



HORNSBY & COMPANY, INC.

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Energy Risk
Management Services

U.S. Natural Gas Perspectives Monthly Review and Outlook

Summary

Since our last report the prompt NYMEX natural contract has collapsed by almost \$5.00 per mmBtu. The primary factor contributing to the decline has been the \$30.00+ per barrel fall in NYMEX crude oil from its all-time settlement peak on July 3. Other factors include relatively moderate summer weather combined with a lack of any production-impacting hurricane activity thus far. In addition, however, the consensus remains quite bearish with regard to the pre-winter level of working storage anticipated to be reached at the end of October. Many analysts are assuming levels of 3.4-3.5 tcf at that time. The primary variable leading to such outlooks is robust production, led in large part by gains in shale gas output, more than offsetting domestic demand reflecting a stagnating U.S. economy.

Our balances, however, continue to point to a more constructive outlook. Relative to last month's report, we have made little revision to our forecast for the remainder of 2008. Although we now expect a slightly more moderate net decline in working storage for this year, a decline nonetheless, right or wrong, leads to our more constructive conclusion.

Our report includes for the first time our official look at 2009. In contrast to 2008, we anticipate a net build in working storage for next year. Although we are looking for a modest recovery in manufacturing output in 2009, continued gains in domestic production will more than offset any rebound in industrial sector natural gas consumption. Critical to our balances as well is our assumption of normal winter weather, which leads to more moderate gains in residential gas consumption in the first quarter. With regard to price, if our outlook for the remainder of this year is anywhere near the mark, we believe that natural gas prices will improve relative to crude oil prices, a trend which we believe will continue into next year. Nonetheless, since we are looking for WTI to average around \$90.00 per barrel in 2009, our prompt NYMEX/Henry Hub average comes in at about \$8.50 per mmBtu, about 10% below our anticipated average for 2008.

+ U.S. natural gas consumption is forecast to rise by 0.6%, or about 140 bcf next year.

+ Domestic dry gas production is slated to gain by 3.0%, or around 610 bcf in 2009.

+ Our balances imply a net build in working storage for next year of some 250 bcf.

Viewpoint

Since our last report the prompt NYMEX natural contract has collapsed by almost \$5.00 per mmBtu. The downtrend has been virtually uninterrupted, and as we issue this report the September NYMEX contract is struggling to remain above \$8.00 per mmBtu.

The primary factor contributing to the decline has been the \$30.00+ per barrel fall in NYMEX crude oil from its all-time settlement peak on July 3.

There have been a number of rationales put forth for crude oil's fall, but in reality from a fundamental standpoint little has changed from a month or two ago. The market, however, has finally decided to refocus on such fundamentals as the dollar has witnessed a recovery, with active non-commercials unwinding long crude oil/short dollar trades in the process.

Other factors specific to natural gas include relatively moderate summer weather with only sporadic heat spells, combined with a lack of any production-impacting hurricane activity thus far. Storm activity has periodically led to precautionary production shut ins, but there has not been the impact that some speculators had been hoping for.

In addition, however, the consensus appears to remain quite bearish in terms of the pre-winter level of working storage anticipated to be achieved at the end of October.

Many outlooks expect storage to total 3.4-3.5 tcf at that time, either close to or achieving a new all-time record. The primary influence leading to such forecasts is robust domestic production, led by gains in shale gas output, more than offsetting moderating industrial sector demand reflecting a stagnating U.S. economy.

Our balances, however, continue to point to a more constructive outlook, and thus far at least remain largely on track. Relative to last month's assessment, we have made little revision to our forecast for the remainder of this year.

Granted, we now expect a slightly more moderate net decline in working storage for 2008. We are still looking for a decline nonetheless, right or wrong, which leads to our more constructive conclusion as we move into winter.

This month our report includes our first official look at 2009. In contrast to 2008, our balances imply a net build in working storage for next year.

Although we are looking for a modest recovery in manufacturing output for 2009 as a whole with an acceleration by year end, continued gains in domestic production will more than offset any rebound in industrial sector natural gas consumption.

Critical to our balances as well is our assumption, right or wrong, of normal winter weather, which leads to more moderate gains in residential gas consumption in the first quarter. First quarter 2008 weather played a major role in working down storage volumes from the record of last fall.

With regard to price, if our outlook for the remainder of this year is even close to the mark, we believe natural gas prices should improve relative to WTI, a trend which we believe will continue into next year as passive crude oil length moderates.

Nonetheless, since we are looking for WTI to average around \$90.00 per barrel next year, our prompt NYMEX/Henry Hub average comes in at about \$8.50 per mmBtu, about 10% below our anticipated average for 2008.

Demand: Review and Outlook

For 2008, we are looking for domestic natural gas consumption to increase by 3.4%, or some 795 bcf over 2007. As previously discussed, however, the bulk of the demand gains were likely witnessed in the first quarter,

This marks an upward revision from last month's report by about 30 bcf. As updated DOE numbers come in, we have fine tuned up second quarter demand in the residential and electric utility sectors, more than offsetting a slight downward revision in the industrial sector.

Our customary table itemizing the eight largest industrial gas consumers as shown below suggests a slight aggregate improvement in June versus the prior year compared to the May year-over-year change, with positive influences including primary metals and transportation equipment.

Eight Largest Industrial Consumers Of Natural Gas June Manufacturing Output

Industry	YOY %Chg. Output
Chemicals	-0.2
Petroleum and Coal	+0.4
Primary Metals	+2.9
Paper	-0.8
Food	-0.8
Non-Metallic Mineral	-2.5
Fabricated Metal	-1.6
Transportation Equip.	+5.3

With regard to the total manufacturing index, June witnessed a 0.6% decline versus the previous year, lying within the range of our Base Case expectations for 2008.

Quite clearly, the fate of the U.S. economy for the next several months remains highly uncertain, but we all must make working assumptions nonetheless.

As indicated, so far the actual performance has not deviated materially from our conservative assumptions, and thus we retain our Base Case for the remainder of the year and have now made our assumptions for 2009.

With regard to the latter, for next year we believe manufacturing output will rise at an average rate of 2.6%, accelerating to a 3.0% rate of growth toward the end of 2009. This forecast would generally be viewed as conservative when coming off a “recession”, although the U.S. economy has not officially entered such a situation thus far in 2008.

As such, for next year we are looking for industrial sector natural gas demand to increase by 1.5%, or some 105 bcf, which actually lies a bit below our expected rate of growth for this year. However, as data come in for the summer, we would look for industrial gas demand growth to moderate from the performance of earlier this year, which biases 2008 growth upward.

Once again assuming normal winter and summer weather for next year plus a moderation in demand growth by electric utilities, we anticipate total U.S. natural gas consumption to increase by 0.6%, or some 140 bcf in 2009, a fraction of our estimated 3.4% rate of growth for 2008 versus 2007.

**Supply:
Review and Outlook**

As mentioned previously, the consensus is quite optimistic with regard to domestic production for this year and beyond, influenced by a number of developing shale gas projects. We would agree that domestic production growth will be strongly influenced by this phenomenon.

In our minds, however, the question is the extent to which such shale gas output growth will dominate over other more moderate gains in conventional natural gas production as well as the degree to which LNG imports continue to come in short of consensus expectations.

Aggregating the production component alone for the moment, we expect domestic dry gas production to rise by 5.3%, or about 1.02 tcf this year, followed by a more modest gain of 3.0%, or some 610 bcf in 2009.

With regard to imports, thus far our conservative LNG assumptions lie close to the mark. Our balances assume some recovery in imports later this year reflecting the decline in crude oil prices, moderating in turn landed gas prices in Europe and Asia, leading to a slight improvement in U.S.-bound economics. For 2009 we are looking for a modest gain in LNG imports for the year as a whole.

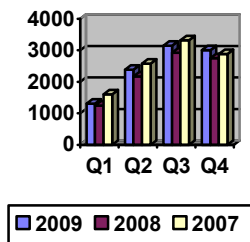
Influencing the “net” equation for 2008 thus far has been a rise in gross exports from the United States, primarily to Mexico. There is no doubt this has aided the overall balance and we would look for such exports to remain at roughly current levels through 2009.

Putting it all together, our balances for 2008 still imply a net decline in working storage of some 130 bcf, though slightly less than forecast last month. For the end of October, our balances are targeting working storage to lie at about 3.1 tcf.

For 2009, as previously discussed our balances imply a somewhat less constructive outlook assuming normal weather, which from a natural gas demand standpoint does not offset a recovery in manufacturing output.

For the year as whole we expect a net storage build of around 250 tcf, with year-end 2009 working storage standing at some 3.0 tcf. If reasonable, it suggests a level of year-end working storage about on par with the end of 2006.

**End-Quarter
Working Gas Storage Levels
(BCF)**



Implications for Price

It is difficult to find a more descriptive word for natural's price fate since early July than "collapse". Granted, at \$13.00+ per mmBtu natural was greatly overvalued in our view even under our more constructive natural gas balances, but the decline was a prime example of the old adage that commodities take the stairs up and the elevator down.

Having previously reviewed the factors leading to the decline off the highs, the difficult task now is to try and determine where we go from here.

Looking first at the short term, while previously trading well above our September (basis October NYMEX) target prices are now trading well below. Our September model has assumed prompt WTI trading at \$110.00 per barrel, and at this point we see no need to amend this forecast.

The key has clearly been the ratio of natural to crude oil. As we issue this report, the ratio on a September contract basis is trading around 44%. Previously, post Rita and Katrina the ratio had been able to stabilize around 50% or so.

If our more constructive natural gas balances for the remainder of 2008 are anywhere close to the mark, the ratio should improve. Having said this, we are compelled to reduce our target ratio for September from our last report to around 50%.

As our customary table below illustrates, holding our oil outlook constant from last month with little change in our balances but revising down our target oil/gas ratio now suggests a September target of around \$9.15 per mmBtu.

Henry Hub Price Outlook Average for Month of September 2008 (\$/mmBtu)

1990-2007 Relationships	\$3.55(E)
1990-1999 Relationships	\$1.95(E)
2000-2007 Relationships	\$5.60(E)

2000-2007 Relationships
Plus Oil Premium **\$9.15(E)(a)**

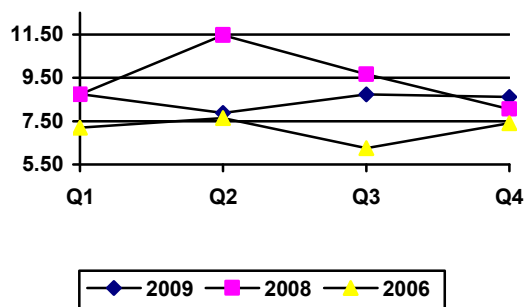
a) @ 315 cents per gallon distillate and \$110.00 per barrel WTI.

This would still suggest an optimistic outlook from current prices and consensus expectations, but we feel compelled to forecast a recovery if our fundamental balances are reasonable.

For next year, we believe prompt WTI will average around \$90.00 per barrel. Although our gas balances for 2009 are not as constructive as our expectations for this year, they are not onerous by historical standards.

Taking all this into account and assuming an oil/gas ratio of 55% or so, it would imply a prompt NYMEX/Henry Hub average of \$8.50 per mmBtu. We concede our forecast ratio appears high, but given the inordinate net short positions on the NYMEX held by non-commercials combined with our assumption of a less positive influence on oil prices from passive length next year, we believe our outlook is achievable.

Henry Hub Prices 2007-2009 (Dollars per MCF)



August 11, 2008

U.S. Natural Gas Supply and Demand Balances
2008-2009
(Billion Cubic Feet)

	Q1	Q2(E)	Q3(E)	Q4(E)	2008(E)	%Chg 08-07	Q1(E)	Q2(E)	Q3(E)	Q4(E)	2009(E)	%Chg 09-08
Supply												
Total Dry Gas Production	5,080	5,078	5,029	5,112	20,299	5.3	5,232	5,231	5,180	5,265	20,908	3.0
Withdrawals From Storage	1,891	269	320	724	3,203	-3.5	1,700	133	318	703	2,853	-10.9
Supplemental Gaseous Fuels	11	14	15	13	54	-11.0	11	15	16	13	55	1.5
Imports	1,088	975	1,089	1,103	4,255	-7.5	1,102	984	1,093	1,108	4,287	0.8
Canada	1,009	873	968	994	3,844	1.8	1,019	882	972	999	3,873	0.7
LNG	76	94	110	100	380		80	92	110	100	382	
Other	3	8	11	9	31		3	9	11	9	32	
Balancing Item	(63)	91	50	(80)	(2)		0	0	0	(125)	(125)	
Total Supply	8,007	6,427	6,503	6,872	27,809	3.0	8,045	6,362	6,606	6,965	27,978	0.6
Disposition												
Additions To Storage	255	1,194	1,074	551	3,074	-2.3	258	1,206	1,084	557	3,105	1.0
Exports	317	202	185	205	909	10.5	317	202	185	205	909	0.0
Consumption	7,435	5,031	5,244	6,116	23,826	3.4	7,471	4,953	5,337	6,203	23,964	0.6
Lease And Plant Fuel	307	307	302	307	1,222	4.5	314	314	311	316	1,254	2.6
Pipeline and Distribution Use	201	146	161	169	677	8.7	165	165	166	174	669	-1.2
Residential	2,355	769	350	1,421	4,896	3.6	2,382	688	354	1,436	4,859	-0.7
Commercial(a)	1,303	569	375	892	3,140	4.4	1,298	498	373	888	3,056	-2.7
Industrial	1,872	1,591	1,562	1,752	6,778	2.1	1,890	1,612	1,593	1,787	6,882	1.5
Electric Power	1,397	1,647	2,494	1,575	7,113	3.5	1,422	1,677	2,541	1,603	7,243	1.8
Total Disposition	8,007	6,427	6,503	6,872	27,809	3.0	8,045	6,362	6,606	6,965	27,978	0.6
Addendum:												
Net Storage Injections	(1,636)	926	754	(173)	(129)		(1,442)	1,073	767	(146)	252	
End Period Working Gas In Storage	1,247	2,171	2,925	2,752	2,752		1,310	2,383	3,150	3,004	3,004	
Henry Hub Price (Dollars Per mmBtu)	8.74	11.46	9.66	8.05	9.48	33.0	8.75	7.88	8.73	8.62	8.50	-10.4
Gas Wells Drilled					34,556	5.0					36,283	5.0
Total Discoveries(Bcf)					13,822	-6.7					14,513	5.0
Discoveries Per Well(Bcf)					0.40	-11.1					0.40	0.0
Total Revisions and Adjustments(Bcf)					4,000	0.0					4,000	0.0
Total Reserve Additions(Bcf)					17,822	-5.2					18,513	3.9
Reserve Replacement Ratio					88%						89%	
Total Recoverable Reserves (Bcf)					184,009	-1.3					181,614	-1.3
Reserve To Production Ratio(Years)					9.1						8.7	

Source: Historical Data, U.S. Department of Energy.
Information contained herein is believed to be reliable but its accuracy cannot be guaranteed. Past performance is not indicative of future results and the risk of loss is substantial in futures trading.
Note: May not sum to totals in all cases due to rounding.
(E) WHB Energy Research LLC estimates.
(a) Includes minor use as vehicle fuel.