

OE ENERGY MARKET SNAPSHOT

East Version – March 2016 Data

Office of Enforcement
Federal Energy Regulatory Commission
April 2016

Natural Gas and Fuels Markets

East

Northeast Day-Ahead Prices Averaged Annually/ Seasonally

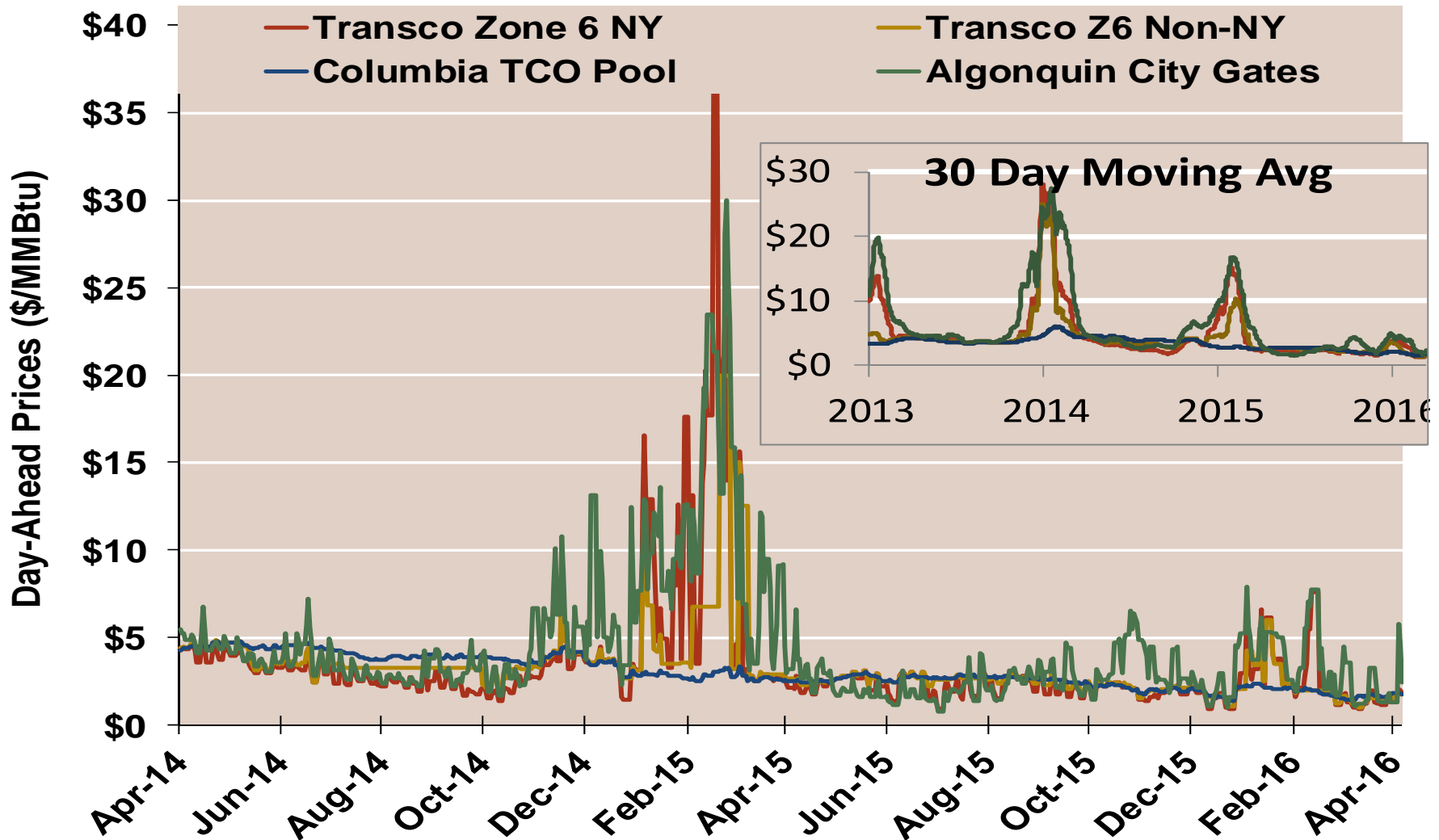
| | Average Day Ahead Prices (\$/MMBtu) | Algonquin Citygates | Transco Zone 6 NY | Transco Zone 6 Non-NY | Columbia Appalachia | Henry Hub |
|----------|-------------------------------------|---------------------|-------------------|-----------------------|---------------------|-------------|
| 2013 | Annual | 6.95 | 5.11 | 4.03 | 3.72 | 3.72 |
| | Summer | 4.24 | 3.92 | 3.84 | 3.77 | 3.76 |
| | Winter 2013/2014 | 15.76 | 11.40 | 9.66 | 4.60 | 4.61 |
| 2014 | Annual | 7.95 | 6.22 | 5.98 | 4.30 | 4.32 |
| | Summer | 3.50 | 2.89 | 3.53 | 4.14 | 4.18 |
| | Winter 2014/2015 | 9.17 | 6.68 | 5.25 | 3.15 | 3.21 |
| 2015 | Annual | 4.71 | 3.77 | 3.33 | 2.51 | 2.60 |
| | Summer | 2.51 | 2.25 | 2.53 | 2.58 | 2.67 |
| | Winter 2015/2016 | 3.18 | 2.26 | 2.11 | 1.86 | 1.97 |
| 2016 YTD | Annual | 3.46 | 2.55 | 2.22 | 1.86 | 1.97 |
| | Summer | 3.38 | 1.78 | 1.74 | 1.83 | 1.93 |
| | Winter 2016/2017 | | | | | |

Notes:

Source: Derived from ICE data

Updated Apr-2016

Northeast Day-Ahead Prices

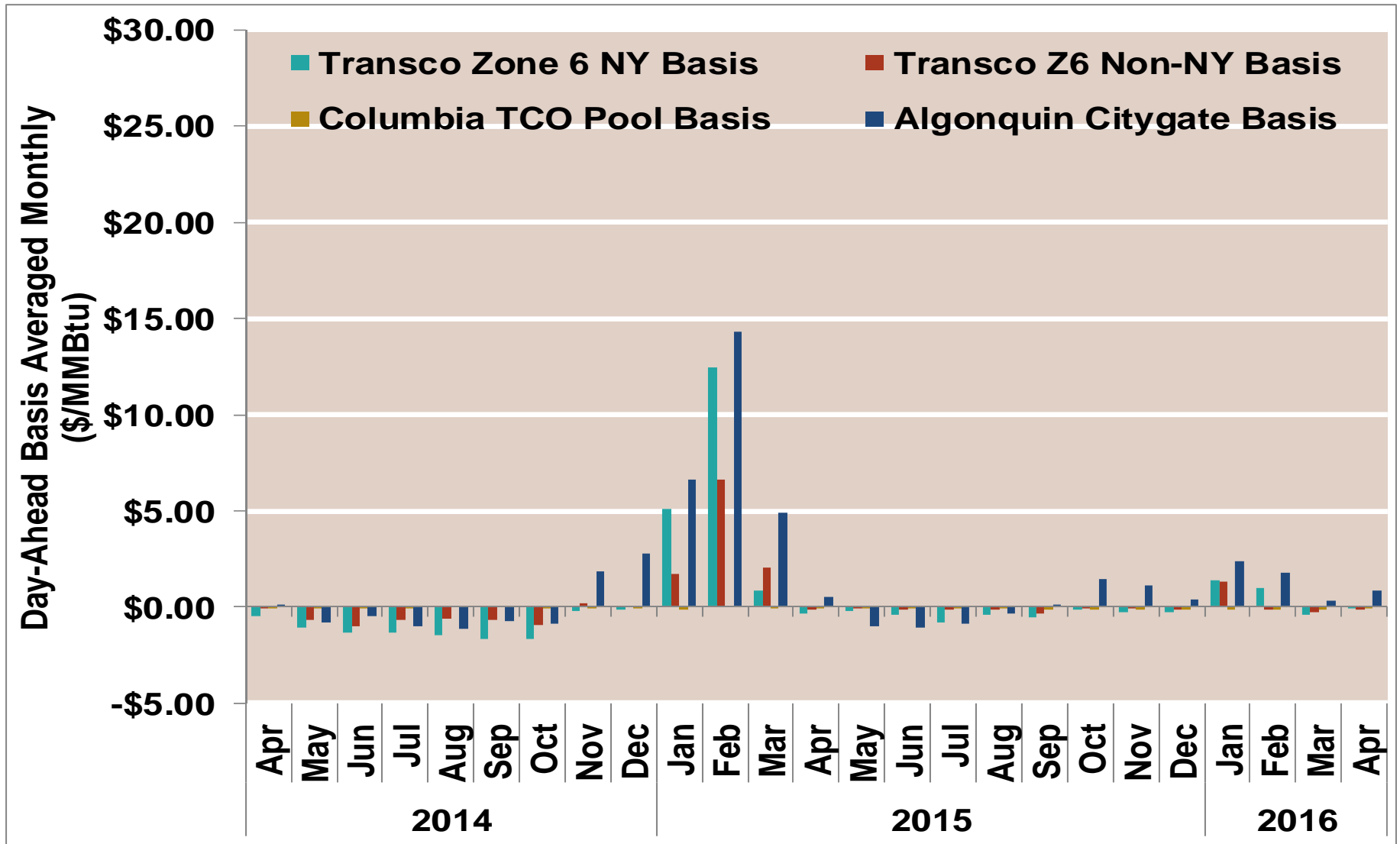


Notes:

Source: Derived from ICE data

Updated Apr-2016

Northeast Monthly Average Basis Value To Henry Hub

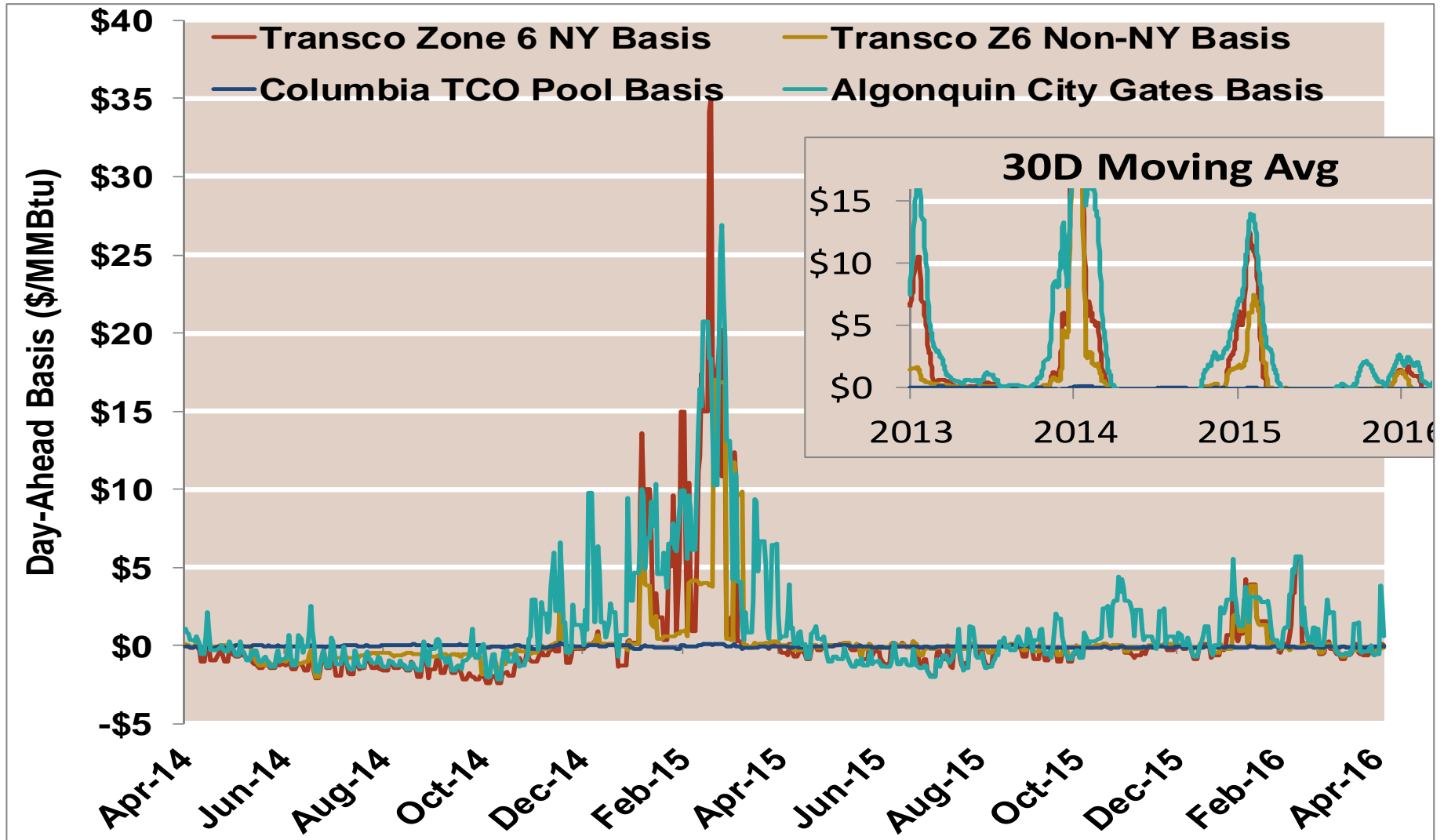


Notes:

Source: Derived from ICE data

Updated Apr-2016

Northeast Day-Ahead Basis

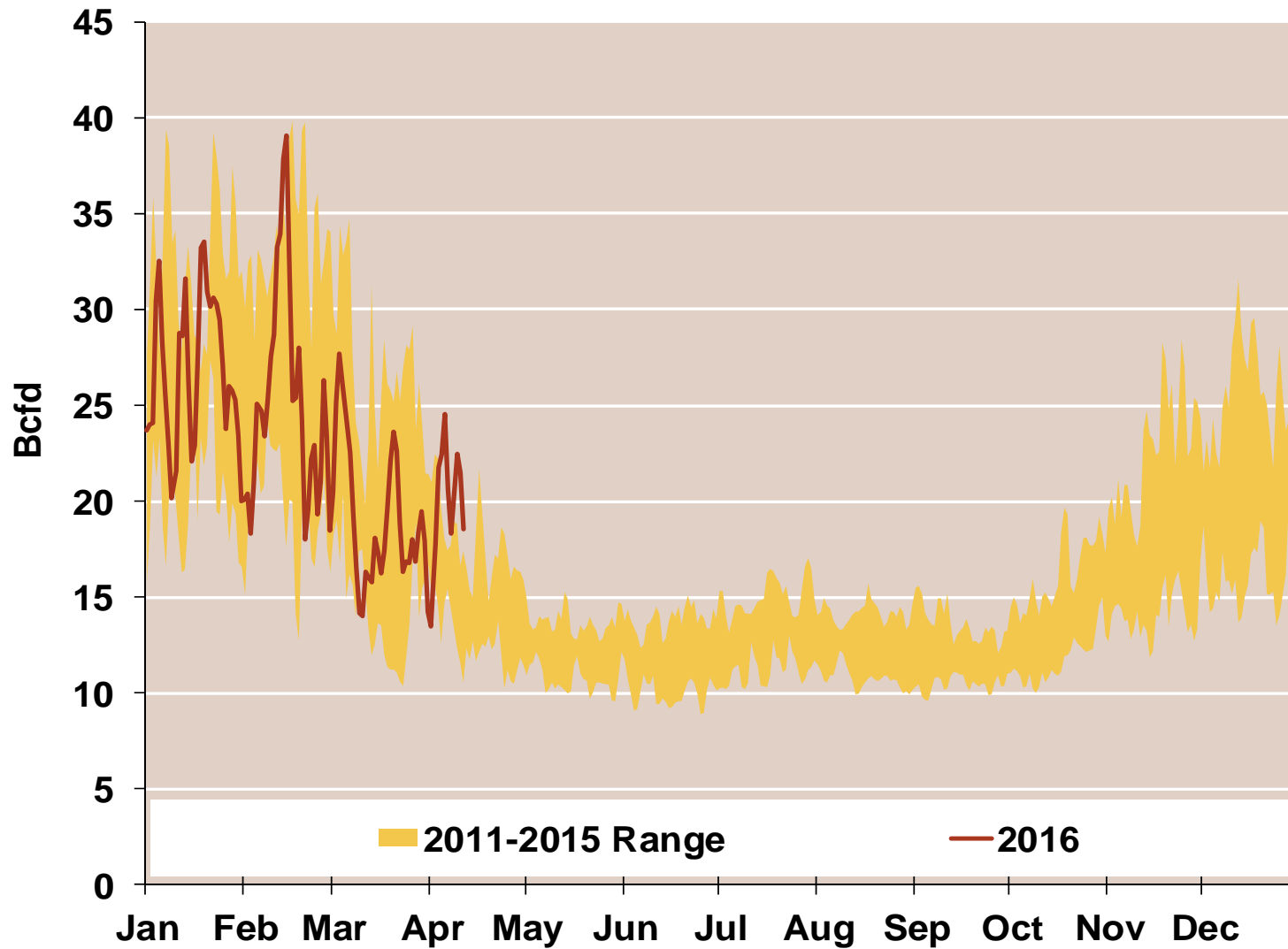


Notes:

Source: Derived from ICE data

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Daily Northeast Natural Gas Demand All Sectors

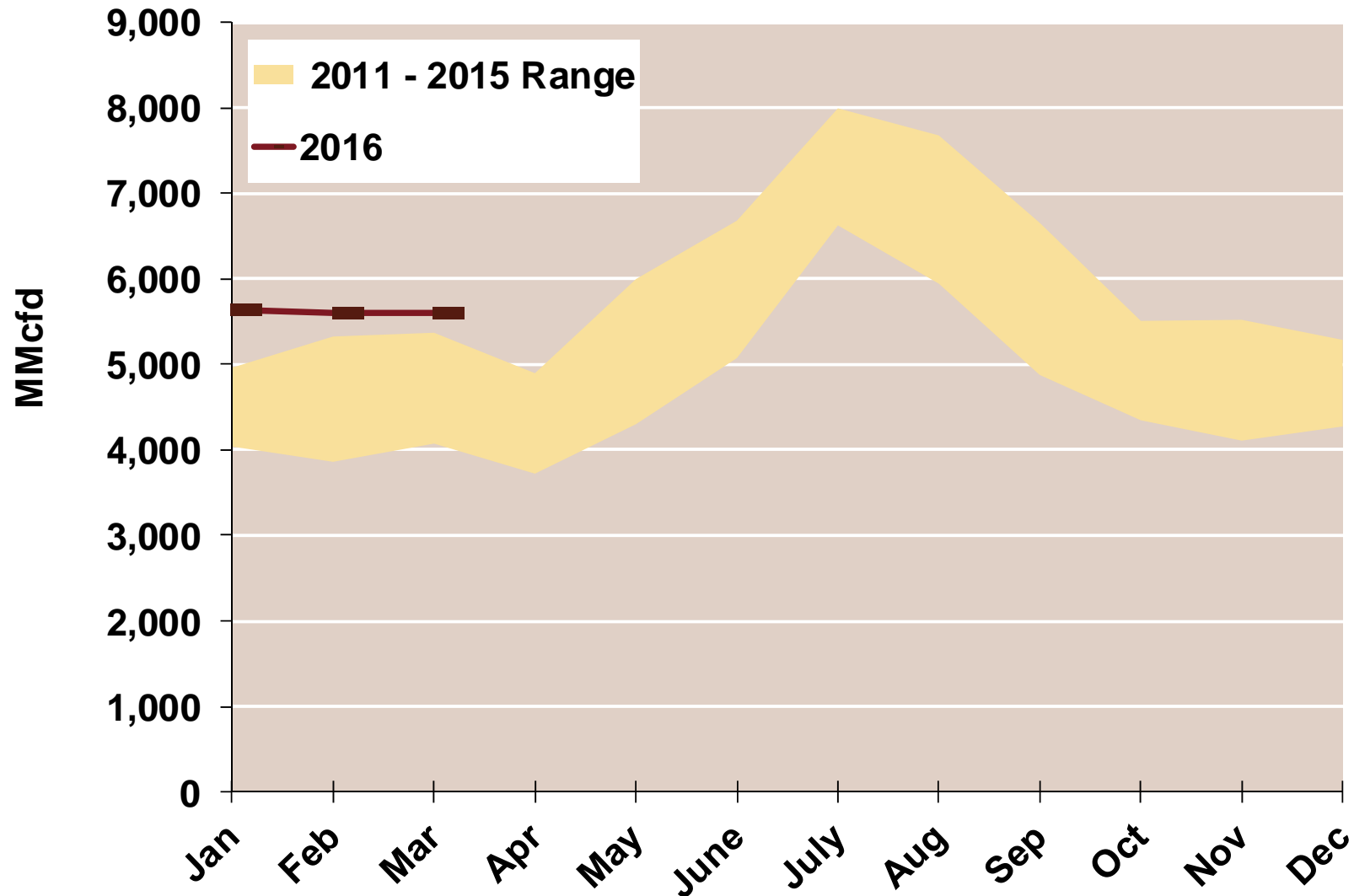


Source: Derived from *Bentek Energy* data

Note: Northeast is defined as Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, Ohio and Kentucky

Updated: Oct 2015

Northeast Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data

Note: Northeast is defined as Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, Ohio and Kentucky

Updated: Oct 2015

Southeast Day-Ahead Prices Averaged Annually/Seasonally

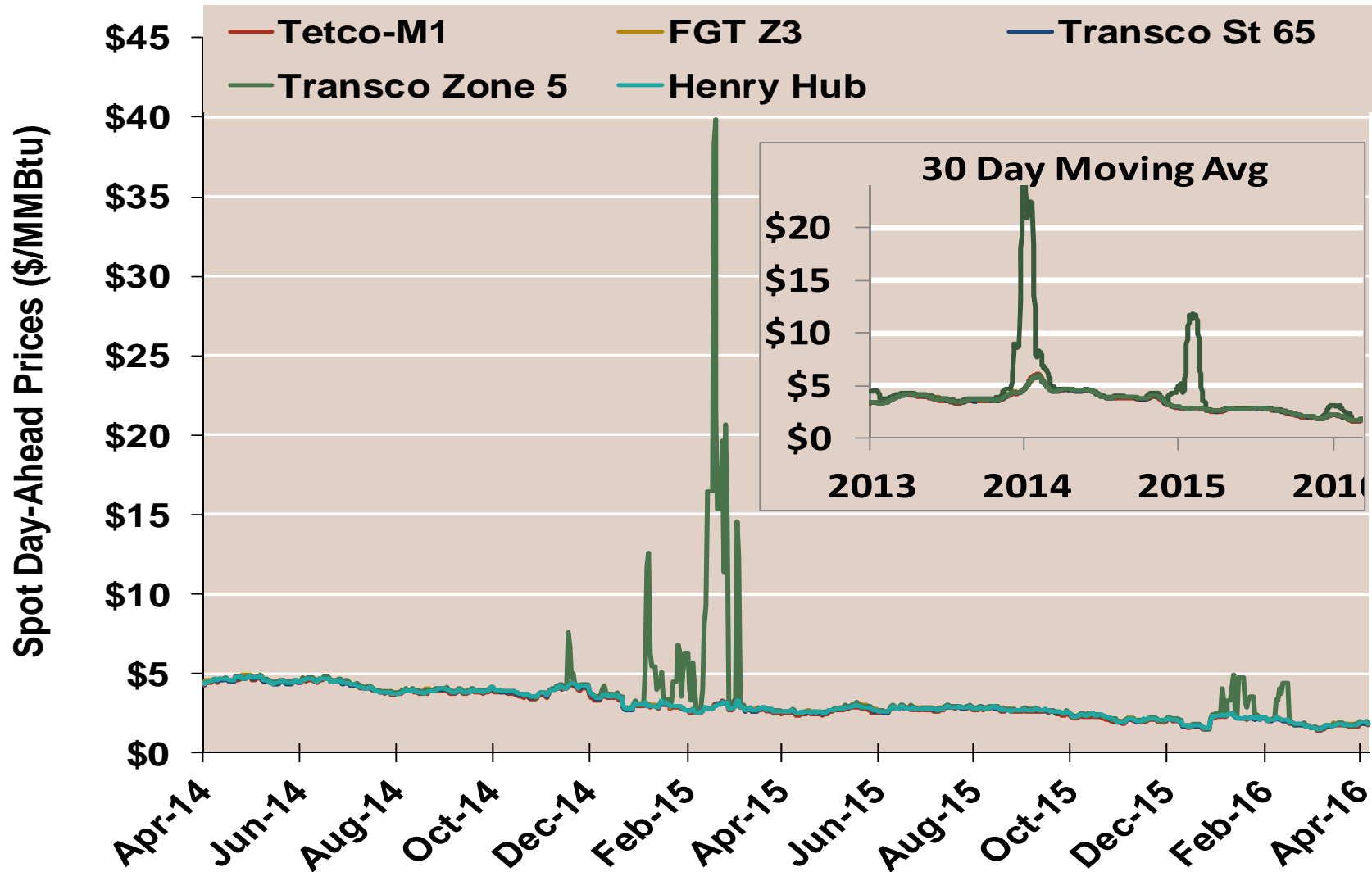
| | Average Day Ahead Prices (\$/MMBtu) | FGT Z3 | Tetco-M1 | Transco St 65 | Transco Zone 5 | Henry Hub |
|----------|-------------------------------------|--------|----------|---------------|----------------|-------------|
| 2013 | Annual | 3.77 | 3.66 | 3.71 | 4.01 | 3.72 |
| | Summer | 3.83 | 3.68 | 3.74 | 3.88 | 3.76 |
| | Winter 2013/2014 | 4.62 | 4.61 | 4.60 | 9.44 | 4.61 |
| 2014 | Annual | 4.34 | 4.28 | 4.30 | 6.32 | 4.32 |
| | Summer | 4.21 | 4.12 | 4.16 | 4.24 | 4.18 |
| | Winter 2014/2015 | 3.21 | 3.14 | 3.19 | 5.57 | 3.21 |
| 2015 | Annual | 2.62 | 2.53 | 2.58 | 3.58 | 2.60 |
| | Summer | 2.69 | 2.58 | 2.65 | 2.73 | 2.67 |
| | Winter 2015/2016 | 1.99 | 1.91 | 1.95 | 2.28 | 1.97 |
| 2016 YTD | Annual | 1.98 | 1.91 | 1.94 | 2.41 | 1.97 |
| | Summer | 1.87 | 1.82 | 1.87 | 1.93 | 1.93 |
| | Winter 2016/2017 | | | | | |

Notes:

Source: Derived from ICE data

Updated Apr-2016

Southeast Day-Ahead Prices

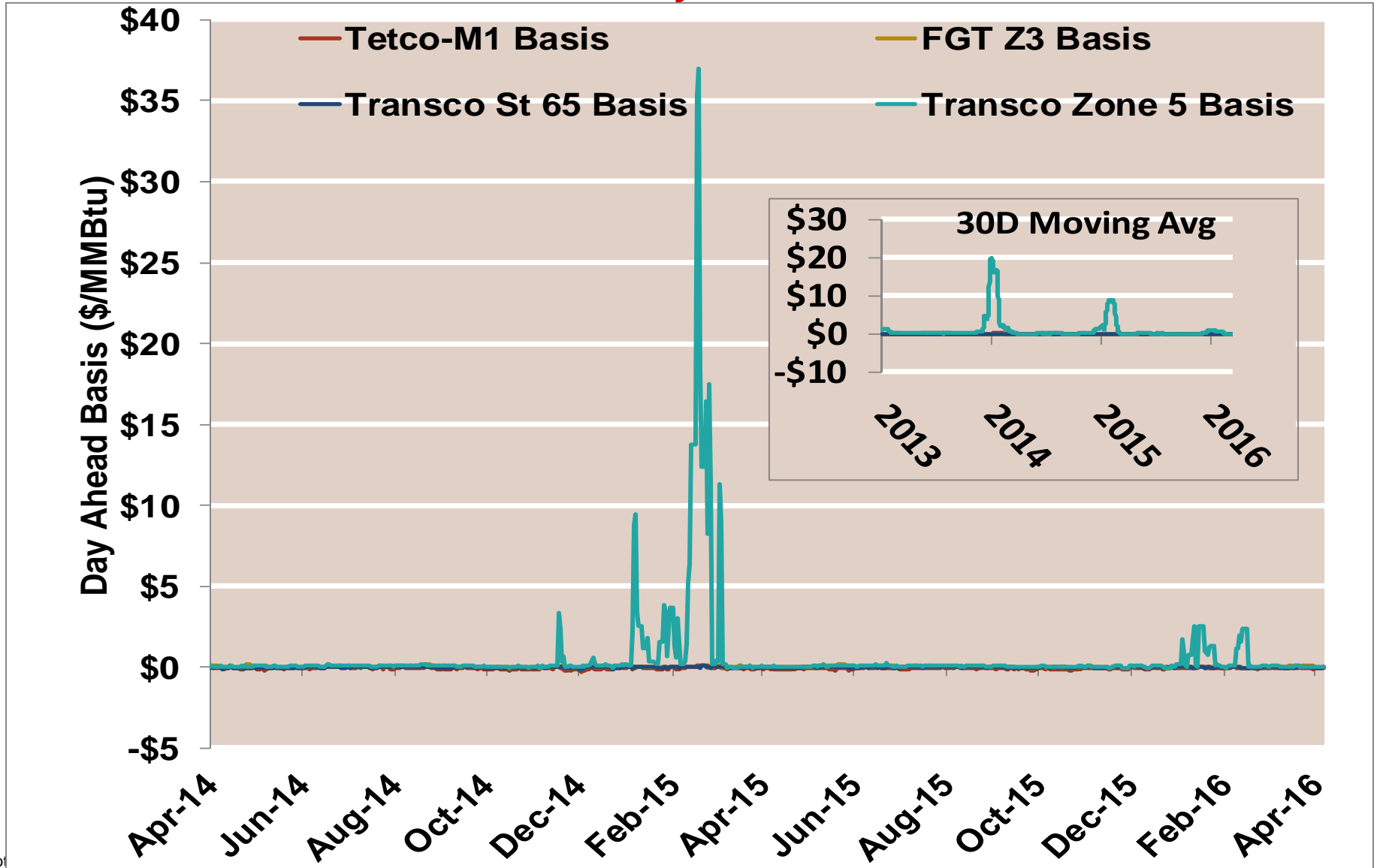


Notes:

Source: Derived from ICE data

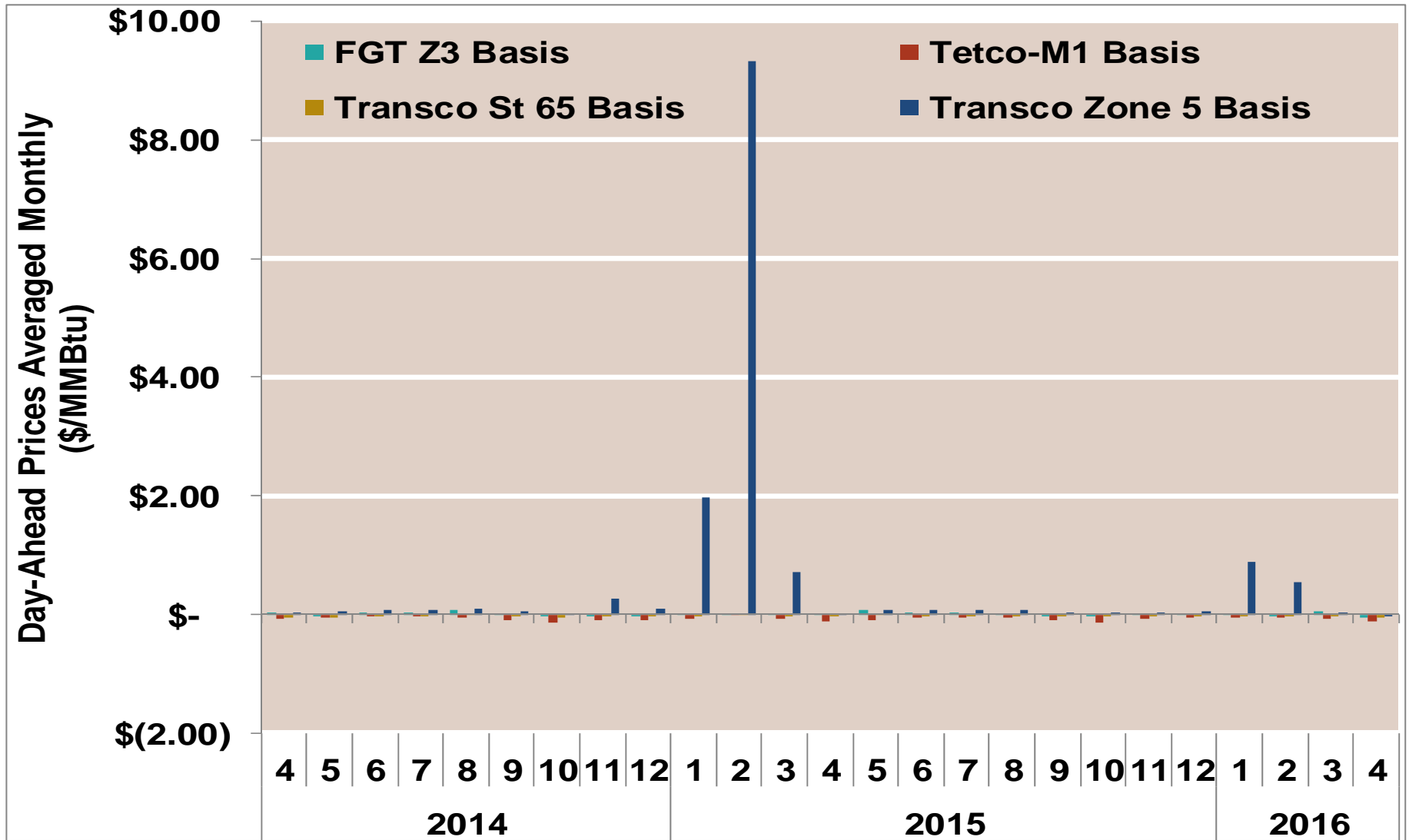
Updated Apr-2016

Southeast Day-Ahead Basis



Note

Southeast Monthly Average Basis Value To Henry Hub

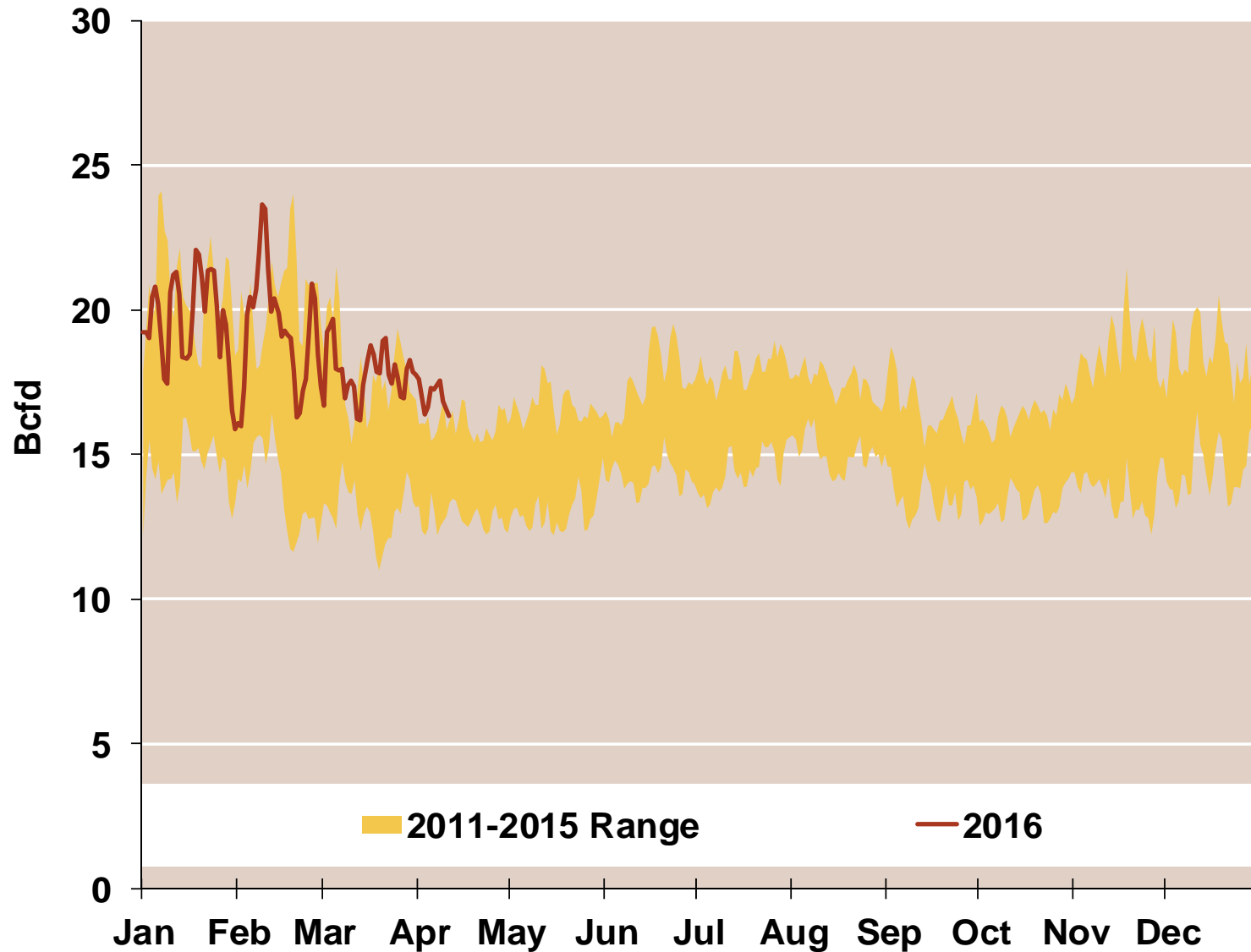


Notes:

Source: Derived from ICE data

Updated Apr-2016

Daily Southeast Natural Gas Demand All Sectors

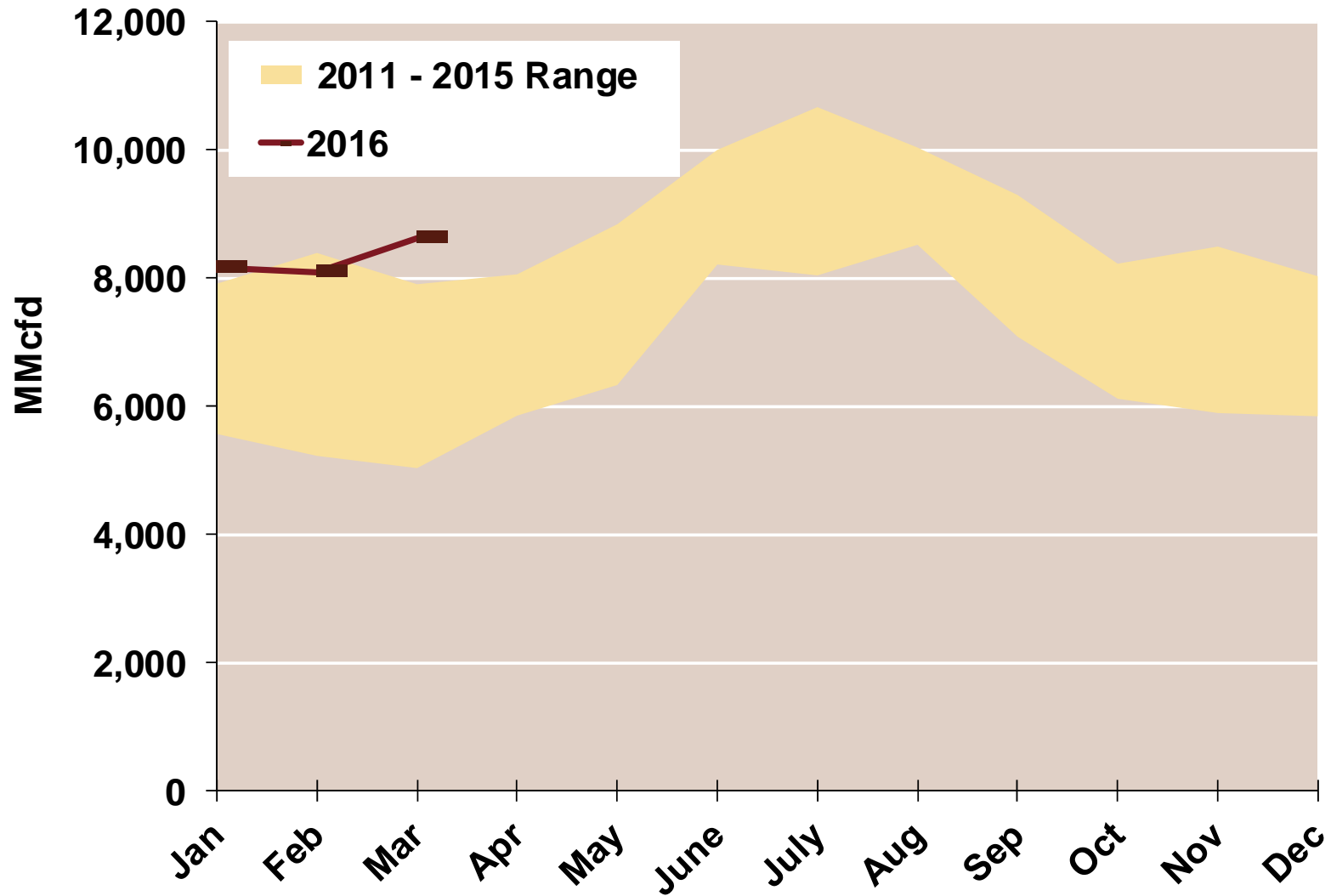


Source: Derived from *Bentek Energy* data

Note: Southeast is defined as North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, and Tennessee.

Updated: Oct 2015

Southeast Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data

Note: Southeast is defined as North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas, and Tennessee.

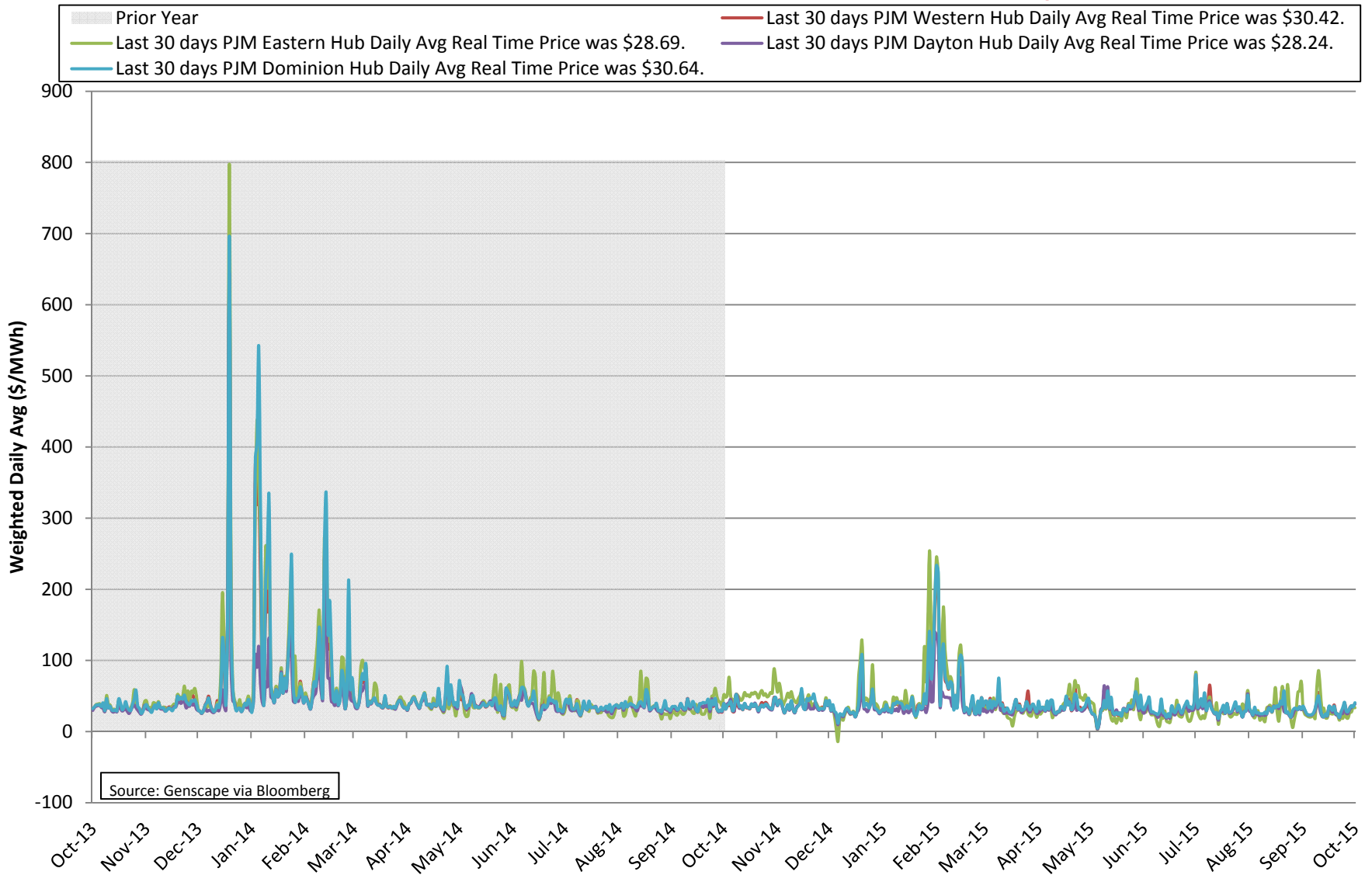
Updated: Oct 2015



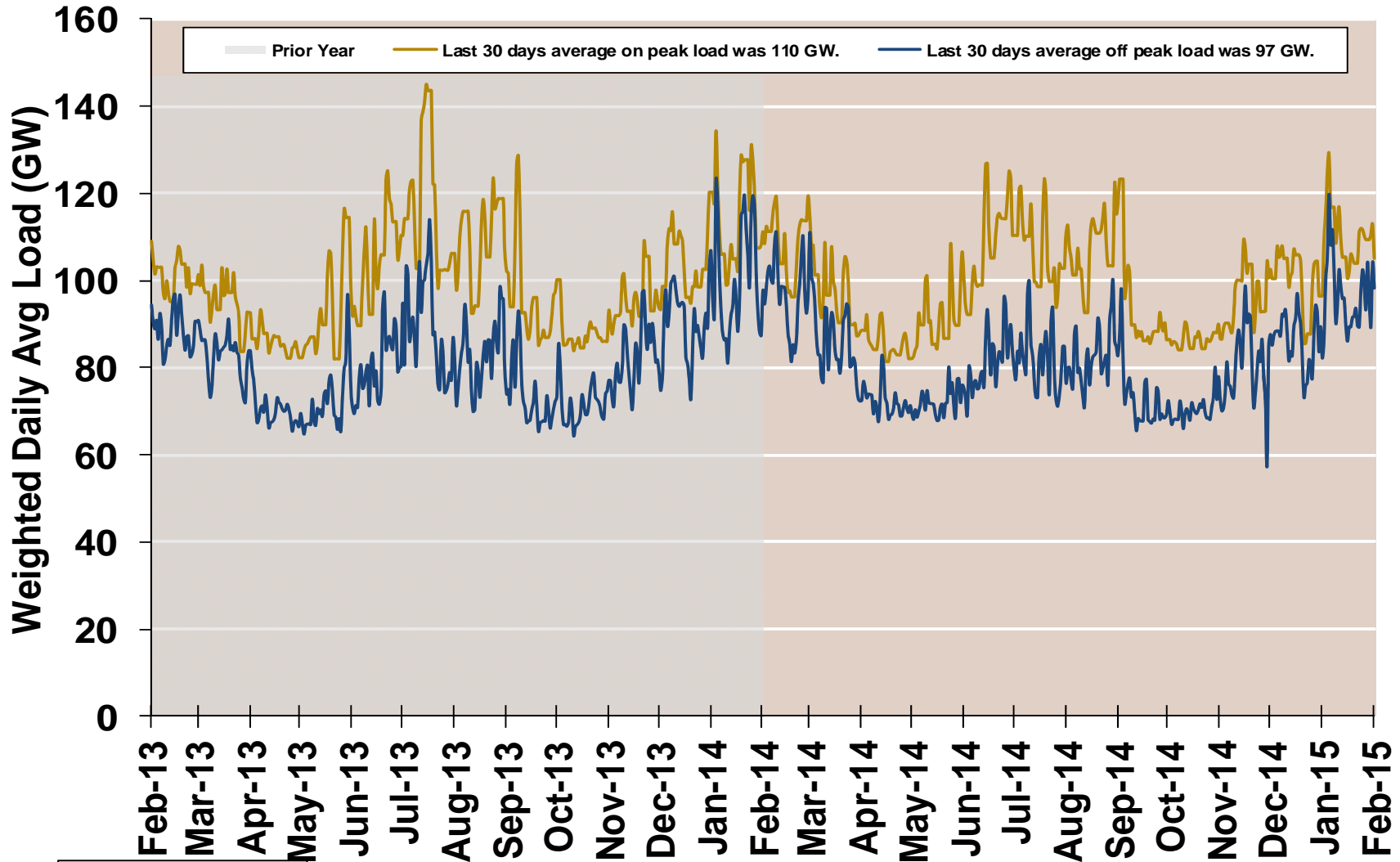
Electricity Markets

East

PJM Real Time Prices—Two Year History

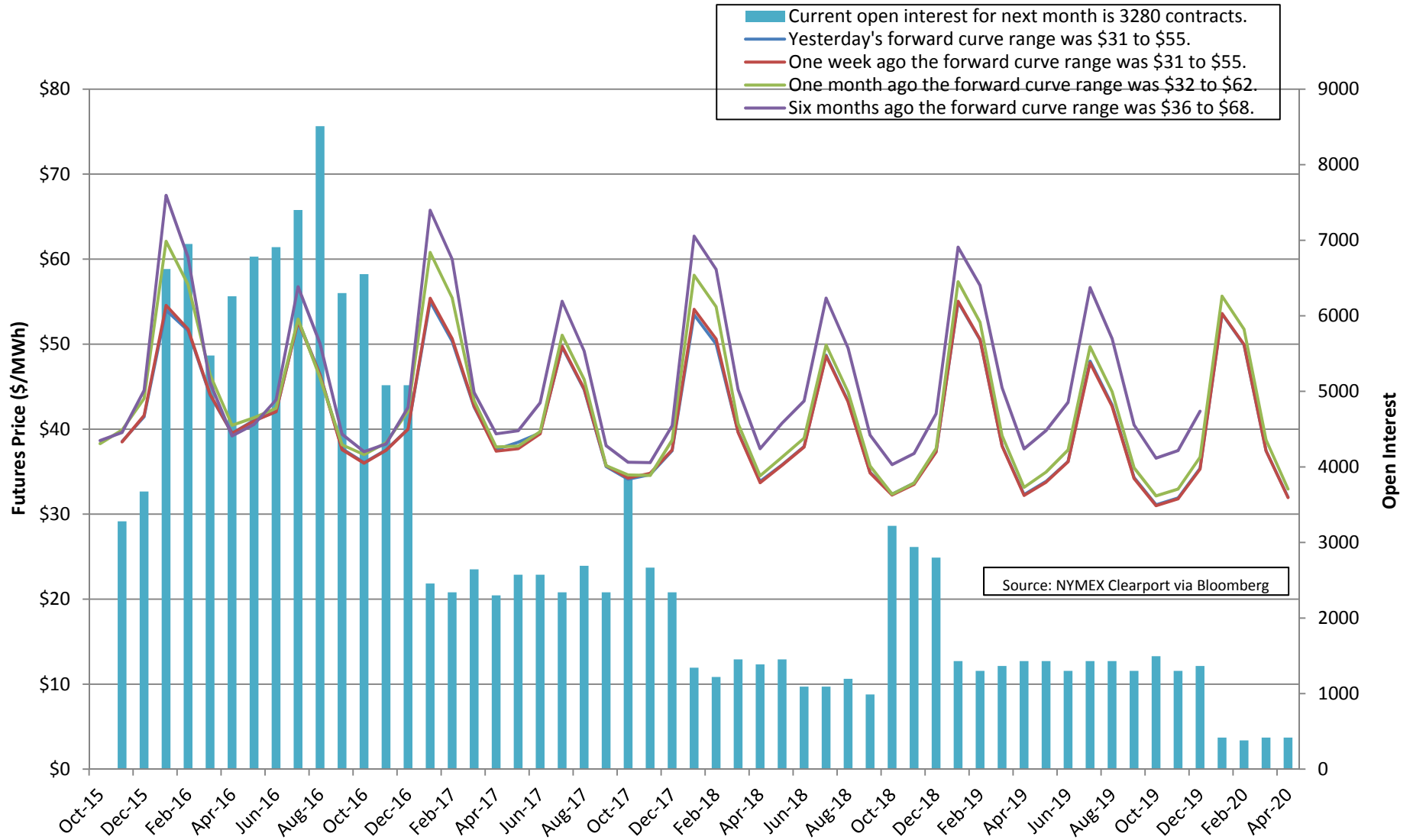


PJM System Daily Average Load —Two Year History

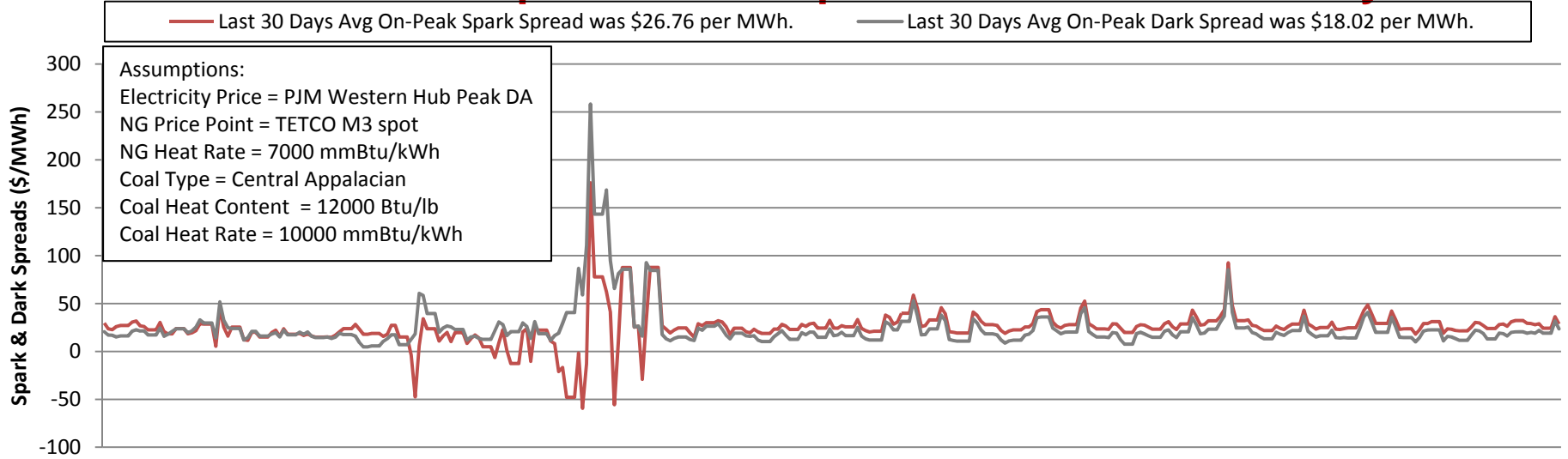


Source: Genscape via Bloomberg

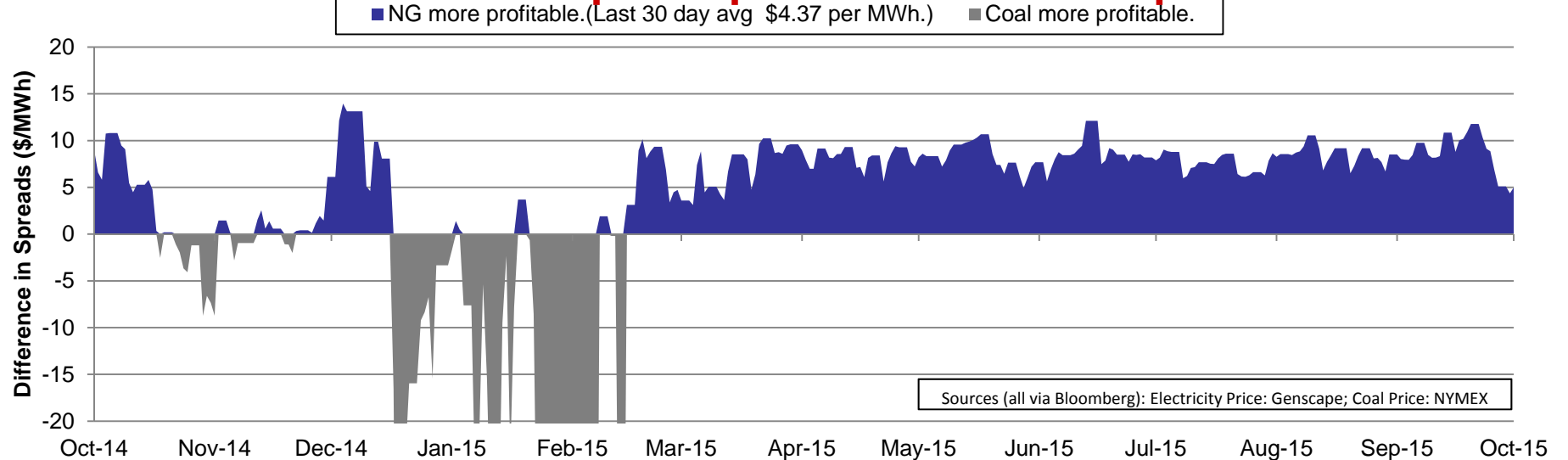
PJM Western Hub Peak RT Futures



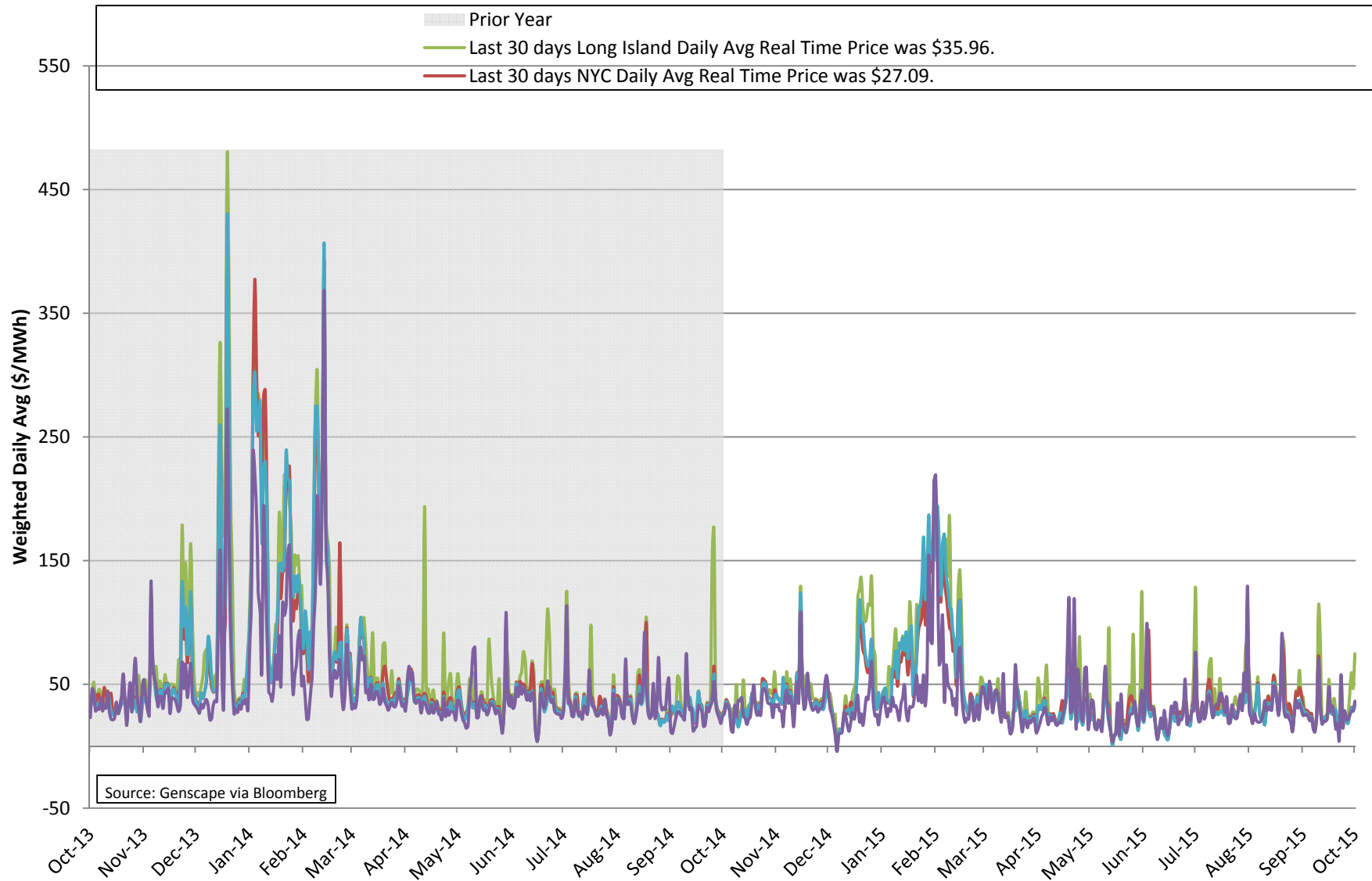
PJM On-Peak Spark & Dark Spreads – One Year History



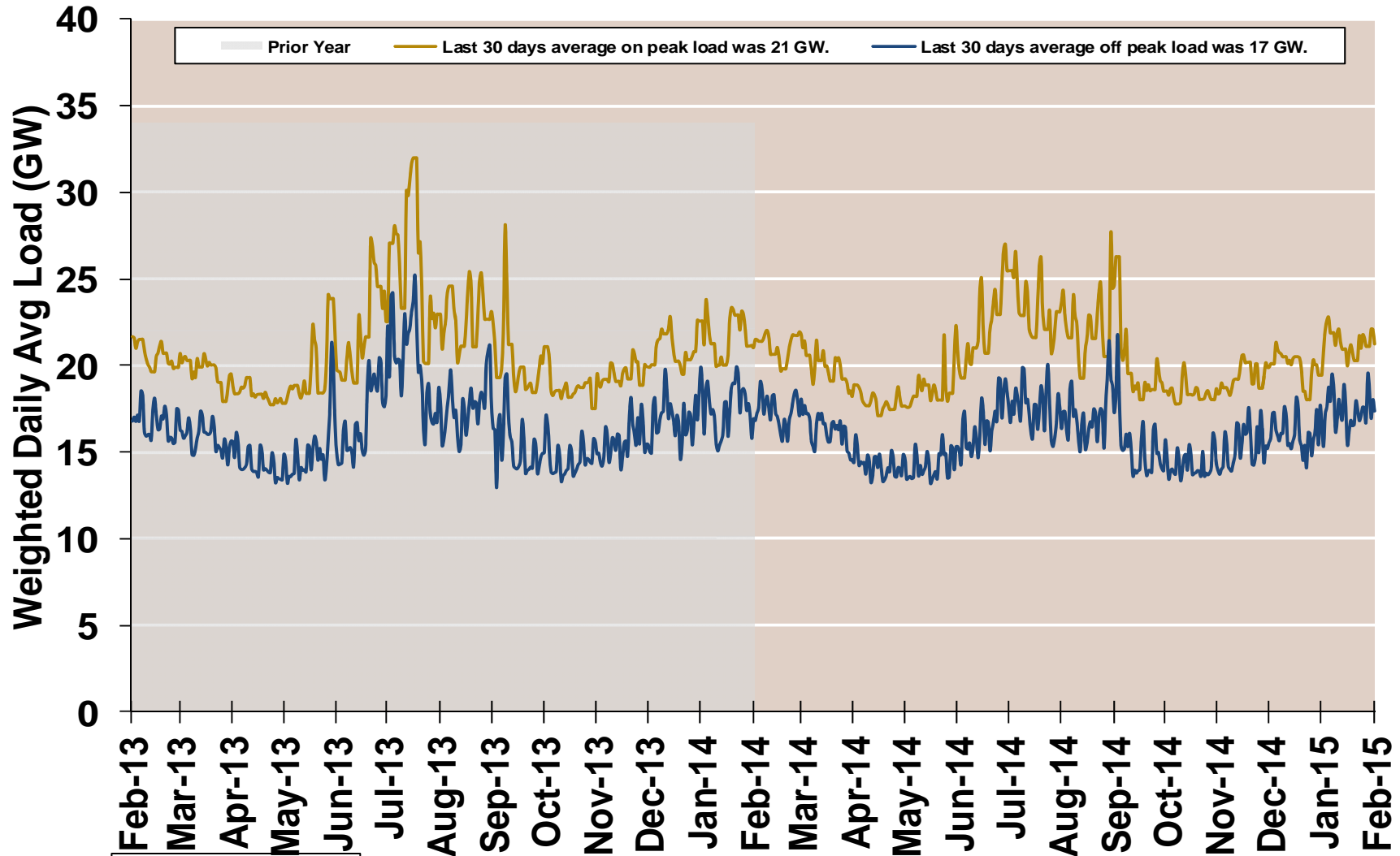
PJM On-Peak Spark Spread minus Dark Spread



NYISO Real Time Prices—Two Year History

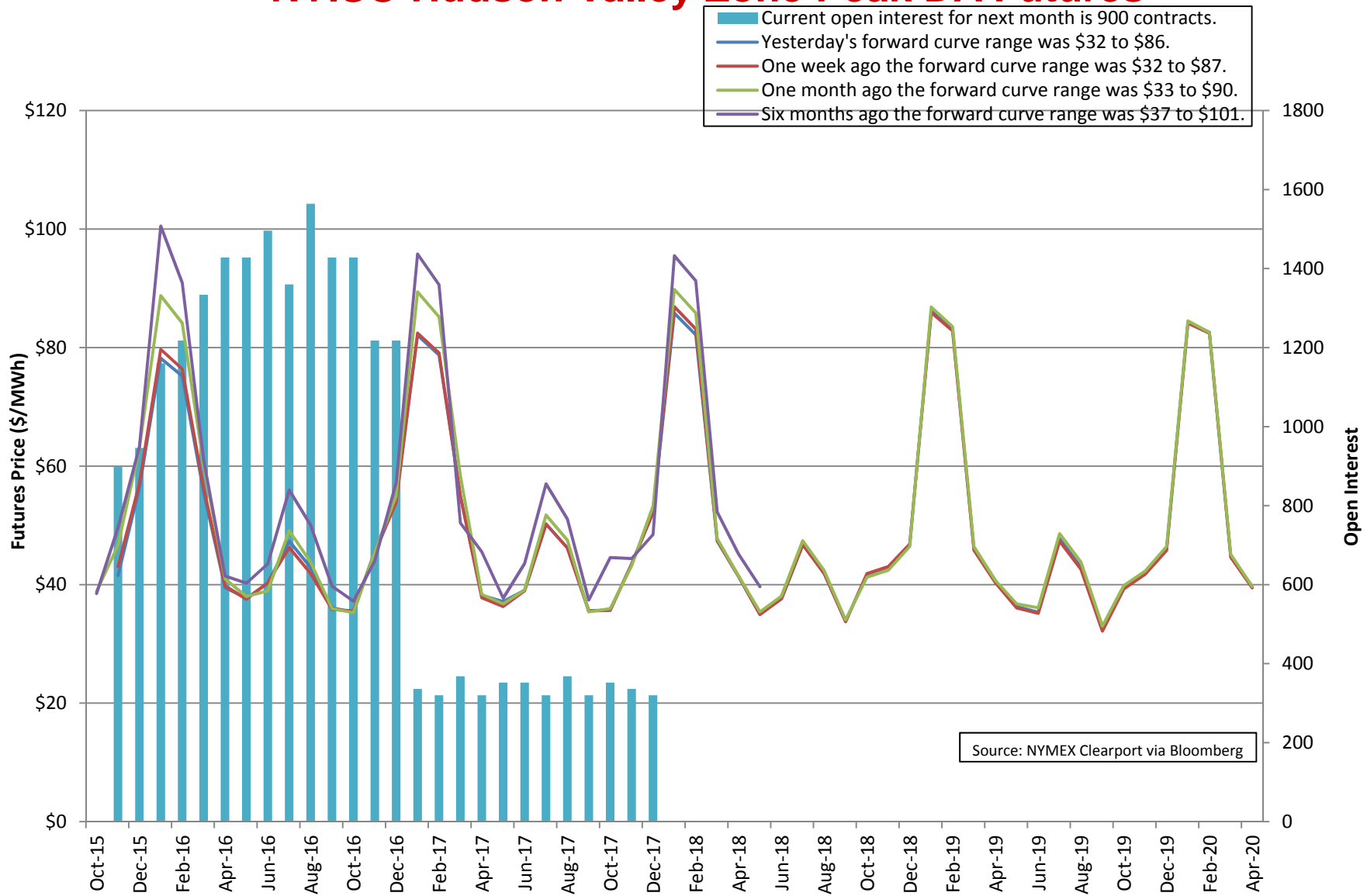


NYISO System Daily Average Load — Two Year History

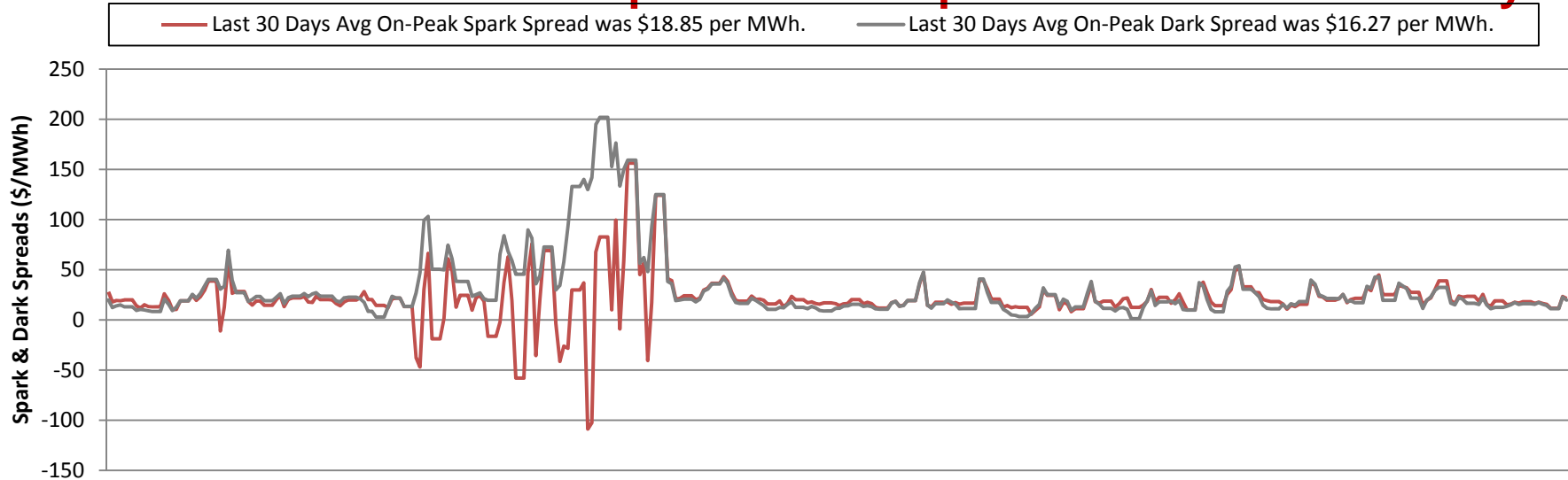


Source: Genscape via Bloomberg

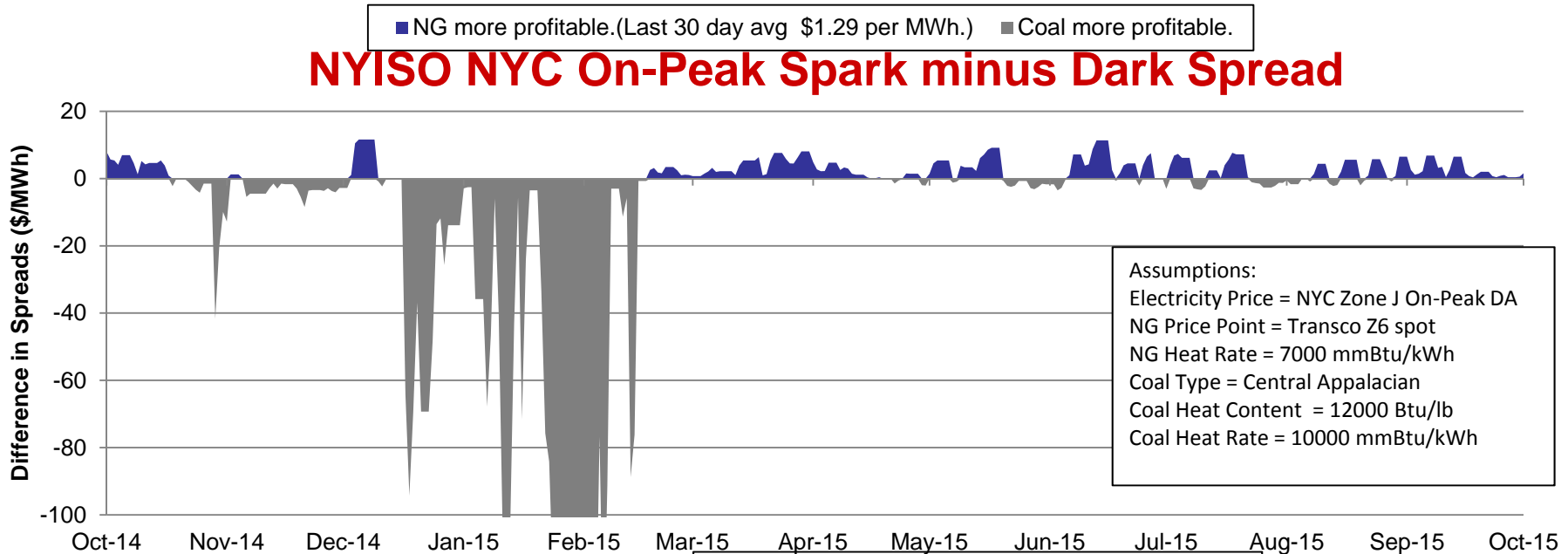
NYISO Hudson Valley Zone Peak DA Futures



NYISO NYC On-Peak Spark & Dark Spreads – One Year History



NYISO NYC On-Peak Spark minus Dark Spread

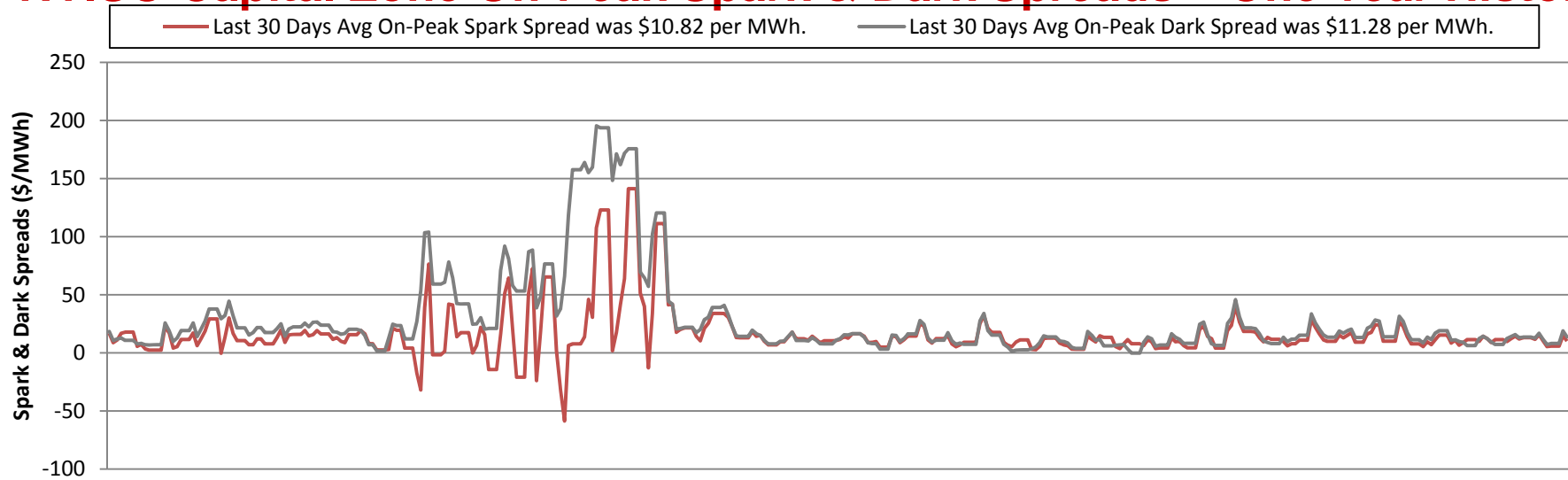


Assumptions:
 Electricity Price = NYC Zone J On-Peak DA
 NG Price Point = Transco Z6 spot
 NG Heat Rate = 7000 mmBtu/kWh
 Coal Type = Central Appalacian
 Coal Heat Content = 12000 Btu/lb
 Coal Heat Rate = 10000 mmBtu/kWh

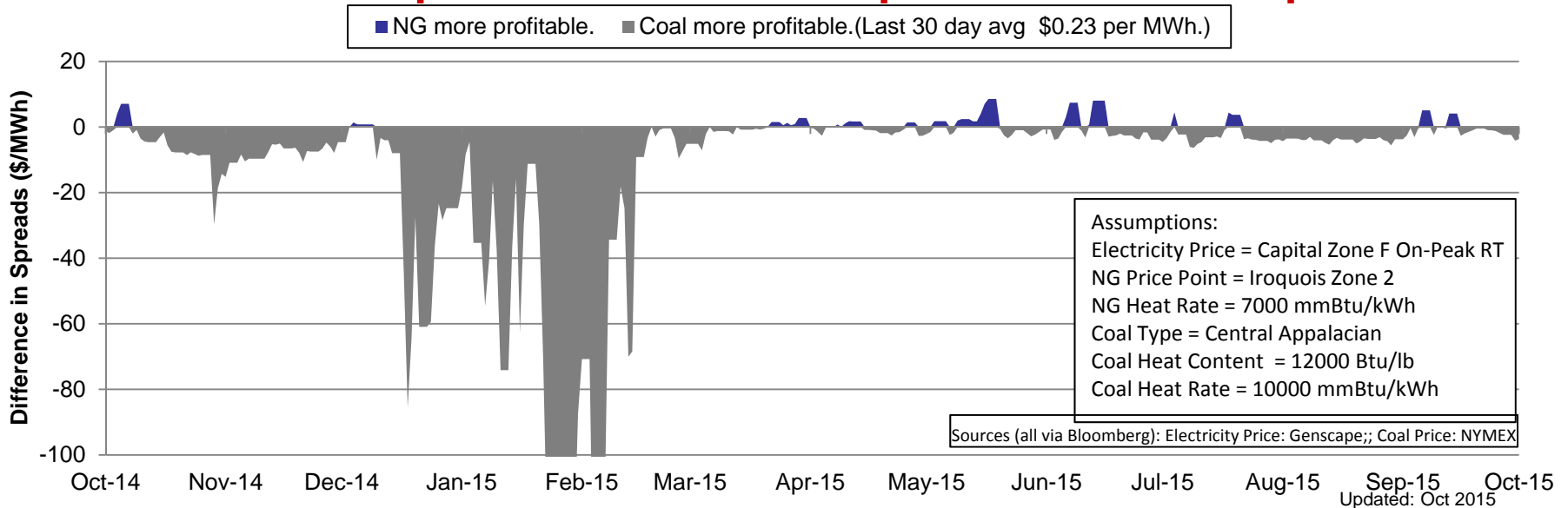
Sources (all via Bloomberg): Electricity Price: Genscape;; Coal Price: NYMEX

Updated: Oct 2015

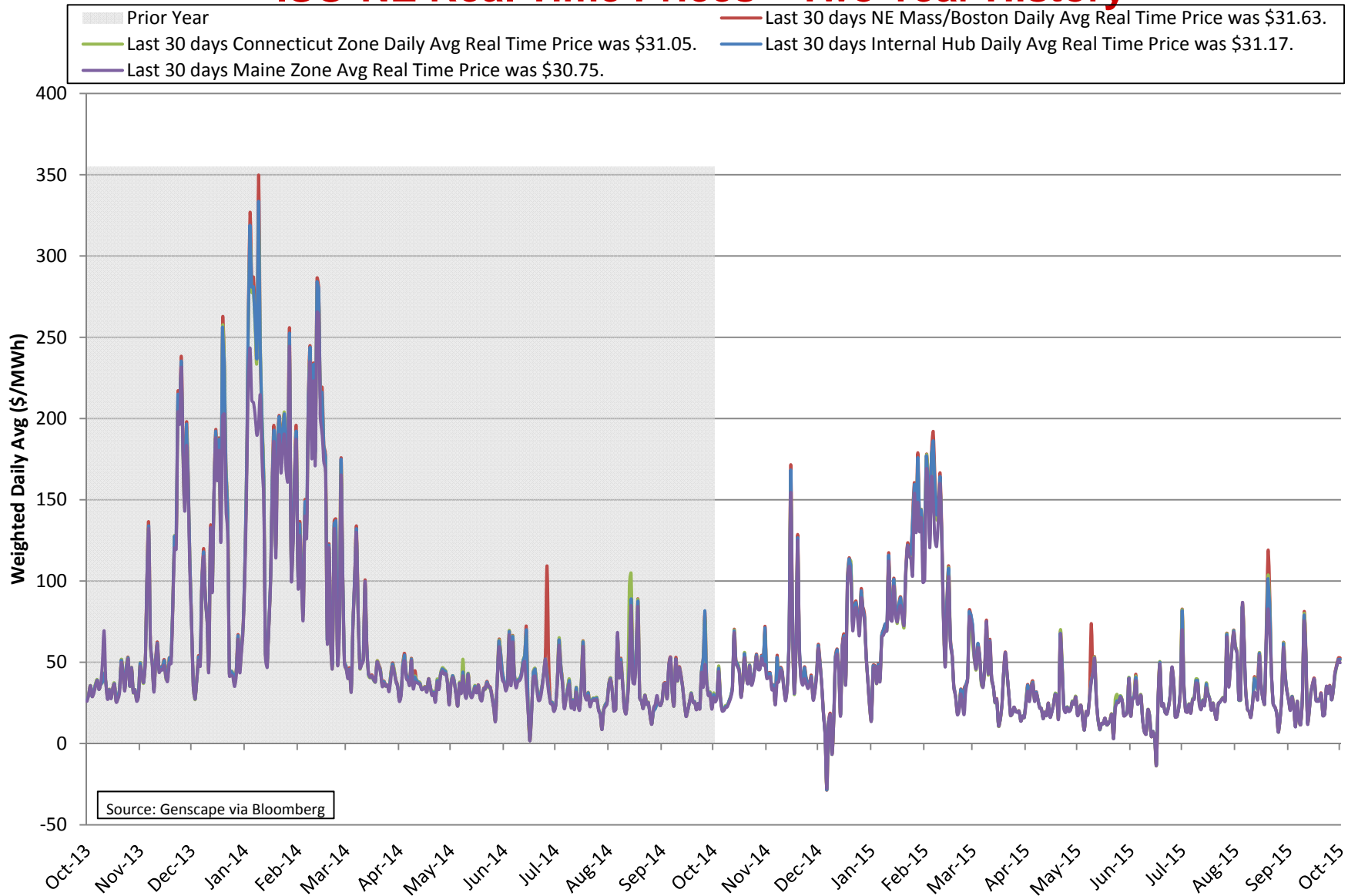
NYISO Capital Zone On-Peak Spark & Dark Spreads – One Year History



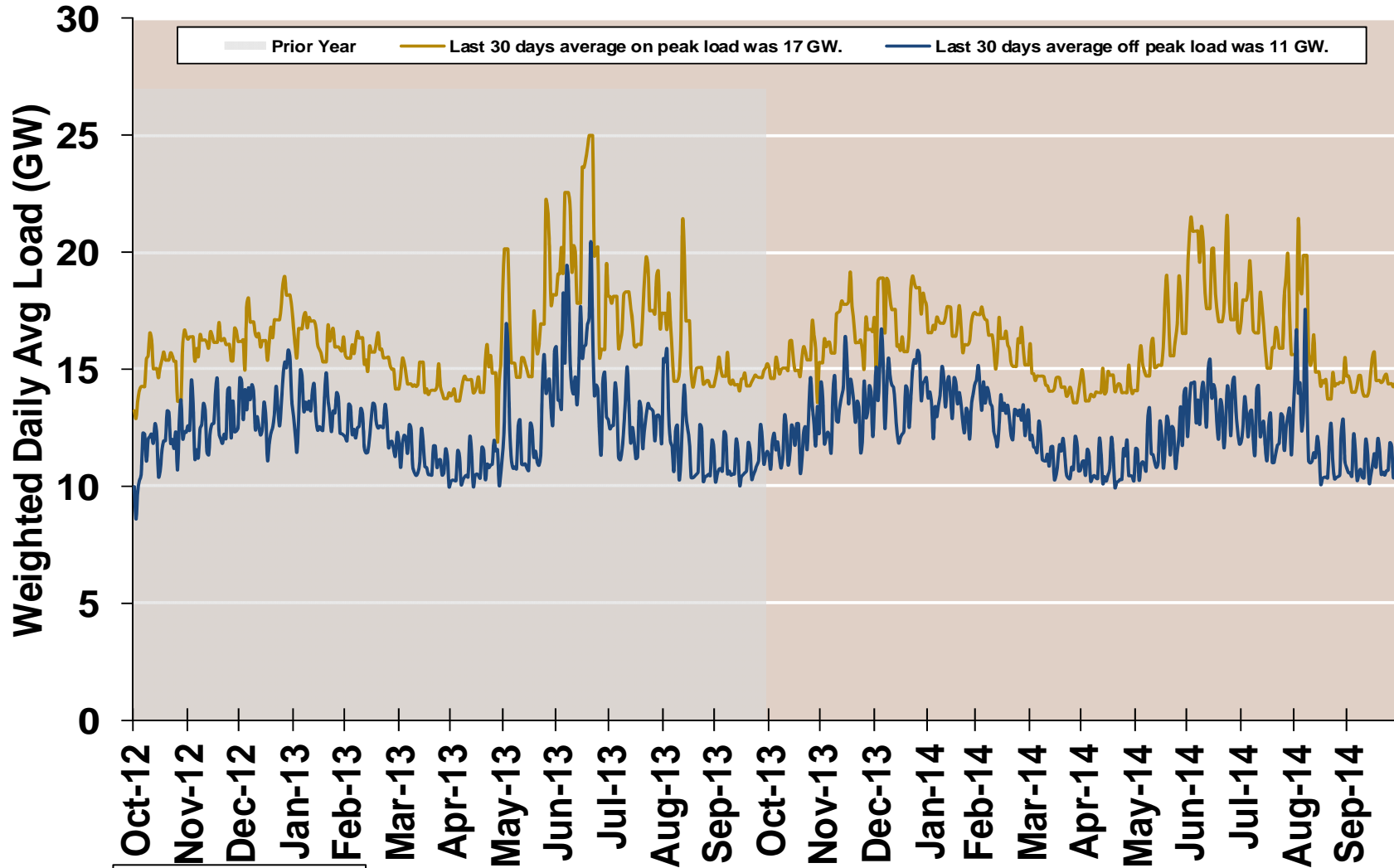
NYISO Capital Zone On-Peak Spark minus Dark Spread



ISO-NE Real Time Prices—Two Year History

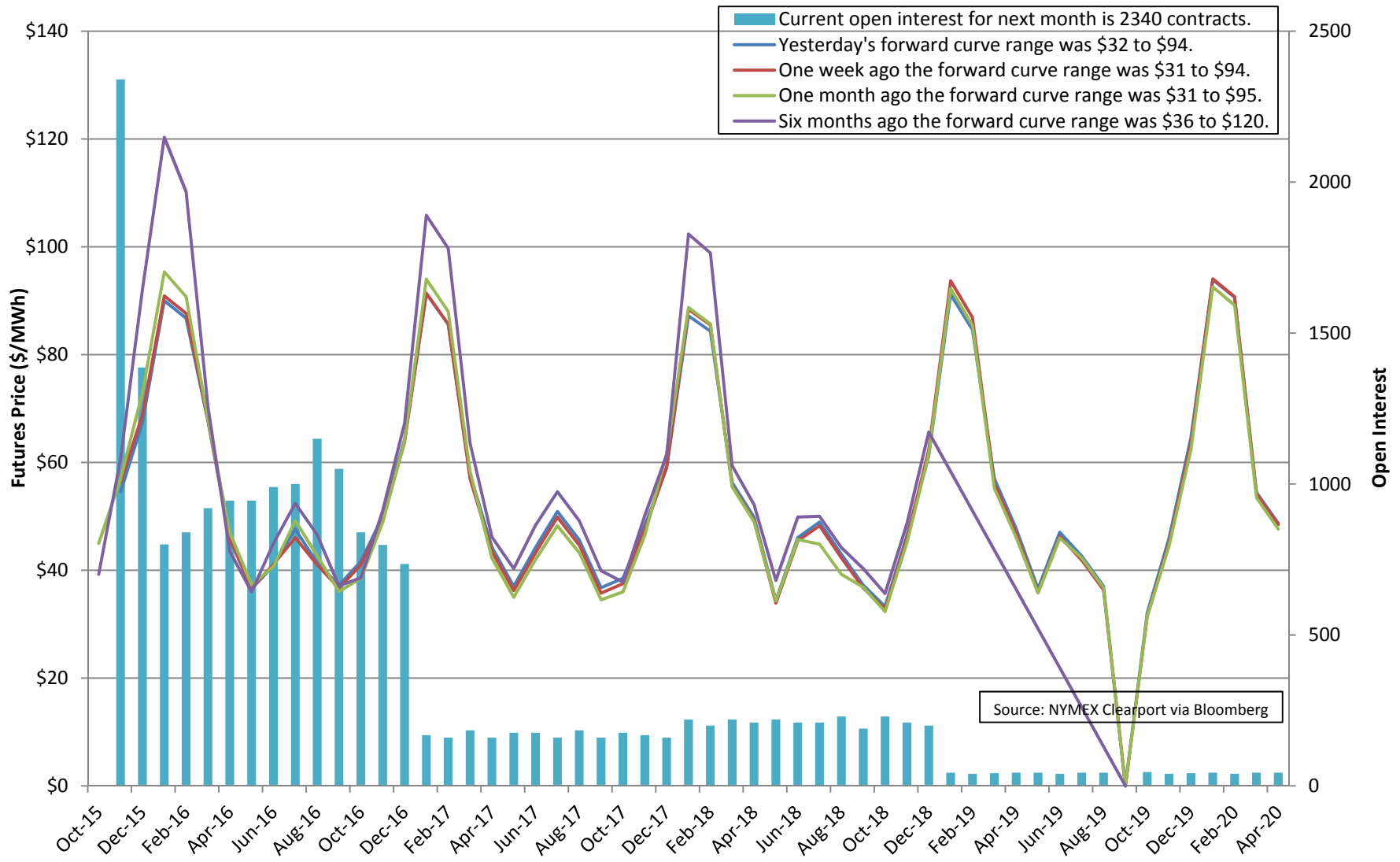


ISO-NE System Daily Average Load —Two Year History

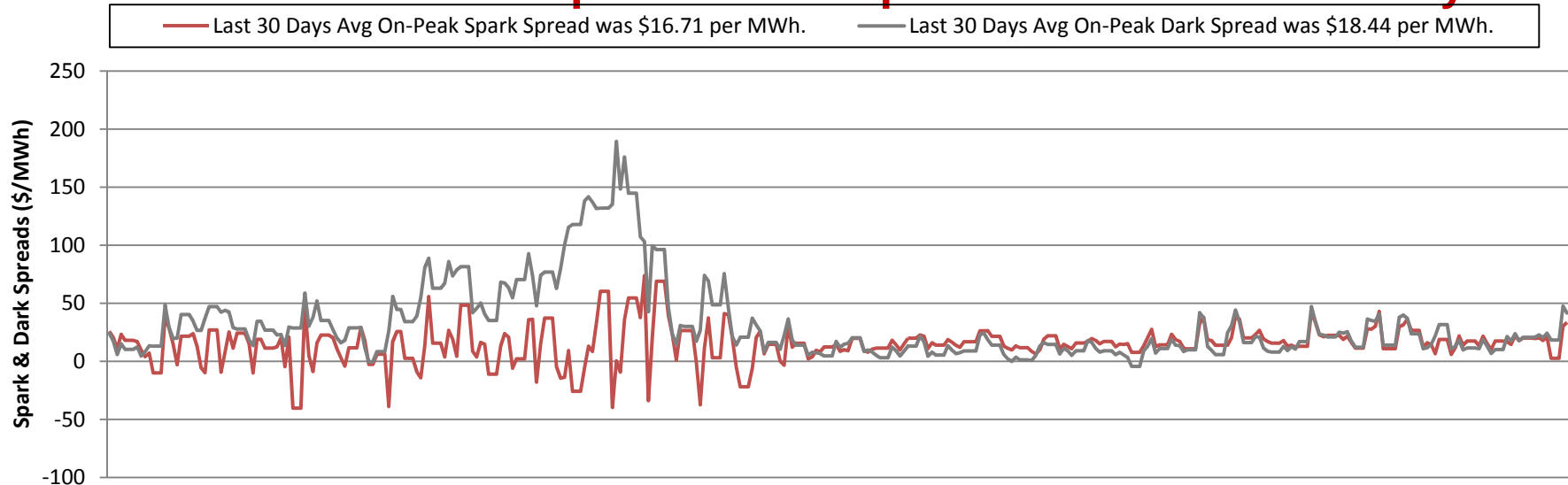


Source: Genscape via Bloomberg

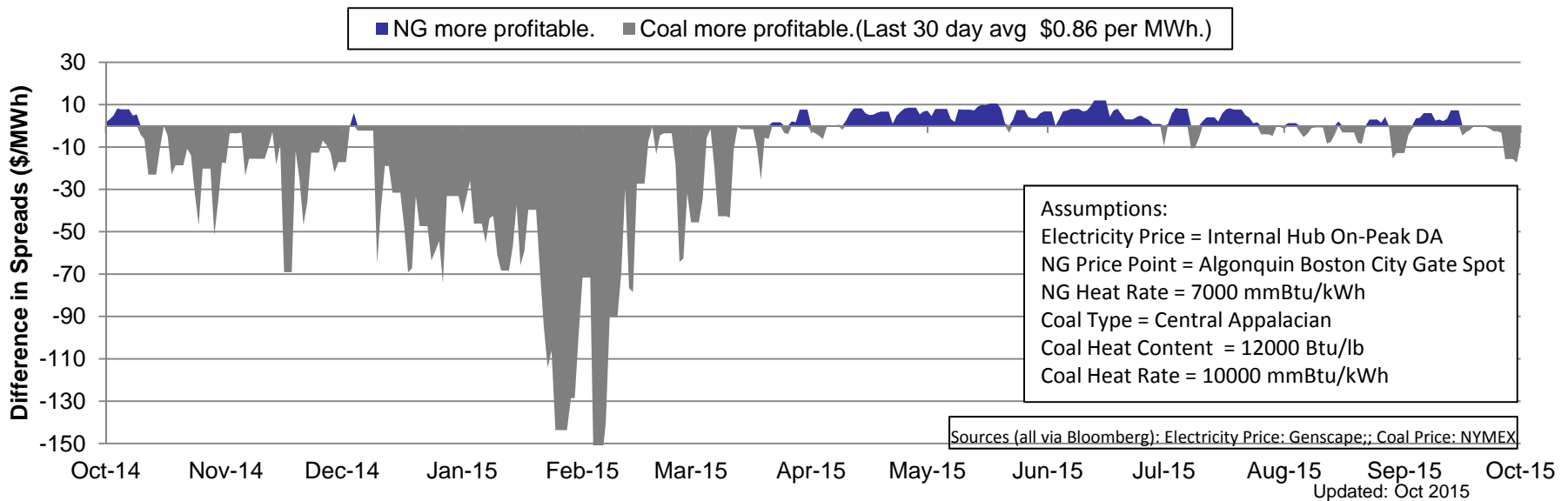
ISO-NE Internal Hub Peak DA Futures



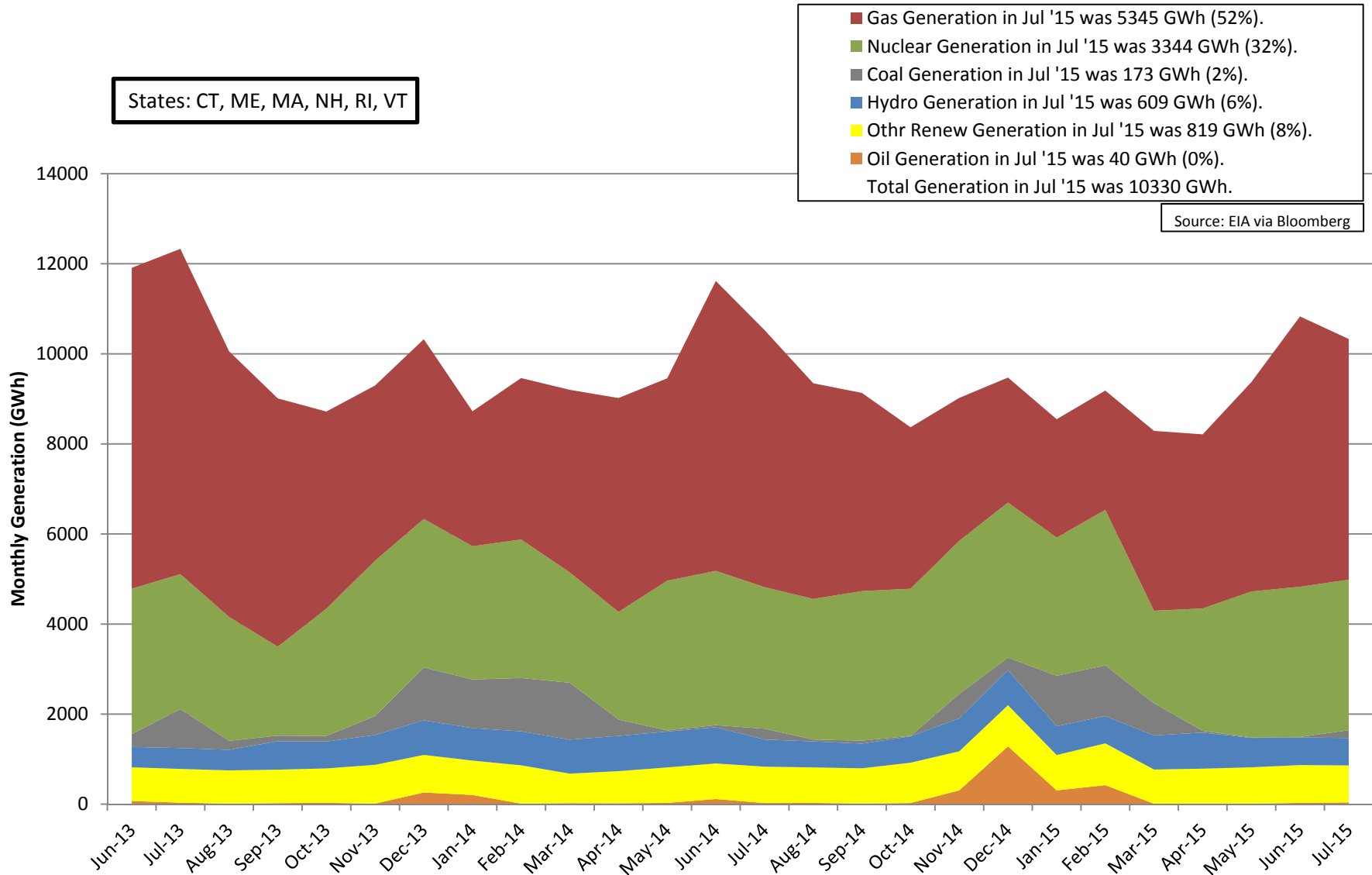
ISO-NE On-Peak Spark & Dark Spreads – One Year History



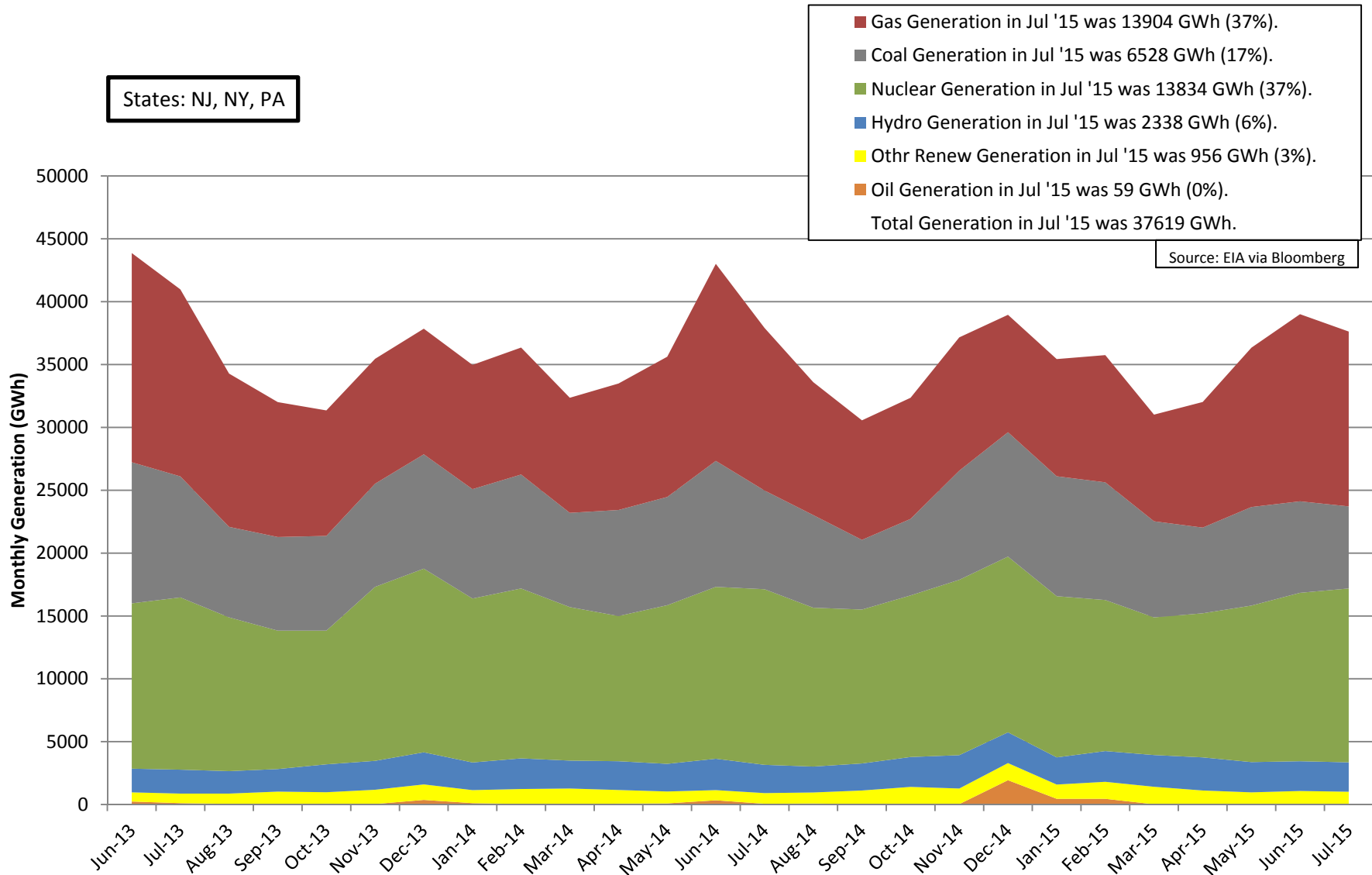
ISO-NE On-Peak Spark minus Dark Spread



New England Generation Mix



Mid Atlantic Generation Mix



South Atlantic Generation Mix

