

Market Implementation Committee PJM Conference & Training Center, Audubon, PA December 13, 2017 9:00 a.m. – 1:00 p.m. EPT

## Administration

- 1. Ms. Christina Stotesbury and Ms. Chantal Hendrzak, PJM, provided announcements and reviewed the Antitrust, Code of Conduct, and Public Meetings/Media Participation Guidelines.
- 2. The committee approved the draft minutes from the November 8, 2017 Market Implementation Committee meeting by acclamation with 0 objections and 0 abstentions.
- 3. Ms. Christina Stotesbury, PJM, reviewed the active MIC issues on Issue Tracking.

Ms. Jennifer Tribulski, PJM, provided a brief update on the FERC Order addressing Remand in the MOPR Proceeding. More details will be provided at the December 21 MRC meeting.

## Endorsements/Approvals

## 4. FTR Modeling, Performance & Surplus

Mr. Brian Chmielewski, PJM, reviewed the solution proposals that came out of the FTRMPS Special Sessions of the MIC. The committee was asked to endorse a proposal for each issue.

- A. Long Term FTR Modeling Enhancements for Future Transmission Expansions. The committee endorsed the proposal by acclamation with 0 objections and 1 abstention.
- B. Monthly FTR Auction Case Performance. The committee endorsed the proposal by acclamation with 0 objections and 1 abstention.
- C. Day-Ahead and FTR Auction Surplus. The committee endorsed Package A with 157 in favor (90%), 17 opposed (10%), and 11 abstentions. Package B failed to meet the majority support threshold with 48 in favor (34%), 94 opposed (66%), and 12 abstentions.

Mr. Brian Chmielewski, PJM, also provided a first read of governing document redline revisions associated with the proposed revisions to address the Modeling, Performance and Surplus FTR issues. The committee will be asked to endorse the governing document revisions at the January MIC meeting.

- D. FTRMPS Manual and Tariff Redline Revisions
- E. FTRMPS Executive Summary of Manual Changes
- 5. Seasonal DR Aggregation Registration Rules Problem Statement and Issue Charge

Ms. Katie Guerry, EnerNOC, reviewed the problem statement and issue charge to address the aggregation of summer and winter Demand Response MWs for the Capacity Performance Annual Requirement. The committee approved the problem statement and issue charge by acclamation with 0 objections and 0 abstentions.



## First Readings

# 6. FTR Nodal Remapping - Problem Statement & Issue Charge

Mr. Brian Chmielewski, PJM, presented a first read of a problem statement and issue charge to address FTR nodal remapping. The committee will be asked to approve the problem statement and issue charge at the January meeting.

# 7. Market Path/Interface Pricing Point Alignment

- A. Mr. Tim Horger, PJM, presented the PJM-IMM joint proposal to address the Market Path/Interface Pricing Point Alignment issue.
- B. Mr. Steve Kelly, Brookfield Renewable, and Mr. Brock Ondayko, AEP, presented alternative proposals for consideration and discussion.

The solution proposals to address this issue will be presented for another first read in January. The committee will be asked to endorse a proposal at the February meeting.

# 8. **RERRA Review of Energy Efficiency Participation**

Mr. Pete Langbein, PJM, provided an update on the FERC Order regarding the Declaratory Order for the RERRA review of Energy Efficiency participation in wholesale markets, and presented a first read of the Demand Response Subcommittee proposal for the RERRA review of Energy Efficiency resource participation in the Capacity Market.

## Working Issues

## 9. Transmission Penalty Factors

Ms. Lisa Morelli, PJM, provided an update on discussions between PJM and the Market Monitor to modify the Transmission Penalty Factor during scarcity conditions. Stakeholders were given an opportunity to offer design components and solution options for consideration. This issue will continue to be worked at the January MIC meeting.

# Additional Updates

# 10. Operationalizing Gas Pipeline Contingencies

Mr. Joe Ciabattoni, PJM, and Mr. Augustine Caven, PJM, provided an update on energy market implications associated with the Operationalizing Gas Pipeline Contingencies initiative. Additional information will be presented at the MRC on December 21.

## 11. Resilience Roadmap

Ms. Stephanie Monzon, PJM, provided an update on the Resilience Roadmap.

## **Informational Section**

# Credit Subcommittee (CS)

Meeting materials will be posted to the <u>CS website</u>.



#### Demand Response Subcommittee (DRS)

Meeting materials will be posted to the DRS web site.

# Intermittent Resources Subcommittee (IRS)

Meeting materials will be posted to the <u>IRS web site</u>.

## Interregional Coordination Activity

Materials were posted for informational purposes only. Mr. Tim Horger, PJM, was available at the MIC meeting to answer any questions.

## Market Settlements Subcommittee (MSS)

Meeting materials are posted to the MSS web site.

## **Report on Market Operations**

The Report on Market Operations will be reviewed during the MC Webinar.

9:00 a.m.	PJM Interconnection – Conference & Training Center
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## In-person Attendees

Hendrzak, Chantal (Chair)	PJM Interconnection, LLC	Not Applicable
Stotesbury, Christina (Secretary)	PJM Interconnection, LLC	Not Applicable
Anders, David	PJM Interconnection, LLC	Not Applicable
Benchek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Bleiweis, Bruce	DC Energy LLC	Other Supplier
Borgatti, Michael	Gabel and Associates	Not Applicable
Bowring, Joe	Monitoring Analytics, LLC	Not Applicable
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
Carmean, Gregory	OPSI	Not Applicable
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable
Chmielewski, Brian	PJM Interconnection, LLC	Not Applicable
Ciabattoni, Joseph	PJM Interconnection, LLC	Not Applicable



Crystle, Gil Dadourian, John des Rosiers, Jared Dillon, Matthew Drauschak, Lisa Driscoll, Mary Ellen Fabiano, Janell Farmer, Larry Filomena, Guy Fitch, Neal Ford, Adrien Fuess, James Greiner, Gary Guerry, Katie Hastings, David Horger, Tim Horstmann, John Hudis, Gabriella Johnson, Carl Kauffman, Brian Keech, Adam Kelly, Stephen Kenney, Susan Kogut, George Lapierre, Daniel Lieberman, Steven Mabry, David Midgley, Sharon Morelli, Lisa O'Connell, Robert Pakela, Gregg Pilong, Melissa Poulos, Greg Powers, Sean Price, Ruth Scarpignato, David Scheidecker, Paul Schreim, Morris Skucas, Ruta Sweeney, Rory Trayers, Barry Tribulski, Jennifer

**UGI** Development Company Monitoring Analytics, LLC Pierce Atwood, LLP UGI Development Company PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Customized Energy Solutions, Ltd. NRG Power Marketing LLC Old Dominion Electric Cooperative PBF Power Marketing LLC PSEG Energy Resources and Trade LLC EnerNOC, Inc. Market Interconnection LLC PJM Interconnection, LLC Dayton Power & Light Company (The) Jersey Green Energy LLC Customized Energy Solutions, Ltd.\* NRG Curtailment Solutions PJM Interconnection, LLC Brookfield Energy Marketing LP PJM Interconnection, LLC New York Power Authority Brookfield Energy Marketing LP American Municipal Power, Inc. McNees Wallace & Nurick LLC Exelon Business Services Company, LLC PJM Interconnection, LLC PPGI Fund A/B Development, LLC DTE Energy Trading, Inc. PJM Interconnection, LLC CAPS Linde Energy Services, Inc. Division of the Public Advocate of the State of Delaware Calpine Energy Services, L.P. PJM Interconnection, LLC Maryland Public Service Commission Pierce Atwood **RTO** Insider Citigroup Energy, Inc. PJM Interconnection, LLC

**Transmission Owner** Not Applicable Not Applicable Generation Owner Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Generation Owner **Electric Distributor Generation Owner** Other Supplier Other Supplier Not Applicable Not Applicable **Transmission Owner** Other Supplier Not Applicable Other Supplier Not Applicable Other Supplier Not Applicable Other Supplier Other Supplier **Electric Distributor** Not Applicable **Transmission Owner** Not Applicable **Generation Owner** Other Supplier Not Applicable Not Applicable End User Customer End User Customer **Generation Owner** Not Applicable Not Applicable Not Applicable Not Applicable Other Supplier Not Applicable



Whitehead, Jeffrey Williams, Stanley

#### WebEx Attendees

Ainspan, Malcolm Barker, Jason Bazar, Kevin Bennett, Stephen Binder, Gerry Bolan, Martin Bonanni, John Britt, Debbie Brown, Rich Bruno, Joshua Bruno, Patrick Burdis, Tim Callaghan, Chris Campbell, Bruce Caven, Augustine Cawley, Troy Chen, Jennifer Chintapalli, Raj Chocarro Aguirrebengoa, Iker Cocco, Michael Cox, EdwardP Coyne, Suzanne Croop, Danielle Cummings, Bridgid D'Antonio, Phil Dasher, Brett Daugherty, Suzanne Davis, James DeLosa, Joseph Depillo, Raymond Dessender, Harry Dirani, Rami Dolan, James Domian, Christin Doremus, Steven Drom, Rick Dugan, Chuck Duquaine, Mark

GT Power Group PJM Interconnection, LLC

Energy Curtailment Specialists, Inc. Exelon Business Services Company, LLC PJM Interconnection, LLC PJM Interconnection, LLC SESCO Enterprises LLC FirstEnergy Solutions Corp. NRG Power Marketing LLC North Carolina Electric Membership Corporation PJM Interconnection, LLC EnergyConnect, Inc. PJM Interconnection, LLC PJM Interconnection, LLC Natural Resources Defense Council Galt Power Inc. E.ON Climate & Renewables North America, Inc. Old Dominion Electric Cooperative Appalachian Power Company PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Energy Authority, Inc. (The) PJM Interconnection, LLC Dominion Energy Marketing, Inc. **DE Public Service Commission** PSEG Energy Resources and Trade LLC Customized Energy Solutions, Ltd. PJM Interconnection, LLC PJM Interconnection, LLC Mitsubishi Electric Power Products Inc. EnerNOC, Inc. **Eckert Seamans** East Kentucky Power Cooperative, Inc.

Aces Power Marketing Inc.

Not Applicable Not Applicable

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



Endress, Eric Engelby, Ben Esterly, Terri Evrard, David Foladare, Kenneth Fort, Jim Fox, Angela Fuhr, Gretchen Gahimer, Mike Garnett, Bryan Gebolys, Debbie Genuario, Gabrielle Gerber, Rebecca Giacomoni, Anthony Gilani, Rehan Glazer, Craig Gorman, Kevin Greening, Michele Hanser, Erik Harmon, Mike Hartman, Carla Hauske, Thomas Hayik, Seth Haynes, Greg Heinle, Frederick Herman, Michael Hilaski, Steve Hoatson, Tom Hohenshilt, Jennifer Holdbrook, Ruth Holland, Risa Holter, Natasha Horton, Dana Hsia, Eric Hugee, Jacqulynn Hurwich, Mark Hyzinski, Tom Jani, Alpa Janicki, Diane Jardot, Gina Jett, William Jha, Monica

PJM Interconnection, LLC Southern Maryland Electric Cooperative PJM Interconnection, LLC Pennsylvania Office of Consumer Advocate Tangibl The Energy Authority Wylan Energy, L.L.C. Commerce Energy, Inc. IN Office of Utility Consumer Counselor Duke Energy Ohio, Inc. Public Utilities Commission of Ohio (The) PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC ConEdison Energy, Inc. PJM Interconnection, LLC Highlands Energy Group LLC (The) PPL Electric Utilities Corp. dba PPL Utilities Michigan Public Service Commission Union Electric Company d/b/a Ameren Missouri Adapt2 Solutions, Inc. PJM Interconnection, LLC Monitoring Analytics, LLC Energy Authority, Inc. (The) Office of the People's Counsel PJM Interconnection, LLC Potomac Electric Power Company Riverside Generating, LLC Talen Energy Marketing, LLC Northern Virginia Electric Cooperative PJM Interconnection, LLC PJM Interconnection, LLC Appalachian Power Company PJM Interconnection, LLC PJM Interconnection, LLC Elliott Bay Energy Trading, LLC GT Power Group PJM Interconnection, LLC Boston Energy Trading & Marketing, LLC Essential Power Rock Springs, LLC **Duke Energy Business Services LLC** PCI

Not Applicable **Electric Distributor** Not Applicable End User Customer Not Applicable Other Supplier Not Applicable Other Supplier End User Customer Transmission Owner Not Applicable Not Applicable Not Applicable Not Applicable Other Supplier Not Applicable Other Supplier Transmission Owner Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Other Supplier End User Customer Not Applicable **Electric Distributor** Other Supplier Generation Owner Electric Distributor Not Applicable Not Applicable Transmission Owner Not Applicable Not Applicable Other Supplier Not Applicable Not Applicable Generation Owner Transmission Owner **Generation Owner** Not Applicable



Kaczanowski, Marek Karnik, Rashmi Kazerooni, Hamid Kilgallen, Kevin Kimmel, David Kingston, Amber Kinser, Cynthia Knies, Heather Kolo, Elta Kormos, Mike Langbein, Pete LaRocque, Matthew LeBris Erffmeyer, Jacques Lee, Lori Murphy Lejcar, Jamie Leopold, Chris Lewis, Cara Libbos, Robin Lind, Clarke Logan, Sharon Loomis, Harold Lowe, Connie Mae Velasco, Cheryl Mancuso, Melanie Marcino, Angelo Mariam, Yohannes Marton, David Marzewski, Skyler Matheson, Doug McAlister, Lisa McLaughlin, Jeffrey McLaverty, Megan Merola, Becky Metzler, Jakob Miller, John Nawaz, Zainab Nix, Emma Norton, Chris Olaleye, Michael Olenick, Cory Ondayko, Brock O'Neill, Jack

Baltimore Gas and Electric Company Other Talen Energy Marketing, LLC Avangrid Renewables LLC PJM Interconnection, LLC North Carolina Electric Membership Corporation Tennessee Department of Agriculture EDF Trading North America, LLC GTM Exelon Generation Co., LLC PJM Interconnection, LLC PJM Interconnection, LLC Illinois Citizens Utility Board PJM Interconnection, LLC Allegheny Electric Cooperative, Inc. Appalachian Power Company Public Service Electric & Gas Company FirstEnergy Solutions Corp. **Powerex Corporation** The Federal Energy Regulatory Commission PJM Interconnection, LLC **Dominion Virginia Power** PJM Interconnection, LLC FirstEnergy Solutions Corp. PJM Interconnection, LLC Office of the Peoples Counsel for the District of Columbia FirstEnergy Solutions Corp. Monitoring Analytics, LLC EnerNOC, Inc. American Municipal Power, Inc. PJM Interconnection, LLC PJM Interconnection, LLC Noble Americas Energy Solutions LLC Castleton Commodities Merchant Trading L.P. Commonwealth Edison Company NJ Board of Public Utilities PJM Interconnection, LLC American Municipal Power, Inc. PJM Interconnection, LLC West Oaks Energy, LP Appalachian Power Company PJM Interconnection, LLC

**Transmission Owner** Not Applicable Generation Owner Generation Owner Not Applicable **Electric Distributor** Not Applicable Other Supplier Not Applicable Generation Owner Not Applicable Not Applicable End User Customer Not Applicable **Electric Distributor Transmission Owner** Transmission Owner Transmission Owner Other Supplier Not Applicable Not Applicable Not Applicable Not Applicable Transmission Owner Not Applicable End User Customer Transmission Owner Not Applicable Other Supplier Electric Distributor Not Applicable Not Applicable Other Supplier Other Supplier Transmission Owner Not Applicable Not Applicable **Electric Distributor** Not Applicable Other Supplier Transmission Owner Not Applicable



Pacella, Chris Patel, Anita Patel, Kevur Patten, Kevin Peebles, Andy Pelletier, Eveline Peoples, John Philips, Marjorie Pratzon, David Price, Mark Prokop, Brenda Rajan, Abhijit Ramsey, James Rault, Mary-Beth Rayhorn, Carolyn Reams, William Riehl, John Ritchie, Sandra Robins, Pip Robinson, Maria Robson, Matt Rohrbach, John Rothey, Kristin Ruck, Andrew Rushing, Nathan Russo, Michael Rutigliano, Tom Saini, Ishwar Salaneck, Alexandra Sasser, Jonathan Schneider, Jon Schuyler, Ken Seelaus, Andy Seelaus, Tim Shanker, Roy Sillin, John Snyder, Sue Sock, Bryan Souder, Michelle Stadelmeyer, Rebecca Stern, Alexander Stewart, Travis

PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Appalachian Power Company Saracen Energy East LP Hydro-Quebec Duquesne Light Company Direct Energy Business, LLC GT Power Group DC Energy Mid-Atlantic, LLC ITC Mid-Atlantic Development LLC **Dominion Resources** Suffolk Fund LLC Old Dominion Electric Cooperative **Dominion Virginia Power** Allegheny Electric Cooperative, Inc. The Federal Energy Regulatory Commission PJM Interconnection, LLC EMC Development Company, Inc. Advanced Energy Economy, Inc. SESCO Enterprises LLC Southern Maryland Electric Cooperative American Municipal Power, Inc. PSEG Energy Resources and Trade, LLC CPV Maryland, LLC LDH Energy Funds Trading Ltd. Achieving Equilibrium LLC Macquarie Energy LLC Monitoring Analytics, LLC Customized Energy Solutions, Ltd.\* FirstEnergy Solutions Corp. PJM Interconnection, LLC EMC Development Company, Inc. EMC Development Company, Inc. H.Q. Energy Services (U.S.), Inc. The Federal Energy Regulatory Commission PJM Interconnection, LLC PSEG Energy Resources and Trade, LLC PJM Interconnection, LLC PJM Interconnection, LLC Public Service Electric & Gas Company Gable and Associates

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



Stone, Andy Stuchell, Jeff Sturgeon, John Suh, Jung Tangirala, Subha Tatum, Edward Thomson, Heather Tibbetts, Maeve Tigue, John Tsao, Stephanie Tyler, Catherine Vayda, Brian Velasco, Cheryl Mae Villeneuve, Alexandre Vitiello, Jacqueline Wadsworth, Joseph Walter, Laura Ward, Michael Webster, John Wicks, Tonja Wilhite, Chad Wilkie, Brian Williams, Amber Wilmoth, Emily Wilson, Bram Wilson, James Wood, Gordon Yang, Dan Zadlo, Thomas

Author: Christina Stotesbury

PJM Interconnection, LLC FirstEnergy Solutions Corp. Duke Energy Carolinas, LLC Noble Americas Energy Solutions LLC ABB American Municipal Power Mid-Atlantic Renewable Energy Pierce Atwood New York State Electric & Gas Corporation SPGlobal Monitoring Analytics Borough of Park Ridge, NJ PJM Interconnection, LLC MAG Energy Solutions, Inc. Dominion Energy Marketing, Inc. Vitol Inc. PJM Interconnection, LLC PJM Interconnection, LLC Icetec.com, Inc. **Duquesne Light Company** FirstEnergy Solutions Corp. Consolidated Edison Solutions, Inc. New York State Electric & Gas Corporation **Dominion Virginia Power** Diamond State Generation Partners, LLC Wilson Energy Economics ETC Endure Energy L.L.C. Parma Energy LLC PJM Interconnection, LLC

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