Federal GOM is expected to increase by 1.9 percent in 2009 because of continued recovery from the 2008 hurricane season and new supplies associated with the startup of offshore oil production facilities. Despite expectations of higher prices and the recovery of drilling programs next year, total production in 2010 is expected to be lower in both the lower-48 non-GOM and Federal GOM regions.

Projected U.S. liquefied natural gas (LNG) imports are expected to increase to about 480 billion cubic feet (Bcf) in 2009, from 352 Bcf in 2008, because of lower global economic activity and the start up of new liquefaction capacity in the Middle East and other parts of the world. Depressed LNG demand in Asia and Europe should tend to increase the amount of LNG available to the United States. However, the LNG projection is subject to considerable uncertainty. Initial production from new liquefaction capacity has been slowed or delayed for extended periods, and U.S. natural gas demand is also projected to be lower in 2009. As a result, expanded LNG flows into the United States likely would depend on there being less domestic natural gas production or imports from Canada than forecast. In the current Outlook, U.S. pipeline imports are expected to decline by about 11 percent in 2009.

Global Crude Oil and Liquid Fuels

The price of West Texas Intermediate (WTI) crude oil averaged \$100 per barrel in 2008. The global economic slowdown is projected to reduce the average price to \$53 per barrel this year. Assuming an economic recovery next year, WTI prices are expected to average \$63 in 2010.

Gas Commercial Operations Hedging Program Market Indicators Summary May 22, 2009

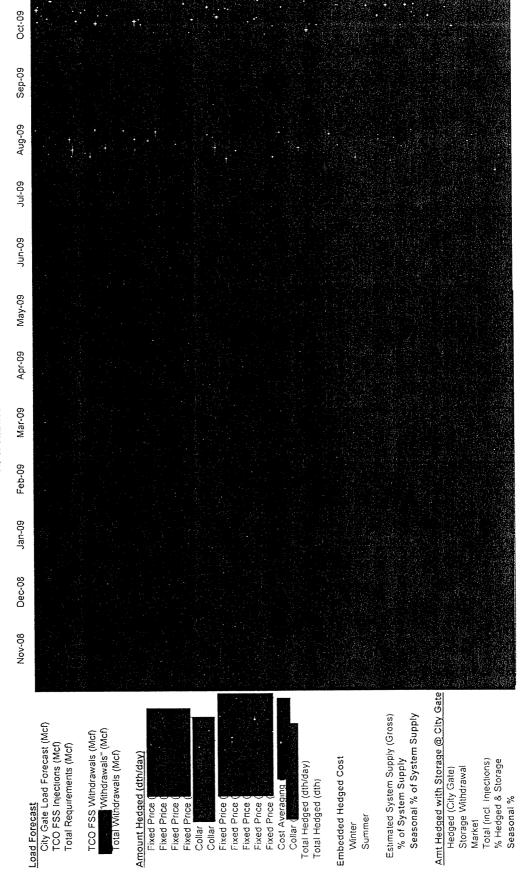
	Price Pressure	Term	Comments	Page Ref
Weather		•		
Long Term Forecast (Dec 09Feb 10)	 	Long	NOAA predicting above average temperatures for Dec 2009Feb. 2010 for Mid-Continent and Southern portion of United States. Equal chance of above, below or normal in Northeast and portions of Central States and portions of Western US.	12
Mid Term Forecast (30-60 days)	4→	Long	June predicted to be 3.6% warmer than 10 year normal and July is predicted to be 2.9% cooler than 10 year normal.	13
Short Term Forecast (6-10 days)	←→	Short	Above and Much Above over West during the period. Above over Mid- Continent early in period becoming Below to normal later in the period.	14
Tropical Storm Activity	1	Long	AccuWeather's 2009 hurricane forecast calls for 10 named Atlantic Basin storms2 storms to hit U.S. coastline.	15
Storage Inventory				
EIA Weekly Storage Report		Long	Storage injections for the week ending May 15th were 103 BCF. Storage levels are at 2.116 TCF which is 32.1% higher than last year and 22.4% higher than the 5 year average.	16
Industry Publications				
Cambridge Energy Research Associates Summer 2009: Winter 2009/10	1	Long	CERA projects the Henry Hub price to average per MMBtu for 2009. Economic outlook continues to deteriorate. Natural gas demand continues to fall faster than supply.	
Gas Daily	ţ	Long	Overall gas production is still up 4% from last year even with productions shut-ins to date as innovations in drilling technology and expansions in unconventional plays have ameliorated expected production drop-offs.	17
Gas Daily	ţ	Long	The Marcellus Shale is starting to look as prolific as the Barnett Shale while having the advantage of being much closer to premium Northeast markets.	18-19
Gas Daily	†	Long	For every Mcf of gas produced from conventional basins around the world, nine times that amount of recoverable unconventional gas exists in the same basin.	20
Gas Daily	†	Long	The recent rally may have overshot and that gas prices are likely to see some downside in the near term, given continued industrial production declines.	21-22
Government Agencies				
Energy Information Administration Winter 2009/10: \$4.750 Summer 2009. \$3.550	†	Long	Saying demand won't rebound until late this year, EIA trimmed its 2009 Henry Hub spot price projection by 4.2%, down 55% from the 2008 average.	23
Technical Analysis	γ			
Winter 2009-10 Strip Chart	←→	Short	Closed at \$5.85	24
Summer 2010 Strip Chart	←→	Short	Closed at \$6.17	25
Economy				
Demand		Long	EIA: Natural gas consumption is projected to decline by 1.9% in 2009 and then increase slightly in 2010.	26-27
Supply	+	Long	EIA: Total U.S. marketed natural gas production is expected to decline by 1.0% in 2009 and fall by 2.8% in 2010. Total working natural gas rigs have declined by 54% since last August.	26-27
Oil Market	+	Long	WTI crude oil prices, which averaged \$99.57 per barrel in 2008, are projected to average \$52 per barrel in 2009 and \$58 per barrel in 2010.	26-27

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

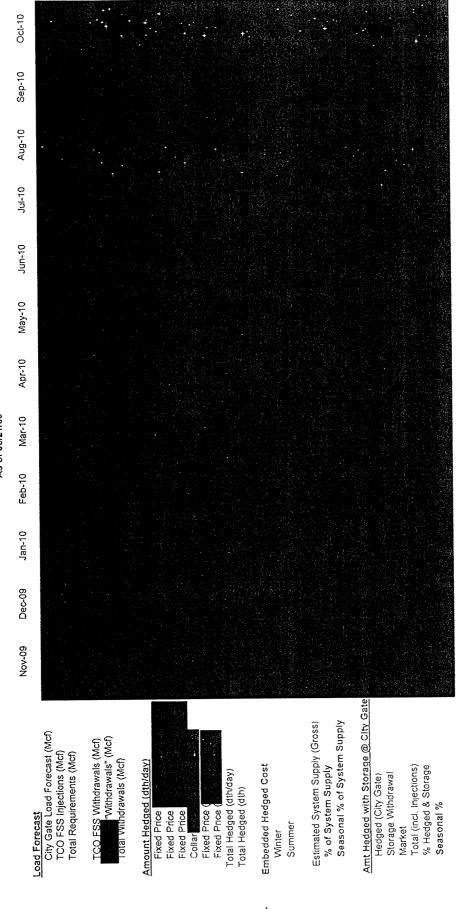
Attendees: Jeff Kern, Jim Henning (by telephone), Mike Brumback, Joachim Fischesser

Discussed current market conditions including weather forecasts, storage levels and various analysts projections as well as EIA's forecasts for natural gas and oil markets. Based on the discussion, as well as the current position of the Hedging Program, no additional hedging is proposed.

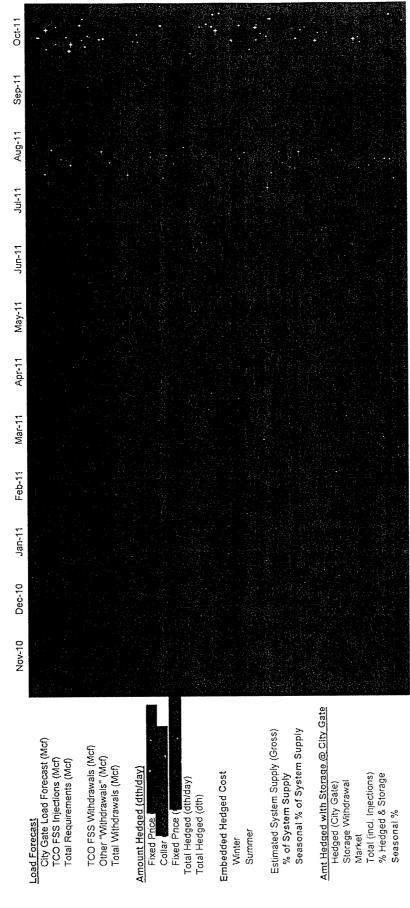
Duke Energy Kentucky Hedging Program - Current Position November 2008 - October 2009 As of 05/21/09



Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 05/21/09



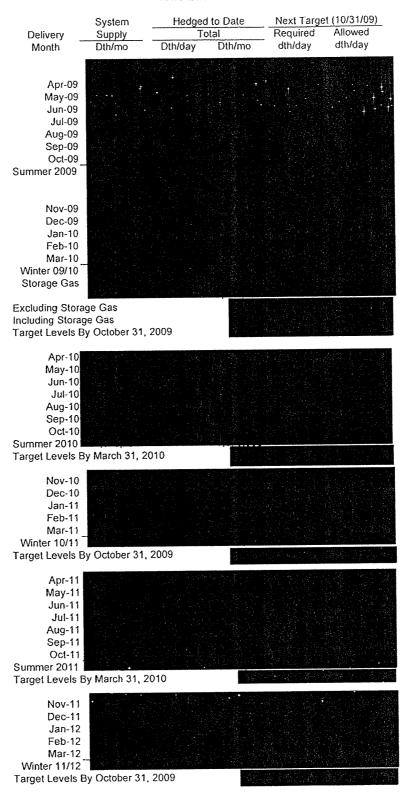
Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 05/21/09



Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 05/21/09

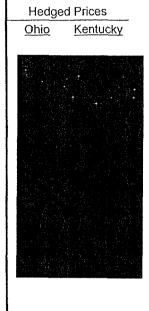
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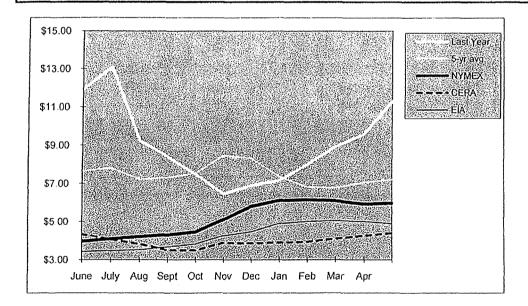
Duke Energy Kentucky Hedging Program Current Position

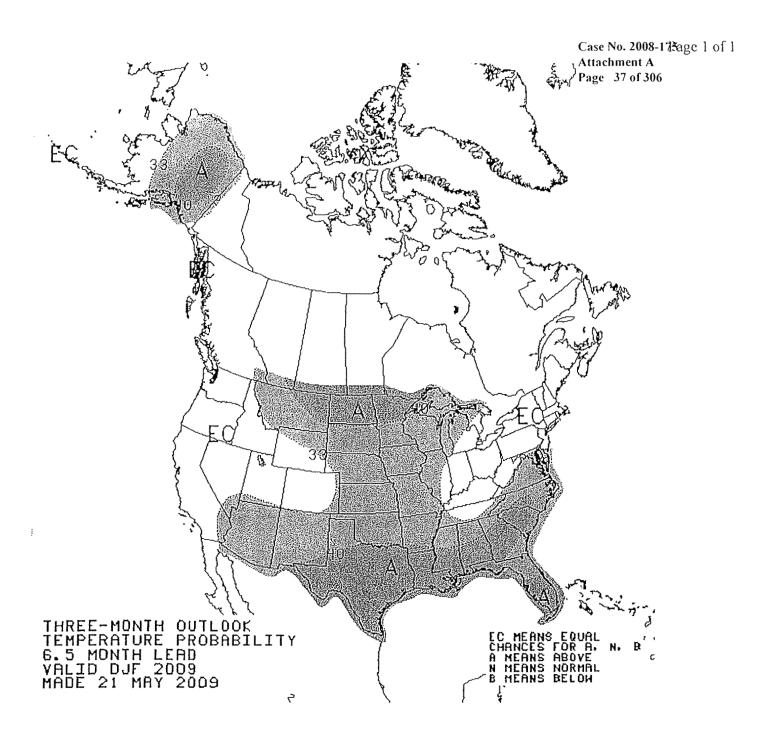


Case No. 2008-175 Attachment A COMPARISON OF HISTORIC SPOT & PROJECTED PRICES Page $^{-36}$ of 306 TO CURRENT FUTURES PRICES

Historic Prices:									
NYMEX Closing Price									
	5-yr. avg.	Last Year		CERA	EIA	NYMEX			
	(04/05-08/09)	(2008-2009)		23-Арг-09	12-May-09	20-May-09			
June	\$7.65	\$11.92			\$3.430	\$3.970			
July	\$7.81	\$13.11			\$3.480	\$4.098			
Aug	\$7.21	\$9.22			\$3.530	\$4.222			
Sept	\$7.31	\$8.39			\$3.680	\$4.318			
Oct	\$7.55	\$7.47			\$3.830	\$4.463			
Nov	\$8.47	\$6.47			\$4.270	\$5.105			
Dec	\$8.31	\$6.89			\$4.470	\$5.795			
Jan	\$7.36	\$7.17			\$4.920	\$6.112			
Feb	\$6.82	\$8.00			\$5.020	\$6.152			
Mar	\$6.79	\$8.93			\$5.070	\$6.102			
Apr	\$7.06	\$9.58			\$5.020	\$5.927			
May	\$7.21	\$11.28			\$4.910	\$5.972			
12 Month Avg	\$7.46	\$9.03			\$4.303	\$5.186			
Summe	r Average				\$3.386	\$4.025			
Winter A	verage				\$4.900	\$6.018			







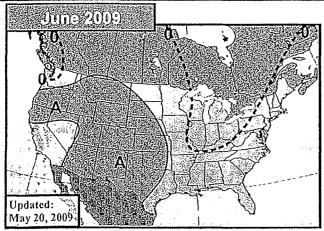


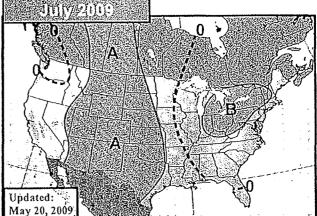


EarthSat's 30-60 Day Outlook

Wednesday, May 20, 2009

Forecaster: SS/BH/TH





翻 Above (+3) M Above (+2) M Above (+1) 0 - - 0 M Below (-1) M Below (-2) M Below (-3)

Previous S S

Slight warm tweaks in the West

Still slightly cool in the Midwest

The June forecast was mostly unchanged this week, with just a few minor warm tweaks to some cities in the West including Portland, Salt Lake City, Phoenix, and Denver. The map in the bottom right corner is our CropCast 15-30 Day precipitation forecast, which ranges from June 2-17. The

forecast shows above normal precipitation across the Southwest and into the Great Basin. This could have a limiting effect on temperatures across the West. On the contrary, continued dryness in TX could lead to some enhancement of the heat.



June PWCDD* Forecasts

*10Y Normal updated to 99-08

Jun 2009 Fcst:

237.0

10Y Normal 228.7 30Y Normal 217.4 Jun-2008 263.1

Change: +0.5
National Population-Weighted CDDs

Previous

Forecast remains unchanged

Still warm across the Rockies/ Plains

The July forecast remains unchanged, with warmth still expected across the Rockies and Plains and cooler conditions anticipated for the East. The map in the bottom right corner is the July 2-meter (surface) temperature anomaly forecast from the ECMWF model (the colored contours are at 0.5F inter-

vals). The phase is shifted a bit with the warmest anomalies further west across the Pacific Northwest, and the coolest anomalies further west across the western Midwest though the overall idea of a warm West and cool East holds.



July PWCDD* Forecasts

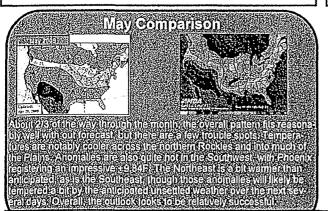
*10Y Normal updated to 99-08

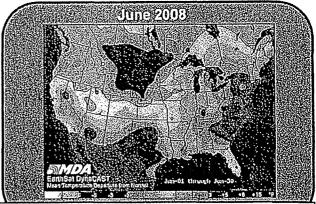
Jul 2009 Fcst:

326.5

10Y Normal* 336.2 30Y Normal 327.7 Jul-2008 340.0

Change: 0.0
National Population-Weighted CDDs





Maps above depict deviations of average temperatures from 30 Y normal in Fahrenheit.

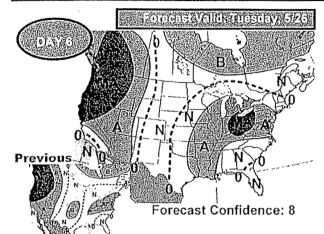


EarthSat's 6-10 Day Forecast-Detailed

Thursday, May 21, 2009

Forecaster: BH/AC

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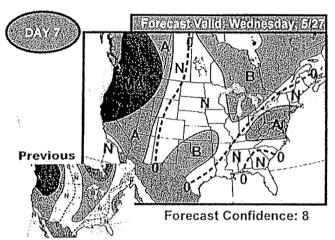


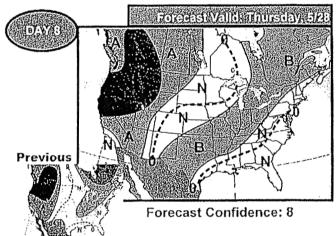
Today's Forecast:

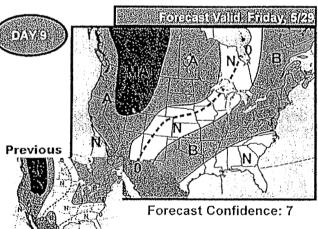
East Turns Cooler Late

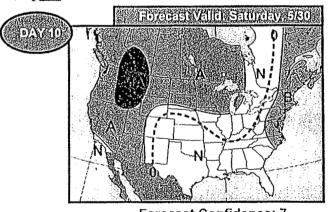
Warmth Strongest In Interior Northwest

Temperatures across the Midwest and East early in the period will hold a brief stint of widespread above normals, which could turn out to be a little stronger than projected. Otherwise, a cooling trend across both regions takes place by the midperiod where seasonal to belows start to filter into these regions. The main focus of the warmth is now over the Interior Northwest and Northern California, and may even take on warmer readings still. A warming trend is anticipated to reach the Northern Plains and western Midwest during the second half of the period. This warmth could contain more widespread above normal conditions during this time.









Forecast Confidence: 7

Strong Above+15 or UP

Much Above+8F to +14F

Above+3F to +7F

+2F ······-2F

Strong Below-15 or Lower Much Below-8F to -14F

Below-3F to -7F 🚳

MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [Morning Basic-Page 3, Version 2.0]

Monday, May 18, 2009

Forecaster warns Gulf rig operators to be on lookout for sudden storms

Operators of gas and oil rigs in the Gulf of Mexico should be more concerned about fast-developing storms that pop up in the Gulf's open waters than about larger, more powerful tropical storms and hurricanes that develop over the Atlantic Ocean and give plenty of warning, a private weather forecaster said Thursday in Houston.

Joe Bastardi, a meteorologist with AccuWeather, presented his firm's forecast for the 2009 hurricane season, which calls for 10 named Atlantic Basin storms this year. Bastardi forecast that two storms will hit the US coastline with hurricane-force winds and that, unlike in the past several years, most of that activity will be concentrated on the East Coast rather than the Gulf Coast.

However, he told Platts that Gulf producers face a specific short-term threat unrelated to the mega-storms that make landfall.

"The problem is not the Katrinas and Ritas, or even the Ikes. The problem storms are going to be the Jerrys, like 1989, where people died trying to evacuate a rig. A front came into the Gulf in October and was fed back and developed into a storm," he said.

"Those are the kind of things I'm more concerned with, and a lot of times you won't see those show up on a tropical bulletin."

Gulf rig operators this year should be more concerned "about things that are not tropical in nature and that may fly under the radar until someone in an official capacity actually believes they're tropical," he said.

"I think the meat of the season is more concentrated further north and east. I think what's going to be interesting in relation to the US coast this year, the western Gulf included, is going to be what you may not see coming until it's already there."

He cited as an example Tropical Storm Edouard, which hit the Central Gulf producing area last August, forcing producers to curtail 555,000 Mcf/d, or roughly 7% of the Gulf's gas output.

"A lot of folks didn't see that coming and yet the system just seemed to appear," Bastardi said. "I think the biggest challenge that's left for hurricane forecasters, as far as something that could surprise people, are things that develop in the backyard." — Jim Magill

Home > Natural Gas > Weekly Natural Gas Storage Report

Weekly Natural Gas Storage Report

Case No. 2008-175 age 1 of 1
Attachment Acid.
Gloss Rage 41 of 306

Release Schedule Sign Un for Email Updates

sed: May 21, 2009 at 10:30 A.M. (eastern time) for the Week Ending May 15, 2009 Release: May 28, 2009.

Working Gas in Underground Storage, Lower 48

	Stocks	in billion cubic f	eet (Bcf)	Historical Comparisons						
Region	05/15/09	05/08/09	Change	Year Ago (05/15/08)	5-Year (2004-2008) Average				
	03/13/03	03/00/03	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change			
East	892	827	65	789	13.1	837	6.6			
West	345	332	13	220	56.8	252	36.9			
Producing	879	854	25	592	48.5	640	37.3			
Total	2,116	2,013	103	1,602	32.1	1,729	22,4			

Notes and Definitions

Summary

Working gas in storage was 2,116 Bcf as of Friday, May 15, 2009, according to EIA estimates. This represents a net increase of 103 Bcf from the previous week. Stocks were 514 Bcf higher than last year at this time and 387 Bcf above the 5-year average of 1,729 Bcf. In the East Region, stocks were 55 Bcf above the 5-year average following net injections of 65 Bcf. Stocks in the Producing Region were 239 Bcf above the 5-year average of 640 Bcf after a net injection of 25 Bcf. Stocks in the West Region were 93 Bcf above the 5-year average after a net addition of 13 Bcf. At 2,116 Bcf, total working gas is within the 5-year historical range.

Data

History (XLS)

other formats: Summary TXT CSY

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

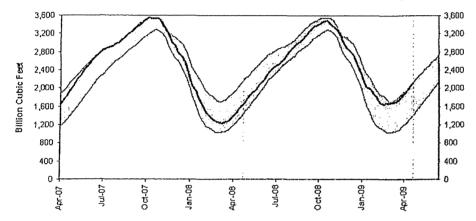
Revision Polic

Related Links

Storage Basics Natural Gas Weekly Update

Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008.

Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

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Thursday, May 21, 2009

Expect more shut-ins by year's end, producers say

Despite rig counts that have fallen 55% since October, more cuts in gas production are needed this year to bring the market into balance, producers and analysts said Wednesday at Intelligence Press' GasMart in Chicago.

Overall gas production is still up 4% from last year even with production shut-ins to date as innovations in drilling technology and expansions in unconventional plays have ameliorated expected production drop-offs, Bentek Energy President Porter Bennett said, adding that "many producers are drilling many more wells with fewer rigs."

"The punch line is the supply is building, prices are going to remain low and you can expect to see more production shut-ins," Bennett added. "We're going to have to see more because that's the only way to balance this. We're going to have to shut down more production."

ConocoPhillips Senior Vice President Will Hussey agreed, saying the market is "oversupplied and we're just ramming it into storage. ... Conventional gas is getting replaced by unconventional, by shale plays. That's not anything new, but now you're hearing it in a way that says it's here, it's happening."

Nexen Marketing Managing Director of Eastern Marketing David Slater concurred, saying "unconventional resources are producing more than expected ... Almost all of the Rocky Mountains are showing growth, East Texas as well. A whole lot of wells were drilled that couldn't get out until the Midcontinent Express came on, and that pipeline has begun to fill up already."

Bennett suggested that those elements will combine to have a long-term effect on basis prices. "When the economy gets going again, I think you're going to see a vastly different supply stack," he said, noting that by year's end Rockies Express Pipeline should stretch from Wyoming to Clarington, Ohio. "All the pipelines that took gas out of REX into the Midwest are full. Where do you put the REX gas?" — Joshua Starnes

Thursday, May 21, 2009

Marcellus Shale's potential 'underappreciated'

The Marcellus Shale in Appalachia is starting to look as prolific as the Barnett Shale of North Texas while having the advantage of being much closer to premium Northeast markets, Jefferies & Company analyst Subash Chandra said Wednesday.

"While other resource plays dominate mind share, Marcellus results are increasingly impressive over a large area in Pennsylvania," Chandra said. "Recent results suggest economics may be at least as good as the Barnett core."

Chandra noted that results from two producers operating in the core of the Marcellus in northeastern Pennsylvania — National Fuel Gas' Seneca Resources and privately held East Resources — were particularly encouraging.

Seneca reported a horizontal well in Clearfield County operated by Houston-based EOG Resources that had a seven-day flow rate of 3,000 Mcf/d with up to 10 fracking stages that cost \$4 million. East Resources completed two horizontal wells in Tioga County at a price of less than \$3 million/well that should produce between 3.5 and 4 Bcf in total, he said.

"We estimate that a 3-Bcf well in the Marcellus costing \$4 million can be economic in a sub-\$5/MMBtu NYMEX environment based on results and company guidance," Chandra said. "Recent industry results suggest the Marcellus fairway in northeast Pennsylvania is expanding. We think potential [there] is still underappreciated."

Chandra thinks the state of Pennsylvania and the producing industry will soon resolve their ongoing conflicts regarding water use and disposal associated with shale gas drilling, providing operators with a stable base for their investment.

"Water procurement and disposal and pipeline infrastructure issues are not permanent barriers to development in Pennsylvania as they might be in areas such as New York," Chandra said. "Concerns are legitimate, but we believe the state acknowledges a balanced approach is required going forward."

Eventually, "water may have to be reinjected, or water processing facilities may have to be built, all at a cost, that is compensated from the access to premium end-users and a lower lease cost and royalty burden," Chandra said.

The state's Department of Environmental Protection has already permitted wastewater treatment plants for drillers in the northeastern and southwestern parts of Pennsylvania and is actively looking at the potential for reinjecting wastewater into old wells.

Case No. 2008-175 Attachment A Page 44 of 306

"In the short list of top-tier shales, the Marcellus still distinguishes itself for enormous breadth of the resource spanning a few states and many counties," Chandra said. "Louisiana's Haynesville is relatively compact, while the Bakken is primarily an oil resource." — Bill Holland

Wednesday, May 6, 2009

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Scholar: Unconventional gas reserves 'enormous'

For every Mcf of gas produced from conventional basins around the world, nine times that amount of recoverable unconventional gas exists in the same basin, according to the head of the petroleum engineering department at Texas A&M University.

Stephen Holditch told Platts on the sidelines of the Offshore Technology Conference in Houston late Monday that the 1:9 ratio is based on a study of eight North American basins.

"We've studied publicly available data on how much oil and gas has been produced in different basins and how much is still in these basins in terms of proved, probable and possible reserves," he said. "It falls out that 10% of the oil and gas is in conventional reservoirs and 90% is in unconventional ones," including coalbed methane, shale gas and tight-sands gas.

"We feel that this 90-10 split is part of how natural gas resources are distributed, and it will more or less hold true for every natural gas basin in the world," Holditch said.

His team of researchers examined only those reserves classified as technically recoverable. "We know where it is and we have the technology to recover it, but we can't book it as reserves because we either haven't drilled the wells or there's no pipeline there, or the gas price isn't high enough to make it economic," he added.

Unconventional gas reserves such as those found in the Bossier Sands in East Texas and the Haynesville, Barnett, Woodford, Haynesville and Marcellus shales "aren't unique to North America," Holditch maintained. "South America, the Middle East, Russia, the North Sea or wherever, if you can go into these basins and estimate the amount of conventional oil and gas that's going to be recovered, multiply that by nine and that's how much unconventional gas can be recovered."

Holditch's hypothesis contradicts popular theories — such as the peak oil theory — that the world is running out of hydrocarbons. "The peak oil theory is based on production from conventional oil fields," he said. "What I'm saying is that peak oil theory is only the top of that resource triangle."

According to Holditch, "there's an enormous amount of unconventional oil and gas" around the world, including heavy oil in Canada, Venezuela and Indonesia, as well as the shale gas being developed in the US.

"There are a lot of tight gas reservoirs in the Middle East. They're just now waking up to what they really have," he said. "The other basins in the Middle East and Russia have never tested their source rocks and when they do, they're going to find enormous amounts of oil and gas." — Jim Magill

Wednesday, May 20, 2009

Gas prices will need 12-18 months to recover: analyst

Oil prices may recover as early as three months from now, but natural gas prices have a "more difficult road ahead" and are likely to take a year to 18 months to recover, Goldman Sachs' head of commodities research Jeffrey Currie said Tuesday.

Currie said the recent rally may have overshot and that gas prices are likely to see some downside in the near term, given continued industrial production declines. But, "we don't think Armageddon is going to happen. Our worst fears have not been materialized. We've taken out the tail risk," Currie said at the Energy Risk USA conference in Houston.

The credit crunch has led to a severe "destocking" trend, in which manufacturing activity, finished goods inventories and auto fleets have declined at unprecedented rates, though demand has declined at a similar rate to previous recessions, according to Currie. At current production levels, for example, the US vehicle fleet would take 42 years to replenish, he said.

With supplies in decline, this could to lead to energy scarcity by 2010 if investments don't pick up, he said.

Oil prices will likely be the first to rebound, as early as late summer, on higher global demand and declining supply, he added.

"We need to see investments grow," Currie said. "Barnett Shale and Haynesville Shale are not going to save the commodity complex." Once the economy improves, "it's the lack of commodity supply that will put the brakes on growth," he said. "You can't grow energy 0.5% and GDP at 2% to 3%."

As a manufacturing fuel, natural gas has been among the hardest hit by the destocking in the industrial sector, and gas demand "has been annihilated," Currie said.

Global natural gas demand as of November 2008 had fallen between 5% and 10%, down from positive growth rates earlier last year.

Meanwhile, supply growth has slowed but continues. Goldman Sachs expects global gas supplies to grow nearly 3% in 2009, down from about 6% in 2008, and continue growing at least through 2015. And global liquefied natural gas supplies are expected to grow about 14% in 2009, compared with a nearly 6% growth rate in 2008, according to Goldman Sachs.

The recent NYMEX rally also has brought US-UK gas price parity and is likely to push significant LNG supplies to the US, Currie said. He expects LNG imports to the US to rise to a little more than 3 Bcf/d by December 2009, more than doubling year-over-year imports, and to climb to well above 6 Bcf/d by December 2010.

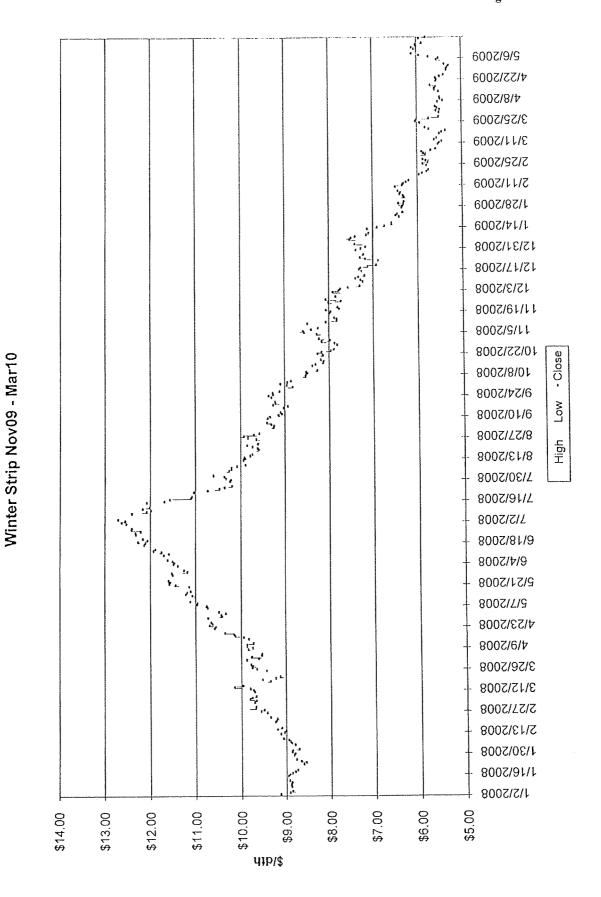
Adding to US supply, Currie expects coal-to-gas substitution to lead natural gas prices to unexpected lows, based on several factors.

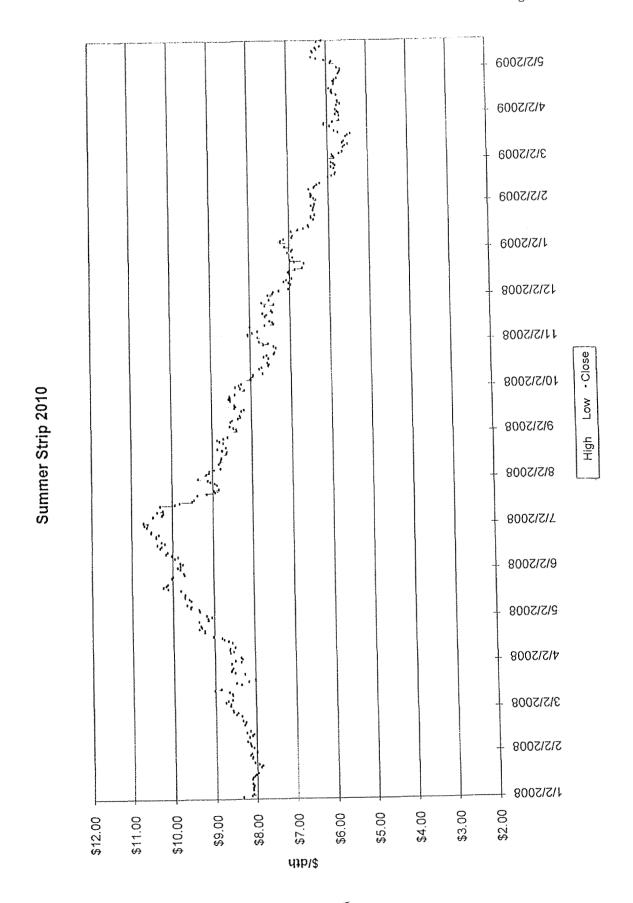
For one, natural gas generation costs, which were cheaper than coal generation costs from January to April, have turned slightly more expensive than coal within the past month, according to Currie. In addition, the US-Europe coal differential has converged, limiting coal exports. "The window to export US coal has closed," he said.

As a result, Currie suggested that both supply and demand will need correcting before gas prices climb: "Gas needs to see rig counts fall and industrial demand rebound." — Sheetal Nasta

Energy Information Administration Henry Hub Pricing Per MMbtu May 12, 2009 Release

' Jan-08	8.01	Jan-09	5.24	Jan-10	4.92
Feb-08	8.51	Feb-09	4.51	Feb-10	5.02
Mar-08	9.46	Mar-09	3.96	Mar-10	5.07
Apr-08	10.18	Apr-09	3.52	Apr-10	5.02
May-08	11.32	May-09	3.38	May-10	4.91
Jun-08	12.68	Jun-09	3.43	Jun-10	4.81
Jul-08	11.11	Jul-09	3.48	Jul-10	4.76
Aug-08	8.26	Aug-09	3.53	Aug-10	4.86
Sep-08	7.65	Sep-09	3.68	Sep-10	4.95
Oct-08	6.74	Oct-09	3.83	Oct-10	5.1
Nov-08	6.67	Nov-09	4.27	Nov-10	5.5
Dec-08	5.82	Dec-09	4.47	Dec-10	5.79
Average		Average		Average	
2008	\$ 8,868	2009	\$ 3.942	2010	\$ 5.059
Summer 2008	\$ 9.706	Summer 2009	\$ ·3·550	Summer 2010	\$ 4.916
Winter 2008- 2009	\$ 5.240	Winter 2009- 2010	\$ 4.750		





Short - Term Energy Outlook May 12, 2009 Release

Natural Gas

Consumption. Total natural gas consumption is projected to decline by 1.9 percent in 2009 and then increase slightly in 2010. Weak economic conditions leading to significantly lower natural gas consumption in the industrial sector are expected to be the main source of the dip in total consumption this year. The projected increase in natural gas use in the electric power sector offsets some of this decline. Lower relative natural gas prices compared with coal, particularly in the Southeast, are expected to induce higher utilization of natural gas-fired electric generation capacity in the near-term and lead to a consumption increase of 2.1 percent in the electric power sector this year. Natural gas consumption is expected to decline slightly in the residential and commercial sectors this year. Similar to other fuels across the energy market, the outlook for natural gas consumption in 2010 is highly contingent upon the timing and pace of economic recovery. Under current assumptions, consumption growth in the electric power sector and a slight recovery in the industrial sector are expected to contribute to a small increase in total consumption for the year, despite minor consumption declines in the residential and commercial sectors due to the expectation of 0.8 percent fewer heating degree-days than the previous year.

Production and Imports. Total U.S. marketed natural gas production is expected to decline by 1.0 percent in 2009 and by 2.8 percent in 2010. As a result of poor economic conditions and lower natural gas prices, total working natural gas rigs have declined by 54 percent since last August. The erosion of drilling activity combined with production curtailments in response to current and projected low prices and high inventory levels are expected to cause natural gas production in the lower-48 non-Gulf of Mexico (GOM) to decrease by about 1.6 percent in 2009. Conversely, marketed production from the Federal GOM is expected to increase by 3.4 percent in 2009 due to the return of facilities damaged by Hurricanes Gustav and Ike as well as the start-up of new production associated with offshore oil projects. Despite expectations of higher prices next year, the lagged effects of the downturn in drilling this year and the natural decline in productivity from existing wells are expected to contribute to lower production in both the lower-48 non-GOM and Federal GOM regions in 2010.

Expected weak natural gas demand in the liquefied natural gas (LNG)-consuming countries of Asia and Europe, the startup of new liquefaction capacity, and limited natural gas storage capacity in countries that typically rely on LNG are expected to increase the availability of LNG for the United States. <u>U.S. LNG imports are expected to increase from 350 billion cubic feet (Bcf) in 2008 to about 500 Bcf in 2009 and 650 Bcf in 2010.</u> However, there is significant uncertainty associated with the global LNG balance. U.S. pipeline imports are expected to decline by about 7 percent in 2009 because of the impacts of suspended drilling programs and declining well productivity in Canada.

U.S. Crude Oil and Liquid Fuels

: 1

WTI crude oil prices, which averaged \$99.57 per barrel in 2008, are projected to average \$52 per barrel in 2009 and \$58 per barrel in 2010. These prices are about \$1 per barrel and \$5 per barrel, respectively, below those projected in last month's Outlook. However, a stronger-than-expected economic recovery or lower non-OPEC production (due to low oil prices, financial market constraints, or more aggressive action to cut production by OPEC countries) could lead to a faster and stronger rise in oil prices. As always, energy price forecasts are highly uncertain. Both recent experience and the sizable participation in near-term crude oil futures options contracts at strike prices that are significantly different from current futures market prices clearly demonstrate that crude oil prices can move within a wide range in a relatively short period.

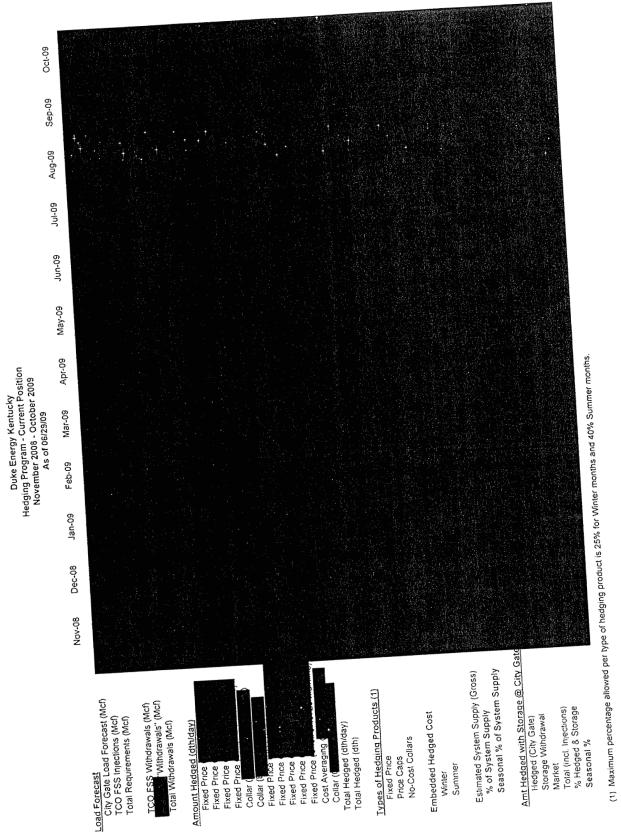
Gas Commercial Operations Hedging Program Market Indicators Summary June 30, 2009

	Price Pressure	Term	Comments	Page Ref
Weather				
Long Term Forecast (Dec 09Feb 10)	1	Long	NOAA predicting above average temperatures for Dec. 2009Feb. 2010 for most of the continental United States.	12
Mid Term Forecast (30-60 days)	←→	Long	Earthsat & WSI both show warmer than normal in the West and cooler in the East for the rest of the summer.	13&14
Short Term Forecast (6-10 days)	\	Short	Normal to below average everywhere except around the Gulf of Mexico.	15
Tropical Storm Activity	\	Long	CSU forecasting slightly below average 2009 Atlantic hurricane season with 11 named storms, five of which will strengthen into hurricanes. No current activity.	16
Storage Inventory				
EIA Weekly Storage Report	\	Long	National storage levels are 31% higher than last year and 22% higher than 5 year average. " West Coast and Rockies could struggle to find space for gas supplies come autumn"	17&18
Industry Publications				
Cambridge Energy Research Associates Summer 2009: Winter 2009/10	1	Long	"It is difficult to see how bullish price signals can maintain a hold on the gas market when the storage surplus is there to fend off every challenge."	19
Gas Daily	←→	Long	California Energy Commission: "Gas price forecasts are unreliable and will continue to be as new carbon regulations and increased liquefied natural gas imports make prices more volatile."	20
Gas Daily	†	Long	Gas price 'bublle' to burse in early 2010: "rapidly declining rig counts might result in a price spike by early 2010."	21
Gas Daily	1	Long	Gas collision looms ahead: "The result will be significan gas-on-gas competion at the Clarignton Hubwith Gulf Coast suppliers being forced to either lower their prices or find alternative markets"	22
Government Agencies		····		r
Energy Information Administration Summer 2009: \$3.651 Winter 2009/10: \$5.008		Long	"average Henry Hub natural gas spot price is expected to stay under \$4 per thousand cubic feet (Mcf) until late in the year"	23
Technical Analysis				
Winter 2009-10 Strip Chart	← →	Short	Range bound: \$5.25 - 6:10	24
Summer 2010 Strip Chart	†	Short	Slight uptrend since mid March	25
Economy				·
Demand	†	Long	EIA: The anticipation of some economic recovery in 2010 is the basis for slight consumption increases in the commercial and industrial sectors next year"	26-27
Supply	†	Long	EIA: Total U.S. marketed natural gas production is expected to decline by 1.1% in 2009 and fall by 2.6% in 2010 Total working natural gas rigs have declined by 56% from September 2008 peak.	26-27
Oil Market	1	Long	Oil prices rose for the third consecutive month in May.	26-27

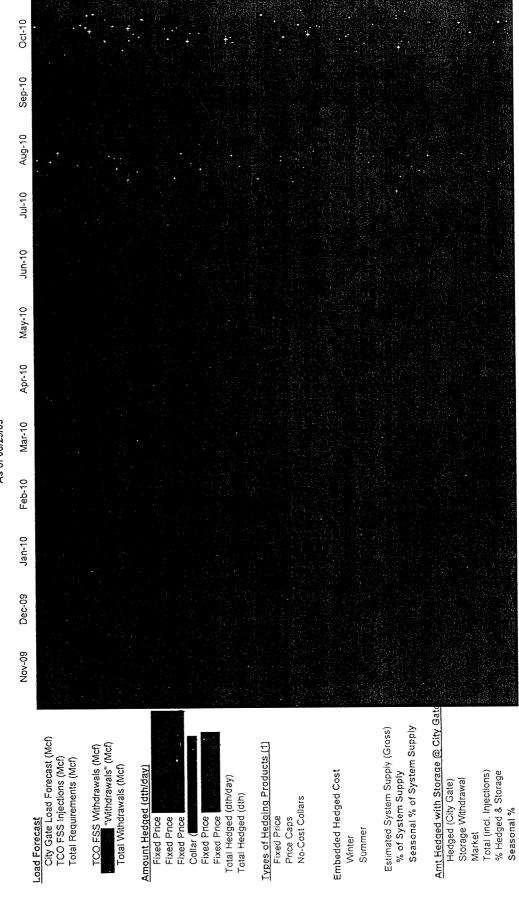
Meeting Minutes: 10th Floor North Conference Room - 10:00 am

Attendees: Jeff Kem, Jim Henning (by telephone), Palty Walker, Mike Brumback, Mitch Martin

The Hedging Committee decided to lock in a fixed price using cost averaging to start around the middle of July for gas to be delivered December 2009 through February 2010 to bring the total hedged for the winter season to around



Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 06/29/09



Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 06/29/09

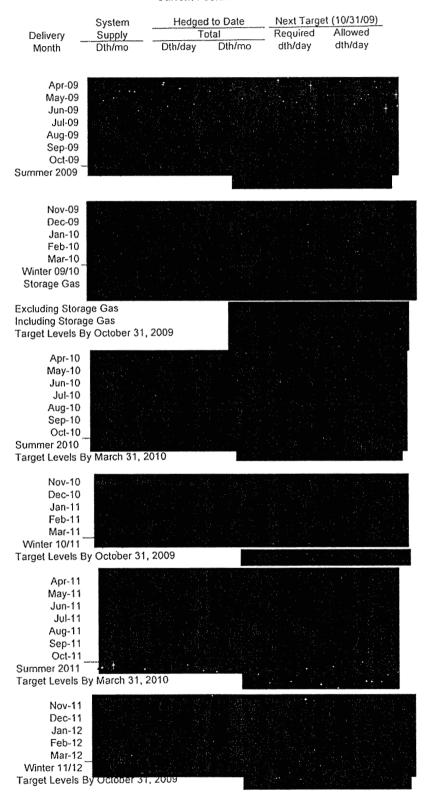
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	Dec-10								
	Nov-10								
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Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 06/29/09

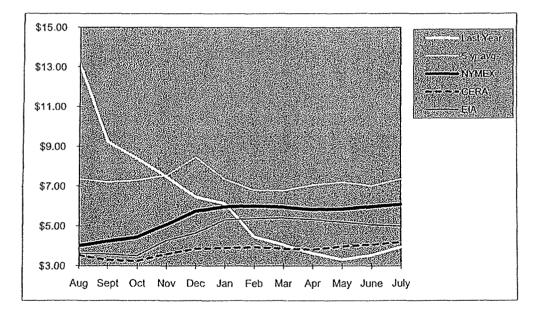
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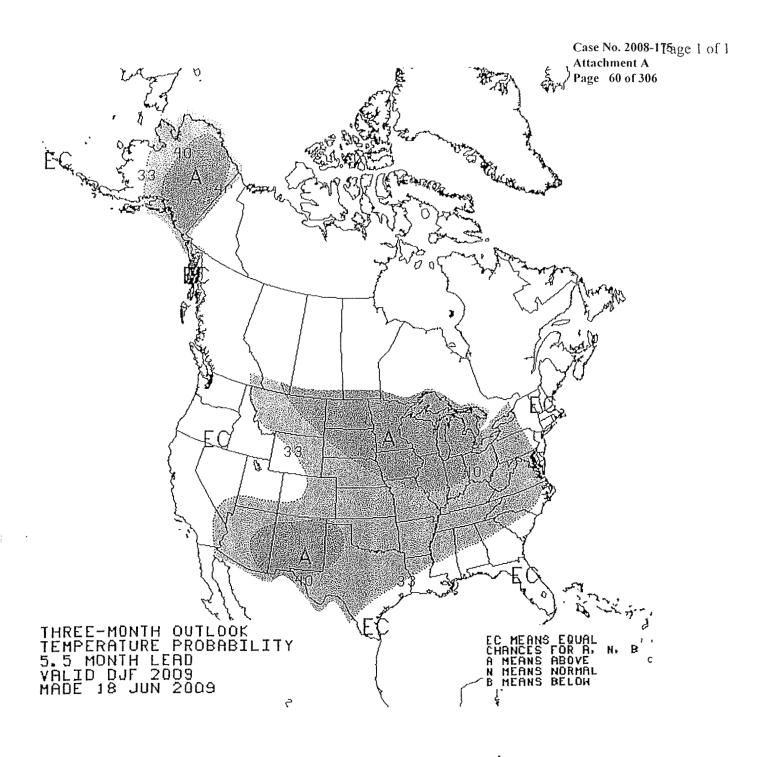
(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program Current Position



	Histor	ic Prices:			
	NYMEX CI	osing Price			r
	5-yr. avg.	Last Year	CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)	25-Jun-09	9-Jun-09	29-Jun-09
Aug	\$7.37	\$13.11		\$3.640	\$4.020
Sept	\$7.21	\$9.22		\$3.590	\$4.237
Oct	\$7.31	\$8.39		\$3.520	\$4.451
Nov	\$7.55	\$7.47		\$4.280	\$5.078
Dec	\$8.47	\$6.47		\$4.640	\$5.748
Jan	\$7.36	\$6.14		\$5.320	\$5.985
Feb	\$6.82	\$4.48		\$5.390	\$6.020
Mar	\$6.79	\$4.06		\$5.410	\$5.955
Apr	\$7.06	\$3.63		\$5.330	\$5.835
May	\$7.21	\$3.32		\$5.200	\$5.860
June	\$7.02	\$3.54		\$5.070	\$5.980
July	\$7.37	\$3.95		\$5.000	\$6.090
12 Month Avg	\$7.29	\$6.15	•	\$4.699	\$5.438
Summe	r Average			\$4.479	\$5.210
Winter A	verage		. Alexandra	\$5.008	\$5.757



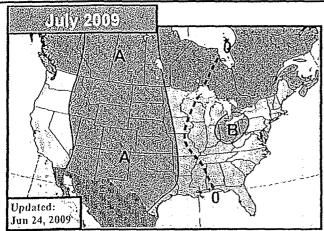


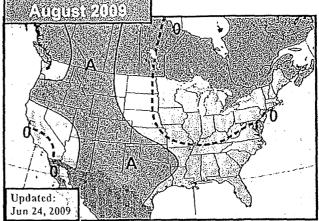


EarthSat's 30-60 Days Outlook

Wednesday, June 24, 2009

Forecaster: SS/BH/TH







Cool changes in the West and Northeast

Still warm Rockies/Plains

In our final July outlook there were a few tweaks to the forecast, though the overall outlook hasn't changed much. A few slight cooler changes were seen across the West as the warmth was pulled back a bit, perhaps based on the June verifications. Parts of the NE were cooled, with New York back below normal after briefly warming to normal last week. For an alternative look, we took a look at the ECMWF model monthly temperature outlook issued on June 15th. The map to the bottom right is the model's 2-meter temperature

departure outlook for the month of July (contours in 0.5C intervals). The model projects a ridge across the West and into the Plains, with a trough keeping cooler air over eastern Canada, similar to our forecast.



Jul PWCDD* Forecasts

*10Y Normal updated to 99-08

Jul 2009 Fcst:

329.6

10Y Normal 336.2 30Y Normal 327.7 Jul-2008 340.0

National Population-Weighted CDD:

The Previous

Some cool changes in the West

East remains mostly near normal

A few cool changes were made to the Southwest in this week's August outlook, with no changes east of the Mississippi. We turn again to the ECMWF monthly 2-meter temperature outlook issued on June 15, this time for the month of August. This model shows more widespread warmth than our outlook across the Plains and into the western Midwest. We've also included the model's 500 mb height anomalies (contours in 5 dm intervals). The model shows some broad ridging across the West, with positive height anomalies across almost the

entire US. It should be mentioned that the model's June outlook issued on May 15 will likely not verify well.



Aug PWCDD* Forecasts

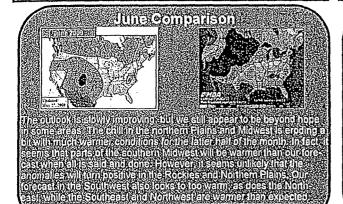
Aug 2009 Fcst:

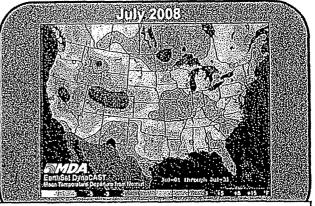
316.0

10Y Normal* 315.9 30Y Normal 296.5 Aug-2008 289.9

Change: -0.3

National Population-Weighted CODs





Maps above depict deviations of average temperatures from 30 Y normal in Fahrenheit.

some of the differences that the Agriculture Committee and [Chairman Collin] Peterson's concerns to announce that we were going to move forward," the Maryland Democrat told reporters.

Hoyer said he is hoping Waxman and Peterson will reach a final agreement on all issues Tuesday night to give members the required two days' notice before the bill can be brought to the floor. If more time is needed, the vote could slip until after the Independence Day recess next week, he said.

As House Democrats were working to iron out the details of an agreement, Senate Environment and Public Works Committee Chairman Barbara Boxer said her panel is preparing to begin its own work on legislation creating a nationwide carbon cap-and-trade scheme.

The California Democrat told reporters she intends to use the House Energy and Commerce Committee's bill as "the bones" of her panel's legislation but may not include the last-minute changes made to win the support of rural and moderate Democrats in the House.

Boxer said she aims to hold a committee vote on a climate bill before Congress leaves town next month for its annual August recess. — Jeff Barber, Jean Chennick

IHS CERA: Cost of building gas-fired plants is declining

The cost of building power plants in North America fell by 3% over the last six months, signaling a "broader downward trend" that now encompasses all types of facilities, including gas-fired plants, consultant IHS CERA said Tuesday.

The Cambridge, Massachusetts-based company projected that additional cost declines are likely, "particularly as equipment costs further catch up with the fall in materials prices."

In its latest Power Capital Costs Index, IHS CERA said the price drop was driven largely by a sharp drop in the prices for steel, copper and petroleum. Though the overall PCCI has been trending downward since the first quarter of 2008, the decline had previously been driven by one factor — the drop in what it would cost to build a nuclear power plant — which masked continued cost escalation of all others, the company said.

The new PCCI marks the first time in nearly a decade that the costs of gas-, coal- and wind-powered projects have decreased, the consultant said.

While the 3% drop "may appear modest compared to the sizable global decline in new construction orders," it "represents a true turning of the tide," Candida Scott, IHS CERA senior director of cost and technology, said in a statement. "We can expect the downward pressure to continue to build as falling costs work their way through the supply chain."

Despite the lower cost of materials, total construction costs are more resilient, said Roger Kranenburg, IHS CERA's director of capital cost power. "Substantial order backlogs have allowed equipment manufacturers to maintain their price position but as the global order pipeline slows they are likely to pass along lower input costs more aggressively."

The IHS CERA report said wind-generating costs have fallen most, showing an 11% drop because of declines in the cost of turbines and a "short-term slowdown in orders." Wind also was most affected by the "current economic and financial crists, which led to a drying up of tax equity and debt investors."

Lower costs for turbines, towers and construction could lead to a continued decrease in costs in the near term, IHS CERA said.

In addition, the company said its survey showed costs for combined-cycle and simple-cycle gas plants declined by 6% over the past six months as part of the larger trend in declining commodity and bulk materials prices.

Reduced demand for power because of the recession has led to a lower number of gas-fired generation projects in the pipeline for North America, "meaning that costs could decrease further in the near term as demand for gas turbines declines

API urges EPA to withdraw emissions plan, calls rationale 'remarkably thin'

The American Petroleum Institute is urging the Environmental Protection Agency to withdraw a proposed greenhouse gas endangerment proposal, which found that GHG emissions pose a danger human health and welfare.

If finalized, the proposal would serve as a basis for regulating such emissions under the Clean Air Act.

In comments submitted Monday, API maintained that EPA had failed to substantiate its conclusions for the finding, saying the Clean Air Act is "ill-suited" to address climate change and urged the agency to "allow the legislative process to proceed."

While the oil and gas trade group opposes the climate bill currently pending before the House of Representatives (see story, page 3), "it is possible to develop a comprehensive legislative response to climate change outside the framework of the existing CAA." it said.

According to API, the proposal's discussion of the health-based effects of GHG emissions contains a number of systemic errors and flaws, including poorly supported conclusions and the failure to weigh beneficial or offsetting effects.

API said the document providing the basis for the proposal "is remarkably thin for a major regulatory action. There is no support for EPA's assertion that GHG pollution currently presents endangerment at today's atmospheric concentrations, and the findings are therefore unwarranted."

Separately, the US Chamber of Commerce said in comments submitted Tuesday that in preparing the endangerment proposal, the agency ignored "relevant, credible scientific information" and on the key scientific data "plays fast and loose with the facts."

The chamber called on EPA to hold an on-the-record formal hearing before a neutral party "to openly review the data the agency is using to justify its endangerment proposal." — Gerald Karey

Rest of summer to be mild in East, hot in West: WSI

In its latest seasonal outlook, private weather forecaster WSI Corporation said Tuesday it expects the rest of the summer to be cooler than normal in the eastern third of the US, while the Rockies and Pacific Northwest can expect warmer-than-normal weather.

"In the Northeast, the cool start will likely be representative of the pattern for the remainder of the summer, although occasional bursts of heat coming from the north-central US will likely impact the area from time to time," said WSI seasonal forecaster Todd Crawford.

"Looking further out in time, the emerging El Niño event will likely play a significant role in determining the upcoming fall and winter pattern, although the magnitude and exact location of the warmest tropical Pacific Ocean temperature anomalies will be the final arbiter," he said.

In July, warmer-than-average weather will dominate everywhere except the Northeast and Southeast, WSI said. In August, the cooler weather extends into the South Central states, while in September below-average temperatures are expected only in the Southeast.

- Stephanie Seay

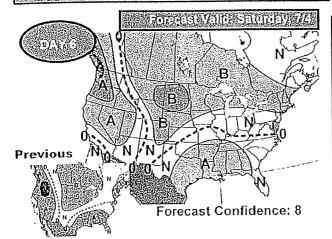


EarthSat's 6-10 Day Forecast-Detailed

Monday, June 29, 2009

Forecaster: BH/AC

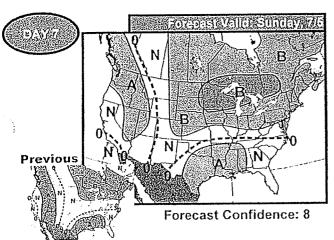
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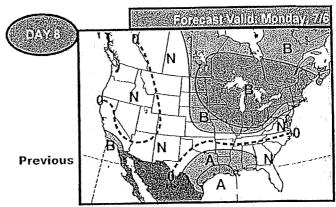


Today's Forecast:

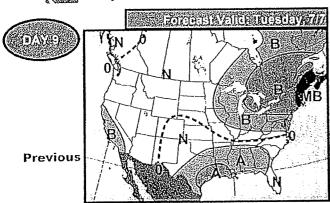
Cool Across Northeast Through Period More Heat Could Build Into Texas, Midwest Late

Cooler chances could still reach the Midwest/Northeast at mid period with a risk of more much belows. With persistent troughing, the Northeast holds the best confidence of seeing cooler conditions through much of the period. The West may see readings turn cooler than expected during the last few days of the period as a trough moves in. Also during the latter part of the period, warmer than forecasted conditions could spread into Texas and into the Midwest as a ridge builds into the Plains during this time. This could produce a return of 100F heat through Dallas and Houston days 9-10.

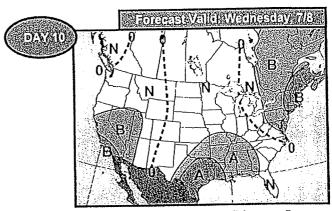




Forecast Confidence: 7



Forecast Confidence: 6



Forecast Confidence: 5

MA +3F to +4F MA +5F to +7F MA MA +8F to +15F SA +15 or Higher

in apparent.

Gensler asserted that excessive speculation from index funds was partly — but not solely — to blame for the "commodity asset bubble" last year. However, he said he has not yet "formed a view" on whether such players are behind the recent spike in petroleum prices.

"I do think just as the asset bubble broke last year with the financial crisis, part of what we're seeing is ... some confidence coming back into the stock market and other investment markets," Gensler said, adding that he has not yet met with the commission's economists "to sort through the specifics of the market."

On the topic of combining the SEC and CFTC, SEC Chairman Mary Schapiro told the committee that "there is a logic and an efficiency that can be achieved from a merger of the two agencies." However, if Congress decides against a merger, she said the agencies must do more to work together and ensure that products and trading practices "do not fall through the cracks or leave large swaths of the market unregulated."

But Gensler was adamant that there not be "a merger just for merger's sake." He said if Congress does move to combine the CFTC and the SEC, it needs to ensure that his agency's "root mission" to protect consumers such as farmers and ranchers from fraud and manipulation remains intact.

Amid numerous congressional proposals that would broaden the reach of various financial overseers, Schapiro said she supported the concept of a council of regulators that would work together to identify "where gaps might be arising" in oversight.

She added that it is important — to both her agency and the CFTC — that any new regulatory model support centralized clearing for standardized OTC trading and to bring institutional dealers under greater regulation. — Jessica Marron

CSU forecast team now expects below-average hurricane season

Colorado State University forecasters now expect a slightly below-average 2009 Atlantic hurricane season with 11 named storms, five of which will strengthen into hurricanes. Of those five, the CSU team said it expects two will become major hurricanes of Category 3 strength or greater.

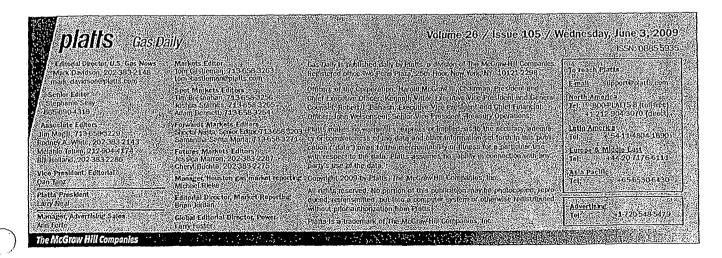
Tuesday's forecast marks a slight downward revision from the 2009 outlook the forecast team issued in April calling for 12 named storms, six hurricanes and two major hurricanes. Long-term averages are 9.6 named storms, 5.9 hurricanes and 2.3 major hurricanes/year. The Atlantic hurricane season runs from June 1 through November 30.

The forecasters based the revised outlook on El Niño, a phenomenon marked by a warming of equatorial Pacific waters that can lead to conditions that prevent the formation of tropical storms.

"We believe that there is a slightly greater chance of a weak El Niño developing this summer/fall than there was in early April," forecaster William Gray said. "El Niño conditions would likely increase levels of vertical wind shear and decrease Atlantic hurricane activity"

Landfall probabilities are also down, with chances of a major hurricane hitting the US coast at 48%, compared with an average in the last century of 52%, the CSU team said.

The chance of a major hurricane making landfall on the East Coast or along the Gulf Coast, where major oil and gas infrastructure is located, are both 28%, compared with long-term averages of 31% and 30%, respectively. — Carla Bass



(eia, Energy Information Administration Official Energy Statistics from the U.S. Government

Home > Natural Gas :- Weekly Natural Gas Storage Report

Case No. 2008-178age 1 of 1 Attachment A Page 65 61 306

Glossary

other formats: Summary IXT CSY

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

ased: June 25, 2009 at 10:30 A.M. (eastern time) for the Week Ending June 19, 2009 ...xt Release: July 2, 2009

Working Gas in Underground Storage, Lower 48

	Stocks	in billion cubic fe	eet (Bcf)	Historical Comparisons					
Region				Year Ago (06/19/08)	5-Year (2004-2008) Average			
-	06/19/09	06/12/09	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change		
East	1,234	1,164	70	1,050	17.5	1,119	10.3		
West	420	408	12	288	45.8	318	32.1		
Producing	997	985	12	682	46.2	732	36.2		
Total	2,651	2,557	94	2,020	31.2	2,169	22.2		

Notes and Definitions

Summary

Working gas in storage was 2,651 Bcf as of Friday, June 19, 2009, according to EIA estimates. This represents a net increase of 94 Bcf from the previous week. Stocks were 631 Bcf higher than last year at this time and 482 Bcf above the 5-year average of 2,169 Bcf. In the East Region, stocks were 115 Bcf above the 5-year average following net injections of 70 Bcf. Stocks in the Producing Region were 265 Bcf above the 5-year average of 732 Bcf after a net injection of 12 Bcf. Stocks in the West Region were 102 Bcf above the 5-year average after a net addition of 12 Bcf. At 2,651 Bcf, total working gas is above the 5-year historical range.

Data

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks

References

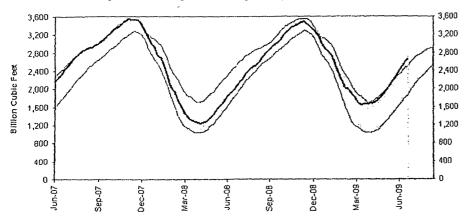
Methodology

Differences Between Monthly and Weekly Data

Related Links

Storage Basics Natural Gas Weekly Update Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008.
Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate

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Some Western gas storage facilities over 70% full

A 94-Bcf injection lifted the nation's gas storage inventories to 2.651 Tcf for the week ending June 19, the Energy Information Administration said Thursday, pushing some facilities in the West toward full capacity with four months left in the traditional refill season. The build was slightly below consensus expectations and prompted a brief spike in the July NYMEX natural gas futures contract (see story, above). A year earlier, EIA reported 2.020 Tcf in storage. As a result, the year-over-year surplus rose to 631 Bcf, while the surplus over the five-year average of 2.169 Tcf climbed to 482 Bcf.

Inventories are now 115 Bcf above the five-year average of 1.119 Tcf in the East, 102 Bcf above the five-year average of 318 Bcf in the West, and 265 Bcf above the five-year average of 732 Bcf in the producing region.

Tim Evans, analyst for Citi Futures Perspective, noted that the injection was still above the 85-Bcf five-year average but was "smaller than expected, and thus supportive for prices. We note that the data has been oscillating from bullish to bearish on almost a weekly basis, so it's hard to be confident of the trend. But we do expect to see declining production overall, which should lead to a supportive trend in the weeks and months ahead."

The onset of summer heat may give well-padded gas storage facilities in the West a reprieve as cooling loads kick in. But as autumn approaches, a gas glut could resurface with a vengeance, analysts said.

"California is awash in gas and Questar's Clay Basin storage facility in Utah is nearly 70% full, 65% above June 2008 ending levels and at the top of the 10-year [maximum] range," Wachovia Capital Markets Managing Director David Tameron said.

Logan Reese, an analyst with Bentek Energy, estimated that West storage as of the week ending June 12 was between 60% and 80% full. The oversupply is most pronounced in California, where Reese estimated some facilities — before the worst of the summer heat has even hit — are over 90% full.

Reese's colleague Dennis Burkey, an analyst for Southwest markets, said one of the biggest reasons for the abundant supply in the state is another ripple effect from Rockies Express Pipeline — Southern California served as a "relief valve" for Southeast and Midwest supply that was displaced by the influx of Rockies gas moving east on REX. "The gas had to go somewhere, and SoCal was a convenient place to send it."

The situation is somewhat looser in the Rocky Mountain region, Reese said, noting that storage injections do not generally pick up dramatically until later in the fall. During the summer, "Rockies gas wants to make its way out of the region when possible," he said.

But both the West Coast and Rockies could struggle to find space for gas supplies come autumn as cooling loads wind down. Reese said.

In the meantime, Pacific Gas and Electric has issued several high-inventory operational flow orders on its system this month, while Clay Basin in Utah has advised interruptible customers to withdraw their capacity in order to make room for firm nominations, Reese said.

El Paso Natural Gas, a key interstate route into southern California, has also issued periodic warnings of high linepack since the end of May. Company spokesman Richard Wheatley said the southern mainline that feeds major SoCal Gas border points typically flows to the west at this time of year, although it has the capability of flowing eastward if conditions warrant.

"To say that current working gas volumes in underground storage are ahead of previous averages remains an understatement," the American Gas Association said in a report last week. The group noted that May inventories ended the month above 2.3 Tcf for the first time on record.

"The strong current storage position ... continues to be one signal that, compared to natural gas demand, the nation's supply picture remains robust," AGA said. — Jessica Marron, Sheetal Nasta, Stephanie Seay

IHS CERA ADVISORY SERVICE

North American Natural Gas

IHS CERA Market Briefing

JUNE MONTHLY GAS BRIEFING

WHERE IS THE UPSIDE?

DATEJune 25, 2009

KEY IMPLICATIONS

Bullish market sentiment continues to be disciplined by bearish fundamentals, as the combination of weak demand and strong supply has held the bulls in check. The displacement of coal for power generation has provided some support for gas prices through the recession. Yet, with each transitory driver of higher prices, the rally has fallen short. A brief price surge, apparently in sympathy with rising oil prices, ended in mid-May. A colder-than-normal winter gave way to a mild spring. Even the effect of recent delays in fiquefaction projects, and the resulting redirection of some liquefied natural gas away from North America, could be diminished in the months ahead by new volumes set to arrive under short-term contract. An early economic recovery could make these other factors seem small by comparison, but only over the longer term. It is difficult to see how bullish price signals can maintain a hold on the gas market when the storage surplus is there to fend off every challenge.

- This month IHS CERA has analyzed the sensitivity of gas prices to summer weather across North America. Although the downside risk associated with a mild summer is limited by the coal floor, it is nonetheless significant and could pull prices lower still.
- US storage inventories are projected to challenge the limits of storage capacity by late summer, likely leading to curtailed domestic production for limited periods.
- We expect the Henry Hub price to average \$3.85 per million British thermal units (MMBtu) this year. At AECO-NIT, we project an annual average price of C\$3.70 per gigajoule (\$3.21 per MMBtu) for 2009.

NORTH AMERICAN MARKET OVERVIEW

The stabilization in the economic forecast first observed by IHS Global Insight in March has held for the past few months. After an annualized first quarter decline in US gross domestic product (GDP) of 5.9 percent, the pace of the economic deterioration continues to moderate in the second quarter, and there is a growing

Note: All prices are in US dollars unless otherwise indicated.

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million/year (GD 1/9). That made him one of the highest paid CEOs in the US, despite Chesapeake's stock plunging from a high of \$74/share last June into the teens for much of the past year.

The bulk of McClendon's compensation, \$75 million/year, comes from credits he can only use to pay his share of the costs associated with his fractional interests in Chesapeake's wells.

A Fort Worth shareholder blasted McClendon during the question-and-answer session Friday for taking pay for performance that was based on good luck and wanting more money when his luck turned bad. "Risk isn't risk anymore when you are Aubrey McClendon," Jan Fersing said.

"You bet the farm that [gas] prices would continue to go up," Fersing told McClendon. When prices went down "your hand got stuck in the cookie jar." Fersing then said he plans to sell his Chesapeake stock.

McClendon, who told shareholders he would not be able to answer many questions because of four shareholder lawsuits over his pay package, defended his work as head of the nation's second-largest gas producer.

"I'm sorry you think I'm greedy," McClendon said, asserting that he works more than 100 hours a week lining up deals and running the company he founded 25 years ago. "You do not properly characterize my past, present and future with this company," he told Fersing

McClendon revealed during his presentation that Chesapeake is entering the joint venture with Statoil. He said Chesapeake will contribute technology and experience to Statoil's international expertise in a 50/50 venture to exploit gas shales worldwide.

"I see this news as most encouraging," McClendon said, predicting that the world will start to transition away from crude oil to natural gas for fuel.

Beyond his two-sentence disclosure during his presentation at the annual meeting, McClendon provided no other details of the Statoil deal. Statoil representatives were not available for comment Friday.

Chesapeake is the top leaseholder in the Marcellus and Haynesville shales and the number two operator in the Barnett and Fayetteville shales. Statoil is already involved in a Marcellus joint venture with Chesapeake; in November, it paid \$1.25 billion up front and agreed to pay \$2.13 billion worth of Chesapeake's costs in return for a 33% stake in Chesapeake's Marcellus returns (GD 11/12). — Bill Holland

CEC: Price forecasts unreliable as market volatility increases

Gas price forecasts are unreliable and will continue to be as new carbon regulations and increased liquefied natural gas imports make prices more volatile, according to a draft report this week from the staff of the California Energy Commission.

Staff examined gas price volatility and the potential impact of carbon-emissions regulations on gas-fired power generation as the state prepares its 2009 Integrated Energy Policy Report.

The report examined price forecasts produced by the CEC, the California Public Utilities Commission and the Energy Information Administration, and found them all well off the mark when compared with actual prices.

"Historic forecast results have been poor vis-à-vis actual prices and, unfortunately, the future may include more market volatility and even greater forecasting uncertainty," CEC staff found.

During 2008, for instance, Henry Hub spot prices went as high as \$13.32/Mcf and as low as \$5.63/Mcf. The volatility that year was "somewhat unique, as traditional, physical market fundamentals alone did not explain the market's actions," the report said. "Various financial market fundaments, such as commodity speculation, contributed to the significant price volatility in 2008."

Staff noted that gas markets have "complex and dynamic interactions with electricity and other fuel markets affecting many sectors" of the economy. "Existing and future greenhouse gas and energy policies increase the complexity of these interactions, the number of alternative choices than can affect these interactions and the uncertainty inherent to making predictions about key drivers of these interactions.

"Past efforts to predict natural gas prices have been highly inaccurate," CEC staff continued. "With complexity and uncertainty increasing, it may not be feasible to make useful, data-specific, single-point forecasts."

Based on past volatility that went beyond physical market factors, "a reasonable expectation would be that future natural gas price forecasts will be even less accurate as natural gas prices continue to experience price volatility for reasons that are perhaps less understood and less predictable," the report said. — Stephanle Seay

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Case No. 2008-175 Attachment A Page 69 of 306

www.platts.com

Gas Dai

Tuesday, June 16, 2009

Gas price 'bubble' to burst in early 2010; panel

With natural gas prices widely forecast to remain depressed through the end of 2009, panelists at a Boston conference Monday warned that rapidly declining rig counts might result in a price spike by early 2010.

"2010 has the potential for being upside down," Will Hussey, ConocoPhillips Gas & Power's senior vice president of origination, told the LDC Gas Forum Northeast, adding that the rig count has fallen by nearly 50% from about 1,600 in August 2008 to 740 currently.

Despite the current supply overhang, the supply-demand balance could tighten again if manufacturing rebounds in a stronger economy

and Congress looks to cleaner fuels for power generation, said Les Deman, Shell Energy's North American director of fundamental research and analysis.

In Canada, a traditional supply source for major Northeast consumer markets, exports to the US are declining and will continue to do so through at least 2015, unless supplies from the long-awaited Alaskan North Slope and Mackenzie Delta projects are brought to market, said TransCanada's Al Jamal, senior manager of gas supply.

Additionally, western Canadian demand is forecast to grow by 2.1 Bcf/d by 2020, fueled by oil sands recovery and a ramp-up in electric generation, Jamal

d, leading to less Canadian gas crossing the border.

The net result, at least for the short-term, will be a rapid increase from the current \$3/MMBtu to \$4/MMBtu NYMEX contract to a range of \$5/MMBtu to \$7/MMBtu as soon as early 2010, which would be maintained until 2020, he said.

Deman said in his presentation that liquidity has returned to the marketplace and so have the speculators, as the 12-month NYMEX strip has increased by some 20% from mid-April lows.

"It's not that far out on the curve to get to a \$6 level," said Merrill Lynch Commodities' director Rahim Oberholtzer. The January 2010 NYMEX contract settled at \$6.165/MMBtu on Friday.

"While the current market is challenging, there are a lot of opportunities for natural gas players to reduce [their] risk now," Oberholtzer added.

Panelists said soft prices at the moment might prevent players from placing hedges for the upcoming winter and further out along the curve, resulting in greater exposure when the NYMEX contract does move significantly to the upside.

"We're in a bubble now," Hussey warned. "Those rig counts are way down. Don't let yourself be caught off guard." - Samantha Santa Maria

Advantage to focus on Alberta shales ... from page 1

Current development plans, which qualify for an Alberta royalty incentive program, should see its Glacier program reach 25,000 Mcf/d this quarter and double in 2010, Advantage said in a statement.

An independent evaluation by Sproule Associates of Advantage's 57,000-acre

Natural gas hub flow, J	in 15					
me	Scheduled Flow	+/-	% Change	Dally Price	31 Day Flow	Average— Price
ANR, La.	887	5_	-0.51	3.540	960	3.614
Dracut, Mass.	20	3	18.46	3.815	39	3.920
Florida city-gates	2,266	41	1.82	4.720	1,914	4.043
Iroquois, receipts	801	29	3.75	3.845	628	4.015
Kern River, Opal plant	814	-1	-0.13	2,280	783	2.512
Niagara	322	33	11.39	3.820	272	3.960
Northern, Ventura	28	-1	-2 41	2 025	27	2110

				~		400	VA
Columbia (Gulf, La.	3.805	3.78-3.88	3.78-3	3.83	296	55
	Gulf, mainline	3.855	3.82-3.88	3.843		378	65
Florida Gas	s. zone 1	3.805	3.80-3.85	3.80	3.82	43	5
Florida Gas		3.870	3.85-3.89	3.86	3.88	181	14
Florida Gas		4.025	3.86-4.12	3.96-4		311	55
Henry Hub		3.790	3.75 3.86	3.763		612	72
NGPL, La.		3.720	3.72-3.72	3.723		12	2
Southern N	laturat 1 a	3.835	3.80 3.89	3.81-3		326	44
Stingray Po		3.033	3,00 3.03	3.02	5.00	020	
		3.755	2 71 2 00	3.71-3	90	517	82
	La., 500 Leg		3.71-3.90			Company and the second	***
	La., 800 Leg	3.765	3.74-3.82	3.753		275	62
Texas East	A RESIDENCE OF THE PARTY AND T	3.785	3.74-3.80	3.77		307	58
Texas East		3.800	3.76-3.85	3.783	and the same and arrest designation of	240	58
Texas Gas,	zone SL	3.805	3.77-3.86	3.78	3.83	156	29
Shell	Jan 2010	6.357	6.376	6.149	+19.2	65	75
311011	Feb 2010	6.384		6.202	+18.8	13	52
	Mar 2010	6.312		6.126	+17.4	18	73
els,	Apr 2010	6.162		5.989	+16.4	13	78
	May 2010	6.207	6.206	6.057	+16.2		06
5,	Jun 2010	6,307	6.304	6.164	+15.5	1	25
ta proj-	Jul 2010	6.419		6.291	+14.9		10
supply.	Aug 2010	6.507	6.512	6.384	+14.6		23
	Sep 2010	6.560		6.439	+14.4		52
by	Oct 2010	6.667		-6.539	+14.6		244
nal	Nov 2010	6.997		6.883	+13.6		
	Dec 2010	7.387		7.305	+12.6		52
1	Jan 2011	7.597		7.540	+11.9		48
he cur-	Feb 2010	7.597		7.597	+11.9		0
	Mar 2011	7.427		7.360	+11.9		13
e said.	Apr 2011	6.907		6.907	+9.4		0
	May 2011	6.887 6.977		6.977	+9.4		0
tplace	Jun 2011	7.077		7.077	+8.9	ren to a transmit	0
y some	Jul 2011 Aug 2011	7.152		7.152	+8.9		0
,	Sep 2011	7.182		7.182	+8.9		0
	Oct 2011	7.262		7.262	+8.9		- ō
h	Nov 2011	7.502		7.502	+8.9		0
act	Dec 2011	7,797		7.797	+8.9		0
	Jan 2012	8.002		7.950	+8.9		2
	Feb 2012	7.997		7.950	+8.9		2
s for	Mar 2012	7,767		7.730	+8.4		2
	Apr 2012	7.137		7.137	+4.9		1
	May 2012	7.092		7.797	14.9		1
ing	Jun 2012	7.172		N/A	+4.9		0
)	011 date	toe Edday)		

Contract data for Friday

Volume of contracts traded: 244,267

Front-months open interest:

JUL. 77,138; AUG. 96,402; SEP. 83.500

Total open Interest: 729,616

Henry Hub/NYMEX spre - Henry Hub cash price NYMEX front month clos 4.1 3.9 3.7 12-Jun Platts oil prices, Jun 15

	(\$/b)	(\$/MMBtu)
iulf Coast spot		
% Resid	64.05-64.15	10,20

Gas collision looms ahead

E. Russell (Rusty) Braziel, Bentek Energy LLC, Evergreen, Colorado

Rockies gas supplies moving to the Ohio Valley on the final leg of the Rex Pipeline will fight with increasing shale production from the Gulf Coast and Appalachian Basin.

he U.S. natural gas market is entering a period of unparalleled risk and opportunity, when certain key trends will reshape the industry. Later this year, when the final leg of the Rockies Express (Rex.) Pipeline is completed into the Ohio Valley, gas suppliers in the Rockies will be able to compete directly against supplies from the Gulf Coast and Appalachia.

At the same time, U.S. gas production continues to increase, filling pipeline capacity out of major supply areas. And if this is not enough, the recession that began in 2008 is taking a toll on U.S. gas demand, creating an even greater disparity between supply and demand in key regional markets.

These developments will have significant implications for gas flows, capacity utilization and pricing differentials for years to come.

The triggering event for this market shift is completion of Rex into two major gateways to the Northeast: to the Lebanon Hub in Ohio in June, then across the state into the Clarington, Ohio, hub by November This capacity of 1.8 billion cubic feet (Bcf) per day will fulfill Rex's purpose of giving Rockies producers direct access to Northeast gas markets.

By extending the pipeline to Clarington, the pipeline avoided highly restrictive capacity bottlenecks at Lebanon, gaining access to nearly 5 Bcf a day of capacity on several pipelines serving the Northeast, including Dominion, Texas Eastern (Tetco), and Tennessee Gas Pipeline (TGP). Of this total capacity available at Clarington, an analysis of his-

torical flows and capacity utilization at the hub indicates that about 0.9 Bcf a day is open and available to shippers during the winter season.

Unfortunately, pipeline-capacity constraints downstream of Clarington between the Ohio Valley and the large, premiumpriced markets in the Northeast severely limit the usefulness of this new capacity.

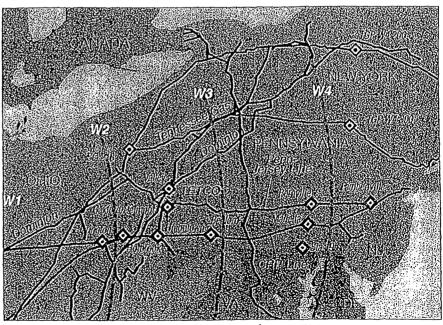
With downstream capacity constrained, the key implication is that, for Rex gas to capture market share in the Northeast, gas supplies that have traditionally served this region must be displaced. The most significant volumes of these competing supplies are sourced from Gulf Coast and Midcontinent wells.

Rex gas supplies have two distinct

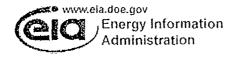
competitive advantages in this fight for market share. First, the pipeline's tariff provides variable transportation-cost advantages to Rex shippers, primarily in the form of low fuel costs, relative to competing pipelines into the area. Second, these shippers are able to exploit the historical weakness of Rockies gas prices to compete aggressively with higher-priced. Gulf supplies. The result will be significant gas-on-gas competition at the Clarington Hub and surrounding markets, with Gulf Coast suppliers being forced to either lower their prices or find alternative markets for their gas.

New problems

Gulf producers face another problem, and



Constraints downstream of Clarington, Source: Bentek Energy UC



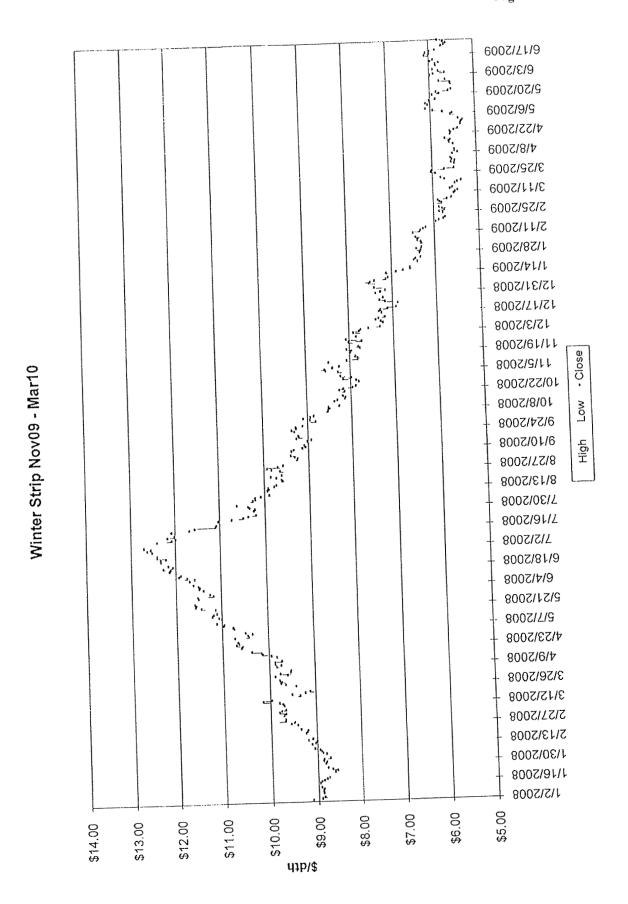
June 2009

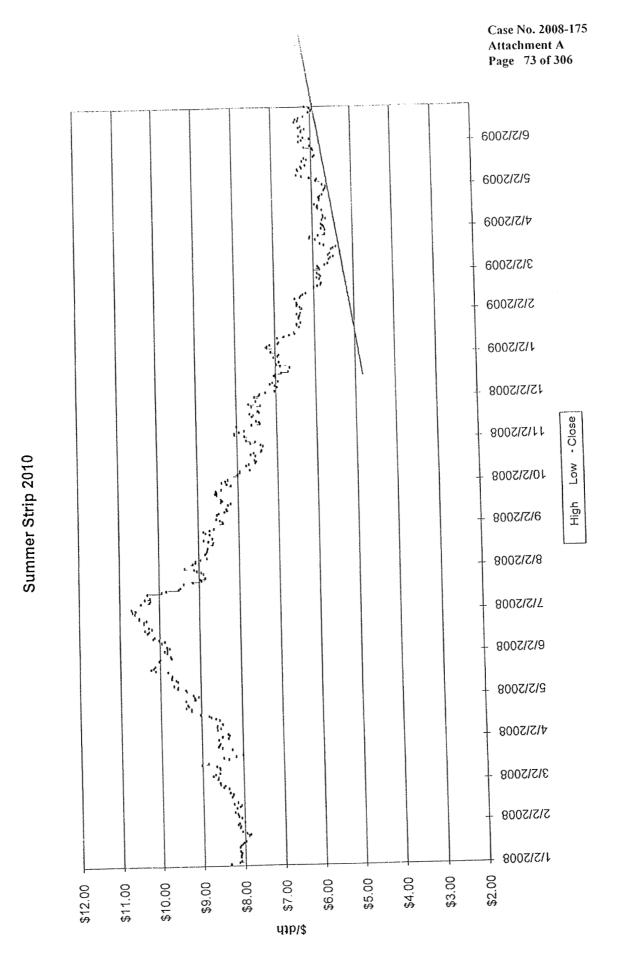
Short-Term Energy Outlook

June 9, 2009 Release

Highlights

- Spot prices for crude oil and petroleum products have increased over the past month. The price of West Texas Intermediate (WTI) crude oil is expected to average \$67 per barrel for the second half of 2009, an increase of about \$16 compared with the first half of the year.
- The average U.S. price for regular-grade gasoline, at \$2.62 per gallon on June 8, was almost 60 cents per gallon higher than its price at the end of April. Regular-grade gasoline prices are expected to reach their summer seasonal peak in July, with a monthly average close to \$2.70 per gallon. The annual average regular-grade gasoline retail price in 2009 is expected to be \$2.33 per gallon, rising to \$2.56 in 2010. The annual average diesel fuel retail prices are expected to be \$2.40 and \$2.67 per gallon in 2009 and 2010, respectively.
- The monthly average Henry Hub natural gas spot price is expected to stay under \$4 per thousand cubic feet (Mcf) until late in the year as abundant natural gas supplies converge with weak demand driven by an 8-percent decline in industrial sector consumption. The price is projected to increase from an average of \$4.13 per Mcf in 2009 to an average \$5.49 per Mcf in 2010 as expected economic growth boosts industrial consumption of natural gas.
- Based on the current Atlantic hurricane season outlook from the National Oceanic and Atmospheric Administration (NOAA), EIA estimates expected production shut-ins on the U.S. Gulf Coast during the upcoming hurricane season (June through November) of about 4.5 million barrels for crude oil and 36 billion cubic feet for natural gas (see the 2009 Outlook for Hurricane Production Outages in the Gulf of Mexico). Actual shut-ins are likely to differ significantly from this expectation depending on the number, track, and strength of hurricanes as the season progresses.





Short-Term Energy Outlook

June 9, 2009 Release

Natural Gas

Consumption. Total natural gas consumption is projected to decline by 2.2 percent in 2009 and then increase slightly in 2010. While total natural gas consumption remains hampered by the broad economic downturn, the persistence of low natural gas prices into the fourth quarter of 2009 is expected to lead to a 2.7-percent increase in electric power sector consumption in 2009, offsetting a portion of the 8percent decline expected in industrial sector consumption. Additional declines expected in the residential and commercial sectors this year also contribute to the lower 2009 consumption estimate. The anticipation of some economic recovery in 2010 is the basis for slight consumption increases in the commercial and industrial sectors next year, with little change expected in the residential sector. Furthermore, if the dollar remains weak and natural gas prices remain relatively low, consumption in the industrial sector may be bolstered by increased exports of natural-gas-intensive products. Finally, consumption in the electric power sector is expected to remain flat in 2010 as natural gas prices rise relative to coal prices.

Production and Imports. Total U.S. marketed natural gas production is expected to decline by 1.1 percent in 2009 and by 2.6 percent in 2010. Low natural gas prices brought about by the current economic slump have had a dramatic impact on recent drilling activity. According to Baker Hughes, total working natural gas rigs are now down 56 percent from the September 2008 peak. Although a corresponding decline in production has yet to appear in data through March 2009, total U.S. marketed production is expected to drop by nearly 5 billion cubic feet (Bcf) per day between the first and fourth quarters of 2009. The decline in annual production is expected to occur almost exclusively in the Lower-48 non-Gulf of Mexico (GOM) this year, more than offsetting the small expected increase in GOM output. This projection includes an estimated expectation of hurricane-induced outage of about 36 Bcf for the offshore region in 2009.

Global Crude Oil and Liquid Fuels

Overview. Oil prices rose for the third consecutive month in May, driven in part by expectations of a global economic recovery and future increases in oil consumption. In addition, a weaker dollar and increasing financial market activity are prompting higher prices for commodities, overshadowing weak oil supply and demand

Case No. 2008-175 Attachment A Page 75 of 306

fundamentals. The weaker dollar may indicate that economic activity abroad, especially in Asia, is stronger than currently estimated, which would provide an upside risk to the oil price forecast. Downside risks, such as continuing weak demand as indicated by sluggish first quarter 2009 oil consumption data, high inventories, and increased surplus production capacity levels within the Organization of the Petroleum Exporting Countries (OPEC) could moderate the upward price pressure, especially if the global economic recovery is delayed and/or weaker than expected.

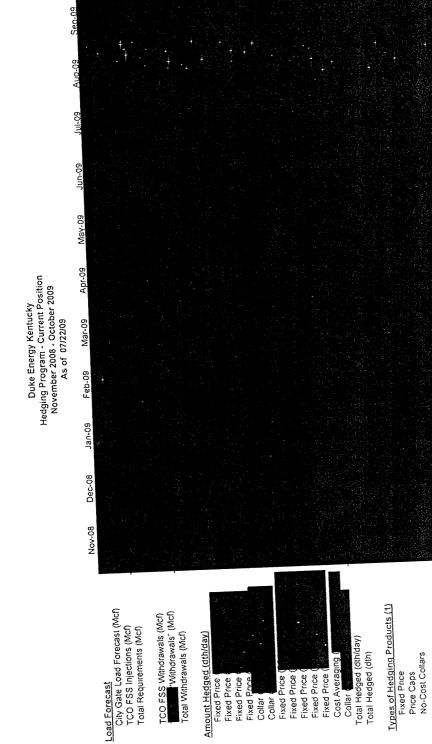
Gas Commercial Operations Hedging Program Market Indicators Summary July 23, 2009

	Price Pressure	Term	Comments	Page Ref
Weather	Triessuie	L		
Long Term Forecast (Dec 09Feb 10)	1 4	Long	NOAA predicting above average temperatures for Dec. 2009Feb. 2010 for most of the continental United States.	14
Mid Term Forecast (30-60 days)	←→	Long	August predicted to be 3.8% warmer than 10 year normal and Sept. is predicted to be 2.3% cooler than 10 year normal.	15
Short Term Forecast (6-10 days)		Short	Below and normal temperatures through majority of country.	16
Tropical Storm Activity	1	Long	WSI has updated 2009 hurricane forecast downwardconditions could lead to an "unusually quiet" season.	17
Storage Inventory				
EIA Weekly Storage Report		Long	Storage injections for the week ending July 17th were 66 BCF. Storage levels are at 2 952 TCF which is 23.8% higher than last year and 18.4% higher than the 5 year average. Canada pushing up against storage	18-20
Industry Publications				<u> </u>
Cambridge Energy Research Associates Summer 2009 Winter 2009/10	+	Long		21
Gas Daily	1	Short	US gas prices should drop to \$2/Mcf or lower later this year as storage capacity limitations are reached	22
Gas Daily	†	Long	Gas prices could rebound to \$7/MMBtu if the economy recovers over the next year. "Gas demand is down, but not out".	23
Gas Daily	1	Long	Prices poised to start rebounding next winter, Goldman predicts. Manufacturing recovery and cuts to drilling will form the base for gas price recovery.	24
Government Agencies		,	CAAO MAIDH is	1
Energy Information Administration Summer 2009: Winter 2009/10	+	Long	The Henry Hub spot price is expected to average \$4.10 per MMBtu in 2009 and \$5.753 per MMBtu in 2010.	25
Technical Analysis				T
Winter 2009-10 Strip Chart	<u>†</u>	Short	Closed at \$5.40.	26
Summer 2010 Strip Chart	†	Short	Closed at \$5.75.	27
Economy			1	J
Demand	1	Long	EIA: Natural gas consumption is projected to decline by 2.3% in 2009 and remain unchanged in 2010. Poor economic conditions are expected to prolong the current slump in demand over the coming months.	28
Supply	1	Long	EIA: Total U.S. marketed natural gas production is expected to decline by 0.6% in 2009 and fall by 2.9% in 2010. Total working natural gas rigs have declined by 57% from September 2008 peak.	28
Oil Market	1	Long	Oil prices rose for the fourth consecutive month, in part because of stronger than anticipated global activity.	28

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

Attendees: Jeff Kern, Jim Henning, Patty Walker, Mike Brumback, Mitch Martin, Joachim Fischesser, Steve Niederbaumer

Discussed current market conditions including current weather forecasts, storage levels (levels being ahead of 5-year average and that impact charging) and various analysts projections as well as EIA's forecasts for Supply and Demand of the Natural Gas markets and Oil prices. In addition discussed shale gas and the production curves associated with shale gas. Based on the discussion, a determination was made to request some indicitive pricing for a costless collar and to continue to monitor pricing closely.



(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months. Total (incl. Injections) % Hedged & Storage Storage Withdrawal Seasonal %

Amt Hedged with Storage @ City Gate Hedged (City Gate)

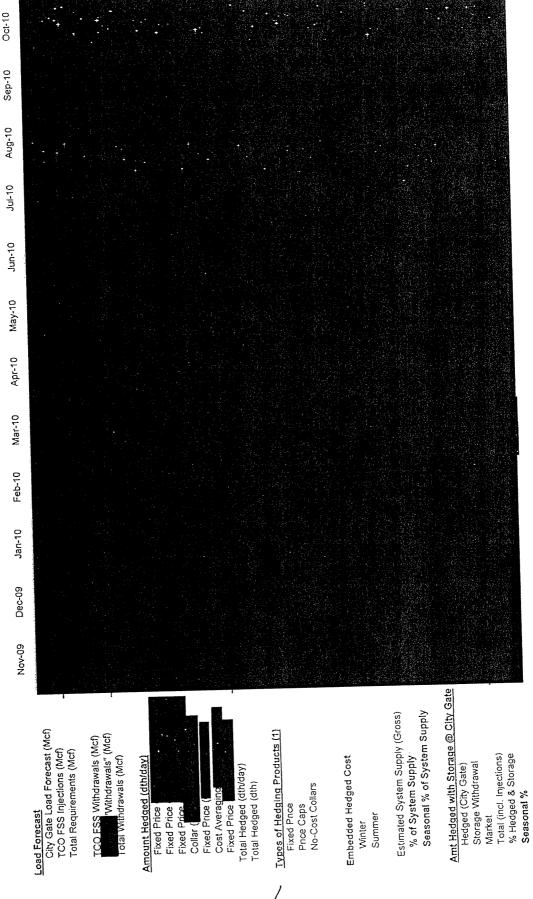
Market

Seasonal % of System Supply Estimated System Supply (Gross) % of System Supply

Embedded Hedged Cost

Summer

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 07/22/09



6

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 07/22/09

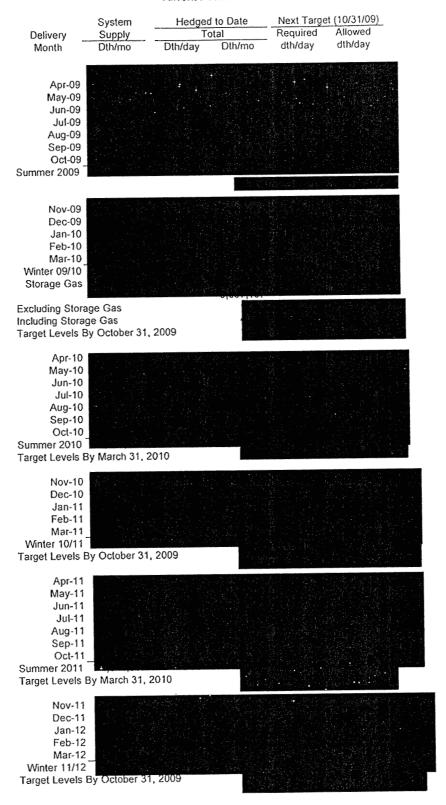
Oct-11 Sep-11 Aug-11 Jul-11 Jun-11 May-11 Apr-11 Mar-11 Feb-11 Jan-11 Dec-10 Nov-10 Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply Load Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Types of Hedging Products (1) TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Requirements (Mcf) Total Withdrawals (Mcf) Amount Hedged (dth/day) Embedded Hedged Cost Total (incl. Injections) % Hedged & Storage Total Hedged (dth/day Total Hedged (dth) No-Cost Collars Seasonal % Fixed Price (Fixed Price (Fixed Pnce Price Caps Summer Market Winter Collar (

Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 07/22/09

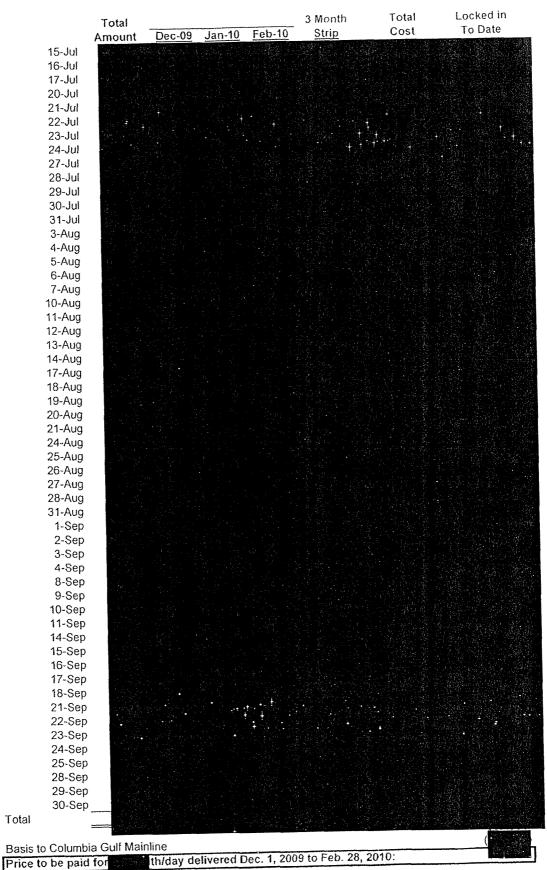
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1 Jan-12									
11 Dec-11									· · · · · · · · · · · · · · · · · · ·
Nov-11								late	
	id Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf)	TCO FSS Withdrawals (Mcf) Other 'Withdrawals' (Mcf) Total Withdrawals (Mcf)	d (dth/day)	(dth/day) (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars	iged Cost	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Market Total (inc). Injections) % Hedged & Storage	%
	Load Forecast City Gate Los TCO FSS Inj Total Require	TCO FSS Withdrawals (Other "Withdrawals" (Mc Total Withdrawals (Mcf)	Amount Hedged (dth/day) TBD TBD TBO	Total Hedged (dth/day) Total Hedged (dth)	Types of Hedging Pr Fixed Price Price Caps No-Cost Collars	Embedded Hedged Cost Winter Summer	Estimated System Suppl % of System Supply Seasonal % of Syste	Amt Hedged with Storag Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections) %, Hedged & Storage	Seasonal %
					Q				

(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program Current Position



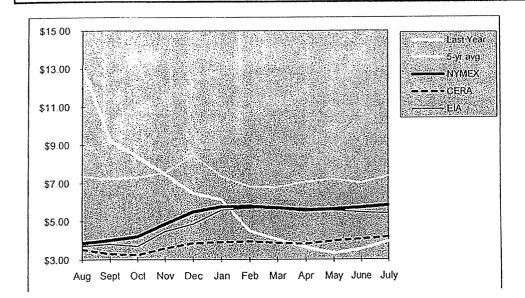
Duke Energy Kentucky Hedging Program for 2009/10 Cost Averaging with Cost Averaging Wi

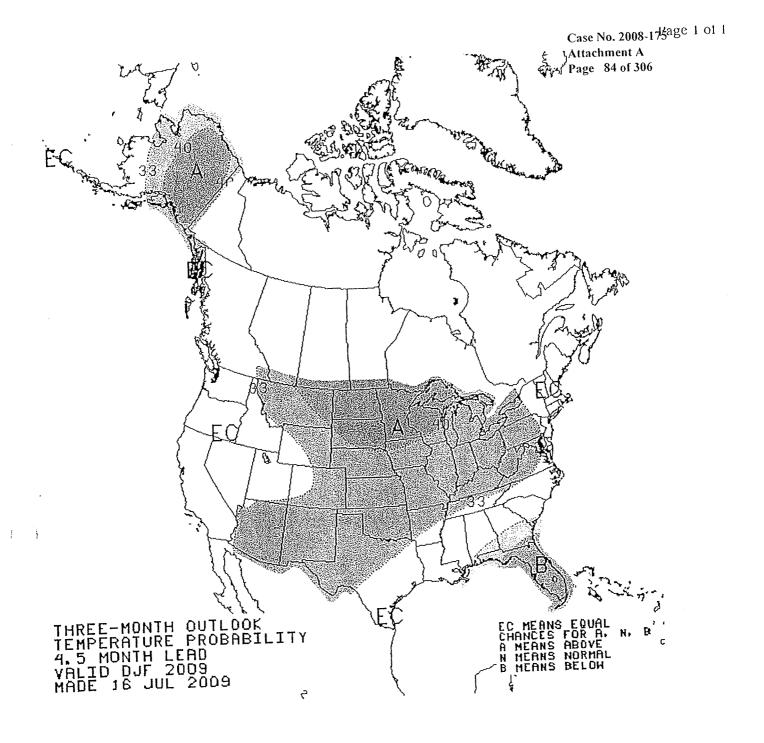


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES 83 of 306 TO CURRENT FUTURES PRICES

	Histori	c Prices:				
	NYMEX CI	osing Price		****	,	
	5-yr. avg.	Last Year		CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)		25-Jun-09	7-Jul-09	22-Jul-09
Aug	\$7.37	\$13.11		10 No.	\$3.720	\$3.861
Sept	\$7.21	\$9.22			\$3.810	\$4.004
Oct	\$7.31	\$8.39			\$3.700	\$4.209
Nov	\$7.55	\$7.47			\$4.470	\$4.856
Dec	\$8.47	\$6.47			\$4.860	\$5.494
Jan	\$7.36	\$6.14			\$5.590	\$5.768
Feb	\$6.82	\$4.48			\$5.680	\$5.790
Mar	\$6.79	\$4.06		A though	\$5.730	\$5.712
Apr	\$7.06	\$3.63			\$5.680	\$5.586
May	\$7.21	\$3.32			\$5.570	\$5,635
June	\$7.02	\$3.54			\$5.470	\$5.730
July	\$7.37	\$3.95			\$5.420	\$5.840
12 Month Avg	\$7.29	\$6.15			\$4.975	\$5.207
	r Average		ado a mandrio gapana <u>ara que mo</u> programa propriações de transferência de tende de tende de tende de tende de te		\$4.767	\$4.981
Winter A	Average				\$5.266	\$5.524







Case No. 2008-175

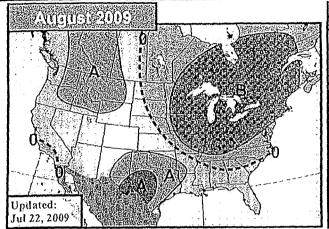
Attachment A

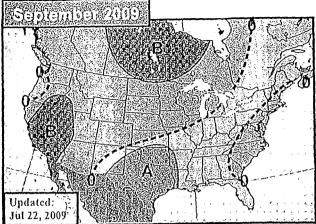
EarthSat Weather

EarthSat's 30-60 Day Outlook

Wednesday, July 22, 2009

Forecaster: SS/BH/TH





I Below (-1)

Previous More widespread belows in the East Warmer in the Northwest

Due in part to recent verifications this summer, a few of the forecasters cooled their forecast in the East and warmed the forecast in the West. The overall outlook is looking strikingly similar to how July is panning out so far (see map below in the "July Comparison"), with warmth in much of the West and cooler temps in the Midwest and East. This week we take a look at a map produced by some of the analog years that match up with our current ENSO trend. Right now sea surface temps are 0.9C above normal in the Nino 3.4 region of the Pacific, and those anomalies are expected to trend higher. Some of the years where we saw similar conditions were 1965, 1963,

2006, 1986, and 2002, among others. The composite August results from those show a similar outlook to our forecast, though they're a bit warmer in the Mid-Atlantic and cooler in the Interior West.

Aug PWCDD* Forecasts

*10Y Normal updated to 99-08

Aug 2009 Fcst:

10Y Normal* 315.9 30Y Normal 296.5 Aug-2008 289.9

National Population-Weighted CDDs

図 0 to -1

Not quite as cool in the Interior West

Below (-2)

Ballow (-3)

Slightly cooler OH Valley

The changes were more subtle in our September outlook, with slightly less overage of below normal temps in the Great Basin and the Northem Plains, and slightly less warmth in the Midwest. As mentioned in the August section, we're heading further and further into an El Nino in the Pacific. With the peak of hurricane season coming in the middle of September, we looked at the ENSO analogs mentioned in our August 30-Day outlook for answers, and those seasons had the following number of named storms in August and September: 1965- 4, 1963- 7, 2006- 6, 1986- 6, and 2002- 11. All of those seasons started quietly as well, with no more than two named storms by the end of July Certainly there are many more factors to consider, but the ENSO analogs alone don't do anything to discourage the notion that the slow start to the hurricane season doesn't necessarily mean that the season will end quietly.

Sep PWCDD* Forecasts

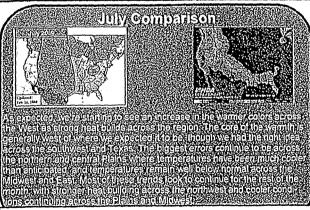
10Y Normal updated to 99-08

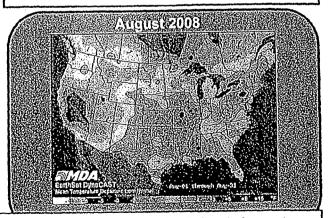
Sep 2009 Fcst:

10Y Normal*: 170.5 30Y Normal Sep-2008

Change: +0.5

National Population-Weighted CDDs





Maps above depict deviations of average temperatures from 30 Y normal in Fahrenheit.

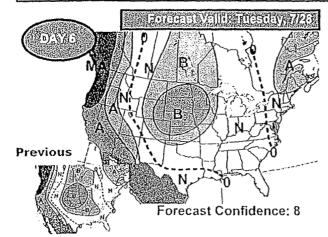


EarthSat's 6-10 Day Forecast-Betailed

Thursday, July 23, 2009

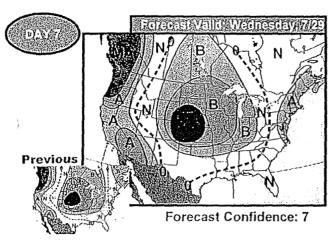
Forecaster: BH/AC

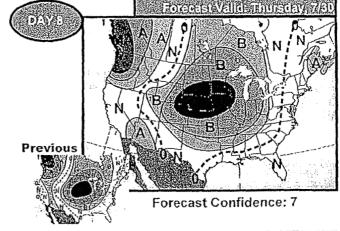
Appagastatemperature enviktions

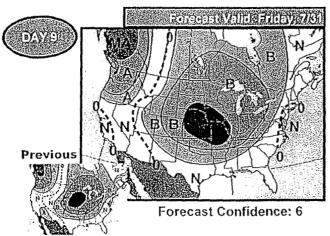


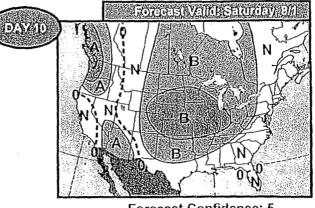
Today's Forecast:

Northeast Trends Slightly Warmer
Abundant Cool Air Hovering Over Plains, Midwest
The Plains and central Rockies will be under the influence of a
cooler risk throughout the period as a trough fixed across the
center of the nation may provide more widespread much belows currently portrayed. The Northeast now sees above normals reflected across the region during the early period. It
could still trend warmer early, but remains dependent on the
unsettled, wet weather still expected over the region. California trends cooler during the late period, and may still see conditions cool down faster and stronger. Houston could fall to
below for a day late, but the coolest conditions will remain further north.









Forecast Confidence: 5

■ A +3F to +4F ■ A +5F to +7F ■ MA +8F to +14F ■ SA +15 or Higher

■ B -3F to -4F ■ B -5F to -7F ■ MB -8F to -14F ■ SB -15 or Lower

Gas Daily

Tuesday, July 21, 2009

WSI trims hurricane forecast, says season could be 'unusually quiet'

WSI on Monday issued an update to its 2009 Atlantic hurricane forecast that calls for 10 named storms and five hurricanes, two of which will develop into major storms of Category 3 strength or greater, and said conditions could lead to an "unusually quiet" season.

The update marks a slight reduction from the 11 named storms, six hurricanes and two intense hurricanes WSI predicted before the season began June 1. The private forecaster said it reduced its projection because of the "unfavorable wind shear environment across the tropical Atlantic, which is driven by the recent development of a new El Niño event in the tropical Pacific."

"The impacts of the EI Niño event have emerged more quickly than originally expected, resulting in reduced expectations for the upcoming season," WSI said, adding that its 2009 forecast numbers remain quite close to the long-term average of 9.8 named storms, six hurricanes and 2.5 intense hurricanes, but are significantly lower than the numbers from the relatively active seasons of the past 15 years.

"Ocean temperatures in the tropical Atlantic remain quite cool relative to the temperatures during the last 15, more tropically active years," WSI seasonal forecaster Todd Crawford said in a statement.

"Further, the new El Niño event continues to strengthen, resulting in an unfavorable wind shear environment across the tropical Atlantic. The early development of this enhanced wind shear along with the relatively cool tropical Atlantic temperatures will almost certainly result in a less active season then last year, and could potentially result in an unusually quiet season," Crawford said.

"We have reduced our forecast numbers slightly to account for the impacts of the new El Niño event, and the fact there have been no early-season storms through mid-July."

El Niño, a phenomenon marked by a warming of surface sea temperatures in the tropical Pacific, can work to limit the development of Atlantic hurricanes. — *Jeff Barber*

Home: Natural Gas > Weekly Natural Gas Storage Report

Case No. 2008-1 Bage 1 of 1 Attachment A Page 88 of 306

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

ised: July 23, 2009 at 10:30 A.M. (eastern time) for the Week Ending July 17, 2009. , Release: July 30, 2009

Working Gas in Underground Storage, Lower 48

	Stocks i	n billion cubíc fe	eet (Bcf)	Historical Comparisons					
Region				Year Ago (07/17/08)	5-Year (2004-2008) Average			
	07/17/09	07/10/09	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change		
East	1,467	1,411	56	1,299	12.9	1,345	9.1		
West	442	443	-1	334	32.3	358	23.5		
Producing	1,043	1,032	11	751	38.9	791	31.9		
Total	2,952	2,886	66	2,384	23.8	2,494	18.4		

Notes and Definitions

Summary

Working gas in storage was 2,952 Bcf as of Friday, July 17, 2009, according to EIA estimates. This represents a net increase of 66 Bcf from the previous week. Stocks were 568 Bcf higher than last year at this time and 458 Bcf above the 5-year average of 2,494 Bcf. In the East Region, stocks were 122 Bcf above the 5-year average following net injections of 56 Bcf. Stocks in the Producing Region were 252 Bcf above the 5-year average of 791 Bcf after a net injection of 11 Bcf. Stocks in the West Region were 84 Bcf above the 5-year average after a net drawdown of 1 Bcf. At 2,952 Bcf, total working gas is above the 5-year historical range.

Data

History (XLS)

other formats: Summary IXT CSV

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

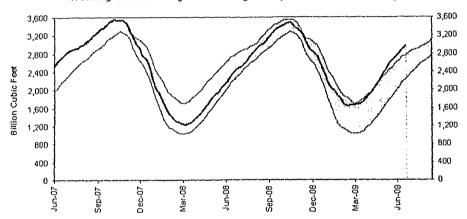
Differences Between Monthly and Weekly Data

Revision Policy

Related Links

Storage Basics Natural Gas Weekly Update Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008.
Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate

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Gas Daily

Thursday, July 23, 2009

Like US, Canada pushing up against storage limits

While much has been made of US gas storage supplies approaching record levels, the story is much the same on the Canadian side of the border, where market observers say some facilities will max out weeks before the injection season ends.

"The Canadian natural gas industry is facing a significant problem going forward to the start of the next heating season in November," First Energy Capital analyst Martin King said Wednesday, predicting that western Canadian storage facilities could be effectively full by mid-August.

Facilities in that region were already more than 88% full by the end of June at 431 Bcf. Both Alberta and British Columbia are holding at record levels for this time of year: 333.2 Bcf (nearly 93% full) and 68.2 Bcf (more than 81% full), respectively, the analyst said.

According to Canadian Enerdata, which surveys a select group of companies for a weekly nationwide storage survey, facilities across Canada were at 73.8% of capacity as of July 10, compared with 59.7% a year earlier and the five-year average of 68.5%.

King estimated that western Canadian storage "will reach effective full limits around 489 Bcf by early to mid-August or sooner." As such, producers must increase their exports to the US, shut in production, or both, he said.

Exports to the US have risen substantially in the last few weeks and "will likely remain elevated near present levels" between 7.5 Bcf/d and 8 Bcf/d until the end of the current injection season, King said. He pointed out that those exports "would simply allow US storage levels to rise just that much faster and partly off- set some of the domestic supply losses that are occurring in the US."

To bring the market back into balance, western Canadian gas producers may have to shut in between 600,000 Mcf/d and 1 Bcf/d from late August through October, "but only after facing severe price weakness" at the AECO-NIT hub, according to King.

"Shutting in production is not a decision to be made lightly, given the potential for various problems that can occur in terms of reservoir damage, tolling agreements at processing plants and pipelines, the simple lack of cash flow, as well as other issues," the analyst said. As such, "we suspect that some rather severe price pain will have to be inflicted on producers in order to generate additional shut-in production."

Meanwhile, analysts with Barclays Capital said late Tuesday that US storage appears on track to hit 3.93 Tcf by the beginning of November, "the highest ever and nearing storage capacity limits."

Analysts with Société Générale predicted an even higher number, 4.02 Tcf, a level "that must result in price cuts to force production cutbacks."

The Barclays analysts pointed out, however, that storage will likely first "hit constraints in an individual region, even if there is availability to store gas somewhere in the country." The producing region, which

has roughly 1.27 Tcf of storage capacity, will likely feel the strain first as it is currently holding 39.8% above last year's levels and 31.3% above the five-year average.

Should any of the regions reach capacity, the analysts said, interruptible injections would be curtailed, linepack would be extremely limited and utilities could issue operational flow orders that would impose severe penalties for deliveries greater than consumption. That would force shut-ins of production upstream of those constraints and cause cash prices in constrained producing basins to fall "precipitously," most likely beginning in the East Texas markets.

But while storage constraints will affect cash prices most, "the risk posed by a full storage finish is enough to keep prompt prices depressed through October and into November 2009," the Barclays analysts maintained. "Perhaps 2009 will give the market a true read of storage capacity." — Melanie Tatum



Table 1
Henry Hub Prices: History and Outlook (nominal US dollars per MM8tu)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	6.17	8.76	6.33	7.93						A
February	6.09	7.62	8.06	8.46						
March	6.91	6.88	7.10	9.34						
April	7.19	7.09	7.57	10.11						
May	6.47	6.23	7.64	11.24						
June	7.17	6.26	7.40	12.61						
July	7.57	6.05	6.21	11.32						
August	9.29	7.24	6.30	8.30						
September	12.11	4.95	5.98	7.70	100					
October	13.36	5.67	6.68	6.75	V. 1					
November	10.29	7.32	7.01	6.62						
December	12.98	6.83	7.08	5.79						
Year average	e 8.80	6.74	6.95	8.85						

Sources: IHS Cambridge Energy Research Associates; Platts Gas Daily historical data.

Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com.

the current market outlook, IHS CERA has analyzed the impacts of a hot and a mild summer in order to develop some uncertainty bands around the gas price.*

Stop us if you have heard this before: North American gas supply is stubbornly refusing to fall at a rate commensurate with demand declines. Although the rig count has fallen below the IHS CERA—estimated level required to maintain a productive capacity of 55 billion cubic feet (Bcf) per day for North America, the pace of the decline in rig activity has slowed in the past two months. In the June 19 Baker Hughes report, the gas-directed rig count actually rose. Given the incremental nature of production declines and ongoing production ramp-ups in key unconventional plays, IHS CERA still expects a whiplash effect in 2011, as a solid economic recovery boosts gas demand well beyond the ability of producers to increase supply in aggregate in the short term. The now-established trend of producers' drilling wells but not completing them continues apace. An inventory of uncompleted wells could create a quasi-hidden reserve of supply that can more rapidly be brought onstream when the economy recovers. It would remove some of the whiplash potential from the market by effectively reducing the time lag between the pickup in rig activity and the expansion of productive capacity. The gas-directed rig count has still not fallen far enough, though we expect that it could fall further.

IHS CERA expects production to bottom out in mid-2010 at 51.3 Bcf per day for the US Lower 48 and 65.5 Bcf per day for all of North America. In recent months, delays in liquefaction have provided one of the few upward pressures on the market. IHS CERA estimates that liquefied natural gas (LNG) imports into the United States will average 1.8 Bcf per day in 2009, in line with last month's estimate. With further expansion of liquefaction capacity, LNG imports are projected to surge to an average of 2.9 Bcf per day in 2010. This increase comes on the back of new contracts for LNG into the Sabine Pass and Cameron terminals, as well as IHS CERA's outlook for major expansions in global liquefaction capacity in 2010. Project delays on the

^{*}IHS CERA's price outlook is modeled on normal weather each and every month. For more information about the hot and mild summer cases, see Summer 2009 Weather Sensitivities, below.

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Friday, July 17, 2009

Analyst sees gas falling below \$2/Mcf later this year

US gas prices should drop to \$2/Mcf or lower later this year as storage capacity limitations place more gas into an already oversupplied market, Benchmark analyst Mark Gilman said Thursday in a conference call.

Gilman said producers will be forced to curtail some more drilling as storage inventories approach 3.8 Tcf or higher, testing capacity limits. On Thursday, storage stocks stood at 2.886 Tcf, 26% higher than this time last year and 19% above the five-year average.

For 2010, Gilman said he expects prices to average between \$3.50/Mcf and \$3.75/Mcf. Longer term, he lowered his long-standing \$6/Mcf price assumption to \$5/Mcf because of the increasingly robust shale gas production and technology that has reduced marginal costs in shale plays to between \$1.50/Mcf and \$2/Mcf.

However, Gilman said his price estimates did not include speculators or "paper market types," which he believes accounted for the swings in the August NYMEX gas futures contract over the past three days.

Gilman said his pricing model assumes that 2009 production will decline by 5.5%, followed by a 2.3% increase in production in 2010.

However, he noted that using old rig count formulas would no longer work in estimating production volumes since nonconventional wells have a higher productivity rate than older, conventional wells.

Additionally, he said liquefied natural gas imports will rise this year with a 33% increase in global liquefaction capacity. "As the US is the market of last resort, it will be the recipient of an incremental portion of this capacity," he said. "High-priced foreign markets will no longer, on arbitrage, divert it away from us." — Cheryl Buchta

Friday, July 10, 2009

Analyst: Prices could return to \$7 assuming quick economic recovery

Gas prices could rebound to \$7/MMBtu if the US economy recovers over the next year, analyst Kevin Petak said Thursday.

"Gas demand is down, but not out," Petak told an audience of industry officials at the Colorado Oil & Gas Association's annual meeting in Denver.

Petak, vice president for gas market modeling at Arlington, Virginia-based consulting firm ICF International, said prices are likely to bounce back due to a combination of declining productive capacity and resurgent demand. He said a rebound is simply "a question of when and how much."

Over the longer term, Petak said gas consumption should grow as the economy stabilizes and demand from power generators rises. But the gas industry will be walking a tightrope, he maintained, with producers having to accept prices low enough to encourage demand but high enough to spur continued drilling.

"Unconventional gas production is a game-changer," Petak said, adding that growing shale gas volumes may actually keep liquefied natural gas imports at bay and negate the need for an Alaska pipeline. "Shale can knock those supplies off the market," he said. "LNG becomes less and less important as shale grows."

Petak told the COGA audience that when it comes to climate change and carbon policy, gas companies want laws "that have some bite in them."

Higher prices for carbon emissions create a "sweet spot" for gas in power generation, he said. Below \$15/ton, coal stays cheaper than gas, but between \$15/ton and \$55/ton, gas becomes the fuel of choice for producing new electricity, he explained.

"The power sector will get the biggest bite of emissions reduction. That's good for gas," Petak said, projecting that gas' share of the power-generation market will grow to about 30% in 2020 from the current 20%. "The key is underlying electric load growth," he said.

Gas industry officials need to publicly emphasize that gas-fired power plants are easier and cheaper to site and build, produce lower emissions and can cycle on and off to back up wind and solar power, according to Petak. — Bill Holland

Friday, July 17, 2009

Prices poised to start rebounding next winter, Goldman predicts

A manufacturing-sector recovery coupled with sharp cuts in drilling by US producers will form the base for a gas price rebound starting this winter, the commodities team at Goldman Sachs said Thursday.

"We believe that a combination of a global rebound in manufacturing, record low liquefied natural gas capacity utilization, coal-to-gas substitution by utilities and a sharp drop-off in US drilling will begin to rebalance the US and global natural gas markets during the upcoming winter," Goldman said.

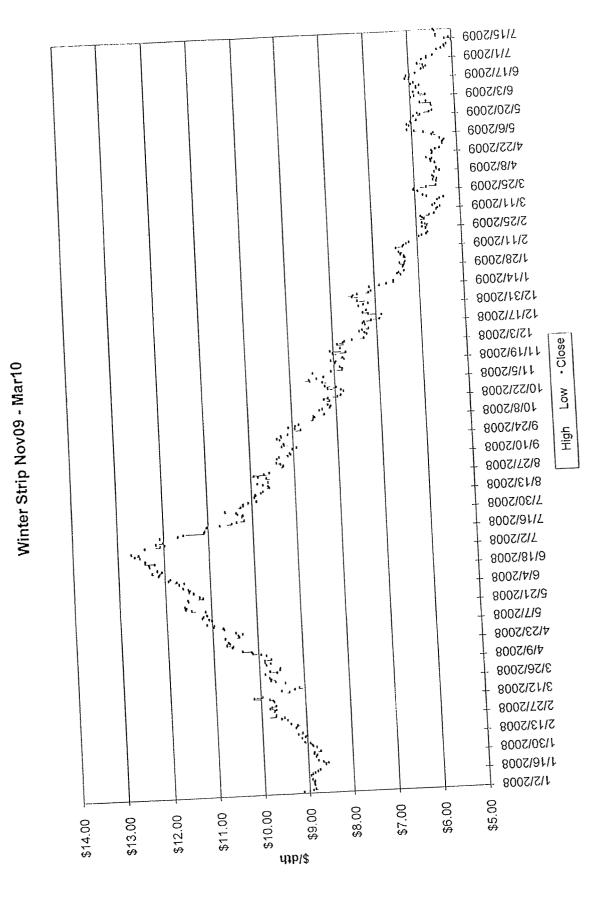
The firm noted that drilling activity is well below the level needed to keep production flat. As a result, "decline rates should begin to set in by next summer at the same time as the global natural gas market rebalances," Goldman said. "To balance the US market, drilling will likely have to increase, and we believe that prices next summer below \$5.50/MMBtu are not sufficient to incentivize such drilling, as the costs for most marginal projects are in the \$5.50/MMBtu to \$7.50/MMBtu range."—

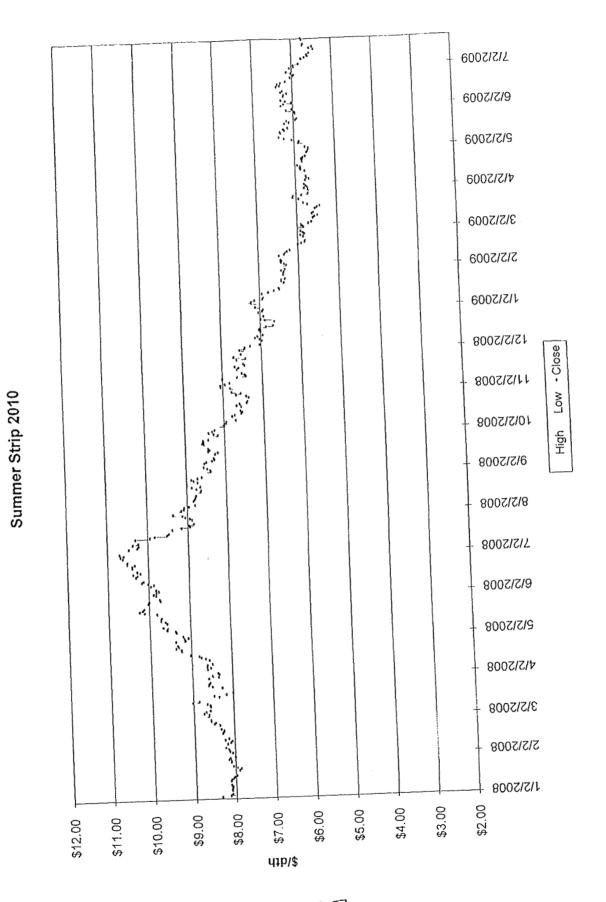
Bill Holland

Case No. 2008-175 Attachment A Page 95 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu July 7, 2009 Release

8.01	Jan-09		5.24	Jan-10		5.59
8.51	Feb-09		4.51	Feb-10		5.68
9.46	Mar-09		3.96	Mar-10		5.73
10.18	Apr-09		3.52	Apr-10		5.68
11.32	May-09		3.84	May-10		5.57
12.68	Jun-09		3.8	Jun-10		5.47
	Jul-09		3.75	Jul-10		5.42
8.26	Aug-09		3.72	Aug-10		5.54
7.65	•		3.81	Sep-10		5.65
6.74	Oct-09		3.7	Oct-10		5.82
6.67	Nov-09		4.47	Nov-10		6.28
5.82	Dec-09		4.86	Dec-10		6.61
	Average			Average		
\$ 8.868	2009	\$	4.098	2010	\$	5,753
				0		
\$ 9.706	Summer 2009	\$	3.734	Summer 2010	\$	5.593
\$ 5.240	Winter 2009- 2010	\$	5.266			
\$	9.46 10.18 11.32 12.68 11.11 8.26 7.65 6.74 6.67 5.82 \$ 8.868 \$ 9.706	8.51 Feb-09 9.46 Mar-09 10.18 Apr-09 11.32 May-09 12.68 Jun-09 11.11 Jul-09 8.26 Aug-09 7.65 Sep-09 6.74 Oct-09 6.67 Nov-09 5.82 Dec-09 Average \$ 8.868 2009 \$ 9.706 Summer 2009	8.51 Feb-09 9.46 Mar-09 10.18 Apr-09 11.32 May-09 12.68 Jun-09 11.11 Jul-09 8.26 Aug-09 7.65 Sep-09 6.74 Oct-09 6.67 Nov-09 5.82 Dec-09 Average \$ 8.868 2009 \$ \$ 9.706 Summer 2009 \$	8.51 Feb-09 4.51 9.46 Mar-09 3.96 10.18 Apr-09 3.52 11.32 May-09 3.84 12.68 Jun-09 3.75 8.26 Aug-09 3.72 7.65 Sep-09 3.81 6.74 Oct-09 3.7 6.67 Nov-09 4.47 5.82 Dec-09 4.86 Average \$ 8.868 2009 \$ 4.098 \$ 9.706 Summer 2009 \$ 3.734	8.51 Feb-09 4.51 Feb-10 9.46 Mar-09 3.96 Mar-10 10.18 Apr-09 3.52 Apr-10 11.32 May-09 3.84 May-10 12.68 Jun-09 3.75 Jul-10 11.11 Jul-09 3.75 Jul-10 8.26 Aug-09 3.72 Aug-10 7.65 Sep-09 3.81 Sep-10 6.74 Oct-09 3.7 Oct-10 6.67 Nov-09 4.47 Nov-10 5.82 Dec-09 4.86 Dec-10 Average Average \$ 8.868 2009 \$ 4.098 2010 \$ 9.706 Summer 2009 \$ 3.734 Summer 2010	8.51 Feb-09 4.51 Feb-10 9.46 Mar-09 3.96 Mar-10 10.18 Apr-09 3.52 Apr-10 11.32 May-09 3.84 May-10 12.68 Jun-09 3.8 Jun-10 11.11 Jul-09 3.75 Jul-10 8.26 Aug-09 3.72 Aug-10 7.65 Sep-09 3.81 Sep-10 6.74 Oct-09 3.7 Oct-10 6.67 Nov-09 4.47 Nov-10 5.82 Dec-09 4.86 Dec-10 Average Average \$ 8.868 2009 \$ 4.098 2010 \$ \$ 9.706 Summer 2009 \$ 3.734 Summer 2010 \$





Short-Term Energy Outlook

July 7, 2009 Release (Next Update: August 11, 2009)

Natural Gas

Consumption. Total natural gas consumption is projected to decline by 2.3 percent in 2009 and remain unchanged in 2010. Poor economic conditions are expected to prolong the current slump in natural gas demand over the coming months, led by an 8.2-percent drop among industrial users in 2009. While consumption is expected to fall in the residential and commercial sectors as well this year, competitive natural gas prices relative to coal are projected to lead to a 2.4-percent increase in electric power sector consumption in 2009. Slight consumption increases in the residential, commercial, and industrial sectors next year are expected to result from the projected economic recovery. Natural gas consumption in the electric power sector is expected to decline by 1 percent in 2010 as natural gas prices rise and coal regains a larger share of the baseload generation mix.

Production and Imports. Total U.S. marketed natural gas production is expected to decline by 0.6 percent in 2009 and by 2.9 percent in 2010. As both consumption and prices have waned amid the recent economic downturn, natural gas producers have responded with a dramatic reduction in drilling activities. According to Baker Hughes, total working natural gas rigs are now down 57 percent since September 2008. The resulting production decline from the drop in rigs is expected to occur almost exclusively in the Lower-48 non-Gulf of Mexico (GOM) region during the second half of this year. While the drop in natural gas drilling rigs is expected to result in lower natural gas production in 2010, recent improvements in drilling technology have lowered costs, reduced drilling time, and increased well productivity. These factors should improve the responsiveness of producers to changes in demand, limiting the extent of sustained upward price movements through the forecast period.

Global Crude Oil and Liquid Fuels

Overview. Crude oil prices rose in June for the fourth consecutive month, in part because of stronger-than-anticipated global economic activity, primarily in Asia. Market sentiment continues to reflect expectations of an economic recovery and a future rebound in oil demand that are outweighing weak current oil consumption and high inventory levels. Continued production restraint by members of the Organization of the Petroleum Exporting Countries (OPEC) and unrest in Iran and Nigeria, respectively OPEC's second- and seventh-biggest oil producers, are also supporting prices. The downside price risks of this forecast are a delayed or weaker-than-expected global economic recovery, ample global surplus production capacity, and high commercial inventories.

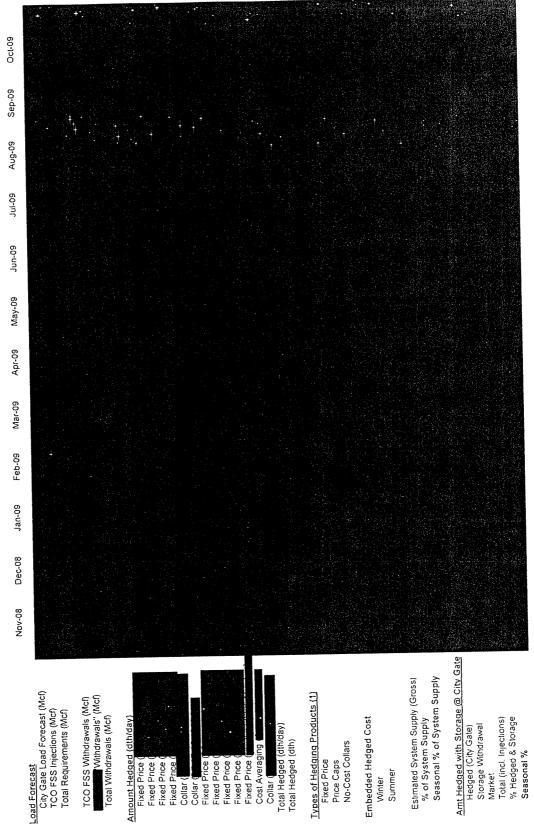
Gas Commercial Operations Hedging Program Market Indicators Summary August 26, 2009

	Price Pressure	Term	Comments	Page Ref
Weather	•			
Long Term Forecast (Dec 09-Feb 10)	 	Long	NOAA predicting above average temperatures for Dec 2009Feb. 2010 for most of the continental United States with below normal temperatures in the south-eastern/central states.	14
Mid Term Forecast (30-60 days)	←→	Long	September predicted to be 1.9% warmer than 10 year normal and October is predicted to be 2.9% warmer than 10 year normal.	15, 15A
Short Term Forecast (6-10 days)	←→	Short	Below and Much below temperatures moving from central states eastward. Followed by above temperatures moving from west to central portions of the country.	16
Tropical Storm Activity	1	Long	No activity at this time that would threaten the production areas.	
Storage Inventory				
EIA Weekly Storage Report	1	Long	Storage injections for the week ending August 14th were 52 BCF. Storage levels are at 3 204 TCF which is 21.3% higher than last year and 19.1% higher than the 5 year average.	17, 18
Industry Publications				
Cambridge Energy Research Associates Summer 2009: S Winter 2009/10:	1	Long	CERA projects the Henry Hub price to average \$200 per MMBtu for 2009, with September and October prices below before MMBtu.	19
Ges Daily	1	Short	"We remain bearish on cash prices through the remainder of the 2009 storage season" "we expect that the lowest cash prices of the year are not behind us, but ahead."	20
Gas Daily	†	Long	While gas market fundamentals continue to be bearish in the short term, analysts indicated this week that they are raising their hopes for a turnaround in 2010.	21, 22
Gas Daily	ţ	Long	The uncertainty about how much gas can be put into storage and many other factors make it difficult to predict whether prices will fall lower""from a fundamentals perspective, one could argue prices for the heating season should fall further".	23, 24
Gas Daily	+	Long	S&P predicts that Henry Hub futures prices will average \$3.75 per MMBtu for the rest of the year and \$4.50 per MMBtu next year.	31, 32
Government Agencies				·
Energy Information Administration Summer 2009: \$3.430 Winter 2009/10: \$4.696	1	Long	The Henry Hub price is expected to increase from an average of \$3.813 per MMBtu in 2009 to an average of \$5.319 per MMBtu in 2010.	25
Technical Analysis		·····		r
Winter 2009-10 Strip Chart	←→	Short	Closed at \$5.16.	26
Summer 2010 Strip Chart	4	Short	Closed at \$5 72	27
conomy				·
Demand	†	Long	EIA: Natural gas consumption is projected to decline by 2.6% in 2009 and increase by 0.5% in 2010. The assumption of improved economic conditions in 2010 is the primary factor leading to projected demand increases in the residential, commercial, and industrial sectors next year.	28, 29
Supply	1	Long	EIA: Total U.S. marketed natural gas production is expected to remain flat in 2009 and fall by 2.8% in 2010. Data for March through May 2009 suggest that the decline in drilling has begun to reduce marketed production in the lower-48 non Gulf of Mexico region.	28, 29
Oil Market	+	Long	Crude oil prices continue to be very volatile EIA expects WTI crude oil to stay flat at an average of \$70 per barrell in the 4th quarter of 2009, an increase of \$27 compared to the 1st quarter of the year.	28, 29

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

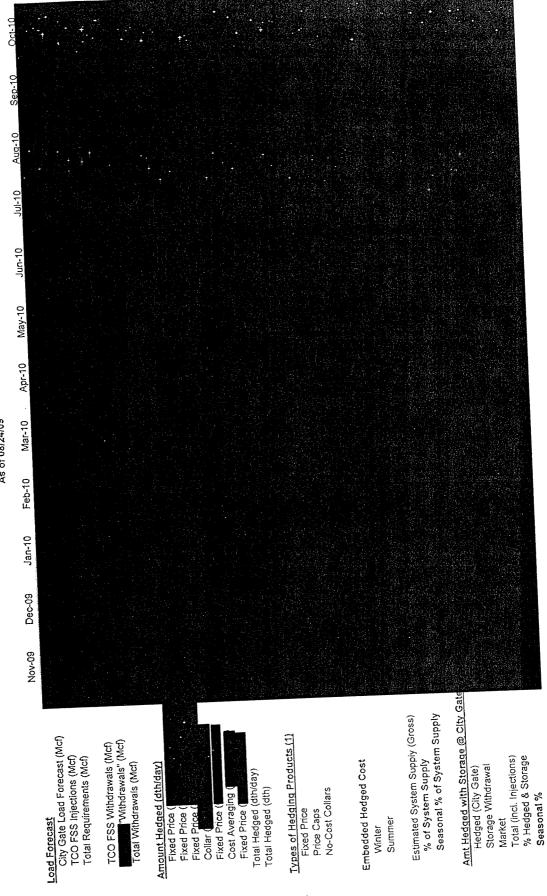
Attendees: Jeff Kem, Jim Henning, Patly Walker, Mike Brumback, Mitch Martin, Joachim Fischesser, Steve Niederbaumer
Discussed market fundamentals including weather (tack of hurricane activity), storage inventory levels, CERA and EIA forecasts for the Winter
2009/10 and Summer 2010, independent analysts projections of supply and demand and the impact on gas prices, economic influences on supply
and demand and technical analysis on Summer and Winter Strip prices. In addition, reviewed DEO and DEK's hedging program to date.
Significant discussion took place around the record storage level and the impact on prices as well as the spread between prompt month and
Winter 09/10 and Summer 2010 NYMEX prices. Based on these factors, a decision was made to hedge additional volumes for the Summer 2011
and Winter 11/12.





(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 08/24/09



6

Oct-11

Sep-11

Aug-11

Jul-11

Jun-11

May-11

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 08/24/09

Apr-11 Mar-11 Feb-11 Jan-11 Dec-10 Nov-10 Amt Hedged with Storage @ City Gate Hedged (City Gate) Seasonal % of System Supply Estimated System Supply (Gross) Types of Hedging Products [1] City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf) % Hedged & Storage Total Requirements (Mcf) Total (incl. Injections) Embedded Hedged Cost % of System Supply Amount Hedged (dth/day) Fixed Price Storage Withdrawal Fixed Price (Pure Total Hedged (dth/day) Total Hedged (dth) No-Cost Collars Seasonal % Fixed Price Price Caps Market Summer Load Forecast Winter Collar (

Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 08/24/09

Oct-12

Sep-12

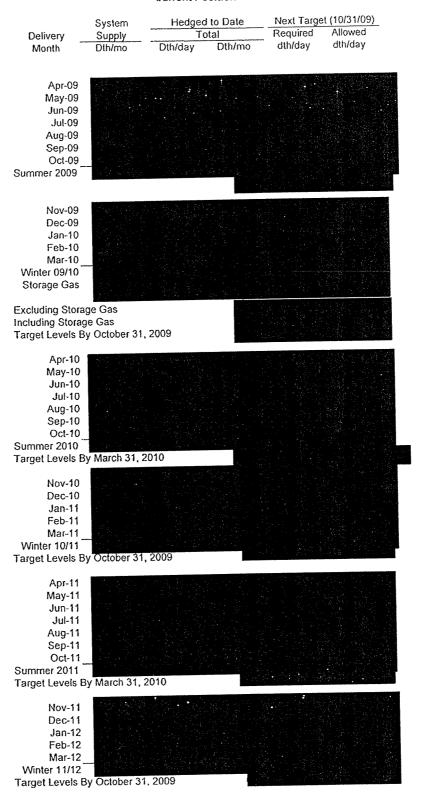
Aug-12

Jul-12

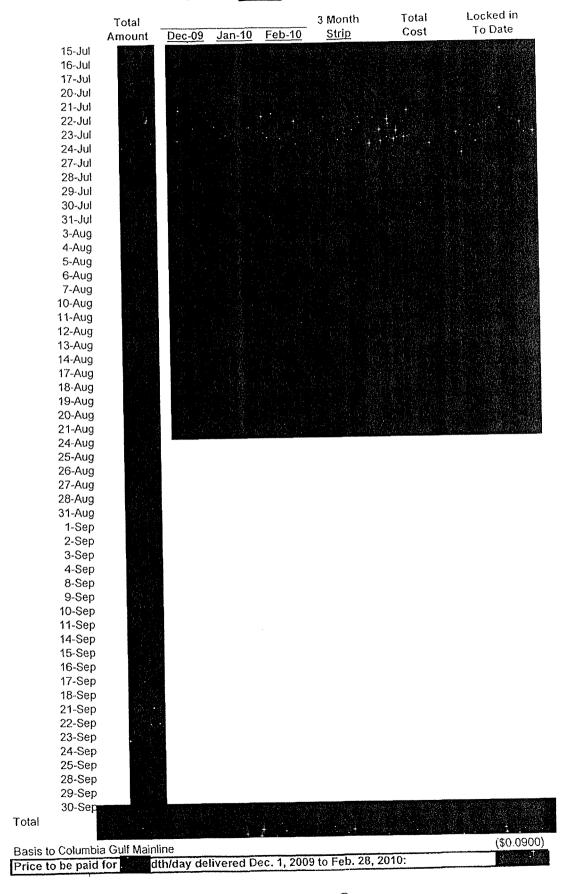
May-12 Jun-12 Jul-12 Aug-12 Sep-12 Oct. 2								
Apr-12 Ma								ner months.
Feb-12 Mar-12								months and 40% Sumr
Nov-11 Dec-11 Jan-12								of hedging product is 25% for Winter
Ź	Load Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf)	TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf)	Amount Hedged (dth/day) TBD TBD TBD TGD TGD Total Hedged (dth/day) Total Hedged (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars	Embedded Hedged Cost Winter Summer	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	Amt Hedgod with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections)	% Hedged & Storage Seasonal % (1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

8

Duke Energy Kentucky Hedging Program Current Position

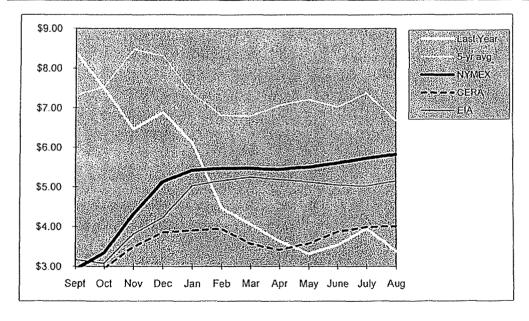


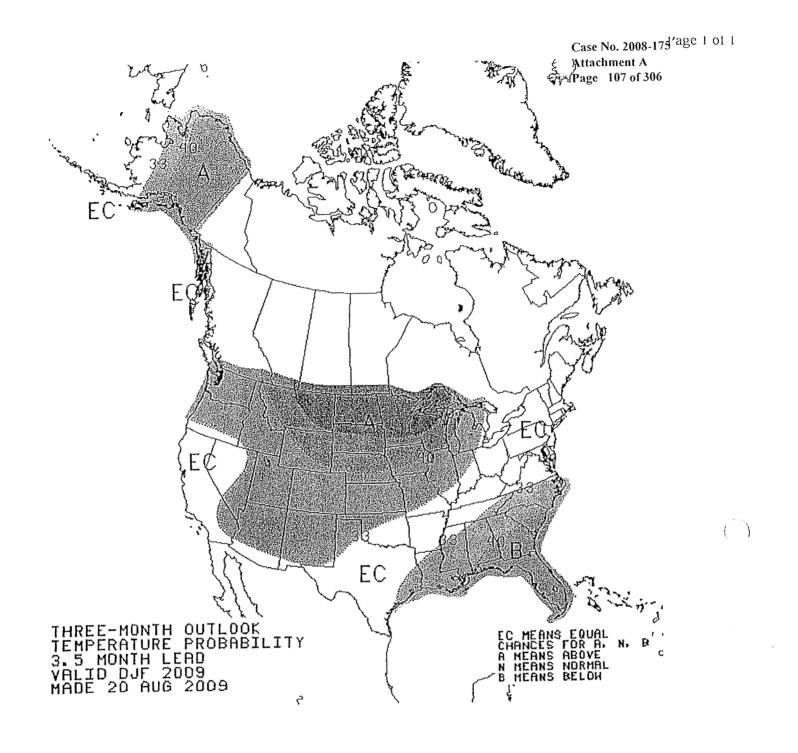
Duke Energy Kentucky Hedging Program for 2009/10 Cost Averaging with Columbia Gulf Mainline



COMPARISON OF HISTORIC SPOT & PROJECTED PRICE TO CURRENT FUTURES PRICES

		ic Prices:				
	5-yr. avg.	osing Price Last Year		CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)		1	11-Aug-09	25-Aug-09
				N. G.W		
Sept	\$7.31\$8.	39			\$3.170	\$2.923
Oct	\$7.55\$7.	47			\$3.080	\$3.337
Nov	\$8.47\$6	47			\$3.820	\$4.307
Dec	\$8.31\$6.	89			\$4,220	\$5.130
Jan	\$7.36\$6.	14			\$5.030	\$5.422
Feb	\$6.82\$4.	48			\$5,160	\$5.473
Mar	\$6.79\$4.	06			\$5.250	\$5.473
Apr	\$7.06\$3.	63			\$5.190	\$5.446
May	\$7.21\$3.	32			\$5.130	\$5.509
June	\$7.02\$3.	54			\$5.050	\$5.610
July	\$7.37\$3.	95			\$5.020	\$5.730
Aug	\$6.68\$3.	38			\$5.150	\$5.825
12 Month Avg	\$7.33\$5.	14			\$4.606	\$5.015
Summe	er Average	1.04	\$4.541	\$4.911		
Winter A	lverage				\$4.696	\$5.161





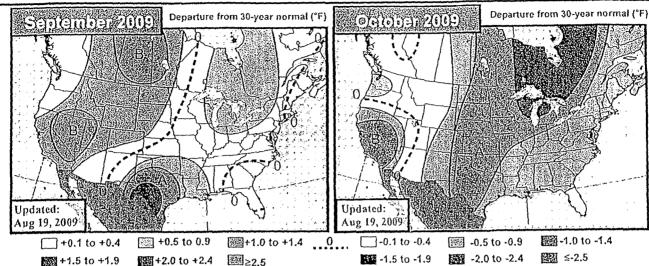
Attachment A



EarthSat's 30-60 Day Outlook

Wednesday, August 19, 2009

Forecaster: SS/BH/TH





No changes

Still cool in the West

No changes were made to the forecast this week. Given the sudden uptick in tropical activity over the past week, this week we're going to focus on the potential for tropical activity in September - the normal peak of hurricane season. We look a look at some of the preferred ENSO analog years to see how the tropics performed in those years. 2004 is a very interesting analog for its number of similarities that it shares with 2009. It had a very similar ENSO pattern, a similar US temperature pattern for the summer through August 15, and the previous 3-month precipitation from today's date was similar as well. That year also started out slow with the first named storm occurring at the beginning of August. It ended up being a very active season with 15 named storms, 9 hurricanes, and four storms (Charley, Frances, Ivan, and Jeanne) that were all retired because of the damage that they caused That's not to say that this season will come close to that (we are not forecasting that), but it's an interesting comparison.

Sep PWCDD* Forecasts

*10Y Normal updated to 99-08

Sep 2009 Fcst:

167.3 | 10Y Normal* | 170.5 30Y Normal | 165.7 Sep-2008 | 169.1

Change: 0.0 National Population-Weighted CDDs

Previous

Slight cool changes in the Midcontinent

Warm changes in the West

A few minor tweaks were made to the forecast which were mostly due to changes in the NAO and ENSO numbers. The West was warmed slightly, and warmth was scaled back slightly across the Midwest. This week we'll take a look at how the ENSO may affect the October weather. The latest weekly number put the temperature anomaly in the ENSO 3.4 region of the Pacific at +0.7C. The SSTs are expected to trend warmer likely putting us in a high end weak or low end moderate episode by winter. Our LongCast outlook takes 10 of the closest analog years to the current ENSO trend and

weights them based on how close they are to the current trend. The top four years right now are 2006, 1963, 2004 (the year discussed in the Sept outlook), and 1996. Using DynaCast, we produced the map to the right for October, which agrees rather well with our forecast though it's a bit warmer in the Southeast and the Northeast.



Oct GWHDD* Forecasts

10Y Normal updated to 99-08 10Y Normal 279.5

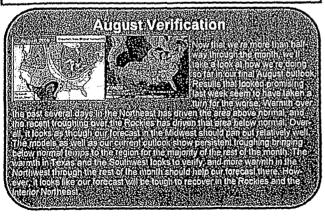
Oct 2009 Fcst:

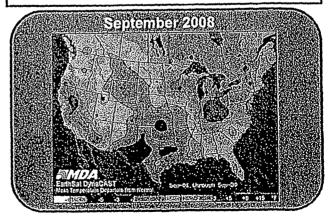
271.3

10Y Normal* 279.5 30Y Normal 289.1 Oct-2008 292.9

Change: +0.3

National Gas-Weighted HDDs





MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [30-60 Day-Outlook, Version 2.1]

Wednesday, August 26, 2009

Forecaster calls for warm autumn, cold start to winter in most regions

Private forecaster WSI said Tuesday that <u>most of the US can expect warmer-than-normal</u> <u>weather through October while early indicators point to the possibility of a colder-than-normal start to winter.</u>

"The pattern that resulted in a record cold July in many eastern US locations has finally abated," said WSI seasonal forecaster Todd Crawford. "We expect the warmer pattern to continue in September, with the exception of the Southeast, where conditions will likely be cooler and wetter than normal. By October and November, the impacts from the current El Niño event will begin to take hold with increased chances of cold temperatures across much of the eastern US."

The pattern for the upcoming winter "will depend strongly on the evolution of this El Niño event during the next few months. A weaker event centered farther east in the tropical Pacific will more likely enable a cold winter in much of the eastern US, while a stronger and more westcentered event would increase the odds of a very mild winter in the Northeast," Crawford added. "We currently favor slightly the former, colder idea, but with very high uncertainty at this point."

The weather should push cooling demand higher in the early fall, but continued slack industrial demand should offset that and keep gas prices low, predicted analysts at Energy Security Analysis Inc. in accompanying market commentary.

By November, when cooler weather is forecast everywhere except the West, the scenario should be more bullish, with power prices supported by firmer spot gas prices and stronger peak loads. ESAI added. — Stephanie Seay

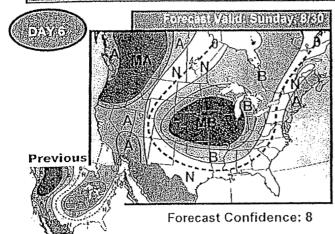


EarthSat's 6-10 Day Forecast-Detailed

Tuesday, August 25, 2009

Forecaster: BH/AC

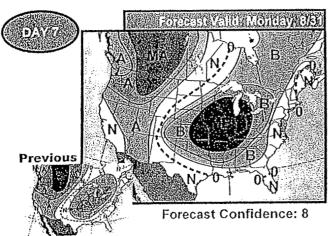
ESTATORIST CONTINUES CONTI



Today's Forecast:

Much Belows Spread Across Plains, Midwest Ridge In Interior West Moves Towards Upper MW Late

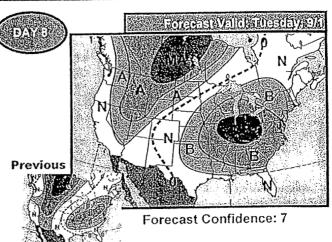
Models are trending into better agreement today on the stronger cool air diving into the Midwest and South for the period. Despite the much belows that are projected, cooler conditions could still appear across these regions. The West is a little trickier overall. Late in the period, the timing of a trough should dictate how cool it gets along the West Coast. Should it move in faster, cooler conditions will occur in these areas. As a result of this trough advancing in, the ridge in the Interior West early in the period shifts more eastward and may provide a warmer than forecasted setup across the Upper Midwest and Northern Plains by the last day or two of the period.



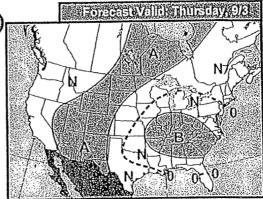
Previous

andreeasteVallite Wednesday.

Forecast Confidence: 6







Forecast Confidence: 5

MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 (backup: 301-231-0664) Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [Morning Basic-Page 3, Version 2.1]

Case No. 2008-175 age 1 01 1 Attachment GlossaPage 111 of 306

Rejease Schedule Sign Up for Email Updates

Home > Natural Gas > Weekly Natural Gas Storage Report

Weekly Natural Gas Storage Report

sed: August 20, 2009 at 10:30 A.M. (castern time) for the Week Ending August 14, 2009 Release: August 27, 2009

Working Gas in Underground Storage, Lower 48

Working Ga	s in Undergrou	nd Storage, Lo	wer 48			other formats: Şu	mmary JXT CSY			
	Stocks i	n billion cuble fe	eet (Bcf)		Historical Comparisons					
Region	08/14/09	08/07/09	Change	Year Ago (08/14/08)	5-Year (2004-2008) Averag				
	08/14/09	00/07/09	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change			
East	1,681	1,635	46	1,530	9.9	1,519	10.7			
West	449	444	5	362	24.0	374	20.1			
Producing	1,074	1,073	1	750	43.2	799	34.4			
Total	3,204	3,152	52	2,642	21.3	2,691	19.1			

Notes and Definitions

Summary

Working gas in storage was 3,204 Bcf as of Friday, August 14, 2009, according to EIA estimates. This represents a net increase of 52 Bcf from the previous week. Stocks were 562 Bcf higher than last year at this time and 513 Bcf above the 5-year average of 2,691 Bcf. In the East Region, stocks were 162 Bcf above the 5-year average following net injections of 46 Bcf. Stocks in the Producing Region were 275 Bcf above the 5-year average of 799 Bcf after a net injection of 1 Bcf. Stocks in the West Region were 75 Bcf above the 5-year average after a net addition of 5 Bcf. At 3,204 Bcf, total working gas is above the 5-year historical range.

Data

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

Revision Policy

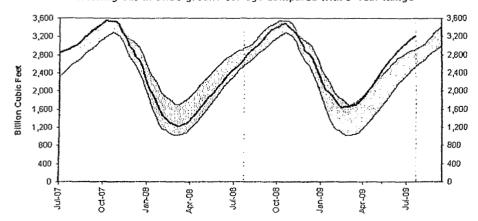
Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008, Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report," The dashed vertical lines Indicate current and year-ago weekly periods.

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Friday, August 21, 2009

Storage tops 3.2 Tcf with 2½ months left in season

The Energy Information Administration on Thursday reported a 52-Bcf injection to storage for the week ending August 14, boosting the nation's inventories to 3.204 Tcf with 2½ months remaining in the traditional refill season.

The build was below both the year-ago level and five-year average, but that didn't stop the front-month NYMEX gas futures contract from settling below \$3/MMBtu for the first time in seven years.

In the same week of 2008, EIA reported 2.642 Tcf in storage. As a result, the surplus from a year ago shrank to 562 Bcf from 592 Bcf last week, while the surplus over the five-year average of 2.691 Tcf narrowed to 513 Bcf from 517 Bcf.

Stephen Smith, president of Stephen Smith Energy Associates, <u>said there was a lot of hot, sticky weather in the Northeast last week that bolstered demand and kept gas out of storage.</u> He also cited ANR Pipeline's shut-in following the August 5 explosion at High Island Offshore System gas platform in the Gulf of Mexico, which took about 250,000 Mcf/d offline.

Despite the lower-than-expected build, storage levels are still 21% higher than last year and 19% above the five-year average. "It seems to me that we are still on track for a very big peak in storage," Smith said. "And with gas below \$3/MMBtu in the first time in a long time, we are just facing what now appears to be an unavoidable crunch."

"Clearly as we press on past records, system pressures will increase, forcing curtailments and/or shut-ins," said analysts at Stifel Nicolaus. "The next few weeks will be instructive regarding just how much additional capacity actually exists in the producing region, which has implications for the entire US."

Tim Evans, an analyst at Citi Futures Perspective, said it is still unclear whether the last two weekly builds, which were slightly below consensus expectations, indicate that the supply/demand balance is finally shifting due to the drastic cuts in drilling rigs.

"I continue to look for a transition to a tighter balance," he said, noting that the smaller injections might be due more to the US's failure to attract as many liquefied natural gas cargoes as expected.

-- Stephanie Seay, Cheryl Buchta

IHS CERA Monthly Briefing

AUGUST 25, 2003 - PAGE 3

Table 1
Henry Hub Prices: History and Outlook



(nominal US dollars per MMBtu)										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	6.17	8.76	6.33	7.93						
February	6.09	7.62	8.06	8.46						
March	6.91	6.88	7.10	9.34						
April	7.19	7.09	7.57	10.11						
May	6.47	6.23	7.64	11.24						i. San
June	7.17	6.26	7.40	12.61						
July	7.57	6.05	6.21	11.32						
August	9.29	7.24	6.30	8.30						
September	12.11	4.95	5.98	7.70						
October	13.36	5.67	6.68	6.75						717
November	10.29	7.32	7.01	6.62						
December	12.98	6.83	7.08	5.79						
Year average	e 8.80	6.74	6.95	8.85						

Sources: IHS Cambridge Energy Research Associates; Platts Gas Daily historical data. Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com.

is unlikely to offer a strong market for gas in the coming months, as IHS CERA's analysis of North American power markets suggests that the 2007 level of electricity demand will not be matched until 2011.*

In these final months of the injection season, it is now all but inevitable that storage inventories will be a catalyst for a significant dropoff in prices. The falling rig count (down approximately 60 percent from last September's high) indicates a collective effort to counteract a loosened supply-demand balance. However, given the productivity of key unconventional plays where drilling activity has been sustained, production levels have declined at a more measured pace than demand, and the excess supplies have pushed up storage inventories. Most of the bullish signals in the market have been transitory: a colder-than-normal period across some regions in late winter, a rally in prices in sympathy with rising oil prices.

IHS CERA now believes that the North American market is facing production curtailments not only for fall 2009 but for fall 2010 as well. The implications are significant: despite the cushion for demand provided by gas displacement of coal for power generation (a cushion which typically grows as gas prices retreat further), the market could well find itself in a similar position for a brief period next fall. This expectation rests upon IHS Global Insight's projections for relatively tepid US gross domestic product (GDP) growth in 2010 (approximately 1.5 percent) as well as additional volumes of LNG expected for 2010. We have for months reiterated the increasing likelihood of a "hard stop" in production this fall. The prospect for more of the same in 2010 is a signpost of just how great the potential for new supply is and just how uncertain the gas demand outlook remains.

IHS CERA expects the price at Henry Hub to average \$3.44 per million British thermal units (MMBtu) for August, falling to \$2.90 in September. By October the price is projected to remain near seven-year lows at \$2.95 before bouncing back slightly with the approach of winter. For

Thursday, July 30, 2009

Barclays: Lowest cash prices of the year 'are not behind us'

Spot gas prices will fall even further this fall despite cuts in supply, analysts at Barclays Capital said late Tuesday, contrary to the seemingly bullish signals coming from the gas storage market.

"Despite shrinking storage injections, we expect storage to reach record levels by the end of the injection season," analysts James Crandall, Biliana Pehlivanova and Michael Zenker said in their weekly natural gas note.

"We remain bearish on cash prices through the remainder of the 2009 storage injection season," they said. "Indeed, we expect that the lowest cash prices of the year are not behind us, but ahead."

They said four weeks of storage injections below the five-year average have prompted some traders and analysts to say the supply/demand balance is tightening. But the Barclays team thinks demand hasn't increased appreciably and that more gas than needed is still flowing into the market.

Industrial demand has stayed flat, the team said, as the sector is using 12%, or 2.4 Bcf/d, less gas than a year ago. The production region, home to many of the country's petrochemical plants, continues to fill storage at the record pace seen earlier this year, illustrating that demand weakness.

While slightly more gas is going to the power sector as a share of the market, the analysts noted that electricity consumption is off 7% from its peak in 2007.

As for supply, the drop-off to date "has under-paced our estimates," they said. "Non-Energy Information Administration data sources further suggest that the supply pullback has not been large thus far."

Although "we do not dismiss the potential that the market reads a further shrinking of storage injections as a bullish tightening of the market, we remain convinced that the total amount of gas in storage, and particularly the likely inventory levels in place in late October and early November, will place increasing downward pressure on prices," the Barclays team said. — Bill Holland

Wednesday, July 29, 2009

Analysts see 2010 price rebound as fundamentals shift

While gas market fundamentals continue to be bearish in the short term, analysts indicated this week that they are raising their hopes for a turnaround in 2010.

"I think we've struck a less bearish chord ... and some 'fixes' have begun to take hold on both sides of supply and demand," Scott Speaker, natural gas strategist at JP Morgan, said on a conference call Monday.

"We're actually a bit above the forward curve for [fourth-quarter] 2009 and for 2010," Speaker said. "We're starting to see tighter balances [in supply and demand] from the depths seen in February and March."

Most of the supply-side tightening has occurred as producers have been voluntarily curtailing production, while low prices kept liquefied natural gas from replacing much of the lost production, he noted.

Just as important, Speaker said, JP Morgan analysts are beginning to see an uptick in industrial demand and are adjusting their forecasts for 2010. At the peak of the recession, "industrial natural gas use was down more than 3 Bcf/d. By the end of 2009 it will be down just under 2 Bcf/d and by 2010 it will be around 1.5 Bcf/d" below 2008 levels.

Speaker cautioned that despite signs of life the market is still "fraught with risk." "Some of the supportive elements — such as lower-than-expected deliveries of LNG and the replacement of coal-fired power with gas — are temporary," Speaker said, explaining that European gas storage is beginning to fill, as are US coal stockpiles. The US market can soon expect an uptick in LNG imports to offset domestic production declines and coal to begin replacing gas, he added.

Speaker also said Commodity Futures Trading Commission hearings this week on position limits and speculation (see story, page 1), could add some short-term downward pressure as such discussions "do tend to spook the market. And if there is a mass exodus of investors, there could be some disconnect [in pricing]."

But gas storage remains the main downside risk factor, Speaker said. Because working gas inventories in some parts of the country will likely fill by September, JP Morgan analysts believe the NYMEX prompt-month contract could fall further until winter demand arrives.

He added, however, that storage levels are a bit lower than had been anticipated three months ago. "We were expecting 3.3 Tcf by the week ending August 7, but now we're adding a week ... though we're still pointed towards an almost 575 Bcf year-on-year surplus."

Likewise, analysts at consultant Ernst & Young said they are cautiously hopeful of a price turnaround as early as the end of September.

"While recovery will be slow and gradual, there is a great deal more optimism in the markets going into the third quarter, and that is reflected in oil and gas industry activity," Marcela Donadio, industry leader for E&Y's Americas oil and gas segment, said in a statement Monday. "Major players in the energy industry are preparing for the upturn"

Oil prices have bounced off their lows to climb as high as \$70/barrel, running roughly \$20/barrel to \$25/barrel above what market demand would have appeared to support, despite relatively weak demand and no substantive changes in production, the consultant said. But at the same time, "natural gas prices have continued the downward march."

When commodity prices collapsed late last year, gas and oil prices were aligned in the \$30/barrel of oil equivalent range, E&Y explained. But now, oil prices are holding at "approximately three times the value of natural gas," which is hovering around \$3.50/MMBtu thanks to lingering economic difficulties and associated weakness in demand.

One area in which the tepid economy appears to have had little impact is the merger-and-acquisition sector, in which deal activity is down only slightly from the first half of 2008, and the value of transactions "was only about 7.5% lower than the first half of 2008 when commodity prices were twice as high," E&Y noted. — Joshua Starnes, Melanie Tatum

Tuesday, August 25, 2009

Cold winter could push gas prices past \$5 mark: analyst

Though US gas storage facilities are filling at an unprecedented rate and putting increasing downward pressure on gas prices, the potential still exists for prices this winter to surpass the \$5.00/MMBtu mark, according to the latest analysis from Strategic Energy and Economic Research in Massachusetts.

"The uncertainty about how much gas can be put in storage and many other factors make it difficult to predict whether prices will fall lower," SEER Vice President Ron Denhardt said. But from a fundamentals perspective, "one could argue prices for the heating season should fall further."

Denhardt predicted that storage could push as high as 3.9 Tcf by the end of October and, assuming normal weather, should end the heating season at around 1.865 Tcf.

Due in part to their traditional position above 1% residual fuel oil during the heating season, Henry Hub gas prices should average about \$5.50/MMBtu, thanks in part to a likely stronger crude oil market boosting resid prices.

Nevertheless, the potential for colder-than-normal weather this winter leaves some room to the upside, the analyst noted. Should this winter bring 10% more heating degree-days than normal, Henry Hub prices could average \$7.75/MMBtu during the heating season. On the other hand, if heating degree-days are 10% below normal, prices could average \$3.25/MMBtu.

Those prices also assume "significant declines in US production" of about 4.7%, or 2.7 Bcf/d, below last year. The increasing push toward shale gas production should make the shutting-in process easier, as "the economics of shutting in natural gas production in shale are much better than most production because the pressure builds up when the well is shut in," Denhardt said. "Consequently, a significant portion of the delayed production can be produced when desired."

At the same time, liquefied natural gas imports are likely to grow only 500,000 Mcf/d. "LNG production in 2009 has been well below our expectations and all other projections we have seen," Denhardt noted.

Despite the global addition of substantial liquefaction capacity, production problems in Algeria and Nigeria have reduced supply by a combined 1.7 Bcf/d. Moreover, Europe has been importing more LNG in part to make up for a drop in Russian production, a trend which might continue for some time. "UK forward prices are substantially higher

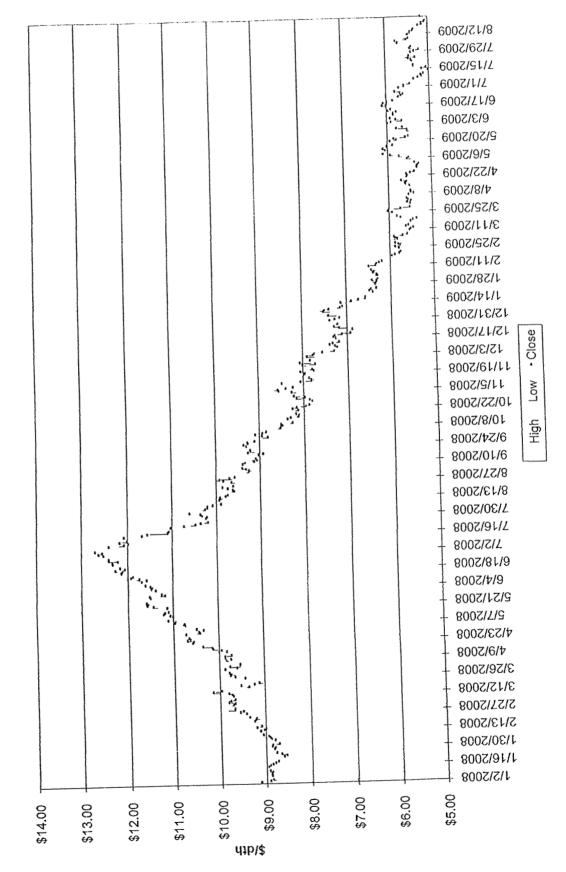
than US prices through the coming heating season," the analyst explained. "This suggests that Europe may continue to be a major destination of LNG imports."

The potential for hurricane-linked disruptions to US production also exists, which would present another potential boost to gas prices. Though storm activity has fallen well below normal levels so far this year, Denhardt noted, "it only takes one major storm to dramatically shift the market." — *Melanie Tatum*

Case No. 2008-175 Attachment A Page 119 of 306

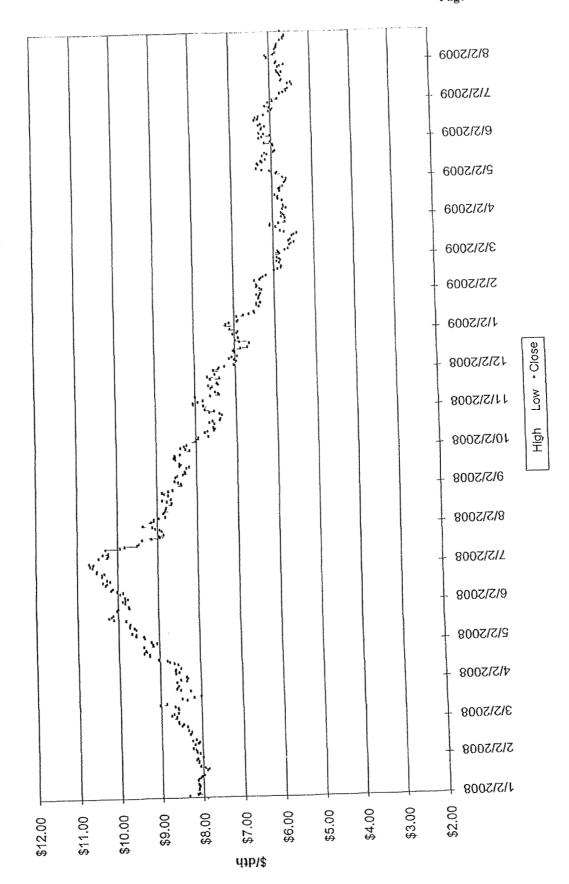
Energy Information Administration Henry Hub Pricing Per MMbtu August 11, 2009 Release

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Winter Strip Nov09 - Mar10

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Short-Term Energy Outlook

August 11, 2009 Release (Next Update: September 9, 2009 Wednesday)

Natural Gas Consumption. EIA projects total U.S. natural gas consumption will decline by 2.6 percent in 2009 and increase by 0.5 percent in 2010. Despite some recent signs of economic stability, the severe contraction during the first half of the year contributed to an estimated 3.8-percent decline in daily average natural gas consumption compared with consumption during the first half of 2008. The decline in natural gas use during this period was driven principally by a drop in industrial activity, reflected in the 17-percent year-over-year decline in the natural-gas-weighted industrial production index during the first half of the year. Natural gas prices have declined to the point where they now compete against coal for a share of the baseload generation in the electric power sector. Consequently, natural gas consumption in the electric power sector is expected to increase by 2 percent in 2009. The assumption of improved economic conditions in 2010 is the primary factor leading to projected demand increases in the residential, commercial, and industrial sectors next year. However, the expectation of higher natural gas prices and lower coal prices in 2010 likely will lead to a slight reduction in natural gas consumption in the electric power sector.

Natural Gas Supply. We expect total U.S. marketed natural gas production to stay flat in 2009 and decrease by 2.8 percent in 2010. The outlook for production is conditioned on the current low price environment that has brought about a significant pullback in drilling activities. According to Baker-Hughes, total working natural gas rigs have now declined by 58 percent since September 2008. Data for March through May 2009 suggest that the decline in drilling has begun to reduce marketed production in the lower-48 non-Gulf of Mexico (GOM) region. While the monthly average rate of decline was about 0.3 billion cubic feet per day (Bcf/d) during those 3 months, production is expected to decrease at a faster pace through the remainder of 2009 with some curtailments from existing production expected. Federal GOM production is expected to increase by 3.3 percent in 2009 in part because recovery from damage sustained during last year's hurricane season and the lower expected incidence of hurricane activity this year. Although drilling activity is expected to pick up early next year, the lagged affect of reduced drilling this year is expected to lead to lower production in all regions outside Alaska. Alaska natural gas production is expected to remain near current levels through the forecast.

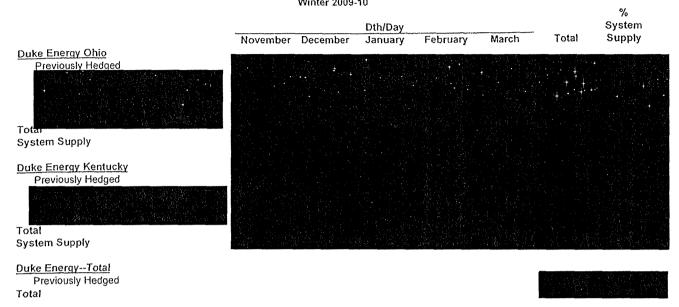
We expect U.S. liquefied natural gas (LNG) imports to increase to about 500 billion cubic feet (Bcf) in 2009, up from 352 Bcf in 2008, and rise to about 740 Bcf in 2010. While increasing over 2008 levels, U.S. LNG import growth this year has been constrained because of increased LNG demand in Europe and delays and maintenance to new and existing LNG liquefaction capacity. With limited natural gas storage availability, recent data suggest that European inventory levels are now nearing

capacity. As a result, LNG shipments may be redirected to U.S. ports in the coming months as prices in the European market become less attractive to LNG suppliers. A similar scenario may also occur in Canada, with natural gas pipeline imports increasing in the months ahead as Canadian storage facilities are topped off. An increase in U.S. natural gas imports would likely be balanced by larger-than-expected declines in domestic natural gas production.

Global Crude Oil and Liquid Fuels

Global Petroleum Overview. The oil market continues to be defined by the tension between optimism over the perceived recovery of the global economy on the one hand and persistently weak global consumption of crude oil and other liquid fuels on the other. There are indications that oil consumption could be recovering outside of the Organization for Economic Cooperation and Development (OECD). However, this has been somewhat offset by an erosion of compliance with production cuts announced by the Organization of the Petroleum Exporting Countries (OPEC). The rising level of global oil inventories when combined with weak current consumption indicates overall weakness in the oil market. For example, U.S. commercial crude oil and petroleum product stocks have increased for 5 straight quarters for the first time since 1979-1980, and they are projected to increase again in the third quarter of this year. As a result, the future level of oil prices will largely depend upon the timing and pace of the global economic recovery and the resultant impact on global oil consumption that would tend to erode surplus stocks.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Wednesday, August 26, 2009

S&P slashes 2009 gas price forecast to \$3.75

With industrial demand still weak and production cuts smaller than expected, Standard & Poor's Ratings Services said Tuesday it has <u>lowered its gas price forecast for the remainder of 2009 by 75 cents/MMBtu and its 2010 forecast by \$1/MMBtu.</u>

<u>S&P predicted that Henry Hub futures prices will average \$3.75/MMBtu for the rest of this year and \$4.50/MMBtu next year.</u> It also raised its short-term outlook for oil prices to \$55/barrel for both 2009 and 2010.

"It is clear there has been a divergence in the direction of hydrocarbon prices," S&P said. "Because of poor industrial demand in North America and concerns about oversupply, natural gas prices have continued their downward spiral. The price of crude oil, however, has surged recently, reflecting a more optimistic outlook for the global demand of transportation fuels."

S&P noted that US gas production fell by about 1% in April and May while the rig count has plummeted. "However, many wells that were drilled have not yet been completed. Until this backlog is worked off, production declines could remain relatively tepid."

Those declines "could well be entirely offset by lower industrial demand," which is down about 15% year over year and accounts for about 30% of overall gas demand, the firm noted.

Weather "could be a big contributing factor for the rest of 2009's natural gas prices," S&P said. "If the weather [is] mild and industrial demand remains tepid, storage levels will likely remain relatively high for the bulk of 2009, putting pressure on spot prices throughout the year."

As for industry cost structures, S&P said that while it believes some of the most prolific shale plays can generate rates of return in the \$4-\$5/MMBtu range, most US drilling opportunities require \$6-\$8/MMBtu prices to be worthwhile.

In addition, "sharp first-year production decline curves of more than 30% in the US provide a natural correcting mechanism," S&P said. Typical decline curves for many of the unconventional plays, which are responsible for much of new drilling, average 60% to 80%.

Case No. 2008-175 Attachment A Page 126 of 306

S&P — like Platts, a division of The McGraw-Hill Companies — sees a bright future for gas demand in the power-generation sector as environmental regulations and increasing coal prices make gas the fuel of choice for new capacity.

The firm noted that "it is important to remember that our price deck is a NYMEX price. By contrast, many natural gas producers sell at a discount to NYMEX primarily due to location takeaway capacity. These discounts can be substantial at times, but have tightened significantly during the last few quarters. For example, basis differentials in the Rockies have narrowed to under \$1/MMBtu from over \$3/MMBtu a year ago." — Stephanie Seay

Gas Commercial Operations Hedging Program Market Indicators Summary September 24, 2009

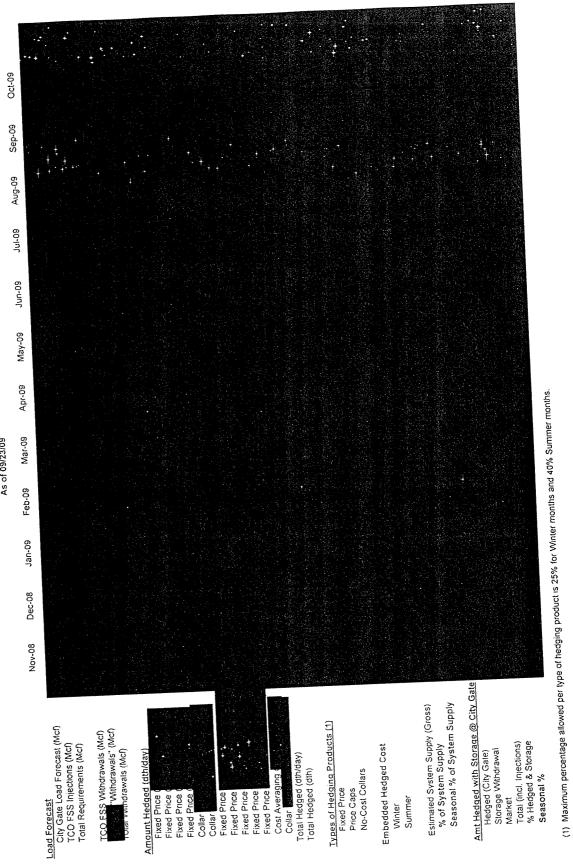
	Price Pressure	Term	Comments	Page Ref		
Weather						
Long Term Forecast (Dec 09Feb 10)	 	Long	NOAA predicting above average temperatures for Dec. 2009Feb. 2010 for most of the continental United States with below normal temperatures in the south-eastern/central states.	13		
Mid Term Forecast (30-60 days)	↓ →	Long	October predicted to be 0.9% warmer than 10 year normal and November is predicted to be 2.3% warmer than 10 year normal.	14		
Short Term Forecast (6-10 days)	←→	Short	Much Above and Above in the West is being replaced with Below later in the period. Below and Normal in the Mid-Continent for the period.	15		
Tropical Storm Activity	1	Long	No activity at this time that would threaten the production areas.			
Storage Inventory						
EIA Weekly Storage Report	 	Long	Storage injections for the week ending September 11th were 66 BCF. Storage levels are at 3 458 TCF which is 16.7% higher than last year and 16.4% higher than the 5 year average.			
Industry Publications	·	·				
Cambridge Energy Research Associates Summer 2009: Winter 2009/10	1	L.ong		18		
Reuter's	ļ	Short	Since early Sept when prices were at the lowest levels since March 200 prices have rebounded to the \$3.70s. "I don't think the market has any significant legs to the upside. We've very likely seen the bottom, but there's an awful lot of overhang in supply that should keep prices in chec			
Gas Daily	†	Long	"We expect gas prices to remain volatileand are likely to be at least 50° higher in 2010but will probably trade between \$4 and \$6/Mcf for an extended period of time."			
Gas Daily	←→	Long	Citing vast uncertainty about the impact of drilling cuts, the growth of the LNG market and the pace of economic recovery two gas executives refused to predict where gas prices are headed.	22		
Gas Daily	1	Long	The US gas market will be flush with supply from new shale plays for at least the next decade. "Most operators with good science and drilling techniques can earn a 10% rate of return from shale plays even at prices below \$4/Mcf.	23		
Government Agencles						
Energy Information Administration Summer 2009: \$3.177 Winter 2009/10: \$4.002	+	Long	The Henry Hub price is expected to increase from an average of \$3.545 per MMBtu in 2009 to an average of \$4.643 per MMBtu in 2010.	24		
Technical Analysis				r		
Winter 2009-10 Strip Chart	+	Short	Closed at \$5.25.	25		
Summer 2010 Strip Chart	←→	Short	Closed at \$5.76.	26		
Economy		·				
Demand	-	Long	EIA: Natural gas consumption is projected to decline by 2 4% in 2009 and remain flat in 2010. The anticipated addition of new coal-fired capacity and rising natural gas prices limits significant increases in gas consumption by electric generators.	27		
Supply	†	Long	EIA: Total U.S. marketed natural gas production is expected to increase by 0.9% in 2009 and fall by 3.5% in 2010. The current production trend reflects significant improvements in horizontal drilling technology and robust productivity from shale plays.	27		
Oil Market	-	Long	Crude oil prices continue to be very volatile. EIA expects WTI crude oil to average about \$70 per barrell in the 4th quarter of 2009, an increase of \$27 compared to the 1st quarter of the year.	27		

Meeting Minutes: 10th Floor North Conference Room - 2:30 pm Attendees: Jeff Kem, Jim Henning, Mitch Marlin, Steve Niederbaumer

Discussed market fundementals such as weather, storage inventory levels, and economic factors such as supply and demand. Discussed the CERA and EIA forecasts as well as analyst predictions concerning price expectations. In addition, discussed Winter and Summer Strip Charls based on Technical Analysis. Discussed our current postions within Ohio and Kentucky hedging plans and that hedging percentages will change November 1st. In addition, discussed the rate on the Cost Averaging deals through September 22, 2009 Discussed the results of the September 9, 2009 deals for 5 000 dths/day and 1,000 dths/day on Col Gulf Mainline for April 2011 to March 2012. Bids received were

bid was accepted. Based on the review of this data it was determined not hedge additional volumes at this time.





Oct-10

Sep-10 Aug-10 Jul-10 Jun-10 May-10 Apr-10 Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 09/23/09 Mar-10 Feb-10 Jan-10 Dec-09 Nov-09 Estimated System Supply (Gross) Types of Hedging Products (1) City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) TCO FSS Withdrawals (Mcf) Total Requirements (Mcf) Embedded Hedged Cost Total Withdrawals (Mcf) Amount Hedged (dth/day) Total Hedged (dth/day) Total Hedged (dth) No-Cost Collars Cost Averaging (Fixed Price (Fixed Price (Fixed Pnce Price Caps Fixed Price Fixed Price Fixed Price Summer Collar (Winter

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Amt Hedged with Storage @ City Ga Hedged (City Gate) Storage Withdrawal

Total (incl. Injections) % Hedged & Storage

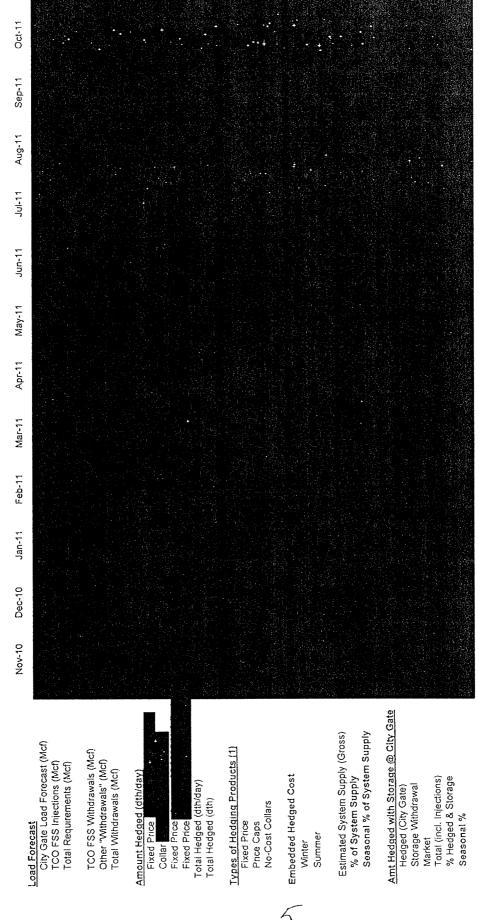
Market

Seasonal %

Seasonal % of System Supply

% of System Supply

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 09/23/09

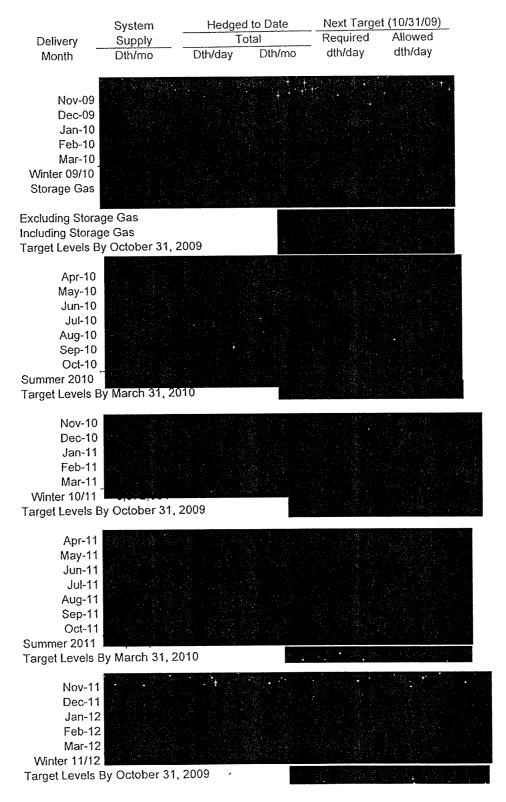


Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 09/23/09

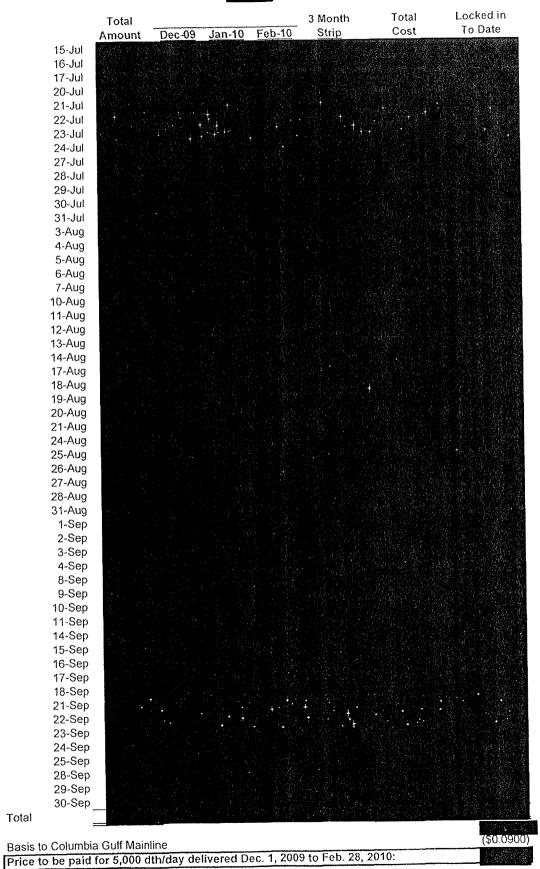
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		d Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf)	TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf)	Amount Hedged (dth/day)	TBD TBD Total Hedged (dth/day)	Total Hedged (dth)	Types of Hedging Products (1) Fixed Price	Price Caps No-Cost Collars	Embedded Hedged Cost Winter	Sulliniel Sulliniel Sulliniel Sulliniel Sulliniel	Suinated System Supply (State) % of System Supply Seasonal % of System Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate)	Storage Withdrawal Market	Total (incl. Injections) % Hedged & Storage Seasonal %
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(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program Current Position



Duke Energy Kentucky Hedging Program for 2009/10 Columbia Gulf Mainline Cost Averaging with



Total

Gas Commercial Operations Long Term Fixed Price Bid Sheet

Date of Bids: Time of Bids: September 9, 2009

Location:

11:00 AM

Location: Term: Columbia Gulf Mainline Apr 11 - Mar 12

Volume (dth/day)

6,000

Mainline Bid

Dominic Sung

(281) 366-4912

/dth

/dth

Clara Caddy

Glenn Gaddy (281) 293-3898

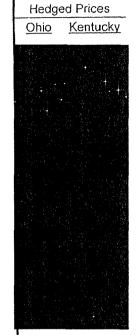
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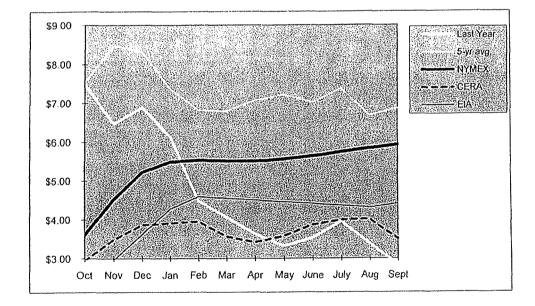
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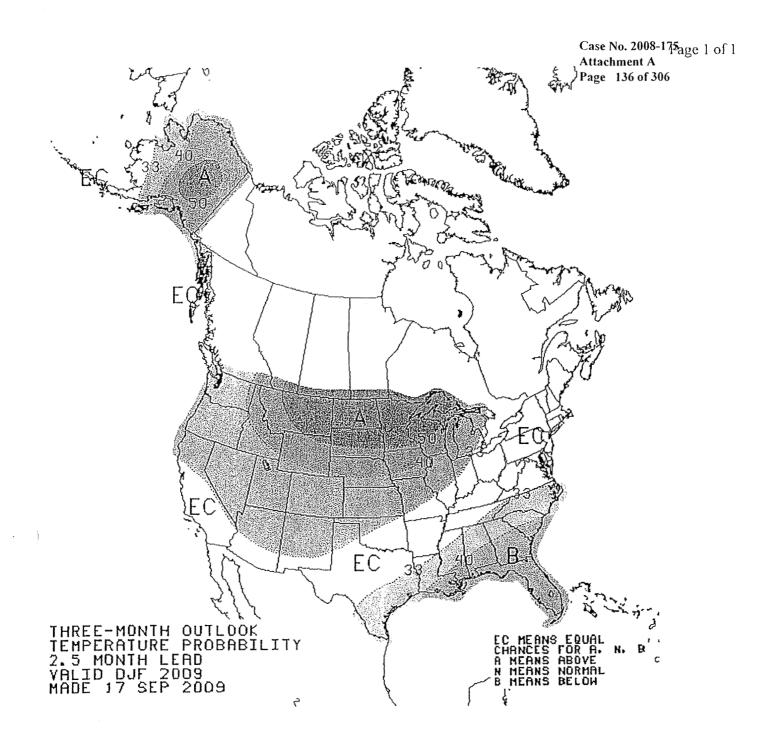


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES TO CURRENT FUTURES PRICES

	Histori	c Prices:				
	NYMEX C	osing Price				
	5-yr. avg.	Last Year		CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)	2	5-Aug-09	9-Sep-09	23-Sep-09
				Contract (
Oct	\$7.55	\$7.47			\$2.250	\$3.609
Nov	\$8.47	\$6.47			\$2.970	\$4.520
Dec	\$8.31	\$6.89			\$3.620	\$5.218
Jan	\$7.36	\$6.14			\$4.280	\$5.489
Feb	\$6.82	\$4.48			\$4.590	\$5.533
Mar	\$6.79	\$4.06			\$4.550	\$5.512
Apr	\$7.06	\$3.63			\$4.500	\$5.507
May	\$7.21	\$3.32			\$4.450	\$5.557
June	\$7.02	\$3.54			\$4.410	\$5.635
July	\$7.37	\$3.95			\$4.360	\$5.740
Aug	\$6.68	\$3.38			\$4.310	\$5.836
Sept	\$6.87	\$2.84	_		\$4.410	\$5.923
12 Month Avg	\$7.29	\$4.68	······		\$4.058	\$5.340
,	er Average				\$4.099	\$5.401
Winter A	•		\$4.002	\$5.254		





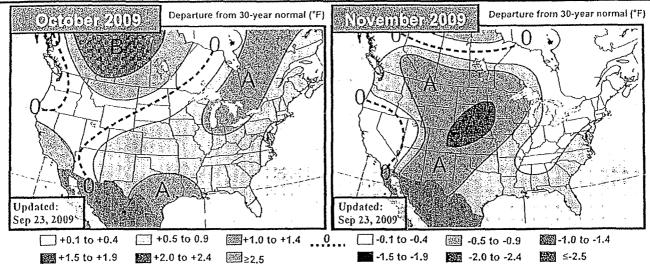




EarthSat's 30-60 Day Outlook

Wednesday, September 23, 2009

Forecaster: SS/BH



Previous

No major changes to the forecast

Slightly cooler in Western Canada

Changes to the October forecast were very minor with just a few minor cool tweaks in the West. A cooler risk exists in Texas and the Southeast, especially if soil moisture plays a role. Precipitation has run well above normal the past month or so in these areas. If wetness continues, we may need to adjust our forecast cooler. The GFS and Euro model guidance includes the first full week of October now, and the early results vary. Below are the 0z composite 850mb temp anomaly forecasts for the 11-15 Day period (October 3-7). The GFS operational has been highly inconsistent, but sup-

ports our warm East. The ensembles both show widespread near normal temperatures, a sign of uncertainty and possible variability to start the month.



Oct GWHDD* Forecasts

*10Y Normal updated to 99-08

Oct 2009 Fcst:

277.0

10Y Normal* 279.5 30Y Normal 289.1 Oct-2008 292.9

No Change
National Gas-Weighted HDDs



Not as warm across Texas

Warmer in the Northwest

Changes were made in a cooler direction from Texas into parts of the Tennessee Valley and the Southeast while the Northwest was warmed. The forecast still takes into account a weak to moderate El Niño. These events typically produce above normal conditions from the Southwest through the Upper Midwest, much like the current outlook. If the PDO turns further negative by November, more of the Midwest and East could also be warmer. A negative PDO in November also correlates to a seasonal to cooler Northwest. The QBO brings different risks to the table. If this index continues to trend negative, the West coast carries a warmer risk, while the East could be cooler. We still expect the El Niño will be the primary forcing mechanism, limiting the influences of the PDO and QBO.

Nov GWHDD* Forecasts

*10Y Normal updated to 99-08

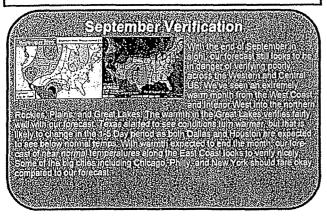
Nov 2009 Fcst:

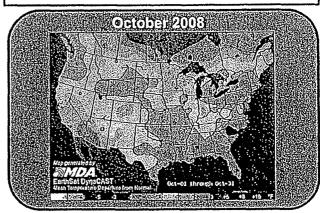
520.5

10Y Normal* 532.6 30Y Normal 575.5 Nov-2008 565.9

Change: +0.5

National Gas-Weighted HDDs





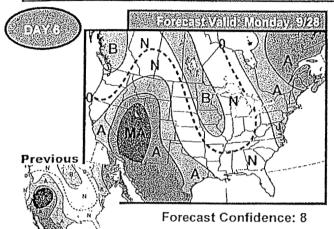


EarthSat's 6-10 Day Forecast-Detailed

Wednesday, September 23, 2009

Forecaster: BH/AC

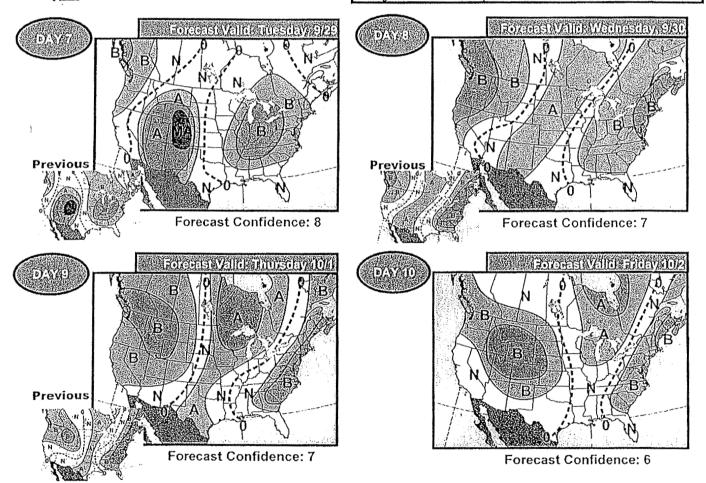
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Today's Forecast:

Aboves Progress Into Plains, Midwest Briefly Northwest May Turn Cooler Than Expected

Confidence stays towards the higher side for the forecast period, but a few risks remain. During the second half of the period, the Northwest could see much below normal conditions occur at times as the models (and the forecast) may be underestimating the intensity of this cool air mass. Also, some much below normal temperatures may appear in the Northeast during the midperiod as shown by the European operational model. Should the pattern progress a bit faster, the Northeast could warm to above normal late. An additional day or two of slightly stronger warming might occur across parts of the Plains and Midwest during the middle of the period.



MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 (backup: 301-231-0664) Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [Morning Basic-Page 3, Version 2.1]

△ A +3F to +4F △ A +5F to +7F ■ MA +8F to +14F → SA +15 or Higher
△ B -3F to -4F △ B -5F to -7F ■ MB -8F to -14F △ SB -15 or Lower

Home > Natural Gas > Weekly Natural Gas Storage Report

Case No. 2008-17Bage 1 of 1 Attachment A Page 139 of 306

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

sed: September 17, 2009 at 10:30 A.M. (eastern time) for the Week Ending September 11, 2009 Release: September 24, 2009

Working Gas in Underground Storage, Lower 48

[Stocks i	in billion cubic fo	eet (Bcf)	Historical Comparisons					
Region	09/11/09	09/04/09	Change	Year Ago (09/11/08)	5-Year (2004-2008) Average			
	03/11/03	03/04/03	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change		
East	1,876	1,831	45	1,764	6.3	1,723	8.9		
West	472	462	10	397	18.9	400	18.0		
Producing	1,110	1,099	11	801	38.6	849	30.7		
Total	3,458	3,392	66	2,962	16.7	2,971	16.4		

Notes and Definitions

Summary

Working gas in storage was 3,458 Bcf as of Friday, September 11, 2009, according to EIA estimates. This represents a net increase of 66 Bcf from the previous week. Stocks were 496 Bcf higher than last year at this time and 487 Bcf above the 5-year average of 2,971 Bcf. In the East Region, stocks were 153 Bcf above the 5-year average following net injections of 45 Bcf. Stocks In the Producing Region were 261 Bcf above the 5-year average of 849 Bcf after a net injection of 11 Bcf. Stocks in the West Region were 72 Bcf above the 5-year average after a net addition of 10 Bcf. At 3,458 Bcf, total working gas is above the 5-year historical range.



other formats: Summary TXT CSV

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

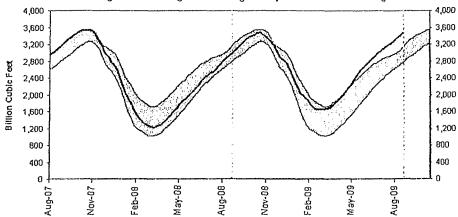
Revision Policy

Related Links

Storage Basics

Natural Gas Weekly Update Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008.
Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

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Friday, September 18, 2009

Storage stocks top 2008's season-ending level

Gas storage inventories rose to 3.458 Tcf last week, topping last year's season-ending mark of 3.412 Tcf with seven weeks yet to go in the traditional refill season, the Energy Information Administration reported Thursday

EIA said 66 Bcf was added to storage during the week ending September 11, a lower-than-expected build that was also smaller than the five-year average of 82 Bcf. But the report took the steam out of the recent rally by the October NYMEX gas futures contract, which tumbled 30.2 cents/MMBtu.

"With weather a neutral factor year-on-year and last year's fill light relative to normal due to hurricanerelated shut-ins, the injection would have likely been higher were it not for now obvious production shut-ins," said analysts at Credit Suisse, who also blamed weaker power-generation demand due to mild weather.

Storage inventory levels are now closing in on the 2007 season-ending record of 3.545 Tcf, the Credit Suisse analysts noted, adding that they expect stocks to end October between 3.7 and 3.8 Tcf.

In the same week of 2008, EIA reported 2.962 Tcf in storage. As a result, the surplus from a year ago inched up to 496 Bcf from 495 Bcf last week, while the surplus over the five-year average of 2.971 Tcf fell to 487 Bcf from 503 Bcf.

Inventories are now 153 Bcf above the five-year average of 1.723 Tcf in the East, 72 Bcf above the five-year average of 400 Bcf in the West, and 261 Bcf above the five-year average of 849 Bcf in the producing region.

Tim Evans, an analyst at Citi Futures Perspective, said even though he expects inventories to top 3.9 Tcf this fall, the shrinking surplus may indicate that the supply/demand balance is starting to shift. "It does suggest that the [storage] seams are not going to burst," he said.

Evans said the risk of overflowing storage capacity has often been overstated. While EIA estimated that working capacity is as high as 4.3 Tcf, Evans said that in practice it would be hard to top 4 Tcf. "But the precise level and timing of peak is going to be weather-dependent," he said.

Jefferies & Company analyst Subash Chandra noted that the injection for the week ending September 4 indicated 2 Bcf/d of production curtailments. But he said with the recovery of cash prices over the past few days, some of that gas may have returned.

"The issue is whether Epsilon Energy is representative of other E&P companies (we believe they are), which suggests that curtailed volumes have come back recently." Chandra noted that Epsilon shut in production when spot prices fell to \$1.88/MMBtu "but turned the wells back on Monday as spot gas rebounded to \$3." — Stephanie Seay, Cheryl Buchta



Table 1

Henry Hub Prices: History and Outlook
(nominal US dollars per MMBtu)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	6,17	8.76	6.33	7.93						
February	6.09	7.62	8.06	8.46	1				J. 4 . 5.	
March	6.91	6.88	7.10	9.34	1					
April	7.19	7.09	7.57	10.11						
May	6.47	6.23	7.64	11.24						
June	7.17	6.26	7.40	12.61						
July	7.57	6.05	6.21	11.32	9-33					
August	9.29	7.24	6.30	8.30						
September	12.11	4.95	5.98	7.70						
October	13.36	5.67	6.68	6.75						
November	10.29	7.32	7.01	6.62						
December	12.98	6.83	7.08	5.79						
Year average	8.80	6.74	6.95	8.85						
						- A				

Sources: IHS Cambridge Energy Research Associates; Platts Gas Daily historical data Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com.

is unlikely to offer a strong market for gas in the coming months, as IHS CERA's analysis of North American power markets suggests that the 2007 level of electricity demand will not be matched until 2011.*

In these final months of the injection season, it is now all but inevitable that storage inventories will be a catalyst for a significant dropoff in prices. The falling rig count (down approximately 60 percent from last September's high) indicates a collective effort to counteract a loosened supply-demand balance. However, given the productivity of key unconventional plays where drilling activity has been sustained, production levels have declined at a more measured pace than demand, and the excess supplies have pushed up storage inventories. Most of the bullish signals in the market have been transitory: a colder-than-normal period across some regions in late winter, a rally in prices in sympathy with rising oil prices.

IHS CERA now believes that the North American market is facing production curtailments not only for fall 2009 but for fall 2010 as well. The implications are significant: despite the cushion for demand provided by gas displacement of coal for power generation (a cushion which typically grows as gas prices retreat further), the market could well find itself in a similar position for a brief period next fall. This expectation rests upon IHS Global Insight's projections for relatively tepid US gross domestic product (GDP) growth in 2010 (approximately 1.5 percent) as well as additional volumes of LNG expected for 2010. We have for months reiterated the increasing likelihood of a "hard stop" in production this fall. The prospect for more of the same in 2010 is a signpost of just how great the potential for new supply is and just how uncertain the gas demand outlook remains.

IHS CERA expects the price at Henry Hub to average \$3.44 per million British thermal units (MMBtu) for August, falling to \$2.90 in September. By October the price is projected to remain near seven-year lows at \$2.95 before bouncing back slightly with the approach of winter. For

^{*}See the IHS CERA Data Tables and Figures North American Power Market Fundamentals, 2009-14.

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Reuter—Natural Gas Story

By Joe Silha

NEW YORK, Sept 17 (Reuters) - U.S. natural gas prices, having bounced more than 50 percent since hitting a 7-1/2-year low earlier this month, may not have much higher to go in the near term as brimming inventories and weak demand leave the market oversupplied.

After sliding to \$2.409 per million British thermal units in early September, the lowest level for a nearby natural gas contract on the New York Mercantile Exchange since March 2002, prices rebounded this week to the \$3.70s.

"This is less a rally than a price recovery. The market was oversold below \$3, and there's been a bunch of short covering, but gas is piling up in storage, and the recent lift in prices ignored that," said Pax Saunders, analyst at Gelber & Associates in Houston.

Natural gas traders, noting funds were carrying huge short positions, said news last week that the United States Natural, a long-only ETF, would issue new shares later this month and concerns that CME Group would tighten enforcement of NYMEX position limits, helped trigger the rush to cover, or buy back shorts, to lower total exposure.

Also, gas prices often rally in late summer or early autumn as traders anticipate stronger winter demand.

But some analysts expect this year to be different, with inventories at record highs, summer temperatures fading and a sluggish economy slowing gas use, particularly from industry which accounts for nearly 30 percent of total consumption.

"I don't think the market has any significant legs to the upside. We've very likely seen the bottom, but there's an awful lot of overhang in supply that should keep prices in check," said Chris Kostas, gas analyst at Energy Security Analysis Inc.

Analysts agree a lot depends on winter, a time when demand for gas to heat homes and businesses is at its peak.

SUPPLY GLUT

Domestic natural gas inventories will be heading into winter at all-time highs, and unless the heating season turns out cold, storage is likely to still be high this spring, which could limit expected price gains next year.

U.S. Energy Information Administration data showed total gas inventories climbed to 3.458 trillion cubic feet last week, and at current build rates, are probably just two weeks away from breaking the record of 3.565 tcf hit in 2007.

With seven weeks left in the stock building season, analysts expect storage to hit new highs above 3.8 tcf by November.

Inventories are a key source of supply that help utilities meet peak heating demand, and the huge cushion means there will be no supply shortfalls this winter.

The 75 percent slide in gas prices, since peaking last summer above \$13, prompted steep cuts in drilling and helped slow production as few producers, if any, can make money at prices under \$3. But most analysts agree the shut-ins so far have only modestly tightened the supply-demand balance.

"Production declines have not happened as quickly as we expected," ESAI's Kostas said.

While output is expected to decline further this and next year, analysts say even steeper cuts in demand, particularly from the industrial sector due to the recession, will make it difficult to balance the market until the economy recovers.

HIGHER PRICES NEXT YEAR

Despite the current supply glut, most analysts expect gas prices to improve later this year and next year.

Forward gas prices through 2010 are still hovering well above \$5.50, reflecting first the expected increase in demand this winter, then further declines in production and some improvement in industrial use as the economy recovers in 2010.

But even with a tighter supply-demand balance next year, analysts generally agree huge reserves of gas should temper price gains.

"There is a flexibility of supply which means that prices next year will not go to the moon," said Jason Schenker at Prestige Economics, a Texas-based energy consultancy.

Analysts note some very prolific shale basins are located close to existing drilling and pipeline infrastructure and can easily be tapped if prices move back to the \$4.50 or \$5 level. In addition, LNG, or liquefied natural gas, will again be a big wild card next year, with new production projects having the potential to flood the global market and drive more supply to U.S. shores.

"There's a lot of new LNG supply expected next year, which should help reduce any run up in prices," ESAI's Kostas said.

(Reporting by Joe Silha; Editing by Marguerita Choy)

Friday, September 18, 2009

Analyst sees considerable upside for domestic gas prices in 2010

Oppenheimer energy analyst Fadel Gheit said Thursday that he's bullish on exploration-and-production companies because gas prices are likely to rebound 50% in the next year.

"Natural gas prices surged by 25% in recent weeks from their seven-year low on an improving outlook based on declining US production and increased demand," Gheit said in a note to clients. "We expect gas prices to remain volatile, much more so than crude oil prices, and are likely to be at least 50% higher in 2010 — but will probably trade between \$4 and \$6/Mcf for an extended period of time."

"We remain bullish on E&P stocks, which are predominantly domestic natural gas producers," Gheit said.

Unless producers are able to hedge their 2010 production above \$5/Mcf, an event Gheit doesn't think is likely, their 2010 capital spending plans will constrict, further cutting into any production gains, Gheit explained.

"We think the probabilities of natural gas trading outside this price range [\$4 to \$6/Mcf] are low because of the price impact on capital spending, production and supply," he said. "Given the gas supply response to futures prices, we think the stocks' upside potential, despite the strong gains, remains greater than the downside risk from lower natural gas prices."

Further, Gheit predicted that if prices stabilize, the industry should start to consolidate as buyers and sellers begin to value their reserves more uniformly.

Also adding to consolidation will be interest in US shale plays on the part of the supermajors, he said.

— Bill Holland

Thursday, September 17, 2009

Citing track record, officials forgo price forecasts

Two gas industry executives refused Wednesday to predict where gas prices are headed, citing vast uncertainty about the impact of drilling cuts, the growth of the liquefied natural gas market and the pace of economic recovery.

"Take any price forecast with a grain of salt," BP Manager of Fundamental Analysis Dawn Constantin said during an LDC Forum panel discussion in Chicago. "Our track record for forecasting isn't very good."

Constantin did offer a prediction that the drastic cuts in North America's rig counts could tighten the domestic supply situation next year as production falls. Then she threw a wrench into that observation by noting that global LNG supplies are still growing in a down economy and that more LNG may be headed to the US.

While "it appears we are starting to turn around" the global economy, the wild card in gas price forecasting is LNG, Constantin said. "Where is this gas going to go?"

Further, she noted that gas-on-gas competition in the US will heat up as new supplies from shale plays displace Canadian imports and Gulf of Mexico production.

"Everything I say today could be wrong next week," Proliance Energy Vice President of Sales and Marketing Dave Pentzien said, noting that the dynamics of the macro economy and scale of new gas supplies create too many variables for reliable predictions.

Pentzien then illustrated how forecasters have performed over time. "Canadian imports were going to be 9 Bcf/d forever," he said, adding that analysts are now expecting those imports to decline by 1.5 Bcf/d to 5 Bcf/d.

"LNG imports four years ago were 4 Bcf/d and predicted to go to 12 Bcf/d by 2015," he added, noting that few now expect such an increase.

"The one thing they fortunately got wrong? We were forecasted to be a dying industry. The prediction was for supply to be flat and declining. Actually it's increasing."

Constantin and Pentzien agreed that any growth in gas demand is linked to economic recovery, and the jury is still out on how quickly the US economy bounces back from recession.

Constantin said the gas market is still performing its function of balancing supply and demand with prices. "Higher prices [in the past] led to increased production," she said, noting that producers responded to the double-digit prices of the past two years with a 35% increase in the amount of potential gas available for recovery, primarily due to shale development. — Bill Holland

Wednesday, September 23, 2009

Analyst: Shale plays will keep market flush with gas for years

After years of scarcity, the US gas market will be flush with supply from new shale plays for at least the next decade, an industry analyst predicted Tuesday.

Speaking at the opening panel of IHS Herold's 18th Pacesetters Energy Conference in Greenwich, Connecticut, IHS CERA Vice President of Industry Relations Pete Stark said investment dollars are choosing between tight sands, coalbed methane and shale for the future of the gas industry and "shale is going to be the winner."

"There's going to be a huge shakeout in investing," he said. "The Horn River, Haynesville and Marcellus [shales] are going to dominate."

While not universally true, Stark said most operators with good science and drilling techniques can earn a 10% rate of return from shale plays even at prices below \$4/Mcf.

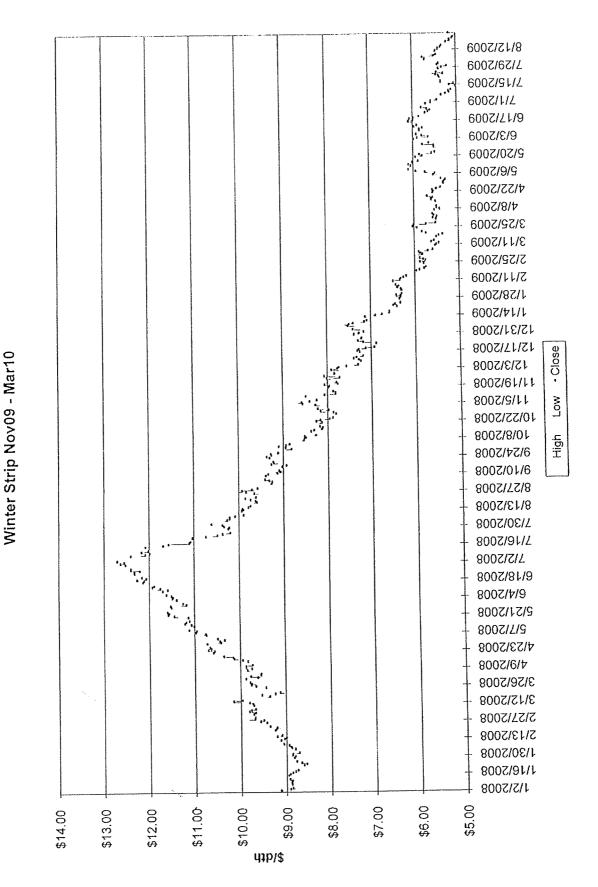
The growth of shale gas volumes is poised to overwhelm any production losses from wells shut in due to low prices, Stark said. His data showed the recent curtailment of 6,000 wells that produced less than 500 Mcf/d each for a 1.1 Bcf drop in supply. At the same time, 305 new wells have been drilled with production rates above 10.000 Mcf/d.

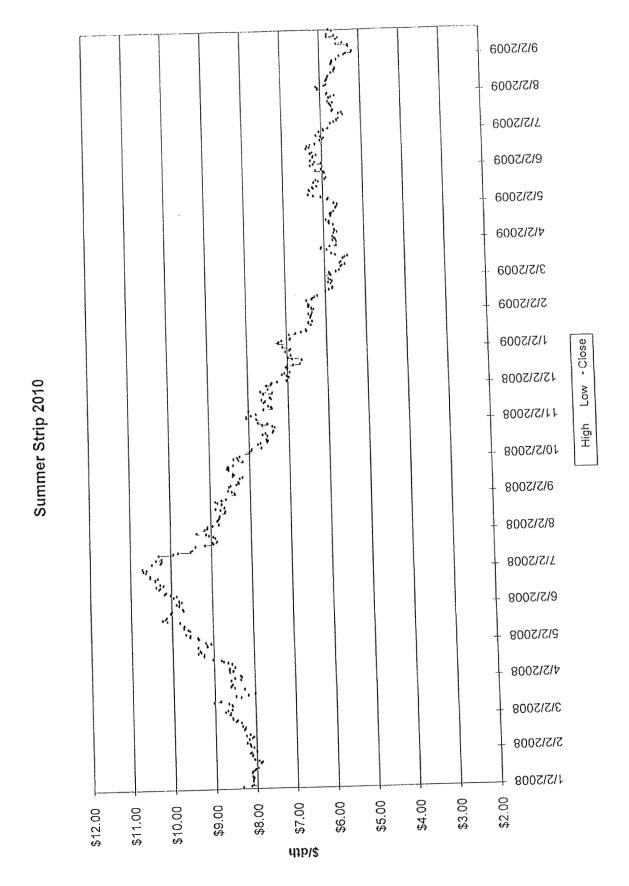
Adding to shale's advantage is that production efficiencies increase the longer an operator stays active in a particular play, Stark said, illustrating his point by showing Southwestern Energy's production gains even as the firm's costs have dropped in Arkansas' Fayetteville Shale.

Demand for the gas will return as the economy recovers, Stark said, but new demand will need to come from the power-generation sector to help cut into the growing gas glut. Neither Stark nor his co-panelist, IHS CERA Managing Director for Global Oil Jim Burkhard, saw much likelihood that gas would catch on as a transportation fuel in a US auto market they predict will be dominated by hybrid cars. — *Bill Holland*

Energy Information Administration Henry Hub Pricing Per MMbtu September 9, 2009 Release

Jan-08	7.99	Jan-09	5.24	Jan-10	4.28
Feb-08	8.54	Feb-09	4.51	Feb-10	4.59
Mar-08	9.41	Mar-09	3.96	Mar-10	4.55
Apr-08	10.18	Apr-09	3.49	Apr-10	4.50
May-08	11.27	May-09	3.83	May-10	4.45
Jun-08	12.69	Jun-09	3.80	Jun-10	4.41
Jul-08	11.09	Jul-09	3.38	Jul-10	4.36
Aug-08	8.26	Aug-09	3.14	Aug-10	4.31
Sep-08	7.67	Sep-09	2.35	Sep-10	4.41
Oct-08	6.74	Oct-09	2.25	Oct-10	4.75
Nov-08	6.68	Nov-09	2.97	Nov-10	5.35
Dec-08	5.82	Dec-09	3.62	Dec-10	5,75
Average 2008	\$ 8.862	Average 2009	\$ 3.545	Average 2010 \$	4.643
Summer 2008	\$ 9.700	Summer 2009	\$ 3.177	Summer \$	4.456
Winter 2008- 2009	\$ 5.242	Winter 2009- 2010	\$ 4.002		





Short-Term Energy Outlook

September 9, 2009 Release (Next Update: October 6, 2009)

Natural Gas

U.S. Consumption. EIA projects that total natural gas consumption will likely decline by 2.4 percent in 2009 and remain flat in 2010. Despite low relative prices for much of the year, industrial natural gas consumption declined by 12 percent in the first 6 months of 2009 compared with the same period last year. EIA expects this year-over-year consumption decline will continue through the second half of the year for industrial users, although the trend will be less pronounced. Conversely, EIA expects natural gas use in the electric power sector will increase by 4.3 percent on a year-over-year basis during the second half of 2009 as natural gas continues to compete with coal for a share of the baseload power supply at current prices.

EIA expects natural gas consumption will increase slightly in the commercial and industrial sectors in 2010 as a result of improved economic conditions and low prices. Consumption remains relatively flat in the residential and electric power sectors next year. The anticipated addition of new coal-fired generating capacity and rising natural gas prices limits the potential for significant increases beyond the forecast 2009 level in natural gas consumption by electric generators.

U.S. Production and Imports. EIA expects total U.S. marketed natural gas production to increase by 0.9 percent in 2009 and fall by 3.5 percent in 2010. Despite a 20-percent drop in prices and a 45-percent drop in working natural gas drilling rigs since the start of the year, total natural gas production increased slightly from January to June 2009. This current production trend reflects significant improvements in horizontal drilling technology and robust productivity from shale gas discoveries in Louisiana, Oklahoma, Arkansas, and Pennsylvania. While lower prices have caused a reduction in drilling activity by all rig types, according to data compiled by Smith International, working horizontal rigs have fallen by only 27 percent since the start of the year compared with a 65-percent decrease among vertically-directed rigs. Working horizontal drilling rigs now represent more than half of the active natural gas drilling fleet.

As U.S. natural gas inventories swell to record-high levels, some curtailment of production is expected. The sustained reduction in drilling activity and production curtailments are projected to result in a 5.7-percent decline in marketed production from the Lower-48 non-Gulf of Mexico (GOM) between the first and second half of the year. The projected 1.3-percent increase in Federal GOM production during the second half of 2009 over the first half results from the addition of new producing wells and continued recovery from damage sustained during last year's hurricane season.

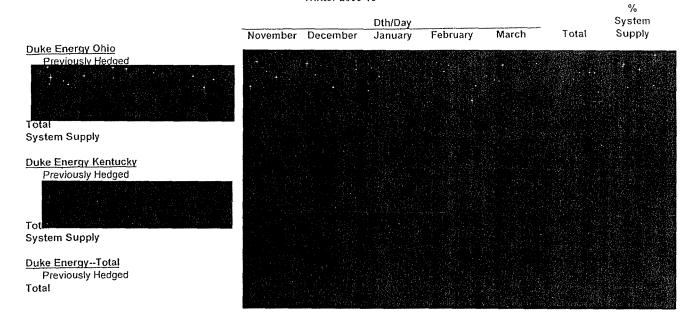
<u>Projected U.S. liquefied natural gas (LNG) imports increase to about 460 billion cubic feet (Bcf) in 2009 from 350 Bcf in 2008 and rise to about 660 Bcf in 2010.</u> Maintenance to existing LNG supply facilities and delays to new liquefaction projects, in addition to higher world oil prices during the second half of 2009, contribute to the 43-Bcf downward revision in the 2009 LNG import forecast from last month's *Outlook*.

Global Crude Oil and Liquid Fuels

Volatility persists for crude oil spot prices, although over narrower ranges than seen earlier this year and last year. EIA expects the price of West Texas Intermediate (WTI) crude oil to average about \$70 per barrel in the fourth quarter of 2009, a \$27-increase over the first quarter of the year.

Global Petroleum Overview. WTI oil prices hovered in the \$67-to-\$74-per-barrel range in August as expectations of an economic recovery and higher oil consumption in the future were weighed against weak current demand and high inventories. As long as oil prices remain in their current range, EIA expects the Organization of the Petroleum Exporting Countries (OPEC) to maintain its existing production targets.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Gas Commercial Operations Hedging Program Market Indicators Summary October 23, 2009

	Price Pressure	Term	Comments	Page Ref
Weather	11 1033010	L		IVEI
Long Term Forecast (Dec 09–Feb 10)	Ţ	Long	NOAA predicting above average temperatures for Dec. 2009—Feb. 2010 for most of the continental United States with below normal temperatures in the south-eastern/central states.	12
Mid Term Forecast (30-60 days)	 	Long	November predicted to be 1.4% colder than 10 year normal and December is predicted to be 4.5% warmer than 10 year normal. Two forecasters predict cold winter for eastern US this year.	13, 14
Short Term Forecast (6-10 days)	<u> </u>	Short	Much Below and Below in the West is being replaced with Normal later in the period. Above early in the forecasted period being replaced by Normal and some Below in the Mid-Continent for the period.	15 -
Tropical Storm Activity	1 1	Long	No activity at this time that would threaten the production areas.	
Storage Inventory		L	I	
EIA Weekly Storage Report	1	Long	Storage injections for the week ending October 16th were 18 BCF. Storage levels are at 3.734 TCF which is 11.9% higher than last year and 13.1% higher than the 5 year average.	16
Industry Publications			T	
Cambridge Energy Research Associates Summer 2010: Winter 2009/10	ţ	Long	Decline in the rate of injection suggests that the rebalancing of the North American gas market could be on the horizon. CERA projecting MMBtu for 2009 and \$ 2010.	17, 18
Gas Daily	ţ	Long	"There's a lot of concern about the winter season and the bulls get a lift with the cold start to the season. All the ingredients are there: oversold futures, a cold October—the stars are beginning to align for the bulls." However, fundamentals may be signaling another move.	19, 20
Gas Daily		Long	Uncertainty about the pace of economic recovery and the importance of LNG prompted another bearish outlook on gas prices, cutting their forecast for next year by 8%	
Gas Daily	†	Long	Gas prices will climb above \$7/MMBtu in the second half of 2010 as the cut in rig count and natural field declines finally make an impact.	22
Gas Daily	t	Long	The conventional wisdom of abundant, economic shale gas supplies in the US was criticized—current operators are underestimating the rate of decline from shale gas wells, as well as the cost of developing them.	23, 24
Government Agencies				
Energy Information Administration Summer 2010 : \$4.644 Winter 2009/10: \$4.476	1	Long	EIA projects average household expenditures for space-heating fuels to be \$960 this winter, a decrease of 8% from last winter. Households using natural gas are projecting a decrease of 12%.	25
Technical Analysis	-		Y	
Winter 2009-10 Strip Chart	←→	Short	Closed at \$5.84.	26
Summer 2010 Strip Chart	→	Short	Closed at \$6.22	27
Conomy				
Demand	4	Long	EIA: Natural gas consumption is projected to decline by 2.0% in 2009 and 0.2% in 2010. Weak economic conditions continue to hamper the Industrial sector, residential and commercial sectors are showing lower consumption, only the power generation sector is up compared to last year.	28, 29
Supply	†	Long	EIA: Total U.S. marketed natural gas production is expected to increase by 1.5% in 2009 and fall by 3.8% in 2010. Economic recovery and increasing demand in 2010 are expected to push prices up and provide the incentive for increasing production later next year.	28, 29
Oil Market	←→	Long	Economic growth in China and signs of a turnaround in other Asian countries continue to fuel expectations of a global recovery in world oil consumption. EIA expects WTI crude oil to average about \$70 per barrel this winter, an increase of \$19 over last year.	28, 29

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

Attendees: Patty Walker, Jim Henning, Jeff Kem, Mike Brumback and Steve Niederbaumer

Discussed market fundementals including weather, storage, consumption, supply, winter and summer strip charts, DEO and DEK's hedging program as well as analyst forecasts for future price movements. In addition, discussed the final results of the cost averaging deals with price was determined to be for the December 2009–February 2010 strip. Discussed that NYMEX had increased significantly over the past several weeks and that the "Bulls" seem to be in control of the market, even though the fundamental remain bearish. Based on these factors a decision was made not to hedge additional volumes at this time but to monitor the market closely for significant price moves.

Duke Energy Kentucky Hedging Program - Current Position November 2008 - October 2009 As of 10/22/09

			· • • • • • • • • • • • • • • • • • • •				*
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Sep-09						+	
Aug-09							
Jul-09							
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Apr-09							
Mar-09							
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(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 10/22/09

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Withdrawals" (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf) otal Withdrawals (Mcf) Amount Hedged (dth/day) Total (incl. Injections) % Hedged & Storage Embedded Hedged Cost Hedged (City Gate) Storage Withdrawal Total Hedged (dth/day Total Hedged (dth) No-Cost Collars Cost Averaging Seasonal % Fixed Price Fixed Price Collar Fixed Price Fixed Price Fixed Price Price Caps Load Forecast Fixed Price Summer Market Winter

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 10/22/09

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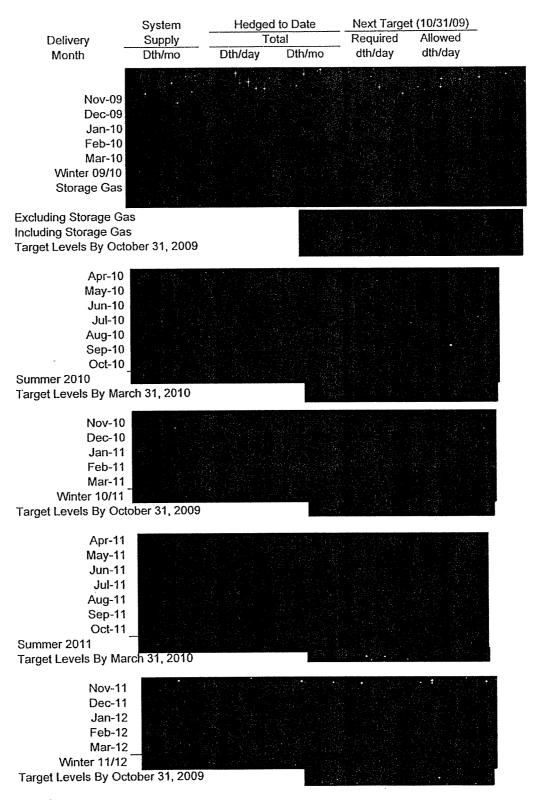
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Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 10/22/09

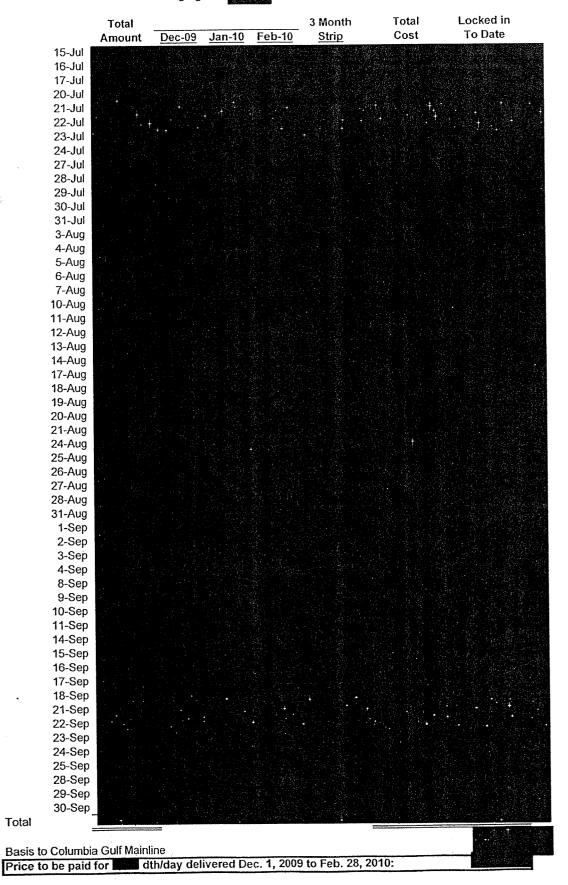
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(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program Current Position



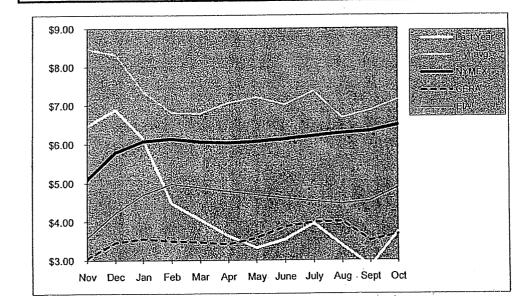
Duke Energy Kentucky Hedging Program for 2009/10 Cost Averaging with Columbia Gulf Mainline

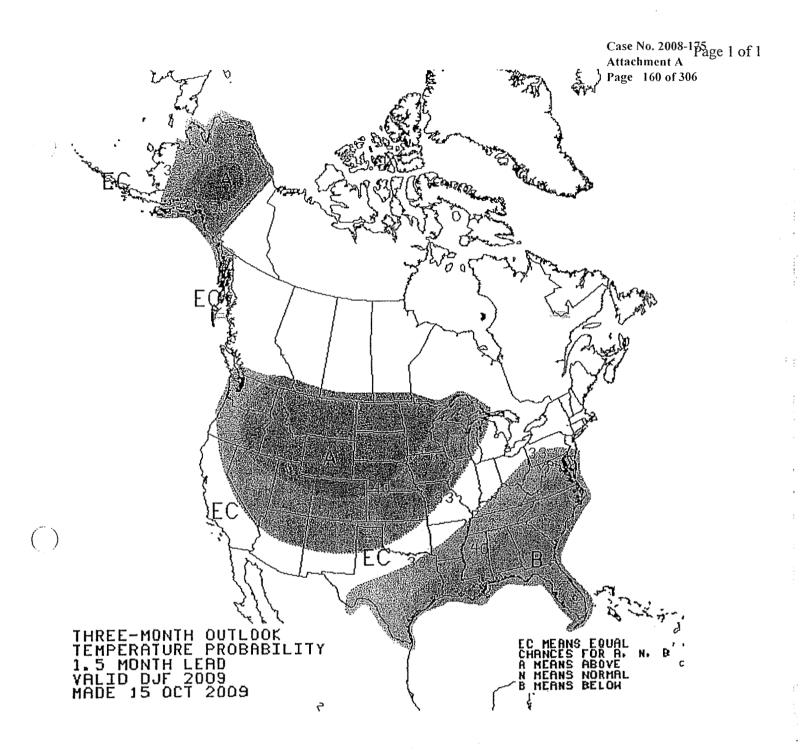


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES TO CURRENT FUTURES PRICES

	Histori	c Prices:						
	NYMEX Closing Price							
	5-yr. avg.	Last Year		CERA	EIA	NYMEX		
	(04/05-08/09)	(2008-2009)		25-Sep-09	6-Oct-09	22-Oct-09		
		:		17 智質 60				
Nov	\$8.47	\$6.47			\$3.580	\$5.100		
Dec	\$8.31	\$6.89			\$4.230	\$5.793		
Jan	\$7.36	\$6.14			\$4.700	\$6.078		
Feb	\$6.82	\$4.48			\$4.980	\$6.140		
Mar	\$6.79	\$4.06		190	\$4.890	\$6.067		
Apr	\$7.06	\$3.63			\$4.790	\$6.037		
May	\$7.21	\$3.32			\$4.700	\$6.073		
June	\$7.02	\$3.54			\$4.610	\$6.133		
July	\$7.37	\$3.95			\$4.530	\$6.213		
Aug	\$6.68	\$3.38			\$4.460	\$6.286		
Sept	\$6.87	\$2.84			\$4.540	\$6.337		
Oct	\$7.15	\$3.73			\$4.880	\$6.492		
12 Month Avg	\$7.26	\$4.37			\$4.574	\$6.062		
	er Average				\$4.644	\$6.224		
Winter A	Average				\$4.476	\$5.836		

Hedged Prices
Ohio Kentucky







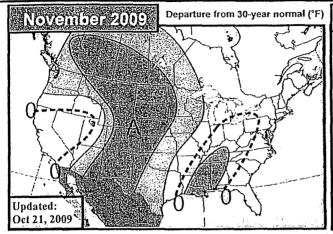
EarthSat's 30-60 Day Outlook

NOTE: In response to customer feedback we made a change to our scale by elliminating the half degree contours after 4/-1F. Please let us know if you have any Issues regarding this change.

Wednesday, October 21, 2009

Forecaster: CC/RLI

Forecaster: SS/BH



Departure from 30-year normal (°F) Bladambar 2110E Updated: Oct 21, 2009 0

+0.1 to +0.4

+0.5 to 0.9

1.0 to +1.9

-0.1 to -0.4

2.5 to -0.9

-1.0 to -1.9

#2.0 to +2.9

23.0

-2.0 to -2.9

€3.0

Previous

Cooler in the Delta/Southeast

Still warm in the Rockies/Plains

Recent model guidance and trends in the upper latitudes have raised some questions concerning the outlook from the Midwest into parts of the East. With blocking potentially continuing in the upper latitudes, cold air may be available for high pressure to transport it into the US for the beginning part of the month. We have cooled our 11-15 Day forecast this morning, which includes the first four days of the month. Subsequently, for the November outlook we've cooled our outlook in parts of the Midwest and Southeast. The ECMWF weekly temperature departures arrived last week (see maps in lower right), and they agree with the concept of a potential colder start to the month. If this were to pan out, it would take a very warm second half of

the month for our forecast to verify. We'll be keeping an eye on the models, and if they continue to trend colder we may see more widespread cold changes in our next up-

Nov GWHDD* Forecasts

*10Y Normal updated to 99-08

Nov 2009 Fcst:

10Y Normal* 532.6 30Y Normal 575.5 Nov-2008 565.9

Change: +14.5

*National Gas-Weighted HDDs



Forecast mostly unchanged

Mild across the North

The December forecast remains mostly unchanged this week with widespread warmth still expected across the Rockies, Plains, and Midwest. In yesterday's Editors Notes we mentioned that a notable warmup up the surface in the tropical Pacific took place over the past week, with anomalies of 0.95C in the notable 3.4 region and even warmer anomalies below the surface. We still expect a trend towards a moderate El Nino event particularly in the early part of the winter. The Dynacast map in the bottom right shows the December temperature anomalies in the matching IRI years from yesterday's Editor's Notes, and the outlook is a near identi-

cal match to our outlook. On the other hand. the ECWMF monthly outlook for the month (map to the right) shows more widespread near normal temps and some warmth in the





Dec GWHDD* Fore-

817.0 Dec 2009 Fcst:

10Y Normal updated to 99-08 10Y Normal 30Y Normal 873.8 897.6 Dec-2008

Change: +3.5

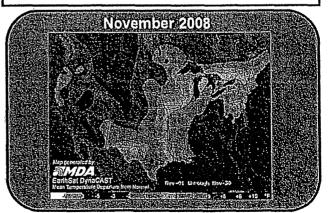
*National Gas-Weighted HDDs

October/Verification



October continues to pan out as one of the coldest of all time across the US. Wide-

In the across the Us. Widespread anomalies ranging from 6-15F below normal are found across the Rockies, and western Midwest, while the Northeast has averaged 2-5F bedirial-The only spots seeing a warmer than normal month are along all Coast and pair of the Southwest. Looking at the forecast for the of the month, the only spots that looks to warm up slightly are the next and the Eastern Midwest/Mid-Atlantic, while the next cold blast cas the might be lower the review of Plains Out offlook raise. much belows in the Rockies and Plains. Our outlook cap-idea of cold conditions in the West-but we clearly under-xient of this unusually cold month, particularly in the



MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [30-60 Day-Outlook, Version 2.1]

4 5000

Gas Daily

Tuesday, October 20, 2009

Two forecasters predict cold winter for eastern US this year

Private forecasters WSI and Commodity Weather Group both issued seasonal forecasts on Monday that call for a colder-than-normal winter in the eastern US.

WSI expects the November to January period to be colder than normal in the eastern and south-central US, and warmer than normal in the western and north-central portions of the country.

CWG said weather patterns indicate "more extended and intense cold periods than seen the last several winters."

"Recent changes in Pacific Ocean temperatures, along with other factors, such as reduced solar flux, have combined to produce a favorable environment for a cold winter in the eastern US this year," said WSI season forecaster Todd Crawford. "Confidence in the cold winter forecast will increase further if snow cover builds rapidly at higher latitudes during October."

He added that WSI's current forecast "indicates a relatively benign start to winter, followed by a rather active and cold January and February."

In November, WSI projects there will be cooler-than normal temperatures east of the Rocky Mountains and much colder-than-normal temperatures in the South.

WSI's December forecast shows warmer-than-normal weather in the Northeast and North-Central regions — with much warmer-than-normal temperatures in the Great Lakes region — and colder-than-normal weather elsewhere.

In January, WSI predicted that east of the Mississippi River, Texas and the south-central US, all will see colder than normal weather, with the north-central portion of the US remaining warmer than normal and the Southwest remaining cold.

CWG noted that some in the weather community in the past few weeks believed that the El Nino would fade back to neutral, but more recent signals indicate a strengthening. If this winter reaches the coldest in a decade status, it would also be colder than any winter in the 1990s or mid-to-late 1980s, the group said.

The US National Oceanic Atmospheric Administration last week also called for a cold winter in the Southeast and Mid-Atlantic states, with milder weather expected in the West and North-Central regions. — *Valarie Jackson, Steph*

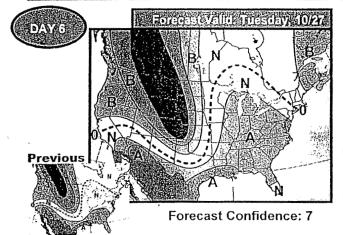


EarthSat's 6-10 Day Forecast-Detailed

Thursday, October 22, 2009

Forecaster: BH/AC

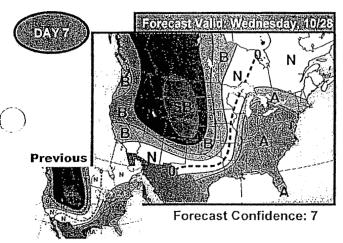
Borecasic lemperature Deviations

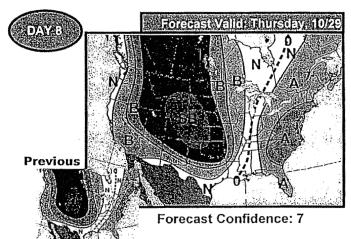


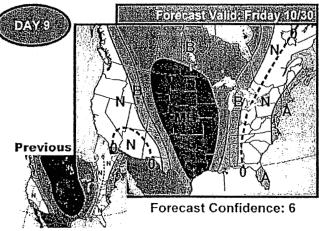
Today's Forecast:

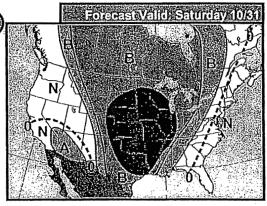
SB's Situated Over Rockies/Plains at Mid-Period Warm Risk Across East During Mid-Period

The impressive cold push continues to be depicted in the fore-cast, but some model differences remain. The American ensembles take widespread strong belows into the Plains and South during the second half of the period, thus providing these regions a cold risk during this time. Meanwhile, there could be stronger ridging occurring across the East during the middle of the period. This could allow some occasional much above normal temperatures to be seen in the eastern Midwest and Northeast, in particular. Operational models show a second cold air mass impacting the northern Rockies late in the period. This seems rushed, however, and should hold off until the 11-15 day.









Forecast Confidence: 6

Home > Natural Gas > Weekly Natural Gas Storage Report

Case No. 2008-178age 1 of 1

Attachment A

Page 16 6

Glossary

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

Led: October 22, 2009 at 10:30 A.M. (eastern time) for the Week Ending October 16, 2009 Next Release: October 29, 2009

Working Gas in Underground Storage, Lower 48

	Stocks i	n billion cubic fe	eet (Bcf)		Historical (Comparisons	
Region	10/16/09	10/09/09	Change	Year Ago (10/16/08)	5-Year (2004-2	2008) Average
	10/10/09	10/09/09	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change
East	2,041	2,030	11	1,979	3.1	1,927	5.9
West	506	504	2	443	14.2	441	14.7
Producing	1,187	1,182	5	914	29.9	935	27.0
Total	3,734	3,716	18	3,337	11.9	3,302	13.1

Notes and Definitions

Summary

Working gas in storage was 3,734 Bcf as of Friday, October 16, 2009, according to EIA estimates. This represents a net increase of 18 Bcf from the previous week. Stocks were 397 Bcf higher than last year at this time and 432 Bcf above the 5-year average of 3,302 Bcf. In the East Region, stocks were 114 Bcf above the 5-year average following net injections of 11 Bcf. Stocks in the Producing Region were 252 Bcf above the 5-year average of 935 Bcf after a net injection of 5 Bcf. Stocks in the West Region were 65 Bcf above the 5-year average after a net addition of 2 Bcf. At 3,734 Bcf, total working gas is above the 5-year historical range.

Da

History (XLS)

other formats: Summary TXT CSV

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

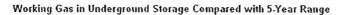
Revision Policy

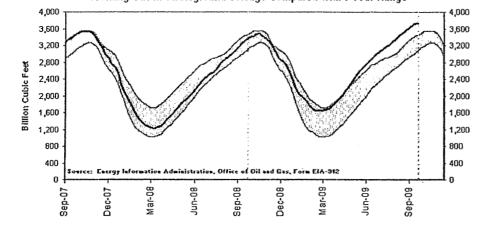
Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator



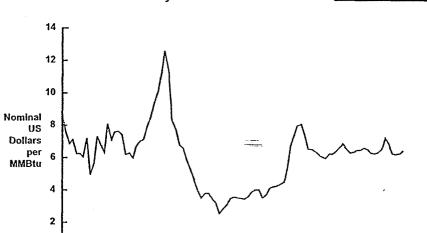


Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008. Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

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Figure 1
Henry Hub Price Outlook



Source: IHS Cambridge Energy Research Associates. 90902-2

2009

2010

2011

2008

2006

2007

Table 1
Henry Hub Prices: History and Outlook (nominal US dollars per MMBtu)

2012

2013

2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	6.17	8.76	6.33	7.93						
February	6.09	7.62	8.06	8.46						
March	6.91	6.88	7.10	9.34						
April	7.19	7.09	7.57	10.11						
May	6.47	6.23	7.64	11.24						
June	7.17	6.26	7.40	12.61						
July	7.57	6.05	6.21	11.32						
August	9.29	7.24	6.30	8.30						
September	12.11	4.95	5.98	7.70						
October	13.36	5.67	6.68	6.75						
November	10.29	7.32	7.01	6.62						
December	12.98	6.83	7.08	5.79						
Year average	8.80	6.74	6.95	8.85						
							10 304.76	17 T	<u> </u>	

Sources: IHS Cambridge Energy Research Associates; Platts Gas Daily historical data. Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com.

IHS CERA Monthly Briefing

September 25, 2009

Key Implications

Since late last year, then high North American natural gas prices have been on a collision course with storage inventories that have been rising relative to the five-year average, with only the displacement of coal for power generation to soften the impact. The long-anticipated collision came in late August, leading to a collapse in regional spreads and sending prices at Henry Hub well below \$2 per million British thermal units (MMBtu) for the Labor Day weekend, although a mid-September rally has brought prices back above \$3 per MMBtu. With several weeks left in the traditional injection season, volatile prices reflect uncertainty about whether the market has bottomed out. Lower year-over-year injections hint at a market rebalance, but can prices sustain a rally in the face of still-bearish fundamentals?

- When can a rebalance begin? North American natural gas storage inventories at the end of August totaled a preliminary 4,049 billion cubic feet (Bcf)—669 Bcf above the five-year average and 577 Bcf above year-ago levels. The North American gas market remains in strong surplus; however, the year-over-year decline in the rate of injection suggests that the rebalancing of the North American gas market could be on the horizon.
- Fundamentals suggest that prices will remain low. IHS CERA expects the Henry Hub price to average \$3.60 per MMBtu this year. For AECO-NIT we project an annual average price of C\$3.35 per gigajoule (GJ) (\$2.99 per MMBtu) for 2009. The AECO-NIT price is expected to average only C\$2.42 per GJ (\$2.03 per MMBtu) in October as Canadian storage inventories work down from record high levels.

Friday, October 16, 2009

Gap between NYMEX, cash narrows dramatically

The wide gap that opened earlier this month between the front month NYMEX gas futures contract and physical cash prices has been sliced by more than half over the past week, though some analysts-predict the two markets will remain relatively far apart by-month's end.

A run of hefty gains in the cash market has helped reduce the extraordinary discount to the November contract, hacking the basis down to about 62 cents/MMBtu on Wednesday, when the contract closed at \$4.436/MMBtu vs. the Henry Hub cash average of \$3.815/MMBtu.

The narrowing spread comes after the November contract took the board at a \$1.58/MMBtu premium to next-day physical deals at Henry Hub, a gap that grew as large as \$2.10/MMBtu at one point.

Analysts point to everything from a spate of cold weather to record storage inventories to some abnormal market positions for the gap's closure.

"There is historically a tendency toward that movement as a part of the seasonality, but nobody has a reasonable explanation for what has happened," analyst Steven Schork said. "There are a number of explanations, but they are all just rumors."

Typically, the front-month contract will converge with underlying cash prices upon the contract's expiration. For instance, the October contract on September 28 rolled off the board at \$3.73/MMBtu, while Platts' index for monthly Henry Hub cash was just a cent below that.

Aided by a cold front that brought near-freezing temperatures to the Midwest and Northeast in the past week, cash prices surged nearly \$2/MMBtu, gaining on all but one day in the past 10.

"There's a lot of concern about the winter season and the bulls get a lift with the cold start to the season," Schork said. "All the ingredients are there: oversold futures, a cold October — the stars are beginning to align for the bulls."

However, fundamentals may be signaling another move. One cash trader said the price gains lately have not been in line with what record storage levels and other market forces indicate.

Storage hit a new high of 3.658 Tcf last week, while pipelines are issuing operational flow orders and linepack alerts to handle the pressure. "It's just bizarre that prices are moving up despite the OFOs and all. That seems totally counterintuitive," the trader said.

Credit Suisse analyst Teri Viswanath said she expects "storage congestion" to maintain downward pressure on cash prices, which in turn should carry over into futures pricing.

Adding to the cash pressure, Viswanath said she expects the return of nearly 600,000 Mcf/d of shut-in capacity on Texas Gas Transmission's Fayetteville and Greenville laterals to return to the market soon. She also said high coal stockpiles should favor coal-fired generation, thus diminishing incentives for generators to switch to gas-fired capacity.

Gelber & Associates energy analyst Pax Saunders said the cash/NYMEX divergence is primarily a storage issue. While the sharply lower cash prices might normally see buyers jumping into the market "like gangbusters," there is very little space still available to store gas, he said.

And while October is <u>typically</u> a light-demand month, "next month could be a <u>whole</u> other story," Saunders said. Until the fundamentals in both markets start to move closer to equilibrium, "the NYMEX could cruise up here in the \$4.00s/MMBtu."

But if cash and futures fail to converge by the end of the month, regulators could take note, cautioned Citi Futures Perspective analyst Tim Evans. He said such anomalies often prompt calls for a Commodity Futures Trading Commission or Federal Energy Regulatory Commission investigation.

Evans said there are legitimate reasons why the two markets early in the month were so dramatically different. But if they fail to meet somewhere in the middle — with NYMEX falling, cash rising or a combination of the two —by the time the November contract rolls off the board, "that's going to raise a lot of concerns." — Jessica Marron, Adam Bennett

Tuesday, October 13, 2009

Raymond James 'not ready to bull up' on 2010 market

Uncertainty about the pace of economic recovery and the importation of liquefied natural gas prompted the energy team at investment bank Raymond James to issue another bearish outlook on gas prices, cutting their forecast for next year by 8%.

"We aren't ready to 'bull up' on 2010 natural gas prices," the team headed by Marshall Adkins said in a report Monday. "We are lowering our 2010 gas price forecast from \$6/Mcf to \$5.50/Mcf to reflect the substantial uncertainties that exist for key natural gas supply and demand drivers."

In the shorter term, the team raised its 2009 gas price forecast by 10% to \$4.14/Mcf, anticipating a small rebound late this year.

"So far, the gas market's willingness to overlook near-term weakness for an expected price recovery in 2010 helped keep gas prices from remaining low," the report said. "We are still expecting a meaningful gas price rebound this winter as bullish gas supply optics and colder weather lead traders to a typical winter gas rally."

Despite a sharp drop in the rig count, US gas producers have merely idled production by not completing wells or putting them into production — supplies that can be rapidly turned on when prices rise, the report said.

"As we move into this winter, we also believe there is between 400 to 500 Bcf of supply shut-ins and uncompleted wells from the past few months that could re-enter the market," Adkins' team said.

The analysts think the current sense of market tightening has more to do with pipelines being constrained rather than a drop in gas volumes. They think supply will only drop about 3 Bcf/d in 2010, compared with what they say is a consensus estimate of 5 Bcf/d.

Also hovering over the market is the unknown quantity of LNG that could arrive in underused US terminals next year, with several liquefaction trains around the world set to go online in the coming months.

"These new facilities could add up to 5 Bcf/d of incremental supply," Raymond James said. "With excess LNG supply already on the water, these new facilities could cause a deluge of LNG imports to hit US shores, particularly next summer when global gas demand wanes seasonally." — Bill Holland

Monday, September 28, 2009

Analyst: Gas to top \$7 in second half of 2010 amid supply cuts

Gas prices will climb above \$7/MMBtu in the second half of 2010 as the cut in rig counts and natural field declines finally make an impact, Banc of America Securities-Merrill Lynch Head of Global Commodities Research Francisco Blanch said Friday.

But in the near term, the US gas market is "in an alarming state," Blanch said in a note to clients. "Storage caverns in the producing region are nearly full. Major pipelines have issued imbalance warnings, implying that the market is close to running out of storage capacity."

While he's sticking with a \$6/MMBtu average price forecast for 2010, he's increased his forecast for the second half of the year to \$7.60/MMBtu, with a first-half average of \$4.40/MMBtu.

"In our view, the real rebalance has to come from the supply side," Blanch said. "To date, the impact of the sharp rig count reductions is still concealed by rising shale gas production. Despite the steep price declines, shut-ins of existing production have occurred too slowly.

"Make no doubt, the market will eventually rebalance," Blanch concluded. "We expect the rig count reductions and natural field declines to drive dry production from a peak of 58 Bcf/d to 53 Bcf/d by mid next year. Hence, there could be real value opening up in the second half of 2010." — Bill Holland

Tuesday, October 13, 2009

Consultant rips optimistic shale gas estimates

The conventional wisdom of abundant, economic shale gas supplies in the US was criticized Monday by an independent consultant, who told the annual meeting of the Association for the Study of Peak Oil in Denver to make a distinction between resources and reserves.

In a panel on the issue of gas as a game-changer, Arthur Berman, the director of geoscience consulting firm Labyrinth Consulting Services, said <u>current operators are underestimating</u> the rate of decline from shale gas wells, as well as the cost of developing them.

"The only cost that matters is the end marginal cost," Berman said, and at a \$7-\$8/Mcf price needed to be profitable shale gas would be quoted at a level more than imported liquefied natural gas. Prices below that will render projects unprofitable, he added.

Berman did not dispute a recent Colorado School of Mines estimate that shale gas reserves in the US are in excess of 2,000 Tcf. "These are resources," he said. "They are produceable at some cost. But a fraction of them are actually reserves, which means they can be produced commercially."

The pointed comments by Berman, who recently penned a widely-read article in *World Oil* magazine about his findings, ranged from detailed reporting of his firm's own results on studying the Barnett and Fayetteville shales to at one point dragging in the ghost of Lehman Brothers in a none-too-subtle dig at the promotional efforts by shale companies such as Chesapeake Energy.

Management of shale producers are promoting two concurrent miracles, according to Berman: that producing shale gas can simultaneously be low risk/high reward, and that an exploration venture can have high capital costs and low gas prices at the same time, "and still make lots of money."

Berman said companies such as Chesapeake have balance sheets marked by "a huge debt load, borrowed money and effectively borrowed money through equity offerings. They are always writing down assets, always selling assets, and they are more interested in booking reserves than making money."

Berman's panel also featured Peter Dea, a former CEO of both Barrett Resources and Western Gas Resources, and now president and CEO of Cirque Resources, a Denver-based exploration company. Dea spoke prior to Berman and gave a conventional overview of US gas reserves, which he called an "American treasure."

In a brief Q&A session following the panel, Dea addressed Berman's critical comments of existing management at shale gas companies. He said there have been some "overstatements" of reserves by some companies but said technology and efficiency increases are still under development. Ultimately, despite "disappointments," the industry will be profitable, Dea added.

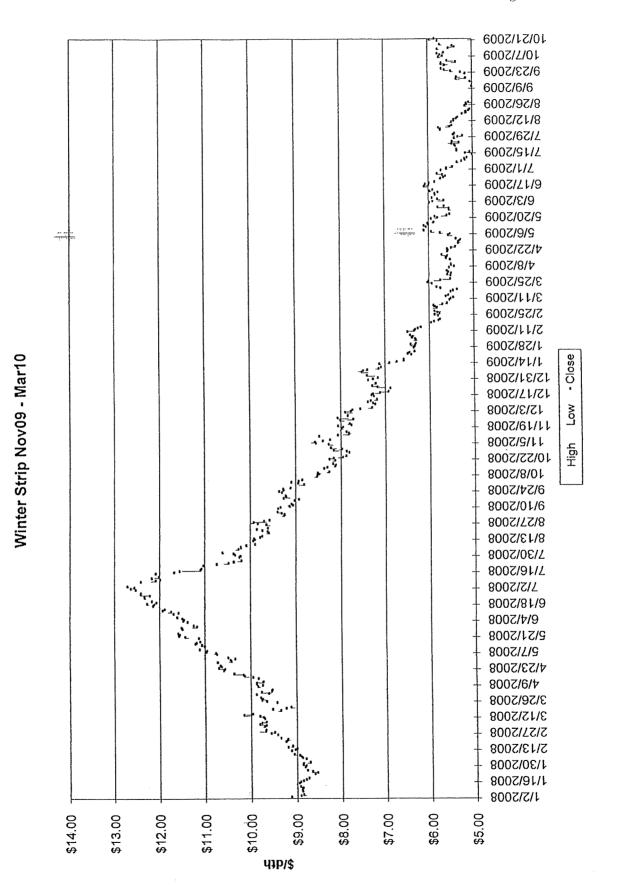
Of a USGS estimate of the Barnett Shale that the formation holds around 26

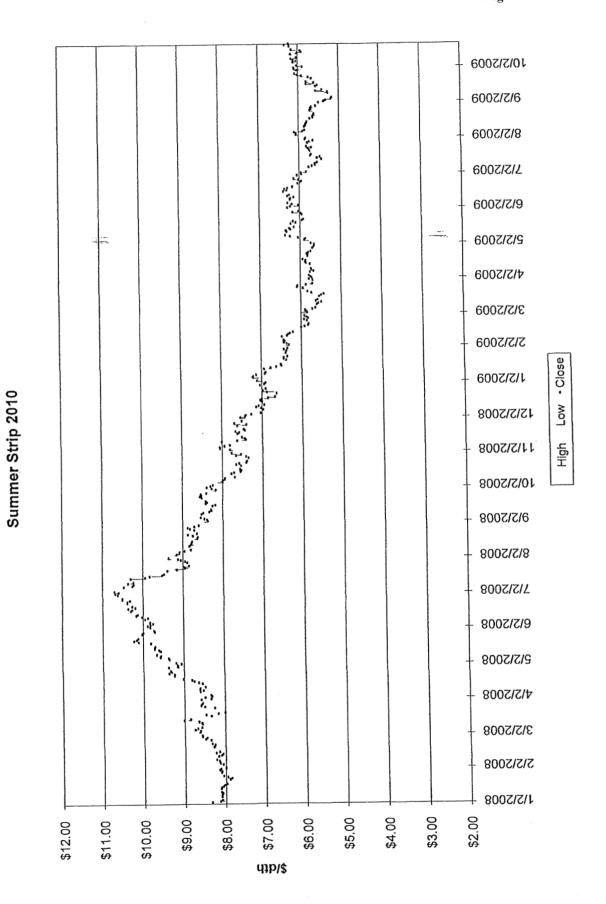
Tcf of recoverable resources, Berman said his firm estimates that only about 10 Tcf
will be produced — and of that, 70% will be noncommercial even at a \$7 to
\$8/Mcf price. Decline rates are rapid in the shale plays, but Berman said they are
far steeper than producers estimate. — John Kingston

Case No. 2008-175 Attachment A Page 173 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu October 6, 2009 Release

Jan-08	7.99	Jan-09	5.24	Jan-10	4.70
Feb-08	8.54	Feb-09	4.51	Feb-10	4.98
Mar-08	9.41	Mar-09	3.96	Mar-10 :	4.89
Apr-08	10.18	Apr-09	3.49	Apr-10	4.79
May-08	11.27	May-09	3.83	May-10	4.70
Jun-08	12.69	Jun-09	3.80	Jun-10	4.61
Jul-08	11.09	Jul-09	3.38	Jul-10	4.53
Aug-08	8.26	Aug-09	3.14	Aug-10	4.46
Sep-08	7.67	Sep-09	2.97	Sep-10	4.54
Oct-08	6.74	Oct-09	2.78	Oct-10	4.88
Nov-08	6.68	Nov-09	3.58	Nov-10	5.48
Dec-08	5.82	Dec-09	4.23	Dec-10	5.93
Average		Average		Average	
2008	\$ 8.862	2009	\$ 3.743	2010	\$ 4.874
Summer 2008	\$ 9.700	Summer 2009	\$ 3.341	Summer 2010	\$ 4.644
Winter 2008- 2009	\$ 5.242	Winter 2009- 2010	\$ 4.476		





Short-Term Energy and Winter Fuels Outlook

October 6, 2009 Release

Natural Gas

U.S. Natural Gas Consumption. Total natural gas consumption is projected to decline by 2.0 percent in 2009 and 0.2 percent in 2010. Weak economic conditions continue to hamper the industrial sector, where the most recent data show natural gas consumption is down by 12.4 percent through July compared with the same period last year. With lower consumption in the residential and commercial sectors as well, natural gas use in the electric power sector continues to serve as the only demand outlet for increased natural gas supplies. EIA data indicate that electric-power-sector natural gas consumption increased by 0.4 percent in 2009 through July, compared with the same period in 2008, despite a 5.3-percent decline in total electricity generation over the same period. Sustained low natural gas prices are expected to prolong the preferred use of natural gas in place of coal for electricity generation in some regions until space-heating demand picks up this winter.

EIA expects natural gas consumption growth in the commercial and industrial sectors in 2010 to be offset by a decline in the electric power sector. In addition to the assumption of fewer cooling degree-days next year, higher relative natural gas prices and the start-up of new coal-fired generating capacity are all expected to contribute to a reduction in natural-gas-fired electric generation in 2010.

U.S. Natural Gas Production and Imports. EIA expects total U.S. marketed natural gas production to increase by 1.5 percent in 2009 and decline by 3.8 percent in 2010. Marketed natural gas production in the Lower-48 States rose by 2.9 percent this year through July, compared with the same interval in 2008, despite a more than 40-percent decline in the working rig count since the start of the year. While production has remained stronger than expected through much of this year, EIA expects the pullback in drilling to lead to a 3.6-percent decline in Lower-48 production from the first half to the second half of 2009. In addition to the natural rate of decline from producing wells, the current forecast assumes some additional production curtailments as natural gas inventories begin to swell toward capacity limits this month. Although the working rig count has begun to increase slightly in recent weeks, EIA expects domestic natural gas production to continue to fall, with marketed production during the first half of 2010 to average about 1.8 billion cubic feet (Bcf) per day lower than the second half of 2009. However, economic recovery and increasing demand next year are expected to push prices up and provide the incentive for increasing production later next year.

<u>U.S. liquefied natural gas (LNG) imports increase to about 471 Bcf in 2009, from 352 Bcf in 2008, and rise to about 660 Bcf in 2010.</u> Higher LNG import levels may occur on a temporary basis as cargoes are redirected from Europe, where storage is reaching capacity and prices have declined. EIA expects that the startup of several large LNG supply projects in 2010 will lead to an increase in U.S. LNG imports, although previous supply additions abroad have been slowed by construction delays and feedgas shortages that contribute to EIA's present uncertainty about the future of current projects.

Global Crude Oil and Liquid Fuels

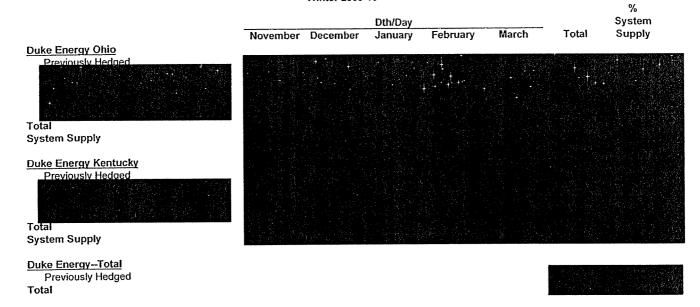
Global Petroleum Overview. Sustained economic growth in China and signs of a turnaround in other Asian countries continue to fuel expectations of a global recovery in world oil consumption. EIA has revised its expectations for world oil consumption upwards by 0.2 million barrels per day (bbl/d) for the remainder of 2009 and for 2010, in large part because of the revision to Asian growth. However, EIA has not revised its WTI oil price projections upward because ample oil supplies remain on the market. Oil inventories remain high and EIA expects oil production by the Organization of the Petroleum Exporting Countries (OPEC) to increase as well.

EIA expects the price of West Texas Intermediate (WTI) crude oil to average about \$70 per barrel this winter

(October-March), a \$19 increase over last winter. The forecast for average WTI prices rises gradually to about \$75 per barrel by December 2010 as U.S. and world economic conditions improve. EIA's forecast assumes U.S. GDP grows by 1.8 percent in 2010 and world oil-consumption-weighted GDP grows by 2.6 percent.

- Carallelia

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Duke Energy

Hedging Program

December 2009 - February 2010

November 3, 2009

- At the October 23, 2009 Hedging Meeting, a decision was reached not to hedge additional volumes due to the recent run-up in NYMEX prices, however, at that time it was stated to monitor the market for significant price movements.
- NYMEX prices for the December 2009—February 2010 strip have decreased significantly from the October 23, 2009 meeting of \$6.004 to \$5.068 based on November 2nd's closing price.
- On November 3, 2009, Jim Henning, Jeff Kern and Steve Niederbaumer met to discuss additional hedging in light of current market conditions.
- Information reviewed included pricing information and the current positions in both the Ohio Hedging Program and the Kentucky Hedging Program.
- After discussion, a determination was made to hedge additional volumes in Ohio and Kentucky converting FOMI base gas to a fixed price.
- A bid was received from and accepted by Duke Energy to convert portions of FOMI base gas to fixed rate gas in Ohio and Kentucky for the months of December 2009 through February 2010. The rate accepted was a dth/day for December through February in Ohio and addth/day for December through February in Kentucky.

share they own and roughly \$35/Encores share worth of Denbury stock. Shareholders will be given the option to vary the mix of cash and stock within the limit of the total deal being 70% stock and 30% cash, executives said.

The combined company will be 66% owned by Denbury shareholders and 33% by Encore shareholders with Denbury's senior management staying in charge of the company, Denbury said.

Denbury executives said Monday they expected most of Encore's present employees to stay with the combined company.

The combined company will be known as Denbury Resources Inc. Denbury has postponed its scheduled Q3 earnings and conference call from Tuesday to Thursday this week as a result of the deal. — Bill Holland

Devon to multiply Haynesville rigs ... from page 1

"With a flow rate of more than [30,000 Mcf/d], we believe the Kardell well is the highest rate well ever drilled in the Haynesville Shale," said David Hager, Devon's executive vice president of exploration and production. "This is clearly a very positive development for the southern portion of the Haynesville Shale play."

Hager said the company would go to a five-rig program next year in the southern portion of the play. "Our longer-term objective is to continue to systematically evaluate and de-risk our entire Haynesville Shale position," he added.

Devon spokesman Chip Minty said the company currently operates one rig in the area, having scaled back operations due to low commodity prices.

Devon holds 47,000 net acres in the southern Haynesville, mostly in San Augustine and Sabine counties in Texas and Sabine Parish, Louisiana, where it has a 100% interest in its primary term leases.

The company holds some \$70,000 net acres in the greater Haynesville trend of East Texas and North Louisiana. Devon said it owns interests in more than 1,800 producing wells in the Carthage area, where it first began drilling in the Haynesville. It has previously drilled eight horizontal Haynesville wells in the greater Carthage area and has identified about 950 risked drilling locations in the area. — Stephanie Seay

RBS may have to sell Sempra JV interest ... from page 1

2012. We also understand that any forthcoming divestiture order from the European Commission is expected to allow for an orderly transition, comply with our joint venture agreement and be executed in a matter that would maximize the value of the business.

Natural gas hub flow, Nov 2

Schodule	d +/-	%	Daily	31 Day	Average
Flow		Change	Price	Flow	Price
1,101	21	1.98	4.135	982	4.019
114	14	14.19	4.580	89	4.403
1,809	-2	-0.13	5.040	2,009	4.685
692	-12	-1.72	4.610	571	4.478
881	-5	-0.57	3.985	872	3.923
211	Ö	0.04	4.500	225	4.431
704	-38	-5.11	4.395	640	4.382
1,051	53	5.31	4.415	1,348	4.273
691	-1	-0.16	4.750	746	4.465
1,372	224	19.56	4.630	1,331	4.499
218	21	10.55	4.630	114	4.450
1,225	24	1.98	4.145	1,171	4.011
1,361	17	1.29	4.570	1,349	4.453
	Flow 1,101 114 1,809 692 881 211 704 1,051 691 1,372 218 1,225	Flow 1,101 21 114 14 1,809 -2 692 -12 881 5 211 0 704 -38 1,051 53 691 -1 1,372 224 218 21 1,225 24	Flow Change 1,101 21 1,98 114 14 14,19 1,809 -2 0,13 692 -12 -1,72 881 -5 -0,57 211 0 0,04 704 -38 -5,11 1,051 53 5,31 691 -1 0,16 1,372 224 19,56 218 21 10,55 1,225 24 1,98	Flow Change Price 1,101 21 1.98 4.135 114 14 14.19 4.580 1,809 -2 0.13 5.040 692 12 1.72 4.610 881 -5 0.57 3.985 211 0 0.04 4.500 704 38 -5.11 4.395 1,051 53 5.31 4.415 691 -1 0.16 4.750 1,372 224 19.56 4.630 218 21 10.55 4.630 1,225 24 1.98 4.145	Flow Change Price Flow 1,101 21 1.98 4.135 982 114 14 14.19 4.580 89 1,809 -2 0.13 5.040 2.009 692 12 1.72 4.610 571 881 -5 0.57 3.985 872 211 0 0.04 4.500 225 704 38 5.11 4.395 640 1,051 53 5.31 4.415 1,348 691 -1 0.16 4.750 746 1,372 224 19.56 4.630 1,331 218 21 10.55 4.630 114 1,225 24 1.98 4.145 1,171

Volumes In 000 MMBtu; prices In \$/MMBtu. For more Information, contact Bill Murphy at 720-548-5485.

Source: Platts data

*	Settlement	High	t.ow	+/-	Volume
€Dec 2009	4 824	5.115	4.817	-22.1	92611
7 Jan 2010	5 162	5.448	5.155	-22.8	30294
Feb 2010	5.217	5.495	5.211	-22.7	9759
Mar 2010	5.205	5.477	5.198	-22.0	9844
Apr 2010	5.203	5.450	5.195	-21.4	6946
May 2010	5.263	5.440	5.263	-21.9	4391
Jun 2010	5.358	5.571	5.358	-21.4	1705
Jul 2010	5.463	5.645	5.463	-21.7	2797
Aug 2010	5.548	5.719	5.543	-21.2	1842
Sep 2010	5.611	5.784	5.619	-21.4	1046
Oct 2010	5.758	5.934	5.758	-21.5	2094
Nov 2010	6.168	6.345	6.168	-21.0	576
Dec 2010	6.553	6.730	6.550	-20.0	1091
Jan 2011	6.788	7.000	6.794	-19.0	1764
Feb 2011	6.783	6.885	6.780	-19.0	275
Mar 2011	6.613	6.800	6.603	-18.0	1030
Apr 2011	6.143	6.230	6.143	-15.0	172
May 2011	6.113	6.200	6.100	-14.5	106
Jun 2011	6.173	6.250	6.173	-14.5	65
Jul 2011	6.243	6.290	6.230	-14.5	14
Aug 2011	6.308	6.360	6.308	-14.5	16
Sep 2011	6.338	6.355	6.330	-14.5	16
Oct 2011	6.458	6.510	6.450	-14.5	5
Nov 2011	6.753	6.800	6.753	14.5	. 3
Dec 2011	7.053	7.100	7.050	-14.5	51
Jan 2012	7.258	7.305	7.258	-14.5	2
Feb 2012	7.248	7.295	7.248	-14.5	3
Mar 2012	7.038	7.085	7.038	-14.5	71
Apr 2012	6,453	6.500	6,453	13.5	108
May 2012	6.403	6.440	6.403	-13.5	1
Jun 2012	6.463	6.463	6.463	-13.5	

6.538

6.628

6.575

6.620

6.660

6.983

NYMEX Henry Hub das futures contract. Nov 2

Contract data for Friday

Sep 2012

Nov 2012

Volume of contracts traded: 193,169

Front-months open interest:

DEC, 152,415; JAN, 113,803; FEB, 42.713

6.598

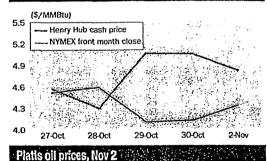
6.628

6.718

6.983

Total open interest: 691,445

Kenry Hub/NYMEX spread

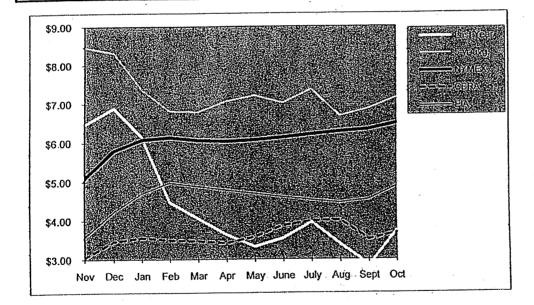


	(\$/b)	(\$/MMBtu
Gulf Coast spot		
1% Resid ¹	72.75-72.80	11.58
3% Resid¹	70.55-70.60	11.23
Crude spot		
WTI (Dec)2	77.84-77.86	13.36
New York spot		
No.21	83.99-84.20	14.44
0.3% Resid LP3	76.60-76.65	12.19
0.3% Resid HP3 ·	74.45-74.50	11.85
0.7% Resid ³	72.40-72.45	11.52
1% Resid ³	71.95-72.00	11.45

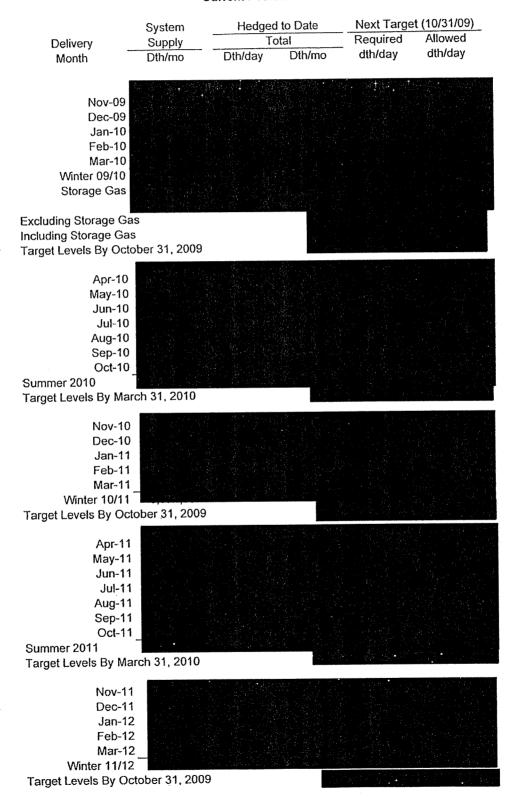
COMPARISON OF HISTORIC SPOT & PROJECTED PRICES TO CURRENT FUTURES PRICES

	Histori	c Prices:					
	NYMEX CI	osing Price					
	5-yr. avg.	Last Year		CERA	EIA "	NYMEX	
	(04/05-08/09)	(2008-2009)		25-Sep-09	6-Oct-09	22-Oct-09	
				350 1 1214			
Nov	\$8.47	\$6.47			\$3.580	\$5.100	
Dec	\$8.31	\$6.89			\$4.230	₹ (\$5.793	
Jan	\$7.36	\$6.14			\$4.700	3 \\$6.078	
Feb	\$6.82	\$4.48			\$4.980	√ (\$6.140	
Mar	\$6.79	\$4.06			\$4.890	\$6.067	
Apr	\$7.06	=\$3.63			\$4.790	\$6.037	
May	\$7.21	\$3.32		\$ 7.2	\$4.700	\$6.073	1
June	\$7.02	\$3.54			\$4.610	\$6.133	
July	\$7.37	\$3.95			\$4.530	\$6.213	ļ
Aug	\$6.68	\$3.38			\$4.460	\$6.286	
Sept	\$6.87	\$2.84			\$4.540	\$6.337	
Oct	\$7.15	\$3.73			\$4.880	\$6.492]
12 Month Avg	\$7.26	\$4.37			\$4.574	\$6.062	
	er Average		<u> </u>		\$4.644	\$6.224	
Winter A	•				\$4.476	\$5.836	

Hedged Prices	
Ohio Kentucky	
l	-
	報告一次各門在京門軍官官衛軍 的事情感者 可聽事情不得你



Duke Energy Kentucky Hedging Program Current Position



Gas Commercial Operations Hedging Program Market Indicators Summary November 13, 2009

	Price Pressure	Term	Comments	Page Ref
Weather		······································		
Long Term Forecast (Dec 09–Feb 10)	1	Long	NOAA predicting above average temperatures for Dec 2009—Feb. 2010 for most of the continental United States with below normal temperatures in the south-eastern/central states.	11
Mid Term Forecast (30-60 days)		Long	December predicted to be 5.7% warmer than 10 year normal and January is predicted to be 4.6% colder than 10 year normal	12
Short Term Forecast (6-10 days)	ļ	Short	Differing levels of Above temperatures dominating Canada and the United States for the 6 to 10 day period.	13
Tropical Storm Activity	1	Long	No activity at this time that would threaten the production areas.	
Storage Inventory				
EIA Weekly Storage Report	<u> </u>	Long	Storage injections for the week ending November 6th were 25 BCF. Storage levels are at 3.813 TCF which is 10.1% higher than last year and 12.0% higher than the 5 year average. First time in history that the storage inventory has surpassed 3.8 Tcf.	14
Industry Publications		·		
Cambridge Engage By arch Associates Summer 2010: Winter 2009/10	+	Long	Our expectation remains that bearish fundamentals will keep prices low throughout this winter and into 2010. CERA projecting MMBtu for 2009 and \$MMBtu for 2009 and \$	15
Gas Daily	11	Long	US gas market gradually coming into balance—one analyst predicting a sharp recovery of gas prices next year to average \$7.50/Mcf. Other analyst more pessimistic about pace of recovery predicting \$4 85/Mcf for 2010.	16
Gas Daily	1	Long	There is "significant downside price risk with normal weather" due to the large storage inventory.	17
Gas Daily	†	Long	The number of rigs needs to grow by about 50% to meet a 1 Bcf/d annual gas demand increase expected to start next year. "Gas prices have to rise to entice more drilling".	18
PlanalyticsWinter 2009-10 Update	1	Long	All forecasts for this winter are for Colder than Normal Industrial production is picking up Could beat record draw if injections continue to slow 2010 Price Forecasts: Barclays-\$6.30 Deutsch-\$6.40 BP-\$7.00 ConocoPhillips-\$8.00	,
Government Agencles				
Energy Information Administration Summer 2010: \$4.636 Winter 2009/10: \$4.602	<u>†</u>	Long	With a growing economy and expected decrease in gas production, the projected Henry Hub annual average spot price increases from \$3.71 per MMBtu in 2009 to \$4.06 in 2010.	19
Tochnical Analysis	1 A	T =:	L	T 60
Winter 2009-10 Strip Chart	<u> </u>	Short	Closed at \$4.71.	20
Winter 2010-11 Strip Chart	<u> † </u>	Short	Closed at \$6.27.	21
Summer 2010 Strip Chart	<u> </u>	Short	Closed at \$5.14	22
Economy				т
Demand	←→	Long	electric generation's consumption in 2010 is projected to more than offset consumption growth in the other sectors.	23
Supply	†	Long	EIA: Total U.S. marketed natural gas production is expected to increase by 2.8% in 2009 and fall by 3.8% in 2010. EIA expects that the reduced drilling rates and steeper decline rates from new wells brought on stream in 2009 will lead to lower levels of production during 2010.	23
Oil Market	Î î	Long	Sustained economic growth in China and other Asian is contributing to the beginnings of a rebound in world oil consumption. EIA expects WTI crude oil to average about \$77 per barrel this winter, an increase of \$7 compared with last months report.	1 00

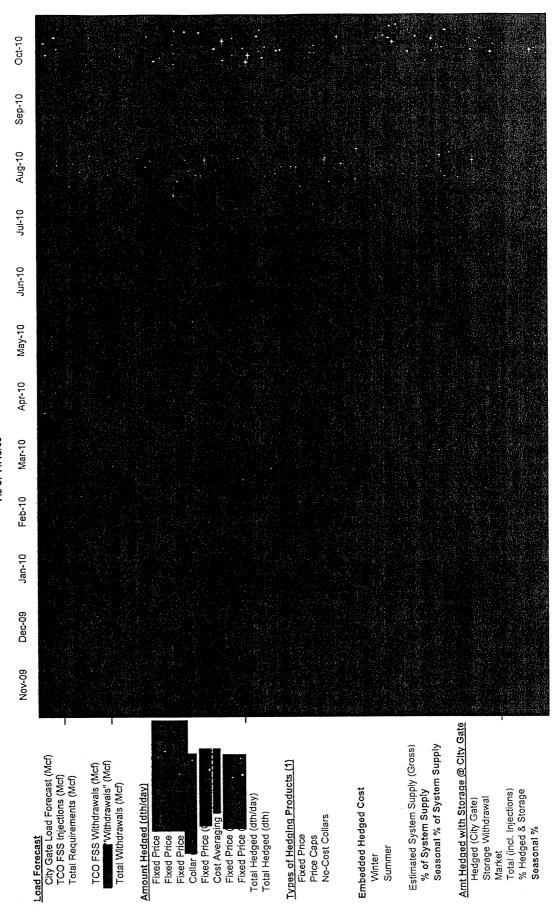
ī	feeting Minutes: 10th Floor North Conference Room - 2:30 pm
l	Attendees: Patty Walker, Jim Henning, Jeff Kern, Mike Brumback, Joachim Fischesser and Steve Niederbaumer
ļ	Discussed market fundementals such as weather, storage inventory levels, and economic factors such as supply and demand. Discussed the
	CERA and EIA forecasts as well as analyst predictions concerning price expectations. In addition, discussed Winter and Summer Strip Charts
l	based on Technical Analysis. Discussed our current postions within Ohio and Kentucky hedging plans and that the hedging percentages changed
ı	November 1st. In addition, discussed the spreads between current NYMEX prices and historical prices. Discussed the warm November
1	temperatures impact on NYMEX price. A decision was made to hedge additional gas. On November 17th contacted decision was made to hedge additional gas.
l	or fixed price bids on the dth/day the second of the control of th
l	and see the second seco
l	dth/day () @ Col Gulf Mainline for June 2010-Aug. 2010. A bid of was offered and accepted based on the NYMEX price
1	at the time of the deal and the besis

omparisons	
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-	
Prio	,
NYMEX	

Case No. 2008-173 Attachment A Page 184 of 306

Nov. 12	Oct. 23	Sept. 24	Labor Day	Nov. 12 vs. Oct. 23	Nov. 7 Sept	Nov. 12 vs. Labor Day	
4,711	5.743	5.793	4.759	(1.03)		(0.05)	
5.145	5.977	6.025	5.176	(0.83)		(0.03)	
6.269	6.999	7.045	6.397	(0.73)		(0.13)	
6.003	6.553	6.62	6.109	(0.55)		(0.11)	
6.797	7.337	7.38	6.873	(0.54)		(0.08)	
6.258	6.791	6.752	6.306	(0.53)	(0.49)	(0.05)	
5.613	6.403	6.45	5.685	(0.79)		(0.07)	
5.973	6.641	6.693	6.056	(0.67)		(0.08)	
6.114	6.739		6.229	(0.63)	(0.68)	(0.12)	
6.298	6.879	6.912	6.389	(0.58)		(0.09)	
6.333	6.88	6.936	6.427	(0.55)	(0.60)	(0.09)	
6.325	6.847		6.387	(0.52)		(00.0)	

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 11/13/09



Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 11/13/09 Oct-11 Sep-11 Aug-11 Jul-11 Jun-11 May-11 Mar-11 Feb-11 Jan-11 · Dec-10 Nov-10 Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Estimated System Supply (Gross) Seasonal % of System Supply City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Types of Hedging Products (1)
Fixed Price
Price Caps TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Requirements (Mcf) Total Withdrawals (Mcf) Amount Hedged (dth/day) Embedded Hedged Cost % of System Supply Total (incl. Injections) % Hedged & Storage Total Hedged (dth/day) Total Hedged (dth) No-Cost Collars Seasonal % Collar (Fixed Price (Fixed Price (Fixed Price Summer Market Winter

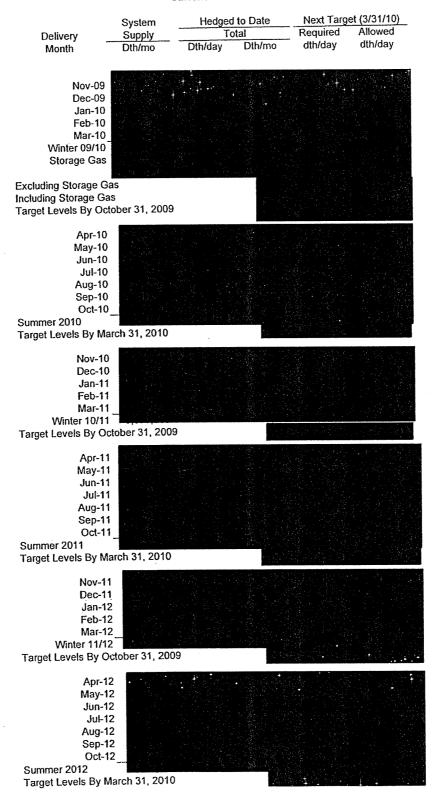
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Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 11/13/09

Oct-12							
Sep-12							
Aug-12							,
Jul-12							
Jun-12							
May-12							
Apr-12							
Mar-12							
Feb-12							
Jan-12							
Dec-11							
Nov-11							
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	(Mcf)	af)		(1) (1)	•	(Gross)	Amt Hedged with Storage (a City Gate) Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections) % Hedged & Storage Soasonal %
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(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

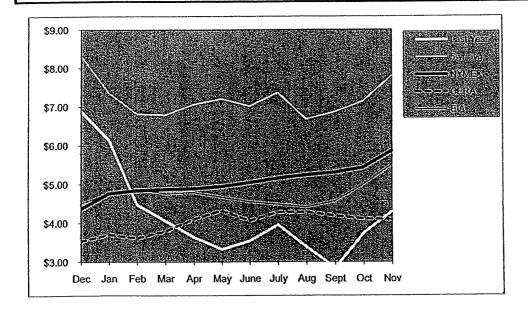
Duke Energy Kentucky Hedging Program Current Position

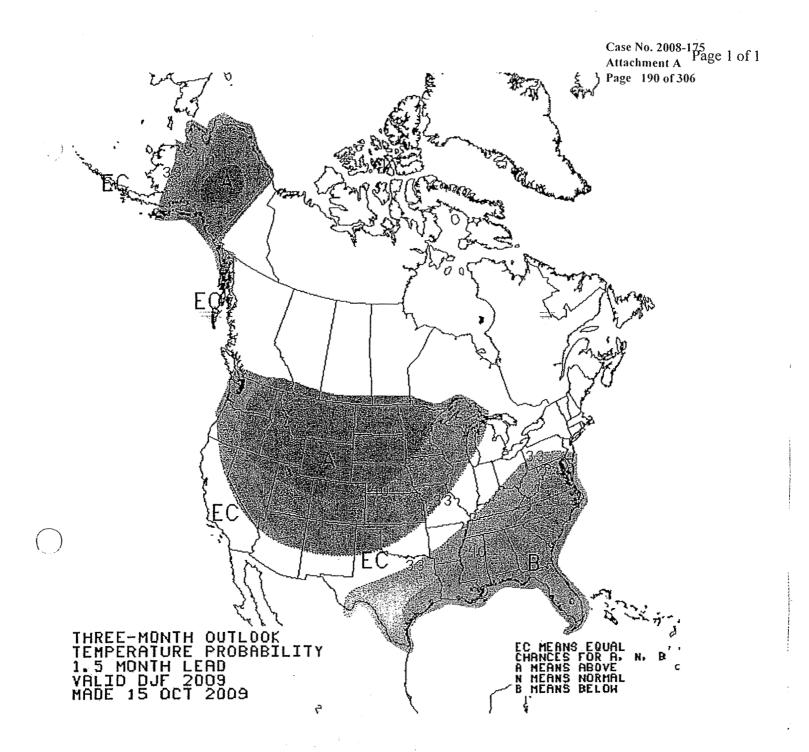


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES TO CURRENT FUTURES PRICES

	Histori	c Prices:				
	NYMEX CI	osing Price				
	5-yr. avg.	Last Year		CERA	EIA	NYMEX
	(04/05-08/09)	(2008-2009)		26-Oct-09	10-Nov-09	13-Nov-09
				41.3		
Dec	\$8.31	\$6.89			\$4.500	\$4.370
Jan	\$7.36	\$6.14			\$4.770	\$4.761
Feb	\$6.82	\$4.48			\$4.880	\$4.841
Mar	\$6.79	\$4.06	.*		\$4.760	\$4.870
Apr	\$7.06	\$3.63			\$4.790	\$4.887
May	\$7.21	\$3.32			\$4.670	\$4.946
June	\$7.02	\$3.54			\$4.550	\$5.044
July	\$7.37	\$3.95			\$4.480	\$5.154
Aug	\$6.68	\$3.38			\$4.410	\$5.239
Sept	\$6.87	\$2.84			\$4.560	\$5.304
Oct	\$7.15	\$3.73			\$4.990	\$5.429
Nov	\$7.80	\$4.29			\$5.500	\$5.857
12 Month Avg	\$7.20	\$4.19			\$4.738	\$5.059
	r Average	<u></u>			\$4.636	\$5.143
Winter A	verage				\$4.882	\$4.940

Hedged Prices
Ohio Kentucky
장면 변화된당 동안 중 작
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1 化自己基础的 电光层管理
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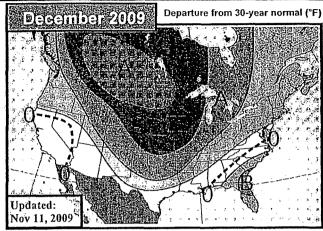




EarthSat's 30-60 Day Outlook

Wednesday, November 11, 2009

Forecaster: SS/BH



Updated:
Nov 11, 2009

___ +0.1 to +0.4

#0.5 to 0.9

#1.0 to +1.9

____-0.1 to -0.4

3 -0.5 to -0.9

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+2.0 to +2.9

≥3.0

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Prev

Previous

Some warm changes in the West

Moderate El Niño still expected

The forecast continues to warm across much of the US in December as confidence in a moderate El Niño increases. Warm changes were seen particularly in the West with more aboves in the Northwest, and also in the Southeast with marginal belows limited to the coast. SST anomalies in the central Pacific continued to rise since last week, with region 3.4 region reported at 1.7C on Monday. While this technically is within the strong range, we do not expect it to remain at this level and have already seen a slight decrease from its peak. With the El Niño numbers as high as they are and with a near-neutral PDO, we expect ENSO to be the main driver of the forecast, at least for December. That having been said, with such a stubborn pattern in November, that may leave room for more volatility in the pattern in December, particularly in the East where we don't expect temperatures to be quite anomalously warm. The statistical correlation relating cold Octobers to warm Decembers also helps increase confidence in the overall forecast.

Nov GWHDD* Forecasts

*10Y Normal updated to 99-08

Dec 2009 Fcst:

807.0

10Y Normal* 855.8 30Y Normal 873.8 Dec-2008 897.6

Change: -1.0

*National Gas-Weighted HDDs



Greater coverage of aboves in western Canada

Warmer in the Northwest

Widespread warmth continues in the January forecast, with warmer changes noted across much of the northern tier. Confidence continues to increase in a moderate El Niño, though as we mentioned last week, that scenario brings about several different possibilities. Our LongCast model uses statistical analysis to find the years that had the most similar El Niño patterns as the current ones and weights those years accordingly. Currently, it appears that 2002 and 1994 are the closest fits from an ENSO standpoint alone. These years combine to produce an outlook similar to ours, though cooler in the East (a reflection of 2002). To break it down further, these years showed the month being split between a very warm first half and cooler second half. We

expect a similar outcome as it is typical during the break-down of El Niño events. Our current forecast shows the warmer start outweighing the cold finish, however there is a cold risk evident.



Dec GWHDD* Forecasts

Jan 2010 Fcst:

957.0

*10Y Normal updated to 99-08 10Y Normal 914.9 30Y Normal 977.6 Jan-2009 1026.2

Change: -5.0

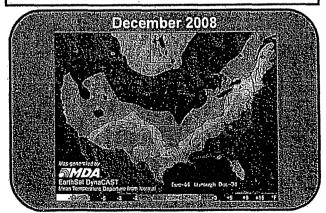
*National Gas-Weighted HDDs

November Verification



vingespread warmin has been the story through the first 1/3 of November, with above normal temperatures stretching across much of the pration. The strongest warm has been across the Plains

where anomalies of 8-12F have been seen. The only cool spot has been in the Southeast. As of right now it appears that our warm forecast is in pretty good shape, with our 1-15 Day forecast as well as most of the models showing widespread warmth across most of the US. If anything, we were probably not hearly warm enough in our November forecast. Our area of normals near the Gulf Coast looks as though it may verify nicely.



MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [30-60 Day-Outlook, Version 2.1]

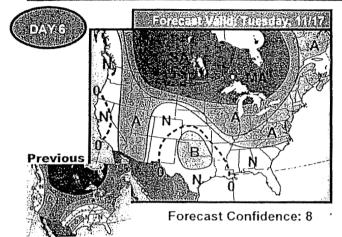


EarthSat's 6-10 Day Forecast-Detailed

Thursday, November 12, 2009

Forecaster: BH/EW

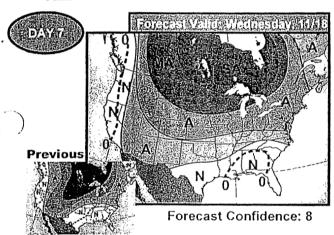
Foresast Temperature Deviations

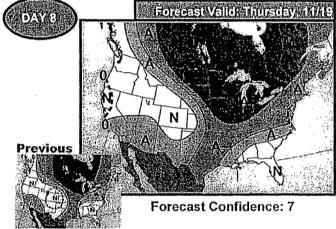


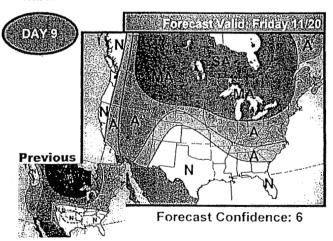
Today's Forecast:

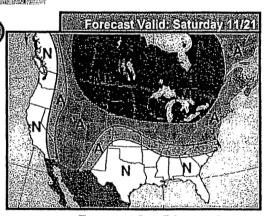
Much Aboves Possible in Northeast at Times Early Cut-off Low Lacking a Cold Air Connection

A cut-off low early on in the forecast period could bring some belows to the southern Plains but its lack of any cold air connection will prevent those belows from spreading elsewhere. The low could, however, knock down temps in the N. Plains and Midwest from much above to above levels. The American models show stronger troughing late in the period across the mid-continent but there is little support to allow colder temps to be realized. Temps closer to seasonal levels are expected as a result. Much aboves are possible during at times across the Northeast, especially late.









Forecast Confidence: 6

△ A +3F to +4F △ A +5F to +7F ► MA +8F to +14F ► SA +15 or Higher △ A +3F to -4F △ B -5F to -7F ► MB -8F to -14F ► SB -15 or Lower

DAY 10

MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 (backup: 301-231-0664) Fax (240) 833 8301 www.mdafederal.com/wx/ ©2009 [Morning Basic-Page 3, Version 2.1]

Release Schedule Sign Up for Email Updates

GlossaRage 193 of 306

other formats: Summary TXT CSV

AttachmentAm

(eia, Energy Information Administration

Home - Natural Gas > Weekly Natural Gas Storage Report

Weekly Natural Gas Storage Report

Official Energy Statistics from the U.S. Government

ased: November 13, 2009 at 10:30 A.M. (eastern time) for the Week Ending November 6, 2009. Release: November 19, 2009

Working Gas in Underground Storage, Lower 48

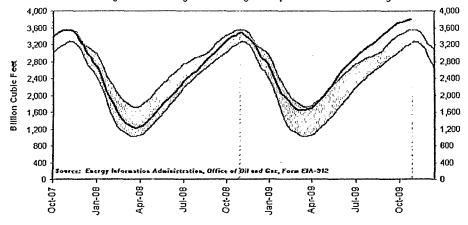
	Stocks i	n billion cubic fe	et (Bcf)	Historical Comparisons				
Region	11/06/09	10/30/09	Change	Year Ago (11/06/08)	5-Year (2004-2008) Average		
_	11/06/09			Stocks (Bcf)	% Change	Stocks (Bcf)	% Change	
East	2,093	2,085	8	2,037	2.7	1,975	6.0	
West	521	514	7	467	11.6	454	14.8	
Producing	1,199	1,189	10	960	24.9	976	22.8	
Total	3.813	3.788	25	3.463	10.1	3,404	12.0	

Notes and Definitions

Summary

Working gas in storage was 3,813 Bcf as of Friday, November 6, 2009, according to EIA estimates. This represents a net increase of 25 Bcf from the previous week. Stocks were 350 Bcf higher than last year at this time and 409 Bcf above the 5-year average of 3,404 Bcf. In the East Region, stocks were 118 Bcf above the 5-year average following net injections of 8 Bcf. Stocks in the Producing Region were 223 Bcf above the 5-year average of 976 Bcf after a net injection of 10 Bcf. Stocks in the West Region were 67 Bcf above the 5-year average after a net addition of 7 Bcf. At 3,813 Bcf, total working gas is above the 5-year historical range.

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008. Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines Indicate current and year-ago weekly periods.

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Data

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator

Table

Henry Hub Prices: History and Outlook

2026 2027 2028 2029 2030 2024 2025 2022 2023 2018 2019 2020 2021 2017 २००३ २०१० २०११ २०१२ २०१३ २०१६ २०१६ 2007 2008 6.33 7.93 8.06 8.46 7.10 9.34 7.57 10.11 7.64 11.24 7.40 12.61 6.21 11.32 6.30 8.30 5.98 7.70 6.68 6.75 7.01 6.62 8,85 6.95 6.74 6.88 6.26 7.24 4.95 5.67 7.32 7.09 6.23 12.11 13.36 6.91 7.17 7.57 9.29 8.80 6.47 September December November October June May Suly

Sourcest/HS Cambridge Energy Résearch Associates; Platts Gas Delly historical data. Excel tables are available in the North American Natural Gas Client Services area at IMSCERA.com. Excel tables: Figures from 2005–August 2009 are derived from historical data as available; IMS CERA projections September 2009–forward.

average

Friday, October 30, 2009

Analysts differ sharply on 2010 gas price outlook

While two energy analysts agreed Thursday that the US gas market is gradually coming into balance, they expressed sharply different views on what effect that would have on prices.

Tudor Pickering Holt Managing Director <u>David Pursell predicted a sharp recovery in gas prices next</u> year, to an average of \$7.50/Mcf, due to the impact of drilling cuts and an economy-driven increase in demand.

David Pruner, Wood Mackenzie's head of global gas and power account management, <u>agreed that</u> <u>production cuts are keeping a floor under prices</u>, but he was more pessimistic about the pace of <u>economic recovery</u>, saying gas prices would average just \$4.85/Mcf next year.

"The US economy drives gas demand," Pruner told an audience of more than 400 at Platts' second annual Appalachian Gas Conference in Pittsburgh. Over the longer term, Pruner predicted that gas would trade in the \$5 to \$6.50/Mcf range for much of the next decade.

The good news for producers in the Marcellus Shale and similar unconventional gas plays is that the industry can still make money at those prices. Pruner said. "There are major cost reductions in shale," he said, adding that the industry's experience shows producers reducing their drilling costs by 25% as those plays mature and getting better at extracting gas from the rock formations.

"Costs will come down to about \$3 to \$4 million/well," he predicted, adding that the Marcellus' geographic location next to the gas-consuming Northeast corridor virtually guarantees that gas will sell at a premium to other markets.

Meanwhile, Pursell told the conference that cuts in the rig count have already trimmed 1 Bcf/d of onshore production and ultimately could reduce North American gas supply by 10% in 2010 — bolstering his projection of \$7.50/Mcf gas next year.

He said his analysis shows a further 5% drop in supply in 2011 and another 3% decline in 2012. That, combined with growing demand, underscored his prediction that gas will trade in the \$5 to \$8/Mcf range long-term.

Pursell said Tudor Pickering divides the US into 32 separate production regions and its analysis shows onshore conventional production is falling sharply, particularly in South Texas and the Rockies.

In contrast, production in the East region has doubled, driven by Marcellus Shale development, Pursell said. And shale will continue to contribute more to North America's gas supply each year, up to 21 Bcf/year by 2013, he predicted.

Pursell cautioned attendees that while stable prices are good news for low-cost production plays such as the Marcellus, "shales are tough," and full-scale development of the Marcellus and Haynesville will tax the industry's abilities in engineering and geology at a time when there are fewer energy engineers graduating from North American colleges. — *Bill Holland*

Tuesday, October 27, 2009

Denhardt raises Q1 price forecast, says normal winter won't tighten market

While weather will certainly play a role in gas prices during the heating season, one analyst said Friday that he strongly disagrees with those who say a normal winter will tighten the market and raise prices.

Ron Denhardt, vice president at Strategic Energy & Economic Research, said he has reviewed a number of models, and <u>most support the notion that if weather is normal, the heating</u> season will still end with record levels of gas in storage.

He estimates that 1.8 Tcf will be left in inventory at the end of March 2010 assuming a normal winter, compared to 1.656 Tcf last March and a five-year average of 1.486 Tcf. <u>Denhardt noted that there is "significant downside price risk with normal weather" due to the large storage inventory.</u>

However, Denhardt raised his own projection for the first-quarter 2010 average Henry Hub price to \$5.50/MMBtu from the \$4.80/MMBut he forecast a month ago, "because of the possibility of colder than normal weather and the impact of the flow of funds."

Until and unless there is strong downward pressure on the natural gas market because of the need to cycle storage in March, prices can increase substantially without any significant impact on the supply-demand balance," he said.

Denhardt said gas and oil prices are being supported by concerns about the loss in the value of the dollar, "in spite of the fact that the supply/demand balance for both markets is very loose." Gas prices are also finding support because of the possibility for a colder than normal winter, he added.

Denhardt said that when storage operators begin calling for mandatory drawdowns, it could put strong downward pressure on prices in March and possibly even February. A 5% change in heating degree-days causes about a 250 Bcf change in gas consumption during the heating season, he noted.

For the non-heating season, Denhardt said gas prices need to be high enough to increase drilling in order to assure sufficient gas storage by the end of next year. He noted that US gas productive capacity declined about 0.5 Bcf/d from the end of June through August, and will fall another 2 Bcf/d by the end of March 2010 — amounting to a 6% annual decline rate that is "well above historic experience."

With normal weather, non-heating season prices will have to average about \$5.75/MMBtu to balance the market, Denhardt said. — *Stephanie Seay*

Friday, November 13, 2009

Analyst: Rig count needs to rise 50% to meet impending demand increase

The number of rigs actively drilling in the US needs to grow by about 50% to meet a 1 Bcf/d annual gas demand increase expected to start next year, an industry analyst said Thursday.

"The industry is broken at 1,000 rigs total," Dave Pursell, managing director of Tudor, Pickering Holt, said at a meeting of the Houston chapter of the International Association of Energy Economics. "We think that in the near term, the current rig count is unsustainably low."

He said the industry needs about "1,500 rigs total to keep production up to meet a 1 Bcf/d per-year demand growth," Pursell said. And even that would be sharply below the number of rigs operating at the height of 2008's drilling boom.

"We don't need 2,350 total rigs drilling for oil and gas like we did last year," Pursell said. The increasing importance of shale gas as part of the overall US supply picture will mean the need for "fewer rigs in fewer places."

The analyst said his long-term price projection "is a lot lower" than the average prices seen in 2008. "An \$8[/Mcf] price is off the table," he said. "We're probably a little bit more optimistic on gas prices in the near term. As declines kick in and the market tightens, prices will go up."

Pursell estimated that 2010 gas production could decline by as much as 10% and drop another 5% in 2011 based on current drilling levels. "Gas prices have to rise to entice more drilling," he said.

Conventional onshore gas production has been on the decline since early this year, Pursell said, adding that producers are voluntarily curtailing volumes in two ways: by shutting in wells and by drilling wells but not completing them.

He noted that Gulf of Mexico gas production has declined by half in the last eight years, from 14 Bcf/d in 2001 to 7 Bcf/d today, while production from shale plays has increased from about 1 Bcf/d to between 7 Bcf/d and 8 Bcf/d over the same period — effectively offsetting the Gulf decline.

"People have left the Gulf because it's not a growth basin," Pursell said.

The increasing importance of shale gas has led to a dramatic increase in the number of horizontal wells drilled over the last eight years, Pursell said. In 2001, about 5% of all gas wells were drilled horizontally, while today that figure is closer to 50%.

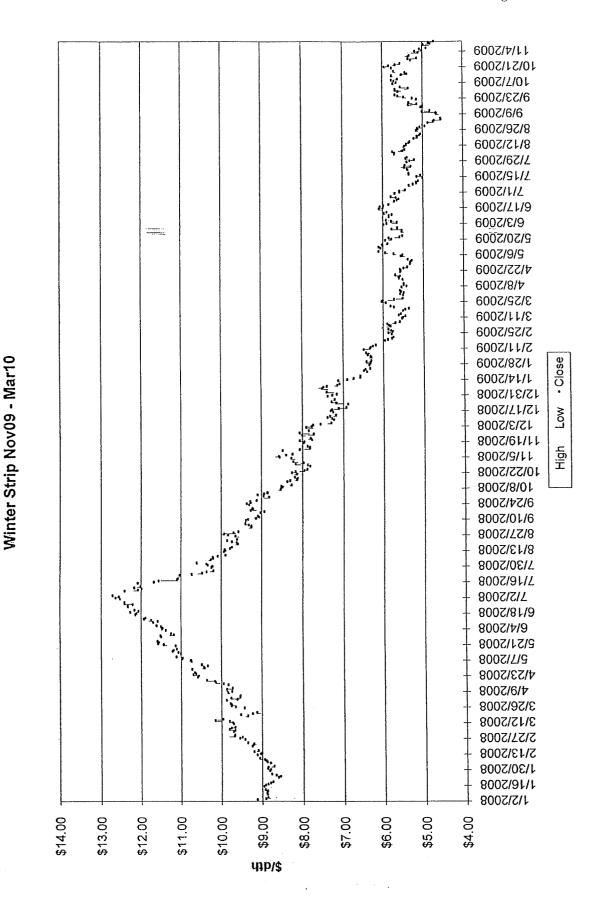
And as shale gas activity ramps up, "you almost double the number of horizontal rigs in shale plays from what we saw in September of last year," Pursell said.

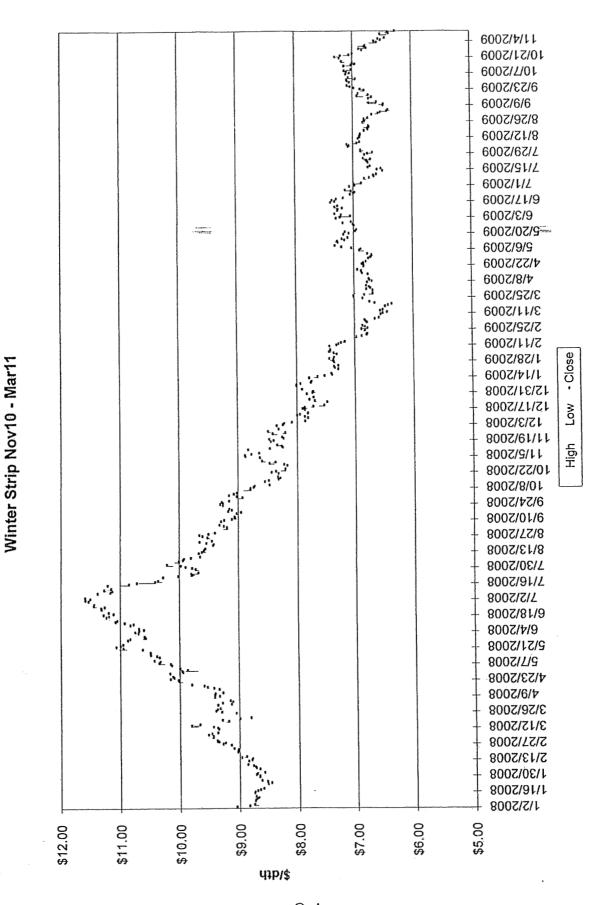
Producers will see drilling costs remain fairly low even as the rig count inches higher, Pursell predicted. "You'll tend to have the higher-horsepower rigs running, but the fact that you'll have 825 rigs sitting in the yard will be an anchor on day rates." — Jim Magill

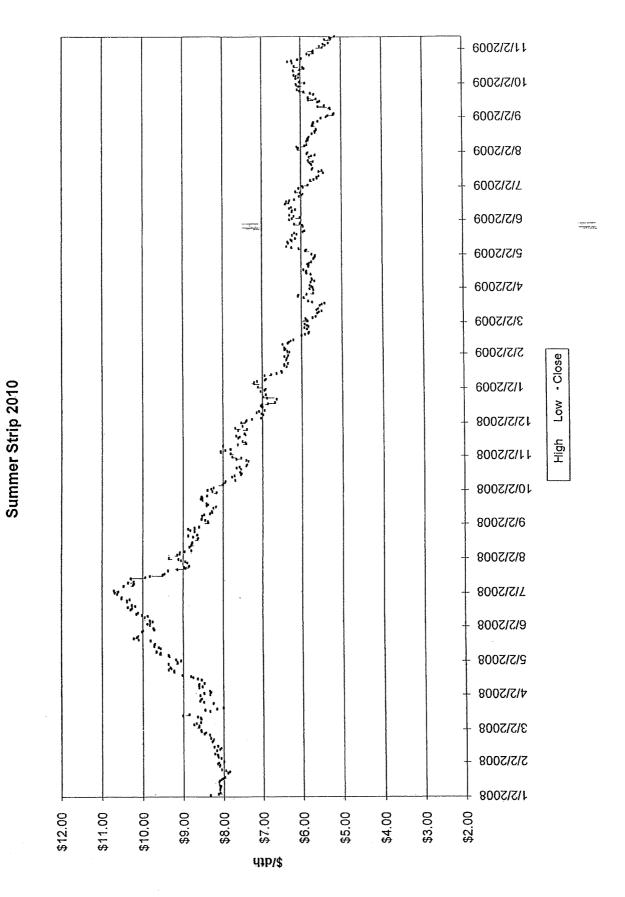
Case No. 2008-175 Attachment A Page 198 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu November 10, 2009 Release

Jan-08		7.99	Jan-09	5.24	Jan-10 4.77
Feb-08		8.54	Feb-09	4.51	Feb-10 4.88
Mar-08		9.41	Mar-09	3.96	Mar-10 4.76
Apr-08		10.18	Apr-09	3.49	Apr-10 4.79
May-08		11.27	May-09	3.83	May-10 4.67
Jun-08		12.69	Jun-09	3.80	Jun-10 4.55
Jul-08		11.09	Jul-09	3.38	Jul-10 4.48
Aug-08		8.26	Aug-09	3.14	Aug-10 4.41
Sep-08		7.67	Sep-09	2.97	Sep-10 4.56
Oct-08		6.74	Oct-09	4.00	Oct-10 4.99
Nov-08		6.68	Nov-09	4.10	Nov-10 5.50
Dec-08	,	5.82	Dec-09	4.50	Dec-10 6.00
Average			Average	 at per set follow who work may	Average
2008	\$	8.862	2009	\$ 3.910	2010 \$ 4.863
Summer 2008	\$	9.700	Summer 2009	\$ 3.516	Summer \$ 4.636
Winter 2008- 2009	\$	5.242	Winter 2009- 2010	\$ 4.602	







Short-Term Energy Outlook

November 10, 2009 Release (Next Update: December 8, 2009)

Natural Gas

U.S. Natural Gas Consumption. EIA projects total natural gas consumption to decline by 1.9 percent in 2009 to 62.2 billion cubic feet (Bcf) per day and by another 1.1 percent in 2010. While the broad economic downturn led to a drop in total consumption in 2009, low prices have contributed to a 2-percent increase in natural gas use in the electric power sector from January through August of this year compared with the same period in 2008. The recent increase in natural gas prices has contributed to a return to normal seasonal levels of natural gas consumption for electric power generation. EIA expects natural gas use in the electric power sector to remain near normal in the coming months as the onset of winter weather and the corresponding increase in spaceheating demand lead to higher prices.

A large decline in electric power sector consumption of natural gas in 2010 is projected to more than offset natural gas consumption growth in the residential, commercial, and industrial sectors. The anticipated addition of new coal-fired generating capacity combined with higher natural gas prices should reverse the coal-to-natural-gas switching trend that accounted for the large increase in electric-power-sector natural gas consumption this year.

U.S. Natural Gas Production and Imports. EIA expects total U.S. marketed natural gas production to increase by 2.8 percent in 2009 and decline by 3.8 percent in 2010. While working natural gas rigs have declined by more than 54 percent since cresting at 1,600 late in August 2008, marketed natural gas production in the Lower-48 non-Federal Gulf of Mexico has only declined by 0.6 percent between January and August. The natural gas rig count is on the rise again after bottoming out in mid-July 2009, according to Baker Hughes. Nonetheless, EIA still expects that the reduced drilling rates and steeper decline rates from new wells brought on stream in 2009 will lead to lower levels of production during 2010.

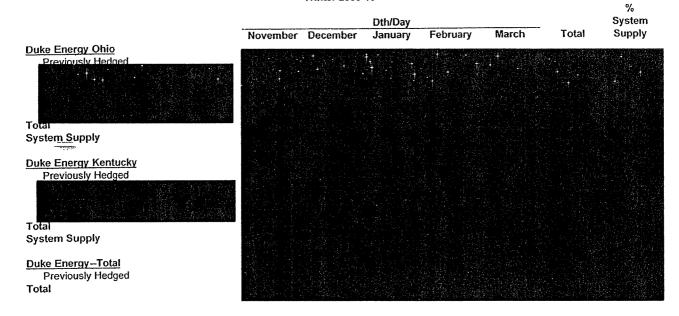
EIA expects pipeline imports of natural gas to decline by 13 percent in 2009 and 7 percent in 2010 based on lower expected production and higher consumption in Canada. Pipeline imports have averaged about 1 Bcf per day below year-ago levels all year, dropping considerably in the most recent months.

<u>U.S. liquefied natural gas (LNG) imports increase to about 470 Bcf in 2009 from 350 Bcf in 2008 and rise to about 660 Bcf in 2010 in this forecast.</u> Although winter weather in the Northern Hemisphere tends to increase global LNG demand and limit cargoes available for the United States, the recent start-up of new liquefaction projects in Qatar and Yemen may lead to higher U.S. LNG import flows before the year is out. The increased supply of LNG brought about by the start-up of several large LNG supply projects in late-2009 and in 2010 contributes to an increase in the outlook for U.S. LNG imports next year. However, the timing of these new liquefaction additions is extremely difficult to judge. In the past, projects have been delayed and postponed for significant lengths of time as a result of feedgas shortage and construction problems.

Global Crude Oil and Liquid Fuels

Global Petroleum Overview. Sustained economic growth in China and other Asian countries is contributing to the beginnings of a rebound in world oil consumption, leading EIA to revise its expectations for world oil consumption upwards for the second consecutive month, with consumption growth increased by 0.15 million barrels per day (bbl/d) for both 2009 and 2010 compared with the last Outlook. Although Organization for Economic Cooperation and Development (OECD) oil inventories (as measured in days-of-supply) remain high, optimism for a continued economic tumaround combined with the impact of Organization of the Petroleum Exporting Countries' (OPEC) production cuts have driven oil prices higher. However, if the economic recovery stalls and oil consumption does not rebound, oil prices could weaken given the high level of inventories.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Gas Commercial Operations Hedging Program Market Indicators Summary December 16, 2009

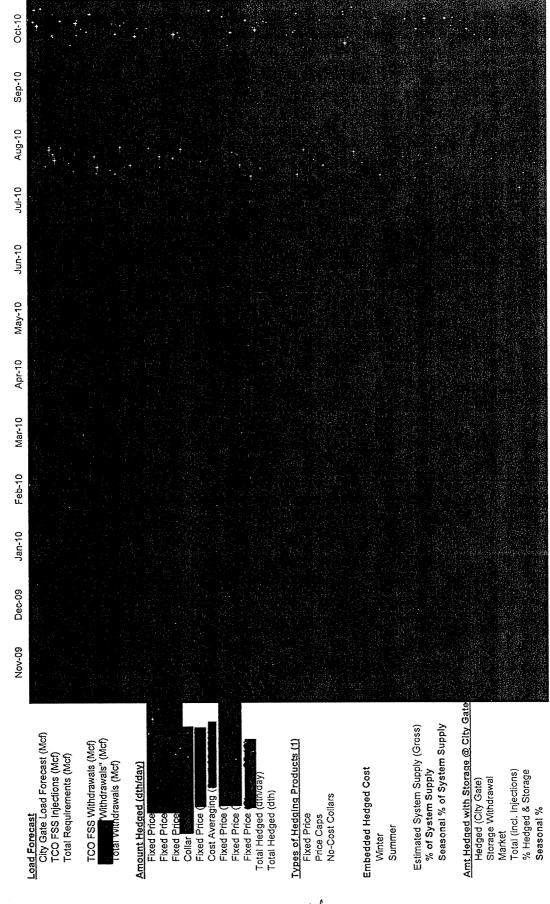
	Price Pressure	Term	Comments	Page Ref
Weather				
Long Term Forecast (Dec 09–Feb 10)	1	Long	NOAA predicting above average temperatures for Dec. 2009—Feb. 2010 for most of the continental United States with below normal temperatures in the south-eastern/central states.	10
Mid Term Forecast (30-60 days)	<u> </u>	Long	January predicted to be 4.5% colder than 10 year normal and January is predicted to be 6.0% colder than 10 year normal.	11
Short Term Forecast (6-10 days)	†	Short	Differing levels of Below temperatures dominating Canada and the United States for the 6 to 10 day period.	12
Tropical Storm Activity		Long	Atlantic hurricane season mildest since 1997 due to El Nino.	13
Storage Inventory				<u> </u>
EIA Weekly Storage Report	1	Long	Storage withdraws (1st of the season) for the week ending December 4th were 64 BCF. Storage levels are at 3.773 TCF which is 14.3% higher than last year and 15.7% higher than the 5 year average.	14
Industry Publications				
Cambridge Energy Research Associates Summer 2010: Winter 2009/10:	+	Long	Producers are maintaining drilling activity at a pace that promises, at best, modest volume reductions. CERA projecting MMBtu for 2009 and pr 2010.	15
Gas Daily		Long	Rising output from shale gas wells is offsetting production cuts from idled conventional rigs. Goldman Sachs forecasts 2010 NYMEX price to average \$6/MMBTU and \$6.50/MMBTU for 2011.	16
Gas Daily	ţ	Long	Falling marginal well costs and a bright future for shale plays mean most producers will continue drilling if gas prices remain at about \$5/Mcf. The bottom line is that long-term, the marginal US gas well cost curve will be pushed steadily lower over the next several years.	17
Gas Daily	1	Long	Gas production volumes will fall far less than expected because of increased output from shale plays. The decline in 2010 will be 2.4 Bcf/d, half of what some analysts have forecasted.	18
Government Agencies	- 			•
Energy Information Administration Summer 2010 : \$4.293 Winter 2009/10: \$4.218	†	Long	The projected Henry Hub annual average spot price is expected to increase from \$3.84 per MMBtu in 2009 to \$4.488 in 2010. Projected average household expenditures on natural gas total \$778 this winter, compared with \$889 last winter.	19
Technical Analysis				·
Winter 2009-10 Strip Chart	<u> </u>	Short	Closed at \$5.39.	20
Winter 2010-11 Strip Chart	<u> </u>	Short	Closed at \$6.70.	21
Summer 2010 Strip Chart	<u> † </u>	Short	Closed at \$5.64	22
Economy Demand		Long	EIA: Natural gas consumption is projected to decline by 1.9% in 2009 and 0.4% in 2010. A return to normal weather and expectations for economic growth are the drivers for consumption increases in residential, commercial and industrial sectors in 2010. A large decline in electric generation's consumption in 2010 is projected to more than offset consumption growth in the other sectors.	23-24
Supply	1	Long	EIA: Total U.S. marketed natural gas production is expected to increase by 3.7% in 2009 and fall by 3.1% in 2010. The recent dip in September production appears to be the result of shut-ins, maintenance, and pipeline constraints, as opposed to declining field productivity.	23-24
Oil Market	†	Long	Expectations of a continued global economic turnaround have buttressed oil markets, and this Outlook assumes world oil-consumption-weighted real GDP grows by 2.6% in 2010.	23-24

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

Attendees: Patty Walker, Jim Henning, Jeff Kem, Mitch Martin, Mike Brumback, and Steve Niederbaumer

Discussed the results of the two deals completed on November 17, 2009. In addition, discussed current market conditions including weather forecasts, storage levels and various analysts projections as well as EIA's forecasts for natural gas and oil markets. Based on the discussion, as well as the current position of the Hedging Program, no additional hedging is proposed.

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 12/15/09



Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 12/15/09

Oct-11 Sep-11 Aug-11 Jul-11 Jun-11 May-11 Apr-11 Mar-11 Feb-11 Jan-11 Dec-10 Nov-10 Amt Hedged with Storage @ City Gate Estimated System Supply (Gross) Seasonal % of System Supply City Gate Load Forecast (Mcf) Types of Hedging Products (1) TCO FSS Withdrawals (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf) Amount Hedged (dth/day) Fixed Price (Fixed Price (Control Hedged (dth/day) Total Hedged (dth/day) **Embedded Hedged Cost** % of System Supply % Hedged & Storage Total (incl. Injections) Hedged (City Gate) Storage Withdrawal No-Cost Collars Seasonal % Fixed Price Fixed Price Fixed Price Price Caps Load Forecast Summer Winter Collar

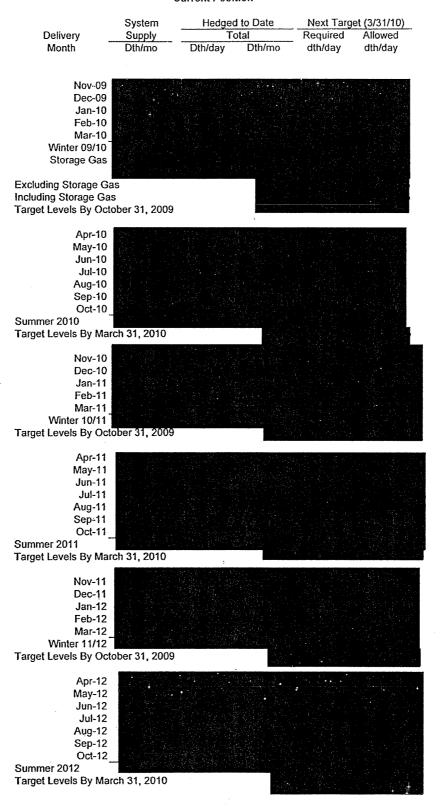
5

Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 12/15/09

Oct-12		+						,	•
Sep-12									
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	Load Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf)	TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf)	Amount Hedged (dth/day) Fixed Price (Fixed Price (TRD)	Total Hedged (dth/day) Total Hedged (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars	Embedded Hedged Cost Winter Summer	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections)	% Hedged & Storage Seasonal %
	Load F City TCC Tota	TOT Tot	Amoun Fixe Fixe	Total	Types Fix Pric No-	Embeo Wir Sur	Estin % c Sec	Amt Hy Hee Sto Ma	S. S. S.

(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

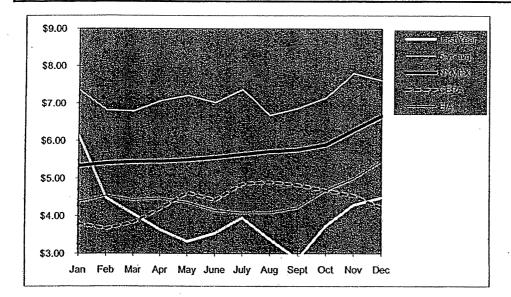
Duke Energy Kentucky Hedging Program Current Position

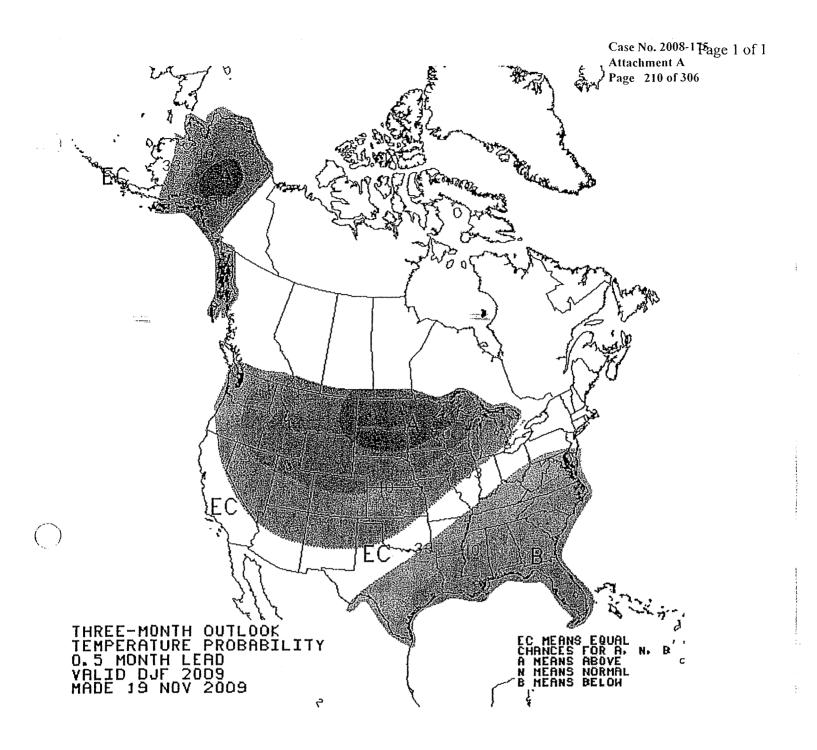


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES Page 209 of 306 TO CURRENT FUTURES PRICES

		Histor	ic Prices:				
		NYMEX CI	osing Price				
l		5-yr. avg.	Last Year		CERA	EIA	NYMEX
		(04/05-08/09)	(2008-2009)		24-Nov-09	8-Dec-09	16-Dec-09
					e elitar di		
	Jan	\$7.36	\$6.14			\$4.380	\$5.332
	Feb	\$6.82	\$4.48			\$4.540	\$5.402
	Mar	\$6.79	\$4.06		18.43	\$4.430	\$5.437
	Apr	\$7.06	\$3.63			\$4.470	\$5.452
	May	\$7.21	\$3.32			\$4.360	\$5.494
	June	\$7.02	\$3.54			\$4.150	\$5.555
	July	\$7.37	\$3.95			\$4.080	\$5.635
	Aug	\$6.68	\$3.38			\$4.090	\$5.712
	Sept	\$6.87	\$2.84			\$4.220	\$5.757
	Oct	\$7.15	\$3.73			\$4.680	\$5.892
	Nov	\$7.80	\$4.29			\$5.000	\$6.282
	Dec	\$7.62	\$4.49			\$5.460	\$6.662
12 Mo	nth Avg	\$7.14	\$3.99			\$4.488	\$5.718
	Summe	r Average		***************************************		\$4.293	\$5.642
	Winter A	verage			Salah K	\$4.762	\$5.823

Hedged	d Prices
Ohio	Kentucky
Onio	Rentucky



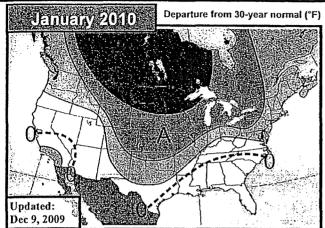




EarthSat's 30-60 Day Outlook

Wednesday, December 09, 2009

Forecaster: SS/BH/TH



R9577878782010 Departure from 30-year normal (°F) Updated: Dec 9, 2009

運翻 +0.5 to 0.9

翔+1.0 to +1.9

. 0

-0.1 to -0.4

魔剛 -0.5 to -0.9

-1.0 to -1.9

+2.0 to +2.9

≥3.0

-2.0 to -2.9

3.0 ≤3.0



Previous

Still favoring warmth overall

Low confidence forecast

Despite December panning out much colder than initially expected, there were very few changes to the January outlook. Only a few minor cool tweaks were made to the East. The past few months have alternated above and below normal, with a very cold October and (likely) December and a very warm November in between. The AO has generally followed suit, coming in largely negative throughout October, positive for the majority of November, and now negative through December. Blocking has turned out to be the main driver of the weather so far this month, with El Niño taking a backseat and allowing for Arctic intrusion into the US. The main question will be whether or not blocking will remain in the driver's seat through the winter or if El Niño will come back as the main player. Blocking has not shown a tendency to last more than 3-4 weeks at a time over the past several months, and if it does indeed break down we should see a more typical El Niño January with widespread warmth. However, given how things have played out thus far, confidence is low.

Jan GWHDD* Forecasts

*10Y Normal updated to 99-08

Jan 2010 Fcst:

956.0

10Y Normal* 914.9 30Y Normal 977.6 Jan-2009 1026.2

Change: +2.0

*National Gas-Weighted HDDs



Cold outlook continues in the East

Confidence remains low

February remains unchanged with a cold outlook still favored in the East and generally seasonal to warm weather in the West. Confidence in the forecast remains low due to the uncertainty of El Niño as a driver of the forecast. We had expected more of a back-loaded winter this year as most of the preferred El Niño analog years showed a pattern where Arctic air finally was allowed into the US, particularly the eastern half. Winter has started out colder than expected, but that doesn't discount the possibility that it will also end cold.

The map on the bottom right shows a historical composite of Februarys in El Niño years that are similar to the current and expected Pacific pattern. This pattern will become more likely if the north Atlantic blocking that we saw in October and December returns again, which would be possible given its periodicity of late.



Feb GWHDD* Forecasts

*10Y Normal updated to 99-08

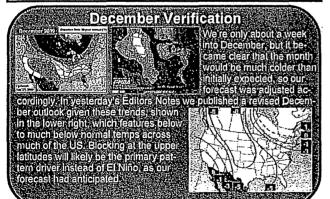
Feb 2010 Fcst:

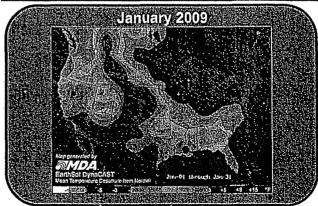
826.0

10Y Normal* 776.8 30Y Normal 789.5 Feb-2009 738.0

Change: +0.0

*National Gas-Weighted HDDs





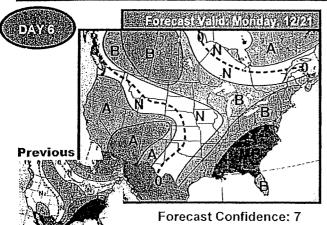


EarthSat's 6-10 Day Forecast-Detailed

Wednesday, December 16, 2009

Forecaster: BH/AC

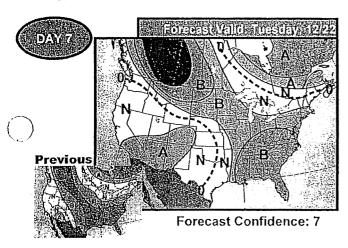
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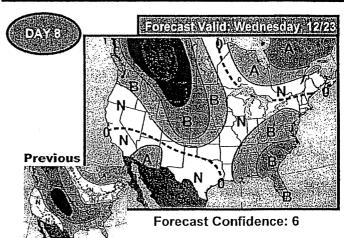


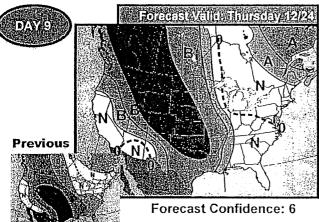
Today's Forecast:

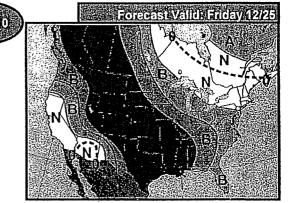
Mid-Continent Has Colder Potential Late Brief Warm Up Possible in MW & East

Overall, the cold pattern persists across much of the country, and models are in good agreement with this aside from some day-to-day details. The eastern portion of the nation still holds a cold risk with the potential for more much belows to be seen through Day 7. However, a warming trend is aiming to occur in the Midwest and East mid to late period. This short-lived warm up potential is depicted by the most recent European operational model. The next cold air mass diving through the Rockies for the second half of the period could bring a colder risk for the Mid-Continent late.









Forecast Confidence: 5

△ A +3F to +4F ☑ A +5F to +7F ☑ MA +8F to +14F ☑ SA +15 or Higher

3 B -3F to -4F 3 B -5F to -7F ■ MB -8F to -14F ■ SB -15 or Lower

Tuesday, December 1, 2009

Atlantic hurricane season mildest since 1997 due to El Niño: NOAA

The 2009 Atlantic hurricane season, which officially ended Monday, <u>had the fewest named storms</u> since 1997, thanks in part to El Niño conditions that developed in mid-summer, the National Oceanic and Atmospheric Administration said.

NOAA said nine named storms formed this year, including three hurricanes, two of which were major hurricanes of Category 3 strength or above. The agency said these numbers fall within the ranges predicted in its mid-season outlook issued in August, which called for seven to 11 named storms, three to six hurricanes, and one to two major hurricanes.

An average season has 11 named storms and six hurricanes, including two major hurricanes.

"The reduced activity was expected and reflects the development of El Niño during the summer," Gerry Bell, lead seasonal hurricane forecaster at NOAA's Climate Prediction Center, said in a statement. "El Niño produced strong wind shear across the Caribbean Sea and western tropical Atlantic, which resulted in fewer and shorter-lived storms compared to some recent very active seasons."

Two systems, Claudette and Ida, brought tropical storm force winds to the US mainland, the agency said, adding that for the first time in three years, no hurricanes hit the US.

"There were 38 hurricane hunter aircraft reconnaissance missions flown by NOAA and the US Air Force over the Atlantic Basin this year compared with 169 in 2008," in another indication of a less active season, NOAA said.

"El Niño is expected to reach peak strength this winter and will likely continue into the spring," Bell said, adding that it "is far too early to say whether El Niño will be present next summer."

NOAA will issue its initial 2010 Atlantic hurricane outlook in May, before the official start of the season June 1.

--- Jeff Barber

Natural Gas > Weekly Natural Gas Storage Report

Case No. 2008-175 Attachmen Cacin Glossapage 214 of 306

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

ssed: December 10, 2009 at 10:30 A.M. (eastern time) for the Week Ending December 4, 2009. Release: December 17, 2009

Working Gas in Underground Storage, Lower 48

						other formace: pu	THE PART AND
	Stocks	n billion cubic fe	eet (Bcf)		Historical	Comparisons	
Region	12/04/09	2/04/09 11/27/09	Change	Year Ago (12/04/08)	5-Year (2004-	2008) Average
	12/04/05	11/2//03	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change
East	2,061	2,092	-31	1,879	9.7	1,870	10.2
West	517	526	-9	465	11.2	436	18.6
Producing	1,195	1,219	-24	956	25.0	954	25.3
Total	3,773	3,837	-64	3,301	14.3	3,260	15.7

Notes and Definitions

Summary

Working gas In storage was 3,773 Bcf as of Friday, December 4, 2009, according to EIA estimates. This represents a net decline of 64 Bcf from the previous week. Stocks were 472 Bcf higher than last year at this time and 513 Bcf above the 5year average of 3,260 Bcf. In the East Region, stocks were 191 Bcf above the 5-year average following net withdrawals of 31 Bcf. Stocks in the Producing Region were 241 Bcf above the 5-year average of 954 Bcf after a net withdrawal of 24 Bcf. Stocks in the West Region were 81 Bcf above the 5-year average after a net drawdown of 9 Bcf. At 3,773 Bcf, total working gas is above the 5-year historical range.



other formats: Summary TXT_CSV

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

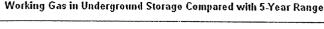
Revision Policy

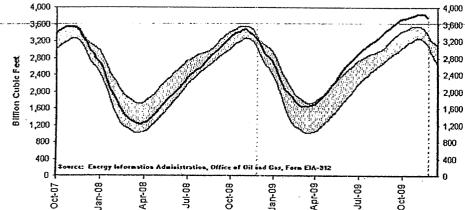
Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator

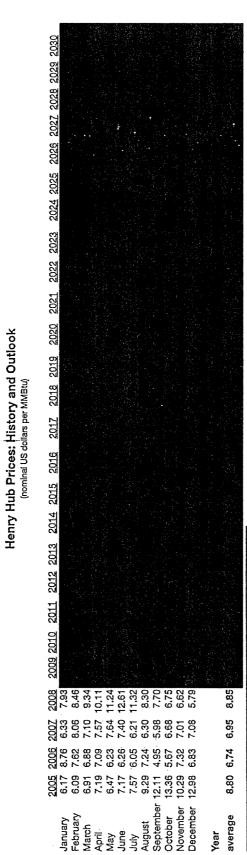




Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2004 through 2008. Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines indicate current and year-ago weekly periods.

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Table 1



Sources: IHS Cambridge Energy Research Associates, Platts *Gas Dally* historical data. Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com. Figures from 2005-August 2009 are derived from historical data as available; IHS CERA projections September 2009-forward.

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Friday, December 4, 2009

Goldman slices 21% off its 2010 gas price forecast

Rising output from shale gas wells is offsetting production cuts from idled conventional drilling rigs, Goldman Sachs said Thursday as it dropped its 2010 NYMEX gas price forecast 21% to an average of \$6/MMBtu.

The investment bank also delivered its first prediction for average 2011 prices —\$6.50/MMBtu — as it believes this year's steep rig count drop will finally begin to have an effect on the market.

"Much stronger-than-expected unconventional gas productivity has kept US natural gas production strong in 2009 despite a collapse in investment," a team headed by analysts Jeffrey Currie and Allison Nathan said in a note to clients.

They said the Energy Information Administration's September production data showing a 1.3 Bcf/d decline from August was driven by pipeline disruptions, not production shut-ins.

Fueling the increase in shale gas production are stronger-than-anticipated drilling efficiencies that lower costs and boost volumes, according to Goldman.

"Specifically, 12 months ago the expected production from the Haynesville for end-2009 was in the 400,000 Mcf/d range and the plans for pipeline expansions out of Louisiana implied incremental takeout capacity of approximately 500,000 Mcf/d," the report said.

"However, the September production data ... suggests the Haynesville is already producing in the 800,000 Mcf/d range and the required pipeline capacity has been built along with the growing production volumes."

As a result of those and other gains in unconventional production, Goldman now expects a 2.7 Bcf/d overall decline next year, vs. their earlier projection of 5.5 Bcf/d. The bank also said it expects another near-record or record level of gas in storage at the end of the 2010 injection season — 3.97 Tcf vs. its previous forecast of 3.66 Tcf.

The firm said it does not expect that volume to breach storage capacity, which it pegged at 4.05 Tcf.

While liquefied natural gas imports provide a theoretical cap on how high US gas prices can rise, the Goldman analysts think LNG will be a marginal player in the 2010 US market as producers overseas have reacted to lower prices worldwide by cutting their liquefaction rates from 81% to 78% — taking 1 Bcf/d off the global market.

Looking ahead to 2011, the Goldman team said it expects US production to continue declining slowly, by 900,000 Mcf/d, with unconventional gas still booming and conventional output sliding.

— Bill Holland

Tuesday, December 15, 2009

\$5 gas is enough to keep drilling: Raymond James

Falling marginal well costs and a bright future for shale plays mean most producers will continue drilling even if gas prices remain at about \$5/Mcf, analysts at Raymond James said in a report Monday.

"A combination of gas well high-grading, falling well costs and improving drilling efficiencies have combined to substantially lower the marginal gas well economics over the past year" by some 30% to 50%, the analysts said.

"Think to yourself: when was the last time you heard a public E&P company state that their projects need over \$6/Mcf for their play to make economic sense?" the report said. Since most companies exclude non-drilling costs when they calculate their internal rates of return, "we can argue until the cows come home whether that is right or not, but does it really matter if they are putting holes in the ground?"

While only about 15% of current US gas supply comes from the cheaper shale plays, five to seven years from now those plays could make up half of the nation's supply, said Raymond James' John Freeman and David Luke Eller. In the meantime, improved technologies and well high-grading will continue to improve the economics of all formations, they said.

"Simply put, the days of plays like the vertical Cotton Valley have probably already passed," the report noted. The lowest-return plays were eliminated when the rig count was cut in half, and many of those will eventually move toward horizontal drilling.

"In other words, what's the point of basing a long-term marginal cost for natural gas on plays that will not be around (or needed) anyway?"

The analysts said they feel "very confident that countless more natural gas shale plays will be discovered in North America. The bottom line is that long-term, the marginal US gas well cost curve will be pushed steadily lower over the next several years."

Another indication that drilling will continue even at \$5/Mcf is that many producers have been taking advantage of the gas contango to hedge their gas at higher prices in 2010.

"While the market might be terrified of a \$5 gas world, is a \$5 gas world really that bad for E&P producers? No!" the analysts insisted.

"In fact, most operators will earn a decent living in that environment and the others will adapt (horizontal drilling, recompletions, etc.) or fade away." — Stephanie Seay

Wednesday, December 16, 2009

Credit Suisse: Production to fall 'less than industry is predicting'

Despite a sharp drop in drilling activity, gas production volumes will fall far less than expected because of increased output from shale plays, analysts at Credit Suisse said Tuesday.

"We think that the level of production declines will be much less than the industry is predicting," Brad Handler, director of equity research of Credit Suisse US Oilfield Equipment and Services, said during a conference call. He estimated that the decline in 2010 will be 2.4 Bcf/d, about half of what some analysts have forecast.

Credit Suisse also predicted that the average number of active gas rigs will increase to 850 in 2010 and 2011 and to 900 in 2012. This year, rigs peaked in the first quarter at 1,018 and have averaged 789 year-to-date.

Arun Jayaram, vice president of equity research for the same Credit Suisse division, said <u>fewer rigs are</u> <u>necessary to keep production high because of new technology used in shale plays</u>. As a result, he said the historical relationship between drilling activity and production volumes began to break down in 2007.

"In 2006 and 2007, no matter how many rigs you threw at the situation it was almost impossible to grow production. That has changed," he said.

Credit Suisse estimated that the number of horizontal rigs will increase to 750 in 2012, or 56% of the total. "It wouldn't surprise us if the gas activity ended up being two-thirds horizontal," Handler said.

He noted that in the first quarter of 2007, horizontal rigs accounted for just 20% of domestic gas production.

- Eunice Bridges

Case No. 2008-175 Attachment A Page 219 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu December 8, 2009 Release

Jan-08		7.99
Feb-08		8.54
Mar-08		9.41
Apr-08		10.18
May-08		11.27
Jun-08		12.69
Jul-08		11.09
Aug-08		8.26
Sep-08		7.67
Oct-08		6.74
Nov-08		6.68
Dec-08		5.82
Average		, e i e en er e en en en en en
2008	\$	8.862
Control of the Contro	** 1 *** 1.4	Andrew Stranger and Company and Company
Summer		
2008	\$	9.700
	Age trade for John	
Winter 2008- 2009	\$	5.242

Jan-09	5.24
Feb-09	4.51
Mar-09	3.96
Apr-09	3.49
May-09	3.83
Jun-09	3.80
Jul-09	3.38
Aug-09	3.14
Sep-09	2.97
Oct-09	4.00
Nov-09	3.66
Dec-09	4.08

Jan-10	4.38
Feb-10	4.54
Mar-10	4.43
Apr-10	4.47
May-10	4.36
Jun-10	4.15
Jul-10	4.08
Aug-10	4.09
Sep-10	4.22
Oct-10	4.68
Nov-10	5.00
Dec-10	5.46

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2009	\$	3.516

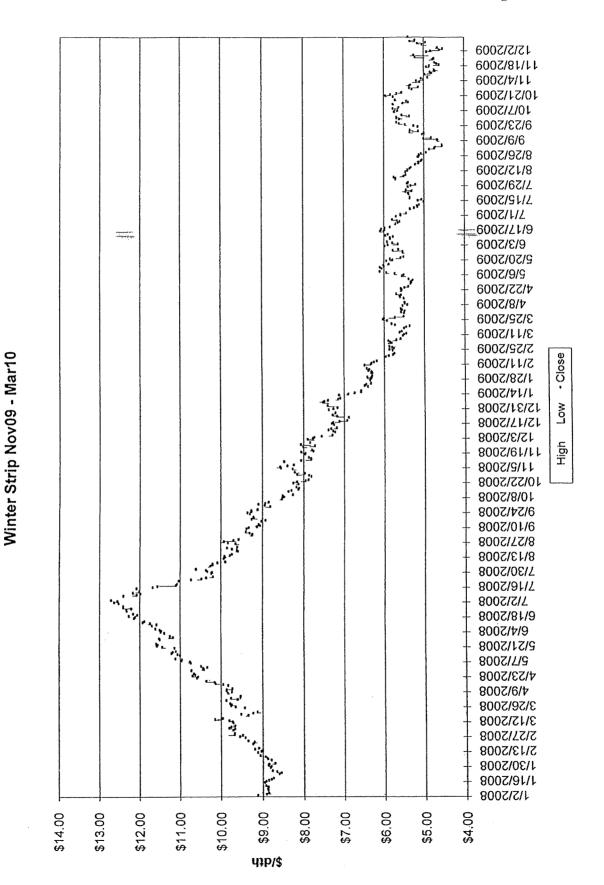
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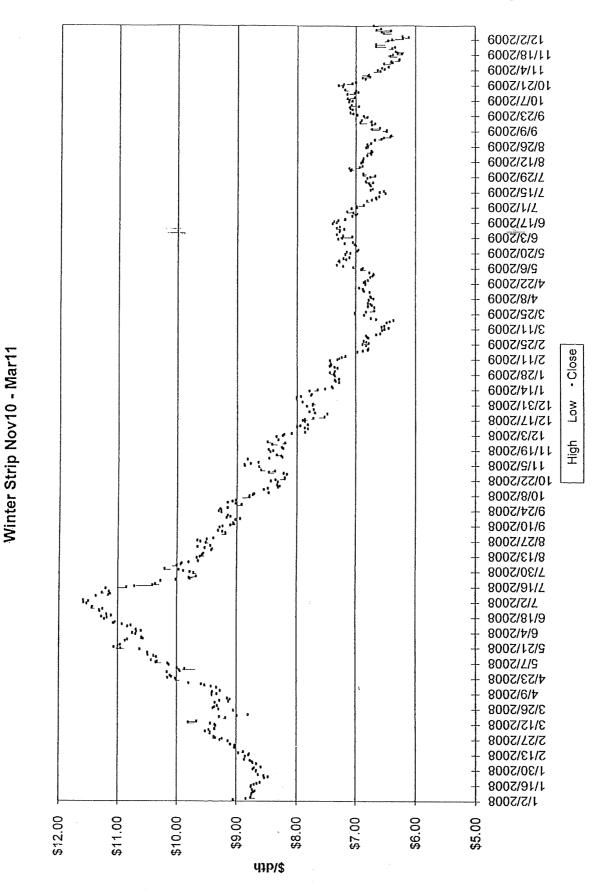
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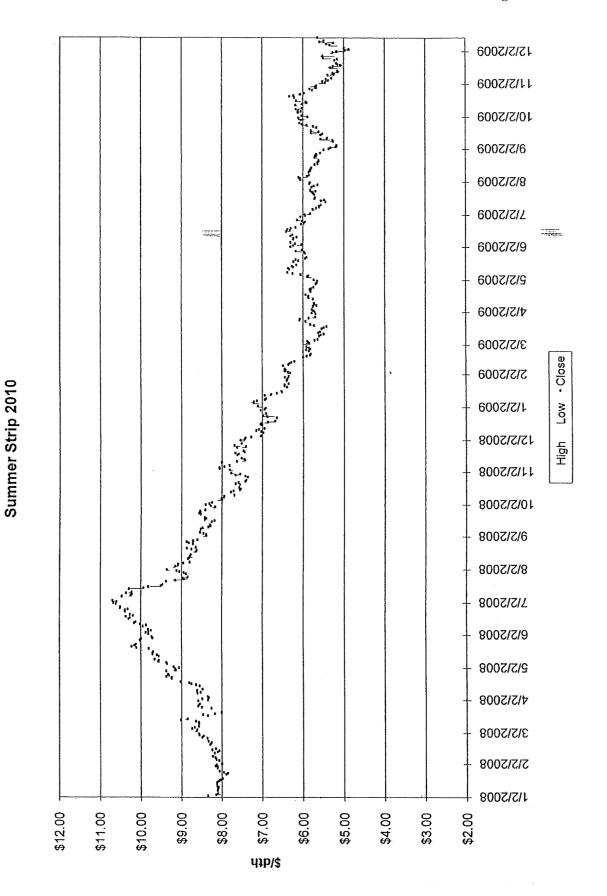
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Short-Term Energy Outlook

December 8, 2009 Release (Next Update: January 12, 2010)

Natural Gas

U.S. Natural Gas Consumption. EIA expects total natural gas consumption will decrease by 1.9 percent in 2009 and by an additional 0.4 percent in 2010. A steep decline in demand by the industrial sector, and smaller but significant declines in the residential and commercial sectors, have been partially offset by consumption growth in the electric power sector this year. Low natural gas prices relative to coal caused substantial switching to natural gas for baseload electric power generation throughout most of 2009. However, in recent weeks, natural-gas-fired generation has been closer to year-ago levels because of the seasonal increase in natural gas prices and the decrease in coal prices driven by historically high coal stocks. In addition, warmer-than-normal weather over the eastern United States during November depressed seasonal space-heating demand in the residential and commercial sectors. This weaker consumption is evident in natural gas working inventories, which increased by an estimated 9 billion cubic feet (Bcf) during November compared with the previous 5-year average decline of about 57 Bcf over the month.

A return to normal weather and expectations for economic growth are the primary drivers in EIA's forecast for consumption increases in the residential, commercial, and industrial sectors in 2010. However, EIA still expects total consumption to fall as higher natural gas prices contribute to some reversal of the coal-to-natural-gas switching that took place in the electric power sector during 2009.

U.S. Natural Gas Production and Imports. EIA expects total marketed natural gas production will increase by 3.7 percent in 2009, followed by a decline of 3.1 percent in 2010. Minimal hurricane disruptions and significant growth in production from onshore shale basins have contributed to the increase in domestic supply this year, despite a nearly 60-percent decline in the working natural gas rig count from September 2008 to July 2009. According to Baker Hughes, the working natural gas rig count is currently 748, up 83 from the low of 665 this past July. Although marketed production in the Lower-48 non-Federal Gulf of Mexico has declined since peaking in February 2009, the recent dip in September production appears to be the result of shut-ins, maintenance, and pipeline constraints, as opposed to declining field productivity. Production volumes are expected to have recovered in October and November. Shorter completion times and enhanced well productivity in shale basins contributed to sustained higher production levels amidst a dramatically lower rig count in 2009.

U.S. pipeline imports averaged about 9 Bcf/d through the first 9 months of 2009, compared with 9.9 Bcf/d during the same period last year. Lower drilling activity and natural gas production in Canada have contributed to reduced pipeline import flows this year. EIA expects pipeline imports to fall by 12 percent for the year. The persistence of low rig counts in Canada leads to lower expected Canadian natural gas production and lower U.S. pipeline imports next year. Offsetting a portion of the decline in pipeline imports, U.S. liquefied natural gas (LNG) imports increased in 2009, averaging about 1.3 Bcf/d through September compared with almost 1.0 Bcf/d during the same period last year. Imports rose, albeit from very low levels in 2008, as new global liquefaction capacity added to supply while global LNG demand suffered under the economic crisis. EIA expects that U.S. LNG imports will increase to 1.7 Bcf/d in 2010 with the expected completion of additional global LNG supply projects, although the start-up dates for supply additions have historically been subject to delay.

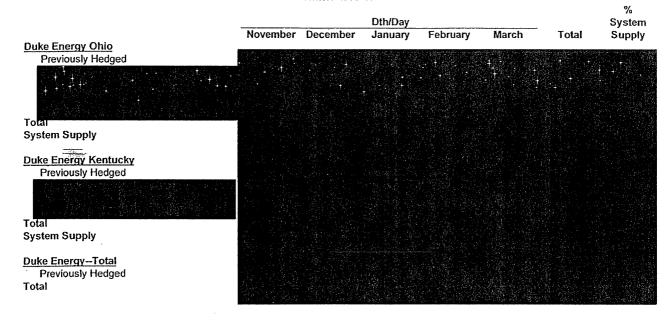
U.S. Natural Gas Inventories. On November 27, 2009, working natural gas in storage was 3,837 Bcf, 487 Bcf above the 5-year average (2004–2008) and 470 Bcf above the level during the corresponding

week last year. Assuming a storage withdrawal between the end of November and the end of March about 6.1 percent (113 Bcf) greater than the previous 5-year average for that period, end-of-winter (March 31, 2010) stocks will be about 1,845 Bcf. This would be the highest end-of-winter storage level since 1991, when inventories measured 1,912 Bcf.

Global Crude Oil and Liquid Fuels

Global Petroleum Overview. As 2009 draws to a close and the Organization of the Petroleum Exporting Countries (OPEC) prepares to meet again at the end of the month, it faces a global oil market that has firmed up in response to production cuts that began to take effect in January 2009. Although OPEC compliance with the cuts has weakened and global oil inventories remain very high by historical standards, WTI oil prices averaged \$78 per barrel in November, continuing their generally upward trend since February. Expectations of a continued global economic turnaround have buttressed oil markets, and this Outlook assumes world oil-consumption-weighted real GDP grows by 2.6 percent in 2010, following a decline of 0.7 percent in 2009. EIA's expectation is that OPEC crude oil output in 2010 will hold at roughly fourth-quarter 2009 levels of under 30 million barrels per day.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Gas Commercial Operations Hedging Program Market Indicators Summary January 25, 2010

	Price Pressure	Term	Comments	Page Ref	
Weather					
Long Term Forecast (Feb 10-Apr 10)		Long	NOAA predicting above average temperatures for Feb. 2010–Apr. 2010 for the northern portion of CONUS with below normal temperatures in the southern portion, normal temperatures are forecasted in the middle. Private forecaster WSI predicts February through April to be colder than normal in East.	10-11	
Mid Term Forecast (30-60 days)	1	Long	February predicted to be 2.6% colder than 10 year normal and March is predicted to be 4.5% colder than 10 year normal.	12	
Short Term Forecast (6-10 days)	†	Short	Below temperatures in central and eastern portions of Canada and the United States early in the period being followed by below temperatures in west and central portions of continent.	13	
Storage Inventory					
EIA Weekly Storage Report	†	Long	Storage withdrawals for the week ending January 15th were 245 BCF. Combined with last weeks 266 BCF withdrawal, the two week withdrawal of 511 BCF is the highest two-week withdrawal on record. Storage levels are at 2.607 TCF which is 0.9% higher than last year and 0.2% lower than the 5 year average.	14	
Industry Publications					
Cambridge Energy Research Associates Summer 2010: \$ Winter 2009/10:	1	Long	Producers are maintaining drilling activity at a need that promises, at best, modest volume reductions. CERA projecting \$400 /MMBtu for 2010 and for 2011.	15	
Gas Daily	†	Long	US gas production today faces a greater risk of freeze-offs than in the past because production growth is taking place farther north.	16-18	
Gas Daily	1	Long	Frigid winter weather, coal recovers recover market share lost in 2009, growth in domestic gas supply and more LNG flowing to US possible 20 surprises.		
Gas Daily	1	Long	US gas production data from October suggests that most of the price at economy driven production declines have already occurred.		
Gas Daily	+	Long	Surging shale production, rising LNG imports and an increase in coal-fired power generation will all conspire to cut into any temporary price gains.	22	
Government Agencies					
Energy Information Administration Summer 2010: \$4.950 Winter 2009/10: \$5.040	+	Long	The projected Henry Hub annual average spot price is expected to increase from \$3.943 per MMBtu in 2009 to \$5.208 in 2010. The price will continue to increase in 2011, averaging \$5.94 per MMBtu. Enhanced domestic production capabilities and slow consumption growth are expected to keep prices from rising dramatically through 2011.	23	
Technical Analysis					
Winter 2009-10 Strip Chart	4	Short	Closed at \$5.59.	24	
Winter 2010-11 Strip Chart	←→	Short	Closed at \$6.57.	25	
Summer 2010 Strip Chart	←→	Short	Closed at \$5.71.	26	
Economy					
Demand		L.ong	EIA: Natural gas consumption is projected to decline by 1.5% in 2009. In 2010, natural gas consumption is forecast to remain relatively unchanged. 2010 gas consumption by the electric power sector is expected to decline 2.8% which will be offset by growth in the residential, commercial and industrial sectors.	27-28	
Supply	1	Long	EIA: Total U.S. marketed natural gas production is expected to increase by 3.7% in 2009 and fall by 3.0% in 2010 resulting from declines from initial production at new wells and the lagged impact of reduced drilling. EIA expects production to increase by 1.3% in 2011.	27-28	
Oil Market Long economic recovery continu which averaged \$62 per ba			The world oil market should tighten in 2010 and 2011, provided that global economic recovery continues as projected. EIA expects WTI crude oil, which averaged \$62 per barrel in 2009, will average about \$80 and \$84 per barrel in 2010 and 2011, respectively.	27-28	

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

Attendees: Jeff Kern, Jim Henning, Patty Walker, Mike Brumback, Milch Martin, Joachim Fischesser, Steve Niederbaumer
Discussed the current market fundamentals including weather, storage levels (storage level projected at end of the withdrawal season), supply and demand and analyst thoughts on the current gas marke概回识接已付tions. In addition, discussed DEO and DEK's hedging programs and the amount of gas currently hedged within those programs. Discussed timing issues around Texas Gas storage and the Summer injection program. Determined that based on levels currently hedged in Ohio and Kentucky as well as fundemental factors no additional hedging activity is necessary at this time.

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 01/25/10

Oct-10											
Sep-10											4
Aug-10											•
Jul-10											
Jun-10											
May-10											
0 Apr-10											
10 Mar-10											
-10 Feb-10											
Dec-09 Jan-10											
Nov-09 Dec											
ž			e) Iine					ate		Gate	
	orecast (Mcf) ins (Mcf) its (Mcf)	awals (Mcf) awals" (Mcf) s (Mcf)	h/day) 18.475 Mainline 17.70 Mainline) 187.3725 Mair		fay)	roducts (1)	Cost	Dth at City Ga	Supply (Gross) pply ystem Supply	orage @ City te) val	ons) age
Load Forecast	City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf)	TCO FSS Withdrawals (Mcf) "Withdrawals" (Mcf) Total Withdrawals (Mcf)	Amount Hedged (dth/day) Fixed Price (BP \$8.475 Mainline) Fixed Price (BP \$7.70 Mainline) Fixed Price (Shell \$7.3725 Mainline)	Collar Fixed Price (Cost Averaging (Served Price Fixed Price Fixed Price Fixed Frice Fixed Price Fixed Price Fixed Price Fixed Frice Frice Fixed Frice Fixed Frice Fixed Frice Fixed Frice Fixed Frice	Fixed Price Total Hedged (dth/day) Total Hedged (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars	Embedded Hedged Cost Winter Summer	Estimated EGC per Dth at City Gate	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal	Mancel Total (incl. Injections) % Hedged & Storage Seasonal %
Load	15 T	101	Amour Fix Fix	8 2 8 2 2	Fix Total Total	Types Fix Pu	Ember Wii Su	Estim	Estin % Se	Amt H He Stc	S. C. S. S.

(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 01/25/10

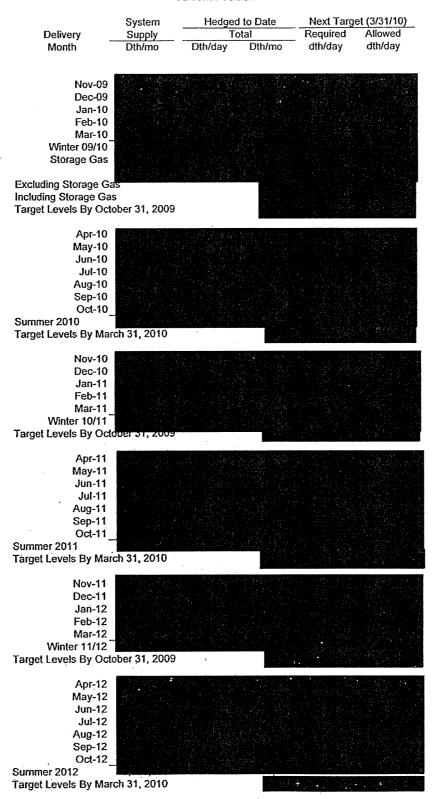
Oct-11 Sep-11 Aug-11 Jul-11 Jun-11 May-11 Apr-11 Mar-11 Feb-11 Jan-11 Dec-10 Nov-10 Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Estimated EGC per Dth at City Gate Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply City Gate Load Forecast (Mcf) TCO FSS Withdrawals (Mcf) Types of Hedging Products (1) TCO FSS Injections (Mcf) Total Requirements (Mcf) Other "Withdrawals" (Mcf) Amount Hedged (dth/dav)
Fixed Price
Fixed Price: Total Withdrawals (Mcf) Embedded Hedged Cost Total (incl. Injections) %:Hedged & Storage Seasonal % Total Hedged (dth/day) Total Hedged (dth) Price Caps No-Cost Collars Collar Fixed Price Fixed Price Fixed Price Load Forecast Summer Market Winter

Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 01/25/10

Jul-12 Aug-12 Sep-12 Oct-12		• 1		
Jun-12				
May-12				
2 Apr-12				
2 Mar-12				
12 Feb-12				
-11 Jan-12				
Nov-11 Dec-11				
No.				<u>ato</u>
Load Forecast City Gate Load Forecast (Mcf) TOO FSS Injections (Mcf) Total Requirements (Mcf) TCO FSS Withdrawals. (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals" (Mcf)	Amount Hedged (dth/dax) Fixed Price Fixed Price TBD Total Hedged (dth/day)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars Winter Summer	Estimated EGC per Dth at Clty Gate Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate): Storage Withdrawal Market Total (incl. Injections) % Hedged & Storage Seasonal %

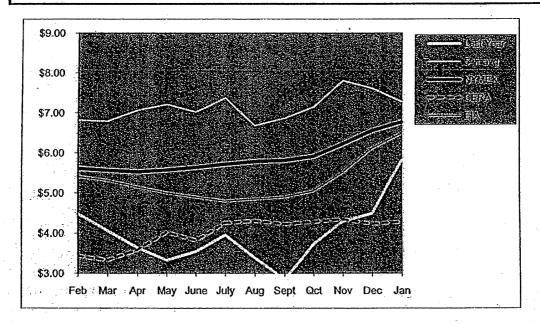
(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

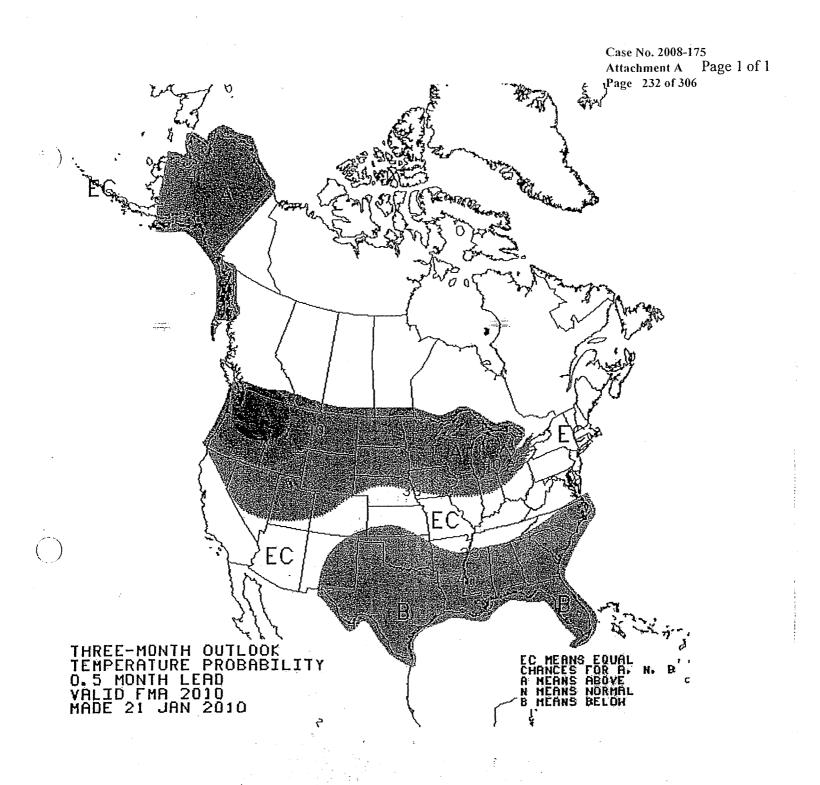
Duke Energy Kentucky Hedging Program Current Position



COMPARISON OF HISTORIC SPOT & PROJECTED PRICES TO CURRENT FUTURES PRICES

		ic Prices:				
	<u></u>	osing Price	r	r		
	5-yr. avg.	Last Year		CERA	EIA	NYMEX
	(05/06-09/10)	(2009-2010)		23-Dec-09	12-Jan-10	22-Jan-10
Feb	\$6.82	\$4.48			\$5.410	\$5.615
Mar	\$6.79	\$4.06		\$ to keep	\$5.320	\$5.568
Apr	\$7.06	\$3.63			\$5.150	\$5.529
May	\$7.21	\$3.32			\$5.000	\$5.575
June	\$7.02	\$3.54			\$4.900	\$5.640
July	\$7.37	\$3.95			\$4.800	\$5.717
Aug	\$6.68	\$3.38			\$4.850	\$5.784
Sept	\$6.87	\$2.84			\$4.900	\$5.814
Oct	\$7.15	\$3.73			\$5.050	\$5.914
Nov	\$7.80	\$4.29			\$5.520	\$6.224
Dec	\$7.62	\$4.49			\$6.120	\$6.554
Jan	\$7.28	\$5.81			\$6.490	\$6.769
12 Month Avg	\$7.14	\$3.96			\$5.293	\$5.892
Summe	er Average		······································		\$4.950	\$5.710
Winter A	\verage				\$5.772	\$6.146





Thursday, January 21, 2010

February through April to be colder than normal in East: WSI

The eastern two-thirds of the US can generally expect colder-than-normal weather in the next three months, private forecaster WSI said late Wednesday, with warmer than-normal weather expected in the West.

"After a brief respite from the bitter cold in late January, this rather extreme winter appears to be gearing up for an encore in February," said WSI Chief Meteorologist Todd Crawford. "All of the important weather and climate factors that we monitor suggest winter will be coming back with a vengeance in February. This transition back to colder temperatures is already showing up in two-week forecasts from our computer models, lending more confidence to the colder forecast trend."

For the February-April period as a whole, "we are forecasting 1,863 gas-weighted heating degree-days on a national basis, which is approximately 8% more than last year and about 2% more than the 1971-2000 mean."

For February alone, WSI expects colder-than-normal weather in every part of the US, particularly in the North Central, Rockies and Southeast regions.

In accompanying market analysis, consulting firm ESAI said the forecast portends more gas price volatility and potential constraints in the Northeast, and "significant" drawdowns to the current gas storage surplus.

In March, only the Northwest and Southwest regions are expected to be warmer than normal.

ESAI's Paul Flemming, director of power and gas, said the market should look for the possibility of late season gas demand that month as nuclear power plants typically go down in March for routine maintenance.

For April, WSI said only the Southeast and South-Central states can expect colder than normal weather. The result should be more moderate gas demand as the heating season draws to a close, Flemming said.

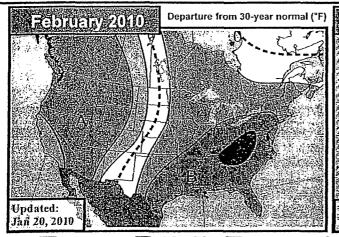
- Stephanie Seav



EarthSat's 30-60 Day Outlook

Wednesday, January 20, 2010

Forecaster: SS/BH/TH



Departure from 30-year normal (°F) Jan 20, 2010

+0.1 to +0.4

圖 +0.5 to 0.9

國 +1.0 to +1.9

-0.1 to -0.4

國 -0.5 to -0.9 ≤3.0

-1.0 to -1.9

+2.0 to +2.9

≥3.0

-2.0 to -2.9



Cold scaled back across the Northeast

Will cold be based further west?

Some changes were made to the February outlook, mostly backing the idea of bringing the cold a bit further west and showing warmer trends in the Northeast. At this point we feel that there are two main risks to the forecast (illustrated bottom right). The first risk is that the AO and the NAO turn sharply negative again. If this occurs, the question is where will the resulting cold air be placed. We think that the -NAO would be more west-based, allowing cold air to spill into the mid-continent rather than the East. This makes sense given that cold outbreaks have been focused primarily in the central US over the past several months. The second risk is that ENSO wins out and we see ENSO climatology with warmth in the northern tier and cold in

the South. This risk seems to be less likely, though the recent heavy rains in the West give reason to think that the "normat" El Nino effects might finally be occurring. Our outlook resembles a split between these two risks.

Feb GWHDD* Forecasts

*10Y Normal updated to '00-09

Feb 2010 Fcst:

803.0

10Y Normal* 783.0 30Y Normal 789.5 Feb-2009 738.0

Change: -5.0

*National Gas-Weighted HDDs



More belows across the Southern Plains

Warmer in the Pacific Northwest

The March outlook is a bit cooler overall with more widespread belows across the southern Plains and more marginal belows in the Tennessee and Ohio Valleys. Some minor warmer changes were seen in the Great Lakes. The colder changes are contingent upon the timing of the expected return of colder weather across the US in February. Cold events over the past several months have generally had a 4-6 week window of occurring, notably from the end of Sept to the end of Oct, and from the end of Nov to the beginning of Jan. This has generally been followed by a 4-6 week cycle of warmth (this was touched upon in yesterday's Editors Notes). Assuming such a trend continues, if the cold trend in February begins sooner than expected, the latter part of March could potentially turn warmer. On the other hand, if cold is delayed until the latter part of February it could last through the duration of

Mar GWHDD* Forecasts

*10Y Normal updated to '00-09

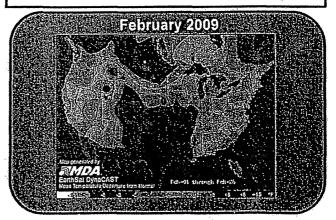
Mar 2010 Fcst: 644.0

10Y Normal* 616.1 30Y Normal 634.7 Mar-2009 605.2

Change: +2.0

*National Gas-Weighted HDDs





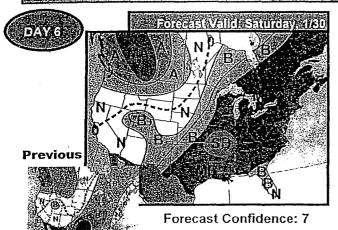


EarthSat's 6-10 Day Forecast-Detailed

Monday, January 25, 2010

Forecaster: BH/AC

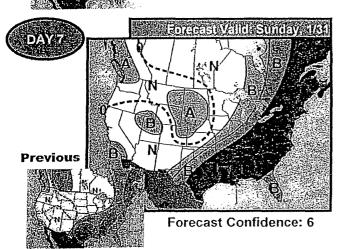
Forecasi Temperature Deviations



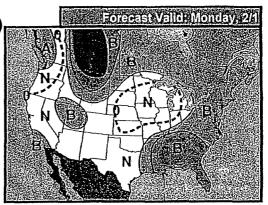
Today's Forecast:

More Strong Belows Possible Early
Faster Warm Up For Plains, Midwest By Mid-Period

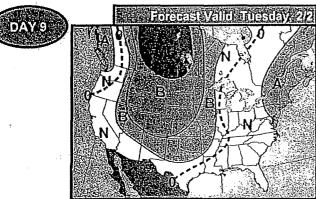
Stronger cooling could occur across the Midwest & South at the start of the period with more widespread strong below normal readings possible on Day 6. However, this cold risk is short-lived as temperatures rebound across the Midwest for the mid-period, which might lead in a few above normal readings. This warmth transfers over to the Northeast by the latter part of the period. As a result, a warm risk is still attached, with more widespread and stronger aboves possible for the region. Meanwhile, the next cold air shot diving into central Canada by period's end may contain more much belows, and this could be sent into the Upper Midwest by the end of the period.





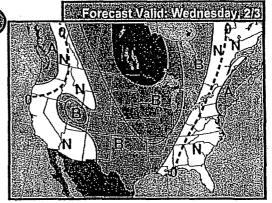


Forecast Confidence: 6



Forecast Confidence: 5

DAY 10



Forecast Confidence: 5

Case No. 2008-175

Attachment A

Glossary

Release Schedule Sign Up for Email Updates

Page 1 of 1

Independent Statistics and Analysis

> Natural Gas > Weekly Natural Gas Storage Report

Weekly Natural Gas Storage Report

sed: January 21, 2010 at 10:30 A.M. (eastern time) for the Week Ending January 15, 2010. Next Release: January 28, 2010

Working Gas in Underground Storage, Lower 48

	Stocks i	n billion cubic fe	et (Bcf)	1	. Historical Comparisons					
Region	01/15/10	01/08/10	Change	Year Ago (01/15/09)	5-Year (2005-2009) Average				
	01/15/10	01/00/10	Спануе	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change -3.8			
East	1,401	1,532	-131	1,361	2.9	1,457	-3.8			
West	396	414	-18	362	9.4	341	16.1			
Producing	81,0	906	-96	862	-6.0	815	-0.6			
Total	2,607	2,852	-245	2,585	0.9	2,613	-0.2			

Notes and Definitions

Summary

Working gas in storage was 2,607 Bcf as of Friday, January 15, 2010, according to EIA estimates. This represents a net decline of 245 Bcf from the previous week. Stocks were 22 Bcf higher than last year at this time and 6 Bcf below the 5year average of 2,613 Bcf. In the East Region, stocks were 56 Bcf below the 5-year average following net withdrawals of 131 Bcf. Stocks in the Producing Region were 5 Bcf below the 5-year average of 815 Bcf after a net withdrawal of 96 Bcf. Stocks in the West Region were 55 Bcf above the 5-year average after a net drawdown of 18 Bcf. At 2,607 Bcf, total working gas is within the 5-year historical range.



other formats: Summary TXT CSV

History (XLS)

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

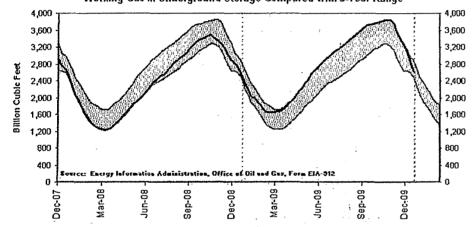
Revision Policy

Related Links

Storage Basics

Natural Gas Weekly Update Natural Gas Navigator

Working Gas in Underground Storage Compared with 5-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2005 through 2009. Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines Indicate current and year-ago weekly periods.

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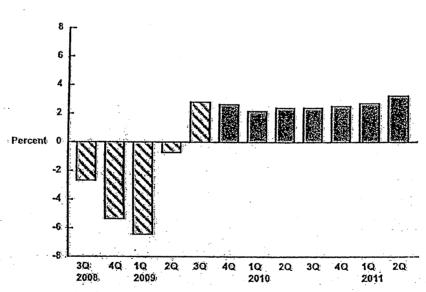
Table 1 Henry Hub Prices: History and Outlook (nominal US dollars per MMBtu)



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
January	6.17	8.76	6.33	7.93		ing £ 5	Str. N				4			
February	6.09	7.62	8.06	8.46			†		· 1					
March	6.91	6.88	7.10	9.34	1		* + † .		egargi esti					对激的人
April	7.19	7.09	7.57	10.11										
May	6.47	6.23	7.64	11.24										
June	7.17	6.26	7.40	12.61										
July	7.57	6.05	6.21	11.32										
August	9.29	7.24	6.30	8.30										
September	12.11	4.95	5.98	7.70										
October	13.36	5.67	6.68	6.75	1									
November	10.29	7.32	7.01	6.62	14.									
December	12.98	6.83	7.08	5.79										
Year average	08.8	6.74	6.95	8.85										

Sources: IHS CERA, Platts Gas Daily historical data. Excel tables are available in the North American Natural Gas Client Services area at IHSCERA.com. Figures from 2005-November 2009 are derived from historical data as available; IHS CERA projections are for December 2009 forward.

Figure 3 **Outlook for US GDP Growth**



Source: Historical data (first quarter 2008 through third quarter 2009) from US Bureau of Economic Analysis. Projections from IHS Global Insight (as of December 2, 2009). 90202-1_2112

Thursday, December 24, 2009

Market growing more prone to cold-weather risks

Record cold and wellhead freeze-offs in early December caused a sudden drop in gas supplies and led to unusually large and unexpected withdrawals from storage in the past couple of weeks, analysts and traders said.

And with drillers shifting more of their resources to unconventional shale gas plays, the market may become even more susceptible to the impact of extreme cold.

As frigid weather began sweeping across the continent, the Energy Information Administration reported a 64-Bcf storage drawdown for the week ending December 4, about 20 Bcf above many analyst expectations. For the following week, EIA reported a 207 Bcf draw, again upending market expectations and drastically reducing the surplus.

Between December 2 and 10, temperatures ran mostly 15 to 30 degrees below normal in Colorado, and the Rockies overall was "extremely cold," said Matt Rogers, president of Commodity Weather Group.

In addition to surging localized demand, sources reported freeze-offs in the Rockies and western Canada during that period, reducing deliveries downstream to the east.

Rockies Express Pipeline's exports out of the Rockies dropped to an average 1.3 Bcf/d in the week ending December 6, down from close to 1.5 Bcf/d the previous week. Exports fell further the following week, averaging 912,700 Mcf/d for the week ending December 12. For much of November, REX exports had averaged more than 1.6 Bcf/d.

The biggest drop in exports on REX occurred over a three-day period starting December 12, when the pipeline issued a force majeure near the Wamsutter hubin Sweetwater County, Wyoming, cutting exports further to between 30,000 and 36,000 Mcf/d.

The outage, while lasting just a few days, coincided with some of the coldest weather of the season. According to Rogers, heating demand nationwide on December 10 and 11 ran 40% higher than the 10-year average and "we saw highs only in the teens in Chicago one of those days."

REX sendouts have gradually risen and averaged about 893,000 Mcf/d since the force majeure was lifted December 15.

But traders and analysts believe the phenomenon could be a recurring theme this winter during cold bouts, injecting a bullish tenor to the supply picture.

"You saw the impact in the big storage misses," one Texas-based trader said. "Look at the cash vs. [balance-of-the-month] spread. Cash was trading over January and over bal-mo. You saw the added demand either from cold or REX in the market."

Freeze-offs are not unusual in the Rockies, but in previous years the impact tended to be more isolated locally, since the Rockies had less export capacity and more captive gas.

This year, REX firmly embedded the Rockies as a supply source for the Midcontinent and Midwest, with the inevitability of it supplying the Northeast once REX-East gets permission to restart its Clarington service.

While a gas leak blocked REX's access to Northeast markets only days after starting service to Clarington, Ohio, on November 12, the line will eventually also service the Northeast via Clarington hub interconnections

"Now the Rockies is a supply basin going to the Midcontinent and offsetting gas to the east," one trader commented. Another trader commented that it was hard to tell which markets were particularly impacted by this recent event "since that gas ends up in so many places," suggesting the potential for a widespread impact.

Because freeze-offs in the region are somewhat routine, Rockies producers are also better prepared for them, typically with preventative measures in place such as inline heating or methanol injections to keep equipment and gas warm enough so the water vapor won't freeze and block flows.

But freeze prevention is an expensive measure, and capital expenditure decisions generally favor applying them to wells that are likely to be more efficient and prolific.

Once a well does freeze, though, there is little producers can do except wait for it to thaw, said Brian Jeffries, executive director of the Wyoming Pipeline Authority. While there is no general rule on how long that could take, anecdotally it generally lasts a few days, he said.

"Rockies producers, because weather happens so much more often, are generally more prepared than in Texas and Oklahoma," Jeffries said. "Freeze-offs tend to be more dramatic in Oklahoma and West Texas, where freezing weather is far more unlikely. Because it's unlikely, it makes less sense to plan for it."

That fact has raised questions of how weather conditions and even brief spikes in demand could impact the market, given the shift from conventional to shale gas wells, which produce sharply higher volumes per day per well than conventional.

While booming onshore shale gas production has greatly increased supply, it also exposes the nation's gas deliveries to more cold-related disruptions. Bentek Energy said in a report Tuesday.

US supply "is now more exposed to cold weather risks than it had been in the recent past because of the supply shift that has taken place over the last few years," the report said. "Much more US gas supply is coming from onshore unconventional gas plays in Texas, Louisiana and Arkansas."

For example, in the winter of 2005-06, the Fort Worth Basin produced some 2 Bcf/d, while the Gulf Coast produced 6.5 Bcf/d. This winter, Fort Worth is producing 5.3 Bcf/d, while the Gulf has declined to about 5.2 Bcf/d.

"While a heavier reliance on North Texas supply helps mitigate hurricane risk, it also increases exposure to cold temperatures." Bentek said.

On the supply side, some production facilities, processing plants and gathering systems are connected not only into the interstate pipeline grid but into local markets as well. Particularly in Texas, during cold weather some of that gas may never reach interstate pipelines, Bentek noted.

Overall, the analyst's supply sample fell 2.4 Bcf/d from November 30 to December 19, affecting several producing regions.

The sudden, unexplained supply losses and record demand this month created problems for the models that analysts use to make their forecasts, Bentek added. Storage forecasts thus widely missed the mark when the Energy Information Administration reported a withdrawal of more than 200 Bcf this month, the firm said.

"While there are historical precedents for cold-induced supply declines, US gas production today faces a greater risk of freeze-offs than it had in the past because production growth is taking place farther north," Bentek concluded. "Future modeling will have to account for these events and industry changes to more accurately forecast supply, demand and storage during expected cold snaps."

- Sheetal Nasta, Stephanie Seay

Thursday, January 7, 2010

Barclays sees weather, fuel-switching as 2010 'surprises'

If the current chill across most of the US extends its stay, the natural gas market may reset to a more bullish tone for 2010, analysts with at Barclays Capital said Wednesday.

<u>Listing their top 10 potential surprises for the year, the Barclays team tagged frigid</u> winter weather as number one on the list. "Even a market with surplus storage can fall to <u>undersupply if weather is cold enough,"</u> the team of James Crandall, Biliana Pehlivanova, and Michael Zenker said in a note to clients.

"Mother Nature went long natural gas starting in December 2009 and is working her book," they said, adding that they expect December pulls from storage to top 700 Bcf — 100 Bcf above the average since 2002 as weather was 11% colder than the 10-year norm.

"This factor is, in our view, the market's best chance for a bullish 2010 trajectory," Barclays said.

Two weeks ago, the Barclays team said gas grabbing market share from coal was a big surprise in 2009. In Wednesday's report, they said a 2010 surprise may be coal taking much of that share back.

"Coal recovers most, but not all, of its lost 2009 market share, but the balance is delicately linked to gas prices," Barclays said. "The surprise could come either from a booming recovery in coal-fired output, sending gas demand into a tailspin, or from additional displacement of coal, which would require a combination of strong coal prices and weak natural gas prices."

Another surprise Barclays thinks could emerge this year is growth in domestic gas supply even in a \$5/MMBtu market. The combination of more efficient shale wells recovering more gas will keep drillers producing, the analysts predicted.

With hedging to guarantee cash flow and lots of land leased cheaply, producers will look at their going-forward costs, not all-in costs, and invest \$3/MMBtu to produce gas they can sell for around \$5/MMBtu. Barclays said, noting that the rig count should grow slowly in the current price environment.

"Perhaps the market will realize that producers do not require \$7 or even \$6/MMBtu to grow production," the analysts said. "Such a sequence of events could convince the market that the back of the [futures] curve is too pricey."

The amount of liquefied natural gas imported to the US is a perennial item on "what to watch for" lists, and Barclays said the surge in overseas liquefaction plants coming online and the possibility of more pipeline gas flowing in Europe could bring even more LNG to US shores.

"More than ever, cross-Atlantic price spreads will be important to watch and should feature more prominently in Houston cocktail party conversation," the report said.

Other surprises that could be lurking this year include breakthrough legislation favoring natural gas vehicles in the US and, less likely, strong cap-and-trade rules that would raise coal prices.

The Barclays team doesn't have high hopes that tough carbon laws are coming but cautioned that the Environmental Protection Agency "is on a separate track. Thus, the scales would still tip against coal."

Less likely, but still in the mix, are two more possible surprises for the gas industry: that demand doesn't come back in a US economic recovery that is "energy-light" and that bankers and lenders throttle back the amount of capital they are willing to invest or lend to gas producers.

"A protracted period of disappointing prices, or the failure of a number of producers, would rein in the appetite of the capital markets to fund producers," Barclays said. "While intriguing, there are no signs of such a shift. In fact, the cost of borrowing has continued to fall since the credit crisis and the capital markets are open for producers." — Bill Holland

Gas Daily

Monday, January 4, 2010

Analyst: Demand to catch up with supply in 2010

Gas production declines appear to have leveled off as shale production takes up the slack from rigs laid down in conventional basins, independent energy analyst Stephen Smith said in a report Thursday.

The Natchez, Mississippi-based president of Stephen Smith Energy Associates also predicted that a 2% increase in gas demand from a modestly recovering economy will boost prices.

Smith is projecting that the market will be 400,000 Mcf/d undersupplied in 2010, leading him to raise his price forecasts for both 2010 and 2011. But he hedged his outlook with the sobering reminder that cold weather "can vanish as quickly as it came."

Smith upped his average Henry Hub spot price forecast for 2010 by 10% to \$5.60/MMBtu. He also raised his first-quarter outlook by 10% to \$5.45/MMBtu and his second-quarter target by 16% to \$5.20/MMBtu.

For the third quarter, Smith added 12% to his November forecast, now \$5.60/MMBtu, and 4% to his fourth-quarter projection, which now stands at \$6.15/MMBtu.

For 2011, Smith sees gas trading at Henry Hub at an average of \$6.65/MMBtu, a 2% increase over his previous projection.

Smith said the 2% increase in last week's October US gas production data from the Energy Information Administration suggests that most of the price and economy-driven production declines have already occurred. "The evidence thus far does not suggest that a major production decline lies ahead," he added.

The reason for that trend despite "a still massively scaled back rig count is becoming increasingly apparent," Smith said. "It has to do with the much greater proportion of shale gas wells now being drilled, the substantial increase in the number of fracs per shale well drilled, and the resulting increase in frontend gas production per operating rig."

Rigs drilling in the biggest shale plays now account for 55% of the total US rig count, Smith said, up from 33% in 2006.

The 2009 production decline, coupled with colder weather and a recovering economy, will be enough to reduce the storage surplus by 150 to 200 Bcf in 2010, Smith said. He's predicting a 5.8% rise in heating degree-days following a 4.7% increase in 2009.

And after a 4% drop in electricity demand in 2009, Smith is predicting a 1.6% increase in kilowatt-hours, with gas-fired generation holding steady at 934 billion KwH. Total gas demand should increase 1.2% to 63.9 Bcf/d this year, including small gains from the residential, commercial and power sectors. — Bill Holland

Tuesday, December 22, 2009

Analyst: Gas price rally won't last through winter

The recent rally in North American gas prices brought on by December's cold snap won't last, Bank of America Securities-Merrill Lynch commodities analyst Francisco Blanch predicted Monday.

Surging shale production, rising liquefied natural gas imports and an increase in coalfired power generation will all conspire to cut into any temporary price gains, Blanch said.

"All in, the US natural gas surplus relative to the five-year average remains at 433 Bcf, or 14%, wide enough to absorb a weather-induced demand shock," he wrote. "Even if withdrawals from now until the end of March equal the five-year average, end-of-winter stocks could near 1.94 Tcf—the highest ever."

Industrial demand for gas has yet to recover to the 20 Bcf/d level seen in previous years, Blanch said, pegging demand from refiners, steel and petrochemical producers at 16.3 Bcf/d and rising only 6% next year.

And the market share gas took from coal will go away now that gas prices have rebounded above the \$5/Mcf level, Blanch said. "Cheap gas relative to coal boosted the share of natural gas in baseload power generation this year, but that support will likely disappear next year due to the higher gas prices."

But the real issue "rests on the production side," Blanch said, as the spike in shale gas output has disrupted the traditional correlation between rig counts and production volumes.

"Dry gas production remains incredibly resilient when contrasted to the sharp drop in rigs," Blanch said. "There is now a real risk that production will be falling by less than expected."

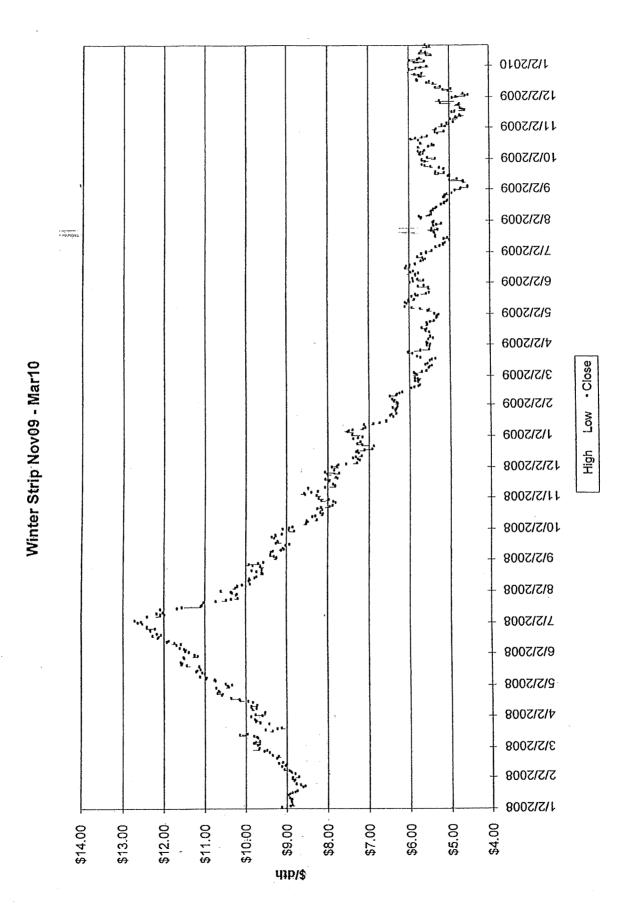
He said it is "staggering to note that despite a 56% year-over-year decline in total US natural gas rigs, dry production actually increased by 1.2% year-over-year in August. Hence, it is increasingly clear that classic rig-to-production models are not working anymore due to the high efficiency of shale plays."

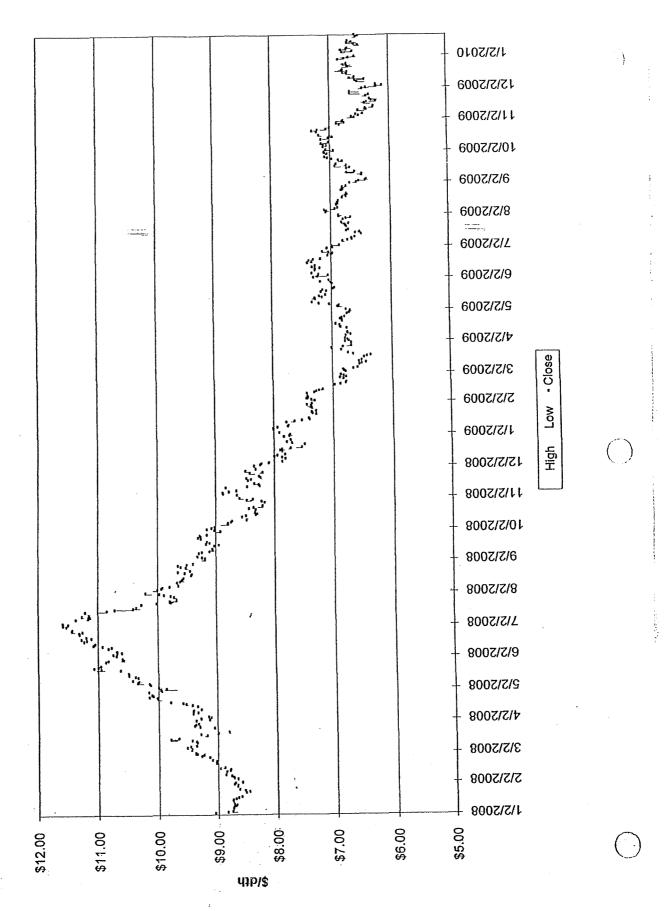
LNG imports will dampen any price increase as the winter progresses, Blanch predicted. LNG producers used 2009 to do maintenance or expand their liquefaction trains but will be producing at full capacity in 2010, putting more gas into the global market, he said.

With prices at the UK's National Balancing Point currently at par or below those at Henry Hub, the market can anticipate more LNG cargoes headed for US shores, further depressing US prices, according to Blanch, — Bill Holland

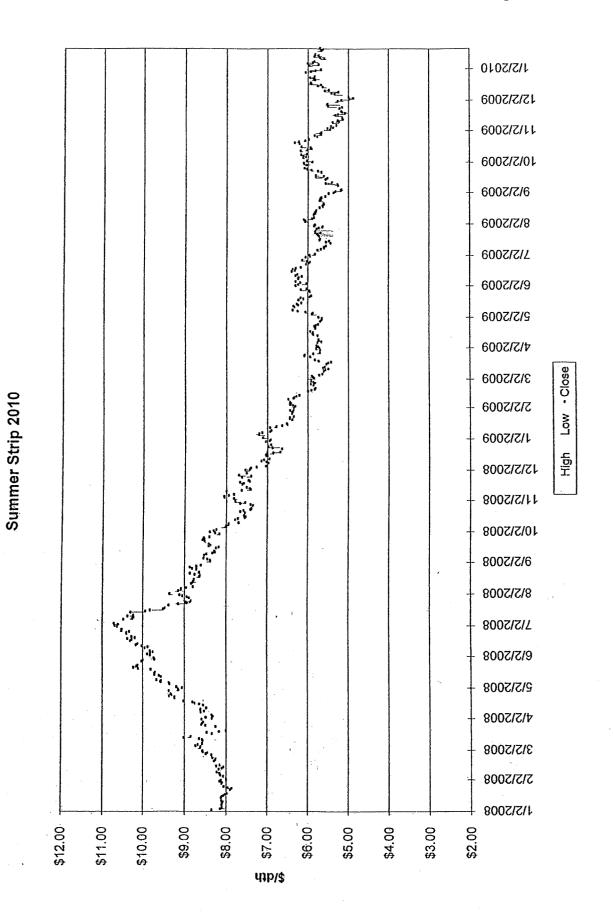
Energy Information Administration Henry Hub Pricing Per MMbtu January 12, 2010 Release

Jan-09		5.24		Jan-10		5.47	ŝ	Jan-11		6.49
Feb-09	:	4.51		Feb-10		5.41	1	Feb-11		6.47
Mar-09		3.96		Mar-10		5.32	į	Mar-11		6.35
Apr-09	1	3.49		Apr-10		5.15	İ	Apr-11		5.95
May-09	1	3.83		May-10		5.00		May-11		5.82
Jun-09	Ì	3.80	***	Jun-10		4.90	Ì	Jun-11		5.73
Jul-09	1	3.38		Jul-10		4.80		Jul-11		5.58
Aug-09	1	3.14		Aug-10		4.85	ĺ	Aug-11		5.43
Sep-09	1	2.97		Sep-10		4.90		Sep-11		5.48
Oct-09	1	4.00		Oct-10		5.05	Ì	Oct-11		5.68
Nov-09		3.66		Nov-10		5.52		Nov-11		5.99
Dec-09]	5.34		Dec-10		6.12		Dec-11		6.31
	•									
Average	1			Average			1	Average		
2009	\$	3.943		2010	\$	5.208		2011	\$	5.940
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Summer	Τ.			Summer				Summer		
2009	\$	3.516		2010	\$	4.950		2011	\$	5.667
				L	l				h	
Winter 2009	1			Winter 2010-		2.400				
2010	\$	5.040		2011	\$	6.190				
				<u></u>		ri reservante es currente				





Winter Strip Nov10 - Mar11



Short-Term Energy Outlook

January 12, 2010 Release (Next Update: February 9, 2010)

Natural Gas

U.S. Natural Gas Consumption. EIA estimates that total natural gas consumption fell by 1.5 percent in 2009, primarily because of the economic downturn. Despite low natural gas prices throughout most of 2009, which contributed to a significant increase in natural gas-fired electric power generation, declines in industrial, residential, and commercial sector consumption drove the year-over-year decline in total consumption.

Total annual natural gas consumption is forecast to remain relatively unchanged in 2010. Higher natural gas prices in 2010 are expected to cause a 2.8-percent decline in natural gas consumption in the electric power sector in 2010, which will offset growth in the residential, commercial, and industrial sectors. Forecast total natural gas consumption increases by 0.4 percent in 2011, led by a 2.5 percent increase in consumption in the industrial sector.

U.S. Natural Gas Production and Imports. EIA estimates that total marketed natural gas production increased by 3.7 percent in 2009, despite a 59-percent decline in the working natural gas rig count from September 2008 to July 2009. Working natural gas rigs have since turned around from the mid-July 2009 low of 665, increasing to 759 as of December 31, 2009. While production growth in 2009 was supported by the enhanced productivity of new wells being drilled, steep declines from initial production at these newly drilled wells and the lagged effect of reduced drilling activity are expected to contribute to a 3-percent decline in 2010 production. EIA expects marketed production to increase by 1.3 percent in 2011 with growth in production from lower-48 non-Gulf of Mexico (GOM) fields offsetting a decline in GOM production.

Global Crude Oil and Liquid Fuels

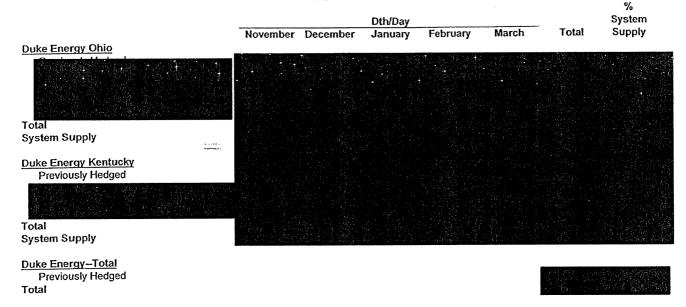
Crude Oil and Liquid FuelsOverview. The world oil market should gradually tighten in 2010 and 2011, provided the global economic recovery continues as projected. While countries outside of the Organization for Economic Cooperation and Development (OECD) will lead 2010 demand recovery, OECD countries should begin to show significant oil demand growth in 2011 in response to improving economic conditions. Projected economic growth in the OECD more than doubles from 1.2 percent in 2010 to 2.7 percent in 2011.

Although compliance with cuts announced by the Organization of the Petroleum Exporting Countries (OPEC) has weakened and global oil inventories and spare production capacity remain very high by historical standards, expectations of a continued global economic turnaround have continued to buttress oil markets. EIA expects that WTI prices, which have been trending upward since February 2009, will continue to increase in 2010 and 2011.

)

EIA expects that the price of West Texas Intermediate (WTI) crude oil, which averaged \$62 per barrel in 2009, will average about \$80 and \$84 per barrel in 2010 and 2011, respectively. EIA's forecast assumes that U.S. real gross domestic product (GDP) grows by 2.0 percent in 2010 and by 2.7 percent in 2011, while world oil-consumption-weighted real GDP grows by 2.5 percent and 3.7 percent in 2010 and 2011, respectively.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Gas Commercial Operations Hedging Program Market Indicators Summary February 24, 2010

	Price Pressure	Term	Comments	Page Ref
Weather				
Long Term Forecast (Mar 10-May 10)	-	Long	NOAA predicting above average temperatures for Mar. 2010—May. 2010 for the northwestem portion of CONUS with below normal temperatures in the south and southcentral portions, normal temperatures are forecasted for plains states through east coast. WSI predicts cooler than normal in the eastern US with warmer weather in the western and northern parts of the country.	10-11
Mid Term Forecast (30-60 days)	1	Long	March predicted to be 5.6% colder than 10 year normal and April is predicted to be 8.4% colder than 10 year normal.	12
Short Term Forecast (6-10 days)	 	Short	Below and Much Below temperatures in central and southem portions of the United States early in the period being pushed south by above normal temperatures in Canada.	13
Storage Inventory				
EIA Weekly Storage Report	†	Long	Storage withdrawals for the week ending February 12th were 190 BCF. Storage levels are at 2.025 TCF which is 1.3% higher than last year and 2.7% higher than the 5 year average.	14
ndustry Publications				
PIRA Energy Group Summer 2010: Winter 2010/11:	<u> </u>	Long	Shale gas economics suggest that the extended NYMEX gas price curve over the next year or so will prove to be unsustainably high. PIRA projecting \$ MMBtu for 2010 and for 2011.	15-17
Gas Daily	†	Long	Less gas in storage than expected due to recent cold weather, but gas prices will drift lower as the rig count rises. Projection for Henry Hub price for non-heating season at \$5.50/MMBtu.	18
Gas Daily	←→	Long	Despite an extremely cold winter so far, US gas prices will likely be capped this year by cheaper coal supplies and a spike in LNG imports. Financial and energy professionals surveyed think gas prices will average between \$5 and \$5.50/MMBtu this year.	19
Gas Daily	+	Long	"Thanks largely to a horizontal drilling boom, US gas production may have reached its bottom and could propel already ample storage supplies to even higher levels this year.	20-21
Government Agencies				·
Energy Information Administration Summer 2010: \$5.150 Winter 2010/11: \$6.124	1	Long	The projected Henry Hub annual average spot price is expected to be \$5.366 per MMBtu in 2010 and \$5.860 per MMBtu in 2011.	22
Technical Analysis				r
Summer 2010 Strip Chart	←→	Short	Closed at \$5.41.	23
Winter 2010-11 Strip Chart	→	Short	Closed at \$5.96.	24
Economy				
Demand		Long	EIA: Natural gas consumption is projected to increase 0.4% to 62.5 Bcf/day in 2010 and another 0.4% in 2011. The outlook for growth in 2011 comes from increases in the industrial sector as a result of improved economic conditions.	25
Supply	†	Long	EIA: Total marketed natural gas production declines 2.6% to 58.7 BCF/day in 2010 and increases by 1.3% in 2011. Current 2010 futures market prices between \$5.50 and \$6.70 per MMBtu appear to provide the necessary economic incentive to expand drilling programs even further.	25
Oil Market	1	Long	The world oil market should lighten in 2010 and 2011, as the global economic recovery continues and world oil demand begins to grow again. EIA expects WTI crude oil, which averaged \$62 per barrel in 2009, will average about \$81 and \$84 per barrel in 2010 and 2011, respectively.	25

Meeting Minutes: 10th Floor North Conference Room - 8:30 am

Attendees: Jeff Kem, Jim Henning, Patty Walker, Mike Brumback, Mitch Martin, Joachim Fischesser, Steve Niederbaumer

Discussed market fundamentals including weather, storage inventory levels, PIRA and EIA forecasts for the Summer 2010 and the Winter 2010/2011, independent analysts projections of supply and demand and the impact on gas prices, economic influences on supply and demand and technical analysis on Summer and Winter Strip prices. In addition, reviewed DEO and DEK's hedging program to date. Significant discussion took place around the recent drop in NYMEX prices and the impact of increased number of drilling rigs in the field. Based on these factors, a decision was made to hedge additional volumes with a fixed price for the Summer 2010 and Winter 10/11.

Case No. 2008-175 Attachment A Page 253 of 306 Page 254 of 306

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 02/22/10

Sep-11

Aug-11

Jun-11

Apr-11

Mar-11

Feb-11

Jan-11

Dec-10

Nov-10

City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Requirements (Mcf) Total Withdrawals (Mcf) Load Forecast

Amount Hedged (dth/day) Total Hedged (dth/day) Total Hedged (dth) Fixed Price Fixed Price Collar Fixed Price Fixed Price

Types of Hedging Products (1) No-Cost Collars Fixed Price Price Caps.

Embedded Hedged Cost Summer Winter

Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply Amt Hedged with Storage @ City Gate Total (Incl. Injections) % Hedged & Storage Hedged (City Gate) Storage Withdrawal Seasonal % Market

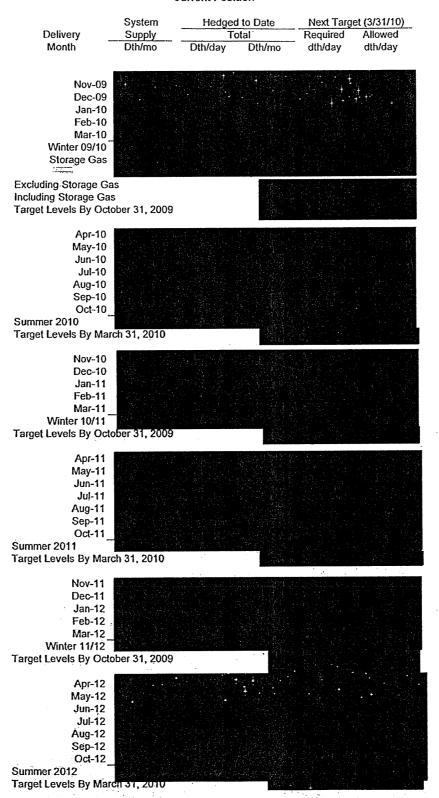
Estimated EGC per Dth at City Gate

Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 02/22/10

Oct-12						•
Sep-12						
Aug-12						1
2 Jul-12						
12 Jun-12						
Apr-12 May-12						
Mar-12 Apr						
Feb-12 M						
Jan-12						
Dec-11						
Nov-11						
	G)		=	lty Gate	Grass) Supply	OCITY Gate
	Id Forecast City Gate Load Forecast (Mcf) TCO FSS Injections (Mcf) Total Requirements (Mcf) TCO FSS Withdrawals (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals (Mcf)	d (dth/day) (dth/day) (dth)	ing Products liars	dged Cost S per Dth at C	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	ith Storage @ ty Gate) thdrawal injections) & Storage
!	Load Forecast City Gate Lo TCO FSS In Total Requir TCO FSS W Other "With Total Withdr	Amount Hedged (dth/day) Fixed Price Fixed Price TBD Total Hedged (dth/day) Total Hedged (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collars	Embedded Hedged Cost Winter Summer Estimated EGC per Dth at Clty Gate	Estimated System Supp % of System Supply Seasonal % of Syste	Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections) % Hedged & Storage Seasonal %

(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

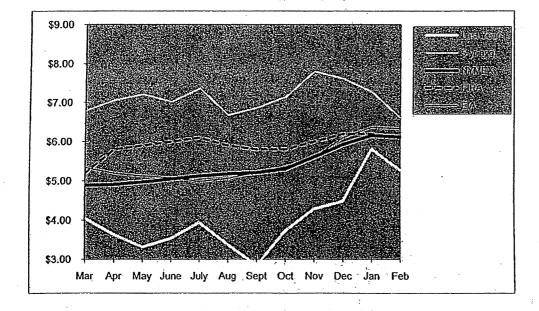
Duke Energy Kentucky Hedging Program Current Position



COMPARISON OF HISTORIC SPOT & PROJECTED PRICES 257 of 306 TO CURRENT FUTURES PRICES

	Histori	c Prices:			
	NYMEX CI	osing Price			
	5-yr. avg.	Last Year	PIRA	EIA	NYMEX
	(05/06-09/10)	(2009-2010)	26-Jan-10	10-Feb-10	23-Feb-10
Mar	\$6.79	\$4.06		\$5.350	\$4.895
Apr	\$7.06	\$3.63	,	\$5.200	\$4.913
May	\$7.21	\$3.32		\$5.130	\$4.977
June	\$7.02	\$3.54		\$5.090	\$5.052
July	\$7.37	\$3.95		\$4.990	\$5.127
Aug	\$6.68	\$3.38		\$5.070	\$5.183
Sept	\$6.87	\$2.84		\$5.210	\$5.215
Oct	\$7.15	\$3.73		\$5.360	\$5.305
Nov	\$7.80	\$4.29		\$5.600	\$5.610
Dec	\$7.62	\$4.49		\$6.100	\$5.928
Jan	\$7.28	\$5.81		\$6.370	\$6.157
Feb	\$6.61	\$5.27		\$6.340	\$6.122
12 Month Avg	\$7.12	\$4.03		\$5.484	\$5.374
Summe	r Average			\$5.150	\$5.110
Winter A	verage			\$5.952	\$5.742





Tuesday, February 23, 2010

WSI calls for continued cold weather in eastern US this spring

Private forecaster WSI Corporation on Monday said the upcoming three-month period will continue to be cooler than normal in the eastern US, with warmer weather in the western and northern parts of the country.

"After another month of widespread below-normal temperatures across the central and eastern US in February, we think the focus of the cold weather will shift southward and eastward in March, as an atmospheric ridge sets up in the western and central US," said Todd Crawford, WSI chief meteorologist.

"The primary drivers for our extreme winter pattern, specifically a strong, dateline-centered El Niño event and a stratospheric warming event, will both be on the wane as we head into March," Crawford said. "The residual effects will likely linger into spring, however, with cold temperatures focused in the Southeast US and warm temperatures spreading from the western into the central US. For the March-May period as a whole, we are forecasting 1191 gas-weighted heating degree-days, approximately 4% more than last year and about 2% less than the 1971-2000 mean."

In March and April, WSI expects warmer weather only in the North Central, Northwest and Southwest regions.

The resulting demand in the East will be offset by lower demand in the West as the nation heads into the spring shoulder months, said consultant Energy Security Analysis.

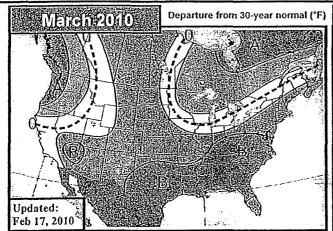
In May, WSI expects colder than normal weather to persist only in the Northeast and Southeast. ESAI said cooling demand could show up early in the West as a result. The next seasonal outlook will be issued by WSI on March 23. — Stephanie Seay



EarthSat's 30-60 Day Outlook

Wednesday, February 17, 2010

Forecaster: SS/BH/TH



Departure from 30-year normal (°F) Voll 2010 Feb 17, 2010

+0.1 to +0.4

+0.5 to 0.9

题+1.0 to +1.9

____-0.1 to -0.4

-0.5 to -0.9

配置-1.0 to -1.9

+2.0 to +2.9

≥3.0

-2.0 to -2.9

≤3.0



Previous

Slight warm changes in West

Slight cold changes in East

The March forecast was mostly unchanged, save for a few warm tweaks in the West and a few marginal cold tweaks in the East. The GWHDD forecast is unchanged. In yesterday's Editors Notes, we pulled together some analog years in which the snow cover matched the current conditions and in which the rank of the MEI (Multivariate ENSO Index) met El Nino thresholds. Those analog years produce a very cold outlook across the eastern 2/3s of the US

for the first half of March. Given the idea that the AO does not seem primed to turn positive very soon, that idea makes sense. Here we've taken those analog years and projected them forward for the rest of the month. The overall composite for March based on those years is somewhat similar to our outlook. The anomalies are colder than our forecast across the Midwest as well as the Southeast.



Mar GWHDD* Forecasts

*10Y Normal updated to '00-09

Mar 2010 Fcst: 650.5

10Y Normal* 616.1 30Y Normal 634.7 Mar-2009 605.2

*National Ges-Weighted HDDs

Previous

Warm changes in Texas

Near normal in the Southeast

Changes to April were again marginal, with some minor warm changes In Texas and minor cold changes in the Northeast. Using the same methodology that we used in the March discussion with snow cover and MEI analogs, we produced a similar map for April. That map does share a few similarities with our outlook, with cool conditions in the western Midwest and Plains and warmer conditions in the Northwest. The mag-

nitude of cold in the Plains and Midwest is a bit stronger, as is the coverage of warmth across the Rockies. Those analogs also show milder conditions for the big cities along the 1-95 corridor in the Mid-Atlantic.



Apr GWHDD* Forecasts

*10Y Normal updated to '00-09

Apr 2010 Fcst: 373.5

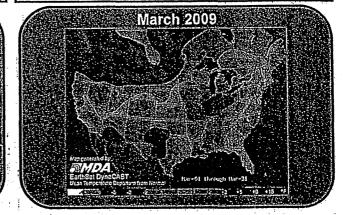
10Y Normal* 344.7 30Y Normal 369.0 Apr-2009 361.2

National Gas-Weighted HDDs

February Verifications



Cast ranks it 10th coldest since (1950). As far as the final 90/80 Day forecast for the month goes, it does a decent job of capturing the general pattern with belows across the South and East and warmth in the West. However, we missed on the magnitude of the cold across the South where anomalies are upwards of 8F below normal. Those anomalies probably won't decrease much if the latter part of the month. The biggest miss looks to be across the northern Rockies/Plains where temperatures have been well below normal. Temperatures have been a bit warmer than projected across New England as well as the Pacific Northwest.



MDA Earthsat Weather 6011 Executive Blvd., Suite 400, Rockville, MD 20852 Tel (240) 833 8300 Fax (240) 833 8301 www.mdafederal.com/wx/ ©2010 [30-60 Day-Outlook, Version 2.1]

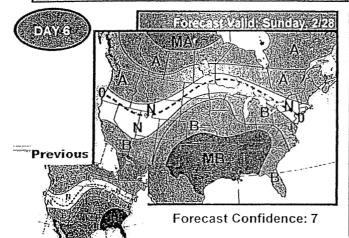


EarthSat's 6-10 Day Forecast-Detailed

Tuesday, February 23, 2010

Forecaster: BH/AC

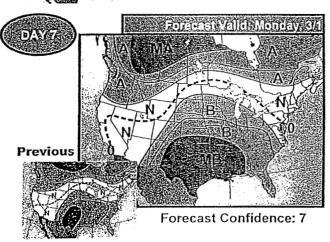
Roce a Temperature Deviations

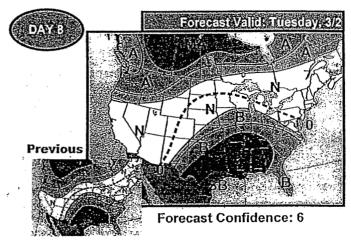


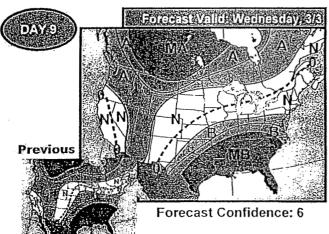
Today's Forecast:

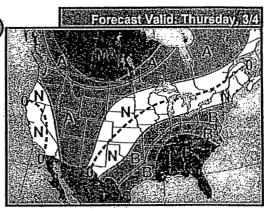
Northern Plains, Upper Midwest Warming Late Strong Belows Could Expand More In Texas, South

The cool/cold air that is aiming to dive into south-central U.S. during the mid-period could be fairly similar to what is occurring presently in the region. As a result, Texas and the Deep South could see some more widespread strong below normal readings for the middle of the period. The models have been suggesting the Northeast will trend colder during the end of the period. Recently, however, this has failed to occur so the forecast stays on mainly seasonal outlook for this region. A warm up into the Northern Plains and Upper Midwest might be stronger during the end of the period. In the West there could be a faster cool down for period's end.









Forecast Confidence: 5

Home > Natural Gas > Weekly Natural Gas Storage Report

Attachment A
Glossary Page 262 of 306

Release Schedule Sign Up for Email Updates

Weekly Natural Gas Storage Report

sed: February 18, 2010 at 10:30 A.M. (eastern time) for the Week Ending February 12, 2010. Release: February 25, 2010

Working Gas in Underground Storage, Lower 48

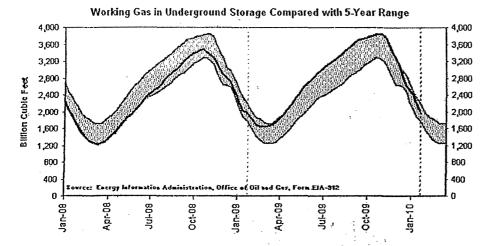
	Stocks i	n billion cubic fe	eet (Bcf)	Historical Comparisons					
Region	02/12/10	02/05/10	Change	Year Ago (02/12/09)	5-Year (2005-2009) Average			
	02/12/10	02/03/10	Change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change		
East	1,030	1,135	-105	951	8.3	1,048	-1.7		
West	322	344	-22	314	2.5	270	19.3		
Producing	673	736	-63	735	-8.4	655	2.7		
Total	2,025	2,215	-190	1,999	1.3	1,972	2.7		

Notes and Definitions

Note: On February 22, 2010, the Energy Information Administration (EIA) will change the web addresses for the Weekly Natural Gas Storage Report (WNGSR). The new web address (URL) for the WNGSR will be: http://ir.eia.gov/ngs/ngs.html. Information about the change of the web address is available at: http://www.eia.doe.gov/oll_gas/irnotice.html.

Summary

Working gas in storage was 2,025 Bcf as of Friday, February 12, 2010, according to EIA estimates. This represents a net decline of 190 Bcf from the previous week. Stocks were 26 Bcf filgher than last year at this time and 53 Bcf above the 5-year average of 1,972 Bcf. In the East Region, stocks were 18 Bcf below the 5-year average following net withdrawals of 105 Bcf. Stocks in the Producing Region were 18 Bcf above the 5-year average of 655 Bcf after a net withdrawal of 63 Bcf. Stocks in the West Region were 52 Bcf above the 5-year average after a net drawdown of 22 Bcf. At 2,025 Bcf, total working gas is within the 5-year historical range.



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2005 through 2009.

Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report." The dashed vertical lines Indicate current and year-ago weekly periods.

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Data

History (XLS)

other formats: Summary TXT CSV

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks (XLS)

References

Methodology

Differences Between Monthly and Weekly Data

Revision Policy

Related Links

Storage Basics

Natural Gas Weekly Update

Natural Gas Navigator

	26, 2010							Nor	th Americ	an Natura	d Gas
Table A1:	Short-Term	Henry Hu	ıb Gas P	rice Fore	cast						
\$/MMBTU											· · · · · · · · · · · · · · · · · · ·
										NYMEX	
										Futures	}
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2010	20
Jan	5.43	6.13	6.18	8.73	6.40	7.97	5.23	Parties State of Philosophics		-	6.
Feb	7.73	5.37	6.11	7.54	8.04	8.49	4.50			5.49	6.
Mar	5.94	5.39	6.94	6.89	7.11	9.36	3.94			5.43	6.
Apr	5.26	5.71	7.16	7.07	7.58	10.15	3.50			5.41	6.
May	5.81	6.33	6.46	6.21	7.64	11.25	3.80			5.46	5.
Jun	5.82	6.27	7.19	6.26	7.34	12.67	3.78			5,53	6.
 Jul	5.03	5.93	7.60	6.12	6.22	11.19	3.38		_	5,61	6.
Aug	4.99	5.41	9.47	7.17	6.27	8.26	3.12			5,67	6.
Sep	4.62	5,03	12.41	4.86	5.99	7.69	2.93			5.71	6.
			· · · · · · · · · · · · · · · · · · ·	4.00	0.00	7.00	2.55			3.71	<u> </u>
Oct	4.63	6.35	13.59	5.75	6.72	6.72	3.95			5.81	6.
Nov	4.47	6.17	10.28	7.38	7.01	6.59	3.55			6,13	6.
Dec	6.13	6.60	12.90	6.74	7.11	5.76	5.36			6.47	6.
40	6.37	5 62	- 6.44	7 70	7.40		4.50				
1Q 2Q	5.63	5.63 6.10	6.41	7.72	7.18	8.61	4.56			5.46	6.
2Q 3Q	4.88	5.46	6.94 9.83	6.51	7.52	11.35	3.69			5.47	5.
4Q	5.08	6.37	12.26	6.05 6.62	6.16	9.05	3.14		— <u> </u>	5.66	6.
Year	5.49	5.89	8,86	6.73	6.94 6.95	6.36 8.84	4.29 3.92			<u>6.14</u> 5.70	<u>6.</u> 6.
	5.1.5		0.00	0.70	0.50	0.04	0.02			0.70	<u> </u>
Nov-Mar		5.50	6.40	9.27	7.13	7.99	5.20			-	6.
Apr-Oct	5.17	5.86	9.13	6.21	. 6.82	9.70	3.49	- DEFECTION TO	1/24/07 Colors	5,60	6.



January 26, 2010 PIRA Energy Group.

North American Gas Forecast Monthly

Bulls and bears can debate to their hearts' content the implications of recent gas market developments. But neither seems likely to label the past three month's market swings as boring. Indeed, the market's "roller-coaster" began with an incredibly mild November, an extreme cold stretch into mid-January, and then the in-progress January thaw. No less important, near-term heating degree day forecasts were as volatile as the weather itself, intensifying bullish enthusiasm during the coldest periods and curbing that enthusiasm during the mildest weather episodes.

Although weather events often mesmerize the market's attention during such degree day turbulence, non-weather events ultimately warrant the greatest scrutiny when assessing future gas price direction. On the bullish side of the ledger, the monstrous December through mid-January storage draws were more than just weather episodes. Those draws underscored: 1) structurally tighter gas balances not explained by cold weather, reflecting sequentially lower production and stronger demand, and 2) much improved prospects for ending the 2009-2010 heating season without a Y/Y storage surplus.

During the current month, the pendulum has swung toward the bearish side of the ledger. Bears have gained new-found strength with the past three-week's jump in gas-oriented rig counts (mostly high productivity horizontal rigs) that seem poised to change the complexion of gas production prospects. Determining the future inflection point from decreasing to increasing production remains a difficult call, given unstable time-lags between gas drilling and Lower 48 deliverability, plus complications associated with changes in rig efficiency and gas well productivity. For now, however, resurgent gas rig counts have decidedly raised the upper bar for 2010 gas production.

A second bearish development has been the "half full, half empty" nature of the manufacturing sector's recovery of late. The U.S. manufacturing sector's 4Q09 rebound had the benefit of a major assist from the dramatic slowdown of inventory liquidation, but M/M changes in output were unexpectedly erratic, in turn, subjecting industrial gas demand prospects to a higher degree of ambiguity. Nevertheless, PIRA's gas price outlook for 2Q10 remains bullish, anchored by rising Y/Y storage deficits. Using a 10-year normal heating degree day assumption for the next three months, storage deficits should emerge by April. Yet, a colder February would establish an earlier, even more bullish storage scenario.

Looking further ahead, we foresee a shift in the momentum of change back toward gas bears. Shale gas economics in particular suggest that the extended NYMEX gas price curve over the next year or so will prove to be unsustainably high. This reports initial foray into 2011 monthly North American gas balances illustrates weather-normalized demand becoming hard pressed to keep pace with rising gas supply. Even at PIRA's below NYMEX

Reference Case prices, storage seems headed for new record highs, signaling the need for lower prices to set off another gas-oriented drilling pullback.

Tuesday, February 23, 2010

Denhardt lowers spring storage, price estimates

There will likely be less gas in storage than expected at the end of the heating season due to recent cold weather, but gas prices will drift lower nonetheless as the rig count continues to rise, according to the latest report by analyst Ron Denhardt.

Denhardt, vice president of natural gas services at Strategic Energy and Economic Research, lowered his projection of working gas in storage at the end of March to 1.5 Tcf, from last month's estimate of 1.629 Tcf, owed to colder weather than expected in February.

That weather, particularly in the South, and the increased displacement of coal for power generation are expected to boost gas consumption by 6.7% for the first quarter compared with a year ago, he said.

Despite less gas in storage, <u>Denhardt reduced his projection for Henry Hub prices for the non-heating season by 20 cents from a month ago to \$5.50/MMBtu.</u>

"The gas rig count is growing as break-even costs of many shale projects are well below Henry Hub prices of \$5/MMBtu and conventional producers will need to drill to maintain cash flow," the analyst noted. The US rig count increased by 55 over the last four weeks and is up by 25% from mid-July.

In addition, liquefied natural gas prices are lower in the UK, which is keeping more LNG in the US, he said.

On the supply side, production is expected to be about 400,000 Mcf/d lower on the whole this year than in 2009 and net imports are expected to be the same, as higher LNG imports are offset by lower imports from Canada, Denhardt said.

Looking ahead, Denhardt is calling for 3.602 Tcf in storage at the end of the refill season, or about 200 Bcf below last year's level — but still keeping prices below the \$6/MMBtu level.

"However, to reach this level of storage, natural gas prices must be high enough to [take] market from coal. This should set a floor of about \$4.50/MMBtu on Henry Hub prices." He noted that last year gas had to displace coal-fired generation in order to balance the market in the non-heating season. — Stephanie Seay

Tuesday, February 9, 2010

Analysts: Coal, LNG to cap gas prices this year

Despite an extremely cold winter so far, US gas prices will likely be capped this year by cheaper coal supplies and a spike in liquefied natural gas imports, two industry analysts said in separate reports.

"We believe demand will fail to play a role in helping revive prices in 2010, even with cold weather in January," Barclays Capital said Monday. "This is counterintuitive, given that we expect the US and Canadian economies to recover."

The anticipated drop in overall US gas demand this year "is driven by an expected reversal of coal's displacement by gas in 2009, which will push 2010 power-sector demand low enough to offset the gains in the other sectors," Barclays said. "The dilemma for the gas industry is that a recovery of gas prices in 2010 would only exacerbate the situation by further trimming gas-coal switching, which would eventually halt the upward movement of gas prices."

Barclays did raise its 2010 Henry Hub gas price forecast by 4% to \$5.25/MMBtu due to the frigid start to the winter but warned investors that the strength won't last.

"We believe cold weather will support prices in first quarter 2010 and, as a result, have raised our price view for the quarter to \$5.50/MMBtu" from \$5.20/MMBtu. "This could blind the market to what lies ahead."

Meanwhile, energy investors surveyed by Credit Suisse last week at a Vail, Colorado, conference echoed Barclays' bearish sentiment — though the respondents were focused more on LNG than on coal.

<u>Financial and energy professionals surveyed think gas prices will average between \$5 and \$5.50/MMBtu this year, slightly below pricing suggested by the NYMEX futures curve.</u>

While those surveyed expect gas production to be flat or slightly higher than last year and expect demand to match supply, they also think LNG imports will pick up from 1.3 Bcf/d to around 2 Bcf/d — keeping downward pressure on prices.

Longer-term, Credit Suisse's survey respondents expect gas to settle into a band between \$6 and \$7/MMBtu.

Those surveyed in Colorado could take some comfort in a note Friday from investment bank Goldman Sachs' commodities team. Goldman thinks gas prices will average \$6/MMBtu this year and see little chance that they will fall below \$4.50/Mcf.

Goldman sees an LNG risk on a worldwide basis. "The main risk factor that could change our view would be greater-than-expected LNG imports into Europe in the coming months triggered by particularly weak Russian and/or Norwegian pipeline exports to the region," its report said. "Such a change in the European balance could potentially lower US LNG imports during 2010, tightening the market." — Bill Holland

Thursday, February 11, 2010

Analysts detail stark shift to horizontal drilling

Thanks largely to a horizontal drilling boom, US gas production may have reached its nadir and could propel already ample storage supplies to even higher levels this year, according to analysts with Barclays Capital.

"While winter weather has cheered prices modestly higher over the past few months, the natural gas rig count has been advancing for 29 weeks," analysts James Crandell, Biliana Pehlivanova and Michael Zenker said in a new report Tuesday. "In particular, horizontal gas drilling has recovered fully and now stands just below its peak in 2008."

Moreover, the analysts said, data from the Energy Information Administration indicates that onshore Lower-48 marketed gas production grew by 490,000 Mcf/d month over month in November, following a 1.17 Bcf/d sequential increase in October.

At the same time, Baker Hughes' estimated gas rig count of 878 at present reflects a recovery of 213 wells, or 32%, since the mid-2009 low. "This far surpasses the pace of recovery we were expecting given the modest rebound of prices" in the first half of last year, the analysts said.

The horizontal rig count, in particular, now stands at a record 659, up from a previous high of 650 set in October 2008. "Since 2006, horizontal drilling has gained 44% over vertical rigs, which have lost 37% respectively," the analysts noted. And that shift "is altering the relationship between drilling (rig counts) and production, as horizontal wells tend to be more prolific, particularly when directed to the top shale plays."

The Haynesville Shale is attracting most of that new interest, with the rig count in that region already near last year's high. The Marcellus, Barnett, Woodford and Fayetteville shales also are experiencing increased producer attention, the Barclays analysts noted.

"The producers' business model continues to pose the dilemma of balancing between the strong incentive that equity markets send to each individual producer to maximize output and the need to keep aggregate production in check as demand growth lags the potential for supply additions," the analysts pointed out.

Even though current prices remain fairly modest compared with those of 2007 and 2008, "the forward curve has offered sufficient opportunities to hedge 2010 production above \$6/MMBtu," they said. Similarly strong hedges last year "allowed many producers to realize prices well in excess of spot levels."

In that light, the Barclays analysts said they expect a similar dynamic this year "as hedges once again soften the impact of low spot prices on producer earnings."

Moreover, as the credit environment improves, producers may seek to increase drilling activity even further. "It is our sense that independents, in particular, plan to grow the rig count from here—perhaps not all the way through the year, but certainly over the next couple of quarters," the analysts said.

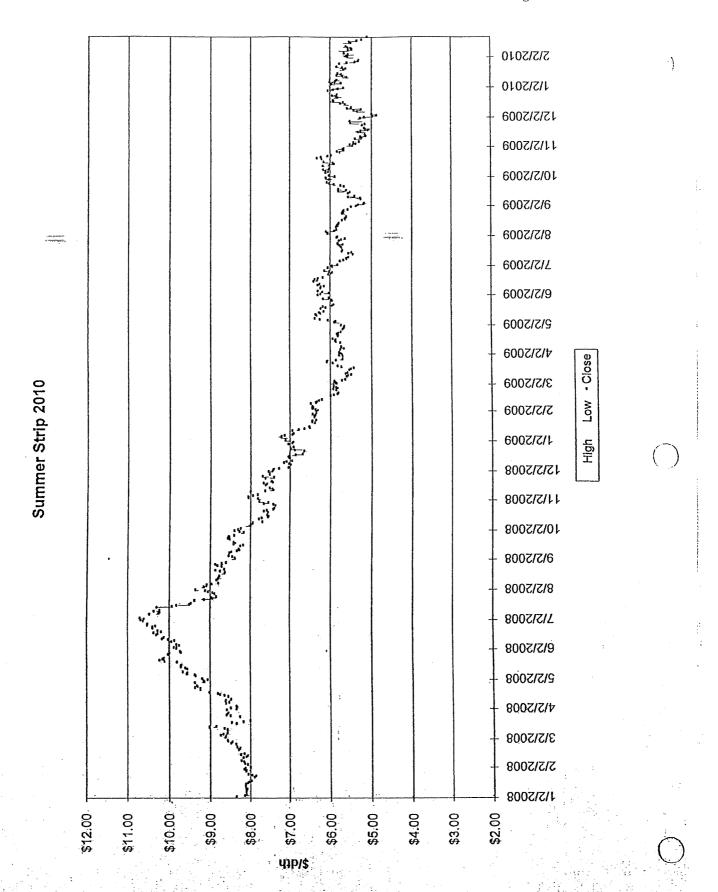
Should the rig count grow to 1,000 by April, stabilize there for the second quarter and drop back to 800 by the end of the year, dry gas production in the Lower-48 states would average only 700,000 Mcf/d lower than in 2009, the analysts estimated. Even if the rig count follows Barclays' current expectations and grows steadily to 900 by the end of 2010, storage inventories still should reach yet another record high by October.

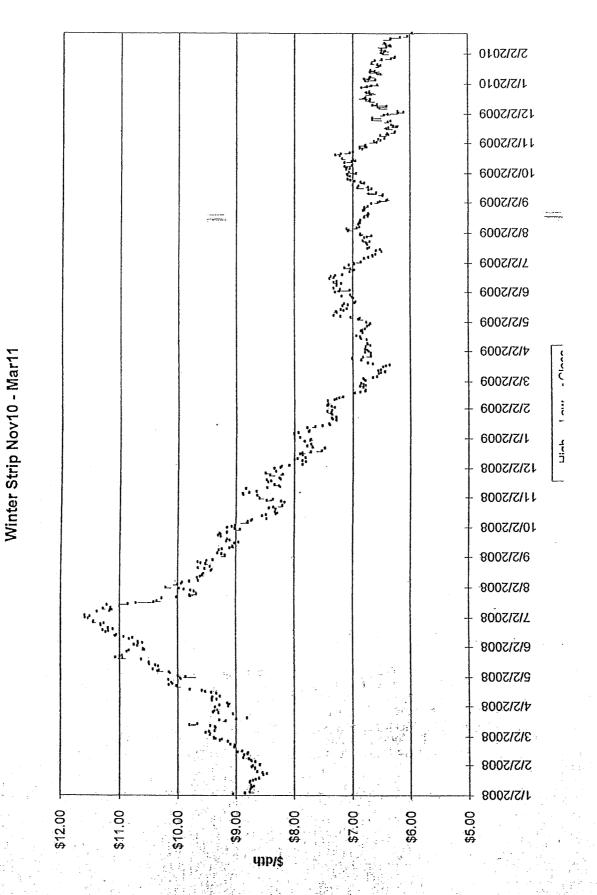
"Thus, if the rig count outperforms the level we assumed, which seems more likely than not, the implication is that even more supply is heading to market," the analysts concluded. — *Melanie Tatum*

Case No. 2008-175 Attachment A Page 270 of 306

Energy Information Administration Henry Hub Pricing Per MMbtu February 10, 2010 Release

	7.00	1 00	504	1 40	E 0.2	Inn 11	6.37
Jan-08	7.99	Jan-09	5.24	Jan-10	5.83	Jan-11	
Feb-08	8.54	Feb-09	4.51	Feb-10	5.46	Feb-11	6.34
Mar-08	9.41	Mar-09	3.96	Mar-10	5.35	Mar-11	6.21
Apr-Ò8	10.18	Apr-09	3.49	Арг-10	5.20	Apr-11	5.83
May-08	11.27	May-09	3.83	May-10	5.13	May-11	5.69
Jun-08	12.69	Jun-09	3.80	Jun-10	5.09	Jun-11	5.60
Jul-08	11.09	Jul-09	3.38	Jul-10	4.99	Jul-11	5.54
Aug-08	8.26	Aug-09	3.14	Aug-10	5.07	Aug-11	5.40
Sep-08	7.67	Sep-09	2.97	Sep-10	5.21	Sep-11	5.45
Oct-08	6.74	Oct-09	4.00	Oct-10	5.36	Oct-11	5.65
Nov-08	6.68	Nov-09	3.66	Nov-10	5.60	Nov-11	5.96
Dec-08	5.82	Dec-09	5.34	Dec-10	6.10	Dec-11	6.28
Average		Average		Average		Average	commence can
2008	\$ 8.862	2009	\$ 3.943	2010	\$ 5.366	2011	\$ 5.860
Cummor		Summer		Summer		Summer	and the second
Summer 2008	\$ 9.700	2009	\$ 3.516	2010	\$ 5.150	2011	\$ 5.594
Winter 2008- 2009	\$ 5.242	Winter 2009- 2010	\$ 5.128	Winter 2010- 2011	\$ 6.124		





Short-Term Energy Outlook

February 10, 2010 Release (Next Update: March 9, 2010)

Natural Gas

U.S. Natural Gas Consumption. EIA expects total natural gas consumption to increase 0.4 percent to 62.5 billion cubic feet per day (Bcf/d) in 2010 and another 0.4 percent in 2011. Very cold weather during the first half of January, particularly in the Southeast, contributed to an 8.4-percent jump in the monthly estimate for electric-power-sector natural gas consumption from the previous forecast. The latest estimate for electric-power-sector consumption in January would be a new record for the month. Although natural gas consumption in the electric power sector has been strong so far this year, an increase in coal-fired generation capacity and higher natural gas prices through the remainder of the year should reduce the share of natural-gas-fired generation in the baseload power mix in 2010. This is despite lower-than-normal snowpack in the Northwest, which we expect to reduce hydroelectric generation in that region in 2010 to about 8 percent below last year's level and boost natural gas consumption. The projected 1.3-percent decline in electric-power-sector natural gas use is offset by growth in the residential, commercial, and industrial sectors in the 2010 forecast. The outlook for growth in total natural gas consumption in 2011 comes from increases in the industrial sector as a result of improved economic conditions.

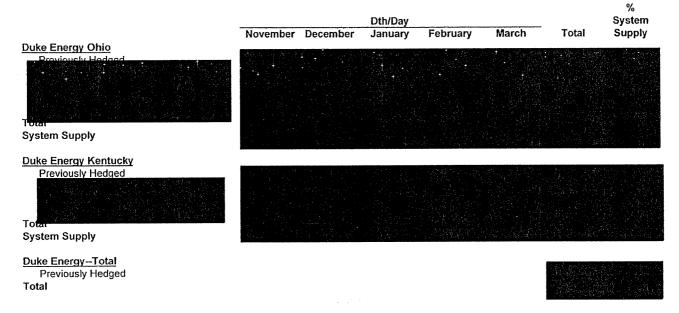
U.S. Natural Gas Production and Imports. Total marketed natural gas production declines 2.6 percent to 58.7 Bcf/d in 2010 and increases by 1.3 percent in 2011 in this forecast. Working natural gas rigs hit a low of 665 in mid-July 2009, and EIA anticipates that the impact of lower drilling activity last year will contribute to the production decline in 2010. While the number of working natural gas rigs is currently about 25 percent below the year-ago level, the number has increased during the last month by about 100 rigs to a total of 861 rigs at the end of January. Current 2010 futures market prices between \$5.50 and \$6.70 per MMBtu appear to provide the necessary economic incentive to expand drilling programs even further. As a result, EIA expects monthly natural gas production to begin to slowly increase later this year and continue on an upward trend through the end of 2011.

Projected U.S. pipeline imports decline by 8.3 percent (0.7 Bcf/d) to 8.1 Bcf/d in 2010 due to the sustained impact of lower Canadian drilling activity and production, as well as increasing demand from oil sands projects in western Canada. A portion of the decline in pipeline imports this year is expected to be offset by imports of liquefied natural gas (LNG), which were double year ago levels in January as temperatures plummeted and prices jumped. The outlook for higher U.S. LNG imports in 2010 is largely due to recent global LNG supply additions in Russia, Yemen, Qatar, and Indonesia. EIA expects net imports of natural gas to decline in 2011 as flows from Canada remain limited and global demand for LNG strengthens.

Global Crude Oil and Liguid Fuels

Crude Oil and Liquid Fuels Overview. The world oil market should gradually tighten in 2010 and 2011, as the global economic recovery continues and world oil demand begins to grow again. Continuation of the production targets set by the Organization of the Petroleum Exporting Countries (OPEC), as well as lower overall growth in non-OPEC supply over the 2010-2011 forecast period, would also contribute to a firming of crude oil prices to above \$80 per barrel this summer. However, the combination of high commercial inventories among members of the Organization for Economic Cooperation and Development (OECD) and ample OPEC surplus production capacity should help dampen the likelihood of any large upward swings in prices.

Duke Energy Hedging Program Remaining Base Not Yet Locked In Winter 2009-10



Gas Commercial Operations Hedging Program Market Indicators Summary March 23, 2010

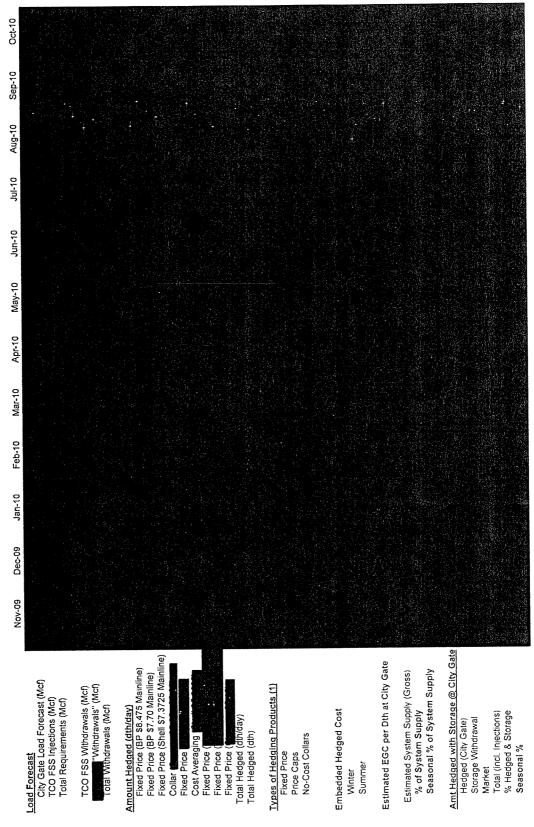
	Price Pressure	Term	Comments	Page Ref
Weather				
Long Term Forecast (Apr 10-Jun 10)	←→	Long	NOAA predicting above average temperatures for Apr. 2010—Jun. 2010 for the western portion of CONUS with pockets of below normal temperatures in the central portions, and equal change of above, normal or below temperatures east of the Mississippi river.	10
Mid Term Forecast (30-60 days)	←→	Long	April is predicted to be 3.9% colder than 10 year normal and May is predicted to be 19.0% colder than 10 year normal.	11
Short Term Forecast (6-10 days)	ļ ļ	Short	Above and Normal temperatures dominate majority of CONUS during early portion of forecasted period changing to below in Midwest and East sections during the later portion of the forecasted period.	12
Storage Inventory		.,		
EIA Weekly Storage Report	1	Long	Storage withdrawals for the week ending March 12th were 11 BCF. Storage levels are at 1.615 TCF which is 2.4% lower than last year and 4.7% higher than the 5 year average.	13
Industry Publications				
PIRA Energy Group Summer 2010: Winter 2010/11	1	Long	Shale gas economics suggest that the extended NYMEX gas price curve over the next year or so will prove to be unsustainably high. PIRA projecting \$\frac{1}{2} MMBtu for 2010 and \$\frac{1}{2} \frac{1}{2} MBtu for 2010.	
Gas Daily	1	Long	Merrill Lynch slashes 2010 price 17% to \$5.00 MMBtu. "The reason behind the lower natural gas prices is simply more supply." Breakeven economics in shale plays range from \$1.50 to \$4.00/MMBtu.	14 - 16
Gas Daily	†	Long	The abundance of gas from shale plays will only heighten the competition between gas and coal in the power generation sector over the next several years. The impact of excess gas supply on the 2009 coal burn was huge—coal-fired generation declined 15.7% while that of natural gas increased 14.5%.	17 - 18
Gas Daily	†	Long	human health and the environment".	19 - 20
Gas Daily	1	Long	Gas prices are likely to stagnate in a trading range between \$4 and \$6/MMBtu for the next year and a half, due to robust supply and soft demand.	21 - 22
Government Agencies				
Energy Information Administration Summer 2010: \$5.003 Winter 2010/11: \$5.714	1	Long	The projected Henry Hub annual average spot price is expected to be \$5.168 per MMBtu in 2010 and \$5.646 per MMBtu in 2011.	23
Technical Analysis				
Summer 2010 Strip Chart	←→	Short	Closed at \$4.38.	24
Winter 2010-11 Strip Chart	←→	Short	Closed at \$5,48.	25
Economy				
Demand	-	Long	EIA: Natural gas consumption is projected to increase 0.7% to 62.9 Bcf/day in 2010 and decline by 0.4% in 2011. Cold weather drives this year's increase. HDD during the first 2 months of 2010 were 5.5% above the 30-year normal and the highest since 2004. The small decline in 2011 reflects the projected return to near-normal weather.	26
Supply	1	Long	EIA: Total marketed natural gas production declines 2.7% to 58.7 BCF/day in 2010 and increases by 1.1% in 2011. EIA expects U.S. net imports to be slightly higher in 2010. For 2010, U.S. LNG imports are forecast to increase by about 45% (or 0.56 Bcf/d).	26 - 27
Oil Market	4 -> ·	Long	More oplimistic expectations of global economic growth during 2010 drives oil consumption up 1.5 million bbl/d from 2009. This increased growth in 2010 supports a firming of crude oil above \$80 per barrel this summer.	26

Meeting Minutes: 10th Floor North Conference Room - 1:00 pm

Attendees: Jeff Kern, Jim Henning, Petty Walker, Mike Brumback, Mitch Martin, Joachim Fischesser, Steve Niederbaumer

Discussed current market conditions including weather forecasts, storage levels and various analysts projections as well as EIA's forecasts for natural gas and oil markets. In addition, discussed EPA's proposed study on fracking, Shale gas breakeven economics of various shale gas plays and discussed the displacement of coal as a fuel source vs natural gas. Based on the discussion (predictions of additional reductions in price), as well as the current position of the Hedging Program, no additional hedging is proposed.

Duke Energy Kentucky Hedging Program - Current Position November 2009 - October 2010 As of 03/22/10



(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

Duke Energy Kentucky Hedging Program - Current Position November 2010 - October 2011 As of 03/22/10

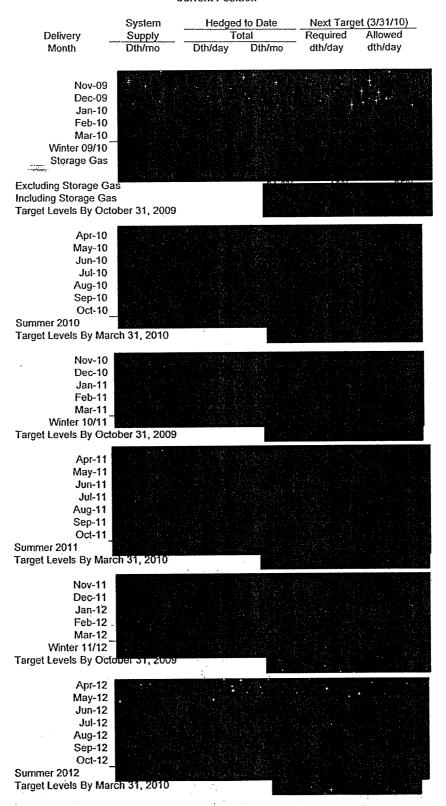
Oct-11						
Sep-11						
Aug-11						
Jul-11						
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Mar-11						
1 Feb-11						
0 Jan-11						
10 Dec-10						
Nov-10						۵
	cast (Mcf) (Mcf) (Mcf) als (Mcf) (Mcf) Acf) (Acf)	ducts (1)	st	Estimated EGC per Dth at City Gate	ipply (Gross) oly stem Supply	Amt Hedged with Storage @ City Gate Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections) % Hedged & Storage Seasonal %
	Load Forecast City Gate Load Forecast (Mcf) TCO FSS. Injections (Mcf) Total Requirements (Mcf) Other "Withdrawals" (Mcf) Total Withdrawals" (Mcf) Total Withdrawals" (Mcf) Fixed Price Fixed Hedged (dth)	Types of Hedging Products (1) Fixed Price Price Caps No-Cost Collers	Embedded Hedged Cost Winter Summer	ed EGC per D	Estimated System Supply (Gross) % of System Supply Seasonal % of System Supply	t Hedged with Storag Hedged (City Gate) Storage Withdrawal Market Total (incl. Injections) % Hedged & Storage Seasonal %
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Duke Energy Kentucky Hedging Program - Current Position November 2011 - October 2012 As of 03/22/10

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Aug-12 Sep-12										, and a second
Jul-12										
12 Jun-12										
Apr-12 May-12										
Mar-12										
Feb-12										
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Dec-11										
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(1) Maximum percentage allowed per type of hedging product is 25% for Winter months and 40% Summer months.

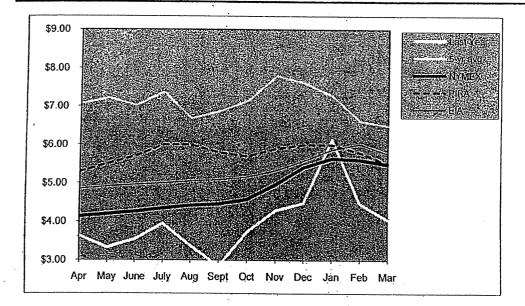
Duke Energy Kentucky Hedging Program Current Position

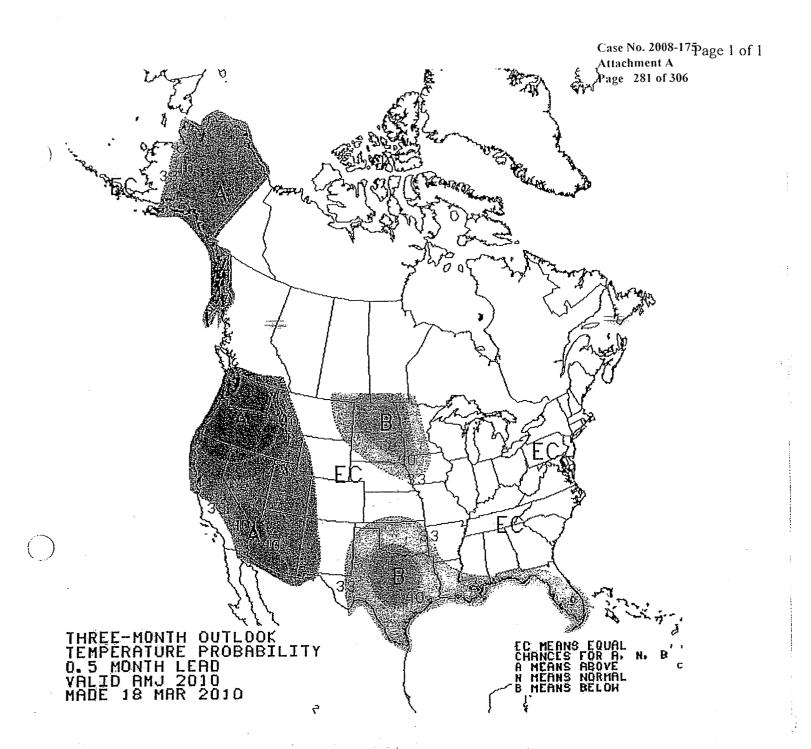


COMPARISON OF HISTORIC SPOT & PROJECTED PRICES Page 280 of 306 TO CURRENT FUTURES PRICES

	Histor	ic Prices:			
	NYMEX C	losing Price			
	5-yr. avg.	Last Year	 PIRA	EIA	NYMEX
	(05/06-09/10)	(2009-2010)	23-Feb-10	9-Mar-10	22-Mar-10
			- Japan		
Apr	\$7.06	\$3.63		\$4.850	\$4.137
May	\$7.21	\$3.32	+	\$4.910	\$4.197
June	\$7.02	\$3.54		\$4.960	\$4.262
July	\$7.37	\$3.95		\$5.000	\$4.351
Aug	\$6.68	\$3.38		\$5.050	\$4.424
Sept	\$6.87	\$2.84		\$5.090	\$4.464
Oct	\$7.15	\$3.73		\$5.160	\$4.578
Nov	\$7.80	\$4.29		\$5.330	\$4.963
Dec	\$7.62	\$4.49		\$5.580	\$5.412
Jan	\$7.28	\$6.14		\$5.870	\$5.640
Feb	\$6.61	\$4.48		\$6.020	\$5.609
Mar	\$6.49	\$4.06		\$5.770	\$5.497
12 Month Avg	\$7.10	\$3.99		\$5.299	\$4.795
Summe	r Average			\$5.003	\$4.345
Winter A	verage			\$5.714	\$5.424

Hedged P	rices
Ohio K	entucky



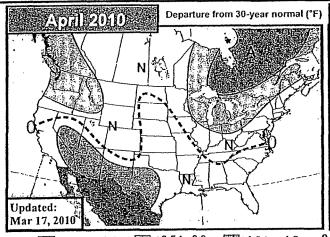




EarthSat's 30-60 Day Outlook

Wednesday, March 17, 2010

Forecaster: SS/BH/TH



Updated:
Mar 17, 2010

- +0.1 to +0.4

+0.5 to 0.9

题+1.0 to +1.9

0 ___-0.1 to -0.4

-0.5 to -0.9

-1.0 to -1.9

+2.0 to +2.9

23.0

-2.0 to -2.9

≤3.0

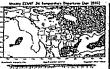
Previous

Warm changes across the northern tier

Mild in the Great Lakes

Warm changes were made to the forecast across the northern tier, with aboves stretching towards the Great Lakes and the Interior Northeast. The European model's monthly outlook released on Monday shows a pattern that shows similarities to out forecast, with warmer than normal temperatures across Eastern Canada and the Northeast and cooler than normal conditions across parts of the South. It shows a lot of near normal temps across the mid-continent which may be a sign of a more variable month overall. Meanwhile, we showed a map in yesterday's Editor's Notes that highlights the risk for warmer.

conditions across the northern tier, using analog years with similar warmth to the current temp anomalies in the Nino 3.4 and 4 regions.





Apr GWHDD* Forecasts

*10Y Normal updated to '00-09

Apr 2010 Fcst:

358.0

10Y Normal* 344.7 30Y Normal 369.0 Apr-2009 361.2

Change: -5.0

National Gas-Weighted HDDs



No changes

Warm in the West

The May forecast remains unchanged, continuing to feature a warm outlook in the West and cooler than normal temperatures in the Midwest and Northeast. The ECMVF monthly map (left) shows a much warmer scenario across the Midwest and East with more widespread above normal temperatures overalt. The CFS monthly outlook for May (center) using initial conditions from March 6-March 15 also shows a warmer solution across the Northeast and Eastern Canada, with colder anomalies across Texas into the Southern Plains and Midwest. Using the Nino 3.4 and 4 analogs gives an outlook (right) that show more similarities to ours overall.







May PWCDD* Forecasts

*10Y Normal updated to '00-09

May 2010 Fcst

88.0

10Y Normal* 108.6 30Y Normal 98.4 May-2009 109.3

Change: 0.0

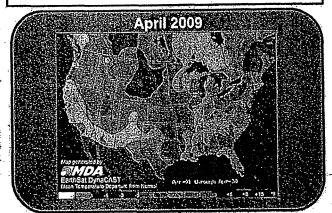
*National Population-Weighted CDDs

March So Far



We're about halfway through the month thus far, and looking at the temperature anomalies we see a pattern that shows some distinct similarities to our

forecast. The forecast captures the overall shape of the pattern reasonably well, with yearn anomalies across the northern tier and cold anomalies across much of the southern tier. Some of the spots in the middle are where we see the biggest misses, particularly the warmth extending from the central Plains into the southern (viidwest and the Mid-Atlantic, The warm anomalies in the East look to increase in magnitude as more warmth continues through the next ten days. Meanwhile, the West should start to see some warm anomalies as well. The national GWHOD number is expected to be considerably warmer than forecast in late Feb as a result.

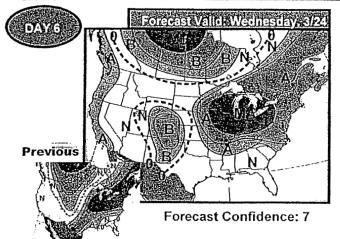




EarthSat's 6-10 Day Forecast-Betailed

Friday, March 19, 2010

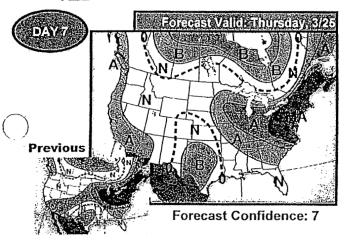
Forecaster: BH/AC

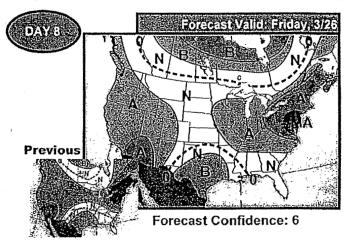


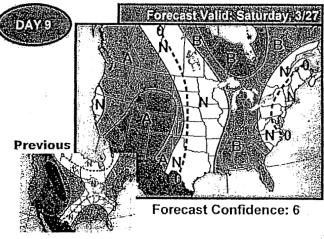
Today's Forecast:

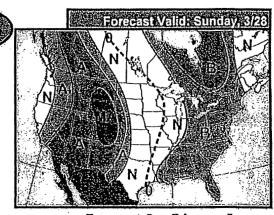
Warmth Returns Across West By Mid-Period Cooling Trend For East, Midwest Late

Temperatures in the Northeast during the first half of the period have been lowered a bit today as uncertainty on the details has increased. While the forecast leans towards the European models, which continue to push much above normal readings into the Northeast, the American models depict more marginal above normal readings. If the American models are correct, the cool down might also be faster to occur. The cool risk persists into the second half of the period for the Midwest and East with the chance for stronger cooling to develop across these areas late. A ridge in the West provides the West with widespread aboves for the second half, but much aboves may form at times.









Forecast Confidence: 5

Attachment

Glossange 284 of 306

History (XLS)

Methodology

and Weekly Data

Revision Policy

Storage Basics

5-Year Averages, Maximum, Minimum, and Year-Ago Stocks References

Differences Between Monthly

Natural Gas Weekly Update

Natural Gas Navigator

Related Links

Release Schedule Sign Up for Email Updates

U.S. Energy Information Administration Independent Statistics and Analysis > Natural Gas > Weekly Natural Gas Storage Report

Weekly Natural Gas Storage Report

Released: March 18, 2010 at 10:30 a.m. (eastern time) for the Week Ending March 12, 2010 Next Release: March 25, 2010

Working Gas in Underground Storage, Lower 48

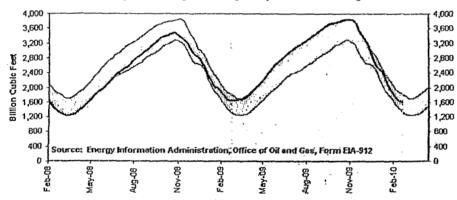
Working Ga	s in Undergrou	nd Storage, Lo	wer 48			other formats: Su	mmary.TXT CSV			
	Stocks	n billion cubic f	eet (Bcf)	Historical Comparisons						
Region	03/12/10	03/05/10	Change	Year Ago (03/12/09)	5-Year (2005-	2009) Average			
	00/12/20	00,00,10	change	Stocks (Bcf)	% Change	Stocks (Bcf)	% Change			
East	770	789	-19	681	13.1	732	52			
West	283	289	-6	278	1.8	230	23.0			
Producing	562	548	14	697	-19.4	580	-3.1			
Total	1,615	1,626	-11	1,655	-2,4	1,542	4.7			

Notes and Definitions

Summary

Working gas in storage was 1,615 Bcf as of Friday, March 12, 2010, according to EIA estimates. This represents a net decline of 11 Bcf from the previous week. Stocks were 40 Bcf less than last year at this time and 73 Bcf above the 5-year average of 1,542 Bcf. In the East Region, stocks were 38 Bcf above the 5-year average following net withdrawals of 19 Bcf. Stocks in the Producing Region were 18 Bcf below the 5-year average of 580 Bcf after a net injection of 14 Bcf. Stocks in the West Region were 53 Bcf above the 5-year average after a net drawdown of 6 Bcf. At 1,615 Bcf, total working gas is within the 5-year historical range.

Working Gas in Underground Storage Compared with 6-Year Range



Note: The shaded area indicates the range between the historical minimum and maximum values for the weekly series from 2005 through 2009, Source: Form EIA-912, "Weekly Underground Natural Gas Storage Report," The dashed vertical lines indicate current and year-ago weekly periods.

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Thursday, March 18, 2010

BoA/Merrill Lynch cuts 2010 price forecast to \$5

Citing the rapid growth of production from low-cost US shale plays, the head of Bank of America Merrill Lynch's commodities team Wednesday slashed his US natural gas price forecast for 2010 by 17% to \$5/MMBtu.

"The reason behind the lower natural gas prices is simply more supply," Francisco Blanch said in a note to clients. "Capital and rigs poured into Haynesville, Marcellus and Eagle Ford [shale plays] even as the 12-month forward strip traded below \$6/MMBtu."

The reason behind the surge in shale drilling? Producers can still make money, in some cases at prices as low as \$1.50/MMBtu, depending on the play, Blanch said, and the numbers for those plays will keep changing as activity grows.

"Breakeven economics in the shale plays are dynamic, constantly changing as more wells are drilled," Blanch said. "Breakeven costs in the major shale plays can be substantially lower, ranging from \$1.50/MMBtu to \$3/MMBtu in the Marcellus Shale to less than \$4/MMBtu in the Haynesville, suggesting that producers in these areas can make money at current prices."

Adding to the low-cost environment in the new shale plays like the Haynesville and the Marcellus, Blanch said, is the high productivity of wells in those plays. Haynesville wells report initial production rates of 15,000 Mcf/d, compared to the 2,400 Mcf/d rates seen in the older Barnett Shale.

"Efficiency gains could continue in 2010 as technical skill and know-how continue to expand," Blanch said. "We expect drilling to remain robust, especially in the Haynesville as well as other shale plays."

"Unless even lower prices force producers to slow down horizontal drilling, natural gas production could soon recover to last year's level, Blanch said, before the drastic cut in the rig count occurred.

Also helping to keep downward pressure on North American prices is a sluggish US economic recovery and rising imports of liquefied natural gas, Blanch said.

LNG imports will more than make up for an expected 500,000 Mcf/d cut in pipeline imports from Canada, Blanch said.

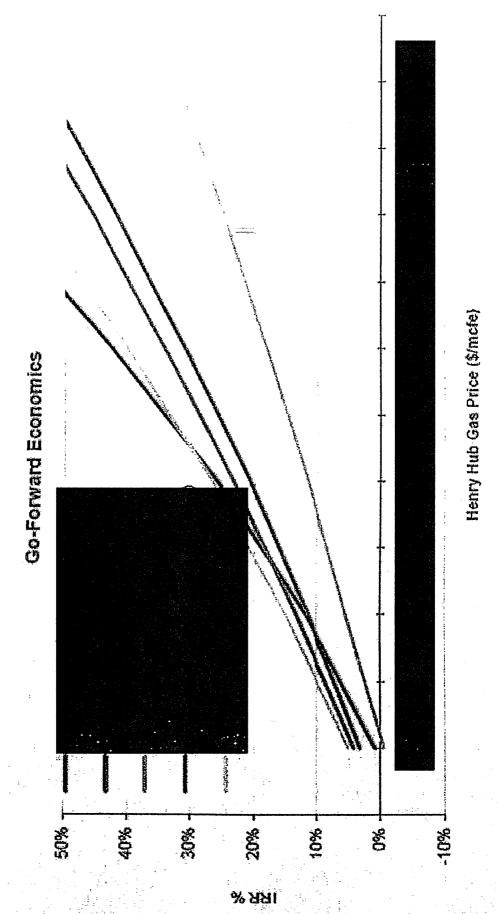
"The risk, which we have flagged before, is largely related to the 3.5 Bcf/d build-out in global LNG capacity this year," Blanch said.

Case No. 2008-175 Attachment A Page 286 of 306

"US LNG imports are up about 1 Bcf/d from a year ago due to higher flows from Qatar, which could rise further as RasGas Train 7 ramps up following commercial production start-up in late February," Blanch said. — *Bill Holland*

making a15%-25% rate of return. Looking at these curves there is no reason that any major producers The economic in the shale plays are so good that even at a \$4-\$5 gas prices, some producers are would stop drilling in the shale plates with prices at current levels.

Initial Rate of Ret



Monday, March 22, 2010

Gas, coal rivalry expected to heat up: analysts

The abundance of gas from shale plays will only heighten the competition between gas and coal in the power generation sector over the next several years, with both fuels finding it hard to maintain higher prices and environmental rules tightening, analysts noted last week.

The tension between the two fuels, sparked by the growth of shale gas, is likely to continue for another three years before the gas supply glut eases, speakers said at Platts' Coal Properties and Investments conference last week in Fort Lauderdale, Florida.

The bottom line for coal-fired utilities is that they cannot plan for the future based on a \$9/MMBtu price of natural gas anymore, said Seth Schwartz, managing director of Energy Ventures Analysis. They now have to consider a \$6/MMBtu price of gas or perhaps even lower when planning. "The shale gas technology has radically changed the outlook for natural gas supply and price," Schwartz said.

The latest Energy Information Administration Short-Term Energy Outlook predicted the Henry Hub spot price will average \$5.17/MMBtu this year and \$5.65/MMBtu in 2011.

The agency predicted that "prices may strengthen slightly in the coming months as demand to rebuild natural gas in storage ... begins. However, the potential for higher domestic production, increasing [liquefied natural gas] supply and limited consumption growth all reduce the possibility of sustained high prices as inventories are replenished over the next several months."

Last week, the April NYMEX gas futures contract hovered above \$4.30/MMBtu, but it closed March 18 at \$4.085/MMBtu based on a lower-than expected draw from storage.

EIA also projected the electric-power-sector delivered coal price would fall by almost 6% to average \$2.08/MMBtu in 2010 and would decline by an additional 2.4% in 2011. The price declines are based on long-term, high-cost coal contracts that are ending in 2010 and 2011.

The impact of excess gas supply on the 2009 coal burn was "huge," particularly east of the Mississippi River, Schwartz said. Citing 2009 coal burn data, he said coal-fired generation declined 15.7% while that of natural gas increased 14.5%. But overall, gas use declined by 3 Bcf in 2009, quickly filling storage, sending the gas to the power market and driving down prices.

Central Appalachian coal bore the brunt of displacement, particularly in the Southeast, where coal burn was down by a "shocking 19.9%," he said. Meanwhile, Eastern coal burn was down 20 million short tons, mostly in the shoulder months of spring and fall.

Using EVA's analysis, Schwartz said Central Appalachian coal displacement begins when the price of natural gas falls below \$5.40/MMBtu and is huge below \$4.50/MMBtu, while Powder River Basin coal displacement occurs when the gas price falls below \$4/MMBtu and is significant below \$3/MMBtu. Gas hit a low of \$2.07/MMBtu in September 2009, and the NYMEX prompt-month settlement hovered in the \$2/MMBtu range in the early part of September. The average price for 2009 NYMEX gas was \$4.16/MMBtu.

The biggest threat to coal, particularly Appalachian coal, arises from the close proximity of the more than 200 Tcf of Marcellus shale gas reserves, said David Bellman, managing director of American Electric Power's strategic and economic analysis division.

He sees the country tipping more toward gas — and gas prices continuing downward — because the glut of supply from the Marcellus Shale would lead to Appalachian gas prices being lower than Henry Hub prices. As an example, he pointed to the recent completion of the Rockies Express pipeline that has already reduced the Rockies basis with Henry Hub by more than 50%.

Until now, gas was flowing west from the Rockies to the East, but Marcellus gas production might change this dynamic as the flows could move west to meet electric generation growth, he said

Bellman said gas has the advantage of being abundant, environmentally cleaner and less expensive for power plant construction than coal, which has had volatile prices in the last couple of years.

Chris Hobson, Southern Company's chief environmental officer and senior vice president of research and environmental affairs, said the Obama administration is forcing the power industry to make decisions based on natural gas, rather than looking long term.

It is encouraging a move away from coal and toward natural gas with no offsetting resources because "we won't have time to put other generation sources to work," Hobson said. "We are headed for a real energy train wreck."

Friday, March 19, 2010

EPA launches study into fracking impacts

The US government's top environmental regulator said Thursday it is launching a widely anticipated study to examine the impact of hydraulic fracturing on water quality and public health.

The Environmental Protection Agency said it would allocate \$1.9 million from this year's budget to kick off what the agency says will be a "comprehensive, peer-reviewed" study of the drilling technique that has unlocked trillions of cubic feet of potentially recoverable natural gas in North America and around the world.

The agency Thursday promised to include input from exploration-and-production companies while it conducts the study, which will last into next year.

"Our research will be designed to answer questions about the potential impact of hydraulic fracturing on human health and the environment," said Dr. Paul Anastas, assistant administrator for EPA's Office of Research and Development. "The study will be conducted through a transparent, peer-reviewed process, with significant stakeholder input."

The technique, developed by US natural gas producers, shoots highly pressurized mixtures of water, steam and a blend of chemicals down a borehole to fracture shale rock beneath the surface. As the explosion of shale drilling has spread across the US away from traditional oil and gas areas to states like Pennsylvania and New York, public concern has grown over the impact of fracturing on water and the environment.

While the typical gas shale well is thousands of feet below the surface and the water table, fracturing the laterals of those wells can consume more than 1 million gallons of water, some of which comes back up as wastewater that must be treated and disposed of

The Environmental Engineering Committee of the EPA's Science Advisory Board has been tasked with designing the study. The science board is scheduled to meet on the issue next month, April 7 and 8.

Saying it was still in the very early stages of designing the study, the EPA noted that it needs to define the questions it wants to ask while taking input from producers and environmental groups before farming the study's design out for review by outside scientists. Then, the EPA said, research will begin into questions raised by hydraulic fracturing.

In addition to the \$1.9 million being diverted in the EPA's budget this year, the agency said it will ask for more money for the study in next year's budget request to Congress.

Industry reaction was swift and cooperative in tone.

"With the extraordinary opportunity presented by our nation's natural gas abundance comes the responsibility to be good stewards of the land," American Natural Gas Alliance President and CEO Regina Hopper said in a statement. "We look forward to sharing with the EPA the extensive work done at every step of the natural gas extraction process. We are confident that a scientific and data-driven examination will provide policymakers and the public with even greater reassurance of the safety of this practice."

Lee Fuller, executive director of the Independent Petroleum Association of America's Energy in Depth project, said that while industry is happy to cooperate with a fracking study, further efforts on Capitol Hill to regulate the practice should be halted until a conclusion is reached.

"We are hopeful and it is our expectation that this study — if based on objective, scientific analysis — will serve as an opportunity to highlight the host of steps taken at every well site that make certain groundwater is properly protected," Fuller said.

"Efforts under way in Congress to give EPA outright authority to regulate fracturing — which could hamper domestic energy production and job growth — should come to a standstill until this study is completed," he added.

The co-sponsor of one of those efforts currently in Congress, the FRAC Act [Fracturing Responsibility and Awareness of Chemicals Act]; which would remove hydraulic fracturing's current exemption from the Safe Drinking Water Act, said the need to protect water supplies was as important as producing natural gas.

"I applaud the EPA's decision to begin a serious investigation into this matter and will continue working to protect our environment from the chemical concoctions being pumped into the ground by energy companies," New York Democratic Congressman Maurice Hinchey said.

Hinchey, whose 22nd District lies atop the bulk of New York's portion of the Marcellus Shale, said "Understanding the risks that hydraulic fracturing poses to drinking water supplies is critical to guiding future policies."

A similar bill in the Senate is being sponsored by Pennsylvania Democrat Robert Casey. The Marcellus, which has seen a boom in drilling, runs diagonally across his state from the southwest to the northeast.

Washington energy policy analyst Kevin Book of ClearView Energy Partners cautioned his clients immediately before the announcement that there was little risk of immediate new regulation of fracking.

"We caution clients that, although this news may produce headlines, we see little sign of nearterm or intermediate term regulatory risks for Lower-48 unconventional gas extraction," Book said.

In fact, conducting a federal study might help ward off federal regulation by reassuring state and local authorities that the techniques are benign, Book said.

Despite industry reassurance that fracking has been used safely for 60 years, some residents near wells in Colorado and Pennsylvania have complained that their drinking water has been contaminated by gas drilling.

State governments in New York and Pennsylvania have expressed concern over the limited ability of their rivers and streams to both supply fracking water and absorb treated wastewater. In response, several Marcellus Shale drillers such as Pittsburgh's EQT and Philadelphia's Atlas Energy report being able to recycle up to 100% of their frack water, using the same water for repeated frack jobs. — *Bill Holland*

Thursday, March 4, 2010

Report: Gas to trade at \$4-\$6 through mid-2011

Given the persistent combination of robust supply and soft demand, gas prices are likely to stagnate in a trading range between \$4 and \$6/MMBtu for the next year and a half, consultant Energy Solutions said in a report this week.

The firm said gas prices may experience periodic dips and spikes outside that range based on short-term fundamentals and eventually will return to higher levels. But "that isn't going to occur until supply and demand come closer to being in balance, and we don't believe that will occur in 2010 or even in the first half of 2011," said EnergySolutions President Valerie Wood.

The "prolific discoveries of shale gas" have changed the marketplace and enabled producers to experience efficiency gains, reduce expenses and achieve "very high initial productivity rates," Wood said.

As a result, "producers can accept a lower sales price because their costs have fallen," the report said. "Service costs are projected to have fallen by as much as 45% last year. The cost to lease an acre of land has been cut in half. More wells can be drilled from a single drilling rig, which means more production capabilities with the use of less labor."

The report noted that producers are profitable in the Haynesville Shale region at \$2.90 to \$3.50/MMBtu. "That is likely one reason production in Louisiana has climbed for 11 consecutive months," Wood said.

The supply glut is expected to continue even if stricter environmental regulations come into play, Wood predicted.

"While there could be some legislation imposing restrictions on hydraulic fracturing for shale supplies, the recent discovery of natural gas in the shallow waters of the Gulf of Mexico could open up an entirely new frontier for supplies," the report said. "Plus, drilling techniques used in the US are now being used elsewhere in the world, and this is only going to increase global natural gas supplies as well."

It also appears that producers are preparing for a lower-priced environment. Two top companies have been attempting to negotiate five- and 10-year sales contracts, "a move that they would only make if they believe price weakness is in the future," the report said.

In addition, producers have hedged as much as 50% of their 2010 production, another indication that they anticipate falling gas prices.

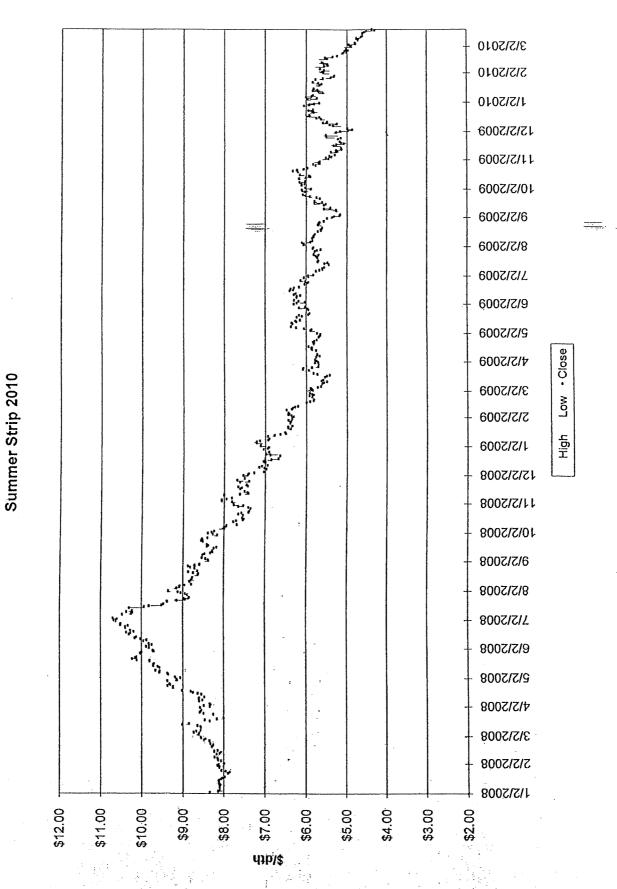
On the demand side, gas consumption remains relatively low even as economic recovery appears to be under way, Wood said. "Given the load that was lost due to the recession, it is expected that natural gas demand in 2010 and even 2011 will likely be lower than it was several years ago." Assuming temperatures are near normal through next autumn, "there is no reason to be alarmed that supplies will be insufficient at this time to meet this demand," she added.

Wood cautioned that despite the outlook for lower prices, buyers should not be lulled into a false sense of security.

"While we've provided our rationale for a weak price environment in 2010, it doesn't mean that buyers should become complacent, because periodic rallies will occur," she said. "Even during weak price environments, there are opportunities to make cost-effective longer-term purchases, particularly in the first and third quarters of the year, and buyers should be prepared for those opportunities." — *Rodney White*

Energy Information Administration Henry Hub Pricing Per MMbtu March 9, 2010 Release

	Jan-08	7.99	Jan-09	5.24	Jan-10	5.83	Jan-11	5.87
	Feb-08	8.54	Feb-09	4.51	Feb-10	5.32	Feb-11	6.02
	Mar-08	9.41	Mar-09	3.96	Mar-10	4.93	Mar-11	5.77
	Apr-08	10.18	Apr-09	3.49	Apr-10	4.85	Арг-11	5.36
	May-08	11.27	May-09	3.83	May-10	4.91	May-11	5.31
	Jun-08	12.69	Jun-09	3.80	Jun-10	4.96	Jun-11	5.36
	Jul-08	11.09	Jul-09	3.38	Jul-10	5.00	Jul-11	5.41
	Aug-08	8.26	Aug-09	3.14	Aug-10	5.05	Aug-11	5.50
:	Sep-08	7.67	Sep-09	2.97	Sep-10	5.09	Sep-11	5.60
	Öct-08	6.74	Oct-09	4.00	Oct-10	5.16	Oct-11	5.70
	Nov-08	6.68	Nov-09	3.66	Nov-10	5.33	Nov-11	5.85
	Dec-08	5.82	Dec-09	5.34	Dec-10	5.58	Dec-11	6.00
:	Average		Average		Average		Average	
	2008	\$ 8.862	2009	\$ 3.943	2010	\$ 5.168	2011	\$ 5.646
	Summer 2008	\$ 9.700	Summer 2009	\$ 3.516	Summer 2010	\$ 5.003	Summer 2011	\$ 5.463
V	Vinter 2008- 2009	\$ 5.242	Winter 2009- 2010	\$ 5.016	Winter 2010- 2011	\$ 5.714		



Winter Strip Nov10 - Mar11

Short-Term Energy Outlook

March 9, 2010 Release

Natural Gas

U.S. Natural Gas Consumption. EIA expects total natural gas consumption to increase by 0.7 percent to 62.9 billion cubic feet per day (Bcf/d) in 2010 and decline by 0.4 percent in 2011. Cold weather drives this year's natural gas consumption increases. Total natural-gas-weighted heating degree-days during the first 2 months of this year were 5.5 percent above the 30-year normal level and the highest for the period since 2004.

The combination of frigid temperatures and electric space heating in the Southeast contributed not only to increases in residential and commercial sector natural gas consumption but also to very strong natural gas consumption in the electric power sector. Even with the assumption of near-normal weather in March, EIA expects first- guarter natural gas use in the electric power sector to increase by about 3 percent above the same period last year and about 17 percent above the previous 5-year average. This increase in first quarter 2010 electric power sector consumption has all but eliminated the projected 1.3-percent year-over-year decline in natural gas consumption for this sector in last month's Outlook.

The 2011 outlook for a small decline in total natural gas consumption reflects the projected return to nearnormal weather, which is expected to reduce consumption in the residential, commercial, and electric power sectors. Continued economic recovery contributes to a projected 2.1-percent increase in natural gas consumption in the industrial sector.

U.S. Natural Gas Production and Imports. EIA expects total marketed natural gas production to decline by 2.7 percent to 58.7 Bcf/d in 2010 and increase by 1.1 percent in 2011. The number of working natural gas rigs has been increasing this year in response to higher prices in both the spot and forward markets. According to Smith International, natural gas rigs have increased by more than 17 percent, or by nearly 140, since the start of this year. There are currently almost 570 working horizontal rigs, a new record. EIA still anticipates a decline in 2010 production because of the lag time arising from low drilling rates last year and steep decline rates associated with newly-drilled wells. However, continued recovery of drilling rig activity, increasing drilling efficiency, and the potential for higher production rates from shale gas wells could lead to higher-than-expected production this year and next.

EIA expects U.S. net imports to be slightly higher in 2010 as a projected decline in pipeline imports is offset by lower exports and higher imports of liquefied natural gas (LNG). While cold weather across the northern hemisphere has helped absorb some of the new LNG supply that has recently come on-stream, U.S. LNG imports are forecast to increase by nearly 0.8 Bcf/d over last year in the first quarter 2010. For 2010 as a whole, U.S. LNG imports are forecast to increase by about 45 percent (or 0.56 Bcf/d). As global LNG demand and import capacity expand next year, EIA expects U.S. LNG imports to show little year-over-year growth in 2011.

Global Crude Oil and Liquid Fuels

Crude Oil and Liquid Fuels Overview. ElA's more optimistic updated expectation for global economic growth during 2010 drives the 2010 forecast for oil consumption growth upwards to 1.5 million barrels per day (bbl/d) from 1.2 million bbl/d in last month's Outlook. This increased growth in 2010 oil consumption supports a firming of crude oil prices at above \$80 per barrel this summer and accommodates a further drawdown of commercial oil inventories. While ElA has also reduced its projections for surplus production capacity in the Organization of the Petroleum Exporting Countries (OPEC), surplus capacity remains ample, dampening the likelihood of a large upward swing in prices.

LNG Supply Surge

P luto World Theoretical Liquefaction Capacity 2007-2010, Bcm/y Sakhalin Tangguh Qatargas BalHar Rasgas III Peru LNG Gatargas II 1+182 1+182 III+5 LNG+182 1+7 III 1+6 NINGT-6 NWS III + October Res Ges re-sche Effective end Total North 410 370 360 350 340 310 300 280 330

2009 and 2010 will be marked by an impressive liquefaction capacity ramp-up (+33% as of end 2010 vs. end 2008 if current schedules of plants under constrùction are maintained)

oversupply is possible over the next 2-3 years if economy does not recover quickly Because liquefaction plants have high fixed costs and debt to pay back, an LNG

Capacity shut-ins are unlikely: the US market should absorb potential Asian and EU supply excess via price adjustment.



Department / Name | 19 March, 2010

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Wanket Trends — Within Next 659 Months

This document summarizes our views on North American Natural Gas fundamentals.

Bearish Price Factors:

- Production
- Drilling remains strong even in weak price environments
 - Producers are hedged out 1-2 years
- They no longer need \$6-\$7 gas to make money due to unconventional plays
 - Still a fair rate of return on \$4-\$5 NYMEX gas for shale producers
 - Rig counts are climbing and are drilling more efficiently
- U.S. deliveries are the strongest in almost 2 years
- A developing gas "situation" in Europe may force more gas to the U.S. Storage at 1,615 as of 3/12
- Around 100 Bcf greater than the 5-year average, but still below 2009's historical run

Wildcard Factors:

- Weather Forecast
- Weather forecast right now are not impressive for summer heat
 - Tropical disturbance are always a wildcard
- Less of a threat than in years past due to location of production

- Canadian Imports
- Imports from Canada are expected to decline into 2011
 - Coal Displacement
- At current gas prices (<\$4.50ish), gas should begin displacing coal in the Southeastern U.S. (we are hearing rumors it has begun)

Tuesday, March 23, 2010

Supply glut seen keeping gas sub-\$6 this year

Investment bank Raymond James' top gas analyst isn't backing away from the firm's \$5.50/Mcf price forecast for 2010 but cautioned Monday that \$6/Mcf gas may not happen this year.

The biggest factor keeping prices down? Gas output hasn't fallen much at all, analyst Marshall Adkins said in a note to clients.

"Natural gas production has yet to show the hard rollover that many of the pundits (read: bulls) were pointing to throughout 2009," Adkins said.

The bank's own analysis of production using reports by publicly traded companies and the Energy Information Administration's Form 914 production reports indicate that gas supplies will only fall about 1 Bcf/d in 2010 from 2009. Worse for bulls, Adkins said, given the sometimes double-digit production gains from shale plays being forecast by independents, is that gas production could be greater in 2010 than 2009.

Analysts at Pritchard Capital Partners said Monday that growing rig counts and supply are making investors bearish on gas prices.

"Bearish sentiments prevail on concerns that due to increased drilling activity, supplies may actually rise in 2010, exacerbating the situation in an already well-supplied market," Pritchard said. The firm noted that the Baker Hughes rig count rose by another 12 rigs last week to 939 rigs, an increase of 41% from the low point in July.

Offsetting the recent cold snap's ability to get gas out of storage is an increase in liquefied natural gas imports, Adkins noted. While storage levels are below those of a year ago, they are still above the five-year average without the balancing of as many power plants switching from coal to gas, Adkins said.

"Unless operators start cutting back on natural gas drilling (or go back to vertical wells), this summer could be ugly for natural gas prices," Adkins said. "In fact, given recent storage data, we would probably take the under on our \$4/Mcf forecast for the third quarter of 2010 — heck, we may even have a \$3 handle this week."

From its peak in the first quarter of 2009, gas production, according to Raymond James' analysis, has only fallen 2.2% (700,000 Mcf/d) for private producers, 0.5% (100,000 Mcf/d) by independents, and 8.2% (900,000 Mcf/d) for the majors.

"The odds are stacking up against the bull case of natural gas," Adkins said. "In fact, we believe domestic US natural gas production may have already bottomed."

"We are still (conservatively) estimating 'normalized' gas supply falling approximately 1 Bcf/d year-over-year in 2010," Adkins said. "Regardless of which US gas supply scenario plays out, it looks like \$6 gas is not in the cards this summer."— Bill Holland

Tuesday, March 23, 2010

Marcellus to dwarf area demand by 2015: Bentek

Production from the Marcellus Shale is likely to double in five years and far outpace regional demand growth during that time, potentially displacing other supplies such as Canadian or Rockies gas, Bentek Energy said in a Monday report.

Bentek's "Beast in the East," report <u>forecasts production to climb from 2.3 Bcf/d in the first quarter of this year to about 4.1 Bcf/d in 2015, based on current rig count levels. In a more aggressive scenario, the consulting firm said the 4 Bcf/d level could be reached by early 2011 if Marcellus producers continue to double production each year.</u>

In contrast, actual demand growth for the region looks set to increase only 800,000 Mcf/d by 2015 from 2009 levels, the report stated. Bentek puts power sector growth by 2015 at only 0.3 Bcf/d, but their scenario did not take into account a potential shift away from coal-fired generation to gas.

"The bottom line in this demand analysis is that the pace of regional gas demand growth, including storage injection demand, is unlikely to match the pace of projected supply growth within the region," the report stated.

As such, supply displacement will be felt across the nation and downward pressure will ultimately be applied to regional prices.

"If Marcellus production is expected to grow at least 1.8 Bcf/d over the next five years, it could completely eliminate the need for 1.4 Bcf/d of Canadian imports in the summer, or the 1.6 Bcf/d of gas that comes from the Midcontinent and Rockies," the report stated.

More than 30 pipeline expansions have been proposed to carry the gas to market, including 22 short-haul and gathering projects totaling 6.8 Bcf/d and 12 market access projects of 5.9 Bcf/d, according to the report.

More pipelines mean tighter spreads.

Although not all of them will get built, even a handful will ensure a tightening of regional price spreads, the report noted. Among the markets that will see prices drop are: Transcontinental Gas Pipe Line's zone 6-New York and non-New York, Texas Eastern Transmission's zone M-3, Tennessee Gas Pipeline zone 6, Iroquois Gas Pipeline's zone 2 and the Algonquin Gas Transmission's city-gates.

As Southeast and Gulf gas gets displaced by Marcellus supplies, prices at upstream markets such as Transco's zones 4 and 5, as well as Texas Eastern's zone M-2, will also be yanked lower, the report contends.

Bentek noted the average forward basis price in the premium Northeast markets through 2013 has declined to \$0.93/MMBtu, compared to \$1.35 last year.

"This is an indication that the market is beginning to respond to the expected pipeline capacity additions and Marcellus growth," the report stated.

Analysts have noted that while forward basis at Northeast city-gate markets would shrink because of the onslaught of Marcellus supplies, they were unlikely to get crushed because the vast majority of proposed projects stop just short of the actual city-gates, ensuring that bottlenecks and constraints would remain.

Analysts were also bullish regarding gas demand growth post-2013 as the economy recovers and gasfired generation gets a boost from expected climate change legislation.

Indeed, the Platts forward curve is in contango through 2013 with assessed full values at Transco's zone 6-New York rising from \$6.18 in 2011, to \$6.92 in 2013 on Monday.

Intercontinental Exchange indicated the 2014 full value for the market was \$7.19 on Monday.

Additionally, Bentek forecasts that because of infrastructure constraints some 550 Marcellus wells, totaling 705,000 Mcf/d, are currently shut in because they lack either gathering or processing lines, or a connection to a larger pipeline.

The consulting firm also pegs the breakeven price at the play at \$3.16/MMBţu, which falls in the low end of current analysts estimates that range from the mid-\$3.00s to the mid-\$4.00s. — Samantha Santa Maria

Tuesday, March 23, 2010

Bearish coal market could weigh on gas sector this summer: analyst

<u>Weakness in the coal market could put additional pressure on the already bearish natural gas</u> <u>market for the next several months</u>, an analyst with Strategic Energy and Economic Research said Monday.

Even though a hotter-than-normal summer could boost cooling demand and provide some support to gas prices, "the potential decline in coal prices provides significant downside risks to natural gas prices," according to Ron Denhardt, SEER's vice president of natural gas services.

"Our current model projections indicate that Henry Hub prices are likely to be below coal prices for two or three months of the non-heating season," Denhardt said, estimating that gas consumption for power generation will fall by about 1.2 Bcf/d as a result of fuel-switching.

With current NYMEX coal prices trading at around \$54.50/ton, Henry Hub prices would have to average \$4.25/MMBtu or less to displace coal. But, Denhardt noted, last year coal prices fell to the \$45/ton level; at those prices, Henry Hub prices would have to drop to around \$3.70/MMBtu to displace coal.

With weather across the US expected to remain mild for the rest of March, storage levels should start the traditional injection season at around 1.65 Tcf, or roughly the same level as last year, he said. Should fuel-switching from gas to coal proceed as expected, Denhardt predicted that working gas in storage at the end of October will reach "feasible capacity" of around 4 Tcf.

That downward pressure on gas prices will likely lead to lower liquefied natural gas imports and lower domestic drilling, the analyst predicted.

"With natural gas production from many shale plays attractive at prices of \$4.00/MMBtu or less, natural gas prices will have to decline enough to stop the rig count from growing," Denhardt noted. Currently, the horizontal rig count — indicative of shale production — is around 8% above its previous peak in October 2008, he said.

On the LNG front, the analyst said that liquefaction capacity should increase by between 4 Bcf/d and 5 Bcf/d. With 2 Bcf/d headed to markets in Asia, the Middle East and Latin America, that would leave between 2 Bcf/d and 3 Bcf/d for the North American and European markets.

European markets currently hold a premium to Henry Hub, which would imply that most of that additional LNG will head to Europe. — *Melanie Tatum*

Attachment B Cost Averaging Fixed Prices

Duke Energy Kentucky
Hedging Program for 2009/10
Cost Averaging with Columbia Gulf Mainline

