

**Market Settlements Subcommittee
Conference Call
October 13, 2016
1:00 p.m. – 4:00 p.m. EST**

Administration

PJM reviewed the Anti-Trust Policy, Code of Conduct and Media Participation Policy and performed roll call. The Subcommittee approved the minutes from the September 22, 2016 MSS meeting.

Working Issues

1. Updates to PJM PDF Billing Invoice

Mr. Sean Flamm, PJM, reviewed the recent updates to the PJM PDF Billing Invoices. The updates give users the ability to copy and paste text from the invoice, add annotations to text, add drawing markups, and combine the PDFs into a PDF portfolio.

2. PJM Metering Task Force Update

Mr. Ryan Nice, PJM, discussed the recent updates and deliverables from the Metering Task Force and how they impact PJM settlements. To summarize, Manual 01, Control Center and Data Exchange Requirements, Section 5: Metering System Requirements has been updated and restructured. Billing Metering is now separated from Operational Metering. Upcoming revisions will update accuracy requirements for backup settlement meters.

In addition to the Manual 01 changes, Manual 28 will also be updated to provide a description of a fully metered EDC.

There was a request for PJM to provide education on how Real Time metering impacts settlements, specifically how Real Time MWs are used to calculate Real Time LMP prices on the system. PJM will cover this education at a future Market Settlements Subcommittee meeting.

3. NSPL Daily Zonal Scaling Factors – Rounding Issues and Possible Solutions

Mr. Sean Flamm, PJM, presented slides on the rounding issues involved with the NSPL scaling and data submission changes in eRPM. He presented two solution options, the D'Hondt Allocation Method and an alternate allocation method based on rounding differences. The subcommittee reviewed examples of each method and conducted a WebEx poll to determine which solution would be preferred. The poll results showed 16 votes for D'Hondt Allocation method and 8 votes for the alternate allocation method. PJM will continue developing the NSPL Daily Zonal Scaling Factor change by using the D'Hondt Allocation method.

4. FERC Order 825 – Discussion on Sub-Hourly Settlements

Mr. Ray Fernandez, PJM, discussed the Generation and Load imbalance component related to the 5 minute settlement implementation. He described how an imbalance is inherently introduced in the Real Time Net Interchange calculation due to flat profiling of load. This imbalance impacts the 5 minute balancing spot market energy charge, spot market loss value, total hourly transmission loss charges, and the hourly transmission loss credits allocated to market participants. Ray will discuss these changes at the November 2, 2016 MIC meeting.

No changes to InSchedule have been identified. PowerMeter will be changed to allow generators to submit 5 minute data if it is available and will display the hourly integrated value in the tool.

PJM will continue to provide education on the impacts of the 5 minute settlement implementation.

Miscellaneous Settlements Items

Mr. Nick DiSciullo, PJM, provided an update on the new LSE InSchedule and NSPL Activity Summary report, which was covered at the September 22, 2016 MSS meeting. The report is currently being developed, and more details will be communicated to the Market Settlements Subcommittee email distribution in the near future.

Future Agenda Items

Participants will have the opportunity to request the addition of any new item(s) to the agenda of a future meeting.

Future Meeting Dates

November 10, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
December 8, 2016	1:00 p.m. – 4:00 p.m.	Conference Call
January 19, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
February 16, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
March 16, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
April 20, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
May 18, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
June 15, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
July 20, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
August 17, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
September 21, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
October 19, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
November 16, 2017	1:00 p.m. – 4:00 p.m.	Conference Call
December 7, 2017	1:00 p.m. – 4:00 p.m.	Conference Call

Attendees

Fernandez, Ray (Chair)	PJM Interconnection, LLC	Not Applicable
DiSciullo, Nick (Secretary)	PJM Interconnection, LLC	Not Applicable
Ahuja, Sarang	Exelon Generation Co., LLC	Generation Owner
Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Atlas, Ted	Talen Energy Marketing, LLC	Not Applicable
Austin, Larry	PJM Interconnection, LLC	Not Applicable
Bargas, Steven	Tenaska Power Services Co.	Generation Owner
Benckek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Bernier, Monica	Calpine Energy Services, L.P.	Generation Owner
Bertocchi, John	Metropolitan Edison Company	Transmission Owner

Bloom, David
 Bolan, Martin
 Borradaile, Michael
 Budney, David
 Burkett, Monica
 Caruthers, Anna
 Chesser, Kathrina
 Cicero, Nicholas
 Coleman, Robert
 Coyne, Suzanne
 Curtis, Eileen
 Dessender, Harry
 Di Iorio, Michelle
 Dugan, Chuck
 Eagles, Suzanne
 Erbrick, Michael
 Farber, John
 Filomena, Guy
 Flamm, Sean
 Gilani, Rehan
 Gleckler, Eric
 Goldsberry, Katherine
 Grisolia, Albert
 Hagaman, Derek
 Hart, Joy
 Hartman, Gary
 Hemmert, John
 Hewett, Christopher
 Holter, Natasha
 Hopkins, Sandra
 Hsia, Eric
 Huber, Steven
 Huber, Steven
 Jerry, Kelvin
 Johnson, Carl
 Juhnden, Jane
 Kenney, Susan
 Kingston, Amber
 Kotras, Craig
 Krauss, Robert
 Krishnaraj, Morgini
 Laaouaouda, Adbel
 Loudenburg, Zack
 Lovely, Christina
 Mabry, David
 Martinson, Tia
 Marton, David
 Mayfield, Maida
 McComb, John
 Medley, Jennifer
 Menciano, Christina
 Mendez, Maria
 Meridionale, Kevin
 Myser, Carole
 Nice, Ryan
 Nichols, Lloyd
 Ondayko, Brock
 Peoples, John
 Phillips, Amanda
 Plevin, Cherie
 Pober, Jeremy
 Polka, Joseph
 Popella, Jeff
 Rayhorn, Carolyn
 Reid, Ryan
 Reynolds, Karen

Baltimore Gas and Electric Company
 FirstEnergy Solutions Corp.
 PJM Interconnection, LLC
 PJM Interconnection, LLC
 PJM Interconnection, LLC
 FirstEnergy Solutions Corp.
 Power Costs Inc.
 FirstEnergy Solutions Corp.
 BP Energy Company
 PJM Interconnection, LLC
 Commonwealth Edison Company
 Customized Energy Solutions, Ltd.*
 PSEG Energy Resources and Trade LLC
 East Kentucky Power Cooperative, Inc.
 Exelon Generation Co., LLC
 Dhastco
 DE Public Service Commission
 Customized Energy Solutions, Ltd.*
 PJM Interconnection, LLC
 Consolidated Edison Energy, Inc.
 Appalachian Power Company
 EDP Renewables North America, LLC
 Public Service Electric & Gas Company
 GT Power Group
 North Carolina Electric Membership Corporation
 Talen Energy Marketing, LLC
 Dayton Power & Light Company (The)
 Virginia Electric & Power Company
 PJM Interconnection, LLC
 Virginia Electric & Power Company
 PJM Interconnection, LLC
 PSEG Energy Resources and Trade LLC
 Public Service Electric & Gas Company
 Baltimore Gas & Electric Company
 Customized Energy Solutions, Ltd.*
 Atlantic City Electric Company
 PJM Interconnection, LLC
 North Carolina Electric Membership Corporation
 Baltimore Gas and Electric Company
 Public Service Electric & Gas Company
 Brookfield Energy Marketing LP
 FirstEnergy Solutions Corp.
 Pennsylvania Renewable Resources, Associates
 Calpine Energy Services, L.P.
 McNees Wallace & Nurick LLC
 Grand Ridge Energy LLC
 FirstEnergy Solutions Corp.
 Duke Energy Business Services LLC
 PJM Interconnection, LLC
 Appalachian Power Company
 Energy Authority, Inc. (The)
 PSEG Energy Resources and Trade, LLC
 Jersey Central Power & Light Company
 Appalachian Power Company
 PJM Interconnection, LLC
 Commonwealth Chesapeake Company, LLC
 Appalachian Power Company
 Duquesne Light Company
 Wabash Valley Power Association, Inc.
 Duke Energy Ohio, Inc.
 Power Costs Inc
 Duquesne Light Company
 Dayton Power & Light Company (The)
 Dominion Virginia Power
 Buckeye Power, Inc.
 Dominion Virginia Power

Transmission Owner
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 Not Applicable
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 Other Supplier
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 Electric Distributor
 Generation Owner
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 Transmission Owner
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 Other Supplier
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 Electric Distributor
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 Electric Distributor
 Transmission Owner
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 Transmission Owner
 Not Applicable
 Transmission Owner
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 Generation Owner
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 Transmission Owner
 Electric Distributor
 Transmission Owner
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 Transmission Owner
 Transmission Owner
 Not Applicable
 Electric Distributor
 Not Applicable



Meeting Minutes

Rieger, Laura
Salem, Jay
Sasser, Jonathan
Saxe, Barbara
Saxena, Richa
Sensenig, James
Shaffer, Brian
Sharkazy III, William
Siemen, Nick
Singamsetti, Rajesh
Srinivasan, Sunil
Tangirala, Subha
Teamann, Cynthia
Tew, Linda
Treadwell, Albert
Tumbleson, Renee
Verduin, Glenn
Weathers, Brian
Weiss, Glenn
Werner, Christopher
Whitehead, Jeffrey
Williams, Stanley
Wilmoth, Emily
Wilson, Rob
Wise, Eric
Yu, Joel

ACES Energy
Pennsylvania Electric Company
Customized Energy Solutions, Ltd.*
Public Service Electric & Gas Company
Nobel Americas Energy Solutions LLC
Pennsylvania Electric Company
Atlantic City Electric Company
PPL Electric Utilities Corp. dba PPL Utilities
AES Corporation
Aces Power Marketing
APX
ABB
FirstEnergy Solutions Corp.
Virginia Electric & Power Company
Allegheny Electric Cooperative, Inc.
FirstEnergy Solutions Corp.
PSEG Energy Resources and Trade LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Appalachian Power Company
Direct Energy Business Marketing, LLC
PJM Interconnection, LLC
Dominion Virginia Power
Illinois Municipal Electric Agency
Energy Authority, Inc. (The)
Rockland Electric Company

Not Applicable
Transmission Owner
Not Applicable
Transmission Owner

Electric Distributor
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Transmission Owner

Electric Distributor
Transmission Owner
Other Supplier
Not Applicable
Not Applicable
Transmission Owner
Other Supplier
Not Applicable
Not Applicable
Electric Distributor
Other Supplier
Transmission Owner

Author: Nicholas DiSciullo