**July 6, 2009** 

# Natural Gas Trends

# **Highlights**

# PHMSA RELEASES REPORT ON MECHANICAL DAMAGE TO PIPELINES

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) recently released a report titled *Mechanical Damage*, the scope of which resulted from a collaborative workshop held in Houston by the agency and the National Association of Pipeline Safety Representatives to address concerns

Pipelines can be damaged by corrosion, excavation, human error, material failure, natural forces, or other causes. Excavation causes the largest number of pipeline damage incidents.

regarding pipeline safety. The 183-page report analyzes current practices related to mechanical damage in natural gas and liquid steel pipelines, with a particular focus on transmission pipelines.

To prepare the report, comprehensive interviews were conducted with a diverse group of pipeline operators in the U.S., Canada and Europe, delving into operator practices for detection, characterization, and mitigation

of mechanical damage on both gas and liquid transmission pipelines and gas distribution pipelines. Operator practices associated with the prevention of mechanical damage were extensively reviewed.

The report identifies six key areas where there appear to be gaps in industry knowledge and regulatory requirements for the prevention, detection, and remediation of mechanical damage of pipelines, including:

- One-call enforcement
- In-line inspection (ILI) technology
- Methods to determine the need for immediate action or pressure reduction
- Validated methods to assess the remaining service life of pipelines impacted by mechanical damage
- Guidelines for the selection and application of composite repair systems, and
- Long-term performance reliability of repair systems.

The report, which was prepared for PHMSA by consulting firm Michael Baker Jr., Inc. in association with four other consulting firms, can be downloaded at: <a href="http://www.phmsa.dot.gov/">http://www.phmsa.dot.gov/</a>

#### Data

- August Natural Gas Futures Contract (July 2), NYMEX at Henry Hub closed at \$3.615
- August Light, Sweet Crude Oil Futures Contract (July 2), NYMEX at Cushing closed at \$66.73 per Bbl. or approximately \$10.63 per MMBtu

# Cooling Degree Days Higher than Norm for Texas

From 6/28/09 thru 7/4/09, Texas experienced significantly warmer than normal weather. The U.S. experienced slightly cooler than normal weather. For the cooling season (1/1/09 to 12/31/09), cumulative cooling degree days are 17% above normal for Texas and 5% above normal for the U.S.

Source: www.cpc.ncep.noaa.gov

Cooling Degree Days (CDD) Week ending 7/4/09

City or Region	Week Total CDD	Week CDD +/- from Normal *	Year-to- date Total CDD	YTD, % +/- from Normal *
Amarillo	89	+3	487	+ 9 %
Austin	155	+ 25	1351	+ 20 %
DFW	161	+ 30	1121	+ 23 %
El Paso	114	-12	1127	+ 23 %
Houston	171	+ 45	1447	+ 28 %
San Antonio	168	+ 36	1585	+ 34 %
Texas**	145	+ 24	1192	+ 17 %
U.S.**	64	- 2	434	+ 5 %

<sup>\*</sup> A minus (-) value is cooler than normal; a plus (+) value is warmer than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which CDDs are calculated. \*\* State and U.S. degree days are population-weighted by NOAA.

## U.S. Gas Storage Injections Rise to 2,721 Bcf

For the week ending 6/26/09, U.S. working gas in storage increased from 2,651 to 2,721 Bcf, 29% higher than the 2,106 Bcf in storage a year ago and nearly 21% higher than the 2,254 Bcf for the 5-year average from 2004 to 2008. Working gas in storage in the producing region (which includes Texas) increased from 997 to 1,001 Bcf, 43% higher than the 700 Bcf in storage a year ago and nearly 34% higher than the 749 Bcf for the 5-year average from 2004 to 2008.

Source: www.eia.doe.gov

U. S. Working Gas in Storage (Bcf) Week ending 6/26/09

Region	This Week	Last Week	Change	Current $\Delta$ from 5-Year Average (%)
East	1289	1234	+55	+ 9.5 %
West	431	420	+11	+ 31.0 %
Producing	1001	997	+4	+ 33.6 %
Lower 48 Total	2721	2651	+70	+ 20.7 %

# Decline Stalls: Gas Rig Count Rises in Two of the Past Three Weeks

The U.S. gas rig count was up 1 for the week and down 851 when compared to 12 months ago. The U.S. total rig count was up 11 for the week and down 993 when compared to 12 months ago.

Source: Baker Hughes, Inc.

Baker Hughes Rotary Rig Count (7/2/09)

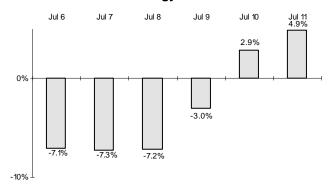
	This	+/- Last	Year	+/- Year
	Week	Week	Ago	Ago
U.S.	928	+11	1921	-993
Gas	688	+1	1539	-851
Oil	229	+10	373	-144
Texas	338	0	923	-585
N. Amer.	1093	+28	2309	-1216

# U.S. Energy Use Expected To Rise This Week

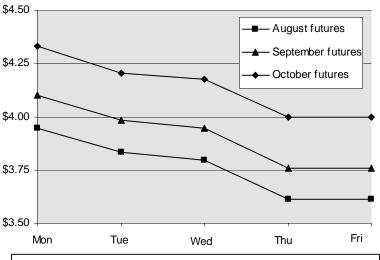
U.S. energy use is forecasted to be below normal through Thursday of this week and above normal on Friday and Saturday, according to the Dominion Energy Index, as shown below. The index forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index

### U.S. Energy Use Forecast



#### NYMEX Natural Gas Price Movement 6/29/09 - 7/3/09



Note: Friday, July 3, 2009 was a holiday. The NYMEX was closed.

# \$13 \$12 \$11 \$10 \$9 \$8 \$7 \$6 \$5 \$4

Jun Jul

Aug Sep

Oct Nov

# Gas Price Summary 7/2/09 +/- Last +/- Last 12-Month This Week Week Year Strip Avg. U.S. (August futures) NYMEX \$3.615 -\$0.334 -\$5.602 \$5.113

\$3

Jan Feb

Apr