PJM Wholesale Cost through May 2018 was $65.01/MWh, up from full-year 2017 costs of $49.64/MWh. (Slides 5 & 6)

In May, uplift exceeded $800,000 on 13 days; May 17th and 20th-31st. (Slides 10 & 11)

Load-weighted average LMP through May 2018 is $44.75/MWh: (Slide 17)
- May 2018 was $38.30/MWh, which is higher than both May 2017 ($31.50/MWh) and May 2016 ($24.00/MWh).

In May, temperatures were above average, especially towards the end of the month, thus the sum of Heating and Cooling Degree Days was slightly above its historic average.

Energy use was also slightly above its historic average. (Slides 18-20)
Executive Summary

- In June 2017, the calculation of FTR surplus was changed to no longer include Balancing congestion and Market to Market payments. (Slide 36)
- FTR revenue adequacy for the month of May is 100% and the 2017-2018 Planning Year remains fully funded. (Slides 36-39)
- Congestion remained at relatively low levels in May. (Slide 36)
- Regulation and Synchronized Reserve market costs have generally tracked with energy prices over time. (Slides 51-53)
Operating Reserve
Monthly Uplift - $/MWh Load

- Day-Ahead Operating Reserve
- Balancing Operating Reserve
- Reactive
- Blackstart
- Lost Opportunity Cost

$/MWh

MAY16  JUN16  JUL16  AUG16  SEP16  OCT16  NOV16  DEC16  JAN17  FEB17  MAR17  APR17  MAY17  JUN17  JUL17  AUG17  SEP17  OCT17  NOV17  DEC17  JAN18  FEB18  MAR18  APR18  MAY18
• In May uplift exceeded $800,000 on 13 days.; May 17th and 20th-31st.

• Contributing factors to uplift were:
  o Localized reliability concerns
  o Higher load levels throughout the month compared to May 2017
    o Results in volatile LMPs and in LOC
  o Outages in PJMs eastern areas
  o Reactive charges associated with area high voltage
Percent of Total CC, CT and Steam Hours with LMP < Offer
Beginning in December 2008, the daily Balancing Operating Reserves (BOR) rate was replaced with six different BOR rates: RTO BOR for Reliability Rate, RTO BOR for Deviations Rate, East BOR for Reliability Rate, East BOR for Deviations Rate, West BOR for Reliability Rate, West BOR for Deviations Rate.

Reliability rates are charged to all real-time load and exports, whereas deviation rates, as before, are charged only to real-time deviations. RTO rates are charged to the whole footprint, whereas East and West rate adders are charged based on location.
Reliability Balancing Operating Reserve Rates

$/MWh

MAY16 | JUL16 | OCT16 | JAN17 | MAY17 | JUL17 | OCT17 | JAN18 | MAY18

RTO
East
West
Energy Market
LMP Summary
Load-Weighted Average LMP

<table>
<thead>
<tr>
<th>Month</th>
<th>Price $/MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY16</td>
<td>$24</td>
</tr>
<tr>
<td>JUN16</td>
<td>$29</td>
</tr>
<tr>
<td>JUL16</td>
<td>$33</td>
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<tr>
<td>AUG16</td>
<td>$36</td>
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<tr>
<td>SEP16</td>
<td>$31</td>
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<tr>
<td>OCT16</td>
<td>$28</td>
</tr>
<tr>
<td>NOV16</td>
<td>$26</td>
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<tr>
<td>DEC16</td>
<td>$33</td>
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<tr>
<td>JAN17</td>
<td>$33</td>
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<td>FEB17</td>
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<td>MAR17</td>
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<td>DEC17</td>
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<td>JAN18</td>
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<td>MAR18</td>
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<td>APR18</td>
<td>$35</td>
</tr>
<tr>
<td>MAY18</td>
<td>$38</td>
</tr>
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</table>
The weather parameter shown in the following slide is a monthly sum of daily Heating Degree Days (HDD) and Cooling Degree Days (CDD).

Degree days represent a deviation from a baseline temperature, in this case 60 degrees for HDD and 65 degrees for CDD. As temperatures get more extreme, colder or hotter, either HDDs or CDDs, respectively, will increase.

Typically, winter months will only record HDDs, while summer months will only record CDDs. Shoulder months may have both HDDs and CDDs.

Degree Days are calculated using a daily load weighting that weights values from stations in each TO zone according to the zonal contribution to the RTO peak on that day.

Average values use data from 1998 to the most recent complete year, in this case, 2017. Averages include load data for all of TO zones in the current RTO footprint.
Historic Average Weather and Energy versus Current Month

- **Current Month Total Energy**
- **Current Month HDD+CDD**
- **Average Monthly Total Energy**
- **Average Monthly HDD + CDD**

<table>
<thead>
<tr>
<th>Month</th>
<th>Current Month Total Energy</th>
<th>Current Month HDD+CDD</th>
<th>Average Monthly Total Energy</th>
<th>Average Monthly HDD + CDD</th>
</tr>
</thead>
<tbody>
<tr>
<td>May17</td>
<td>TWh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun17</td>
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<tr>
<td>Jul17</td>
<td>TWh</td>
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<td>Oct17</td>
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<td>Nov17</td>
<td>TWh</td>
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<td>Dec17</td>
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<td>Feb18</td>
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<tr>
<td>Apr18</td>
<td>TWh</td>
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<td></td>
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</tr>
<tr>
<td>May18</td>
<td>TWh</td>
<td></td>
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</tr>
</tbody>
</table>
Fuel Cost Adjusted LMP (Referenced to 1999 Fuel Prices)
LMP Price Posting Suspensions and Reruns

Percentage of Intervals Price Posting Suspended

Percentage of Intervals Rerun prior to Final LMP Posting
Energy Market

Demand Response Summary
Demand Side Response Estimated Revenue

- Capacity
- Ancillary Services
- Emergency Energy
- Economic Energy
- Economic Energy Incentives

$ Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
<th>Ancillary Services</th>
<th>Emergency Energy</th>
<th>Economic Energy</th>
<th>Economic Energy Incentives</th>
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<td></td>
<td></td>
<td>$150</td>
<td></td>
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<tr>
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<td>2015</td>
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<td>2017</td>
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<td>$500</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
*Data for the last few months are subject to significant change due to the settlement window.
Total Registered MW in PJM's Economic Demand Response

MW

MAY16 JUL16 OCT16 JAN17 MAY17 JUL17 OCT17 JAN18 MAY18
Energy Market

Virtual Activity Summary
The following six charts depict trends in submitted and cleared virtual and up-to-congestion transactions, in terms of number and volume, into the PJM Energy Market. The first two of these charts show the submitted and cleared increment and decrement bids (virtual transactions or virtuals) and they are the same as what was previously being presented in this report. The two charts after them display the trends in submitted and cleared up-to-congestion transactions into the PJM Energy Market. The last two of these six charts combine the virtual and up-to-congestion transactions and show the sum of these two categories.

To clarify what a bid or transaction is, please consider the following example: An offer (increment, decrement or up-to-congestion) of 10 MW, valid for eight hours for a given day, is captured in the charts as eight submitted bids/transactions and 80 submitted MWh. If this offer fully clears for three of the hours it was submitted for, it shows in the charts as three cleared bids/transactions and 30 cleared MWh.
Virtual Bids (INC & DECs) - Total Number

- Submitted Bids
- Cleared Bids

Number of Bids (Millions)

- MAY16
- JUN16
- JUL16
- AUG16
- SEP16
- OCT16
- NOV16
- DEC16
- JAN17
- FEB17
- MAR17
- APR17
- MAY17
- JUN17
- JUL17
- AUG17
- SEP17
- OCT17
- NOV17
- DEC17
- JAN18
- FEB18
- MAR18
- APR18
- MAY18

PJM©2018
Virtual Bids (INC & DEC) - Total Volume

MWh (Millions)

Submitted MWh
Cleared MWh

<table>
<thead>
<tr>
<th>MAY16</th>
<th>JUN16</th>
<th>JUL16</th>
<th>AUG16</th>
<th>SEP16</th>
<th>OCT16</th>
<th>NOV16</th>
<th>DEC16</th>
<th>JAN17</th>
<th>FEB17</th>
<th>MAR17</th>
<th>APR17</th>
<th>MAY17</th>
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<th>AUG17</th>
<th>SEP17</th>
<th>OCT17</th>
<th>NOV17</th>
<th>DEC17</th>
<th>JAN18</th>
<th>FEB18</th>
<th>MAR18</th>
<th>APR18</th>
<th>MAY18</th>
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</tbody>
</table>
Up-To-Congestion Transactions - Total Number

Number of Transactions (Millions)

- Submitted Transactions
- Cleared Transactions

MAY16 | JUN16 | JUL16 | AUG16 | SEP16 | OCT16 | NOV16 | DEC16 | JAN17 | FEB17 | MAR17 | APR17 | MAY17 | JUN17 | JUL17 | AUG17 | SEP17 | OCT17 | NOV17 | DEC17 | JAN18 | FEB18 | MAR18 | APR18 | MAY18
INCs, DECs and Up-To-Congestion Transactions - Total Number
INCs, DECs and Up-To-Congestion Transactions - Total Volume

- Submitted MWh
- Cleared MWh

MWh (Millions)

- MAY16
- JUN16
- JUL16
- AUG16
- SEP16
- OCT16
- NOV16
- DEC16
- JAN17
- FEB17
- MAR17
- APR17
- MAY17
- JUN17
- JUL17
- AUG17
- SEP17
- OCT17
- NOV17
- DEC17
- JAN18
- FEB18
- MAR18
- APR18
- MAY18
Energy Market

Congestion and FTR Summary
FTR Revenue vs. FTR Target Allocation

$ Millions

- Total FTR Revenues
- Total FTR Targets

MAY 16, JUN 16, JUL 16, AUG 16, SEP 16, OCT 16, NOV 16, DEC 16, JAN 17, FEB 17, MAR 17, APR 17, MAY 17, JUN 17, JUL 17, AUG 17, SEP 17, OCT 17, NOV 17, DEC 17, JAN 18, FEB 18, MAR 18, APR 18, MAY 18
<table>
<thead>
<tr>
<th>Period</th>
<th>Surplus / Underfunding</th>
<th>Payout Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>May, 2018</td>
<td>$16,492,943</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>$288,181,441</td>
<td>100%</td>
</tr>
<tr>
<td>2017/2018</td>
<td>$362,783,536</td>
<td>100%</td>
</tr>
</tbody>
</table>
Ten Most Heavily Congested Transmission Facilities - Overall, May

- Graceton-Safe Harbor 230 (BGE)
- Nottingham Reactor 230 (PECO)
- Jackson-Maple 138 (ATSI)
- Sedge Hill-Person 296C 230 (DOM)
- Conastone-Peach Bottom 500 (EHV)
- Pierce Duke 345/138 BK18 (DEOK)
- CPL-DOM Interface (EHV)
- Ashburn-Pleasant View 230 274D (DOM)
- Emilie-Falls 138 (PECO)
- Mitchell-Wilson 138 (APS)
Energy Market

Interchange/Seams Summary
Monthly Average NYISO Interface Pricing

$/MWh

MAY16    JUL16    OCT16    JAN17    MAY17    JUL17    OCT17    JAN18    MAY18

PJM NYISO Price (RT)
NYISO PJM Price (RT)
PJM NYISO Price (DA)
NYISO PJM Price (DA)
Hourly Difference Between PJM and MISO Real-Time Prices

Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Average price difference for May = $1.58
Percent of hours in which the direction of flow is consistent with price differentials = 52.42%
Hourly Difference Between PJM and MISO Day-Ahead Prices

Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Average price difference for May = $-2.17
Hourly Difference Between PJM and NYISO Real-Time Prices

Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Average price difference for May = $0.05
Percent of hours in which the direction of flow is consistent with price differentials = 65.86%
Hourly Difference Between PJM and NYISO Day-Ahead Prices

Positive values represent hours when the PJM price was higher. Negative values represent hours when the PJM price was lower.

Average price difference for May = $3.44
Negative M2M Credit represents PJM payment to MISO
PJM-NYISO Market-to-Market Coordination Settlement

Negative M2M Credit represents PJM payment to NYISO

- Net M2M Credit ~ NYISO ($ Millions)
- Net M2M Credit ~ NYISO/Total FTR Targets (%)
Ancillary Service Market

Summary
Synchronized Reserve and Synchronous Condenser Costs
Load-Adjusted Synchronized Reserve and Synchronous Condenser Costs