December 13, 2000 **NATURAL GAS**

Gas Flash: AGA & Weekly Market Analysis

The week ending Dec.8th saw gas prices at the Henry Hub climb from the $6.50s to the $8.50s/MMBTU, far in excess of the Dec.'00 Bidweek index of "only" $6.03. Given the uncertain time-lags between price changes and the demand response to those changes, you can count on the AGA surveys receiving especially intense scrutiny in the weeks ahead.

Week Ending 12/8/00

AGA Storage Draw = 158 BCF
Implied Production = 49.7 BCF/D

PIRA views the current week's storage draw (158 BCF) as decidedly bullish. First, the level of *implied* production fell 2.5-3.0 BCF/D below our projection for the full month. Implied production is based on PIRA's estimates of demand less net imports linked to the AGA's net storage draw. Second, our gas demand estimate (83.0 versus 69.8 BCF/D a year ago) reflects a weather-driven increase in R/C gas heating of almost 13 BCF/D and virtually no change in non-core demand. We expect much weaker non-core demand in upcoming weeks after the market has had time to adjust more fully to the exceptional December gas price run-up.

The storage situation in California is playing a central role to the State's runaway gas prices. As discussed below, there is no major relief in sight, barring an extended period of mild weather. Today's small Consuming Region West storage draw (7 BCF) underscores the limited flexibility gas inventories offer to moderate the market's tightness.

THE DEMAND DESTRUCTION OF $8-$10 GAS

The brief but violent post Bidweek rally in U.S. gas prices has profound implications for demand. Indeed, the unprecedented price levels in all regional markets will result in significant demand destruction within the non-core usage segments as per PIRA's earlier assessment (*Gas Market Forecast 11/21/00*). More specifically, our Reference Case now expects that price-driven destruction of non-core demand will climb to about 4 BCF/Din the current month.. An important part of this estimate stems from the curtailment of gas processing operations, boosting the ethane/propane content of the natural gas stream (and thus its BTU content).

However, keep in mind that thus far during the 00/01 heating GWHDDs are yielding even more impressive core market demand gains. R/C heating demand is on track to increase more than 5 BCF/D this month (8% above normal GWHDDs). This follows nearly an 8 BCF/D year-on-year gain in November'00 (16% above normal GWHDDs).

HIGH PRICES ARE DESTROYING NON-CORE GAS DEMAND IN DEC. '00

	Gas Balances (BCF/D)		
	1999	2000	Chg.
Demand	76.8	80.6	+3.8
Res/Comm	35.3	40.6	+5.3
Non-Core	41.5	40.0	-1.5
Elec. Gen	12.5	13.0	+0.5
Other	29.0	27.0	-2.0
Supply	76.8	80.6	+3.8
Dom. Prod.	51.0	52.5	+1.5
Net Imp.	10.2	10.9	+0.7
Storage Draw	15.6	17.2	+1.6

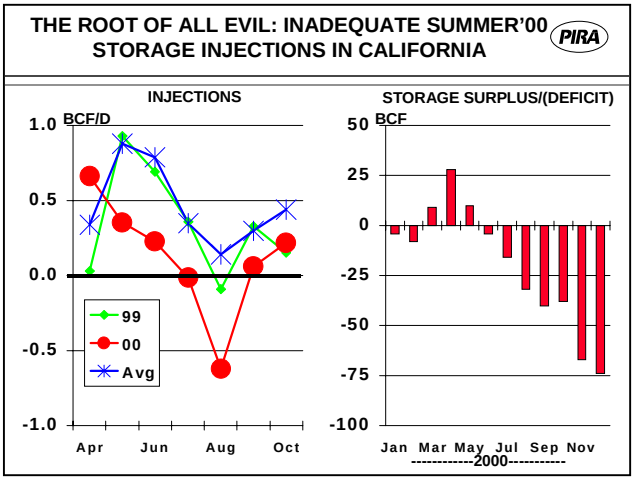
Price-Driven Demand Losses (BCF/D)		
	Low	High
Sum	3.4	4.6
Electric Generation	1.4	1.8
NGLs (Ethane/Propane)	0.8	1.0
Industrial	1.2	1.8
Ammonia, etc.	0.6	0.8
Petroleum Refining	0.3	0.5
Other Manufacturing	0.3	0.5

The increase in core demand this month should result in storage draws that will exceed our pre-December projection. Total U.S. storage on 12/31/00, now

forecast at 1.85-1.90 TCF, will not be sufficient to allow a quick rebound of non-core demand in early'01. At the same time, Jan/Feb gas balances point to some moderation of price-driven demand destruction, barring a continuation of colder than normal temperatures.

THE GRINCH THAT STOLE WESTERN STORAGE

Storage worries are aiding market uncertainty and contributing to astoundingly high western U.S. gas prices. Indeed, the inadequacy of gas storage is a major factor behind the rabid climb in gas prices across the nation, but particularly with respect to California where prices have leapt passed the $50/MMBTU threshold in recent days.

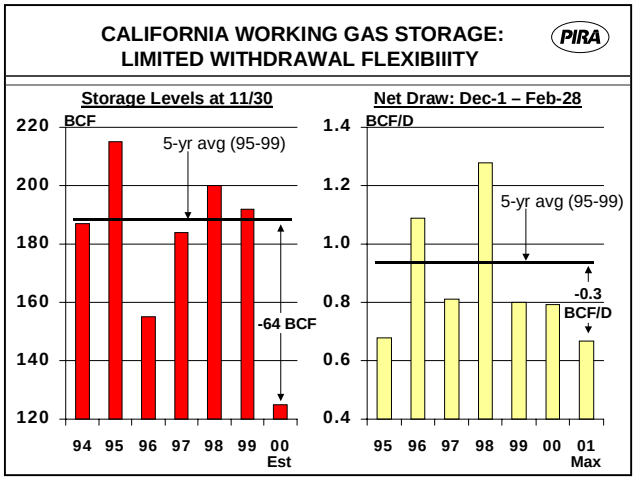


At the start of the 00/01 heating season, *Consuming Region West* and California gas storage were at alarmingly low levels—less than their respective 10-year lows. On 10/31/00, PIRA estimates that the region's total working gas storage only reached 313 BCF (-53 BCF versus 10/31/99). California's share was 149 BCF, 38 BCF less than a year ago.

Those subnormal levels were due to ravenous summer gas demand within the power sector aided by 1) exceptionally strong structural growth 2) above normal cooling degree days 3) below normal hydroelectric generation and 4) the August'00 El Paso pipeline explosion.

As of November 30th, *Consuming Region West* storage shows almost a doubling of the year-on-year deficit.

PIRA calculates that the region's storage shortfall expanded to nearly100 BCF. In California, the ongoing strength of gas-fired EG as well as cold weather reduced storage to only 125 BCF, a staggering 67 BCF below the year-earlier level.



Even if gas storage in California were to end at minimum levels on February 28th (roughly 65 BCF), Dec.-Feb. withdrawal rates would fall at least 0.3 BCF/D below the State's normal winter draw rate (i.e., the 5-year average). This month, California storage withdrawals are forecast to average about 1 BCF/D. Thereafter, storage withdrawals will continue to be restricted in January and February by the low level of California inventory (95-105 BCF) anticipated as of December 31st. Substantially faster withdrawals are not feasible given the LDC's obligation to satisfy firm-service customer requirements during the winter months.

The importance of storage in the region is heightened not only because of seasonally strengthening core demand, but also because of the growing influence of the power sector. With the increasing appetite of gas-fired EG, competition for California's gas supply has greatly intensified. In this environment, market worries appear justified in that the ability to manage seasonal demand surges during the heating season is questionable in light of the limited flexibility gas inventories offer.

Table 1 U.S. GAS STORAGE: AGA SURVEY

		U.S. Total	Consuming East	Producing Region	Consuming West	U.S. Total
Weekly Withdrawal Rates:		----------BCF Per Week----------				BCF/D
Wk Ending	12/1/00	73	57	11	5	10.4
	12/8/00	158	110	41	7	22.6
	12/10/99	73	37	22	14	10.4
Year-on-Year Change						
	12/1/00	-503	-163	-226	-114	
	12/8/00	-588	-236	-245	-107	

Table 2 REGIONAL GAS STORAGE (BCF)

	PIRA/DOE				AGA			
	U.S. Total	Cons. East	Prod. Region	Cons. West	U.S. Total	Cons. East	Prod. Region	Cons. West
9/30/00	2473	1598	573	303	2498	1512	612	373
10/31/00	2687	1750	624	313	2738	1673	681	384
11/30/00	2420	1580	570	270	2429	1495	611	323
12/31/00	1888	1248	420	220	N/A	N/A	N/A	N/A
1/31/01	1232	737	320	175	N/A	N/A	N/A	N/A
2/28/01	840	450	240	150	N/A	N/A	N/A	N/A
3/31/01	670	335	190	145	N/A	N/A	N/A	N/A
	----------Yr.-on-Yr. Change----------							
9/30/00	-431	-118	-259	-54	-389	-113	-229	-48
10/31/00	-339	-49	-237	-53	-262	-42	-170	-50
11/30/00	-571	-181	-291	-99	-523	-179	-229	-115
12/31/00	-621	-207	-313	-101	N/A	N/A	N/A	N/A
1/31/01	-493	-199	-208	-85	N/A	N/A	N/A	N/A
2/28/01	-460	-239	-154	-68	N/A	N/A	N/A	N/A
3/31/01	-480	-234	-186	-60	N/A	N/A	N/A	N/A

Table 3 MONTHLY GAS BALANCES (BCF/D)

	Demand					Supply			Days
	R/C Heat	Elec.	Other	Total	Storage Draw	Total	Dom. Prod.	Other	Supply Cover
Dec-00	32.0	13.0	35.6	80.6	17.2	63.4	52.5	10.9	26.7
Dec-99	26.7	12.5	37.6	76.8	15.6	61.2	51.0	10.2	35.8
Jan-01	31.7	12.7	40.4	84.8	21.2	63.6	52.7	10.9	18.4
Jan-00	30.8	13.1	42.2	86.0	25.3	60.7	50.6	10.1	24.6

Table 4 WEEKLY GAS BALANCES (BCF/D)

		Domestic Demand	Storage Withdrawal	Supply		
				Total	Implied Prod.	Other
Wk Ending	12/1/00	73.2	10.4	62.8	52.1	10.7
	12/8/00	83.0	22.6	60.5	49.7	10.8
	12/10/99	69.8	10.4	59.3	49.2	10.2
4-WksEnding	12/8/00	78.2	16.8	61.4	50.8	10.6
	12/10/99	66.1	5.6	60.5	50.4	10.1

Table 2 storage from DOE through 9/30/00 except PIRA's upward adjustment to Cons. East of 20 BCF for 9/30/99.
Table 3 Net Supply equals Total Supply less demand excluding R/C heating.

For additional information, please contact
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