

ERCOT Market Watch by LCG

April 2015



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

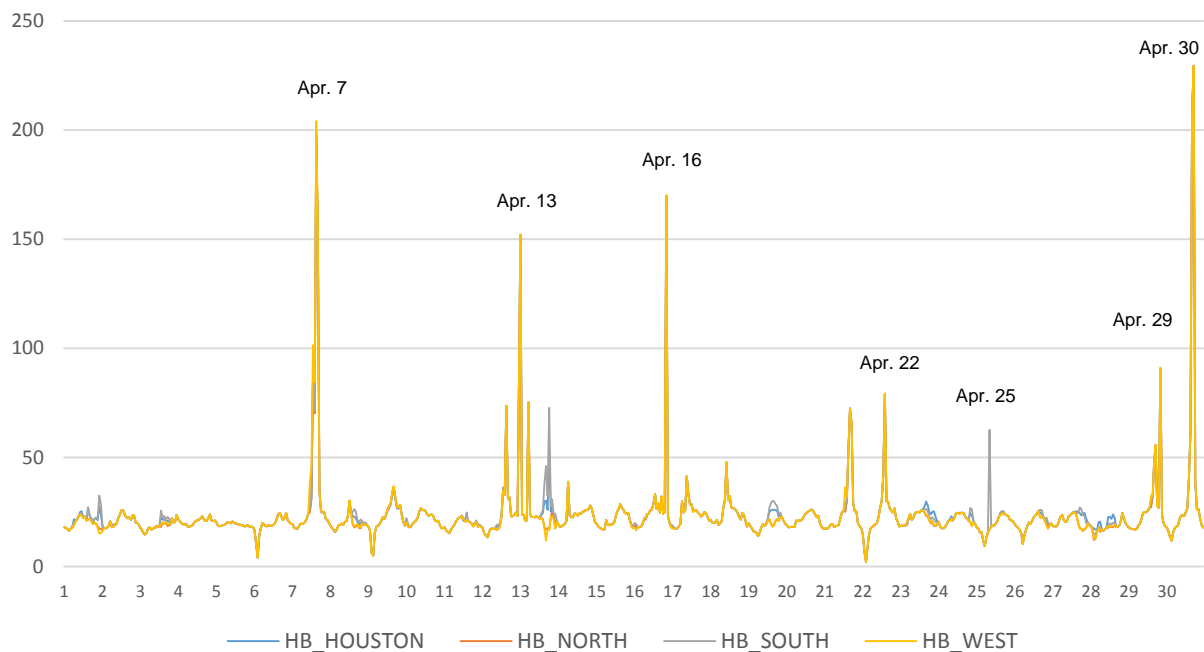
Average Monthly Real-Time Hub Price Summary

	HB_HOUSTON	HB_NORTH	HB_SOUTH	HB_WEST
Weekday ON Peak	\$27.42	\$26.71	\$27.53	\$26.96
Weekend ON Peak	\$22.32	\$21.90	\$22.98	\$21.91
OFF Peak	\$19.22	\$19.01	\$19.26	\$19.01

Release Date: May 6, 2015 – In April the ERCOT real-time market experienced moderate volatility with less extreme price events than in February and March. Real-time hourly average prices were generally lower than in March. The highest price spike occurred on the last day of the month when all RT hourly average hub prices reached over \$229 in hour 18. The constraint with the highest congestion rent in the RT market in April was 14035__A in the West. 6474__A, also in the West, was the most frequently congested constraint.

See below for a summary of line congestion and hub prices.

ERCOT April 2015 Average Hourly Hub Prices (Real-Time)



APRIL 2015 EVENT SUMMARIES

April 7 – In hour 16 all real-time hourly average (RTHA) hub prices reached over \$195. This highest price was experienced at HB_WEST where the average was \$204.08. System Lambda reached \$740.76 for one interval on this day. At this time the system experienced a rapid drop in wind power falling 9,455 MW to 3,118 MW (67%) over 13 hours. This day also experienced the greatest congestion rent for the month. The 14035__A and LON_HI_SMITH1_1 constraints were highly congested.

April 13 – RT prices were volatile on Apr. 12 and 13. The highest RTHA hub prices occurred in hour 1 of Apr. 13 when RTHA price reached \$152.05 at all hubs. For three intervals, system lambda reached over \$760. This day also experienced very high congestion rent, including high congestion on branches ASHERT_CATARI1_1, 144T132_1 and 211T147_1.

April 16 – In hour 21 all RTHA hub prices reached over \$169. System Lambda again reached over \$700 at this time.

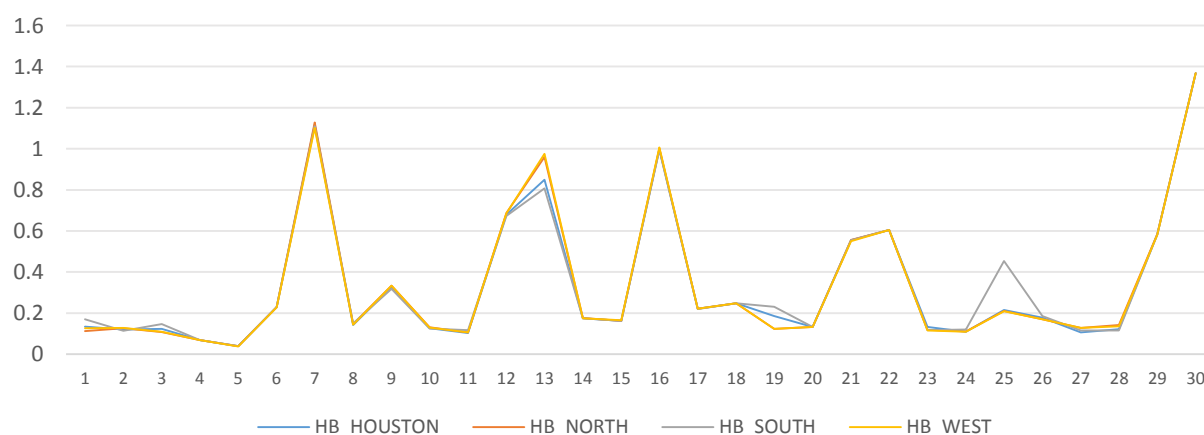
April 22 – Hour 3 on Apr. 22 experienced the lowest RTHA hub prices of the month (all hubs lower than \$2.07) preceded and followed by price spikes. Hour 17 on Apr. 21 and Hour 15 of Apr. 22 experienced RTHA prices of \$72.44 and \$79.13 at all hubs respectively. System lambda reached negative values for 8 intervals near this time.

April 25 – In Hour 9 RTHA HB_SOUTH price reached \$62.62 while other hubs remained lower than \$18. During this time the HARLNS_OLEAND1_1 constraint was highly congested.

April 29 – In Hour 21 on this day RTHA hub prices at all hubs reached 90.95. System Lambda reached \$726 at this time. On this day system wide wind output was less than 1,000 MW for 13 hours.

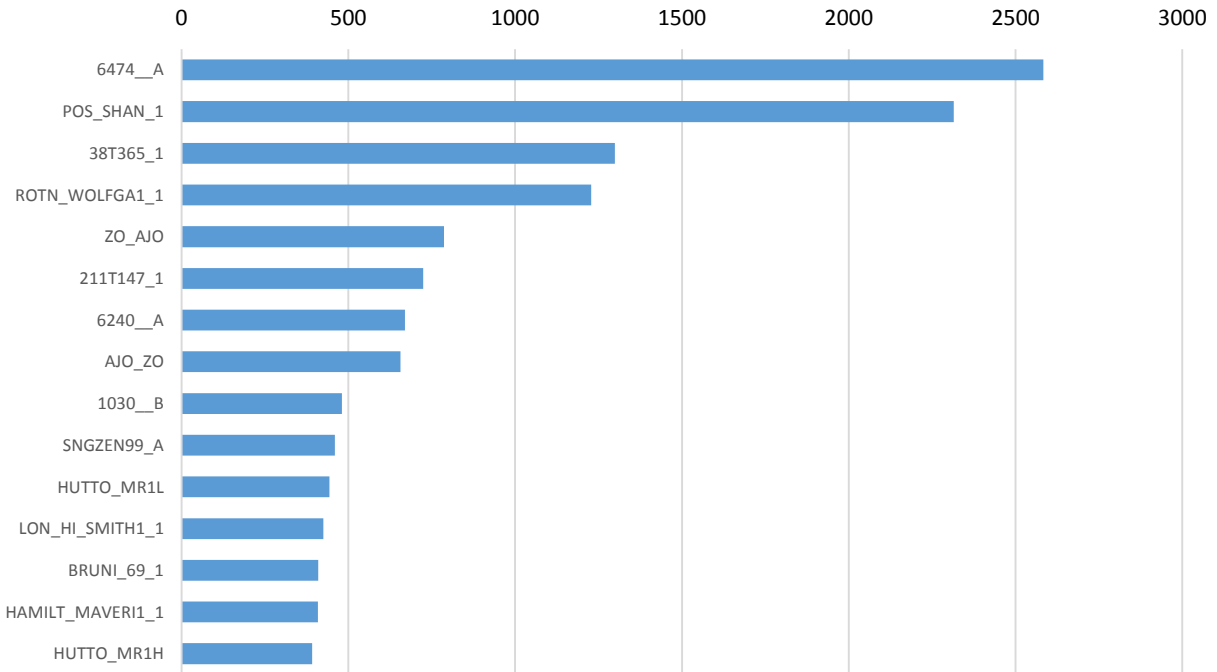
April 30 – This day experienced the most extreme RT hourly average price spike. All hubs reached \$229.45 hourly average price in hour 18. System lambda reached its highest value of the month, reaching \$772.64 for one interval. On this day wind output stayed almost flat near 1,000 MW system wide for 10 hours.

Plot of Daily Volatility Indices (SD/mean) by Hub - April 2015
(Real-Time Hourly Average Prices)

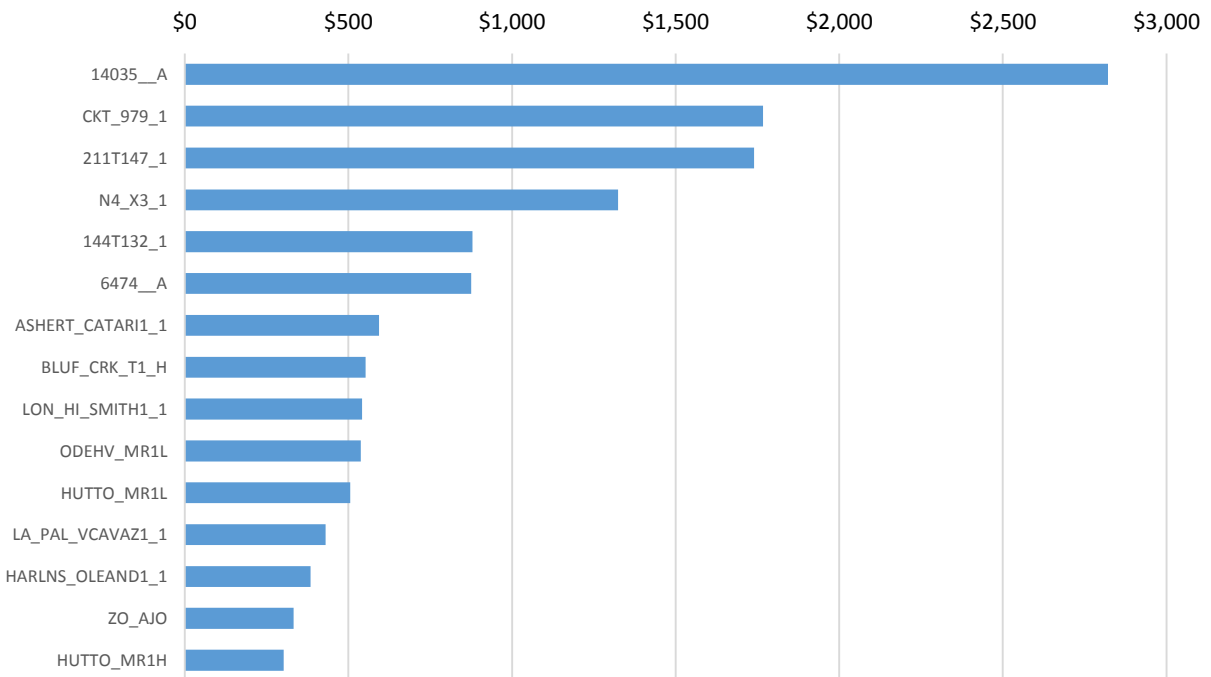


APRIL CONGESTION REPORT

April 2015 - Top 15 Branches Congested
(Periods Congested- 5 min intervals)



April 2015 - Top 15 Branches Congested
(Congestion Rent - Thousands \$)



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

LCG Consulting
4962 El Camino Real, Suite 112
Los Altos, CA 94022
Tel: (+1) 650 962 9670

***Disclaimer** - The report herein are provided without warranty of any kind. LCG Consulting will not be liable to users or any third party, for indirect, consequential, special, incidental, punitive, or exemplary damages, including, without limitation, lost profits, lost savings and lost revenues.*