

Summary

Since 2000 the total normal weather demand for natural gas has declined — for the same reasons it did in the early 1980's. Its major components are residential and commercial (R&C), industrial (Ind.), and generation of electricity (Elec.). Forecast demand compares with some of the history as follows:

Trillion Cubic Feet					
Measured at \$3 per Mcf (2005\$)					
	<u>R&C</u>	<u>Ind.</u>	<u>Elec.</u>	<u>Other</u>	<u>Total</u>
1975	6.73	5.50	3.32	3.55	19.10
1980	7.19	6.00	5.00	3.56	21.75
1985	7.21	5.25	3.79	3.15	19.40
1990	7.52	5.05	3.87	3.31	19.75
1995	7.74	5.80	4.40	3.46	21.40
2000	8.48	6.50	4.98	3.54	23.50
Measured at \$7 per Mcf					
2000	8.22	5.85	4.95	3.40	22.42
2005	8.42	5.08	5.65	3.10	22.25
2006	8.34	4.48	6.34	2.94	22.10
Forecast					
2007	8.39	4.30	6.20	3.04	21.93
2010	8.59	4.04	4.55	2.94	20.12
2015	8.70	2.30	3.33	2.31	16.64

Table 1 presents forecast gas balances out to 2015 as an extension of history beginning in 2003. Normal weather is the basis for the forecasts in 2008 and later years. It appears now that weather in 2007 will be about normal. That is a big change from the warm winter months and hot summer in 2006.

The major elements of gas supply are production and foreign trade. Table 2 summarizes forecast production in comparison with the history.

Production of Natural Gas			
	<u>Trillion Cubic Feet</u>		Total Bcfd
	<u>Assoc- iated</u>	<u>Other</u>	
Ultimate Recovery 12-31-1978	195.6	532.4	
<u>Reserve Additions</u>			
1995-2004	48.2	255.9	
1995-2004	26.5	211.4	
Forecast 2005-2015	13.4	117.0	
Ultimate Recovery 12-31-2015	283.7	1,116.7	
Cumulative Production on 12-31-1978	164.4	389.3	
1979-2004 Production	49.4	257.0	
1995-2004 Production	29.3	179.4	
2005 Production	2.3	17.8	55.0
Estimated 2006 Production	2.3	17.7	54.9
Forecast Production:			
2007	2.3	18.4	56.6
2008	2.4	18.3	56.4
2009	2.5	17.7	55.3
2010	2.3	16.7	52.1
2011	2.2	15.6	48.8
2012	2.0	14.5	45.0
2013	1.9	13.4	42.0
2014	1.7	12.6	39.2
2015	1.6	11.7	36.4
Forecast 2005-2015	23.5	174.4	
Cumulative Production on 12-31-2015	266.6	1000.1	
Proved Reserves on 12-31-2015	17.1	116.6	
Ultimate Recovery on 12-31-2015	283.7	1,116.7	
Of which:			
Gulf of Mexico	37.0	192.6	
Onshore Commercial		652.3	
Tight (including shales)		203.6	
Coalbed		52.5	
Carbon Dioxide (CO ₂)		12.1	
Hydrogen Sulfide (H ₂ S)		2.6	
Nitrogen		1.0	
Helium		Trace	
	<u>Thousands</u>		
	<u>Oil Wells</u>	<u>Gas Wells</u>	<u>Dry Holes</u>
Producing on 12-31-1978	514.5	155.1	
<u>Completions</u>			
1979-1994	357.0	194.7	234.3
1995-2004	85.8	151.4	43.8
Forecast 2005-2015	93.0	211.5	28.0
Abandoned	(629.8)	(226.1)	
Producing on 12-31-2015	420.5	486.6	

Summary (Continued)

Forecast foreign trade in natural gas compares with some of the history as follows:

Imports and (Exports) of Natural Gas					
Billion Cubic Feet Per Day (Bcfd)					
	Pipeline		Ships		Total
	Canada	Mexico	Japan	Other	
1973	2.78	(0.03)	(0.13)	0.01	2.63
1980	2.19	0.27	(0.12)	0.23	2.57
1985	2.54	(0.01)	(0.14)	0.06	2.45
1990	3.92	(0.04)	(0.14)	0.23	3.97
1995	7.64	(0.15)	(0.18)	0.05	7.36
2000	9.49	(0.26)	(0.18)	0.62	9.67
2005	9.14	(0.81)	(0.17)	1.73	9.89
2006	8.91	(0.85)	(0.18)	1.60	9.48
		<u>Forecast</u>			
2007	8.43	(0.82)	(0.18)	1.80	9.23
2008	8.09	(0.80)	(0.18)	3.30	10.41
2009	7.89	(0.84)	(0.06)	4.02	11.01
2010	7.74	(0.20)	-	4.02	11.56
2015	6.76	-	-	7.24	14.00

Average wellhead gas prices that clear the gas market — make forecast consumption equal to forecast supply — are \$6.13 per Mcf in 2007, \$6.75 per Mcf in 2010, and \$8.00 per Mcf in 2015. In constant 2005 dollars they are \$6.06, \$6.19, and \$6.75 per Mcf respectively.

While imports of liquefied natural gas (LNG) were small volumes, the United States was largely isolated from the world trade. As it is becoming more involved, storage in the United States has value — to meet seasonal demand — to producers of LNG just as it does to producers of domestic gas. In the past only 3 Tcf of the 4 Tcf capacity for working gas has typically been used. In the future all of it may be — by importing a lot of LNG in the Spring and Fall and not much of it in Summer and Winter. In 2007 that is something new and it is affecting prices.