

ERCOT Market Watch by LCG

April 2016



ERCOT Market Watch by LCG is a monthly summary of prices, congestion, and important events in the ERCOT market.

Contact LCG Consulting for further information and outlooks for future months.

Online at: www.energyonline.com

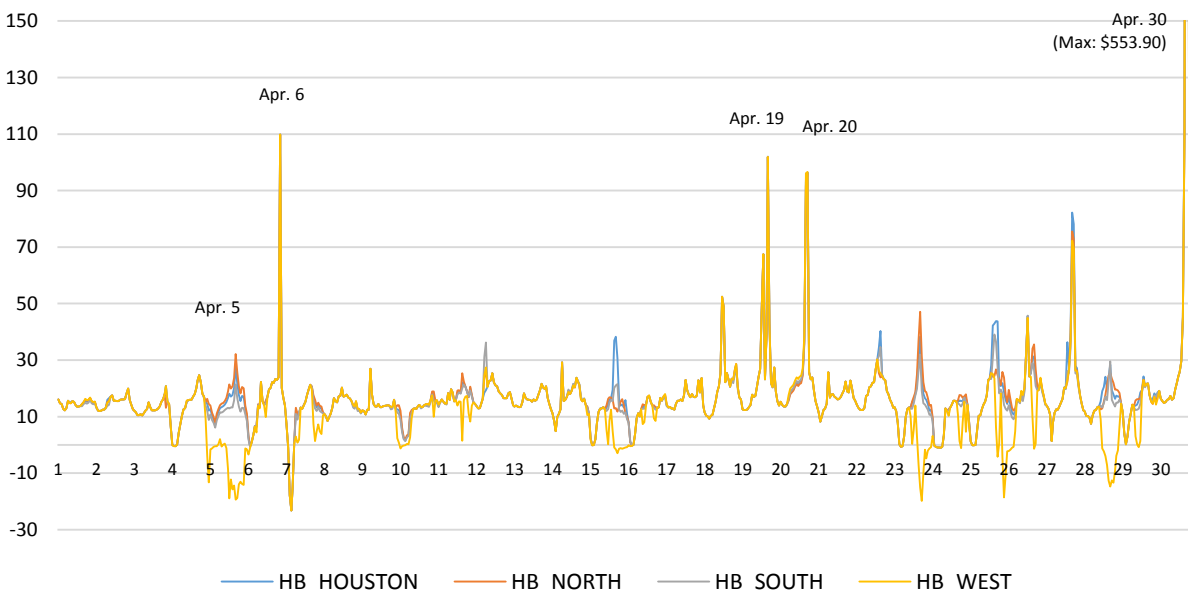
Average Monthly Real-Time Hub Price Summary

	HB_HOUSTON	HB_NORTH	HB_SOUTH	HB_WEST
Weekday ON Peak	\$21.24	\$20.84	\$20.30	\$16.73
Weekend ON Peak	\$23.32	\$23.38	\$22.93	\$20.56
OFF Peak	\$10.43	\$10.58	\$10.22	\$8.80

Release Date: May 20, 2016 – In April the ERCOT Real-Time market experienced lower average prices than the previous month with the exception of weekend peak average prices. The highest price spike occurred on the last day of the month when all trading hubs saw hourly average prices above \$553 in hour 18. The Fort Worth to West Denton 138 kV line accrued the highest congestion rent for the month followed by the Morris Dido to Rosen Heights 138 kV line. The most frequently binding constraint was the Molina to Javalina Tap 138 kV line.

See below for a summary of congested elements and hub prices. LCG's MarketVision reports daily peak and off-peak real-time market nodal price forecasts available at: <http://energyonline.com/marketvision/>

ERCOT April 2016 Average Hourly Hub Prices (Real-Time)



APRIL 2016 EVENT SUMMARIES

Apr. 5 – This day experienced sustained negative pricing at HB_WEST for many hours of the day in the Real-Time market with Daily Average HB_WEST price falling to -\$7.05. Hourly average prices were negative for 20 of the 24 hours this day. Hourly average HB_WEST prices reached as low as -\$19.37 for hour 17. Wind output in the West/North region was very high and sustained for the entire day before dropping off sharply late on the following day.

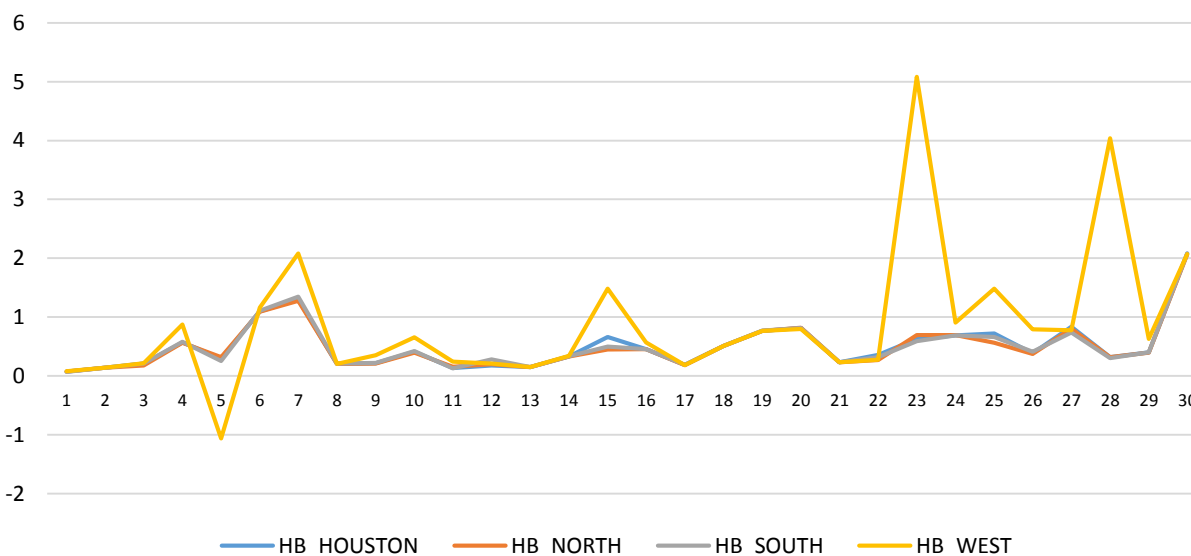
Apr. 6 – In hour 21 Real-Time Hourly Average (RTHA) prices at all four trading hubs reached over \$109. At this time wind output that had been very high and sustained in the West/North region had dropped off from over 8,500 MW to just over 500 MW in 15 hours. During this hour System Lambda reached \$1000 for one interval while RTORPA reached over \$5 during the same hour.

Apr. 19 – In hour 17 RTHA prices at all four hubs reached over \$101 with the highest occurring at HB_SOUTH (\$102.08). System Lambda reached \$500 for one interval during this hour while RTORPA reached over \$14 during the same hour.

Apr. 20 – In hours 17 and 18 RTHA prices at all four hubs were above \$91 while highest hourly average occurred at HB_WEST in hour 18 (\$96.60). System Lambda again reached \$500 on this day for one interval while the RTORPA reached \$22.80 during hour 17 for one interval.

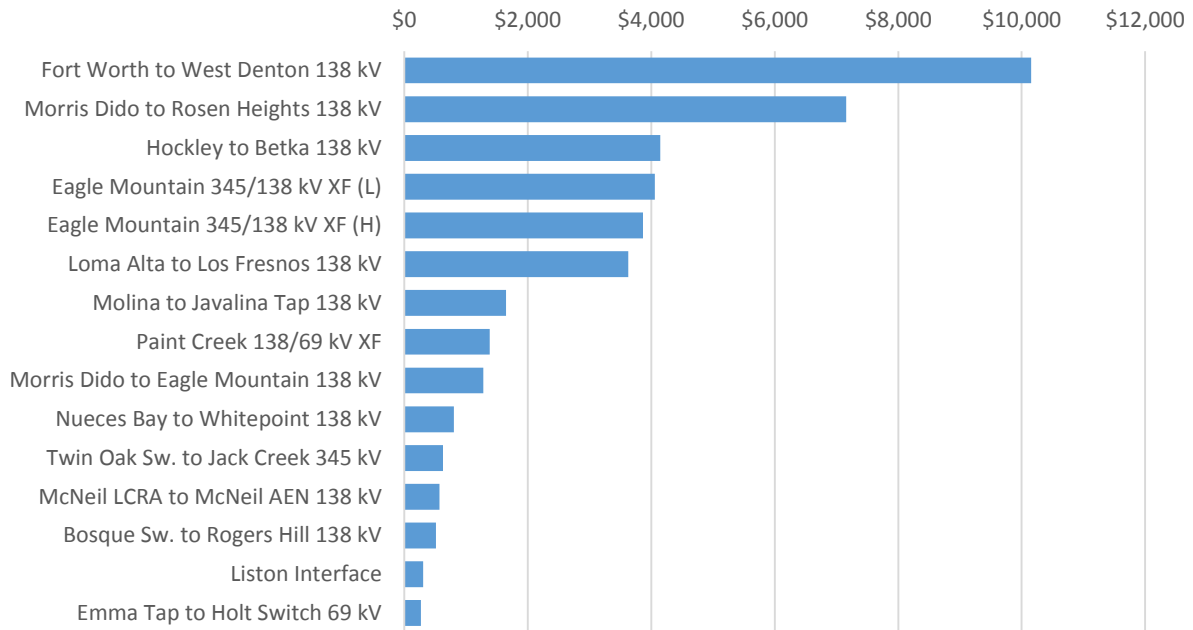
Apr. 30 – This day experienced the largest price spike for the month when RTHA prices reached over \$553 at all four hubs in hour 18. Prices were also very high in hour 17 when all trading hub prices experienced RTHA prices greater than \$439. System Lambda reached its highest level for the month near the end of hour 17 when it was above \$1,184 for one interval. Early in hour 18 the system RTORPA reached the very high value of \$409.32.

Plot of Daily Volatility Indices (SD/mean) by Hub - April 2016
(Real-Time Hourly Average Prices)

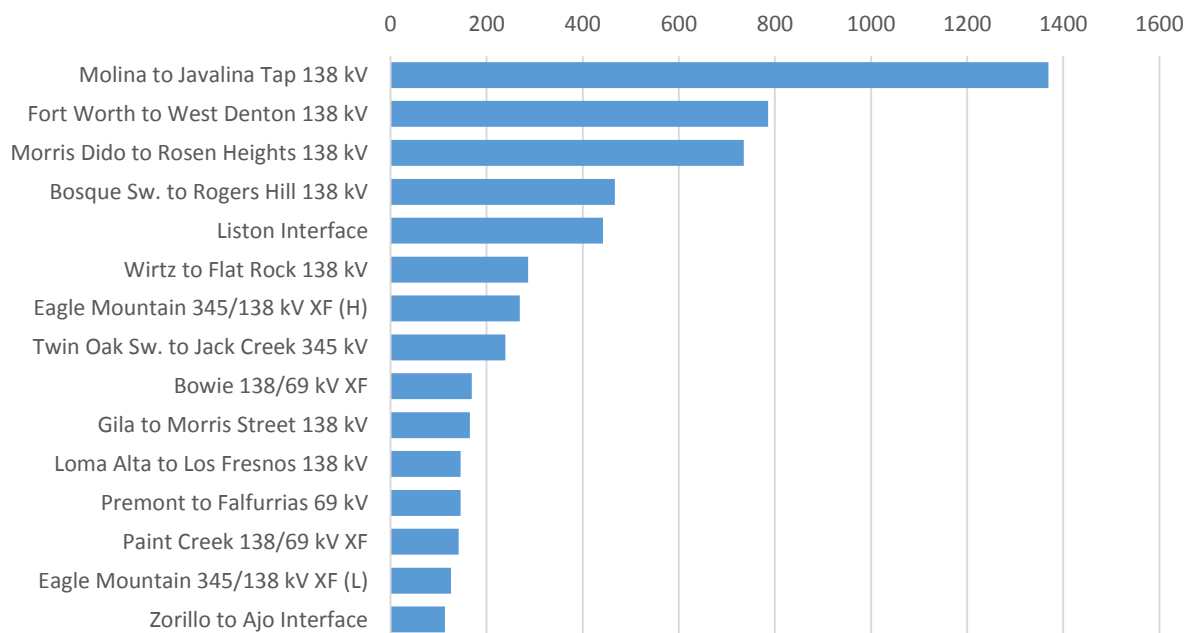


APRIL REALTIME MARKET CONGESTION REPORT

April 2016 - Top 15 Branches Congested
(Congestion Rent - Thousands \$)



April 2016 - Top 15 Branches Congested
(Periods Congested- 5 min intervals)



LCG Consulting provides consulting services, forecasting and software for detailed modeling in the ERCOT region. We offer valuable insights for market participants in the day ahead and real-time markets and CRR auctions. For more information contact Julie Chien: julie.chien@energyonline.com

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