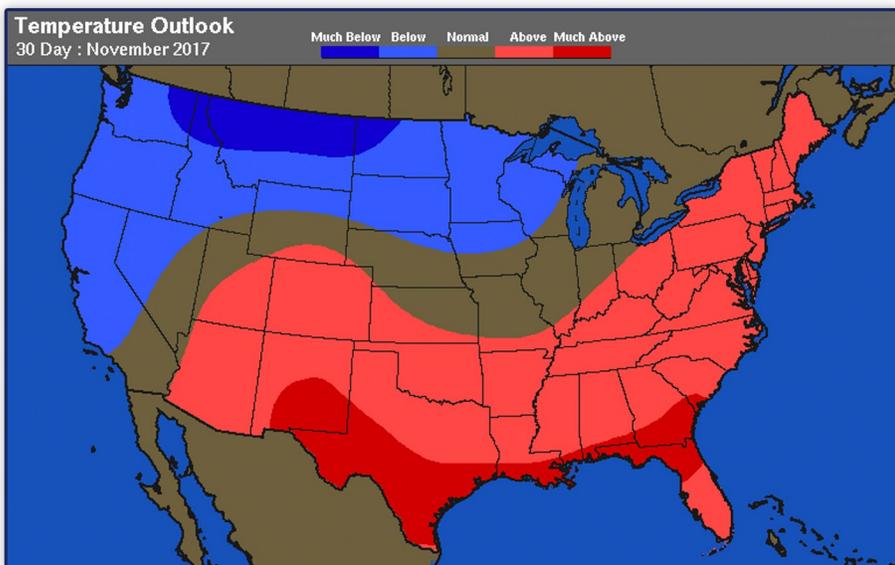


Market Summary

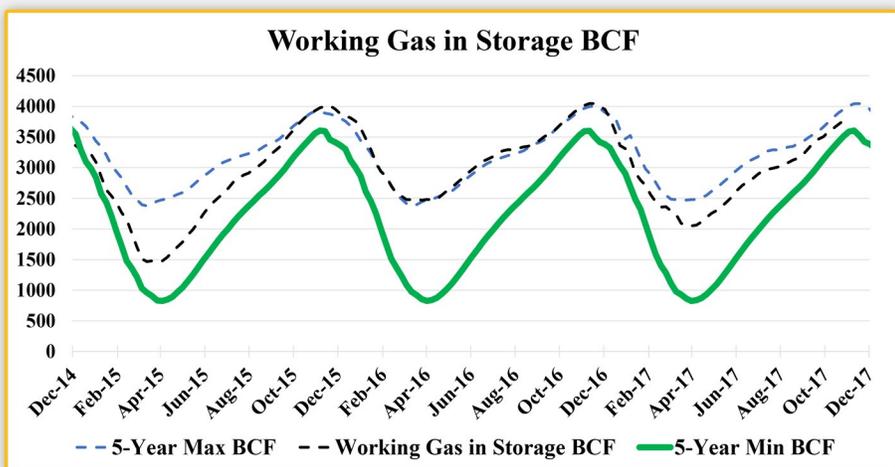
Energy markets are mostly in a holding pattern as they await the arrival of winter weather. While production and storage numbers show stability, long term exports are the major threat to price complacency.

Weather



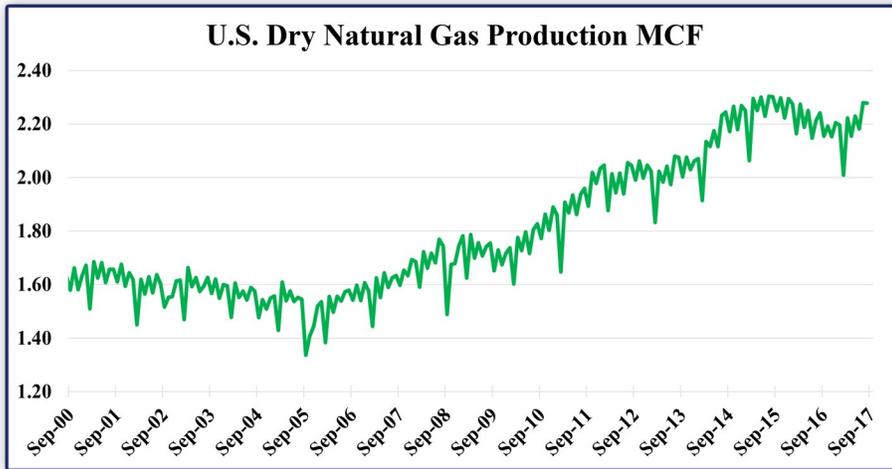
- Producers and suppliers are awaiting the arrival of winter weather. Most markets pushing down during the wait -- aided by the recent heat wave in western United States.

Storage



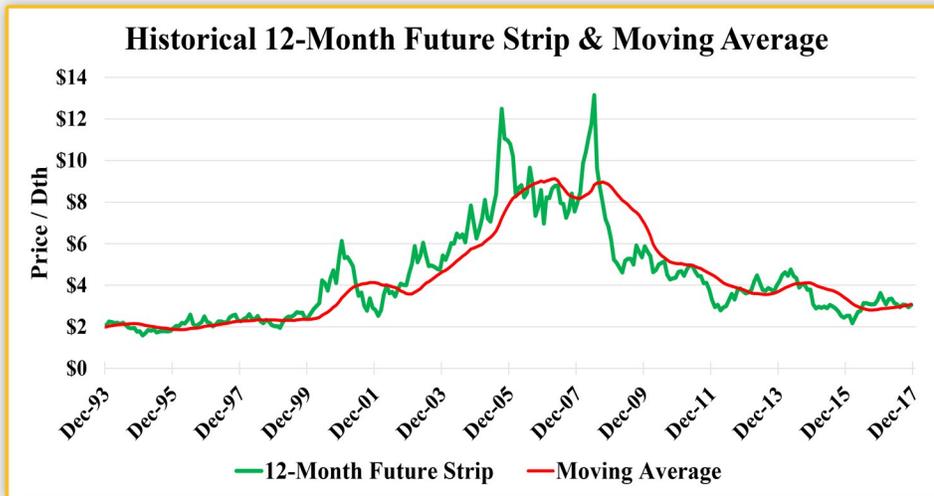
- Although injection season is officially over, injections continue to occur as happened last year.
- Working natural gas stocks are 3,775 Bcf, which is 5% less than the year-ago level and 1% less than the five-year (2012-16) average.

Production



- Pennsylvania's natural gas production reached a new high of 15 Bcf/d in October 2017, an increase of 25% from year-ago levels and an increase of 80% from January 2013. Currently, Pennsylvania accounts for 19% of total United States natural gas production.
- Current pipeline projects include the 3.25 Bcf/d Rover Pipeline Project and the 1.5 Bcf/d Nexus Gas Transmission Project, both slated to begin operations during the first quarter of 2018.

Pricing



Bidweek

Month	SCG	NYMEX
Jan.	\$3.92	\$3.930
Feb.	\$3.53	\$3.391
Mar.	\$2.70	\$2.627
Apr.	\$3.04	\$3.175
May	\$3.06	\$3.142
Jun.	\$3.29	\$3.236
Jul.	\$3.19	\$3.067
Aug.	\$3.21	\$2.969
Sep.	\$3.24	\$2.961
Oct.	\$2.96	\$2.974
Nov.	\$3.61	\$2.752

Prices per Mmbtu.

Noteworthy

- United States set to account for half of the 20 Bcf/d of global export capacity forecasted. LNG demand grew 5-6% last year. The United States needs to increase exports to keep up with Qatar and Australia. Currently shipping 2.5 Bcf/d with forecasts to reach 12 Bcf/d by 2020.
- 262 MW Puente gas power plant proposal for California has been shelved, perhaps permanently as low-cost renewables nudge gas aside as gas did to coal. There is much pushback from protesters against the added pollution and already perceived overbuilt infrastructure of California.
- Long-term outlook through 2020 sees two variables influencing gas prices: increased LNG exports and increased capacity and exports to Mexico.
- Court upholds decision to approve 3 more projects to export LNG.
- A large, unspoken source of methane leaks is residential meters. The utility is allowed to charge customers for lost or unaccounted gas. Leaks are sometimes by design to relieve pressure – customer pays for it all.