Load Analysis Subcommittee
Teleconference / Web conference
Wednesday, November 15, 2017
1:00 p.m. – 4:00 p.m. EPT

Administration

1. Mr. John Reynolds opened the meeting and reviewed the agenda. Ms. Molly Mooney performed roll call.

2. The Load Analysis Subcommittee reviewed and approved the draft minutes from the July 17, 2017 meeting. No changes were requested. Minutes will be posted as final.

Load Forecast Development

3. Distributed Solar Generation Forecast

Mr. Thomas Maslin, IHS Markit, presented the forecast of installed behind-the-meter solar generation for PJM states. The three forecast scenarios that were produced for PJM were reviewed. Ms. Molly Mooney discussed how PJM converts the IHS forecast to zonal impacts at peak load conditions. PJM is currently working with AWS Truepower to develop historical back-casts for behind the meter solar facilities in the PJM footprint. AWS Truepower will present methodology and results at a future LAS meeting in early 2018.

4. Preliminary 2018 PJM Load Forecast

Mr. Andrew Gledhill presented the preliminary 2018 load forecast and the impact of updated economic, efficiency, load, weather, load adjustments, and solar data on the RTO forecast compared to the 2017 load forecast. An additional file showing the decomposition of changes for each zone was also posted with meeting materials. Also, two files showing PJM’s consideration of load adjustments for the 2018 load forecast were posted with meeting materials.

5. Review of Summer 2017 Load

Ms. Amanda Long presented an overview of peak loads and weather experienced in the summer of 2017.

6. Weather Normalization of Load

Mr. John Reynolds reviewed PJM’s current weather normalization process and where these weather normalized values are used. PJM plans on reviewing the weather normalization process in 2018 and will update the LAS of any changes. There is a data spreadsheet posted with meeting materials that shows zonal Non Coincident Peak (NCP) weather normalized values, average zonal diversities, and zonal Coincident Peak (CP) weather normalized values.

7. Load Forecast Accuracy

Mr. Andrew Gledhill presented the accuracy report for the PJM load forecast model. The RTO accuracy for both the summer and the winter were reviewed.
8. Potential Load Forecast Enhancements

Mr. Andrew Gledhill reviewed ongoing work to identify improvements to the load forecasting model. In particular, PJM was tasked with reviewing the winter load forecast model accuracy. The impact of base loads and peak loads were shown and reviewed along with an initial framework to have two models, one that produces a forecast of base load and a second that forecasts total load using the results from the first base load model. PJM will continue work and share results in the first half of 2018.

In Attendance

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
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<tbody>
<tr>
<td>Ryan Dolan</td>
<td>AEP Energy Partners, Inc.</td>
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<tr>
<td>Dylan Drugan</td>
<td>American Electric Power</td>
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<td>Scott Fisher</td>
<td>American Electric Power</td>
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<tr>
<td>Randy Holliday</td>
<td>American Electric Power</td>
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<td>Nicholas Tichich</td>
<td>American Electric Power</td>
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<td>John McDaniel</td>
<td>Baltimore Gas and Electric Company</td>
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<td>Sara Bishop</td>
<td>Calpine</td>
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<td>Jung Suh</td>
<td>Calpine</td>
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<td>David Apostol</td>
<td>Commonwealth Edison Company</td>
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<td>Dennis Kelter</td>
<td>Commonwealth Edison Company</td>
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<tr>
<td>Rehan Gilani</td>
<td>ConEdison Energy, Inc.</td>
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<td>Tiffany Smith</td>
<td>Constellation</td>
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<td>Greg Poulos</td>
<td>Consumer Advocates of PJM States</td>
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<tr>
<td>Guy Filomena</td>
<td>Customized Energy Solutions, Ltd.</td>
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<td>Carl Johnson</td>
<td>Customized Energy Solutions, Ltd.</td>
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<td>Jonathan Sasser</td>
<td>Customized Energy Solutions, Ltd.</td>
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<td>Joseph DeLosa</td>
<td>DE Public Service Commission</td>
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<td>John Horstmann</td>
<td>Dayton Power &amp; Light Company</td>
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<td>David Hastings</td>
<td>DhasCo, LLC</td>
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<td>Billy Coyle</td>
<td>Dominion Virginia Power</td>
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<td>Sid Hays</td>
<td>Dominion Virginia Power</td>
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<td>Abhijit Rajan</td>
<td>Dominion Virginia Power</td>
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<td>Karim Siamer</td>
<td>Dominion Virginia Power</td>
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<td>Bob Wilson</td>
<td>Dominion Virginia Power</td>
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<td>Sally Witt</td>
<td>East Kentucky Power Cooperative, Inc.</td>
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<td>Tim Gusick</td>
<td>Eastern Generation</td>
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<td>Bruce Campbell</td>
<td>Energy Connect, Inc</td>
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<td>Malcolm Ainspan</td>
<td>Energy Curtailment Specialists, Inc.</td>
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<td>Paul Flemming</td>
<td>ESAl</td>
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<td>Scott Niemann</td>
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<td>Sharon Midgley</td>
<td>Exelon Generation Co., LLC</td>
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<tr>
<td>Jim Benchek</td>
<td>FirstEnergy Corporation</td>
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Meeting Minutes

Martin Bolan
Brad Eberts
Debbie Kanner
Bill Moll
Jon Schneider
Tom Hyzinski
David Pratson
Roy Shanker
Thomas Maslin
Alan Nasr
James Peters
Jeff Whitehead
Kevin Obrien
Tom Hoatson
Peterson Hawkins
Dave Mabry
James Manning
Neal Fitch
Adrien Ford
Gregory Carmean
Stephen Wreschnig
Ken Foladare
Kyle VanderHelm
James Wilson

FirstEnergy Corporation
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FirstEnergy Corporation
GT Power Group
GT Power Group
H.Q. Energy Services (U.S.), Inc
IHS Energy
ITC Mid-Atlantic Development, LLC
ITC Transco
JW Energy Solutions, LLC
Leidos
LS Power
Luminus Management, LLC
McNees Wallace & Nurick LLC
NCEMC
NRG Power Marketing LLC
Old Dominion Electric Cooperative
OPSI
Public Service Electric & Gas Company
Tangibl
Tenaska
Wilson Energy Economics

PJM Staff
John Reynolds, Chairman
David Anders
Danielle Croop
Tom Falin
Andrew Gledhill
David Kimmel
Amanda Long
Patricio Rocha-Garrido
Ken Schuyler
Molly Mooney, Secretary

PJM Interconnection, L.L.C.
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