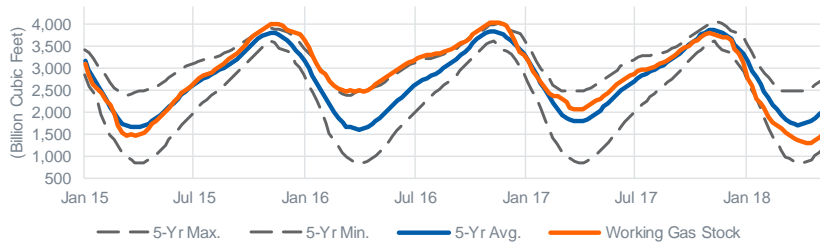


# WEEKLY UPDATE

## Working Natural Gas Storage

as of 5/11/2018



| Balance 2018                |       | Calendar 2019               |       | Calendar 2020               |       |
|-----------------------------|-------|-----------------------------|-------|-----------------------------|-------|
| NYMEX Price as of 5/18/2018 | 2.903 | NYMEX Price as of 5/18/2018 | 2.740 | NYMEX Price as of 5/18/2018 | 2.684 |
| Min (Occurred 2/25/2016)    | 2.549 | Min (Occurred 2/25/2016)    | 2.603 | Min (Occurred 5/9/2018)     | 2.648 |
| Max (Occurred 1/2/2015)     | 3.945 | Max (Occurred 1/2/2015)     | 4.118 | Max (Occurred 1/2/2015)     | 4.260 |

| Summer 2018              |       | Summer 2019              |       | Summer 2020             |       |
|--------------------------|-------|--------------------------|-------|-------------------------|-------|
| Price as of 5/18/2018    | 2.886 | Price as of 5/18/2018    | 2.637 | Price as of 5/18/2018   | 2.605 |
| Min (Occurred 2/23/2016) | 2.476 | Min (Occurred 2/25/2016) | 2.528 | Min (Occurred 5/9/2018) | 2.568 |
| Max (Occurred 1/2/2015)  | 3.870 | Max (Occurred 1/2/2015)  | 4.030 | Max (Occurred 1/2/2015) | 4.058 |

| Winter 2018               |       | Winter 2019              |       | Winter 2020             |       |
|---------------------------|-------|--------------------------|-------|-------------------------|-------|
| Settled Winter Price      | 3.185 | Price as of 5/18/2018    | 3.010 | Price as of 5/18/2018   | 2.696 |
| Min (Occurred 12/21/2017) | 2.595 | Min (Occurred 2/23/2016) | 2.747 | Min (Occurred 5/9/2018) | 2.650 |
| Max (Occurred 1/2/2015)   | 4.116 | Max (Occurred 1/2/2015)  | 4.244 | Max (Occurred 1/2/2015) | 3.867 |

## PRICE TRENDS

- Working gas in storage was 1,538 Bcf as of Friday, May 11, 2018, according to EIA estimates. This represents a net increase of 106 Bcf from the previous week. Stocks were 821 Bcf less than last year at this time and 501 Bcf below the five-year average of 2,039 Bcf. At 1,538 Bcf, total working gas is within the five-year historical range.
- Natural gas spot prices rose at most locations this report week (Wednesday, May 9 to Wednesday, May 16). The Henry Hub spot price rose from \$2.72 per million British thermal units (MMBtu) last Wednesday to \$2.78/MMBtu.
- At the New York Mercantile Exchange (Nymex), the June 2018 contract price rose 8¢ from \$2.737/MMBtu last Wednesday to \$2.815/MMBtu.
- According to Baker Hughes, for the week ending Tuesday, May 8, the natural gas rig count increased by 3 to 199. The number of oil-directed rigs rose by 10 to 844. The total rig count increased by 13, and it now stands at 1,045.

## CONTACT US



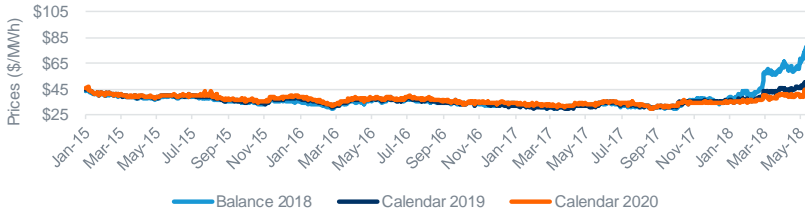
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# ERCOT – ISO MARKET TRENDS

21 MAY 2018

## ERCOT NZ 5x16 Fixed Prices

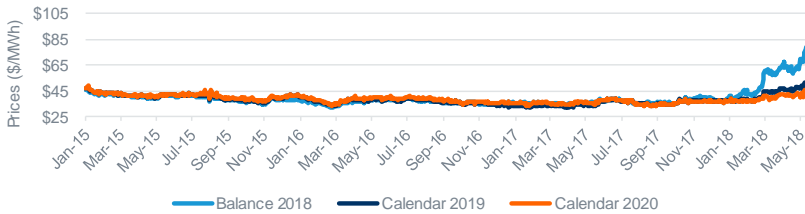
Trade Dates: 1/2/2015 - 5/18/2018



| Balance 2018                      | Calendar 2019                     | Calendar 2020                     |
|-----------------------------------|-----------------------------------|-----------------------------------|
| NYMEX Price as of 5/18/2018 79.73 | NYMEX Price as of 5/18/2018 48.00 | NYMEX Price as of 5/18/2018 40.26 |
| Min (Occurred 2/24/2017) 29.55    | Min (Occurred 2/2/2017) 29.45     | Min (Occurred 8/22/2017) 30.01    |
| Max (Occurred 5/15/2018) 83.23    | Max (Occurred 5/17/2018) 50.89    | Max (Occurred 1/5/2015) 46.31     |

## ERCOT HZ 5x16 Fixed Prices

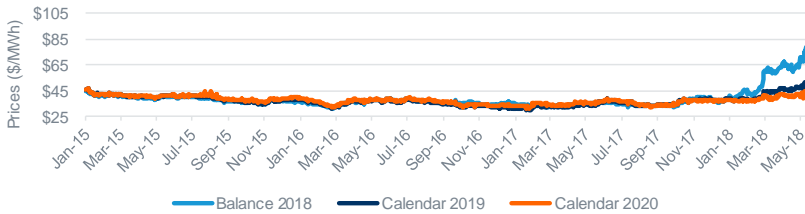
Trade Dates: 1/2/2015 - 5/18/2018



| Balance 2018                      | Calendar 2019                     | Calendar 2020                     |
|-----------------------------------|-----------------------------------|-----------------------------------|
| NYMEX Price as of 5/18/2018 80.23 | NYMEX Price as of 5/18/2018 48.62 | NYMEX Price as of 5/18/2018 41.81 |
| Min (Occurred 2/25/2016) 31.93    | Min (Occurred 1/19/2017) 31.53    | Min (Occurred 1/19/2017) 32.81    |
| Max (Occurred 5/15/2018) 84.15    | Max (Occurred 5/17/2018) 51.56    | Max (Occurred 1/5/2015) 43.24     |

## ERCOT SZ 5x16 Fixed Prices

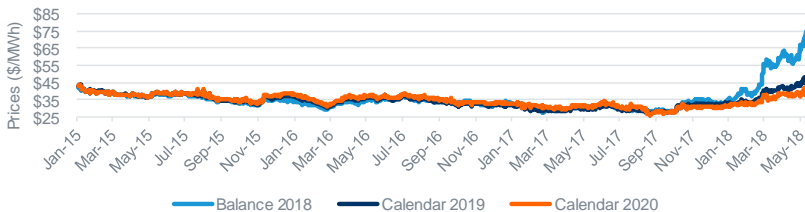
Trade Dates: 1/2/2015 - 5/18/2018



| Balance 2018                      | Calendar 2019                     | Calendar 2020                     |
|-----------------------------------|-----------------------------------|-----------------------------------|
| NYMEX Price as of 5/18/2018 81.36 | NYMEX Price as of 5/18/2018 49.21 | NYMEX Price as of 5/18/2018 41.25 |
| Min (Occurred 2/25/2016) 30.94    | Min (Occurred 1/19/2017) 29.64    | Min (Occurred 1/19/2017) 30.71    |
| Max (Occurred 5/15/2018) 85.08    | Max (Occurred 5/17/2018) 52.17    | Max (Occurred 1/5/2015) 41.43     |

## ERCOT WZ5x16 Fixed Prices

Trade Dates: 1/2/2015 - 5/18/2018



| Balance 2018                      | Calendar 2019                     | Calendar 2020                     |
|-----------------------------------|-----------------------------------|-----------------------------------|
| NYMEX Price as of 5/18/2018 77.25 | NYMEX Price as of 5/18/2018 45.48 | NYMEX Price as of 5/18/2018 38.38 |
| Min (Occurred 8/23/2017) 27.31    | Min (Occurred 8/23/2017) 25.76    | Min (Occurred 8/23/2017) 25.55    |
| Max (Occurred 5/15/2018) 80.66    | Max (Occurred 5/17/2018) 48.13    | Max (Occurred 1/5/2015) 38.91     |

## MARKET INTELLIGENCE

- Morgan Stanley reported that shipping regulations have oil headed for \$90/bbl. It says Brent crude will reach this mark by 2020. The reason: New international shipping regulations taking effect forcing vessels to consume lower sulfur fuels beginning in January 2020 will lead to a boom in demand for middle distillate productions including diesel and marine gasoil, triggering the need for more crude. "We foresee a scramble for middle distillates that will drive crack spreads higher and drag oil prices with it", wrote Morgan Stanley analysts.
- The Wall Street Journal says US oil futures are trailing Brent, the global benchmark, by more than \$7/bbl, settling at \$71.28/bbl on Friday. The two oil benchmarks are further apart than they have been since 2015, before US crude could be freely exported. The divergence is a sign of how stretched global oil supplies have become even as US output has marched higher overtaking Saudi Arabia and rivaling Russia. That has contributed to soaring US exports, which have hit a record of nearly 2.6 million bbls/d. Analyst expect exports to keep climbing as long as the price differential exists. Some think the spread could widen further to \$10/bbl. US crude production has surged to 10.7 million bp/d-highest ever. Producers with pipeline capacity to the Gulf are realizing prices closer to Brent. Producers without this capacity are having their supplies back up in West Texas.
- Platt's Gas Daily reported the US National Weather Service Thursday report predicted elevated temperatures for most of the US Lower 48, increasing the likelihood that gas-fired power burn will outperform this season. This updated summer outlook poses significant upside risk to an already bullish power burn scenario this year, Platt's reported. Through Mid-May, gas-fired burn has averaged 24 Bcf/d and is up 12%, or about 2.5 Bcf/d compared to 2017, per S&P Global Platts Analytics data. Predicted increased demand for gas-fired power this summer could impact the US natural gas storage deficit despite the impact of added renewables, Platt's stated. The power grid this summer will feature 12-13 GW less coal capacity and 15 GW more gas capacity.
- FERC announced the Texas' (and also California) power market(s) is a potential tight spot for this summer, echoing ERCOT's assessment. ERCOT expects its reserve margin to be 10.92%, below its reference margin of 13.75% but expects to have "sufficient tools" to meet energy reliability.

## CONTACT US



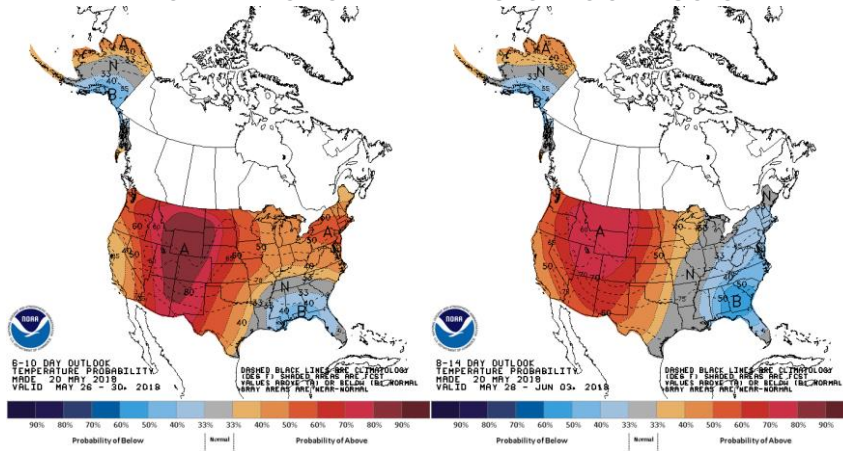
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# ERCOT – ISO MARKET TRENDS

21 MAY 2018

## ERCOT WEATHER OUTLOOK

WARM PATTERN STILL IN PLACE BUT LATE WEEK TROPICAL RISKS BRING UNCERTAINTY INTO NEXT WEEK

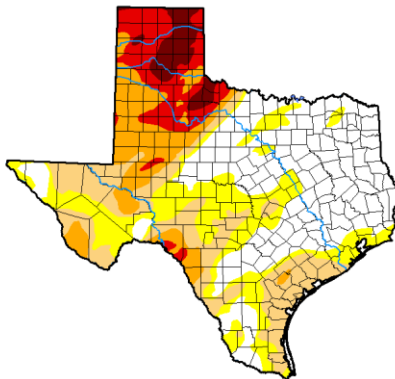


- Warm this week with decreasing rain risks by the mid-week
- Late week and weekend sees tropical risks between LA and FL
- Where the system goes makes a big difference in demand
  - To FL and Texas is hotter
  - To LA and we are cooler and possibly wetter

## DROUGHT MONITOR

### U.S. Drought Monitor Texas

May 15, 2018  
(Released Thursday, May, 17, 2018)  
Valid 8 a.m. EDT



#### Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

#### Author:

Eric Luebbehusen  
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

- Drought advanced last week thru Coastal Texas
- Surprise widespread rains Sat and Sun will offset some gains from prior weeks
- Will be an interesting update on Thursday

The 6-10 and 8-14 day forecasts courtesy of the [National Weather Service/CPC](#)

The U.S. Drought Monitor is jointly produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. Map courtesy of [NDMC-UNL](#).

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