# Item 7: IMM Report

**Steve Reedy**

**Potomac Economics**

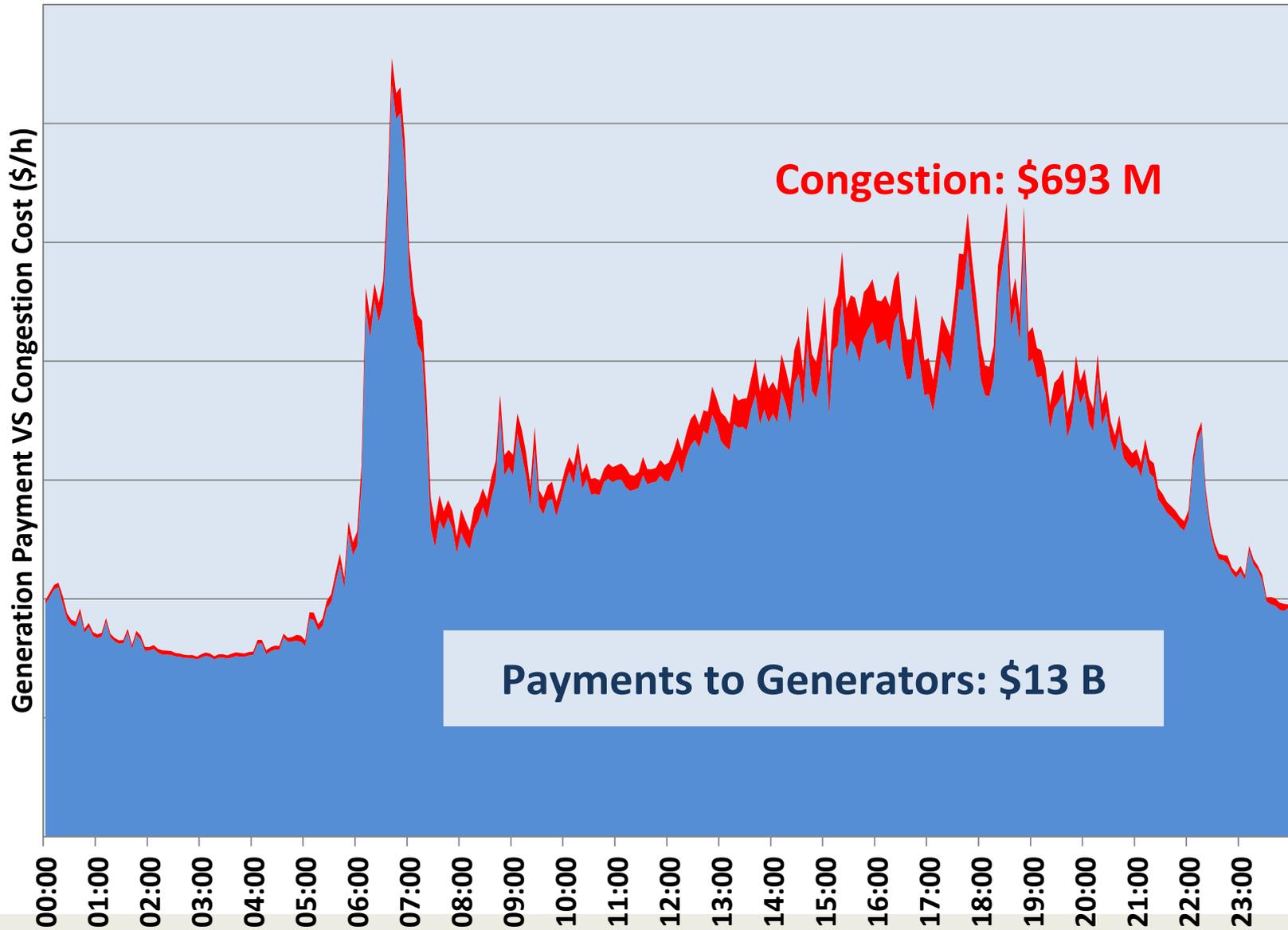**Deputy Director, ERCOT IMM**

**Board of Directors**

**June 9, 2015**

**ERCOT Public**

# The path of Congestion Rent and Revenue in ERCOT

- **Of the money load pays for energy in real time, most goes to generators and some goes to real time congestion rent.**

- **Real time congestion rent plus revenue sufficiency uplift goes to fund Day Ahead congestion positions.**

- **Payouts on the Day Ahead positions greater than their cost is profit for Day Ahead Market Participants.**

- **Some of the Day Ahead congestion goes to fund CRRs and the rest goes to load.**

- **Payouts on CRRs greater than their cost is profit to CRR Account Holders.**

- **Payments made to obtain CRRs goes to load.**

# SCED Generation Payment VS Congestion 2014



Congestion: $693 M

Payments to Generators: $13 B

Generation Payment VS Congestion Cost ($/h)

00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00

POTOMAC ECONOMICS

# Congestion Rent and Revenue in ERCOT

**$693M Congestion Rent**

$13B Generation Payment

POTOMAC ECONOMICS

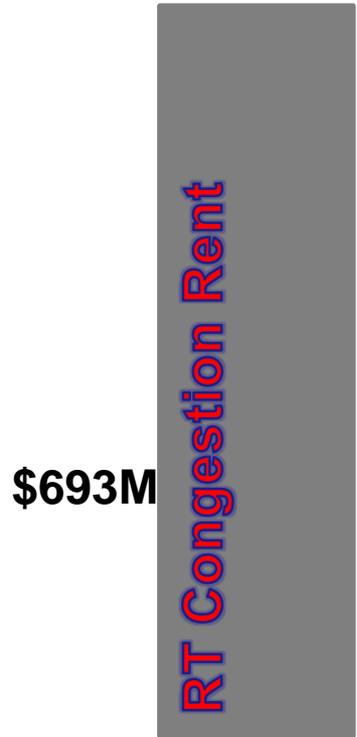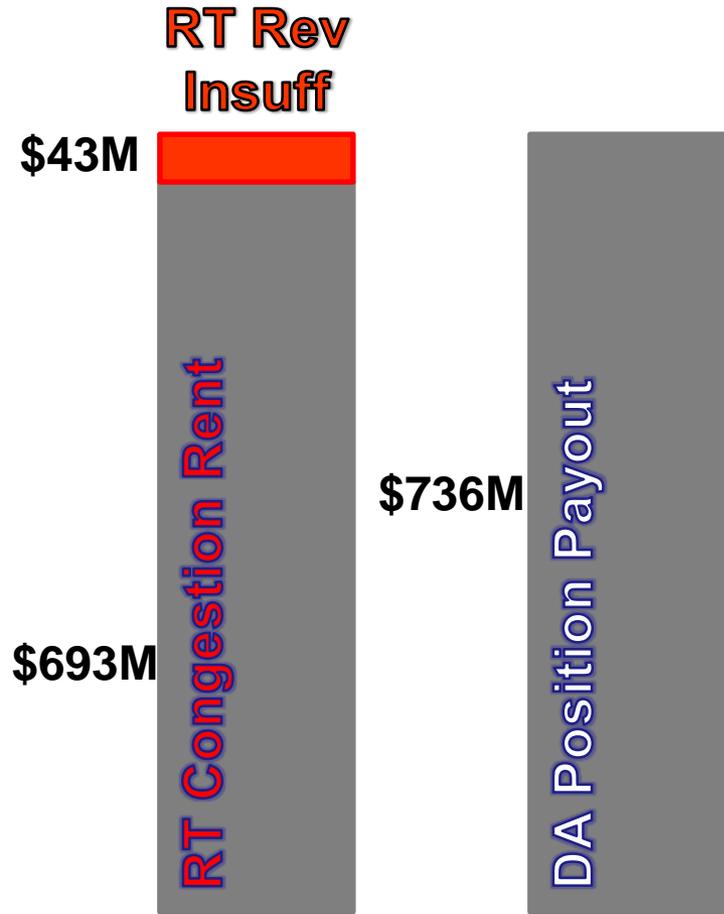# Congestion Rent and Revenue in ERCOT
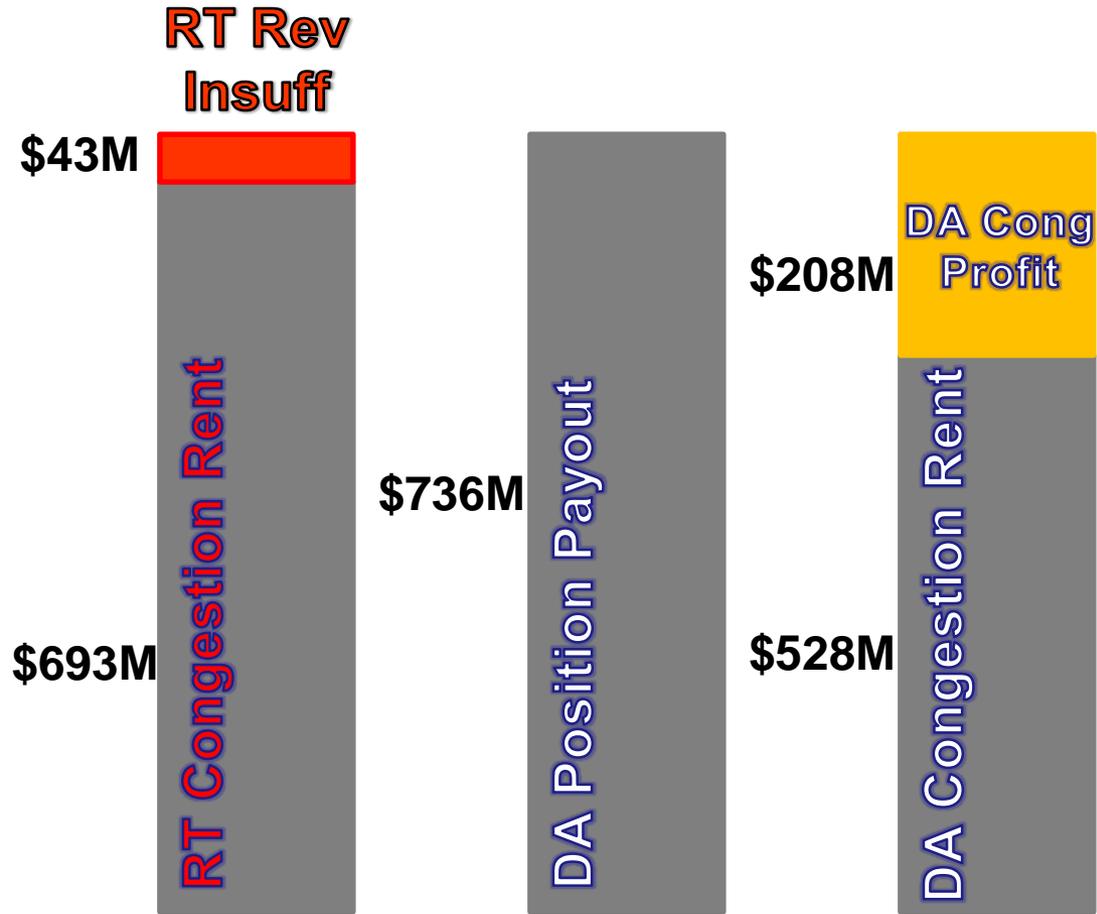


**$693M**

RT Congestion Rent

# Congestion Rent and Revenue in ERCOT

# Congestion Rent and Revenue in ERCOT

# Congestion Rent and Revenue in ERCOT

# Congestion Rent and Revenue in ERCOT

Item 7
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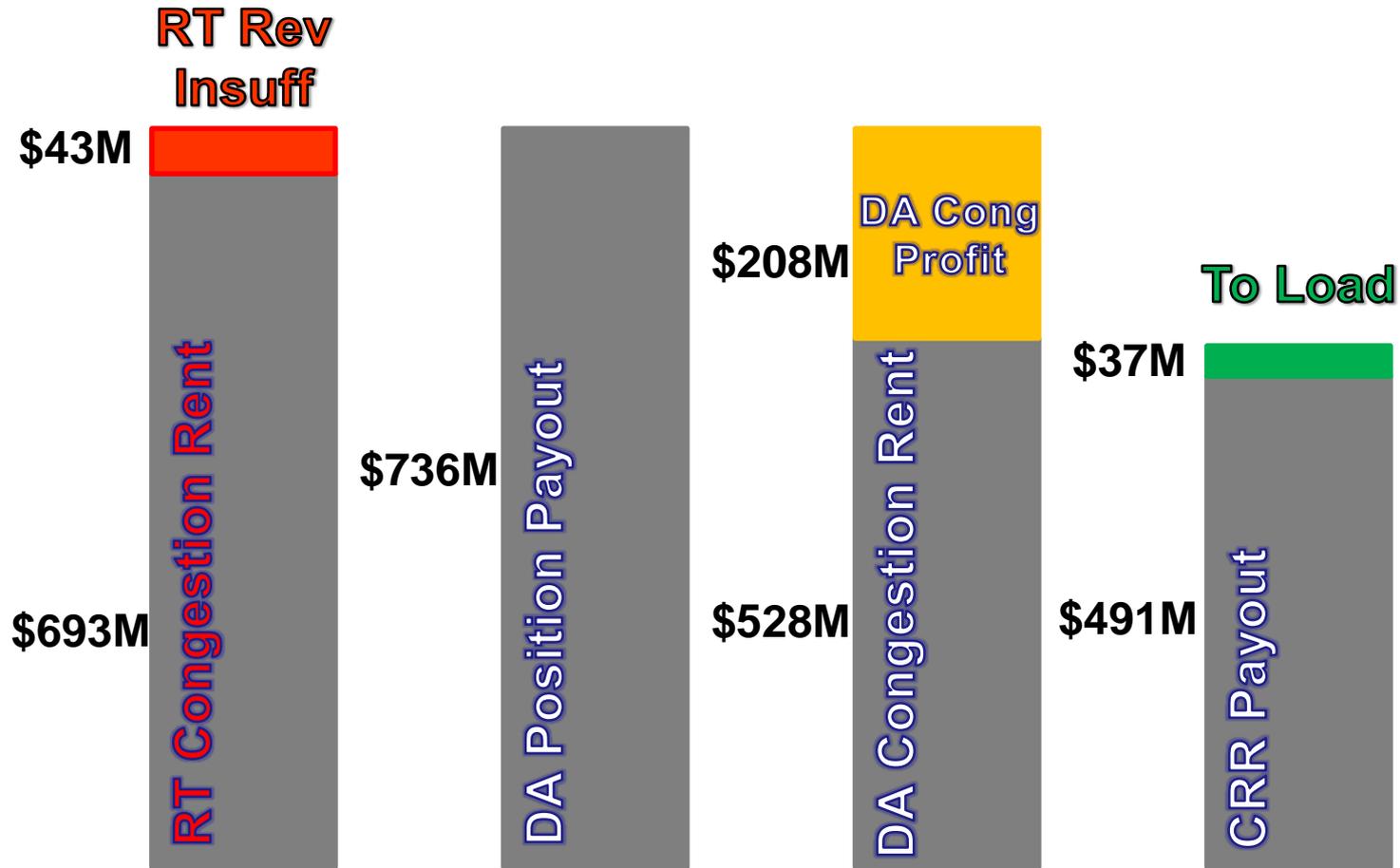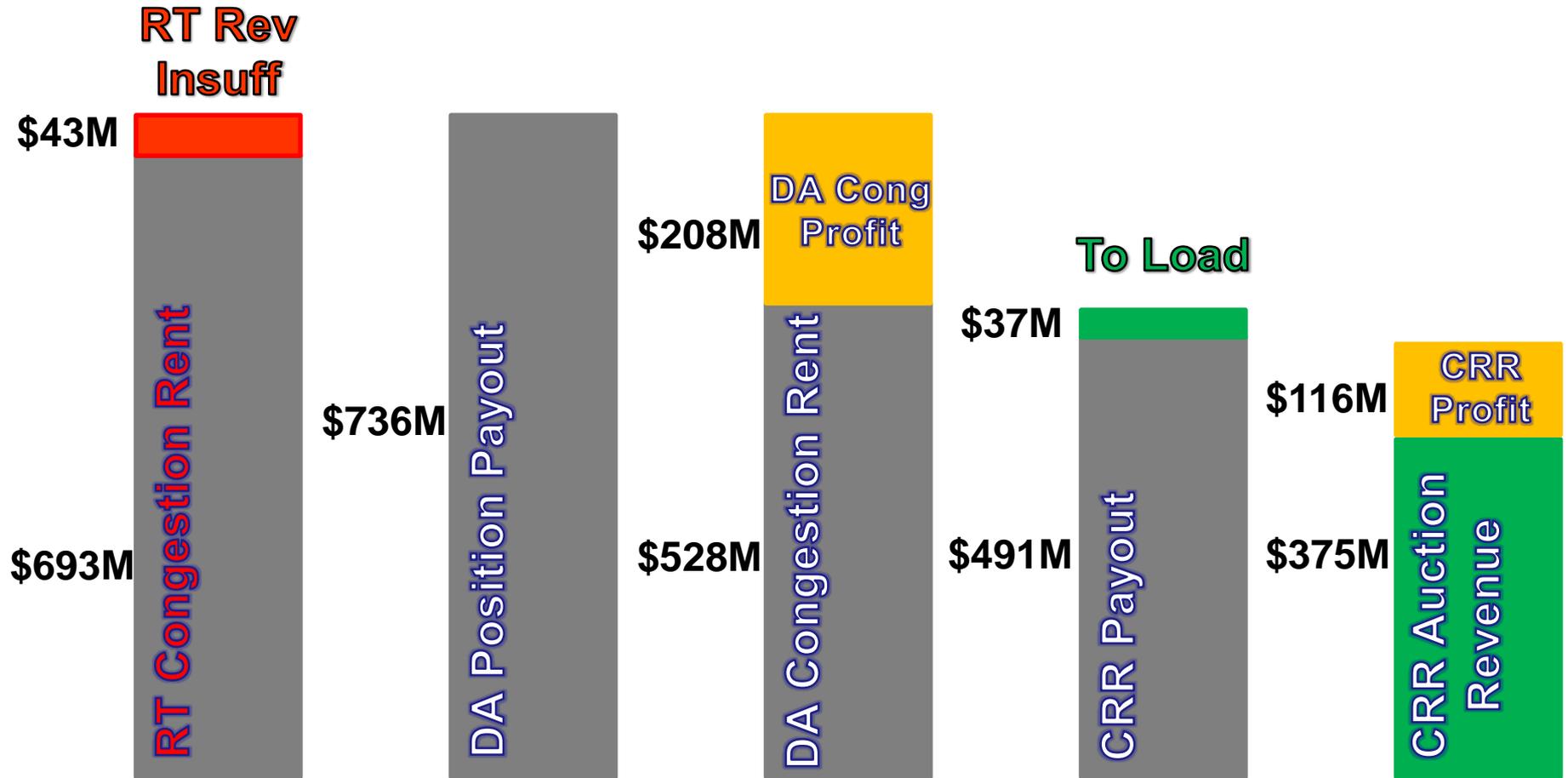
# Congestion Rent and Revenue in ERCOT - Summary

- **Of the money load pays for energy, most goes to generators ($13B) and some goes to real time congestion rent ($693M).**

- **Real time congestion rent plus revenue sufficiency uplift ($43M) goes to fund Day Ahead congestion positions ($736M).**

- **The Day Ahead congestion positions cost $528M leaving a profit of $208M for Day Ahead Market Participants.**

- **Some of the $528M Day Ahead congestion goes to fund CRRs ($491M) and the rest goes to load ($37M).**

- **Those CRR positions cost $375M, which goes to load.  The remaining $116M is profit to CRR Account Holders.**

- **In 2014 load paid $736M above the amount paid to generators in the real time market.**

  - $324M went to profit on DA and CRR positions
  - $412M went back to load directly

POTOMAC ECONOMICS

**To the Public Utility Commission of Texas**

# ERCOT Wholesale Electricity Market Monthly Report

Wednesday, May 27, 2015

Potomac Economics, Ltd.
Independent Market Monitor

| | | | |
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| 16 | **CRR Auction Prices Rankings** | | table |
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| | **- Top 10 PTP Options** | chart | |

# ERCOT-Wide Average Energy Prices DA vs RT
**(avg. DA & RT SPPs weighted by Real Time Settlement Loads)**



Legend: RTPrice2014, RTPrice2015, DAPrice2014, DAPrice2015

X-axis: Month

Y-axis: Energy Prices ($/MWh)
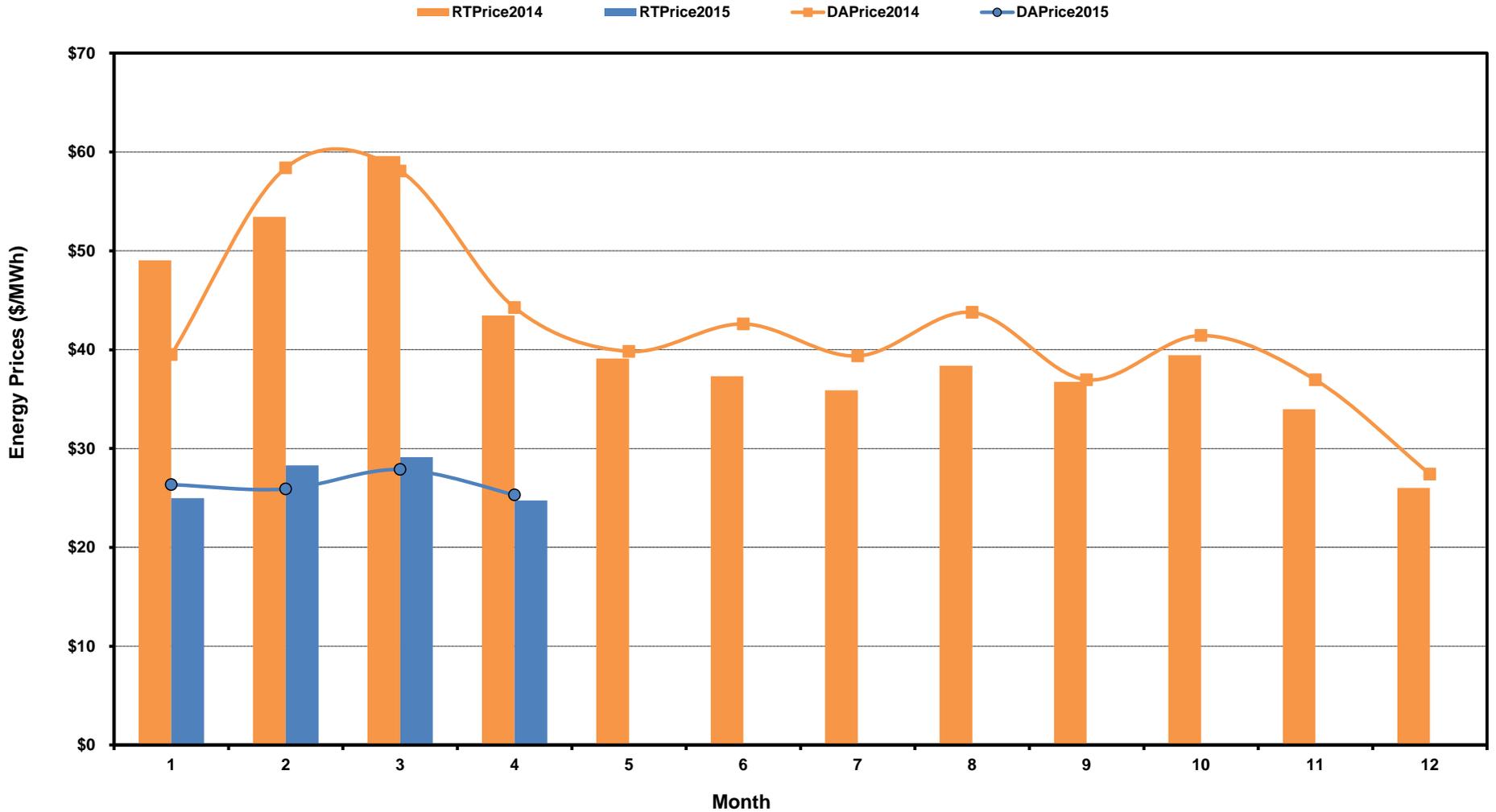
# Load Zone Load Statistics

**(Nodal load zone made comparable to zonal sytem Load Zone definitions\*)**

## Houston Zone

Legend: ▮ AVG14   ▮ AVG15   ◇ PEAK14   ●━ PEAK15



## North Zone

Legend: ▮ AVG14   ▮ AVG15   ◇ PEAK14   ●━ PEAK15



## South Zone

Legend: ▮ AVG14   ▮ AVG15   ◇ PEAK14   ●━ PEAK15



## West Zone

Legend: ▮ AVG14   ▮ AVG15   ◇ PEAK14   ●━ PEAK15

**Note:** * Zonal load zone definition vs. Nodal comparable load zone definition: LZ_Houston=LZ_Houston; LZ_West=LZ_West; LZ_North=(LZ_North,LZ_RAYBN); LZ_South=(LZ_South,LZ_CPS,LZ_AEN,LZ_LCRA)

# Load Zone Monthly Average Energy Price DA vs RT

**(avg. DA & RT SPPs weighted by Real Time Settlement Loads)**
**(Nodal load zone made comparable to zonal sytem Load Zone definitions\*)**



Houston Zone / North Zone / South Zone / West Zone charts — Energy Price ($/MWh) by Month, legend: RT2014, RT2015, DA2014, DA2015
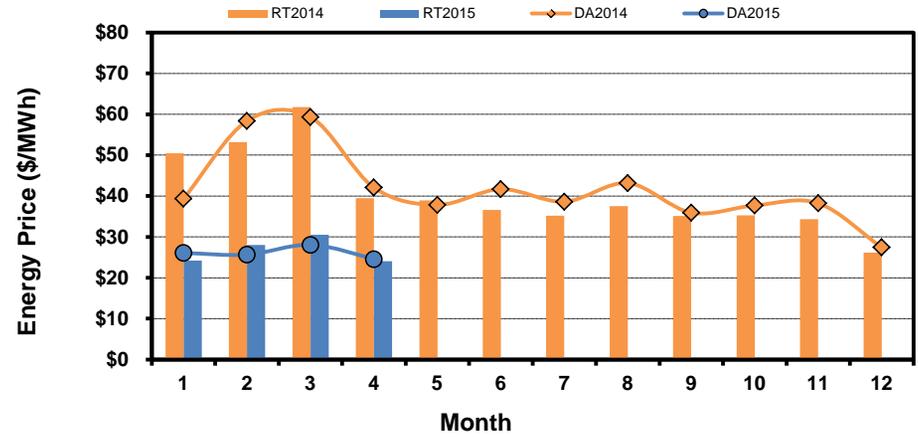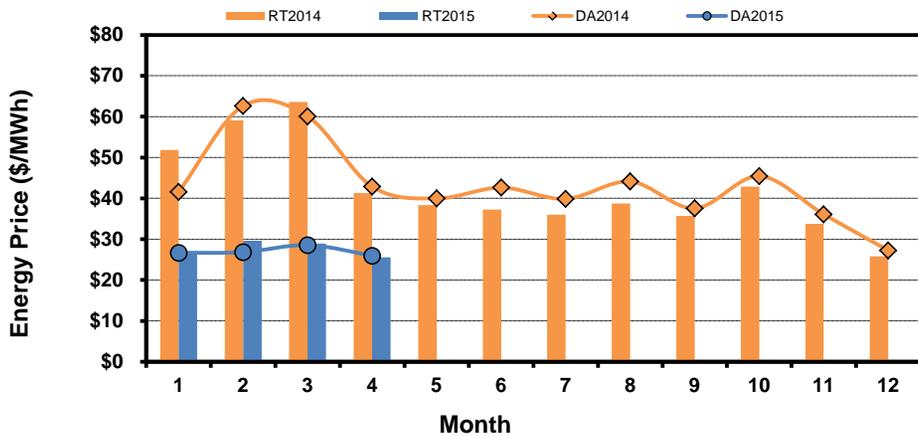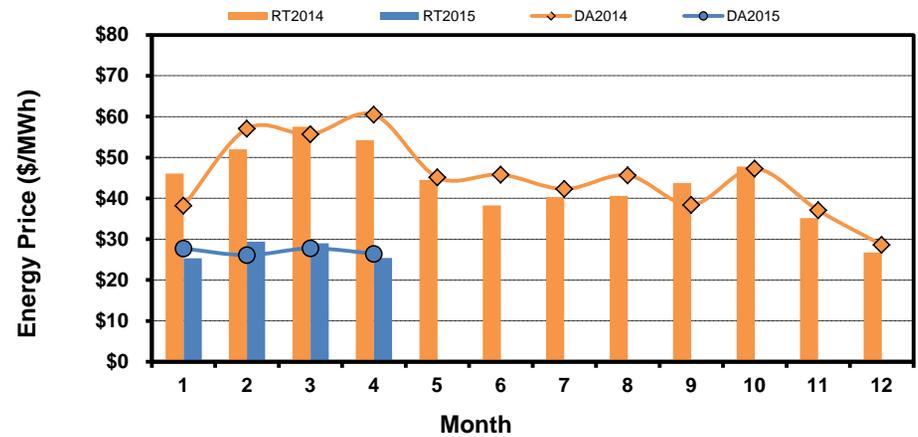
**Note:** * Zonal load zone definition vs. Nodal comparable load zone definition: LZ_Houston=LZ_Houston; LZ_West=LZ_West; LZ_North=(LZ_North,LZ_RAYBN); LZ_South=(LZ_South,LZ_CPS,LZ_AEN,LZ_LCRA)

# ERCOT-Wide Monthly Implied Heat Rate DA vs RT

**(avg. heat rates weighted by Real Time Settlement Loads)**



Legend: RT2014, RT2015, DA2014, DA2015

Y-axis: Heat Rate (MBtu/MWh)

X-axis: Month
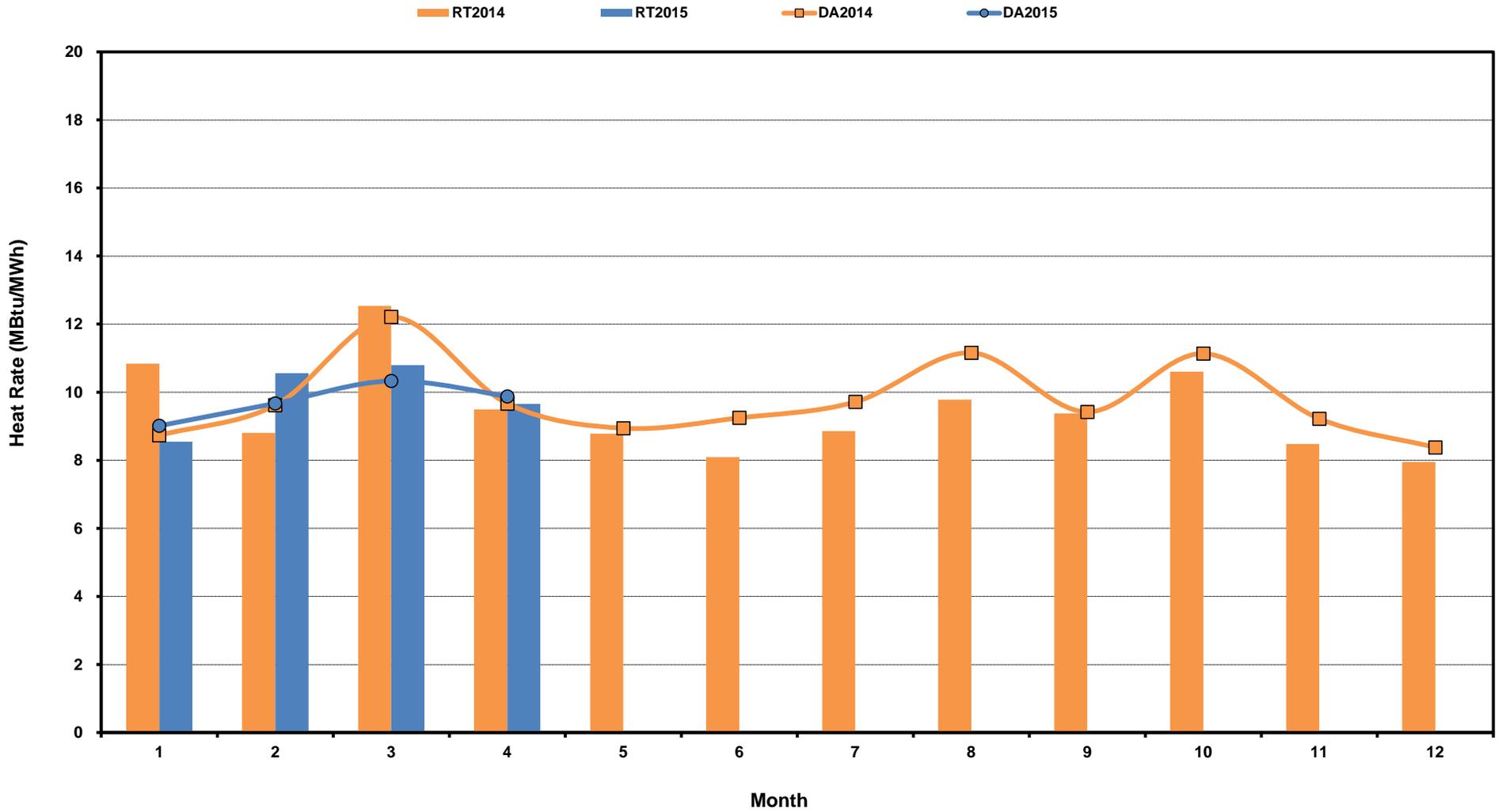
# Load Zone Monthly Implied Heat Rate DA vs RT

**(avg. heat rates weighted by Real Time Settlement Loads)**
**(Nodal load zone made comparable to zonal sytem Load Zone definitions*)**



**Note:** * Zonal load zone definition vs. Nodal comparable load zone definition: LZ_Houston=LZ_Houston; LZ_West=LZ_West; LZ_North=(LZ_North,LZ_RAYBN); LZ_South=(LZ_South,LZ_CPS,LZ_AEN,LZ_LCRA)

# Daily Average Reserve Adder Value and Duration
## Apr-2015



Legend: ■ Number of Intervals  ● AVG non-zero Reserve Adder

Y-axis (left): AVG Reserve Adder ($/MWh) — ($1.0), $4.0, $9.0, $14.0, $19.0, $24.0, $29.0

Y-axis (right): Num. of Intervals (15-min.) — 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

X-axis: Month — 1 through 30
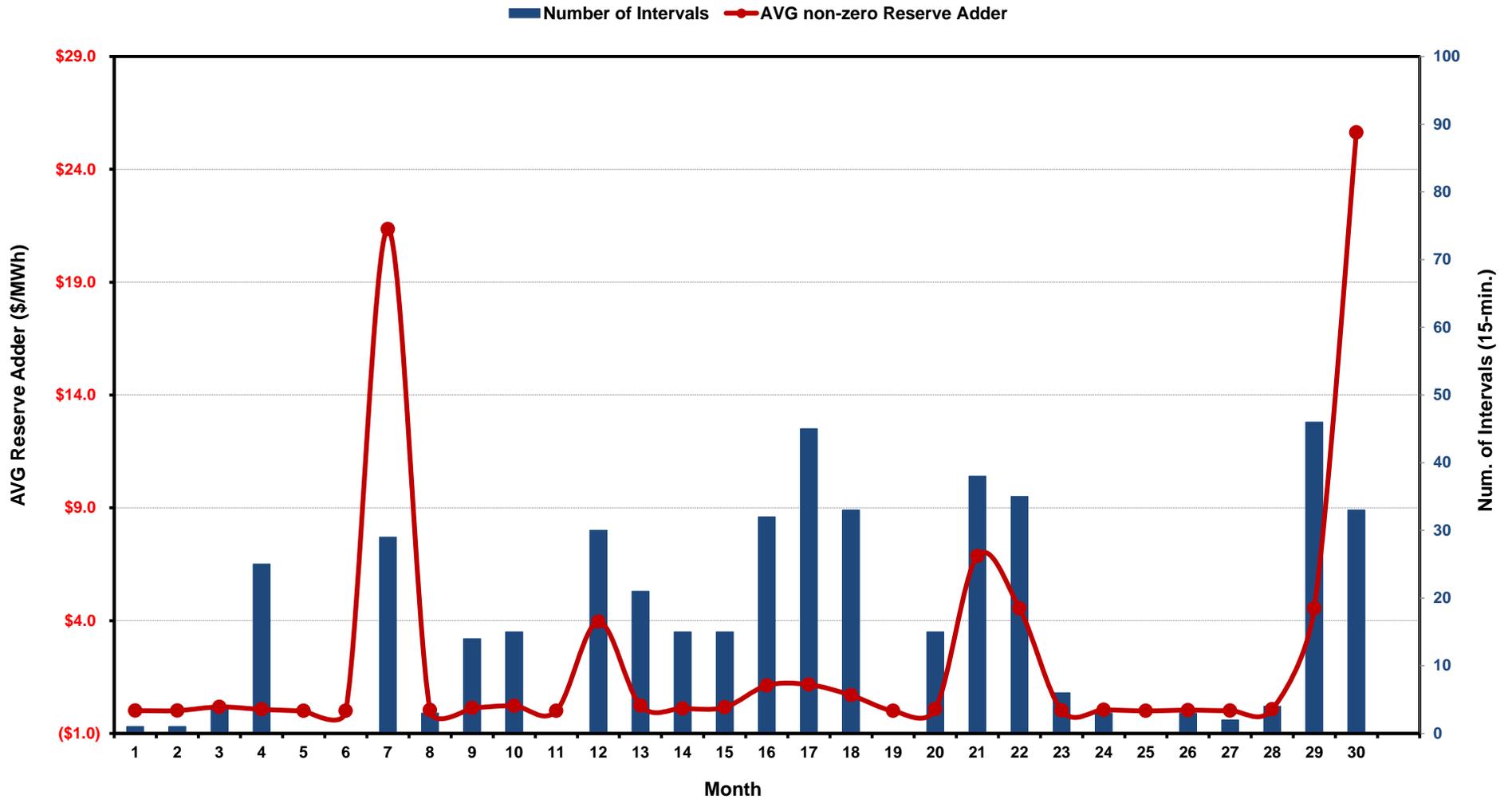
# Monthly Average of Ancillary Services Required MW
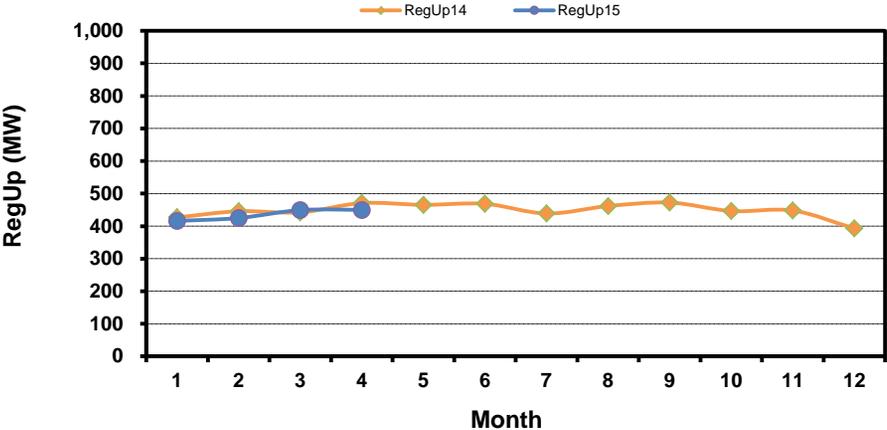
## Regulation Up
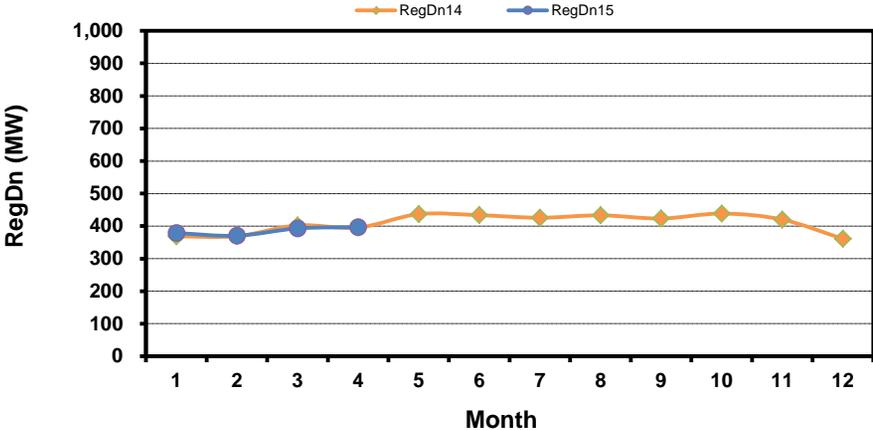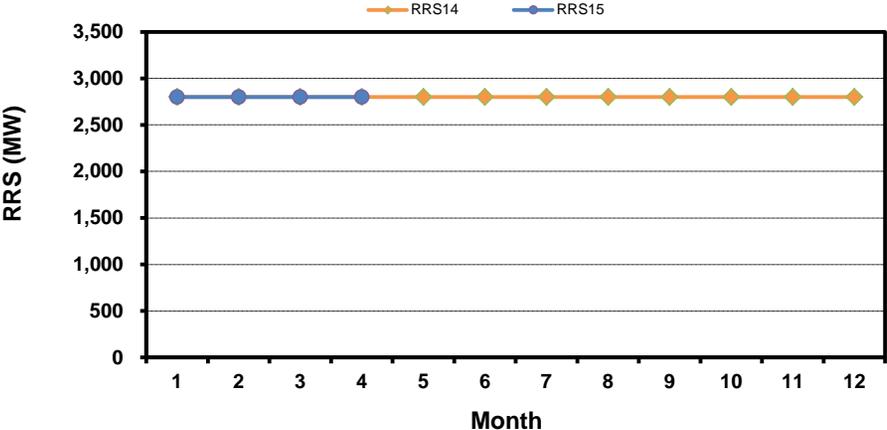


## Regulation Down
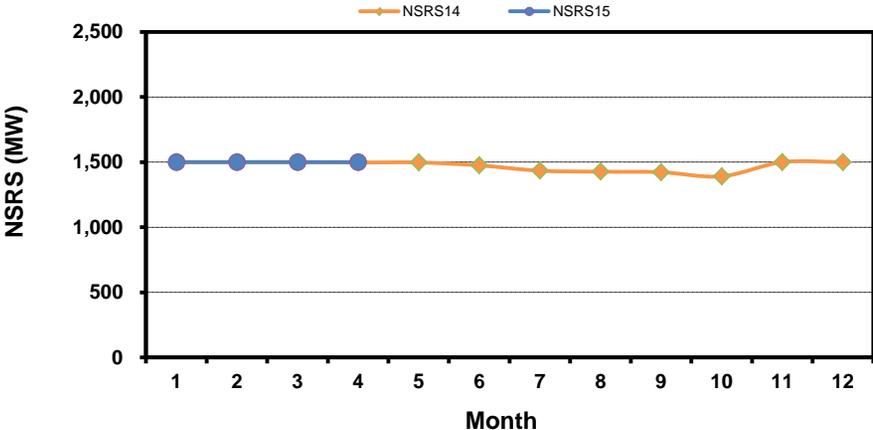


## Responsive Reserve



## Non-Spin Reserve

# Hourly Average of Ancillary Services Required MW
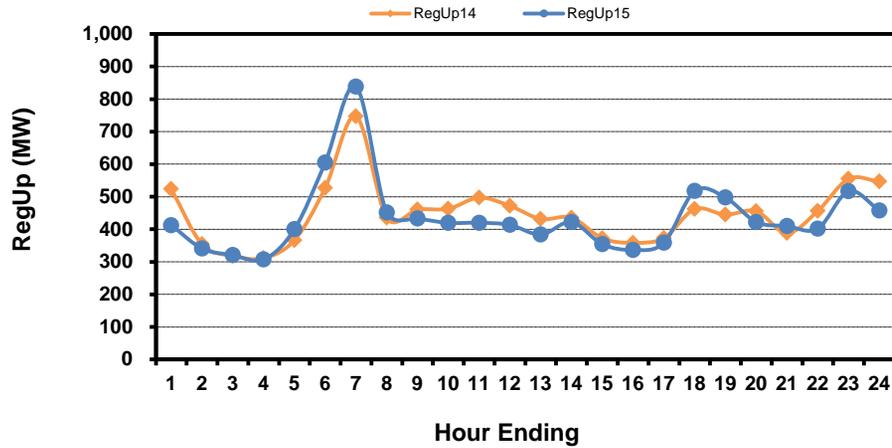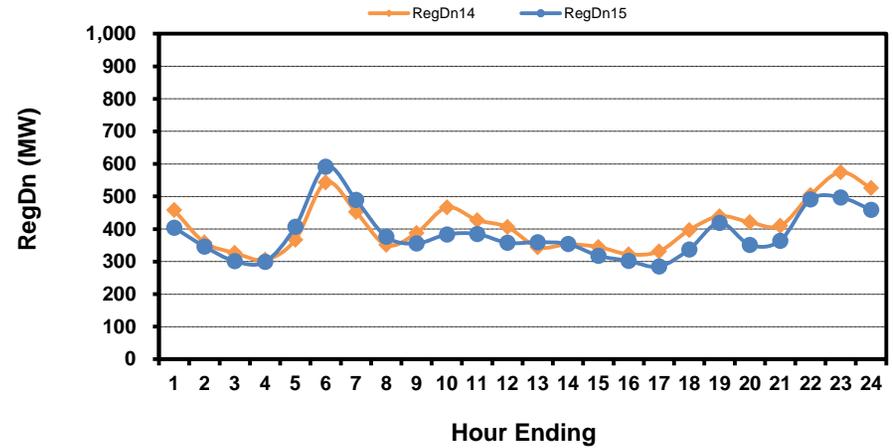
## Regulation Up
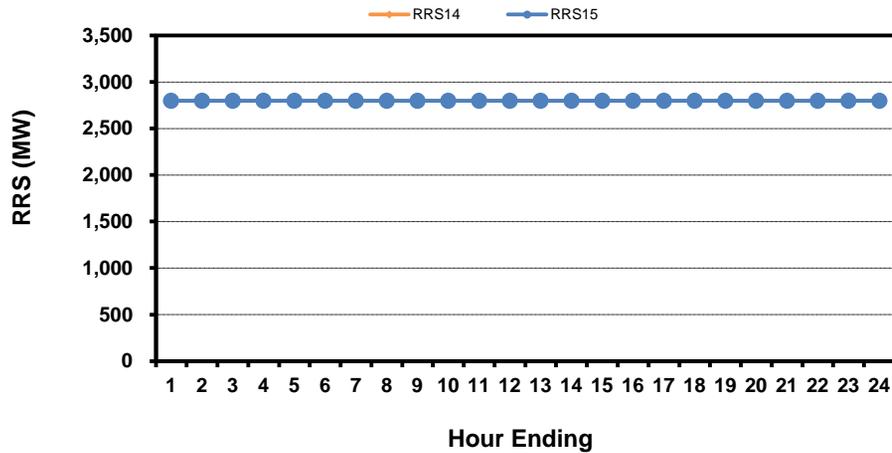


## Regulation Down
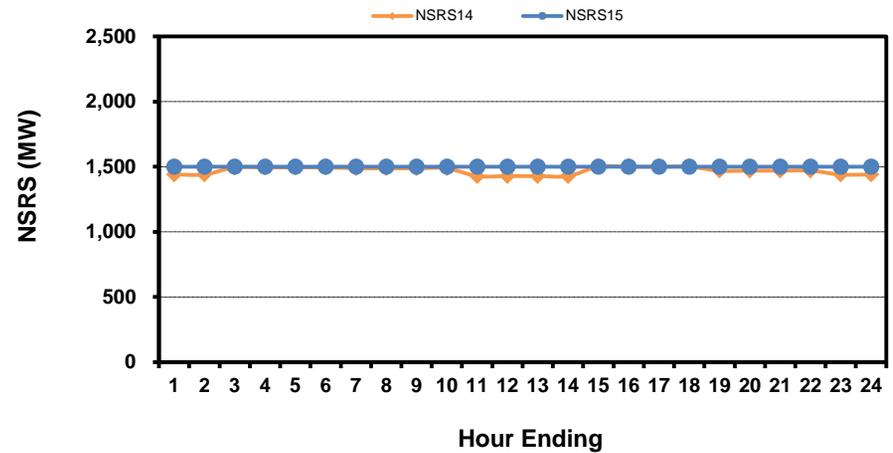


## Responsive Reserve



## Non-Spin Reserve

# Monthly Average Ancillary Services Price

**(weighted by A/S Quantities Required)**



## Regulation Up
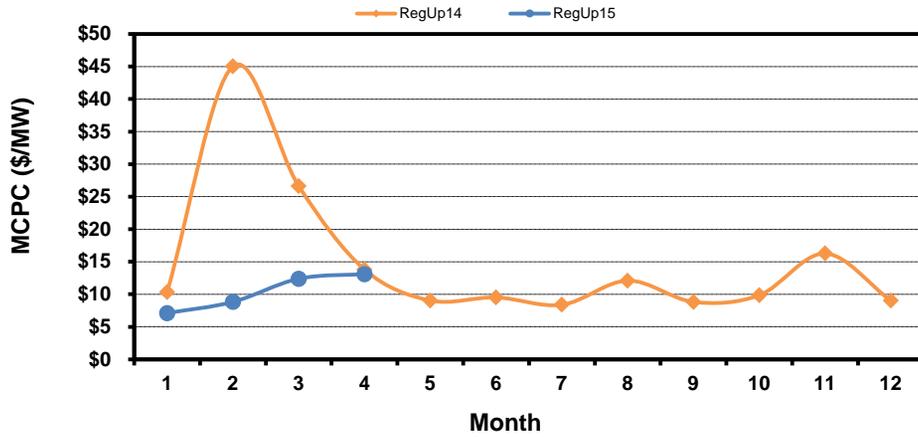
## Regulation Down
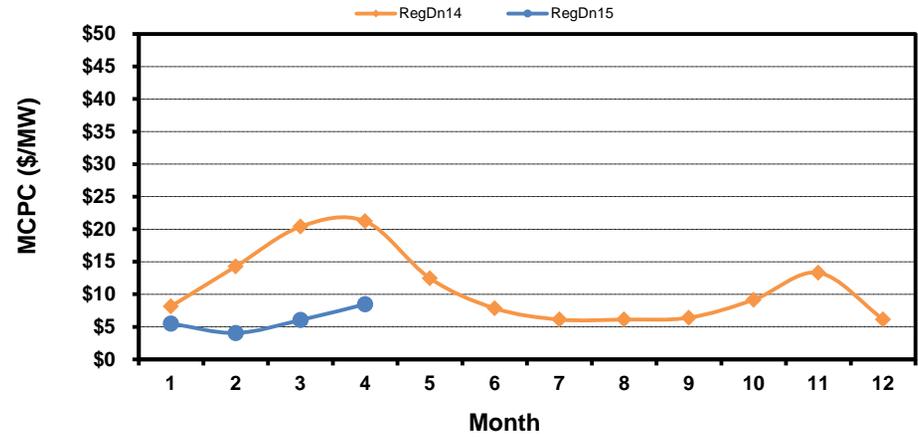
## Responsive Reserve
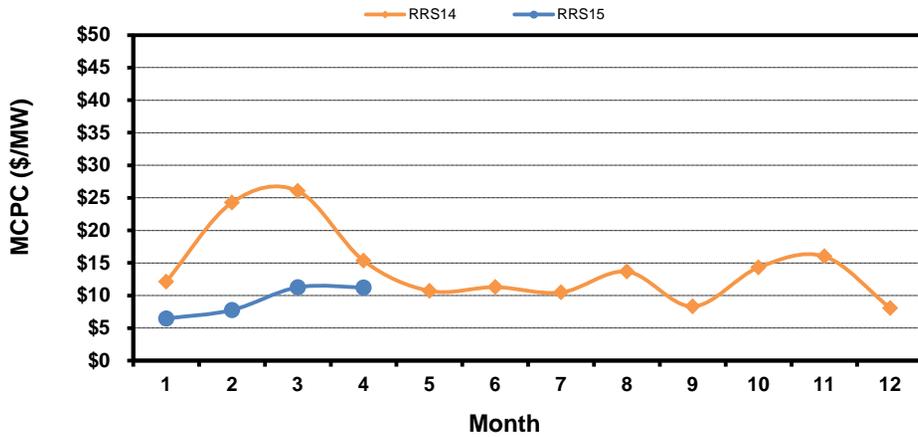
## Non-Spin Reserve
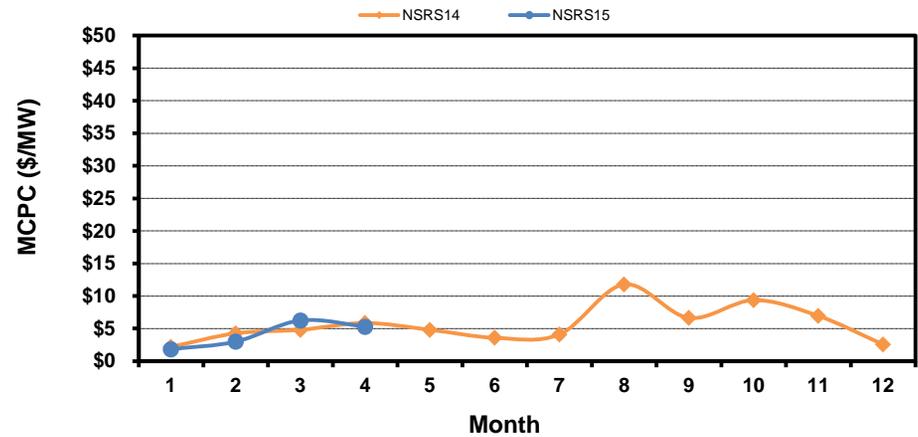
# Monthly Average A/S Cost per MWh Load

■ RegUp  ■ RegDn  ■ RRS  ■ NonSpin



Costs ($/MWh)

Month, Year
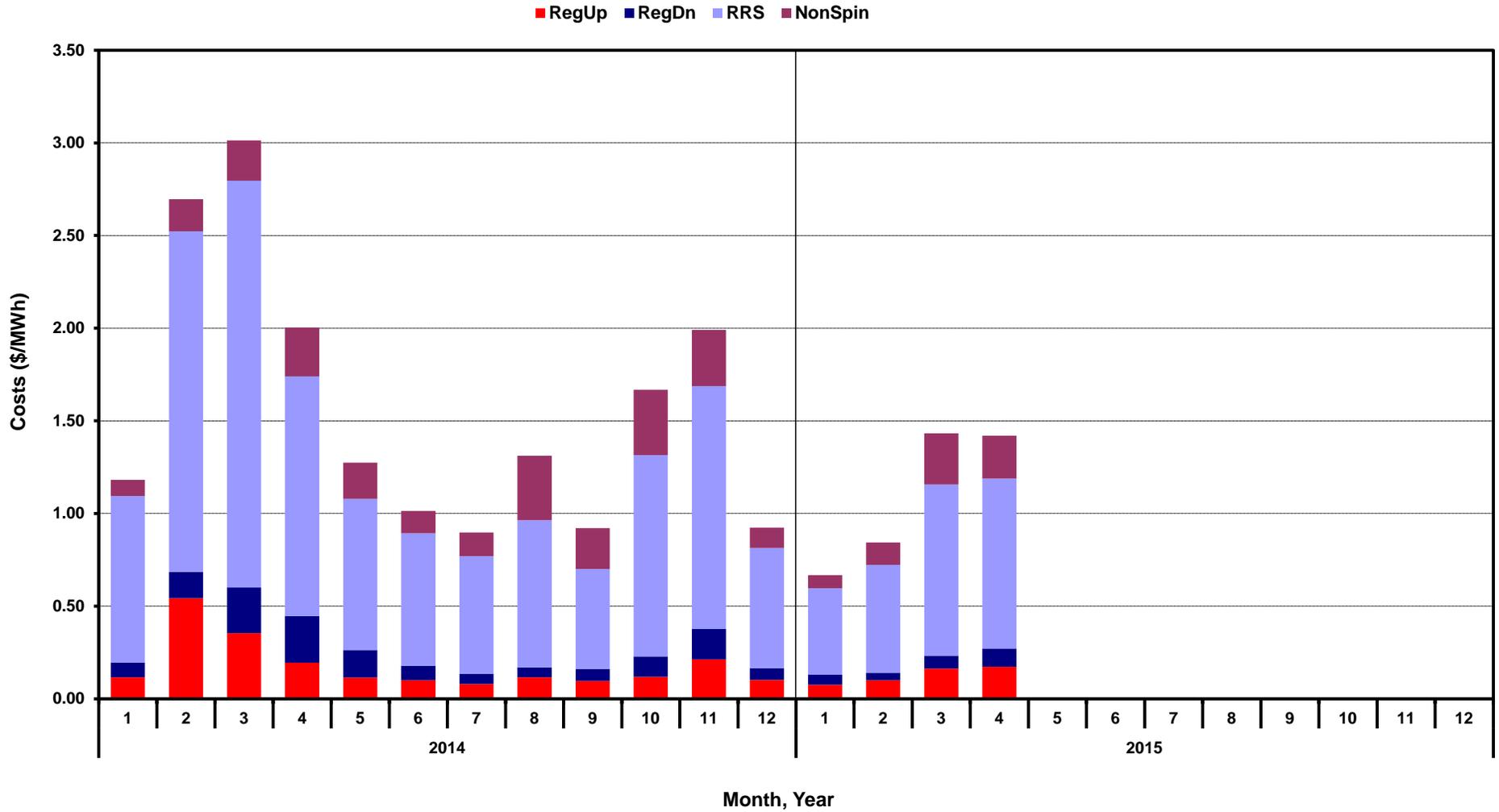
# ERCOT-Wide Cumulative Peaker Net Margin
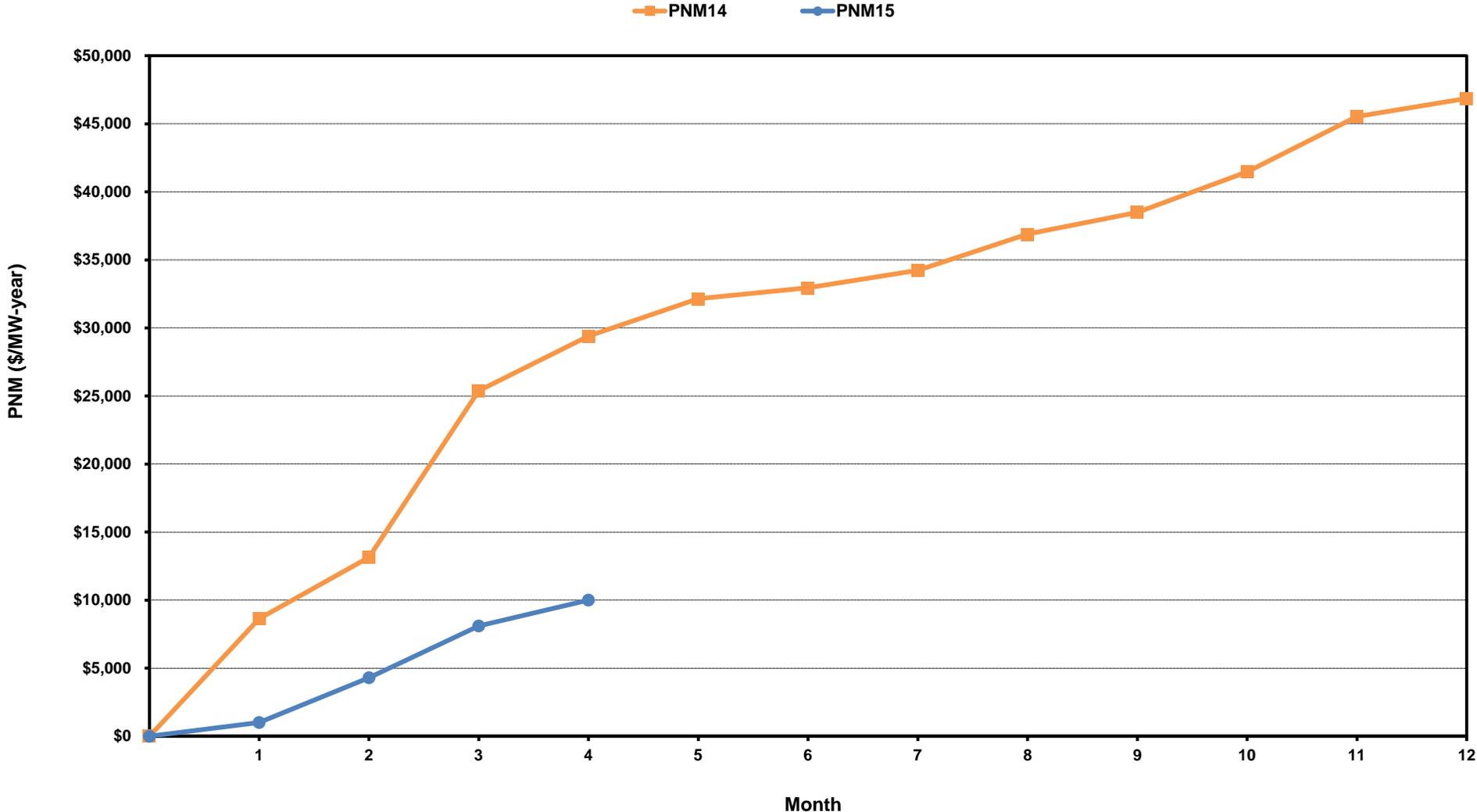
# DA vs. RT Load Forecast Error by Hour Ending

**HE_1_4**   **HE_5_8**   **HE_9_12**   **HE_13_16**   **HE_17_20**   **HE_21_24**



Positive values indicate that DA Load Forecast > RT Load

Y-axis: **Forecast Error (MW)**

X-axis: **Month, Year**

2014: 1 2 3 4 5 6 7 8 9 10 11 12
2015: 1 2 3 4 5 6 7 8 9 10 11 12
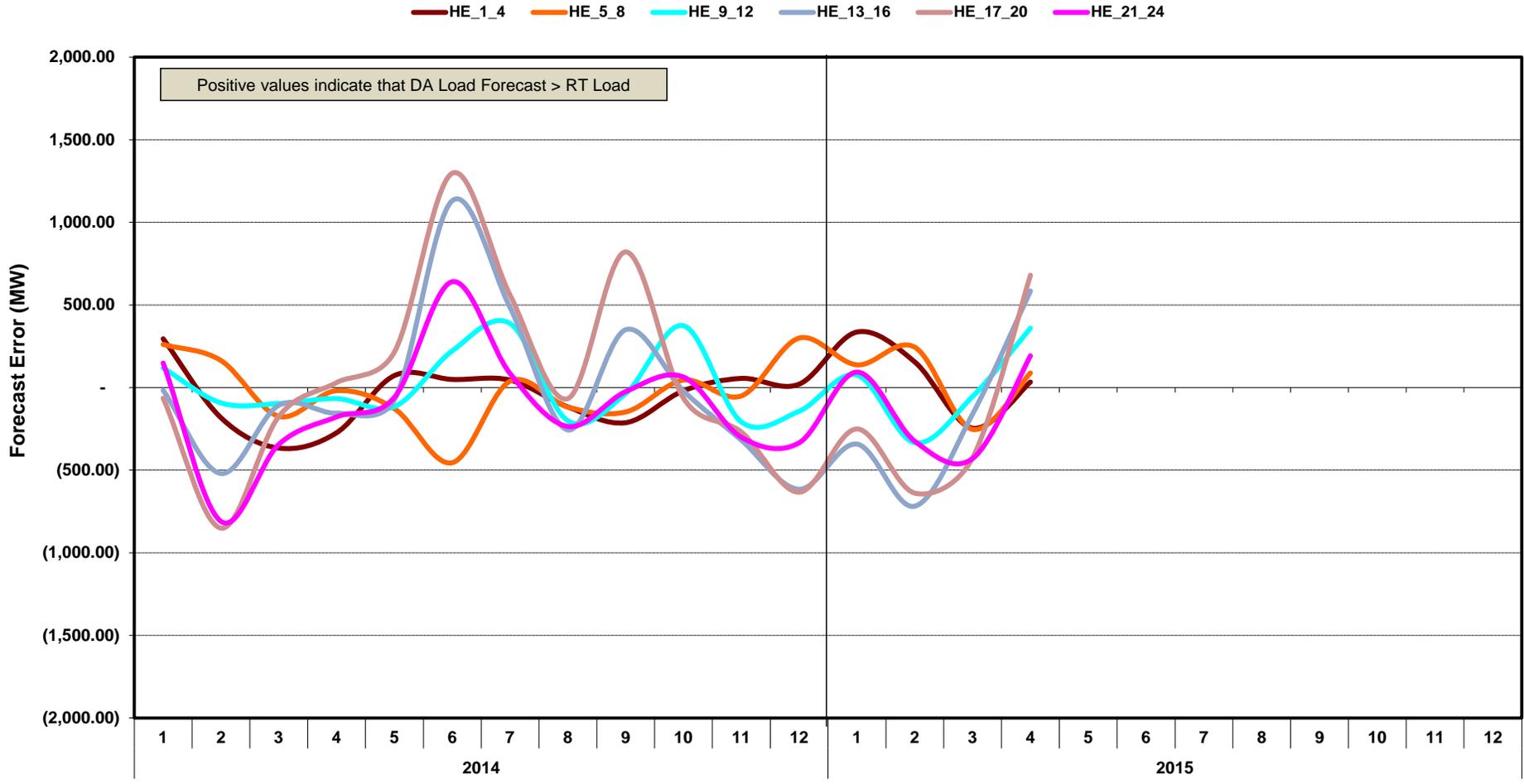
# Monthly Average of Wind Generation by Hour Ending
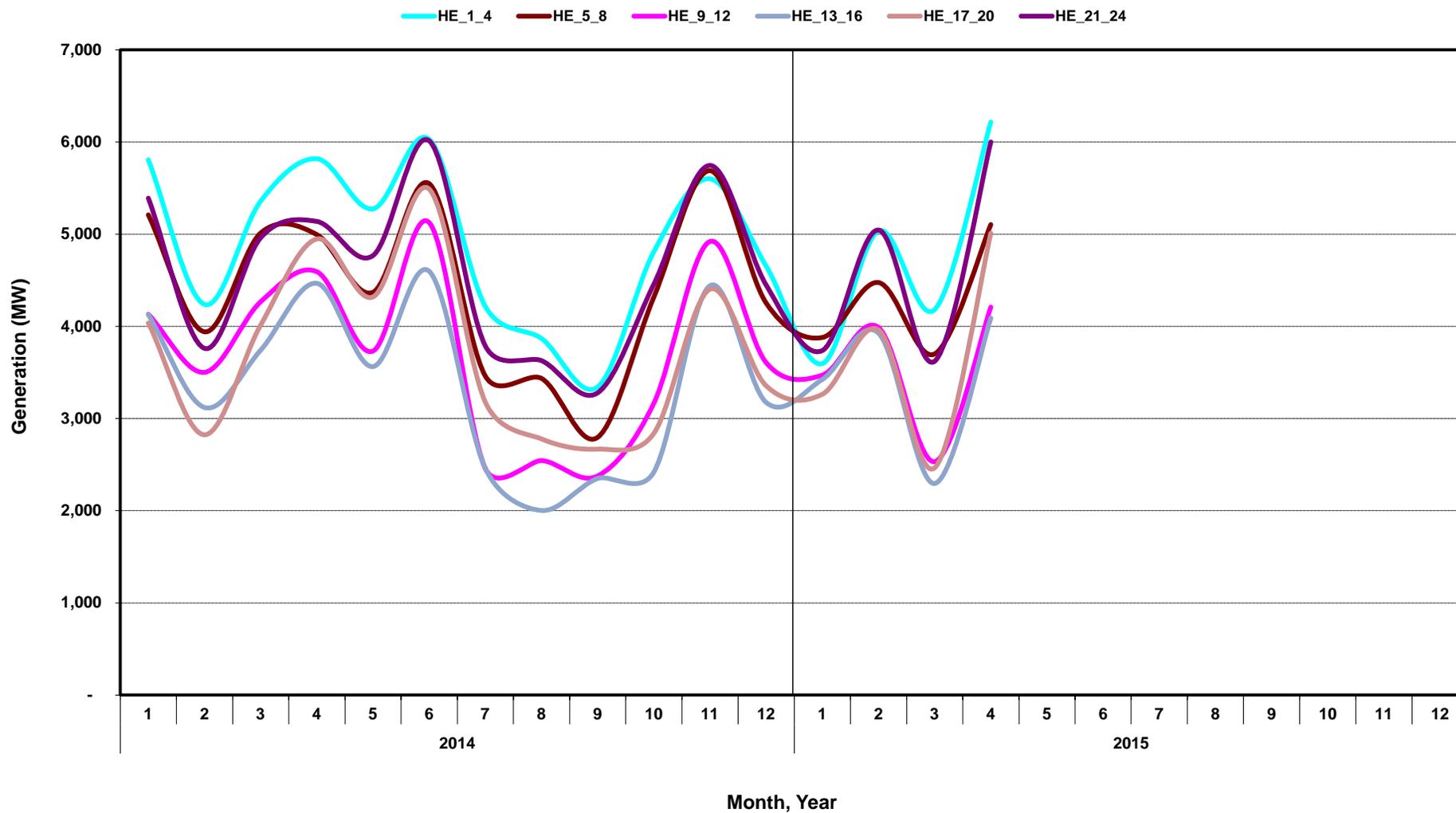


HE_1_4 — HE_5_8 — HE_9_12 — HE_13_16 — HE_17_20 — HE_21_24

**Month, Year**

# RT Congestion Constraint Rankings - 1

## Top 10 Constraints by Total Congestion Rent

**Congestion Rent in $ million**

# RT Congestion Constraint Rankings - 2

## Top 10 Constraints by Binding Frequency



**Number of SCED Intervals**

Legend: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Name of Constraints:
- LON_HI_SMITH1_1 (LON_HILL-SMITH)
- 6474__A (SUNSW-MGSES)
- 336T405_1 (FPPYD1-FPPYD2)
- POS_SHAN_1 (SHANNON-POSTOKSW)
- GIBCRK-SNG (GIBCRK-SNG)
- BRUNI_69_1 (BRUNI-BRUNI)
- 38T365_1 (WIRTZ-FLATRO)
- AJO_ZO (AJO_ZO)
- GILA_MORRIS1_1 (GILA-MORRIS)
- JK_TOKSW_1 (TOKSW-JK_CK)

# DA Congestion Constraint Rankings - 1

## Top 10 Constraints by Total Congestion Rent



**Congestion Rent in $ million**

Legend: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Constraints (top to bottom):
- LON_HI_SMITH1_1 (LON_HILL-SMITH)
- LYTTON_S_AT1 (LYTTON_S-LYTTON_S)
- ADERHO_ELSA1_1 (ADERHOLD-ELSA)
- LA_PAL_VCAVAZ1_1 (LA_PALMA-VCAVAZOS)
- 336T405_1 (FPPYD1-FPPYD2)
- MAR_SKY_1 (MARION-SKYLINE)
- MOSSW_MR1L (MOSSW-MOSSW)
- 6090__D (HLTSW-AMMFT)
- FAYETT_6AT2 (FAYETT-FAYETT)
- 10T211_1 (FPPYD1-SALEM)
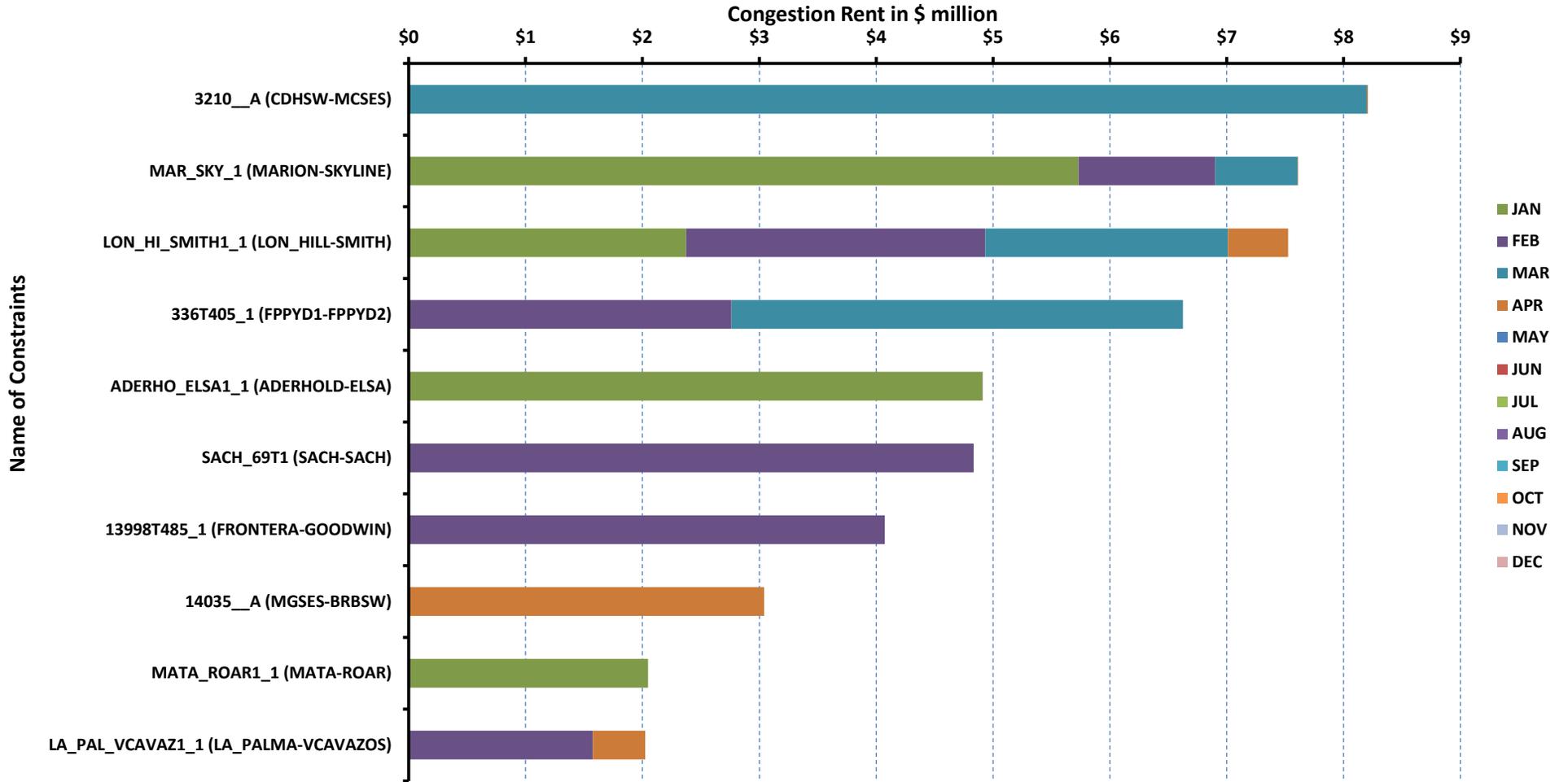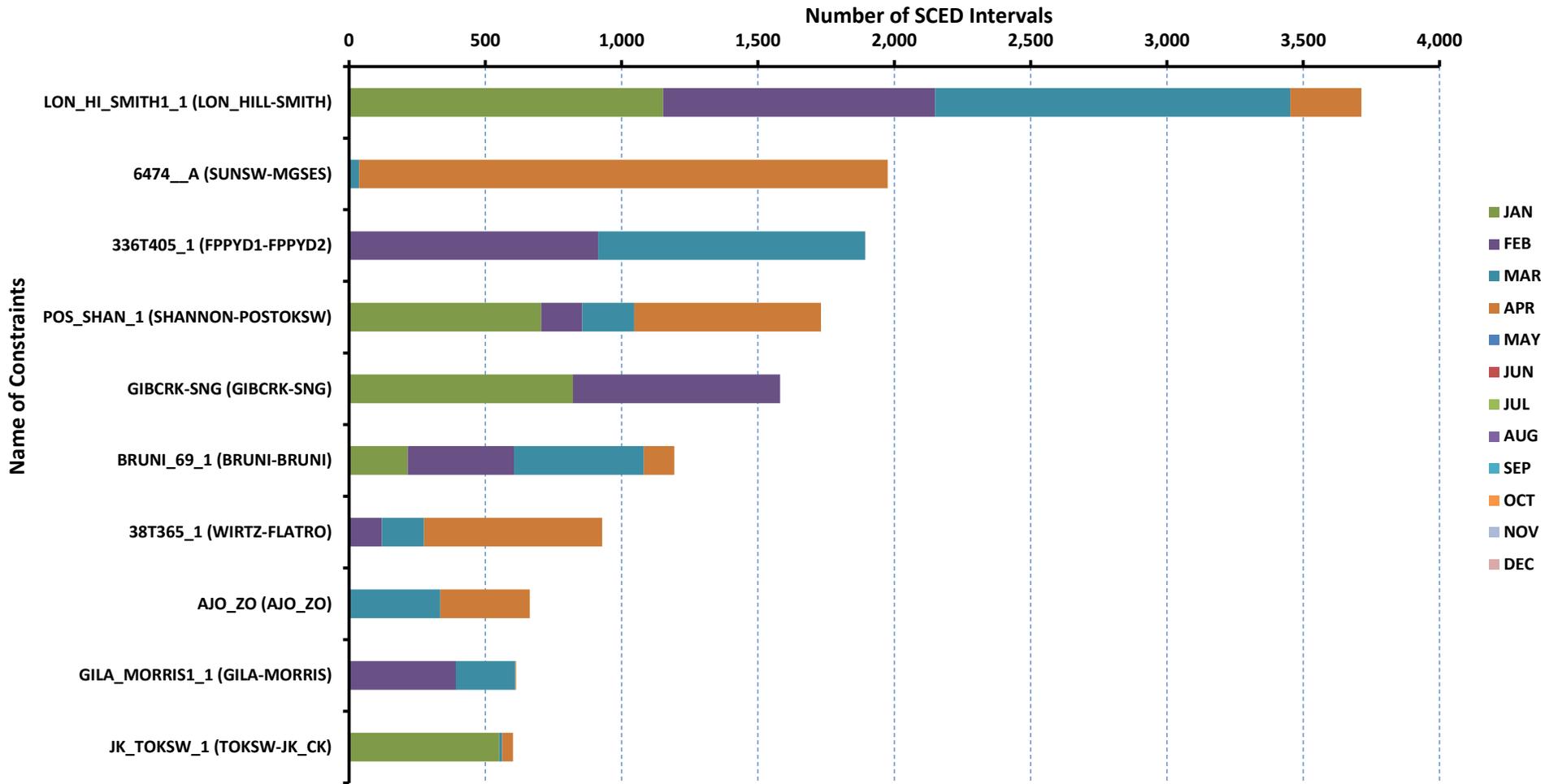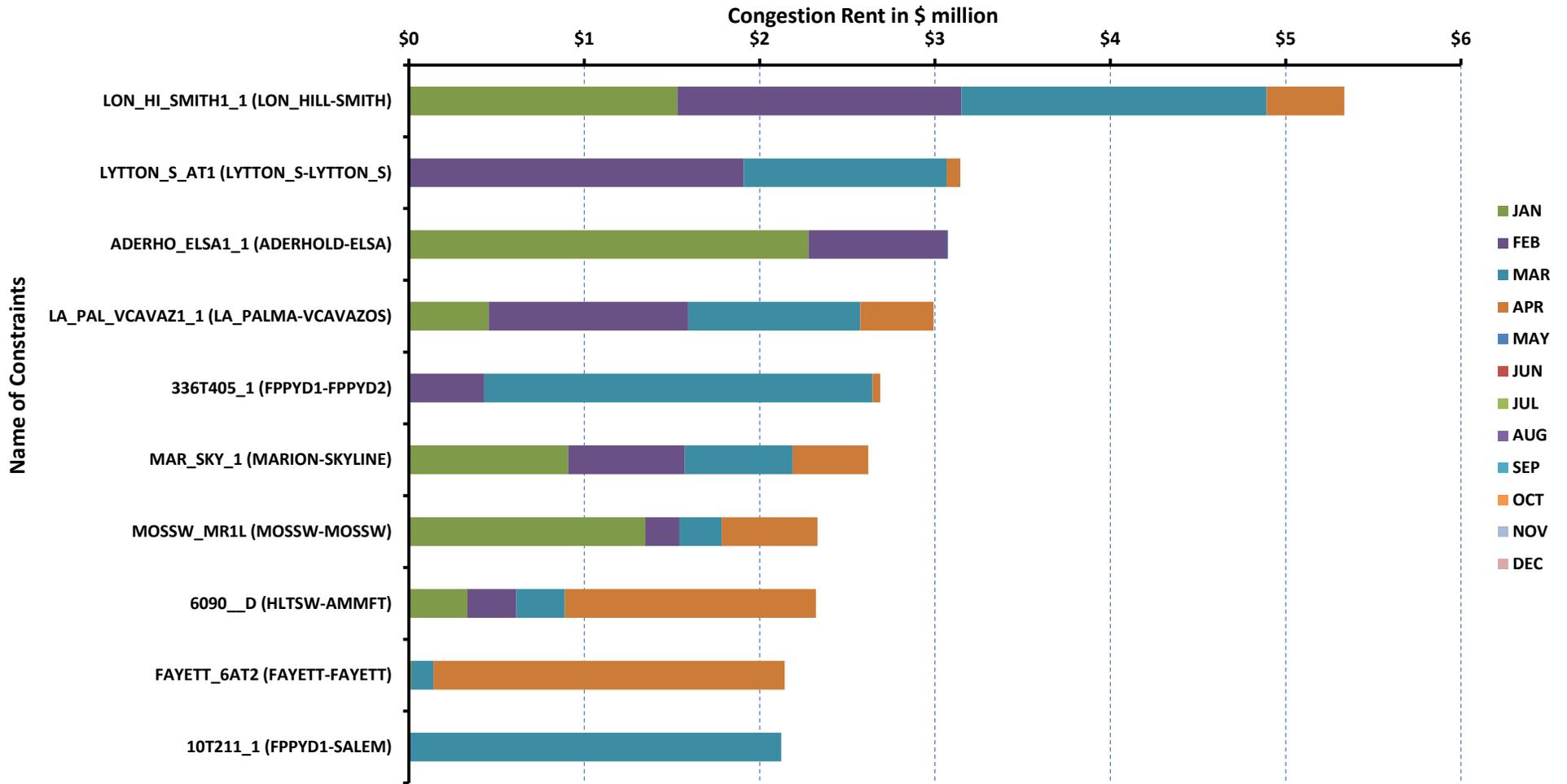
# DA Congestion Constraint Rankings - 2

## Top 10 Constraints by Binding Frequency
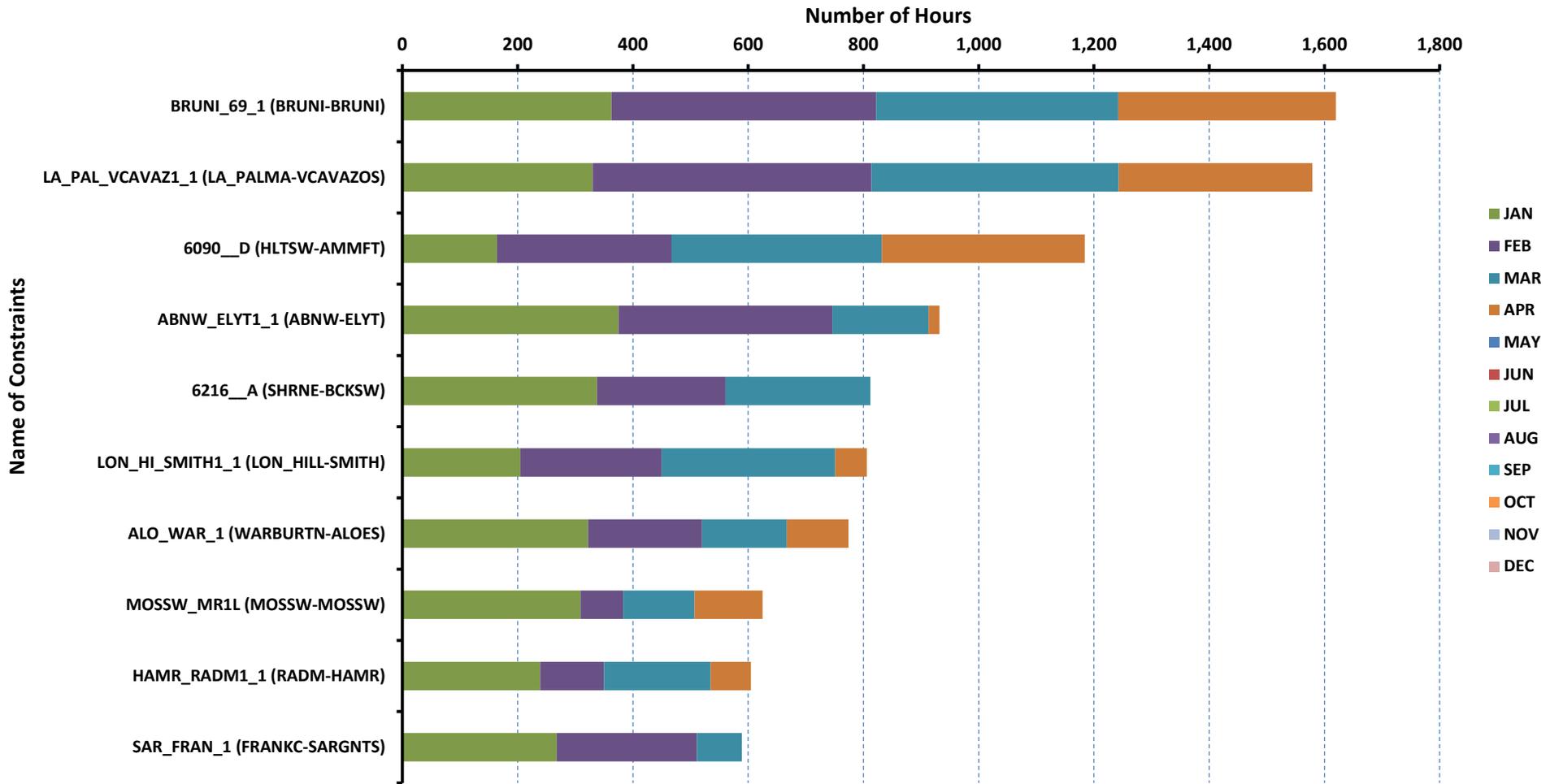
# Top 10 CRR Pairs Ranked by Monthly Auction Values - 1

## Top 10 PTP Obligations by Total Transaction Value
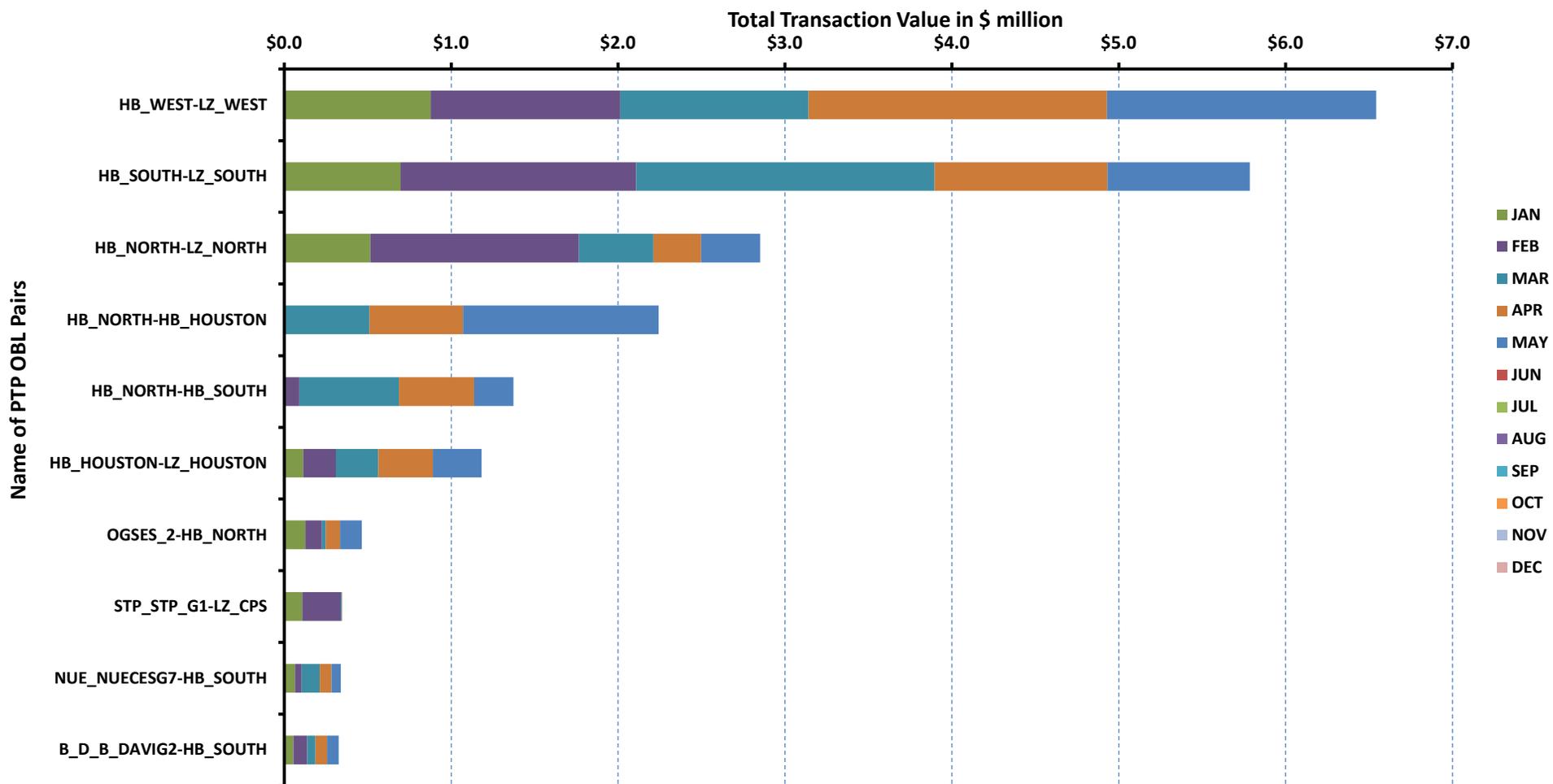
# Top 10 CRR Pairs Ranked by Monthly Auction Values - 2

## Top 10 PTP Options by Total Transaction Value



Total Transaction Value in $ million

Name of PTP OPT Pairs:
- HB_NORTH-LZ_NORTH
- HB_SOUTH-LZ_SOUTH
- HB_WEST-LZ_WEST
- HB_HOUSTON-LZ_HOUSTON
- HB_NORTH-HB_HOUSTON
- HB_SOUTH-LZ_CPS
- STP_STP_G1-LZ_CPS
- CEDROHI_CHW1-LZ_CPS
- PENA_ALL-LZ_AEN
- CALAVER_JKS2-LZ_CPS

Legend:
- JAN
- FEB
- MAR
- APR
- MAY
- JUN
- JUL
- AUG
- SEP
- OCT
- NOV
- DEC
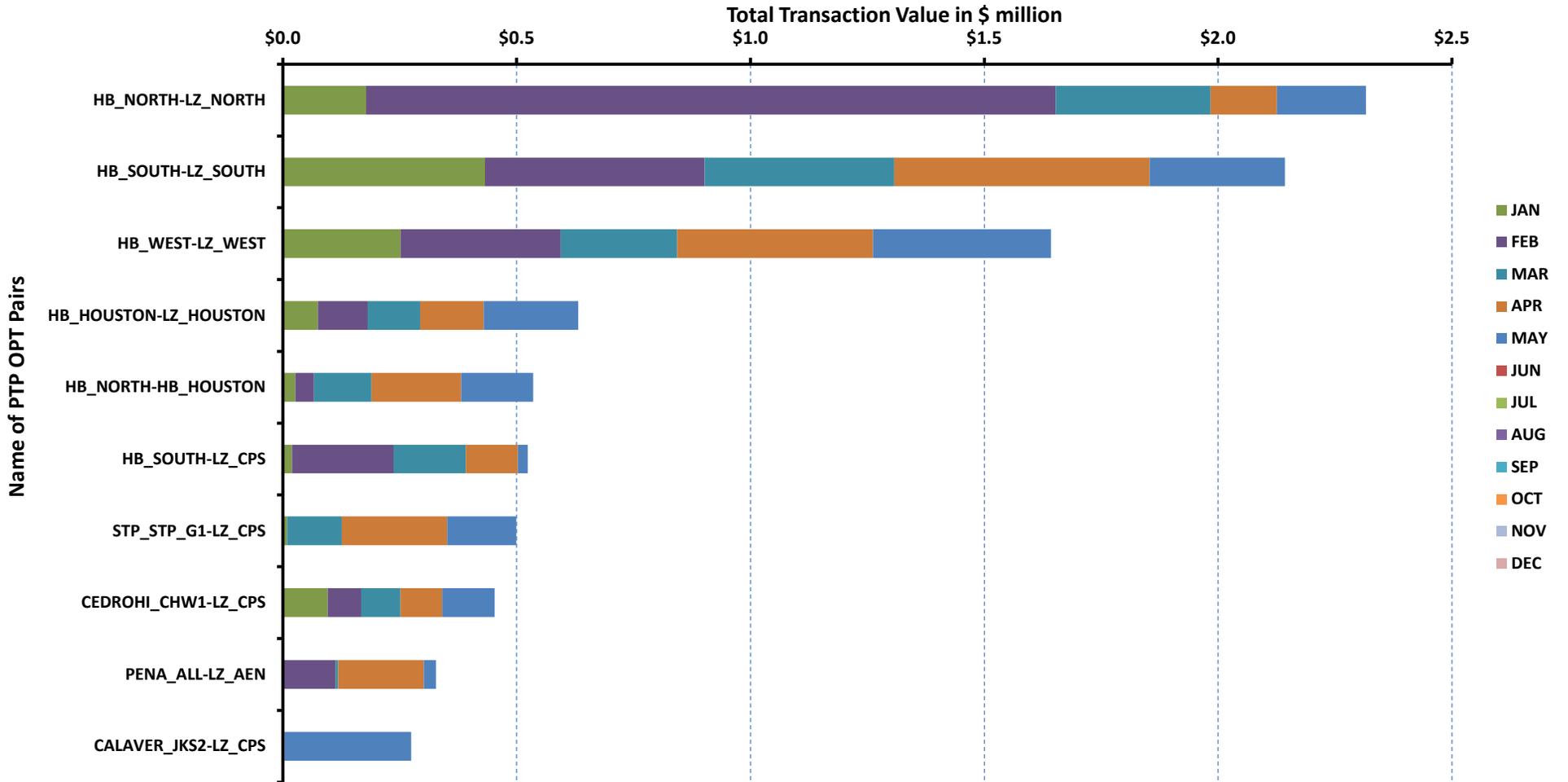
| year | month | dam_spp | rtm_spp |
|------|-------|---------|---------|
| 2014 | 1 | $ 39.50 | $ 49.04 |
| 2014 | 2 | $ 58.39 | $ 53.46 |
| 2014 | 3 | $ 58.07 | $ 59.59 |
| 2014 | 4 | $ 44.25 | $ 43.45 |
| 2014 | 5 | $ 39.83 | $ 39.12 |
| 2014 | 6 | $ 42.60 | $ 37.31 |
| 2014 | 7 | $ 39.37 | $ 35.89 |
| 2014 | 8 | $ 43.77 | $ 38.37 |
| 2014 | 9 | $ 36.95 | $ 36.75 |
| 2014 | 10 | $ 41.43 | $ 39.45 |
| 2014 | 11 | $ 36.94 | $ 33.97 |
| 2014 | 12 | $ 27.41 | $ 26.02 |
| 2015 | 1 | $ 26.35 | $ 24.97 |
| 2015 | 2 | $ 25.90 | $ 28.28 |
| 2015 | 3 | $ 27.88 | $ 29.14 |
| 2015 | 4 | $ 25.31 | $ 24.74 |
| 2015 | 5 | | |
| 2015 | 6 | | |
| 2015 | 7 | | |
| 2015 | 8 | | |
| 2015 | 9 | | |
| 2015 | 10 | | |
| 2015 | 11 | | |
| 2015 | 12 | | |

| year | month | loadPEAK_Houston | loadPEAK_North | loadPEAK_South | loadPEAK_West | loadAVG_Houston | loadAVG_North | loadAVG_South | loadAVG_West |
|------|-------|------------------|----------------|----------------|---------------|-----------------|---------------|---------------|--------------|
| 2014 | 1 | 13,651 | 24,123 | 17,347 | 4,213 | 9,355 | 14,910 | 10,232 | 3,290 |
| 2014 | 2 | 12,694 | 24,490 | 16,765 | 4,362 | 9,207 | 14,594 | 9,914 | 3,284 |
| 2014 | 3 | 12,611 | 23,478 | 15,028 | 4,252 | 8,752 | 12,605 | 8,776 | 3,106 |
| 2014 | 4 | 14,099 | 16,946 | 14,714 | 3,755 | 8,989 | 12,038 | 9,164 | 3,078 |
| 2014 | 5 | 14,573 | 19,552 | 15,082 | 4,314 | 10,120 | 13,354 | 10,049 | 3,231 |
| 2014 | 6 | 16,916 | 22,925 | 16,896 | 4,633 | 12,227 | 16,153 | 12,205 | 3,571 |
| 2014 | 7 | 17,531 | 25,096 | 17,809 | 4,803 | 12,655 | 17,081 | 12,765 | 3,749 |
| 2014 | 8 | 17,644 | 26,131 | 18,256 | 4,934 | 12,904 | 18,071 | 13,482 | 3,823 |
| 2014 | 9 | 17,300 | 25,777 | 17,645 | 4,960 | 11,777 | 16,075 | 11,756 | 3,452 |
| 2014 | 10 | 16,529 | 22,406 | 16,314 | 4,295 | 10,147 | 13,211 | 10,299 | 3,219 |
| 2014 | 11 | 12,029 | 21,132 | 14,367 | 4,204 | 9,112 | 12,791 | 9,018 | 3,284 |
| 2014 | 12 | 11,383 | 19,113 | 14,049 | 4,402 | 8,950 | 13,312 | 9,199 | 3,400 |
| 2015 | 1 | 12,822 | 23,796 | 16,489 | 4,340 | 9,546 | 14,908 | 10,829 | 3,500 |
| 2015 | 2 | 12,559 | 21,957 | 16,072 | 4,443 | 9,309 | 14,607 | 9,983 | 3,480 |
| 2015 | 3 | 12,238 | 21,942 | 15,840 | 4,375 | 8,827 | 12,808 | 9,183 | 3,319 |
| 2015 | 4 | 13,862 | 16,971 | 13,348 | 3,955 | 9,656 | 11,927 | 9,375 | 3,216 |
| 2015 | 5 | | | | | | | | |
| 2015 | 6 | | | | | | | | |
| 2015 | 7 | | | | | | | | |
| 2015 | 8 | | | | | | | | |
| 2015 | 9 | | | | | | | | |
| 2015 | 10 | | | | | | | | |
| 2015 | 11 | | | | | | | | |
| 2015 | 12 | | | | | | | | |

| year | month | avgRTMp_Houston | avgRTMp_North | avgRTMp_South | avgRTMp_West | avgDAMp_Houston | avgDAMp_North | avgDAMp_South | avgDAMp_West |
|---|---|---|---|---|---|---|---|---|---|
| 2014 | 1 | $ 44.80 | $ 50.43 | $ 51.86 | $ 46.03 | $ 37.96 | $ 39.34 | $ 41.58 | $ 38.18 |
| 2014 | 2 | $ 48.35 | $ 53.20 | $ 59.07 | $ 51.96 | $ 54.35 | $ 58.37 | $ 62.62 | $ 57.02 |
| 2014 | 3 | $ 53.10 | $ 61.78 | $ 63.63 | $ 57.56 | $ 55.19 | $ 59.29 | $ 60.04 | $ 55.67 |
| 2014 | 4 | $ 47.32 | $ 39.44 | $ 41.30 | $ 54.24 | $ 43.02 | $ 42.08 | $ 42.87 | $ 60.46 |
| 2014 | 5 | $ 38.47 | $ 38.90 | $ 38.32 | $ 44.48 | $ 40.59 | $ 37.85 | $ 39.98 | $ 45.14 |
| 2014 | 6 | $ 38.02 | $ 36.62 | $ 37.24 | $ 38.26 | $ 42.87 | $ 41.69 | $ 42.62 | $ 45.81 |
| 2014 | 7 | $ 35.43 | $ 35.19 | $ 35.99 | $ 40.30 | $ 39.02 | $ 38.61 | $ 39.87 | $ 42.28 |
| 2014 | 8 | $ 38.53 | $ 37.51 | $ 38.74 | $ 40.65 | $ 43.70 | $ 43.16 | $ 44.12 | $ 45.61 |
| 2014 | 9 | $ 37.93 | $ 35.14 | $ 35.73 | $ 43.72 | $ 37.35 | $ 35.92 | $ 37.54 | $ 38.39 |
| 2014 | 10 | $ 38.71 | $ 35.30 | $ 42.89 | $ 47.81 | $ 40.37 | $ 37.70 | $ 45.44 | $ 47.29 |
| 2014 | 11 | $ 33.28 | $ 34.32 | $ 33.73 | $ 35.19 | $ 35.93 | $ 38.23 | $ 36.09 | $ 37.07 |
| 2014 | 12 | $ 25.72 | $ 26.15 | $ 25.84 | $ 26.77 | $ 27.08 | $ 27.44 | $ 27.26 | $ 28.60 |
| 2015 | 1 | $ 24.37 | $ 24.24 | $ 26.39 | $ 25.31 | $ 25.89 | $ 26.09 | $ 26.67 | $ 27.72 |
| 2015 | 2 | $ 26.86 | $ 28.03 | $ 29.60 | $ 29.36 | $ 25.21 | $ 25.66 | $ 26.83 | $ 26.11 |
| 2015 | 3 | $ 27.42 | $ 30.50 | $ 28.92 | $ 29.02 | $ 26.93 | $ 28.08 | $ 28.55 | $ 27.76 |
| 2015 | 4 | $ 24.60 | $ 24.06 | $ 25.53 | $ 25.38 | $ 25.21 | $ 24.58 | $ 25.95 | $ 26.43 |
| 2015 | 5 | | | | | | | | |
| 2015 | 6 | | | | | | | | |
| 2015 | 7 | | | | | | | | |
| 2015 | 8 | | | | | | | | |
| 2015 | 9 | | | | | | | | |
| 2015 | 10 | | | | | | | | |
| 2015 | 11 | | | | | | | | |
| 2015 | 12 | | | | | | | | |

| year | month | gasprice | rtm_spp | HR_rtm | dam_spp | HR_dam |
|------|-------|----------|---------|--------|---------|--------|
| 2014 | 1 | $ 4.52 | $ 49.04 | 10.84 | $ 39.50 | 8.73 |
| 2014 | 2 | $ 6.07 | $ 53.46 | 8.81 | $ 58.39 | 9.62 |
| 2014 | 3 | $ 4.75 | $ 59.59 | 12.53 | $ 58.07 | 12.21 |
| 2014 | 4 | $ 4.58 | $ 43.45 | 9.49 | $ 44.25 | 9.67 |
| 2014 | 5 | $ 4.45 | $ 39.12 | 8.78 | $ 39.83 | 8.94 |
| 2014 | 6 | $ 4.61 | $ 37.31 | 8.10 | $ 42.60 | 9.25 |
| 2014 | 7 | $ 4.05 | $ 35.89 | 8.86 | $ 39.37 | 9.71 |
| 2014 | 8 | $ 3.92 | $ 38.37 | 9.78 | $ 43.77 | 11.16 |
| 2014 | 9 | $ 3.92 | $ 36.75 | 9.37 | $ 36.95 | 9.42 |
| 2014 | 10 | $ 3.72 | $ 39.45 | 10.60 | $ 41.43 | 11.14 |
| 2014 | 11 | $ 4.01 | $ 33.97 | 8.48 | $ 36.94 | 9.22 |
| 2014 | 12 | $ 3.27 | $ 26.02 | 7.95 | $ 27.41 | 8.38 |
| 2015 | 1 | $ 2.92 | $ 24.97 | 8.54 | $ 26.35 | 9.01 |
| 2015 | 2 | $ 2.68 | $ 28.28 | 10.56 | $ 25.90 | 9.67 |
| 2015 | 3 | $ 2.70 | $ 29.14 | 10.80 | $ 27.88 | 10.33 |
| 2015 | 4 | $ 2.56 | $ 24.74 | 9.65 | $ 25.31 | 9.88 |
| 2015 | 5 | | | | | |
| 2015 | 6 | | | | | |
| 2015 | 7 | | | | | |
| 2015 | 8 | | | | | |
| 2015 | 9 | | | | | |
| 2015 | 10 | | | | | |
| 2015 | 11 | | | | | |
| 2015 | 12 | | | | | |

| year | month | HRdam_Houston | HRdam_South | HRdam_North | HRdam_West | HRrtm_Houston | HRrtm_South | HRrtm_North | HRrtm_West |
|------|-------|---------------|-------------|-------------|------------|---------------|-------------|-------------|------------|
| 2014 | 1 | 8.39 | 9.19 | 8.70 | 8.44 | 9.90 | 11.47 | 11.15 | 10.18 |
| 2014 | 2 | 8.95 | 10.32 | 9.62 | 9.39 | 7.96 | 9.73 | 8.76 | 8.56 |
| 2014 | 3 | 11.61 | 12.63 | 12.47 | 11.71 | 11.17 | 13.38 | 12.99 | 12.11 |
| 2014 | 4 | 9.40 | 9.36 | 9.19 | 13.21 | 10.34 | 9.02 | 8.62 | 11.85 |
| 2014 | 5 | 9.11 | 8.98 | 8.50 | 10.13 | 8.64 | 8.60 | 8.73 | 9.98 |
| 2014 | 6 | 9.30 | 9.25 | 9.05 | 9.94 | 8.25 | 8.08 | 7.95 | 8.30 |
| 2014 | 7 | 9.63 | 9.84 | 9.53 | 10.43 | 8.74 | 8.88 | 8.68 | 9.94 |
| 2014 | 8 | 11.14 | 11.25 | 11.00 | 11.63 | 9.82 | 9.88 | 9.56 | 10.36 |
| 2014 | 9 | 9.52 | 9.57 | 9.16 | 9.79 | 9.67 | 9.11 | 8.96 | 11.15 |
| 2014 | 10 | 10.85 | 12.21 | 10.13 | 12.71 | 10.40 | 11.53 | 9.49 | 12.85 |
| 2014 | 11 | 8.97 | 9.01 | 9.54 | 9.25 | 8.31 | 8.42 | 8.57 | 8.78 |
| 2014 | 12 | 8.28 | 8.33 | 8.39 | 8.74 | 7.86 | 7.90 | 7.99 | 8.18 |
| 2015 | 1 | 8.86 | 9.12 | 8.92 | 9.48 | 8.34 | 9.03 | 8.29 | 8.66 |
| 2015 | 2 | 9.41 | 10.02 | 9.58 | 9.75 | 10.03 | 11.05 | 10.47 | 10.96 |
| 2015 | 3 | 9.98 | 10.58 | 10.41 | 10.29 | 10.16 | 10.72 | 11.30 | 10.76 |
| 2015 | 4 | 9.84 | 10.13 | 9.59 | 10.31 | 9.60 | 9.96 | 9.39 | 9.90 |
| 2015 | 5 | | | | | | | | |
| 2015 | 6 | | | | | | | | |
| 2015 | 7 | | | | | | | | |
| 2015 | 8 | | | | | | | | |
| 2015 | 9 | | | | | | | | |
| 2015 | 10 | | | | | | | | |
| 2015 | 11 | | | | | | | | |
| 2015 | 12 | | | | | | | | |

| YEAR | MONTH | DAY | Intervals | RS_Adder |
|------|-------|-----|-----------|----------|
| 2015 | 4 | 1 | 1 | $ 0.01 |
| 2015 | 4 | 2 | 1 | $ 0.01 |
| 2015 | 4 | 3 | 4 | $ 0.18 |
| 2015 | 4 | 4 | 25 | $ 0.07 |
| 2015 | 4 | 5 | 0 | $ - |
| 2015 | 4 | 6 | 0 | $ - |
| 2015 | 4 | 7 | 29 | $ 21.35 |
| 2015 | 4 | 8 | 3 | $ 0.03 |
| 2015 | 4 | 9 | 14 | $ 0.13 |
| 2015 | 4 | 10 | 15 | $ 0.22 |
| 2015 | 4 | 11 | 0 | $ - |
| 2015 | 4 | 12 | 30 | $ 3.95 |
| 2015 | 4 | 13 | 21 | $ 0.23 |
| 2015 | 4 | 14 | 15 | $ 0.11 |
| 2015 | 4 | 15 | 15 | $ 0.16 |
| 2015 | 4 | 16 | 32 | $ 1.12 |
| 2015 | 4 | 17 | 45 | $ 1.16 |
| 2015 | 4 | 18 | 33 | $ 0.69 |
| 2015 | 4 | 19 | 0 | $ - |
| 2015 | 4 | 20 | 15 | $ 0.07 |
| 2015 | 4 | 21 | 38 | $ 6.86 |
| 2015 | 4 | 22 | 35 | $ 4.54 |
| 2015 | 4 | 23 | 6 | $ 0.02 |
| 2015 | 4 | 24 | 3 | $ 0.04 |
| 2015 | 4 | 25 | 0 | $ - |
| 2015 | 4 | 26 | 3 | $ 0.03 |
| 2015 | 4 | 27 | 2 | $ 0.01 |
| 2015 | 4 | 28 | 4 | $ 0.07 |
| 2015 | 4 | 29 | 46 | $ 4.55 |
| 2015 | 4 | 30 | 33 | $ 25.64 |

| year | month | ASMW_REGDN | ASMW_NSPIN | ASMW_RRS | ASMW_REGUP |
|------|-------|-----------|-----------|----------|-----------|
| 2014 | 1 | 368 | 1,500 | 2,800 | 427 |
| 2014 | 2 | 369 | 1,500 | 2,800 | 446 |
| 2014 | 3 | 402 | 1,500 | 2,800 | 442 |
| 2014 | 4 | 396 | 1,497 | 2,800 | 471 |
| 2014 | 5 | 437 | 1,497 | 2,800 | 465 |
| 2014 | 6 | 434 | 1,475 | 2,800 | 469 |
| 2014 | 7 | 426 | 1,434 | 2,800 | 439 |
| 2014 | 8 | 433 | 1,427 | 2,800 | 462 |
| 2014 | 9 | 423 | 1,423 | 2,800 | 472 |
| 2014 | 10 | 439 | 1,391 | 2,800 | 446 |
| 2014 | 11 | 420 | 1,500 | 2,800 | 448 |
| 2014 | 12 | 361 | 1,500 | 2,800 | 393 |
| 2015 | 1 | 379 | 1,500 | 2,800 | 416 |
| 2015 | 2 | 370 | 1,500 | 2,800 | 425 |
| 2015 | 3 | 393 | 1,500 | 2,800 | 449 |
| 2015 | 4 | 396 | 1,500 | 2,800 | 450 |

| year | DELIVERY_HOUR | ASMW_REGDN | ASMW_NSPIN | ASMW_RRS | ASMW_REGUP |
|---|---|---|---|---|---|
| 2014 | 1 | 458 | 1,440 | 2,800 | 524 |
| 2014 | 2 | 359 | 1,440 | 2,800 | 354 |
| 2014 | 3 | 327 | 1,494 | 2,800 | 318 |
| 2014 | 4 | 306 | 1,494 | 2,800 | 312 |
| 2014 | 5 | 367 | 1,494 | 2,800 | 366 |
| 2014 | 6 | 543 | 1,494 | 2,800 | 527 |
| 2014 | 7 | 453 | 1,488 | 2,800 | 747 |
| 2014 | 8 | 351 | 1,488 | 2,800 | 435 |
| 2014 | 9 | 388 | 1,488 | 2,800 | 461 |
| 2014 | 10 | 467 | 1,488 | 2,800 | 463 |
| 2014 | 11 | 427 | 1,428 | 2,800 | 497 |
| 2014 | 12 | 406 | 1,428 | 2,800 | 472 |
| 2014 | 13 | 344 | 1,428 | 2,800 | 432 |
| 2014 | 14 | 353 | 1,428 | 2,800 | 436 |
| 2014 | 15 | 345 | 1,500 | 2,800 | 372 |
| 2014 | 16 | 322 | 1,500 | 2,800 | 358 |
| 2014 | 17 | 331 | 1,500 | 2,800 | 373 |
| 2014 | 18 | 397 | 1,500 | 2,800 | 462 |
| 2014 | 19 | 439 | 1,469 | 2,800 | 445 |
| 2014 | 20 | 421 | 1,469 | 2,800 | 455 |
| 2014 | 21 | 410 | 1,469 | 2,800 | 388 |
| 2014 | 22 | 505 | 1,469 | 2,800 | 456 |
| 2014 | 23 | 574 | 1,440 | 2,800 | 555 |
| 2014 | 24 | 526 | 1,440 | 2,800 | 547 |
| 2015 | 1 | 404 | 1,500 | 2,800 | 413 |
| 2015 | 2 | 346 | 1,500 | 2,800 | 341 |
| 2015 | 3 | 301 | 1,500 | 2,800 | 321 |
| 2015 | 4 | 299 | 1,500 | 2,800 | 307 |
| 2015 | 5 | 407 | 1,500 | 2,800 | 400 |
| 2015 | 6 | 592 | 1,500 | 2,800 | 605 |
| 2015 | 7 | 490 | 1,500 | 2,800 | 839 |
| 2015 | 8 | 376 | 1,500 | 2,800 | 451 |
| 2015 | 9 | 356 | 1,500 | 2,800 | 433 |
| 2015 | 10 | 383 | 1,500 | 2,800 | 420 |
| 2015 | 11 | 385 | 1,500 | 2,800 | 420 |
| 2015 | 12 | 358 | 1,500 | 2,800 | 414 |
| 2015 | 13 | 359 | 1,500 | 2,800 | 384 |
| 2015 | 14 | 354 | 1,500 | 2,800 | 422 |
| 2015 | 15 | 318 | 1,500 | 2,800 | 354 |
| 2015 | 16 | 302 | 1,500 | 2,800 | 337 |
| 2015 | 17 | 285 | 1,500 | 2,800 | 359 |
| 2015 | 18 | 338 | 1,500 | 2,800 | 518 |
| 2015 | 19 | 419 | 1,500 | 2,800 | 498 |
| 2015 | 20 | 351 | 1,500 | 2,800 | 422 |
| 2015 | 21 | 364 | 1,500 | 2,800 | 410 |
| 2015 | 22 | 491 | 1,500 | 2,800 | 402 |
| 2015 | 23 | 497 | 1,500 | 2,800 | 517 |
| 2015 | 24 | 460 | 1,500 | 2,800 | 458 |

| year | month | MCPC_REGDN | MCPC_NSPIN | MCPC_RRS | MCPC_REGUP |
|------|-------|-----------|-----------|----------|-----------|
| 2014 | 1  | $ 8.15  | $ 2.20  | $ 12.12 | $ 10.32 |
| 2014 | 2  | $ 14.28 | $ 4.28  | $ 24.28 | $ 45.03 |
| 2014 | 3  | $ 20.40 | $ 4.81  | $ 26.05 | $ 26.63 |
| 2014 | 4  | $ 21.21 | $ 5.86  | $ 15.35 | $ 13.80 |
| 2014 | 5  | $ 12.45 | $ 4.82  | $ 10.71 | $ 9.04  |
| 2014 | 6  | $ 7.84  | $ 3.59  | $ 11.29 | $ 9.51  |
| 2014 | 7  | $ 6.11  | $ 4.11  | $ 10.47 | $ 8.38  |
| 2014 | 8  | $ 6.12  | $ 11.79 | $ 13.67 | $ 12.10 |
| 2014 | 9  | $ 6.40  | $ 6.64  | $ 8.33  | $ 8.82  |
| 2014 | 10 | $ 9.16  | $ 9.37  | $ 14.31 | $ 9.85  |
| 2014 | 11 | $ 13.31 | $ 6.95  | $ 16.01 | $ 16.26 |
| 2014 | 12 | $ 6.14  | $ 2.56  | $ 8.08  | $ 9.01  |
| 2015 | 1  | $ 5.49  | $ 1.84  | $ 6.47  | $ 7.10  |
| 2015 | 2  | $ 4.05  | $ 3.00  | $ 7.77  | $ 8.83  |
| 2015 | 3  | $ 6.04  | $ 6.26  | $ 11.27 | $ 12.39 |
| 2015 | 4  | $ 8.47  | $ 5.27  | $ 11.21 | $ 13.08 |
| 2015 | 5  |         |         |         |         |
| 2015 | 6  |         |         |         |         |
| 2015 | 7  |         |         |         |         |
| 2015 | 8  |         |         |         |         |
| 2015 | 9  |         |         |         |         |
| 2015 | 10 |         |         |         |         |
| 2015 | 11 |         |         |         |         |
| 2015 | 12 |         |         |         |         |

| year | month | AScost_REGDN | AScost_NSPIN | AScost_RRS | AScost_REGUP |
|------|-------|--------------|--------------|------------|--------------|
| 2014 | 1 | $ 0.08 | $ 0.09 | $ 0.90 | $ 0.12 |
|      | 2 | $ 0.14 | $ 0.17 | $ 1.84 | $ 0.54 |
|      | 3 | $ 0.25 | $ 0.22 | $ 2.19 | $ 0.35 |
|      | 4 | $ 0.25 | $ 0.26 | $ 1.29 | $ 0.20 |
|      | 5 | $ 0.15 | $ 0.20 | $ 0.82 | $ 0.11 |
|      | 6 | $ 0.08 | $ 0.12 | $ 0.72 | $ 0.10 |
|      | 7 | $ 0.06 | $ 0.13 | $ 0.63 | $ 0.08 |
|      | 8 | $ 0.05 | $ 0.35 | $ 0.79 | $ 0.12 |
|      | 9 | $ 0.06 | $ 0.22 | $ 0.54 | $ 0.10 |
|      | 10 | $ 0.11 | $ 0.35 | $ 1.09 | $ 0.12 |
|      | 11 | $ 0.16 | $ 0.30 | $ 1.31 | $ 0.21 |
|      | 12 | $ 0.06 | $ 0.11 | $ 0.65 | $ 0.10 |
| 2015 | 1 | $ 0.05 | $ 0.07 | $ 0.47 | $ 0.08 |
|      | 2 | $ 0.04 | $ 0.12 | $ 0.58 | $ 0.10 |
|      | 3 | $ 0.07 | $ 0.28 | $ 0.92 | $ 0.16 |
|      | 4 | $ 0.10 | $ 0.23 | $ 0.92 | $ 0.17 |
|      | 5 | | | | |
|      | 6 | | | | |
|      | 7 | | | | |
|      | 8 | | | | |
|      | 9 | | | | |
|      | 10 | | | | |
|      | 11 | | | | |
|      | 12 | | | | |

| year | month | pnm | pnm_accum |
|---|---|---|---|
| 2014 | | $ - | $ - |
| 2014 | 1 | $ 8,628 | $ 8,628 |
| 2014 | 2 | $ 4,513 | $ 13,142 |
| 2014 | 3 | $ 12,232 | $ 25,374 |
| 2014 | 4 | $ 4,025 | $ 29,399 |
| 2014 | 5 | $ 2,749 | $ 32,148 |
| 2014 | 6 | $ 803 | $ 32,951 |
| 2014 | 7 | $ 1,288 | $ 34,239 |
| 2014 | 8 | $ 2,656 | $ 36,895 |
| 2014 | 9 | $ 1,600 | $ 38,494 |
| 2014 | 10 | $ 2,975 | $ 41,469 |
| 2014 | 11 | $ 4,063 | $ 45,532 |
| 2014 | 12 | $ 1,345 | $ 46,877 |
| 2015 | | $ - | $ - |
| 2015 | 1 | $ 1,010 | $ 1,010 |
| 2015 | 2 | $ 3,289 | $ 4,299 |
| 2015 | 3 | $ 3,801 | $ 8,099 |
| 2015 | 4 | $ 1,901 | $ 10,000 |
| 2015 | 5 | | |
| 2015 | 6 | | |
| 2015 | 7 | | |
| 2015 | 8 | | |
| 2015 | 9 | | |
| 2015 | 10 | | |
| 2015 | 11 | | |
| 2015 | 12 | | |

| year | month | HE_1_4 | HE_13_16 | HE_17_20 | HE_21_24 | HE_5_8 | HE_9_12 |
|------|-------|--------|----------|----------|----------|--------|---------|
| 2014 | 1 | 295.09 | (16.43) | (64.17) | 148.12 | 261.13 | 118.43 |
| | 2 | (182.99) | (520.15) | (851.12) | (810.35) | 163.44 | (93.02) |
| | 3 | (366.45) | (107.40) | (174.94) | (343.99) | (174.20) | (96.86) |
| | 4 | (273.46) | (154.90) | 30.34 | (177.42) | (18.89) | (66.78) |
| | 5 | 72.77 | (72.69) | 215.55 | (59.14) | (128.09) | (115.22) |
| | 6 | 49.16 | 1,131.18 | 1,297.39 | 640.74 | (454.87) | 222.09 |
| | 7 | 45.09 | 484.34 | 559.22 | 84.72 | 38.71 | 387.67 |
| | 8 | (117.03) | (256.24) | (66.57) | (235.55) | (118.07) | (201.01) |
| | 9 | (212.53) | 350.15 | 821.30 | (24.37) | (147.66) | (35.89) |
| | 10 | (19.03) | (20.80) | (64.71) | 63.58 | 45.20 | 374.23 |
| | 11 | 55.57 | (318.40) | (269.27) | (300.93) | (50.47) | (208.02) |
| | 12 | 20.67 | (615.58) | (633.45) | (334.32) | 299.33 | (143.23) |
| 2015 | 1 | 336.03 | (342.28) | (250.53) | 93.44 | 137.44 | 75.46 |
| | 2 | 154.88 | (718.24) | (639.31) | (324.92) | 244.06 | (334.07) |
| | 3 | (245.99) | (160.01) | (425.43) | (429.77) | (253.32) | (54.32) |
| | 4 | 33.62 | 584.51 | 679.96 | 191.93 | 88.35 | 359.49 |
| | 5 | | | | | | |
| | 6 | | | | | | |
| | 7 | | | | | | |
| | 8 | | | | | | |
| | 9 | | | | | | |
| | 10 | | | | | | |
| | 11 | | | | | | |
| | 12 | | | | | | |

| year | month | HE_1_4 | HE_13_16 | HE_17_20 | HE_21_24 | HE_5_8 | HE_9_12 |
|------|-------|--------|----------|----------|----------|--------|---------|
| 2014 | 1 | 5,808 | 4,127 | 4,036 | 5,391 | 5,211 | 4,131 |
|      | 2 | 4,238 | 3,120 | 2,824 | 3,762 | 3,941 | 3,502 |
|      | 3 | 5,359 | 3,742 | 4,014 | 4,962 | 5,013 | 4,267 |
|      | 4 | 5,819 | 4,467 | 4,949 | 5,139 | 4,996 | 4,593 |
|      | 5 | 5,275 | 3,564 | 4,320 | 4,769 | 4,371 | 3,733 |
|      | 6 | 6,030 | 4,599 | 5,489 | 6,014 | 5,549 | 5,127 |
|      | 7 | 4,216 | 2,459 | 3,177 | 3,787 | 3,461 | 2,457 |
|      | 8 | 3,869 | 2,003 | 2,779 | 3,629 | 3,436 | 2,544 |
|      | 9 | 3,344 | 2,350 | 2,668 | 3,280 | 2,796 | 2,377 |
|      | 10 | 4,810 | 2,418 | 2,839 | 4,457 | 4,317 | 3,166 |
|      | 11 | 5,601 | 4,442 | 4,404 | 5,746 | 5,689 | 4,922 |
|      | 12 | 4,654 | 3,175 | 3,356 | 4,449 | 4,254 | 3,607 |
| 2015 | 1 | 3,597 | 3,424 | 3,264 | 3,738 | 3,879 | 3,471 |
|      | 2 | 5,036 | 3,927 | 3,961 | 5,045 | 4,476 | 3,988 |
|      | 3 | 4,182 | 2,295 | 2,465 | 3,622 | 3,701 | 2,532 |
|      | 4 | 6,218 | 4,090 | 5,011 | 6,002 | 5,105 | 4,209 |
|      | 5 |  |  |  |  |  |  |
|      | 6 |  |  |  |  |  |  |
|      | 7 |  |  |  |  |  |  |
|      | 8 |  |  |  |  |  |  |
|      | 9 |  |  |  |  |  |  |
|      | 10 |  |  |  |  |  |  |
|      | 11 |  |  |  |  |  |  |
|      | 12 |  |  |  |  |  |  |

| category | year | item | rankvar | rank | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQ_EXIST | 2015 | LON_HI_SMITH1_1 (LON_HILL-SMITH) | 3,713 | 1 | 1,153 | 996 | 1,303 | 261 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | 6474__A (SUNSW-MGSES) | 1,976 | 2 | - | - | 37 | 1,939 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | 336T405_1 (FPPYD1-FPPYD2) | 1,893 | 3 | - | 914 | 979 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | POS_SHAN_1 (SHANNON-POSTOKSW) | 1,731 | 4 | 705 | 151 | 190 | 685 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | GIBCRK-SNG (GIBCRK-SNG) | 1,581 | 5 | 822 | 759 | - | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | BRUNI_69_1 (BRUNI-BRUNI) | 1,193 | 6 | 216 | 389 | 476 | 112 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | 38T365_1 (WIRTZ-FLATRO) | 929 | 7 | - | 121 | 154 | 654 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | AJO_ZO (AJO_ZO) | 663 | 8 | - | - | 335 | 328 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | GILA_MORRIS1_1 (GILA-MORRIS) | 613 | 9 | - | 392 | 218 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | JK_TOKSW_1 (TOKSW-JK_CK) | 602 | 10 | 551 | - | 11 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 3210__A (CDHSW-MCSES) | $ 8.21 | 1 | $ - | $ - | $ 8.20 | $ 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | MAR_SKY_1 (MARION-SKYLINE) | $ 7.61 | 2 | $ 5.73 | $ 1.17 | $ 0.70 | $ 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | LON_HI_SMITH1_1 (LON_HILL-SMITH) | $ 7.53 | 3 | $ 2.37 | $ 2.56 | $ 2.08 | $ 0.52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 336T405_1 (FPPYD1-FPPYD2) | $ 6.62 | 4 | $ - | $ 2.76 | $ 3.86 | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | ADERHO_ELSA1_1 (ADERHOLD-ELSA) | $ 4.91 | 5 | $ 4.91 | $ 0.00 | $ - | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | SACH_69T1 (SACH-SACH) | $ 4.83 | 6 | $ - | $ 4.83 | $ - | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 13998T485_1 (FRONTERA-GOODWIN) | $ 4.07 | 7 | $ - | $ 4.07 | $ - | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 14035__A (MGSES-BRBSW) | $ 3.04 | 8 | $ - | $ - | $ - | $ 3.04 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | MATA_ROAR1_1 (MATA-ROAR) | $ 2.05 | 9 | $ 2.05 | $ - | $ - | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | LA_PAL_VCAVAZ1_1 (LA_PALMA-VCAVAZOS) | $ 2.02 | 10 | $ - | $ 1.58 | $ - | $ 0.45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| category | year | item | rankvar | rank | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FREQ_EXIST | 2015 | BRUNI_69_1 (BRUNI-BRUNI) | 1,620 | 1 | 363 | 459 | 420 | 378 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | LA_PAL_VCAVAZ1_1 (LA_PALMA-VCAVAZOS) | 1,579 | 2 | 330 | 484 | 429 | 336 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | 6090__D (HLTSW-AMMFT) | 1,184 | 3 | 164 | 303 | 365 | 352 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | ABNW_ELYT1_1 (ABNW-ELYT) | 932 | 4 | 375 | 371 | 167 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | 6216__A (SHRNE-BCKSW) | 812 | 5 | 338 | 223 | 251 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | LON_HI_SMITH1_1 (LON_HILL-SMITH) | 806 | 6 | 205 | 245 | 301 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | ALO_WAR_1 (WARBURTN-ALOES) | 774 | 7 | 322 | 198 | 147 | 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | MOSSW_MR1L (MOSSW-MOSSW) | 625 | 8 | 309 | 74 | 124 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | HAMR_RADM1_1 (RADM-HAMR) | 605 | 9 | 239 | 111 | 185 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| FREQ_EXIST | 2015 | SAR_FRAN_1 (FRANKC-SARGNTS) | 589 | 10 | 268 | 243 | 78 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | LON_HI_SMITH1_1 (LON_HILL-SMITH) | $ 5.34 | 1 | $ 1.53 | $ 1.62 | $ 1.74 | $ 0.44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | LYTTON_S_AT1 (LYTTON_S-LYTTON_S) | $ 3.14 | 2 | $ 0.00 | $ 1.91 | $ 1.16 | $ 0.08 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | ADERHO_ELSA1_1 (ADERHOLD-ELSA) | $ 3.07 | 3 | $ 2.28 | $ 0.79 | $ 0.00 | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | LA_PAL_VCAVAZ1_1 (LA_PALMA-VCAVAZOS) | $ 2.99 | 4 | $ 0.45 | $ 1.14 | $ 0.98 | $ 0.42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 336T405_1 (FPPYD1-FPPYD2) | $ 2.69 | 5 | $ 0.01 | $ 0.42 | $ 2.21 | $ 0.04 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | MAR_SKY_1 (MARION-SKYLINE) | $ 2.62 | 6 | $ 0.91 | $ 0.67 | $ 0.61 | $ 0.43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | MOSSW_MR1L (MOSSW-MOSSW) | $ 2.33 | 7 | $ 1.35 | $ 0.19 | $ 0.24 | $ 0.55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 6090__D (HLTSW-AMMFT) | $ 2.32 | 8 | $ 0.33 | $ 0.28 | $ 0.28 | $ 1.43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | FAYETT_6AT2 (FAYETT-FAYETT) | $ 2.14 | 9 | $ 0.01 | $ - | $ 0.13 | $ 2.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOP10_RENT | 2015 | 10T211_1 (FPPYD1-SALEM) | $ 2.12 | 10 | $ - | $ - | $ 2.12 | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| ftr_option | year | pair | total_value | rank | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | 2015 | HB_WEST-LZ_WEST | $ 6.54 | 1 | $ 0.88 | $ 1.14 | $ 1.13 | $ 1.79 | $ 1.61 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | HB_SOUTH-LZ_SOUTH | $ 5.78 | 2 | $ 0.70 | $ 1.41 | $ 1.79 | $ 1.04 | $ 0.85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | HB_NORTH-LZ_NORTH | $ 2.85 | 3 | $ 0.51 | $ 1.25 | $ 0.45 | $ 0.29 | $ 0.35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | HB_NORTH-HB_HOUSTON | $ 2.24 | 4 | $ - | $ - | $ 0.51 | $ 0.56 | $ 1.17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | HB_NORTH-HB_SOUTH | $ 1.37 | 5 | $ - | $ 0.09 | $ 0.60 | $ 0.45 | $ 0.23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | HB_HOUSTON-LZ_HOUSTON | $ 1.18 | 6 | $ 0.11 | $ 0.19 | $ 0.26 | $ 0.33 | $ 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | OGSES_2-HB_NORTH | $ 0.46 | 7 | $ 0.13 | $ 0.10 | $ 0.02 | $ 0.09 | $ 0.13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | STP_STP_G1-LZ_CPS | $ 0.34 | 8 | $ 0.11 | $ 0.23 | $ 0.01 | $ 0.00 | $ - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | NUE_NUECESG7-HB_SOUTH | $ 0.34 | 9 | $ 0.06 | $ 0.04 | $ 0.11 | $ 0.07 | $ 0.06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N | 2015 | B_D_B_DAVIG2-HB_SOUTH | $ 0.33 | 10 | $ 0.05 | $ 0.08 | $ 0.05 | $ 0.07 | $ 0.07 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_NORTH-LZ_NORTH | $ 2.32 | 1 | $ 0.18 | $ 1.47 | $ 0.33 | $ 0.14 | $ 0.19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_SOUTH-LZ_SOUTH | $ 2.14 | 2 | $ 0.43 | $ 0.47 | $ 0.41 | $ 0.55 | $ 0.29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_WEST-LZ_WEST | $ 1.64 | 3 | $ 0.25 | $ 0.34 | $ 0.25 | $ 0.42 | $ 0.38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_HOUSTON-LZ_HOUSTON | $ 0.63 | 4 | $ 0.07 | $ 0.11 | $ 0.11 | $ 0.14 | $ 0.20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_NORTH-HB_HOUSTON | $ 0.54 | 5 | $ 0.03 | $ 0.04 | $ 0.12 | $ 0.19 | $ 0.15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | HB_SOUTH-LZ_CPS | $ 0.52 | 6 | $ 0.02 | $ 0.22 | $ 0.15 | $ 0.11 | $ 0.02 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | STP_STP_G1-LZ_CPS | $ 0.50 | 7 | $ 0.01 | $ - | $ 0.12 | $ 0.23 | $ 0.15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | CEDROHI_CHW1-LZ_CPS | $ 0.45 | 8 | $ 0.10 | $ 0.07 | $ 0.08 | $ 0.09 | $ 0.11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | PENA_ALL-LZ_AEN | $ 0.33 | 9 | $ - | $ 0.11 | $ 0.01 | $ 0.18 | $ 0.03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Y | 2015 | CALAVER_JKS2-LZ_CPS | $ 0.27 | 10 | $ - | $ - | $ 0.00 | $ 0.00 | $ 0.27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |