

ERCOT Market Watch by LCG

December 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.

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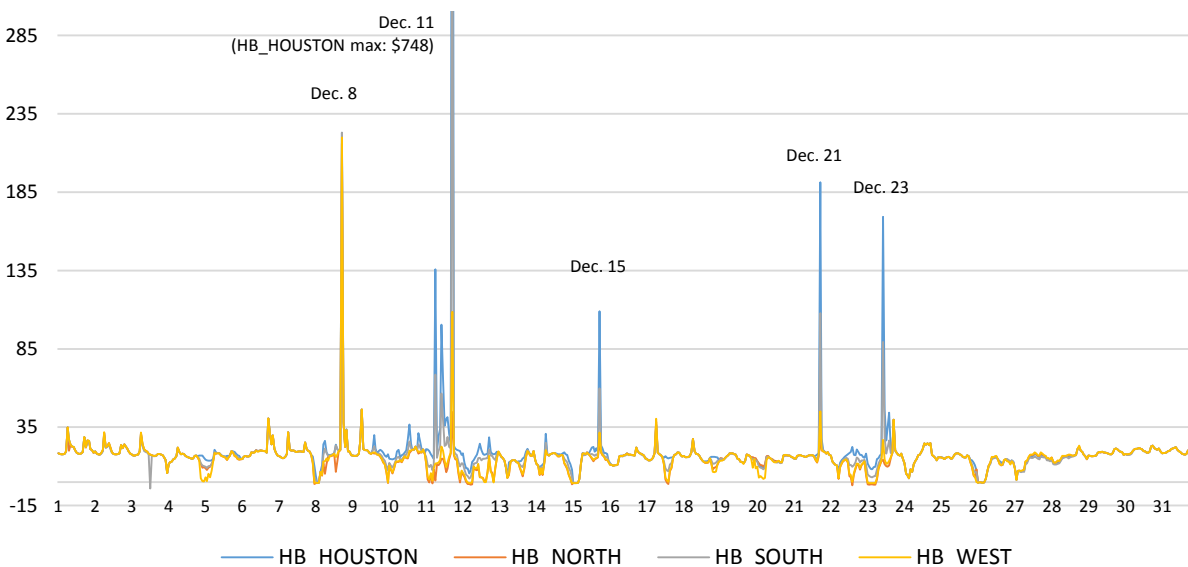
Average Monthly Real-Time Hub Price Summary

	HB_HOUSTON	HB_NORTH	HB_SOUTH	HB_WEST
Weekday ON Peak	\$24.15	\$17.95	\$20.84	\$18.55
Weekend ON Peak	\$16.77	\$14.70	\$15.78	\$14.70
OFF Peak	\$14.00	\$12.18	\$12.88	\$11.88

Release Date: January 7, 2016 – In December the ERCOT Real-Time market experienced greater volatility than in November. Average hub prices were again lower than the previous month with the exception of Houston which experienced the highest price spikes. Wind production continues to set records in ERCOT. A new record was set on Dec. 20 when the wind production peaked at 13,883 MW representing 44.7% of system load at the time. The most active constraints during the month of November were SNGZEN98_A (a 345 kV line importing power to the Houston area), the Panhandle Export Stability Interface, and the Molina Stability Interface. These were also the top three branches in terms of congestion rent. Binding of the Panhandle interface also occurred in November but to a much lesser extent than it did in December. The majority of congestion rent on the Panhandle interface occurred on Dec. 15 and Dec. 20 while the average interface limit when the interface was binding was 1,706 MW.

See below for a summary of congested elements and hub prices.

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



DECEMBER 2015 EVENT SUMMARIES

Dec. 8 – In Hour 18 Real-Time Hourly Average (RTHA) prices reached over \$215 at all four hubs. HB_SOUTH and HB_HOUSTON were highest with RTHA prices of \$222.96 and \$222.84 respectively. The constraint 1030__B was congested at this time. This day experienced the highest RTORPA value for the month when it reached \$10.93 for one interval. System Lambda reached \$1,073.35 for one interval on this day.

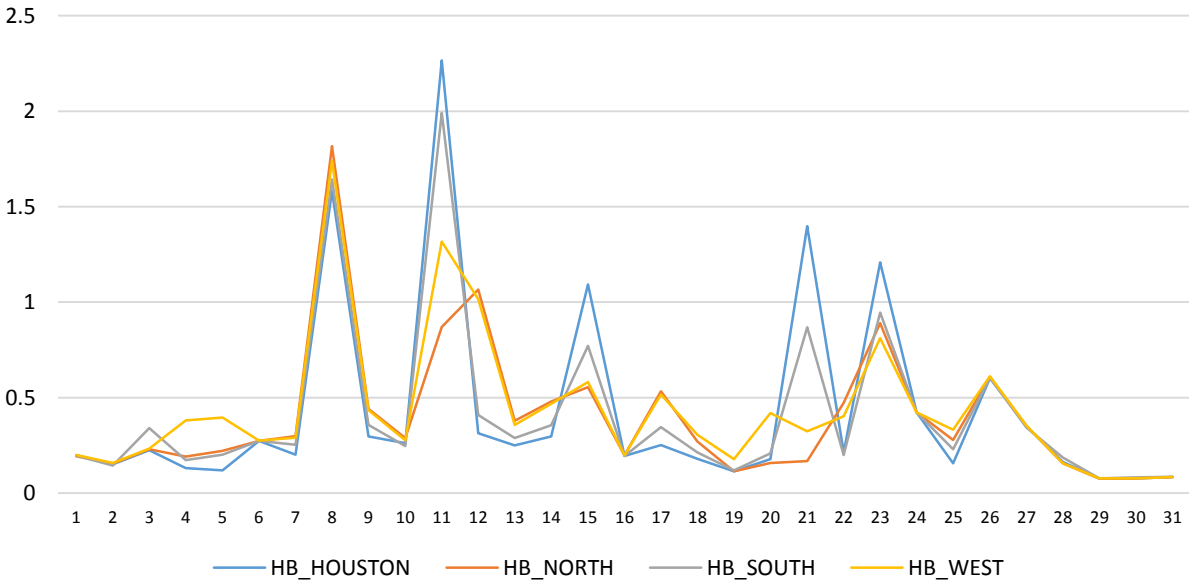
Dec. 11 – This day experienced the most extreme pricing event of the month when the RTHA price at HB_HOUSTON reached \$748 in Hour 18. HB_SOUTH also reached a RTHA price of greater than \$380. SNGZEN98_A was highly congested at this time. This day experienced the highest System Lambda value for the month when it reached \$1,130.62 for one interval.

Dec. 15 – On this day RTHA prices at all four hubs were negative during the first four hours of the day. In Hour 18 RTHA at HB_HOUSTON rose to \$108.95. At this time the SNGZEN98_A and AIRCO4_RINCON1_1 constraints were congested. The Panhandle Interface also accrued a large amount of congestion rent on this day. System Lambda reached \$500 for one interval.

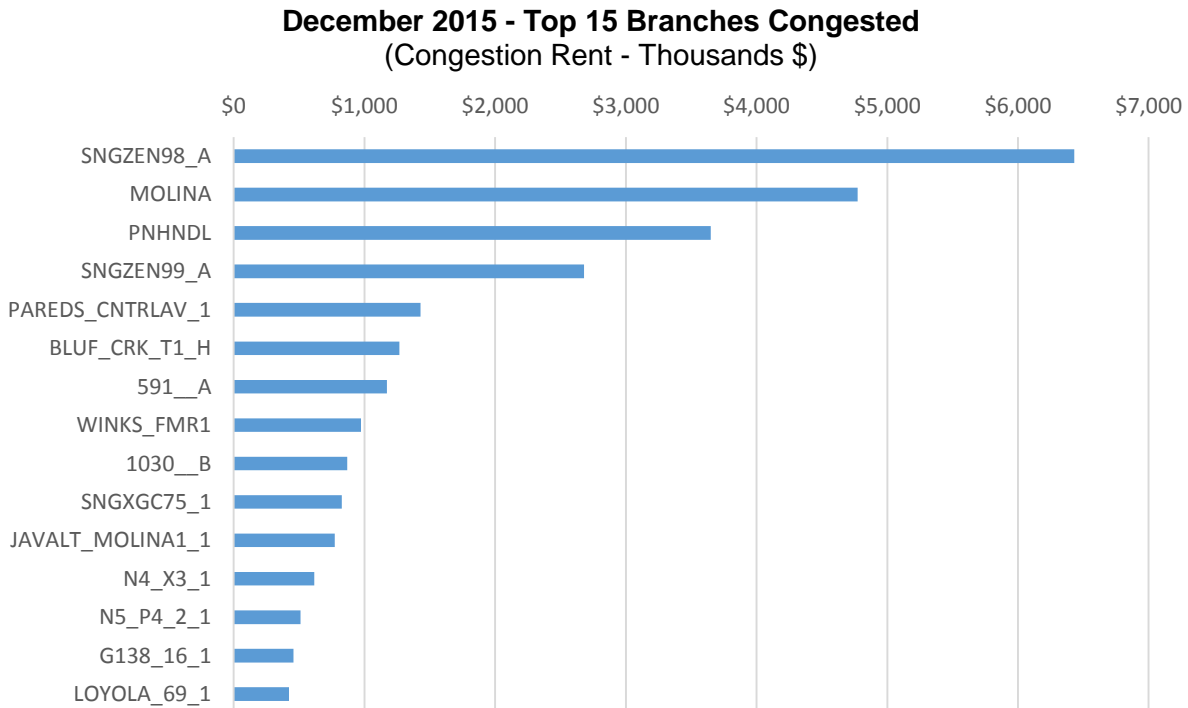
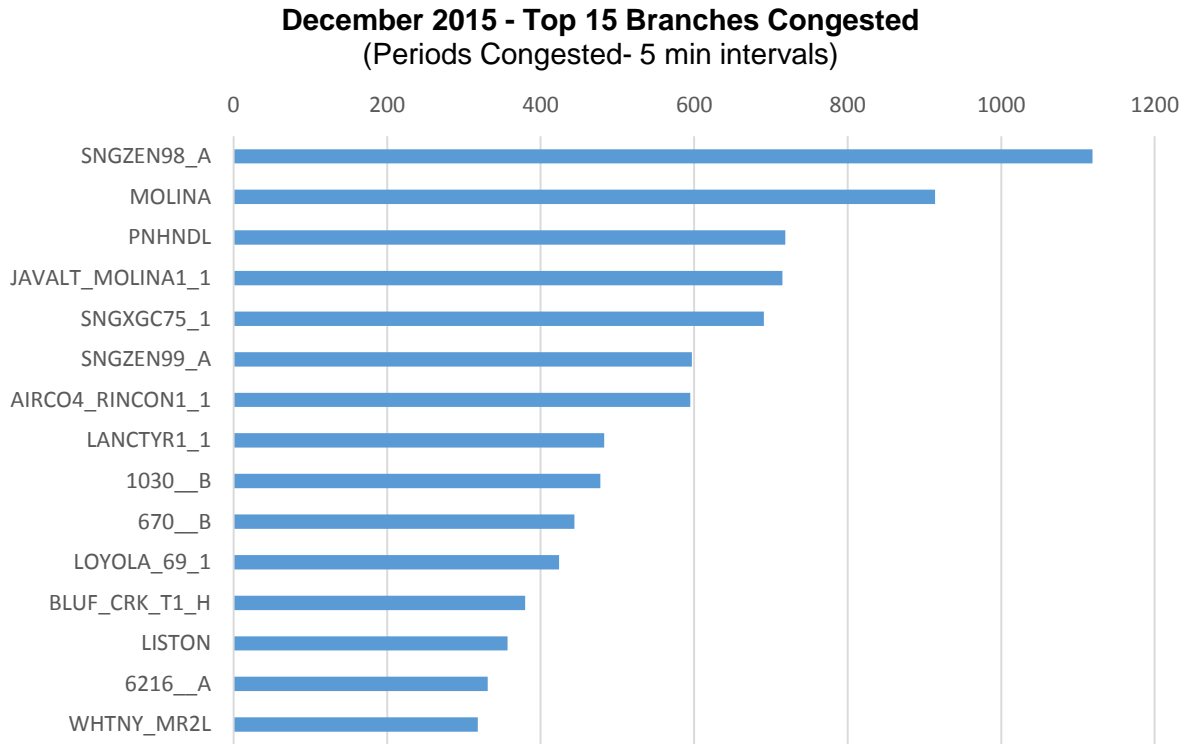
Dec. 21 – RTHA price at HB_HOUSTON reached \$191.25 during Hour 18 while HB_SOUTH reached \$107.81 during the same hour. SNGZEN99_A was congested at this time. System Lambda reached \$1,015.11 for one interval on this day.

Dec. 23 – On this day RTHA price at HB_HOUSTON reached \$169.31 in Hour 11 while reaching \$89.49 during the same hour at HB_SOUTH. SNGZEN99_A was congested at this time. System Lambda reached \$924.03 for one interval.

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



DECEMBER CONGESTION REPORT



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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