

Market Summary

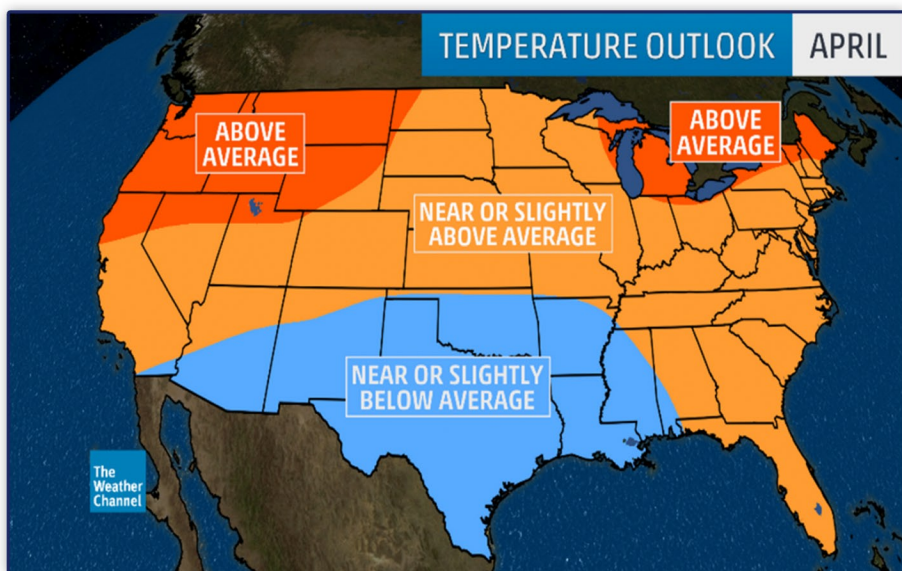
Biggest Factor: Production

United States pricing fundamentals are rather bearish, with record production coming online beginning in June.

Procurement Takeaway

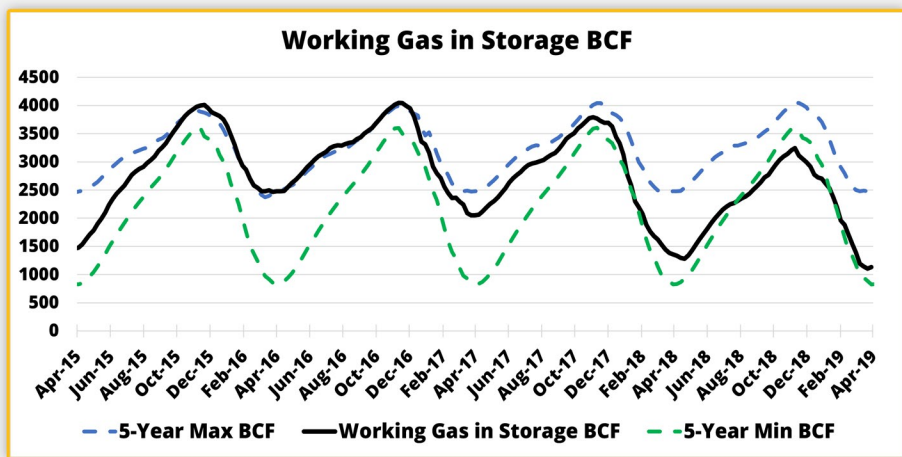
For capacity-hit regions, look to hedge through summer and winter seasons. Otherwise, look for production to continue stabilizing prices and create opportunity for mixed index/fixed strategies.

Weather



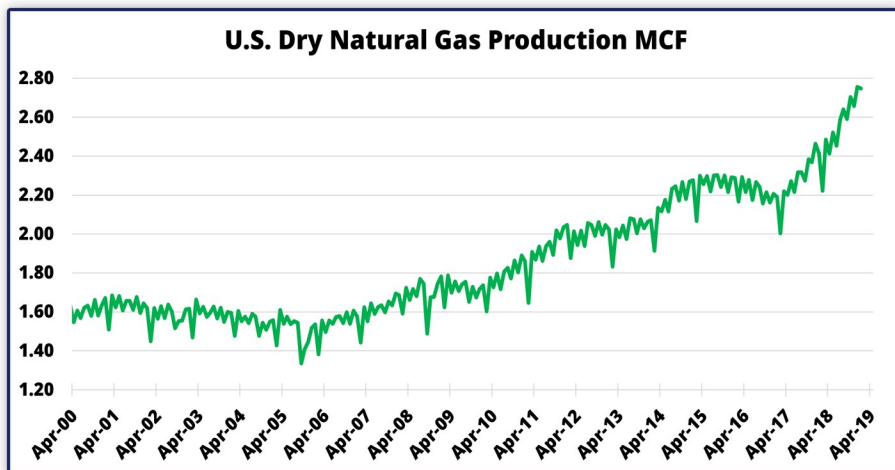
- Weather through April 2019 to remain relatively normal to average.
- Relatively cold winter (Polar Vortex 2019) left storage levels well below normal and, yet, national prices remained low as the long-term outlook sees production increases and new pipeline expansions.
- TAKEAWAY:** Look for moderate to average April weather to keep prices stable as the injection season begins.

Storage



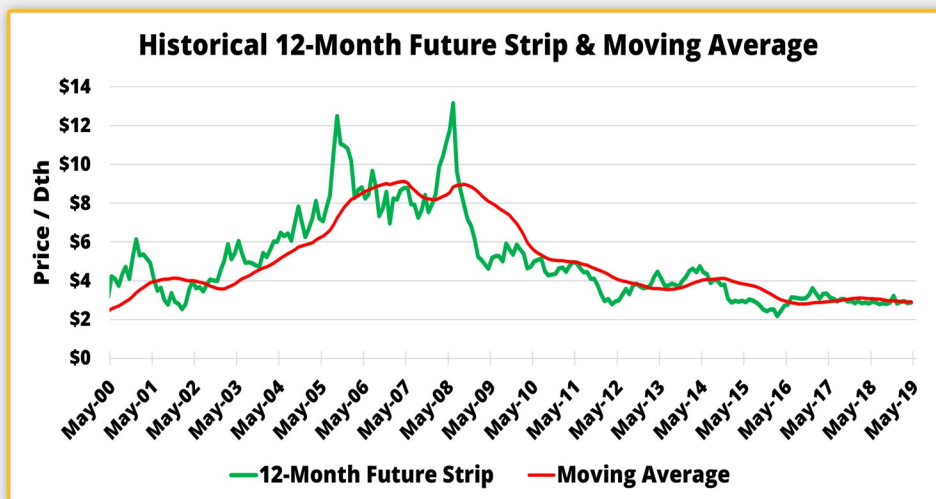
- Mid-March saw gas prices in Texas drop to \$0.12/Dth after an equipment failure in a major pipeline left the commodity stranded in the Permian Basin (Texas region).
- Relatedly, the Permian Basin is the biggest oil producing shale basin in the U.S. and the nation's second biggest gas producing region behind the Appalachian Basin in PA, WV, OH.
- Mid-March saw the largest gas pull in 5 years for March, with levels at 1,186 Bcf - 32% below the 5-year average compared to just 11% in January.
- TAKEAWAY:** Near five-year low storage levels are creating short term uncertainty going into summer and winter seasons.

Production



- U.S. oil production set to over take Russia in five years and near Saudi Arabia's levels – set to account for about 70% of global oil growth and 75% of LNG export expansions.
- 2019 Henry Hub (NYMEX) prices to average \$2.85/Dth due to production growth keeping prices down.
- Marcellus and Utica Shale regions forecasted to supply almost half of all U.S. natural gas by 2040.
- **TAKEAWAY:** Production continues to soar, keeping long-term outlooks favorable.

Pricing



Bidweek

Month	12-Month Strip	NYMEX
Nov. '18	\$2.953	\$3.190
Dec. '18	\$3.240	\$4.714
Jan. '19	\$2.806	\$3.642
Feb. '19	\$2.818	\$2.950
Mar. '19	\$3.008	\$2.860
Apr. '19	\$2.847	\$2.713

Wholesale Prices per Mmbtu

Noteworthy

- U.S. added almost two times as much electricity generating capacity in 2018 than was retired, the largest one year addition in 15 years. Overall, 62% of additions came from natural gas, with 21% from wind and 16% from solar power.
- Pacific Gas & Electric (PG&E) has announced sweeping leadership changes, selecting Bill Johnson, who led the Tennessee Valley Authority for six years, to take over as president and CEO and lead the embattled California utility through a bankruptcy-driven restructuring and wildfire-related issues. Effective as of the next board meeting, PG&E also said 10 new directors have been appointed and seven current directors will step down.
- A new partnership led by the New York Power Authority (NYPA) will focus on finding and assisting startup businesses focused on electric vehicle and energy storage technologies, aiming to help meet the state's Green New Deal goals. The challenge will support NYPA's \$250 million EVolveNY electric vehicle adoption initiative, as well as New York's goal to add 3 GW of battery storage by 2030.
- DTE Energy has announced plans to reduce emissions by 80% by 2040, accelerating the company's decarbonization plan by a decade through the addition of more renewables and increased energy efficiency.