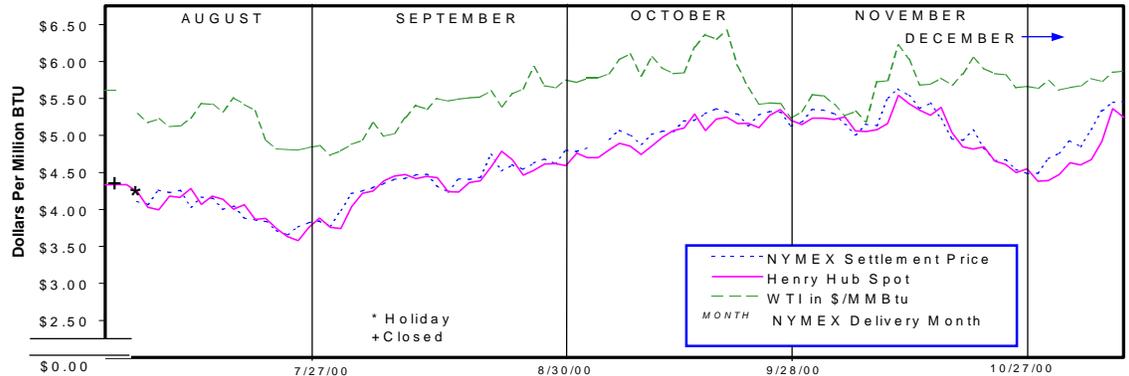


**NYMEX Natural Gas Future Price, Henry Hub Spot Price, and West Texas Intermediate Crude Oil Price**



Note: The Henry Hub spot price is from the GAS DAILY and is the midpoint of their high and low price for a day. The West Texas Intermediate crude oil price, in dollars per barrel, is the "sell price" from the GAS DAILY, and is converted to \$/MMBtu using a conversion factor of 5.80 MMBtu per barrel. The dates marked by vertical lines are the NYMEX near-month contract settlement dates.

**HENRY HUB PRICE**

(\$ per MMBtu)

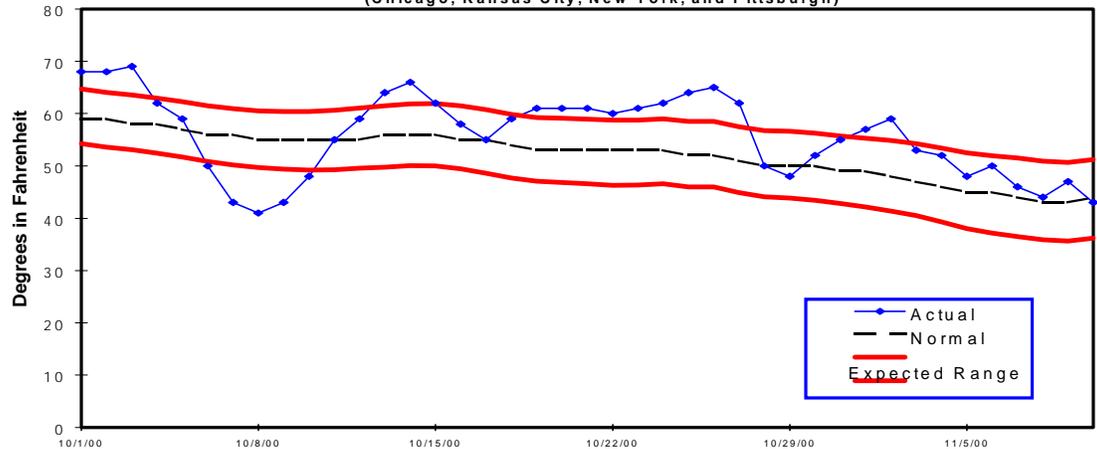
**SPOT FUTURES**

October November

Del Del

11/06	4.50-4.70	4.849
11/07	4.60-4.75	5.081
11/08	4.89-4.95	5.338
11/09	5.30-5.42	5.445
11/10	5.21-5.28	5.456

**Average Temperature for Four Major Gas Consuming Metro Areas (Chicago, Kansas City, New York, and Pittsburgh)**



The bounds are computed by adding and subtracting from the average temperatures for the last 10 years an amount equal to twice an estimate of the standard deviation for temperatures on a day.

**Average Temperature for Four Major Gas Consuming Areas**

Actual Normal Diff

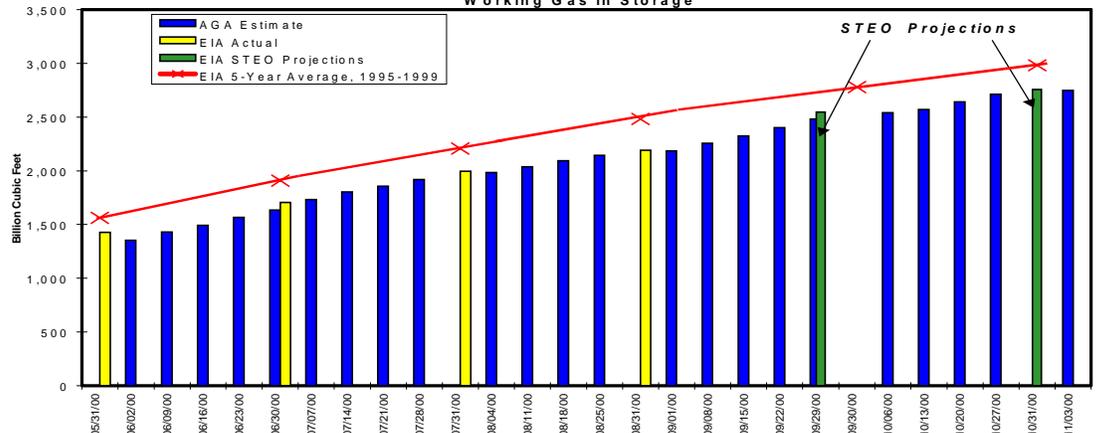
11/04	52	46	6
11/05	48	45	3
11/06	50	45	5
11/07	46	44	2
11/08	44	43	1
11/09	47	43	4
11/10	43	44	-1

**Working Gas Volume as of 11/03/00**

	<b>BCF</b>	<b>% Full</b>
East	1678	91
West	383	76
Prod Area	687	72
U. S.	2748	83

Source: AGA

**Working Gas in Storage**



On November 7, the near-month futures price for natural gas at the Henry Hub ended the trading day at \$5.081 per MMBtu, breaking the \$5 mark for the first time since October 23. The spot natural gas price at the Henry Hub was also higher, ending the week at \$5.25 per MMBtu for a \$0.62 gain from the previous week. A number of events coalesced to force prices higher. First, the warm temperatures that prevailed the first week of the heating season ended abruptly Tuesday, November 7 as forecasts called for further below normal temperatures throughout much of the country. Much of the country's mid section from Texas westward has had up to 70 percent less heating degree days in the first week of the heating season. The National Weather Service (NWS), though, is calling for below normal temperatures over most of the country from November 15 through the 19. Second, the reported stock addition for the week ending November 3, while over twice the average, fell short of industry's optimistic expectations. Third, slight increases in crude oil prices may have been a contributing factor as crude oil markets reacted to export problems in Nigeria and a move by Iraq to halt exports through Turkey for 24 hours. By the end of the week, the West Texas Intermediate marker crude was up \$1.30 compared to the previous Friday and ended at \$34.05 per barrel (\$5.87 per MMBtu).

**Storage:** The American Gas Association (AGA) estimated net injections of 36 Bcf for the week ended Friday, November 3, bringing EIA's estimate of total inventories as of this date to 2,758 Bcf, 7.0 percent less than the 5-year average. The injection estimate is the largest for this particular week in the year for the 7 years that AGA has been publishing weekly estimates, and is over two and one-half times the average (12.3 Bcf) for that period. Consequently (with the exception of the West Region, which experienced net withdrawals), inventories relative to the EIA-estimated 5-year (1995-99) average continued to improve. As of November 3, East Region working gas volumes, at an estimated 1,780 Bcf, are just 2.5 percent below the 5-year average. The strong 21 Bcf injections into Producing Region facilities raised its estimated level to 666 Bcf and improved its position by over 2 percentage points from the previous week to 13.2 percent below average.

**Spot Prices:** With cooler temperatures pervading many parts of the country, weather-related demand started to expand, causing spot prices in nearly all locations to spike mid week then retreat on Friday. Chicago and New York citygate prices ended trading at \$5.46 and \$5.73 per MMBtu on Thursday. When prices softened on Friday, most markets moved down 10 to 30 cents. Actions to limit excessive draws in the Northwest and on the El Paso transmission system pushed spot prices in the West higher before Friday's corrections took hold. Prices in Sumas, Washington and San Juan Basin, New Mexico went up about \$1, reaching \$6.58 and \$5.50. The PG&E and SOCAL sales to high volume customers were at least \$1.24 more than the previous week, reaching \$6.53 and \$6.89 on Thursday.

**Futures Prices:** The December NYMEX futures contract settlement price has moved up 8 out of 9 days since Monday (10/30), increasing by \$0.971 per MMBtu since then. After declining briefly on Monday, the near-month turned in two successive increases of about 25 cents before the price increase decelerated to a penny at week's end. The January, February, and March contracts saw at least a \$0.310 advance over the course of the week to settle at \$5.492, \$5.212, and \$4.912 respectively, on Friday.

**Summary:** Traders reacted strongly this week to cooler weather and a stock position that, while adequate in the East consuming region, is 7.0 percent below the national 5-year average for this time of year. The following supplement provides an outlook of the domestic natural gas transmission capability during the 2000-01 heating season.

**Natural Gas Transmission Outlook, 2000-01 Heating Season:** In the “Status of Natural Gas Pipeline System Capacity Entering the 2000-2001 Heating Season” ([http://www.eia.doe.gov/oil\\_gas/natural\\_gas/feature\\_articles/nat\\_feature\\_articles.html](http://www.eia.doe.gov/oil_gas/natural_gas/feature_articles/nat_feature_articles.html)), EIA concluded that absent an extremely cold upcoming heating season and other unforeseen situations, the nation’s natural gas interstate pipeline infrastructure appears more than adequate to meet the differing regional market demand requirements that are likely to be placed upon it. The conclusion was based on a number of factors, including the amount of surplus transportation capacity as suggested by usage rates on interregional pipeline systems (see table). In addition, the opening of the Alliance Pipeline in Canada, now expected for the first week in December, will improve the U.S. supply picture by an eventual 1.3 Bcf per year through enhanced deliveries from the Midwest to New England. There are some points on the system, though, where the potential exists for temporary capacity constraints during heavy demand periods:

- In the New York City area, capacity constraint problems have occurred in recent years during periods of unusual weather.
- In the Boston area, where pipeline capacity is already heavily utilized, demand has been growing and is expected to grow rapidly over the next several years, especially from developers of gas-fired power generation plants.
- The Leidy area of north central Pennsylvania, where a number of major interstate natural gas pipelines interconnect, has the potential to become a constraint point for pipeline gas flowing to the East Coast, and particularly into the northern New Jersey, New York City area.
- Portions of the Western Region, notably the California market, have growing demand for natural gas for electrical generation, especially during very warm summer weather periods. Utilization levels on the major transmission pipelines serving the State have been well above 90 percent in recent months so have limited flexibility to meet future demand increases.
- Service needs in the southern Nevada area continue to remain at a very high level, suggesting the need for system expansion in that area as well.

Receiving Region	Sending Region	Average Flow (MMcf/d)		Usage Rate On Active Systems (percent)
		Estimated 2000 Capacity (MMcf/d)	1999	1999
Canada	Central	66	--	--
	Midwest	3,329	1,456	60
	Western	51	--	--
	<b>Total into Region</b>	<b>3,446</b>	<b>1,456</b>	<b>60</b>
Mexico	Southwest	1,605	187	19
	Western	448	22	15
	<b>Total into Region</b>	<b>2,053</b>	<b>209</b>	<b>14</b>
Central	Canada	3,673	2,221	95
	Midwest	3,054	2,105	89
	Southwest	8,878	4,097	49
	Western	298	86	29
	<b>Total into Region</b>	<b>15,904</b>	<b>8,509</b>	<b>65</b>
Midwest	Canada	3,267	2,849	87
	Central	12,867	7,750	67
	Northeast	2,090	657	32
	Southeast	9,821	6,088	62
	<b>Total into Region</b>	<b>28,045</b>	<b>17,344</b>	<b>65</b>
Northeast	Canada	2,956	2,158	83
	Midwest	4,887	3,290	76
	Southeast	5,480	4,045	74
	<b>Total into Region</b>	<b>13,323</b>	<b>9,493</b>	<b>77</b>
Southeast	Northeast	532	13	35
	Southwest	21,311	14,251	67
	<b>Total into Region</b>	<b>21,844</b>	<b>14,264</b>	<b>67</b>
Southwest	Central	2,604	1,240	54
	Mexico	565	149	43
	Southeast	405	16	23
	<b>Total into Region</b>	<b>3,574</b>	<b>1,405</b>	<b>52</b>
Western	Canada	4,412	3,331	78
	Central	1,219	762	98
	Southwest	5,487	2,949	55
	<b>Total into Region</b>	<b>11,118</b>	<b>7,043</b>	<b>68</b>
<b>Total Within Lower 48 States</b>		<b>93,808</b>	<b>59,638</b>	<b>66</b>

Source: Energy Information Administration, “Status of Natural Gas Pipeline System Capacity Entering the 2000-2001 Heating Season,” *Natural Gas Monthly*, DOE/EIA-0130 (Washington, DC, October 2000), Table SR-1.

NWS’s forecast for this winter calls for normal weather in the country’s northern tier (*Natural Gas Weekly Update*, October 27, 2000), suggesting that natural gas deliveries could progress through the upcoming winter as usual.