



Market Implementation Committee (MIC) WebEx Only January 12, 2021 9:00 a.m. – 4:00 p.m. EPT

Administration

Nick DiSciullo reviewed the Antitrust, Code of Conduct, Public Meetings/Media Participation and the WebEx Participant Identification Requirements.

The Committee approved the draft minutes from the December 2, 2020 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Nick DiSciullo reviewed the 2021 MIC Work Plan.

Endorsements/Approvals

2. Manual 18: Minimum Offer Price Rule Changes

Jeff Bastian reviewed updates to Manual 18: PJM Capacity Market. These changes conform with the FERC-ordered rule changes in the Minimum Offer Price Rule and Forward Energy & Ancillary Services Offset dockets (Docket Nos. EL16-49-003, EL18-178-003, ER18- 1314-006 and EL19-58).

The committee endorsed the Manual 18 revisions by acclamation with 0 objections and 1 abstention.

Issue Tracking: Capacity Market Minimum Offer Price Rule (MOPR) Order

3. PRD Credits Disposition

Pete Langbein reviewed the BGE proposal addressing the PRD Credits Disposition issue. The committee endorsed the BGE proposal by acclamation with 0 objections and 2 abstentions.

A non-binding poll showed stakeholders preferred the BGE proposal with 118 (91%) in favor over status quo 11 (9%).

Issue Tracking: Price Responsive Demand (PRD) Credits Disposition

First Readings

4. Capital Recovery Factor for Avoidable Project Investment Cost Determinations Jeff Bastian provided a first read of the Problem Statement and Issue Charge addressing Capital Recovery Factor for Avoidable Project Investment Cost Determinations. Some stakeholders requested additional transparency on the details behind the CRF calculation and encouraged PJM to consider turning CRF into a formula rate. Additional discussion will occur on this issue at the February MIC meeting.

5. Long-Term 5-Minute Dispatch & Pricing Work Plan





Aaron Baizman reviewed the Long Term Timeline and provided a first read of the solution package from the Long-Term Five Minute Dispatch & Pricing Matrix that was worked in MIC Special Session meetings.

The committee will be asked to endorse the proposal at the February MIC meeting. Issue Tracking: Five Minute Dispatch and Pricing

11. RPM Capacity Transfer Rights

Kevin Zemanek, Buckeye Power, provided a first read of the Problem Statement and Issue Charge addressing RPM Capacity Transfer Rights.

The committee will be asked to approve the Issue Charge at the February MIC meeting.

Working Items

6. Market Suspension

Stefan Starkov provided education on the Market Suspension issue, highlighting potential causes of a market suspension and a possible approach for determining clearing prices during a Market Suspension event. Stakeholders were encouraged to provide additional solution options and feedback prior to the February MIC meeting.

Issue Tracking: Rules Related to Market Suspension

7. Transparency in Performance Assessment Interval Settlements

Susan Kenney reviewed two of the areas that were identified as needing additional transparency in PAI Settlements, calculations for a resource with both RPM and FRR commitments and allocation of non-performance data to capacity resources due to modeling differences. Additional discussion will continue on this topic during the February MIC meeting.

Issue Tracking: Transparency in Performance Assessment Interval (PAI) Settlements

Additional Items

8. PPL Dynamic Line Ratings

Shadab Ali, PPL, presented PPL's Dynamic Line Ratings Implementation Plan. Additional discussions covering the interactions between Dynamic Line Ratings and markets will occur on this issue at future MIC meetings.

9. Minimum Offer Price Rule Floor Prices

Natalie Tacka provided an overview of the default MOPR floor prices for new entry resources, which were posted on December 18, 2020. Final Net E&AS Revenue Offset values are expected to be posted by January 13, 2021. Specific questions regarding forward-looking E&AS offset methodology can be sent to FWDE&AS@pjm.com.

Issue Tracking: Capacity Market Minimum Offer Price Rule (MOPR) Order

10. Fast Start Pricing Order Overview

Thomas DeVita provided an overview of the FERC Order on PJM's Fast Start Pricing compliance filing in docket ER19-2722. Additional discussion will occur on this issue at the February MIC meeting.





12. ELCC Deficiency Letter Response

Andrew Levitt and Thomas DeVita discussed considerations related to the questions raised by the ELCC deficiency letter issued by FERC in docket ER21-278 and solicited stakeholder feedback on submitting an extension to the deficiency letter response deadline.

Informational Section

CP Unit Specific Parameter Update

Materials are posted as informational only.

Interregional Coordination Update

Materials are posted as informational only.

Credit Subcommittee (CS)

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

Demand Response Subcommittee (DRS)

Meeting materials are posted to the **DRS** website.

DER & Inverter-based Resources Subcommittee (DIRS)

Meeting materials are posted to the **DIRS** website.

Market Settlements Subcommittee (MSS)

Meeting materials are posted to the MSS website.

Report on Market Operations

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

Future Meeting Dates

| - | | |
|-------------------|-----------|-------|
| February 10, 2021 | 9:00 a.m. | WebEx |
| March 10, 2021 | 9:00 a.m. | WebEx |
| April 7, 2021 | 9:00 a.m. | WebEx |
| May 13, 2021 | 9:00 a.m. | WebEx |
| June 9, 2021 | 9:00 a.m. | WebEx |
| July 14, 2021 | 9:00 a.m. | TBD |
| August 11, 2021 | 9:00 a.m. | TBD |
| September 9, 2021 | 9:00 a.m. | TBD |
| October 6, 2021 | 9:00 a.m. | TBD |
| November 3, 2021 | 9:00 a.m. | TBD |
| December 1, 2021 | 9:00 a.m. | TBD |

Author: Nick DiSciullo

WebEx Meeting Attendees

| Names | Company Name | Sector |
|-----------------------|--------------------------|----------------|
| Morelli, Lisa (Chair) | PJM Interconnection, LLC | Not Applicable |





DiSciullo, Nicholas (Secretary)

Afelumo, Foluso Aguilar, Fabiano Silveira

Ali, Shadab
Anders, David
Anderson, Jared
Baizman, Aaron
Barker, Jason
Bastian, Jeff
Benchek, Jim

Bleiweis, Bruce Bloom, David Bowring, Joseph Boyle, Glen

Bernabeu, Emanuel

Breidenbaugh, Aaron Brodbeck, John Bruno, Joshua Bruno, Patrick Campbell, Bruce Carmean, Gregory Carrier, Ron Carroll, Rebecca

Chang, Sean
Chen, Hong
Chmielewski, Brian
Chu, George
Ciabattoni, Joseph
Cocco, Michael
Coyne, Suzanne
Croop, Danielle
Crystle, Gil
D'Alessandris, Lou

D'antonio, Phil Davis, James (Jim) Depillo, Raymond DeVita, Thomas Di Iorio, Michelle Dillon, Matthew DiNicola, Laura Dirani, Rami

Downs, Jere Drom, Richard Dropkin, Ilyana Dugan, Chuck Elkins, Rachel Ericson, Christine

Esterly, Theresa Everngam, Scott Fabiano, Janell PJM Interconnection, LLC

PJM Interconnection, LLC Strom Power, LLC

PPL Electric Utilities Corp. dba PPL Utilities

PJM Interconnection, LLC

S&P Global

PJM Interconnection, LLC

Exelon Business Services Company, LLC

PJM Interconnection, LLC

American Transmission Systems, Inc.

PJM Interconnection, LLC

DC Energy LLC

Baltimore Gas and Electric Company

Monitoring Analytics, LLC PJM Interconnection, LLC

Rodan Energy Solutions (USA) Inc. EDP Renewables North America, LLC

PJM Interconnection, LLC PJM Interconnection, LLC EnergyConnect, Inc.

OPSI

Direct Energy Business, LLC PJM Interconnection, LLC

Shell Energy North America (US), LP

PJM Interconnection, LLC
Old Dominion Electric Cooperative
PJM Interconnection, LLC
PJM Interconnection, LLC

PJM Interconnection, LLC
PJM Interconnection, LLC
UGI Development Company
FirstEnergy Solutions Corp.
PJM Interconnection, LLC
Dominion Energy Marketing, Inc.
PSEG Energy Resources and Trade LLC

PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC

UGI Development Company FirstEnergy Solutions Corp. PJM Interconnection, LLC PJM Interconnection, LLC Eckert Seamans

PJM Interconnection, LLC

East Kentucky Power Cooperative, Inc.

First Energy Company
Illinois Commerce Commission
PJM Interconnection, LLC

The Federal Energy Regulatory Commission

PJM Interconnection, LLC

Not Applicable Not Applicable Other Supplier

Transmission Owner

Not Applicable Not Applicable Not Applicable Transmission Owner

Not Applicable
Transmission Owner
Not Applicable
Other Supplier

Other Supplier Transmission Owner Not Applicable Not Applicable

Not Applicable
Other Supplier
Generation Owner
Not Applicable
Not Applicable
Other Supplier
Not Applicable
Other Supplier
Not Applicable

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

Generation Owner Transmission Owner Not Applicable Generation Owner Other Supplier Not Applicable Other Supplier Generation Owner Transmission Owner Not Applicable

Not Applicable
Not Applicable
Not Applicable
Transmission Owner
Transmission Owner
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Not Applicable





| Fan, Zhenyu |
|--------------------|
| Fazio, Danielle |
| Fereshetian, Damon |
| Fernandez, Raymond |
| Filomona Cur |

Filomena, Guy Fishback, Luke Foladare, Kenneth Ford, Adrien Fuess, Christian

Gates, Terry Gilani, Rehan Greening, Michele Grooms, Craig Guntle, Vince Hanser, Erik Hastings, David

Hatch, Kevin
Hauske, Thomas
Heinle, Frederick
Hoatson, Tom
Hohenshilt, Jennifer
Holter, Natasha
Horger, Tim

Horning, Lynn Marie Horstmann, John Hsia, Eric Hudis, Gabriella

Hull, Gerit Hurwich, Mark Hyzinski, Tom

ller, Art Janicki, Diane Jardot, Gina Jens, Thomas Jett, William Johnson, Carl

Johnston, David Josyula, Siva Kauffman, Brian

Kauttman, Brian Keenan, Matthew

Kelly, Gwen Kelly, Stephen Kenney, Susan Kilgallen, Kevin Kimmel, David Kogut, George

Konowal, Richard Kothakapu, Rakesh Kozhuharov, Dimitar

Langbein, Pete

PJM Interconnection, LLC Noble Americas Gas & Power Corp.

PJM Interconnection, LLC PJM Interconnection, LLC

Customized Energy Solutions, Ltd.

Affirmed Energy LLC

Tangibl

Old Dominion Electric Cooperative PBF Power Marketing LLC Appalachian Power Company ConEdison Energy, Inc. PJM Interconnection, LLC Buckeye Power, Inc.

American PowerNet Management Michigan Public Service Commission

Market Interconnection Consulting Services (MICS)

PJM Interconnection, LLC
PJM Interconnection, LLC
Office of the People's Counsel
Riverside Generating, LLC
Talen Energy Marketing, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Customized Energy Solutions, Ltd.

Dayton Power & Light Company (The) PJM Interconnection, LLC Jersey Green Energy LLC

Jennings, Strouss & Salmon, P.L.C. Elliott Bay Energy Trading, LLC

GT Power Group

Indiana Office of Utility Consumer Counsel Boston Energy Trading & Marketing, LLC Essential Power Rock Springs, LLC

Black Oak Energy, LLC

Duke Energy Business Services LLC Customized Energy Solutions, Ltd. Indiana Utility Regulatory Commission

Monitoring Analytics, LLC Enel X North America, Inc.

Jpower USA

PSEG Energy Resources and Trade LLC

Brookfield Energy Marketing LP PJM Interconnection, LLC Avangrid Renewables LLC PJM Interconnection, LLC New York Power Authority PJM Interconnection, LLC

Fellon McCord

Delaware Municipal Electric Corporation, Inc.

PJM Interconnection, LLC

Not Applicable

Not Applicable Not Applicable Not Applicable

Not Applicable
Not Applicable
Other Supplier
Not Applicable
Electric Distributor

Generation Owner
Transmission Owner
Other Supplier

Not Applicable Electric Distributor End-Use Customer Not Applicable Not Applicable Not Applicable

Not Applicable
Not Applicable
End-Use Customer
Generation Owner
Generation Owner
Not Applicable
Not Applicable
Transmission Owner
Not Applicable

Transmission Owner Not Applicable Other Supplier Not Applicable Other Supplier Not Applicable End-Use Customer Other Supplier Generation Owner

Other Supplier
Transmission Owner
Not Applicable
Not Applicable
Not Applicable
Other Supplier
Not Applicable
Other Supplier

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





Lejcar, Jamie Levitt, Andrew Li, Kanning Liang-Nicol, Cecilia Libbos, Robin Lieberman, Steven Lu, Chenchao Mabry, David Marcino, Angelo Martin, Valerie Matuszak, Alex McDaniel, John McGlynn, Paul McLaverty, Megan Midgley, Sharon Militello, Nicole Miller, John Murphy, Shaun Nix, Emma Nole, Anthony Olaleye, Michael Ondayko, Brock Pakela, Greg Patel, Keyur Pelletier, Eveline Peoples, John Perera, Asanga Philips, Marji Phillips, Darlene Pilong, Melissa Pizzutelli, Ashley Poulos, Greg Pratt, Nicholas Price, Ruth Procuniar, Jason

Rohrbach, John Sasser, Jonathan Scarpignato, David Scheirer, Alexandra Schisler, Ken Schmatz, Peter Schuyler, Ken Seirig, Bahaa Shah, Vijay Shanker, Roy Smith, Kara

Purdie, Michael

Rodriguez, Tomas

Rainey, John Robinson, Becky Allegheny Electric Cooperative, Inc. PJM Interconnection, LLC

PJM Interconnection, LLC

Monongahela Power Company d/b/a Allegheny Power

FirstEnergy Solutions Corp.
American Municipal Power, Inc.
PJM Interconnection, LLC
McNees Wallace & Nurick LLC
PJM Interconnection, LLC

The Federal Energy Regulatory Commission

UGI Energy Services, LLC

Baltimore Gas and Electric Company

PJM Interconnection, LLC PJM Interconnection, LLC

Exelon Business Services Company, LLC

PJM Interconnection, LLC Commonwealth Edison Company PJM Interconnection, LLC Gable and Associates NuEnergen, LLC PJM Interconnection, LLC Appalachain Power Company

DTE Energy Trading, Inc. PJM Interconnection, LLC

Hydro-Quebec

Duquesne Light Company PJM Interconnection, LLC Direct Energy Business, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Monongahela Power Company d/b/a Allegheny Power

CAPS

PPL Electric Utilities Corp. dba PPL Utilities

Division of the Public Advocate of the State of Delaware

Dayton Power & Light Company (The)

Dominion Virginia Power

Northern Virginia Electric Cooperative

Vista Energy Marketing, L.P.

OPSI

Southern Maryland Electric Cooperative Customized Energy Solutions, Ltd.* Calpine Energy Services, L.P. PJM Interconnection, LLC Enel X North America. Inc.

PSEG Energy Resources and Trade LLC

PJM Interconnection, LLC Con Edison Co. of NY PJM Interconnection, LLC H.Q. Energy Services (U.S.), Inc.

Buckeye Power, Inc.

Electric Distributor

Not Applicable
Not Applicable

Transmission Owner

Transmission Owner Electric Distributor Not Applicable

Not Applicable Not Applicable Not Applicable Other Supplier

Transmission Owner Not Applicable Not Applicable

Transmission Owner Not Applicable Transmission Owner Not Applicable Not Applicable Other Supplier Not Applicable

Not Applicable Transmission Owner Other Supplier Not Applicable Not Applicable Transmission Owner

Transmission Owner Not Applicable Other Supplier Not Applicable Not Applicable Transmission Owner Not Applicable

Transmission Owner End-Use Customer Transmission Owner Not Applicable Electric Distributor Other Supplier

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

Electric Distributor





Sorrels, James Sotkiewicz, Paul Souder, Michelle Squibb, Bill Starkov, Stefan Stone, Andy Stupar, Rob Sturgeon, John Suh, Jung Svenson, Heather Swalwell, Brad Sweeney, Rory Tacka, Natalie Thomas, Jack Tibbetts, Maeve Tribulski, Jennifer Tyler, Catherine VanderLaan, D. William

Tyler, Catherine
VanderLaan, D. Willia
Wadsworth, Joseph
Walter, Laura
Ward, Michael
Warshel, Kim
Whitehead, Jeffrey
Widom, Stuart
Wilson, James
Wisersky, Megan
Yeaton, Andrea
Yoder, Michael
Zemanek, Kevin
Zhao, Tong

AEP
E-Cubed Policy Associates
PJM Interconnection, LLC
Ohio Valley Electric Corp
PJM Interconnection, LLC
PJM Interconnection, LLC
Invenergy Energy Management LLC
Duke Energy Carolinas, LLC
Calpine Energy Services, L.P.
Public Service Electric & Gas Company
Tangent Energy Solutions, Inc.

PJM Interconnection, LLC Pierce Atwood PJM Interconnection, LLC Monitoring Analytics, LLC Illinois Commerce Commission Vitol Inc.

PJM Interconnection, LLC

GT Power Group

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
GT Power Group
PJM Interconnection, LLC
Wilson Energy Economics
Madison Gas & Electric Company
PJM Interconnection, LLC

RTO Insider Buckeye Power, Inc. PJM Interconnection, LLC Transmission Owner Not Applicable Not Applicable Transmission Owner Not Applicable Not Applicable Generation Owner Other Supplier Generation Owner Transmission Owner Other Supplier Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable

Other Supplier

Not Applicable

Not Applicable

Not Applicable

Electric Distributor