Preliminary 2019 Load Forecast

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Resource Adequacy Planning
Planning Committee
December 13, 2018
• 2019 Preliminary Load Forecast Review
  – Summer
    • Results
    • Decomposition of Change
  – Winter
    • Results
    • Decomposition of Change
  – Adjustment Requests
• Next Steps
Model Parameters

- Estimation Period: January 1998 through August 2018
- Weather Simulation: 1993 to 2017 (325 Scenarios)
- Economics: September 2018 vintage from Moody’s Analytics
- Equipment Indices: Based on Itron’s 2018 release
- Residential, Commercial, and Industrial weights from EIA 861
- AWS Solar Addbacks & IHS Solar Forecast (zonal & peak allocation by PJM)
- Forecast Adjustments – APS, BGE, COMED and Dominion
Summer
PRELIMINARY - PJM RTO Summer Peak Forecast

2022 Comparison
2018 Forecast to 2019 Preliminary = Down 0.4%

2024 Comparison
2018 Forecast to 2019 Preliminary = Down 0.5%
PRELIMINARY - PJM RTO 2022 Summer Peak Comparison
Preliminary 2019 Forecast vs 2018 Forecast

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PRELIMINARY - PJM RTO 2024 Summer Peak Comparison
Preliminary 2019 Forecast vs 2018 Forecast
Summarized Impacts on PJM RTO 2022 Summer Forecast

- 2018 forecast
- Economics: -0.1%
- Equipment Index: -0.2%
- Weather Simulation: 0.0%
- Solar - BTM Forecast Impact: 0.4%
- Solar - Capacity Factor Impact: -0.4%
- Forecast Adjustments: 0.0%
- Bringing In 2018 Loads*: -0.5%
- Addition of OVEC: 0.1%
- Preliminary 2019 Forecast (W/O OVEC): -0.4%
- Preliminary 2019 forecast: -0.4%
PJM - Summer 2024 Decomposition of Change

Summarized Impacts on PJM RTO 2024 Summer Forecast

- Economics: -0.3%
- Weather Simulation: -0.2%
- Solar: 0.0%
- Solar Capacity Factor Impact: 0.3%
- Forecast Adjustments: -0.4%
- Bringing in 2022 Loads: 0.1%
- Preliminary 2019 Forecast (w/o OVEC): -0.6%
- Addition of OVEC: 0.0%
- Preliminary 2019 Forecast: -0.5%

2018 Forecast

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Winter
2021/22 Comparison
2019 Forecast to 2019 Preliminary
= Down 0.4%

2023/24 Comparison
2018 Forecast to 2019 Preliminary
= Down 0.4%
Preliminary 2019 Forecast vs 2018 Forecast
PRELIMINARY - PJM RTO 2024 Winter Peak Comparison
Preliminary 2019 Forecast vs 2018 Forecast
PRELIMINARY – Winter 2022 Decomposition of Change
PRELIMINARY – Winter 2024 Decomposition of Change

Summarized Impacts on PJM RTO 2024 Winter Forecast

- 2018 Forecast
- Economics
- Equipment Index
- Weather Simulation
- Solar - BTM forecast impact
- Solar - Capacity factor impact
- Forecast Adjustments
- Bringing in 2018 Leads
- Preliminary 2019 forecast (w/o OVEC)
- Addition of OVEC
- Preliminary 2019 Forecast
**New Zone Summary Page**

**Delmarva Power (DPL)**

### Summer Non-Coincident Peak

- Yearly load chart showing trends from 2001 to 2031.

### Winter Non-Coincident Peak

- Yearly load chart showing trends from 2001 to 2031.

### Weather - Annual Average 1994-2016

<table>
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<th>CDD</th>
<th>HDD</th>
<th>THI</th>
<th>WWP</th>
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<tr>
<td>1,166</td>
<td>3,372</td>
<td>84</td>
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**RCI Makeup**

- 42% Residential
- 42% Commercial
- 16% Industrial

**LDAs**

**EASTERN MID- ATLANTIC**
- PJM MID- ATLANTIC
- PJM RTO

**Zonal 10/15 Load Growth**

- DPL SUMMER vs WINTER
- 10-Year Growth
- 15-Year Growth

**Metropolitan Statistical Areas and Weather Stations**

- Salisbury, MD-DE Metropolitan Statistical Area
- Wilmington, DE-MD-NJ Metropolitan Division
- ILG
- WAL

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Next Steps

• Incorporate corrected loads and additional addbacks
• Publish final report in late December
  – Unrestricted Loads Spreadsheet
  – Statistical Appendix
  – Economic Variable and Equipment Index Data
  – Moody’s Analytics Economics Report
• Receive and analyze Peak Shaving Adjustment Requests
  – Publish updated load forecast report in mid-March 2019
• 2019: Resume load forecast model development